Periodic Review Report

Greif, Inc. Facility

2122 Colvin Boulevard Tonawanda, New York
NYSDEC Site Number V00334

Prepared for:

Sonoco Products Company

North Second Street

Hartsville, South Carolina 29550

August 2021

Project No.: 0605504

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Periodic Review Report

Greif, Inc. Facility

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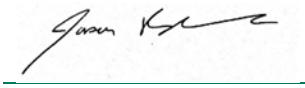

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Acronyms and Abbreviations

Name	Description
COPC	Compounds or Potential Concern
DNAPL	Dense Non-Aqueous Phase Liquid
EC	Engineering Control
EPA	Environmental Protection Agency
ERM	ERM Consulting & Engineering, Inc.
HVAC	Heating, Ventilation, and Air Conditioning
IA	Indoor Air
IC	Institutional Control
LNAPL	Light Non-Aqueous Phase Liquid
MNA	Monitored Natural Attenuation
MW	Monitoring Well
NAPL	Non-Aqueous Phase Liquid
NYSDEC	New York State Department of Environmental Conservation

NYSDOH	New York State Department of Health
O&M	Operations and Maintenance
OM&M	Operations, Maintenance, and Monitoring
PRR	Periodic Review Report
RAO	Remedial Action Objective
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SSD	Sub-Slab Depressurization
SSDS	Sub-Slab Depressurization System
TCE	Trichloroethene
TOGS	Technical and Operational Guidance Series
USEPA	United States Environmental Protection Agency
VCA	Voluntary Cleanup Agreement
VMP	Vapor Monitoring Point
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

Sonoco Products Company (Sonoco, hereafter referred to as the Remedial Party) entered into a Voluntary Cleanup Agreement (VCA) with the New York State Department of Environmental Conservation (NYSDEC) in May 2001, to investigate and remediate the property located at 2122 Colvin Boulevard Tonawanda, Erie County, New York (the Site). The property was remediated for commercial use, and was used for the manufacture of fiber drums and associated products by Greif, Incorporated. Upon completion of the remediation, NYSDEC issued a Release and Covenant Not to Sue as of 16 March 2018. Greif, Incorporated sold the property to Midwest Storage Developers, LLC on 16 July 2021 and it is currently vacant.

Residual contamination is being addressed by Engineering Controls (ECs) pursuant to a Site Management Plan (SMP), which remains in effect. The SMP obligations are also reflected in Institutional Controls (ICs), including a Deed Restriction that has been duly recorded in accordance with ECL Article 71, Title 36.

The SMP requires the maintenance of the ECs, as well as the filing of Periodic Review Reports (PRRs) to document that the ICs and ECs remain in place and continue to be effective.

A summary of the results of the periodic monitoring described in this report are as follows:

- The annual inspection confirmed that the integrity of the Site cover system remains intact.
- Vacuum readings collected from the system piping and vacuum monitoring points (VMPs) in June 2021 are similar to the readings obtained upon system startup in 2013 and those collected afterwards. These data indicate the system is working within the original system specifications.
- Since start-up, the sub-slab depressurization system (SSDS) has been performing effectively and is protective of public health. If significant future modifications to the system are required, the Department will be contacted prior to modifications.

Semi-annual monitoring of the ECs shows that the system is operating as designed and in a consistent manner. In summary, the ICs and ECs remain in place and effective. The submission of the next PRR will be in August 2022.

1. SITE OVERVIEW

Sonoco entered into the VCA with the NYSDEC to remediate the Site. The VCA required Sonoco to investigate and remediate contaminated media at the Site. A figure showing the Site location and boundaries of this 11.636-acre Site is provided in Figure 1 and Figure 2. This Periodic Review Report (PRR) is required as a site management element of the remedial program for the Site.

Sonoco successfully completed the remedial work required by NYSDEC, which included:

A. Excavation of grossly-contaminated media and soil exceeding Commercial Soil Cleanup Objectives (SCOs);

B. Recovery of dense non-aqueous phase liquid (DNAPL) from around and beneath the former varnish pit;

C. Construction and maintenance of a soil cover system consisting of the building slab, stone, and hard pavement to prevent human exposure to remaining contaminated soil/fill at the Site;

D. Installation of a SSDS to prevent the migration of volatile organic compounds (VOCs) from below the building slab into indoor air;

E. Recovery of light non-aqueous phase liquid (LNAPL) in the vicinity of monitoring well MW-23;

F. Monitoring the natural attenuation of groundwater;

G. Execution and recording of a Deed Restriction to restrict land and groundwater use and prevent future exposure to any contamination remaining at the Site; and

H. Development and implementation of a SMP for long-term management of remaining contamination as required by the Deed Restriction, which includes plans for: (1) ICs and ECs; (2) monitoring; (3) O&M; and (4) reporting.

After the successful completion of this work, NYSDEC issued a Release and Covenant Not to Sue as of 16 March 2018.

Remaining contamination is being addressed by ECs pursuant to an SMP, which remains in effect. The SMP obligations are also reflected in ICs, including an Environmental Easement (EE) that has been duly recorded in accordance with ECL Article 71, Title 36.

The SMP requires the maintenance of the ECs, as well as the filing of PRRs to document that the ICs and ECs remain in place and continue to be effective. The SMP will be revised to reflect the current monitoring requirements approved by the NYSDEC per the Site Management Periodic Review Response Letter (November 2019).

2. EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The following remedial action objectives (RAOs) were achieved by the groundwater and soil remedies.

Groundwater

RAOs for Public Health Protection

- Prevent exposure to affected ground water that poses a risk to public health and the environment given the intended use of the Site.

RAOs for Environmental Protection

- Prevent or minimize further migration of the contaminant plume (plume containment); and
- Prevent or minimize further migration of contaminants from source materials to groundwater (source control).

The ICs for groundwater use at the Site remain intact, prohibiting its use. Groundwater monitoring is currently performed every tenth quarter with the next event in in the 2nd quarter of 2023 to monitor VOC concentrations and the remedy of monitored natural attenuation (MNA).

Soil

RAOs for Public Health Protection

- Prevent ingestion, direct contact with, and/or inhalation of soil that poses a risk to public health and the environment given the intended use of the Site;
- Prevent inhalation of or exposure from compounds of potential concern (COPC) volatizing from soil that poses a risk to public health and the environment given the intended use of the Site; and
- Prevent the potential for vapor intrusion into indoor air.

Sub-slab soil vapor is continually removed from beneath the building slab though the SSDS. Nine soil vapor extraction (suction) points penetrate the slab throughout the facility, where piping runs upwards to a central manifold in the mezzanine. From the manifold, the vapor is piped to the blower and then to a discharge point approximately 15 feet above the roof. There are two additional suction points in the boiler room (SP-03 and SP-04), where the piping runs to independent blowers that discharge to a point five feet above roof. The mezzanine SSDS has an automated remote monitoring system (telemetry) that was recently updated in February 2021 and now includes remote monitoring of SP-03 and SP-04. No SSDS downtime was recorded in this period.

3. INSTITUTIONAL CONTROLS AND ENGINEERING CONTROLS COMPLIANCE REPORT

The required Institutional & Engineering Controls Certification Form has been completed and signed by the Volunteer and by ERM Consulting & Engineering, Inc.'s (ERM) engineer-of-record (Appendix A). ERM conducted a Site-wide annual inspection on 28 June 2021. The results of the inspection are documented in the Inspection Form (Appendix B) and a photographic log (Appendix C). A summary of the status of the ICs and ECs is provided in the following sections.

3.1 Institutional Controls

A series of ICs is required by the SMP to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to Commercial or Industrial uses only. Adherence to these ICs on the Site is required by the Deed Restriction and will be implemented under the SMP. These ICs are:

- Compliance with the Deed Restriction and the SMP by the Grantor and the Grantor's successors and assigns;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs on the Site must be inspected at a frequency and in a manner defined in the SMP.
- Groundwater, soil vapor, and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner defined in the SMP;

ICs identified in the Deed Restriction may not be discontinued without an amendment to or extinguishment of the Deed Restriction.

The Site has a series of ICs in the form of Site restrictions. Site restrictions that apply are:

- The property may only be used for commercial or industrial use provided that the long-term ECs and ICs included in the SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted, residential, or restricted residential use without additional remediation and amendment of the Deed Restriction, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for the intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed within the deed-restricted area, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- The Site owner or remedial party will submit to the NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that

constitute a violation or failure to comply with the SMP. The NYSDEC retains the right to access the Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that the NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

Appendix A contains this signed certification.

In summary, the ICs remain in place and effective.

3.2 Engineering Controls

The Site has several ECs to protect public health and the environment. The subsections below describe the status of each EC.

3.2.1 Site Cover System

Exposure to remaining contamination in soil/fill at the Site is prevented by a soil cover system. This cover system is comprised of a minimum of 12 inches of clean soil, asphalt pavement, concrete-covered sidewalks, and/or concrete building slabs. A map showing the areal extent of these cover types is provided as Figure 3.

3.2.2 Sub-Slab Depressurization System

A SSDS was installed in the Site building to prevent exposure to potential soil vapor intrusion from contaminated soil and groundwater that exists beneath the building slab. The full-scale system has been operational since January 2013. Procedures for operating and maintaining the SSDS are documented in the O&M Plan (Section 4 of the SMP). Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of the SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

The goal of the full-scale SSDS is to maintain negative pressure across the portion of building's footprint that requires mitigation per the Decision Matrices. Currently, the SSDS is designed to maintain a negative pressure (i.e., vacuum) beneath the slab when the building is sealed and exhaust fans are operating. If measureable vacuum is obtained during such conditions, the SSDS will be considered to be effectively influencing that area.

Vacuum response measurements collected post-January 2013 through June 2021 inspections indicate that the system is meeting its design objectives. A map detailing the location of the SSDS components and sampling points is provided as Figure 4A and 4B.

4. MONITORING PLAN COMPLIANCE REPORT

4.1 Components of the Monitoring Plan

The following table summarizes the current elements of the monitoring program:

Monitoring Program	Frequency*	Environmental Matrix	Parameter or Analyses
SSDS	Semi-annually	Soil Vapor	Vacuum
NAPL thickness	Semi-annually	Groundwater	Water and NAPL level measurements
Groundwater	Every tenth quarter	Groundwater	Site-specific VOCs, groundwater field parameters
Soil cover system	Annual	Soil	Visual inspection; ensure integrity per the SMP requirements
Soil Vapor/indoor air at VAC-09	Annual	Soil Vapor/indoor air	Site-specific VOCs via EPA Method TO-15
SSDS exhaust (see details in Section 4.3 of the SMP)	Annual	Soil Vapor	Site-specific VOCs via EPA Method TO-15

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC and the NYSDOH. The frequencies shown herein were modified by NYSDEC in November 2019.

Operations Logs are provided in Appendix D.

4.2 Summary of Monitoring Completed

4.2.1 Site Cover System

An annual site inspection was performed to monitor the condition of the Site Cover System. The annual inspection identified surficial floor cracks in areas previously covered by operation equipment but overall confirmed that the integrity of the Site cover system remains intact. A copy of the inspection form is provided as Appendix B.

4.2.2 Sub-Slab Depressurization System

During this reporting period, semi-annual inspections have occurred to confirm that the SSDS is operating properly, and monitoring logs are compiled to record system parameters to assure the system is working effectively.

No major system changes were made in this period and SSDS effluent sampling was performed on 09 March 2021 in accordance with the approved SMP. Additionally, the DAR-1 assessment was performed using the most recent SSD exhaust and volume discharge rates and concluded that continued operation

of the SSDS without emission controls is acceptable. A summary of SSDS concentrations is presented in Table 1 and DAR-1 calculations are presented in Appendix F.

Vacuum measurements were collected semi-annually during this period from the system piping at the mezzanine blower unit and three piping manifolds. The results are summarized in the table below:

Mezzanine/Boiler Room Blower Inlet & Manifold Vacuum Measurements

	1/24/2013	12/18/2020	6/28/2021
Mezzanine Blower Inlet	-19	-18	-18
MAN-1	-3.55	-3.5	-4
MAN-2	-3.56	-3.7	-4
MAN-3	-3.35	-3.3	-4
SP-03	-0.81	-0.8	-0.725
SP-04	-1.94	-1.8	-1.864

*A negative pressure designates a vacuum.

Pressure readings collected from the system piping at the inlets to blowers and each manifold in June 2021 are similar to the readings obtained upon the modified system startup in January 2013 and those collected in December 2020. This indicates the system is working within the original system specifications. Historical SSDS data is presented in Table 2.

SSDS Influence Measurements

This reporting period's results indicate similar vacuum response compared to the prior readings as shown in Figures 4A and 4B.

These vacuum measurements demonstrate that a consistent sub-slab vacuum was obtained in the majority of the building. Vacuum communication was observed during the all events this period on the central western side of the building at VAC-01, VAC-02, VAC-03 and VAC-07, in the former varnish pit area. Vacuum influence was not observed at VAC-11, VAC-16, VAC-19, VAC-20, VAC-32, VAC-34, VAC-37, VAC-41, VAC-54, VAC-56, and VAC-60 during the December 2020 monitoring, but a vacuum was observed at these points during the June 2021 event. Historical vacuum monitoring trends are presented in Figure 5.

No sub-slab intrusive work was conducted during this reporting period that would have disturbed or compromised the cover system.

Since start-up, the SSDS and remote monitoring telemetry has been performing effectively. If significant modifications to the system appear to be required, the NYSDEC will be contacted to discuss prior to performing the modifications.

4.2.3 Groundwater Monitoring

Per the 15 November 2019 NYSDEC response letter for the 2019 PRR, groundwater monitoring is to be performed every tenth quarter, ERM completed the groundwater monitoring event on 28 September through 29 November 2020. Groundwater monitoring network is presented in Figure 7 with shallow and intermediate groundwater contours are presented in Figure 8A and 8B.

ERM completed groundwater monitoring was performed in conformance with the SMP. Appendix E provides Data Usability Summary Reports. ERM will submit the validated analytical results to NYSDEC in a New York State-compliant Electronic Data Deliverable. A summary of VOC concentrations in groundwater from the 2020 monitoring event is included in Table 3.

During the 2020 monitoring event, ERM measured and recorded geochemical parameters on low flow sampling forms which can be found in Appendix G. All purge water generated was stored in a 55-gallon drum for eventual off-Site disposal as a hazardous waste. Waste documents are presented in Appendix H.

4.2.4 Indoor Air and Sub-Slab Vapor Monitoring

ERM completed annual sub-slab soil vapor and indoor air monitoring for 2020-2021 monitoring period on 9 March 2021 at VAC-09 to evaluate indoor air quality in an area with historically poor SSDS communication per the SMP. Figure 8 shows sample locations. A summary of VOC concentrations in soil gas and indoor/outdoor air is provided in Table 4.

4.2.5 NAPL Thickness and Recovery

On a semi-annual basis, the thickness of the DNAPL and LNAPL was measured in the following wells (see Figure 7 for locations):

- RW-1;
- RW-2;
- RW-4;
- RW-6;
- VMP-2;
- VMP-5;
- MW-20; and
- MW-23.

Historical NAPL thicknesses in wells is presented in Table 5. NAPL detected was recovered to the extent practicable at each event and stored in a 55-gallon drum and disposed -off- Site as a hazardous waste in December 2020 and July 2021. Waste documents are presented in Appendix G.

4.2.6 SSDS Telemetry Upgrade

Per the previously submitted 2020 PRR Section 5.2 entitled “Conclusions and Recommendations for Change”, a telemetry system upgrade for the mezzanine blower was completed in February 2021 as well as installing new telemetry for SP-03 and SP-04. After the modifications were completed, the system was re-started and is currently operating as intended.

4.2.7 Sale of the Facility

On 18 December 2020 Greif, Inc. ceased operations as documents in the change of use form submitted to the NYSDEC on 28 December 2020. The property and facility were then sold to Midwest Storage Developers LLC 16 July 2021 as documented by the change of use form submitted to the NYSDEC 9 July 2021. The sale of the property is not documented in the EC/IC certification as the sale occurred outside of the 6 July 2020 through 6 July 2021 reporting period.

4.3 Comparison with Remedial Objectives

Groundwater

Section 2 outlines the RAOs for groundwater, and Table 3 compares the groundwater monitoring results to NYSDEC's Technical and Operational Guidance Series (TOGS) Memorandum Number 1.1.1 (NYSDEC, 1998). As shown in Table 3, VOC concentrations in groundwater exceeded RAOs at some monitoring well locations, particularly monitoring wells inside the building in close proximity to the Former Varnish Pit Area. Figure 9 shows VOC concentration trend plots for monitoring wells sampled as part of the SMP to monitor the Site selected remedy of MNA. Overall, VOC concentrations in groundwater are stable or decreasing in the majority of monitoring wells. VOC concentrations for 1,1,1 – TCA at MW-20 are attributed to its proximity to the Former Varnish Pit Area where small quantities (less than 0.2 ft.) NAPL is recovered on a semi-annual basis as discussed in Section 4.2.5. Paired with the NAPL recovery, the remedial program of MNA for the Site has been effective at reducing VOC concentrations in groundwater.

Soil Vapor

Section 2.4 discusses RAOs for soil vapor; Table 4 show sub-slab soil vapor and indoor air data, respectively, at VAC-09. 1,1,1-trichloroethane (TCA), 1,1-dichloroethane, 1,1-dichloroethene, and trichloroethene (TCE) in soil vapor are at concentrations above the NYSDOH decision matrix thresholds (May 2017) at VAC-09. Of those compounds 1,1-dichloroethane and 1,1-dichlorothene were not detected in indoor air at concentrations above decision matrix thresholds: this indicates that the area of VAC-09 is preventing impacted soil vapors from migrating to indoor air and therefore no expansion of the SSDS is required.

1,1,1-TCA and TCE were detected in the IA sample, but below the NYSDOH decision matrix stage 1 threshold of 3 and 0.2 micrograms per cubic meter respectively and at a concentration four to six orders of magnitude below that found in the sub-slab. Carbon tetrachloride was also detected in the IA sample at VAC-09, but was also present in the outdoor ambient air sample at a similar concentration indicating that this is a background condition.

The SSDS continues to function as designed and is protective of public health. DAR-1 analysis indicates the system can continue to operate without emission controls.

4.4 Summary of Monitoring Deficiencies

The operational logs were completed in full compliance with the SMP. The system was inspected Semi-annually during this reporting period as approved by NYSDEC.

4.5 Conclusions and Recommendations for Change

The data collected during this reporting period indicates that the SSDS and monitoring program is functioning as designed and are meeting the RAOs for the Site.

The SMP monitoring program has been in place since January 2013 and data collected over this period supports the conclusion that the selected remedy continues to be effective.

The SSDS vacuum and influence data from January 2013 to June 2021 indicates that there is consistent SSDS vacuum and communication throughout the facility.

Monitoring of NAPL thicknesses has shown that NAPL is typically only present in measurable quantities in MW-20, MW-23, and RW-6. When NAPL is present in these wells, the quantity is minimal (less than 0.2 feet in thickness).

Groundwater sampling in 2020 continued to demonstrate VOC concentrations are decreasing and that the remedial program of MNA and NAPL product recovery at the Site is effective.

It was noted that the annual inspection was performed after operating equipment from Grief was removed from the facility and cracks in the floor were able to be observed. However, based upon system vacuum readings and supported by subsequent indoor air concentrations, the cracks appear to be surficial in nature and not impact the integrity of the cover system. It is recommended that the current site owner coordinate future building use and improvements with the Remedial Party to maintain the integrity of the cover system.

5. OPERATION AND MAINTENANCE PLAN COMPLIANCE REPORT

Routine maintenance and inspection was conducted to ensure that the SSD System is operating properly until the NYSDEC and the NYSDOH have determined no need for the system. On a monthly basis, the operator confirmed that the main blower is operating properly by remotely accessing the telemetry system.

Qualified building personnel confirmed operation of the boiler room blowers on a quarterly basis up until December 2020 when facility operations ceased. Remote monitoring was installed in February of 2021.

On a semi-annual basis, the operator visited the Site and performed the following activities.

- Collect measurements of sub-slab vacuum at all suction points (SP-01 through SP-11), all vacuum monitoring points (VAC-01 through VAC-62), and vacuum monitoring points for the Former Varnish Pit (PG-102 and PG-103);
- Collect operating data following the Treatment System Data Sheet (Appendix K of the SMP) and
- Inspect boiler room fans and ensure their operation.

On an annual basis, the following was performed:

- Conduct a visual inspection of the complete system.
- Inspect blower and inline fans for bearing failures or signs of other abnormal operations, and repair or replace if required.
- Inspect the discharge location of the vent pipes to ensure that no air intake or operable window has been located nearby.
- Determine, through discussions with building management, if any Heating, Ventilation, and Air Conditioning (HVAC) system modifications occurred that might affect the performance of the SSD System.
- Inspect the floor slab and foundation walls for evidence of cracks and/or holes, and repair of cracks and/or holes, if required.
- Inspect the integrity of the riser pipe and repair the riser pipe, if required.

These items are noted on the Site-Wide Inspection Form (Appendix F of the SMP).

5.1 O&M Deficiencies

The operational logs were completed in full compliance with the SMP. Inspections of the SSDS were performed and data collected indicated that the systems were operating as designed throughout the course of the reporting period.

SSDS System telemetry was checked on a monthly basis. However, some months the telemetry required a system restart and telemetry checks could not be recorded. A new telemetry was installed in February 2021 to the mezzanine SSDS, SP-03, and SP-04 and is performing as designed.

5.2 Conclusions and Recommendations for Change

The SSDS performed as designed during this reporting period. The SMP OM&M program has been in place since January 2013 and data collected over that period supports that the selected remedy is effective and O&M data has been consistent.

As a result of changes to the monitoring well network, NYSDEC approved changes in monitoring frequencies. In addition to the telemetry improvements, the SMP will be updated accordingly to reflect these changes and new ownership.

6. OVERALL PERIODIC REVIEW REPORT CONCLUSIONS AND RECOMMENDATIONS

A change in ownership of the Site occurred shortly after this reporting period and the use of the Site remains solely commercial or industrial in compliance with the Environmental Easement. Farming or vegetable gardens were not observed at the Site. Groundwater underlying the Site is reported by the Site owner as not being used in any manner and evidence of groundwater use was not observed at the Site. There has been no disturbance of the Site cover system during this reporting period.

The SSDS has performed as designed during this reporting period and meets the RAOs for the Site.

Since 2013, quarterly and annual monitoring of the ECs shows that the system is operating as designed. Continued monitoring at reduced levels and routine O&M measures as suggested assure the safe and effective operation of these ECs.

As Midwest Storage Developers LLC recently purchased the property 16 July 2021, Sonoco will continue to communicate with relevant parties to facilitate compliance with the SMP throughout this process.

A summary of ongoing action items is identified below:

- Continue implementing the SMP;
- Revise SMP to reflect current monitoring requirements and new ownership;
- Repair MW-22 well cover; and
- Submit next PRR in August 2022.

7. REFERENCES

ERM, 2016. Site Management Plan, Greif, Inc. Facility, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM, June 2016.

NYSDEC, 1997. Ambient Air Quality Impact Screening Analyses, Guidelines for Control of Toxic Ambient Air Contaminants, Division of Air Resources (DAR-1), Albany, November 12, 1997.

NYSDOH, 2017. Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Bureau of Environmental Exposure Investigation, Troy, May 2017

NYSDEC,. Technical & Operational Guidance Series (TOGS).

TABLES

Table 1
Summary of Treatment System Sampling Results March 2021
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

Analyte		Location ID	SP-03	SP-04	SP-507
		Sample Date	3/8/2021	3/8/2021	3/8/2021
		Sample Type	N	N	N
		Unit			
VOCs	1,1,1-Trichloroethane	µg/m3	1.69	*< 1.09*	2,620
	1,1,2,2-Tetrachloroethane	µg/m3	*< 1.37*	*< 1.37*	*< 8.58*
	1,1,2-trichloro-1,2,2-trifluoroethane (Freon	µg/m3	*< 1.53*	*< 1.53*	*< 9.58*
	1,1,2-Trichloroethane	µg/m3	*< 1.09*	*< 1.09*	*< 6.82*
	1,1-Dichloroethane	µg/m3	*< 0.809*	*< 0.809*	60.7
	1,1-Dichloroethene	µg/m3	*< 0.793*	*< 0.793*	240
	1,2,4-Trichlorobenzene	µg/m3	*< 1.48*	*< 1.48*	*< 9.28*
	1,2,4-Trimethylbenzene	µg/m3	*< 0.983*	*< 0.983*	*< 6.15*
	1,2-dichloro-1,1,2,2-tetrafluoroethane (Fre	µg/m3	*< 1.40*	*< 1.40*	*< 8.74*
	1,2-Dichlorobenzene	µg/m3	*< 1.20*	*< 1.20*	*< 7.52*
	1,2-Dichloroethane	µg/m3	*< 0.809*	*< 0.809*	*< 5.06*
	1,2-Dichloropropane	µg/m3	*< 0.924*	*< 0.924*	*< 5.78*
	1,3,5-Trimethylbenzene	µg/m3	*< 0.983*	*< 0.983*	*< 6.15*
	1,3-Butadiene	µg/m3	*< 0.442*	*< 0.442*	*< 2.77*
	1,3-Dichlorobenzene	µg/m3	*< 1.20*	*< 1.20*	*< 7.52*
	1,4-Dichlorobenzene	µg/m3	*< 1.20*	*< 1.20*	*< 7.52*
	1,4-Dioxane	µg/m3	*< 0.721*	*< 0.721*	9.59
	2,2,4-Trimethylpentane	µg/m3	*< 0.934*	*< 0.934*	*< 5.84*
	2-Butanone	µg/m3	1.65	*< 1.47*	*< 9.20*
	2-Hexanone	µg/m3	*< 0.820*	*< 0.820*	*< 5.12*
	4-Ethyltoluene	µg/m3	*< 0.983*	*< 0.983*	*< 6.15*
	4-Methyl-2-pentanone	µg/m3	*< 2.05*	*< 2.05*	*< 12.8*
	Acetone	µg/m3	3.09	*< 2.38*	*< 14.8*
	Allyl chloride	µg/m3	*< 0.626*	*< 0.626*	*< 3.91*
	Benzene	µg/m3	*< 0.639*	*< 0.639*	*< 3.99*
	Benzyl chloride	µg/m3	*< 1.04*	*< 1.04*	*< 6.47*
	Bromodichloromethane	µg/m3	*< 1.34*	*< 1.34*	*< 8.37*
	Bromoform	µg/m3	*< 2.07*	*< 2.07*	*< 12.9*
	Bromomethane	µg/m3	*< 0.777*	*< 0.777*	*< 4.85*
	Carbon disulfide	µg/m3	*< 0.623*	*< 0.623*	*< 3.89*
	Carbon tetrachloride	µg/m3	*< 1.26*	*< 1.26*	*< 7.86*
	Chlorobenzene	µg/m3	*< 0.921*	*< 0.921*	*< 5.76*
	Chloroethane	µg/m3	*< 0.528*	*< 0.528*	*< 3.30*
	Chloroform	µg/m3	*< 0.977*	*< 0.977*	*< 6.10*
	Chloromethane	µg/m3	0.779	0.502	*< 2.58*
	cis-1,2-Dichloroethene	µg/m3	*< 0.793*	*< 0.793*	152
	cis-1,3-Dichloropropene	µg/m3	*< 0.908*	*< 0.908*	*< 5.67*
	Cyclohexane	µg/m3	*< 0.688*	*< 0.688*	*< 4.30*
	Dibromochloromethane	µg/m3	*< 1.70*	*< 1.70*	*< 10.6*
	Dichlorodifluoromethane (Freon 12)	µg/m3	1.85	1.74	*< 6.18*
	Ethanol	µg/m3	*< 9.42*	*< 9.42*	*< 58.8*
	Ethyl acetate	µg/m3	*< 1.80*	*< 1.80*	*< 11.2*
	Ethylbenzene	µg/m3	*< 0.869*	*< 0.869*	*< 5.43*
	Ethylene dibromide	µg/m3	*< 1.54*	*< 1.54*	*< 9.61*
	Heptane	µg/m3	*< 0.820*	*< 0.820*	*< 5.12*
	Hexachlorobutadiene	µg/m3	*< 2.13*	*< 2.13*	*< 13.3*
	Isopropyl alcohol	µg/m3	*< 1.23*	*< 1.23*	*< 7.67*
	m,p-Xylenes	µg/m3	*< 1.74*	*< 1.74*	*< 10.9*
	Methyl tert-butyl ether	µg/m3	*< 0.721*	*< 0.721*	*< 4.51*
	Methylene chloride	µg/m3	*< 1.74*	*< 1.74*	*< 10.8*
	n-Hexane	µg/m3	*< 0.705*	*< 0.705*	*< 4.41*
	o-Xylene	µg/m3	*< 0.869*	*< 0.869*	*< 5.43*
	Styrene	µg/m3	*< 0.852*	*< 0.852*	*< 5.32*
	tert-Butyl alcohol	µg/m3	*< 1.52*	*< 1.52*	*< 9.46*
	Tetrachloroethene	µg/m3	*< 1.36*	*< 1.36*	*< 8.48*
	Tetrahydrofuran	µg/m3	*< 1.47*	*< 1.47*	*< 9.20*
	Toluene	µg/m3	1.11	*< 0.754*	*< 4.71*
	trans-1,2-Dichloroethene	µg/m3	*< 0.793*	*< 0.793*	*< 4.96*
	trans-1,3-Dichloropropene	µg/m3	*< 0.908*	*< 0.908*	*< 5.67*
	Trichloroethene	µg/m3	*< 1.07*	*< 1.07*	1,420
	Trichlorofluoromethane (Freon 11)	µg/m3	*< 1.12*	*< 1.12*	*< 7.02*
	Vinyl bromide	µg/m3	*< 0.874*	*< 0.874*	*< 5.47*
	Vinyl chloride	µg/m3	*< 0.511*	*< 0.511*	*< 3.20*

Notes:
< = Compound not detected at concentrationsabove the laboratory reporting detection limit.The laboratory reporting detection limit is shown.
N = Normal Environmental Sample
µg/m3 = micrograms per cubic meter
SP-507 = Main SSDS Effluent Sample

Table 2
Summary of Historical SSDS Data
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

	Header Vacuum			Header Air Flow			Effluent			
Location	**MAN-1**	**MAN-2**	**MAN-3**	**MAN-1**	**MAN-2**	**MAN-3**	**Pressure**	**Temp**	**PID**	**Flow**
Units	**" H_2O**	**" H_2O**	**" H_2O**	**cfm**	**cfm**	**cfm**	**" H_2O**	**°F**	**ppm**	**cfm**
Date										
1/24/2013	3.55	3.6	3.35	297.92	162.68	370.44	0.789	118	0.0	417.48
2/22/2013	3.4	3.4	3.3	252.84	147.00	299.88	0.794	120	0.0	295.96
3/25/2013	3	3.2	3.1	241.08	148.96	319.48	0.67	118	0.0	386.12
5/3/2013	5	4	3.7	239.12	137.20	299.88	0.75	121	0.0	366.52
7/31/2013	5	5	5	278.32	193.06	362.60	1.228	111	0.1	464.52
9/25/2013	4.9	4.9	4.7	282.24	170.52	399.84	0.727	109	0.1	509.60
11/20/2013	5	5	4.5	282.24	142.10	278.32	0.9	110	1.2	427.28
7/7/2014	5.5	5.5	5.5	254.80	176.40	343.00	1.11	119	0.4	397.88
10/22/2014	4.75	4.8	4.55	268.52	69.58	374.36	1.07	106	0.2	466.48
3/27/2015	5.5	5.5	5	282.24	76.44	382.20	1.5	104	0.8	544.88
6/10/2015	6.1	6.1	5.6	290.08	199.92	411.60	1.5	110	0.8	537.04
9/25/2015	6	6.5	6	272.44	194.04	384.16	1.047	109	0.4	552.72
12/11/2015	4.9	4.6	4.4	260.68	156.80	354.76	1.02	102	0.7	572.32
3/31/2016	5	5	4.5	262.64	159.74	393.96	0.98	104	0.4	537.04
6/2/2016	5	5	4.7	261.83	166.49	398.14	1.12	110	0.3	533.94
9/26/2016	4.7	4.7	4.5	243.04	159.74	450.80	1.2	104	0.7	511.56
12/28/2016	4.5	4.5	4.5	395.92	117.60	444.92	1.078	107	1.4	480.20
3/31/2017	4.6	4.6	4.4	266.56	144.06	450.80	1.2	108	1.9	464.52
6/15/2017	5.5	5.5	5	278.32	137.20	601.72	1.5	112	0.4	444.92
8/22/2017	5.5	5.5	5.1	254.80	160.72	419.44	1.4	115	0.6	429.24
12/18/2017	4.1	4.3	4.4	268.52	173.46	460.60	1.3	102	0.4	503.72
3/29/2018	4.6	4.6	4.35	256.76	150.92	413.56	1.037	96	0.1	521.36
6/22/2018	5.5	5.5	5	245.00	75.85	431.20	1.2	112	2.6	509.60
9/19/2018	5.5	5.5	5	239.12	161.70	452.76	1.5	112	0.5	517.44
12/13/2018	4.5	4.5	4.3	272.44	121.52	392.00	1.3	110	0.8	501.76
3/25/2019	5	4.8	4.9	264.60	101.92	229.32	2.1	105.4	0.4	366.52
6/28/2019	5	5.5	5	241.08	81.93	397.88	1.8	115	1.0	535.08
9/13/2019	5	5	5	80.75	110.74	111.72	1.3	109	1.4	354.76
12/30/2019	4.4	4.4	4.2	62.72	81.34	115.64	1.0	110	--	215.60
6/30/2020	5	5	5	321.44	96.04	615.44	0.798	119	0.4	454.72
12/18/2020	3.5	3.7	3.3	58.408	71.344	123.48	1.1	91.8	0.3	174.44
6/28/2021	4	4	4	161.7	79.576	174.44	1.2	119	0.6	513.52

Location Key

MAN-1 = Suction Pits 01, 02, interior former varnish pit, and horizontal suction points through former varnish pit's north, west, and south walls.
MAN-2 = Suction Pits 05 and 11.
MAN-3 = Suction Pits 06, 07, 08, 09, and 10

Notes:

Vacuum and pressure data is reported in inches of water.
Air flow data is based on measured air velocity and is reported in cubic feet per minute.
Temperature data is reported in degrees farenheit.
Average flow rates for SP-03 and SP-04 are presented in DAR-1 calculations.

Table 3
Summary of Groundwater Sampling Results September/October 2020
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

Analyte		NY TOGS1.1.1 CLASS GA 1998-2004	Location ID	APW-3	MW-12	MW-13	MW-14	MW-14	MW-18	MW-19	MW-20	MW-22	MW-24	MW-25	MW-26	MW-27
			Sample Date	9/28/2020	9/29/2020	9/29/2020	9/29/2020	9/29/2020	10/27/2020	9/28/2020	9/29/2020	9/29/2020	9/28/2020	9/28/2020	9/28/2020	9/28/2020
			Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N
			Unit													
VOCs	1,1,1-Trichloroethane	**5**	µg/L	**1,400**	**69**	**6,600**	*< 500*	*< 620*	**28**	*< 2.5*	**660,000**	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	1.9 J
	1,1,2-Trichloroethane	1	µg/L	*< 15*	*< 15*	*< 380*	*< 300*	*< 380*	*< 1.5*	*< 1.5*	*< 7,500*	*< 1.5*	*< 3.8*	*< 1.5*	*< 1.5*	*< 1.5*
	1,1-Dichloroethane	**5**	µg/L	**800**	**710**	**4,000**	**1,900**	**1,400**	**24**	*< 2.5*	**15,000**	**37**	2.6 J	3.1	**8.1**	**33**
	1,1-Dichloroethene	**5**	µg/L	**660**	**180**	**3,800**	**880**	**490**	3.2	*< 0.50*	**8,800**	1.5	1.6	*< 0.50*	0.48 J	3.8
	1,2,4-Trimethylbenzene	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	--	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	1,2-Dichloroethane	**0.6**	µg/L	**1.3 J**	**2.1 J**	**41 J**	*< 100*	*< 120*	*< 0.50*	*< 0.50*	*< 2,500*	*< 0.50*	*< 1.2*	*< 0.50*	*< 0.50*	*< 0.50*
	1,2-Dichloroethene	NS	µg/L	16 J	880	4,500	760	500 J	--	*< 2.5*	*< 12,000*	18	240	4.7	*< 2.5*	1.2 J
	2-Butanone	50	µg/L	*< 50*	*< 50*	*< 1,200*	*< 1,000*	*< 1,200*	*< 5.0*	*< 5.0*	*< 25,000*	*< 5.0*	*< 12*	*< 5.0*	*< 5.0*	*< 5.0*
	4-Methyl-2-pentanone	NS	µg/L	*< 50*	*< 50*	*< 1,200*	*< 1,000*	*< 1,200*	*< 5.0*	*< 5.0*	*< 25,000*	*< 5.0*	*< 12*	*< 5.0*	*< 5.0*	*< 5.0*
	Acetone	50	µg/L	*< 50*	*< 50*	*< 1,200*	*< 1,000*	*< 1,200*	*< 5.0*	*< 5.0*	*< 25,000*	*< 5.0*	*< 12*	*< 5.0*	*< 5.0*	*< 5.0*
	Benzene	**1**	µg/L	*< 5.0*	*< 5.0*	*< 120*	*< 100*	*< 120*	*< 0.50*	*< 0.50*	*< 2,500*	*< 0.50*	**2.9**	0.33 J	*< 0.50*	*< 0.50*
	Chloroethane	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	2.6	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	Chloroform	7	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	cis-1,2-Dichloroethene	**5**	µg/L	**16 J**	**850**	**4,500**	**760**	**500 J**	3.1	*< 2.5*	*< 12,000*	**18**	**240**	4.7	*< 2.5*	1.2 J
	Ethylbenzene	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	m,p-Xylenes	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	Methylene chloride	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	o-Xylene	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	Tetrachloroethene	5	µg/L	*< 5.0*	*< 5.0*	*< 120*	*< 100*	*< 120*	*< 0.50*	*< 0.50*	*< 2,500*	*< 0.50*	*< 1.2*	*< 0.50*	*< 0.50*	*< 0.50*
	Toluene	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	trans-1,2-Dichloroethene	**5**	µg/L	*< 25*	**25**	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
	Trichloroethene	**5**	µg/L	*< 5.0*	**150**	**26,000**	**25,000**	**28,000**	2.4	*< 0.50*	**150,000**	**6.8**	**360**	*< 0.50*	*< 0.50*	**6.4**
	Vinyl chloride	**2**	µg/L	**30**	**71**	**98 J**	*< 200*	*< 250*	0.61	*< 1.0*	*< 5,000*	0.65 J	**83**	**6.1**	*< 1.0*	*< 1.0*
	Xylene, Total	5	µg/L	*< 25*	*< 25*	*< 620*	*< 500*	*< 620*	*< 2.5*	*< 2.5*	*< 12,000*	*< 2.5*	*< 6.2*	*< 2.5*	*< 2.5*	*< 2.5*
Dissolved Gases	Ethane	NS	µg/L	5.06	0.96	0.854	*< 0.500*	*< 0.500*	*< 0.500*	*< 0.500*	11.9	*< 0.500*	49.9	3.18	*< 0.500*	*< 0.500*
	Ethene	NS	µg/L	6.33	2.04	13.2	0.822	0.944	*< 0.500*	*< 0.500*	1.93	*< 0.500*	15.5	*< 0.500*	*< 0.500*	*< 0.500*
	Methane	NS	µg/L	1,220	41.8	274	4.34	3.03	284	4.86	9.39	12.2	363	299	929	*< 2.00*
General Chemistry	Dissolved Organic Carbon	NS	mg/L	4.5	2.8	5.9	2.2	2.1	4	1.5	28	1.9	8.7	1.5	2.1	3.2
	Dissolved Solids, Total	NS	mg/L	740	1,100	1,300	620	600	1,000	600	1,500	1,300	1,100	4,400	1,700	670
	Sulfate	**250**	mg/L	74.8	**275**	98.4	71.9	68.1	--	67.4	**470**	**590**	**408**	**2,440**	**1,150**	96.6

Notes:

< = Compound not detected at concentrationsabove the laboratory reporting detection limit.The laboratory reporting detection limit is shown.
J = The analyte was positively identified; associated numerical value is the approximate concentration of the analyte in the sample.
-- = Not analyzed
NS = No Standard
N = Normal Environmental Sample
FD = Field Duplicate Sample
mg/L = milligrams per liter
µg/L = micrograms per liter
Bolded and Shaded results indicate exceedance of NY TOGS 1.1.1 standard

Table 4
Summary of Soil Vapor and Indoor/Ambient Air Results March 2021
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

Analyte		Location ID	AA-SW	IA-VAC-09	IA-VAC-09	SSV-VAC-09
		Sample Date	3/9/2021	3/9/2021	3/9/2021	3/9/2021
		Sample Type	N	N	FD	N
		Unit				
VOCs	1,1,1-Trichloroethane	µg/m3	*< 0.109*	0.627	0.551	16,400
	1,1,2,2-Tetrachloroethane	µg/m3	*< 1.37*	*< 1.37*	*< 1.37*	*< 52.2*
	1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	µg/m3	*< 1.53*	*< 1.53*	*< 1.53*	*< 58.3*
	1,1,2-Trichloroethane	µg/m3	*< 1.09*	*< 1.09*	*< 1.09*	*< 41.5*
	1,1-Dichloroethane	µg/m3	*< 0.809*	*< 0.809*	*< 0.809*	1,810
	1,1-Dichloroethene	µg/m3	*< 0.079*	*< 0.079*	*< 0.079*	1,530
	1,2,4-Trichlorobenzene	µg/m3	*< 1.48*	*< 1.48*	*< 1.48*	*< 56.4*
	1,2,4-Trimethylbenzene	µg/m3	*< 0.983*	*< 0.983*	*< 0.983*	*< 37.4*
	1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	µg/m3	*< 1.40*	*< 1.40*	*< 1.40*	*< 53.1*
	1,2-Dichlorobenzene	µg/m3	*< 1.20*	*< 1.20*	*< 1.20*	*< 45.7*
	1,2-Dichloroethane	µg/m3	*< 0.809*	*< 0.809*	*< 0.809*	*< 30.8*
	1,2-Dichloropropane	µg/m3	*< 0.924*	*< 0.924*	*< 0.924*	*< 35.1*
	1,3,5-Trimethylbenzene	µg/m3	*< 0.983*	*< 0.983*	*< 0.983*	*< 37.4*
	1,3-Butadiene	µg/m3	*< 0.442*	*< 0.442*	*< 0.442*	*< 16.8*
	1,3-Dichlorobenzene	µg/m3	*< 1.20*	*< 1.20*	*< 1.20*	*< 45.7*
	1,4-Dichlorobenzene	µg/m3	*< 1.20*	*< 1.20*	*< 1.20*	*< 45.7*
	1,4-Dioxane	µg/m3	*< 0.721*	*< 0.721*	*< 0.721*	*< 27.4*
	2,2,4-Trimethylpentane	µg/m3	*< 0.934*	*< 0.934*	*< 0.934*	*< 35.5*
	2-Butanone	µg/m3	*< 1.47*	*< 1.47*	2.66	*< 56.0*
	2-Hexanone	µg/m3	*< 0.820*	*< 0.820*	*< 0.820*	*< 31.1*
	4-Ethyltoluene	µg/m3	*< 0.983*	*< 0.983*	*< 0.983*	*< 37.4*
	4-Methyl-2-pentanone	µg/m3	*< 2.05*	*< 2.05*	*< 2.05*	*< 77.9*
	Acetone	µg/m3	4.44	5.08	4.35	*< 90.3*
	Allyl chloride	µg/m3	*< 0.626*	*< 0.626*	*< 0.626*	*< 23.8*
	Benzene	µg/m3	*< 0.639*	0.655	0.642	*< 24.3*
	Benzyl chloride	µg/m3	*< 1.04*	*< 1.04*	*< 1.04*	*< 39.4*
	Bromodichloromethane	µg/m3	*< 1.34*	*< 1.34*	*< 1.34*	*< 50.9*
	Bromoform	µg/m3	*< 2.07*	*< 2.07*	*< 2.07*	*< 78.6*
	Bromomethane	µg/m3	*< 0.777*	*< 0.777*	*< 0.777*	*< 29.5*
	Carbon disulfide	µg/m3	*< 0.623*	*< 0.623*	*< 0.623*	*< 23.7*
	Carbon tetrachloride	µg/m3	0.459	0.459	0.478	*< 47.8*
	Chlorobenzene	µg/m3	*< 0.921*	*< 0.921*	*< 0.921*	*< 35.0*
	Chloroethane	µg/m3	*< 0.528*	*< 0.528*	*< 0.528*	*< 20.1*
	Chloroform	µg/m3	*< 0.977*	*< 0.977*	*< 0.977*	*< 37.1*
	Chloromethane	µg/m3	1.33	1.29	1.28	*< 15.7*
	cis-1,2-Dichloroethene	µg/m3	*< 0.079*	*< 0.079*	*< 0.079*	*< 30.1*
	cis-1,3-Dichloropropene	µg/m3	*< 0.908*	*< 0.908*	*< 0.908*	*< 34.5*
	Cyclohexane	µg/m3	*< 0.688*	*< 0.688*	*< 0.688*	38.6
	Dibromochloromethane	µg/m3	*< 1.70*	*< 1.70*	*< 1.70*	*< 64.7*
	Dichlorodifluoromethane (Freon 12)	µg/m3	2.71	2.66	2.66	*< 37.6*
	Ethanol	µg/m3	13.6	*< 9.42*	*< 9.42*	*< 358*
	Ethyl acetate	µg/m3	*< 1.80*	*< 1.80*	*< 1.80*	*< 68.5*
	Ethylbenzene	µg/m3	*< 0.869*	*< 0.869*	*< 0.869*	*< 33.0*
	Ethylene dibromide	µg/m3	*< 1.54*	*< 1.54*	*< 1.54*	*< 58.4*
	Heptane	µg/m3	*< 0.820*	*< 0.820*	*< 0.820*	102
	Hexachlorobutadiene	µg/m3	*< 2.13*	*< 2.13*	*< 2.13*	*< 81.1*
	Isopropyl alcohol	µg/m3	*< 1.23*	*< 1.23*	*< 1.23*	*< 46.7*
	m,p-Xylenes	µg/m3	*< 1.74*	*< 1.74*	*< 1.74*	*< 66.0*
	Methyl tert-butyl ether	µg/m3	*< 0.721*	*< 0.721*	*< 0.721*	*< 27.4*
	Methylene chloride	µg/m3	*< 1.74*	*< 1.74*	*< 1.74*	*< 66.0*
	n-Hexane	µg/m3	*< 0.705*	*< 0.705*	*< 0.705*	38.1
	o-Xylene	µg/m3	*< 0.869*	*< 0.869*	*< 0.869*	*< 33.0*
	Styrene	µg/m3	*< 0.852*	*< 0.852*	*< 0.852*	*< 32.4*
	tert-Butyl alcohol	µg/m3	*< 1.52*	*< 1.52*	*< 1.52*	*< 57.6*
	Tetrachloroethene	µg/m3	*< 0.136*	*< 0.136*	*< 0.136*	*< 51.5*
	Tetrahydrofuran	µg/m3	*< 1.47*	*< 1.47*	*< 1.47*	*< 56.0*
	Toluene	µg/m3	0.757	1.10	*< 0.754*	78.0
	trans-1,2-Dichloroethene	µg/m3	*< 0.793*	*< 0.793*	*< 0.793*	*< 30.1*
	trans-1,3-Dichloropropene	µg/m3	*< 0.908*	*< 0.908*	*< 0.908*	*< 34.5*
	Trichloroethene	µg/m3	*< 0.107*	0.113	0.107	12,600
	Trichlorofluoromethane (Freon 11)	µg/m3	1.40	1.40	1.37	*< 42.7*
	Vinyl bromide	µg/m3	*< 0.874*	*< 0.874*	*< 0.874*	*< 33.2*
	Vinyl chloride	µg/m3	*< 0.051*	*< 0.051*	*< 0.051*	*< 19.4*

Notes:

< = Compound not detected at concentrationsabove the laboratory reporting detection limit.The laboratory reporting detection limit is shown.
N = Normal Environmental Sample
FD = Field Duplicate Sample
µg/m3 = micrograms per cubic meter

Table 5
Summary of Historical Non-Aqueous Phase Liquid Thicknesses in Wells
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

WELL	RW-1 (ft.) (DNAPL)	RW-2 (ft.) (DNAPL)	RW-4 (ft.) (DNAPL)	RW-5 (ft.) (LNAPL)	RW-6 (ft.) (DNAPL)	VMP-2 (ft.) (DNAPL)	VMP-5 (ft.) (DNAPL)	MW-20 (ft.) (DNAPL)	MW-23 (ft.) (LNAPL)
Date									
19-May-08	0.00	0.00	0.00	0.00	NI	0.00	HS	0.09	0.14
30-May-08	0.00	0.16	0.00	0.00	NI	0.00	HS	0.03	0.14
16-Jun-08	0.00	0.14	0.00	0.02	NI	0.00	0.02	0.07	0.13
25-Jun-08	0.00	0.16	0.00	0.02	NI	0.00	HS	0.07	0.26
3-Jul-08	0.00	0.16	0.00	0.02	NI	0.00	HS	0.09	0.18
23-Jul-08	0.00	0.16	0.00	0.02	NI	0.00	HS	0.10	0.09
6-Aug-08	0.03	0.16	0.00	0.04	NI	0.00	HS	0.11	0.09
19-Aug-08	0.03	0.16	0.00	0.04	NI	0.00	HS	0.13	0.11
21-Nov-08	HS	0.11	0.00	0.00	NI	0.00	HS	0.22	0.29
17-Dec-08	HS	0.11	0.00	0.00	NI	0.00	HS	0.24	0.29
14-Jan-09	0.00	0.00	0.00	0.00	NI	0.00	0.00	HS	0.13
26-Feb-09	0.00	0.00	0.00	0.00	NI	0.00	0.00	0.01	0.24
12-Mar-09	0.00	0.00	0.00	0.00	NI	0.00	0.00	0.00	0.09
22-Apr-09	0.00	0.00	0.00	0.00	NI	0.00	0.00	0.00	0.11
13-May-09	0.00	0.00	0.00	0.00	NI	0.00	0.00	0.00	0.09
25-Jun-09	NM	0.00	NM	0.00	NI	0.00	0.00	NM	0.12
17-Jul-09	NM	0.00	NM	0.00	NI	0.00	0.00	NM	0.11
27-Aug-09	0.00	0.00	0.00	0.00	NI	0.00	NM	NM	0.09
25-Sep-09	0.00	0.00	0.00	0.00	NM	0.00	NM	0.04	0.11
16-Oct-09	NM	0.00	0.00	0.00	NM	0.00	NM	NM	0.11
19-Nov-09	NM	0.00	NM	NM	NM	0.00	NM	NM	0.21
17-Dec-09	0.00	0.00	NM	NM	NM	0.00	0.00	0.01	0.23
14-Jan-10	0.00	0.00	0.00	NM	NM	0.00	0.00	0.01	0.21
17-Feb-10	0.00	0.00	NM	NM	NM	0.00	0.00	0.01	0.17
18-Mar-10	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.01	0.09
13-Apr-10	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.01	0.12
18-May-10	0.00	0.00	0.00	0.00	0.53	0.00	NM	0.01	0.08
15-Jun-10	0.00	0.00	0.00	NM	0.01*	0.00	0.00	0.01	0.07
14-Jul-10	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.07
13-Aug-10	0.00	NM	0.00	NM	0.08	0.00	0.00	HS	0.10
14-Sep-10	0.00	NM	0.00	NM	0.04	0.00	0.00	NM	0.06
14-Oct-10	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.01	0.08
22-Nov-10	0.00	0.00	NM	0.00	0.04	0.00	0.00	0.01	0.14
15-Dec-10	0.00	0.00	0.00	NM	0.01	0.00	NM	0.01	0.09
18-Jan-11	0.00	0.00	0.00	NM	HS	0.00	NM	0.02	0.09
21-Feb-11	NM	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.04
11-Mar-11	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.04	0.03
21-Apr-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
24-May-11	0.00	0.00	0.00	NM	0.15	0.30	0.00	0.10	0.10
21-June-11	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.03	0.08
21-July-11	0.00	0.00	0.00	NM	HS	0.00	0.00	0.01	0.06
29-Aug-11	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	HS
26-Sept-11	0.00	NM	0.00	0.00	0.10	0.00	NM	0.04	HS

Table 5
Summary of Historical Non-Aqueous Phase Liquid Thicknesses in Wells
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

WELL	RW-1 (ft.) (DNAPL)	RW-2 (ft.) (DNAPL)	RW-4 (ft.) (DNAPL)	RW-5 (ft.) (LNAPL)	RW-6 (ft.) (DNAPL)	VMP-2 (ft.) (DNAPL)	VMP-5 (ft.) (DNAPL)	MW-20 (ft.) (DNAPL)	MW-23 (ft.) (LNAPL)
Date									
28-Oct-11	0.00	0.00	NM	0.00	0.03	0.00	0.00	0.02	HS
18-Nov-11	0.00	0.00	NM	NM	HS	0.00	0.00	0.01	0.04
22-Dec-11	0.00	0.00	NM	NM	0.03	0.00	0.00	0.02	0.06
20-Jan-12	0.00	0.00	0.00	0.00	HS	0.00	0.00	0.02	HS
21-Feb-12	0.00	0.00	0.00	0.00	HS	0.00	0.00	0.03	HS
16-Mar-12	0.00	0.00	0.00	0.00	HS	0.00	0.00	HS	0.15
20-Apr-12	0.00	0.00	NM	NM	HS	0.00	0.00	0.02	0.02
17-May-12	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.01	0.03
20-Jun-12	0.00	0.00	0.00	0.00	HS	0.00	0.00	0.01	0.04
20-Jul-12	NM	0.00	NM	0.00	HS	0.00	0.00	NM	0.02
21-Aug-12	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.12	0.19
14-Sept-12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.09
17-Oct-12	0.00	0.00	0.00	0.00	0.11	0.00	NM	0.14	0.09
20-Nov-12	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.02	HS
19-Dec-12	0.00	0.00	NM	0.00	HS	0.00	0.00	0.03	0.06
24-Jan-13	0.00	0.00	0.00	0.00	HS	0.00	0.00	0.03	0.09
22-Feb-13	NM	NM	NM	NM	NM	NM	NM	NM	NM
25-Mar-13	0.00	0.00	NM	NM	0.04	0.00	0.00	0.04	HS
3-May-13	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00
31-Jul-13	0.00	0.00	NM	NM	HS	0.00	0.00	0.04	0.03
25-Sept-13	0.00	0.00	0.00	0.00	HS	0.00	0.00	0.06	HS
20-Nov-13	0.00	0.00	0.00	NM	0.09	0.00	0.00	0.00	0.12
7-Jul-14	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.08	0.12
22-Oct-14	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.03	0.06
27-Mar-15	0.00	0.00	0.00	NM	0.04	0.00	0.00	0.12	0.12
10-June-15	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.13	0.12
25-Sept-15	0.00	0.00	NM	NM	0.02	0.00	0.00	0.02	0.05
11-Dec-15	0.00	0.00	NM	NM	0.16	0.00	0.00	0.03	0.12
31-Mar-16	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.02	0.10
2-June-16	0.00	0.00	NM	NM	0.02	0.00	0.00	0.02	0.11
26-Sept-16	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.06
28-Dec-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.15
31-Mar-17	0.00	0.00	NM	0.00	0.04	0.00	0.00	0.02	0.10
15-Jun-17	0.00	0.00	NM	0.00	0.04	0.00	0.00	0.01	0.05
22-Aug-17	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.02	0.07
18-Dec-17	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.06
29-Mar-18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.15
23-Jun-18	0.00	NM	NM	NM	0.03	0.00	0.00	0.01	0.10
19-Sept -18	0.00	0.00	0.00	0.00	HS	0.00	0.00	0.02	0.09
13-Dec-18	0.00	0.00	0.00	0.00	0.04	0.00	0.00	HS	0.07
29-Mar-19	0.00	0.00	0.00	0.00	HS	0.00	0.00	0.00	NM
27-Mar-19	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	NM
27-Jun-19	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	NM
13-Sep-19	0.00	0.00	0.00	0.00	HS	0.00	0.00	HS	0.00
29-Dec-19	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
30-Jun-20	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.32
18-Dec-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Jun-21	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.08

Notes:

All values are reported in feet as measured with an electronic interface probe.

HS - heavy sheen but no measureable thickness.

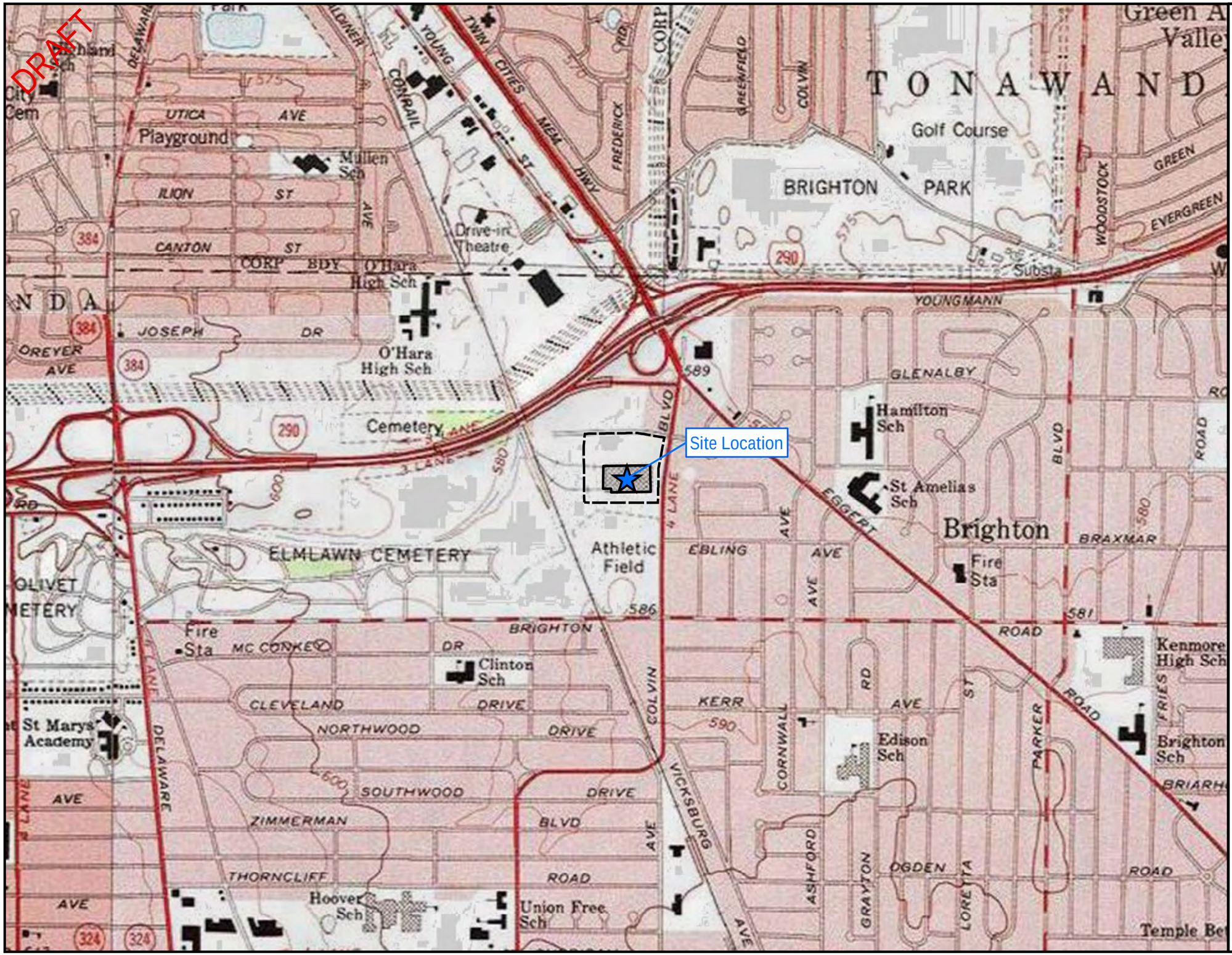
NM - not measured

NI - not installed as of this date.

* - Product level after ERM initiated DNAPL recovery test

FIGURES

DRAFT



Legend

- Building Outline
- Tax Parcel Boundary

NOTES:

1. Tax parcel boundary is approximate in extent and obtained from Eerie County, NY 2017.

N

0 250 500 1,000 1,500 2,000

Feet

Figure 1
Site Location Map
Sonoco Products Company
Tonowanda, NY

ERM

Q:\Boston\Team\DMM\Clients_Q_T\Sonoco\Tonawanda_NY\MXD\PRR-Figure1_SiteLocationMap_20200715.mxd - Caldwell-Payne - 7/15/2020

1387.925' DEED/1387.38' MEAS.

852.86' S.89°21'58"W.

SOUTH LINE MAP COVER 1312

612.61' S.00°45'54"E.

WOODED AREA

ASPHALT PAVEMENT

ASPHALT DRIVEWAY

GRASS

CONCRETE PAD

CONCRETE WALK

MAN DOOR

OVERHEAD DOOR

LONG TRUCK BAY

GRAVEL

LOADING DOCKS

FIBER DRUM STORAGE AREA

FORMER VARNISH UST AREA

FORMER VARNISH PIT

CHAINLINK FENCE ON SECOND FLOOR

VAULT W/GRATE

MAIN BUILDING

OFFICE AREA

SIGN

FLAGPOLE

346.27'

276.46' MS/276.80'DEED N.09°51'24"E.

20' WIDE EASEMENT TO TOWN OF TONAWANDA, L.14859, PG.169

368.44' N.01°21'38"E.

CONCRETE WALL

SHORT TRUCK BAY

PIPE TRENCH

FLAMMABLES ROOM

FORMER TREATMENT BUILDING

ELECTRIC TRANSFORMER

TRENCH

BOILER

STAIRS

VAULT W/METAL DOORS

ASPHALT WALK

788.78' S.88°38'22"E.

FENCE 6.1'S.

FENCE 4.8'S.

P.O.B.

N

0 70' 140'

GRAPHIC SCALE IN FEET

LEGEND

Deed Restriction Boundary

Concrete Pad

Map Source: Wm. Schutt & Associates, P.C., 37 Central Ave, Lancaster, NY. Survey File: D/01351/03, WSA Proj.#01351.

TITLE

FIGURE 2 - SITE LAYOUT & BOUNDARIES
GREIF FACILITY-TONAWANDA, NEW YORK
NYSDEC VCP NUMBER V00334-9

PREPARED FOR

SONOCO PRODUCTS COMPANY

Environmental Resources Management

FIGURE 1

DRAWN BY	SCALE	DATE	JOB NO.
EMF	GRAPHIC	14 JANUARY 2015	0194591.03

R:\Scout\Projects\Sonoco - Greif Bros. Facility\CAD\2014 - SMP\2014-01-Sonoco - Site & Site Boundaries.DWG (01/14/2015 - 1:35pm Melville)

LEGEND

- Property Line and Deed Restriction Boundary
- Soil Cover Sytem - Building Slab
- Concrete Pad
- Estimated Lateral Extent of Soil Exhibiting Signs of NAPL, Heavy Odor, Sheen, and/or Significantly Elevated PID Readings
- Soil Cover System in GB-10/Former Drum Storage UST Area. Area Shown Represents Estimated Extent of Remaining Soil Above Unrestricted use SCOs.
- Soil Cover System in Former Varnish UST Area. Area Shown Represents Estimated Extent of Remaining Soil Above Unrestricted use SCOs.

Map Source: Wm. Schutt & Associates, P.C., 37 Central Ave, Lancaster, NY. Survey File: D/01351/03, WSA Proj.#01351.

0 75' 150'

GRAPHIC SCALE IN FEET

TITLE

FIGURE 3 - LOCATION OF COVER SYSTEM TYPES GREIF FACILITY-TONAWANDA, NEW YORK NYSDEC VCP NUMBER V00334-9

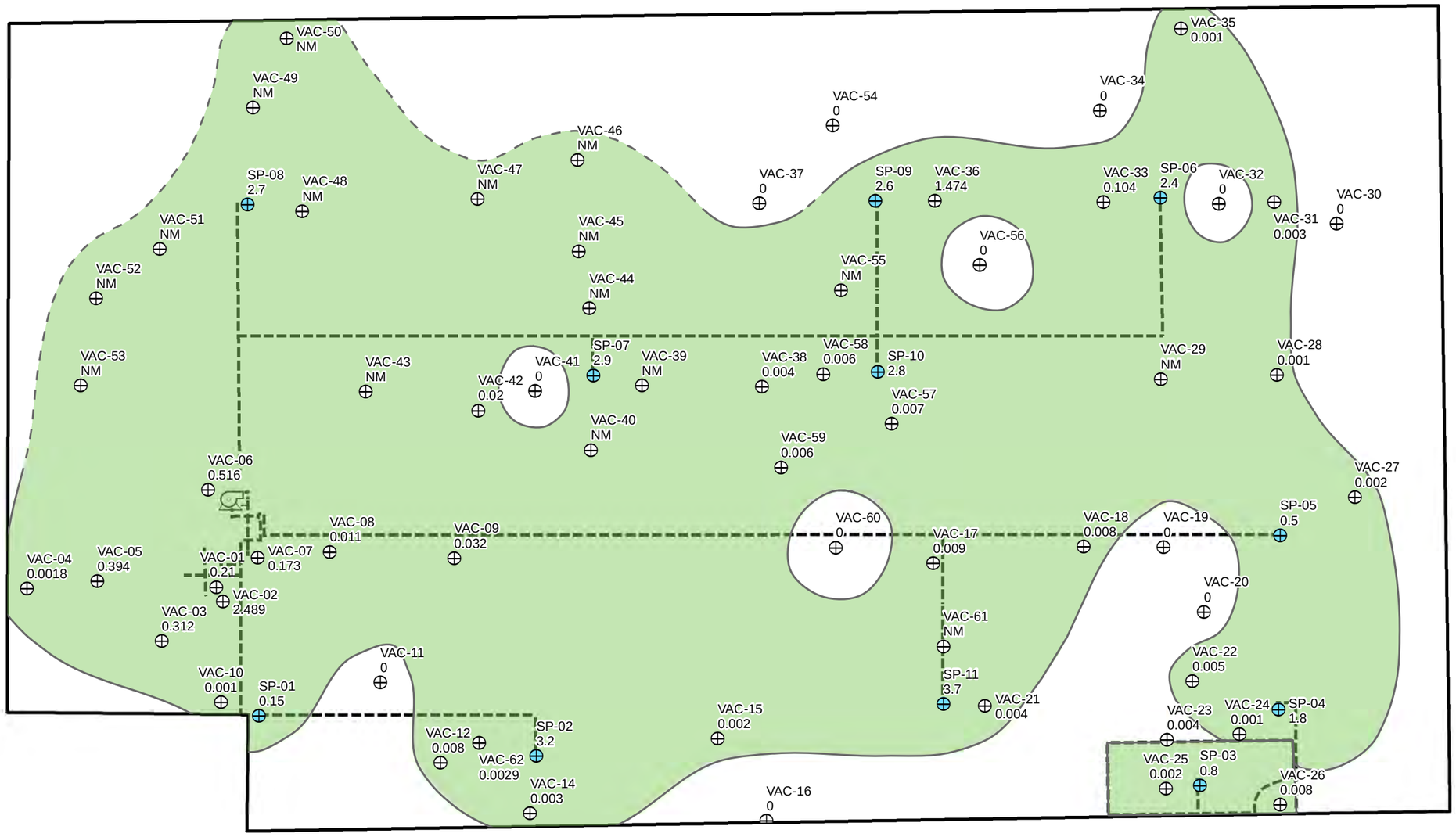
PREPARED FOR

SONOCO PRODUCTS COMPANY

Environmental Resources Management

DRAWN BY	SCALE	DATE	JOB NO.	FIGURE
EMF	GRAPHIC	21 MARCH 2014	0194591.03	3

R:\Scout\Projects\Sonoco - Greif Bros. Facility\CAD\2014 - SMP\2014-01-Sonoco - Cover System Types.DWG (03/21/2014 - 2:57pm Melville)



Legend

- Vertical Suction Point
- Vacuum Monitoring Point
- Modeled Vacuum Extent Boundary
- Inferred Vacuum Extent Boundary
- Estimated Extent of Sub-Floor Vacuum
- Building Outline
- SSD Piping
- Pump Location

NOTES:

1. Vacuum strength is reported in inches of water.
2. Measurements were collected on 12/18/2020.
3. NM = not measured.
4. Estimated extent of vacuum was modeled using topo-to-raster methods in ArcGIS 10.5.

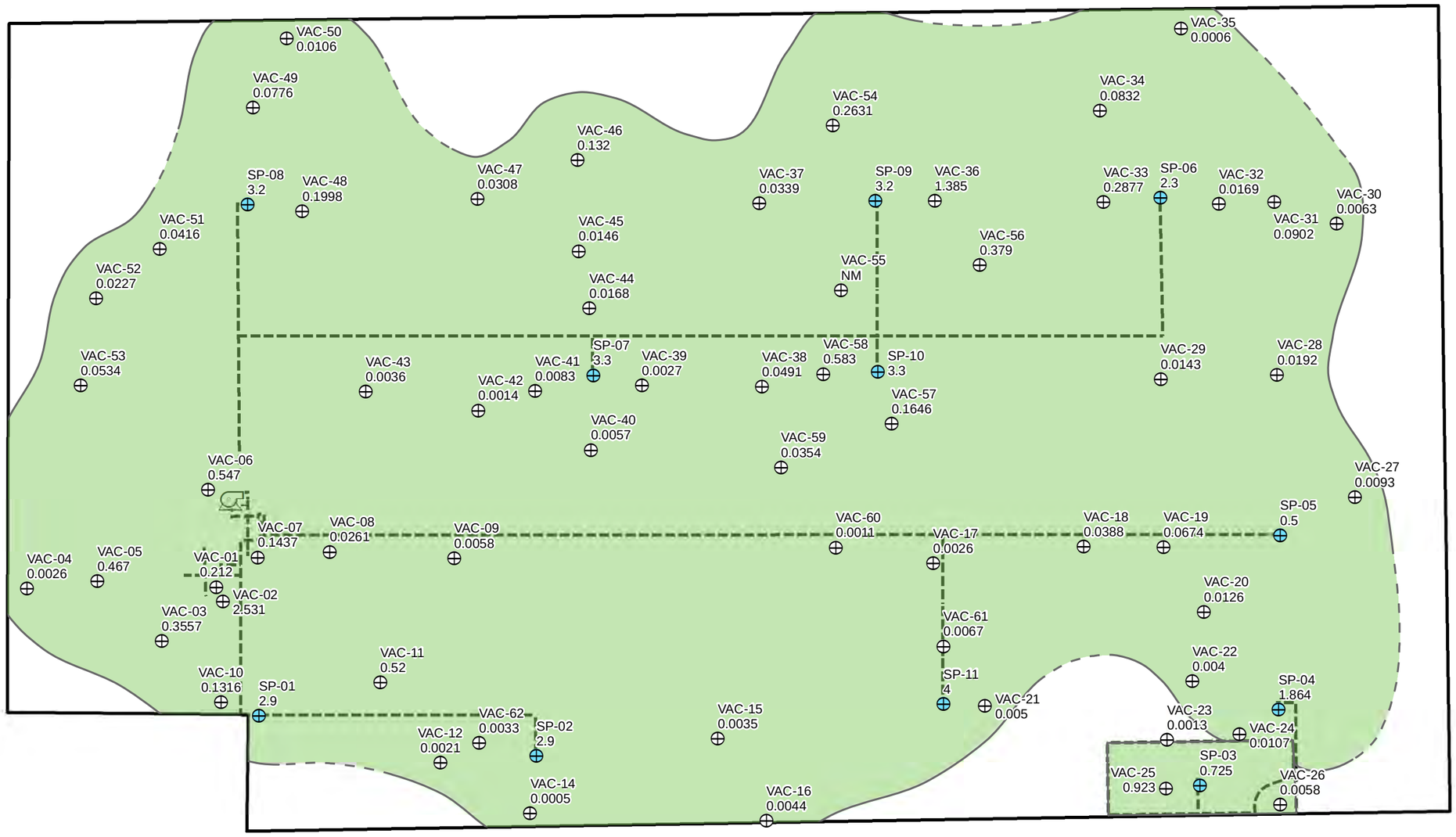
N

0 12.5 25 50 75 100

Feet

Figure 4A
December 2020 Subsurface Vacuum Distribution
Sonoco Products Company
Tonowanda, NY

ERM



Legend

- Vertical Suction Point
- Vacuum Monitoring Point
- Modeled Vacuum Extent Boundary
- Inferred Vacuum Extent Boundary
- Estimated Extent of Sub-Floor Vacuum
- Building Outline
- SSD Piping
- Pump Location

NOTES:

1. Vacuum strength is reported in inches of water.
2. Measurements were collected on 6/28/2021.
3. NM = not measured.
4. Estimated extent of vacuum was modeled using topo-to-raster methods in ArcGIS 10.5.

N

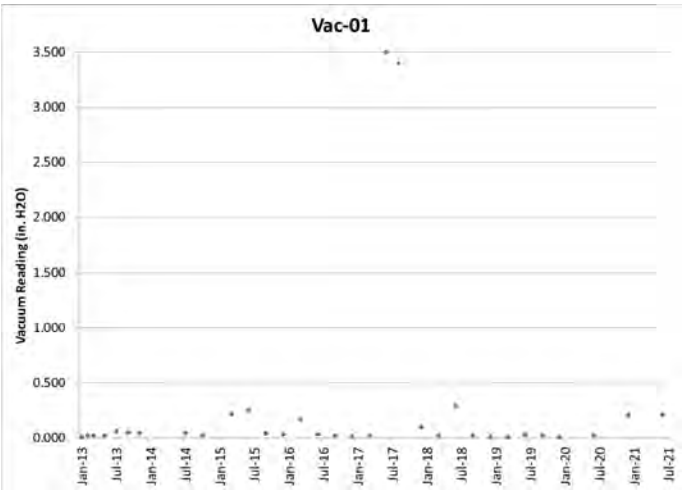
0 12.5 25 50 75 100

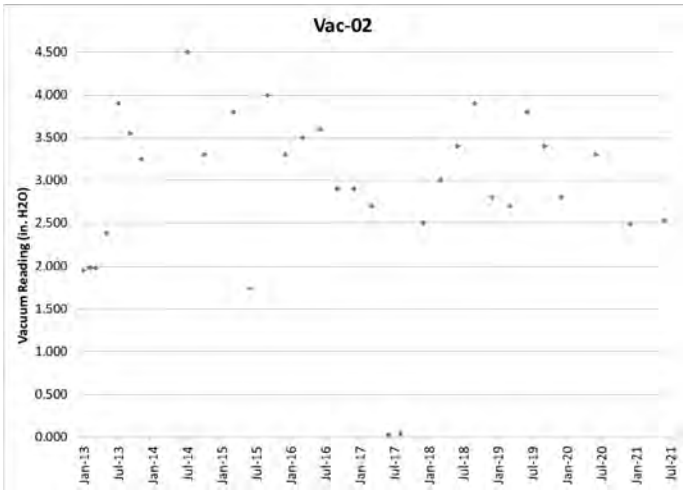
Feet

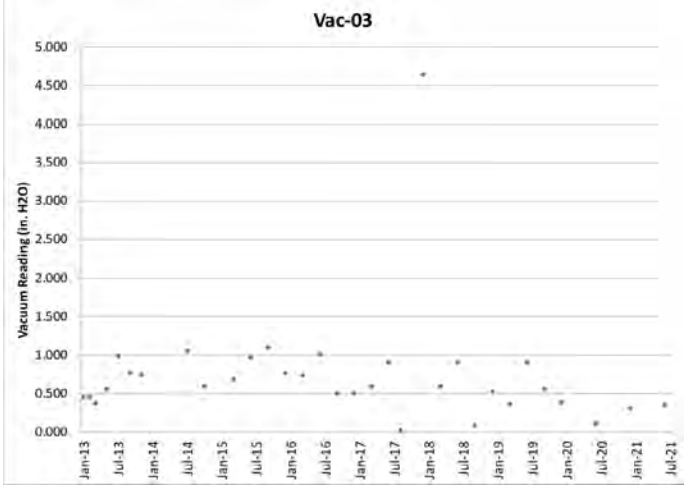
Figure 4**B**
June 2021 Subsurface Vacuum Distribution
Sonoco Products Company
Tonowanda, NY

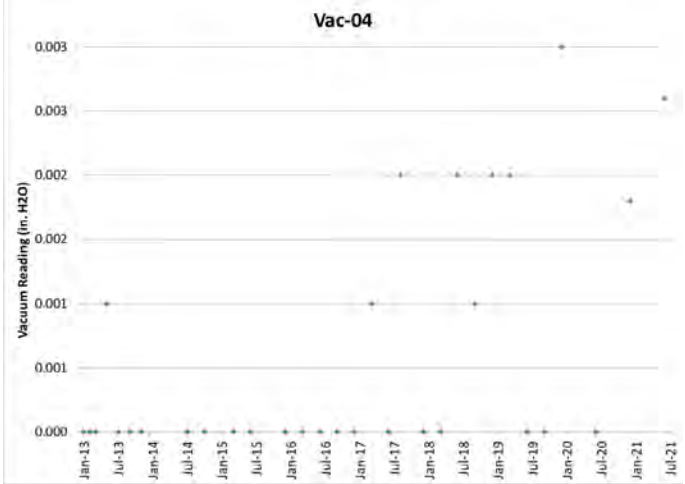
ERM

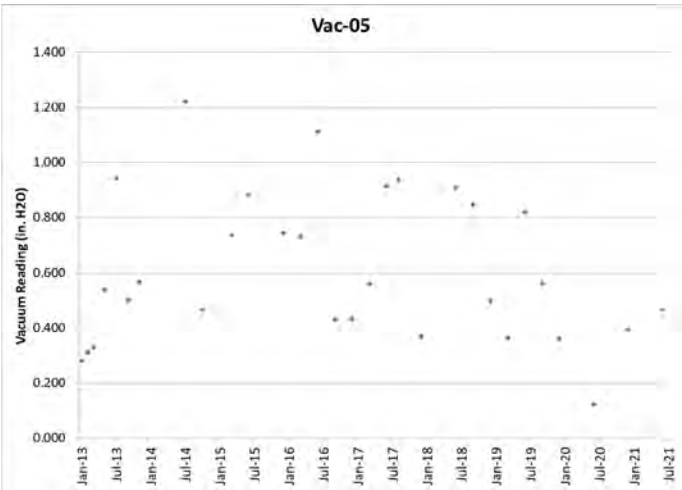
Figure 5
Historical Vacuum Monitoring Data
Greif Facility – Tonawanda, NY NYDEC VCP Number V00334-9











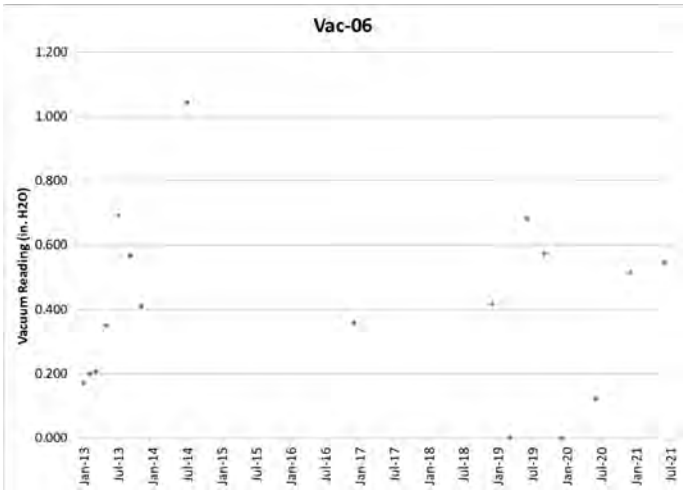
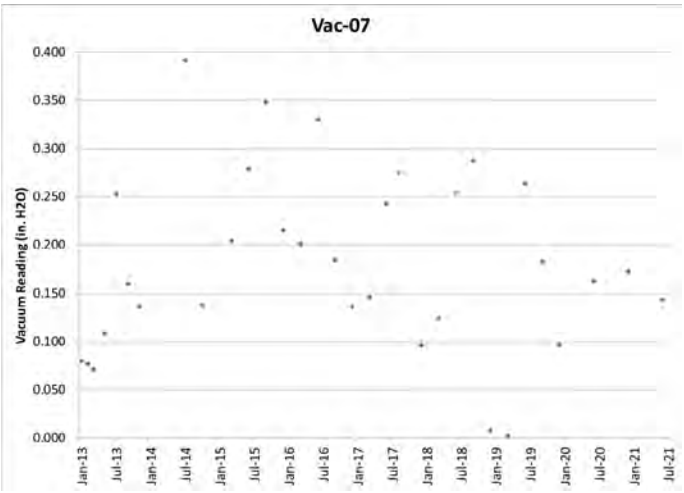
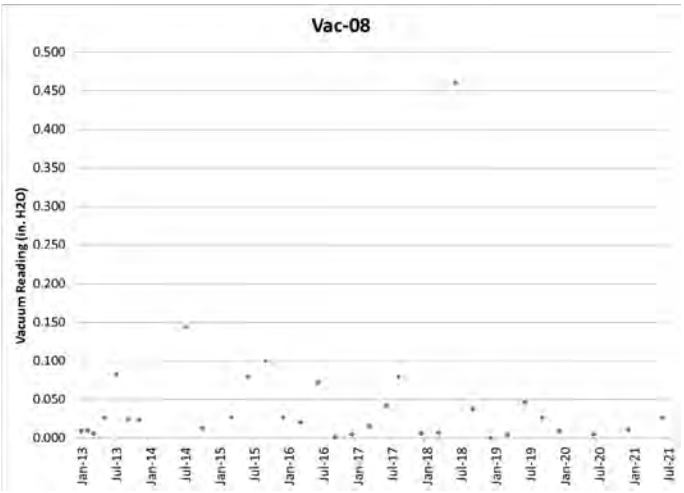
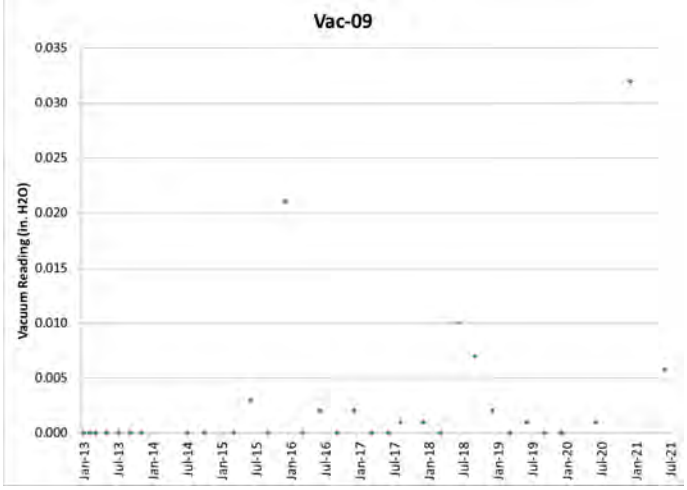
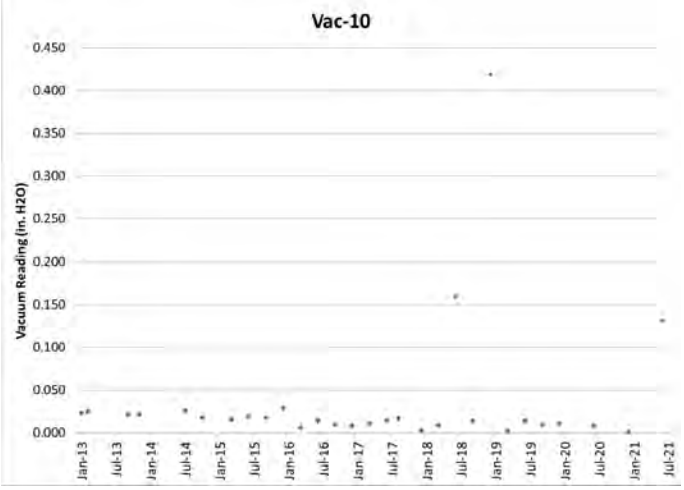


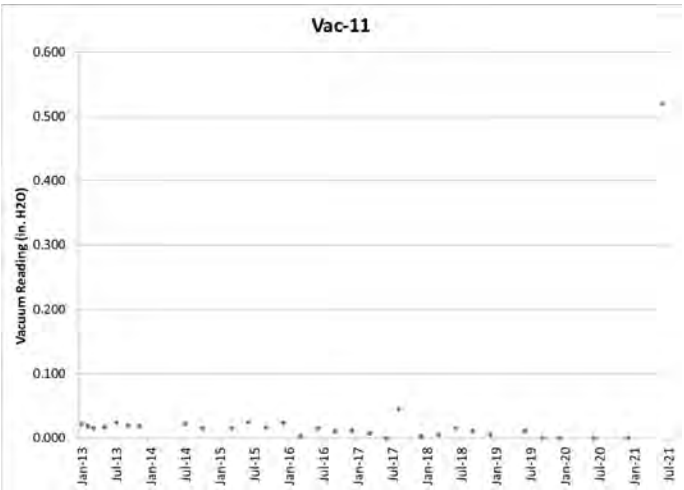
Figure 5
Historical Vacuum Monitoring Data
Greif Facility – Tonawanda, NY NYDEC VCP Number V00334-9











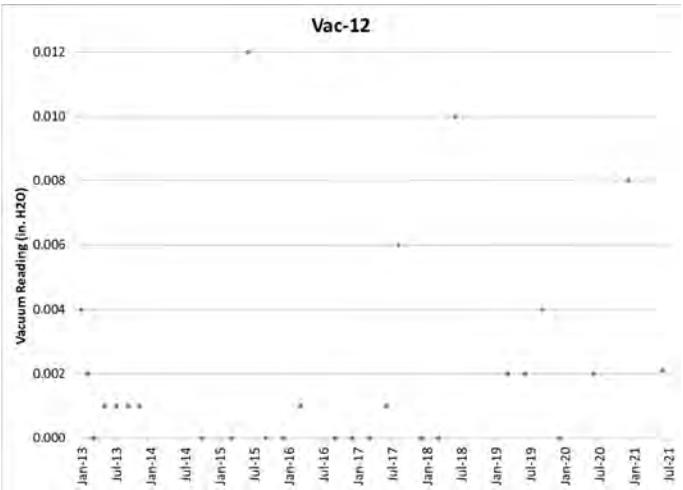
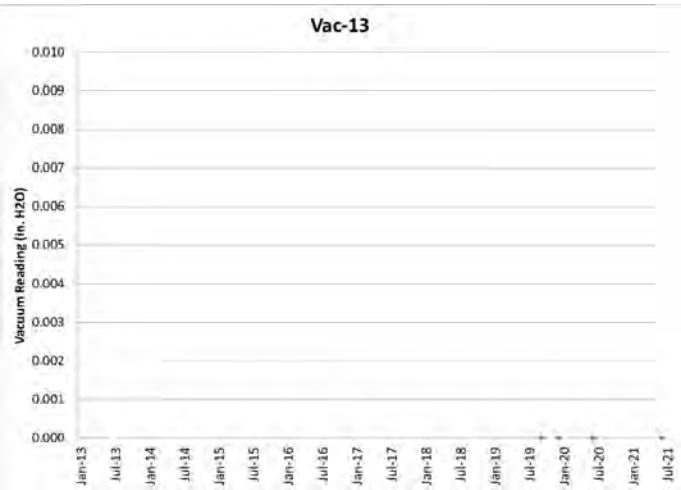
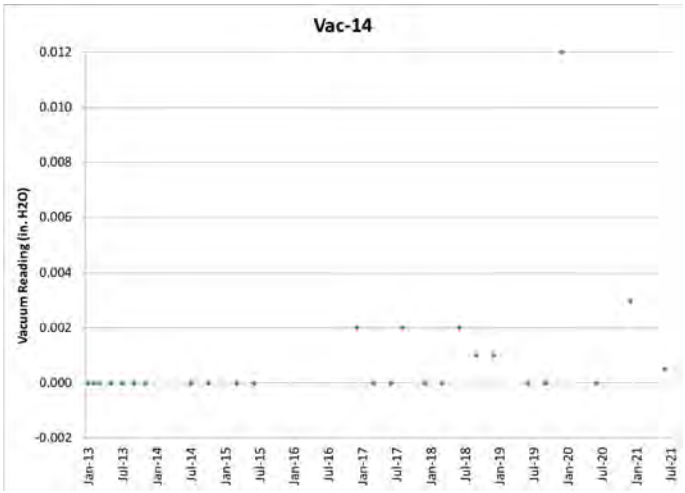
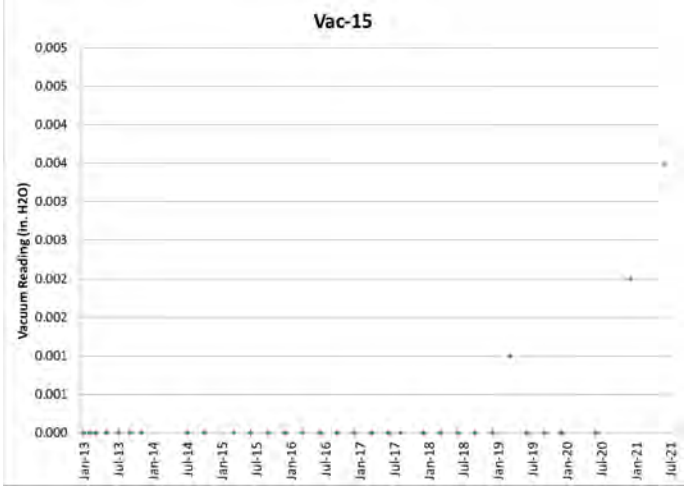
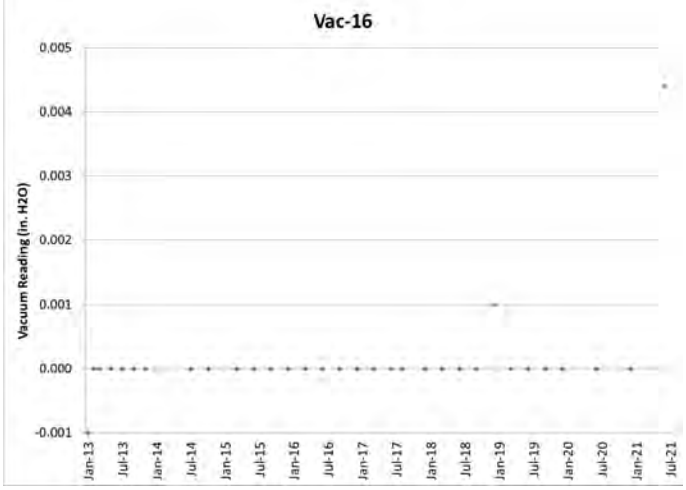


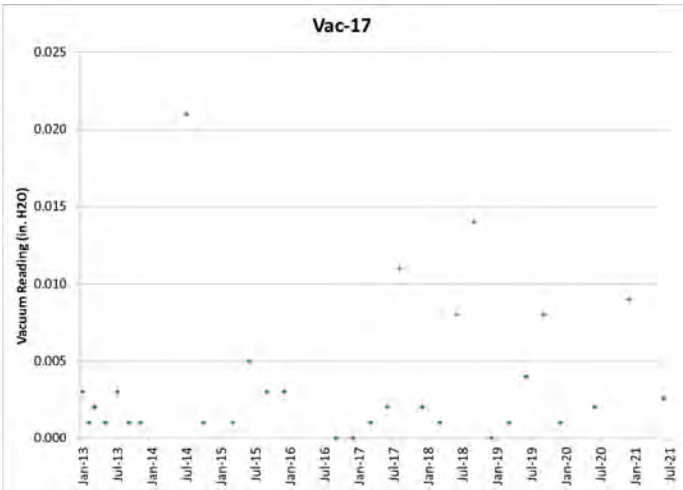
Figure 5
Historical Vacuum Monitoring Data
Greif Facility – Tonawanda, NY NYDEC VCP Number V00334-9

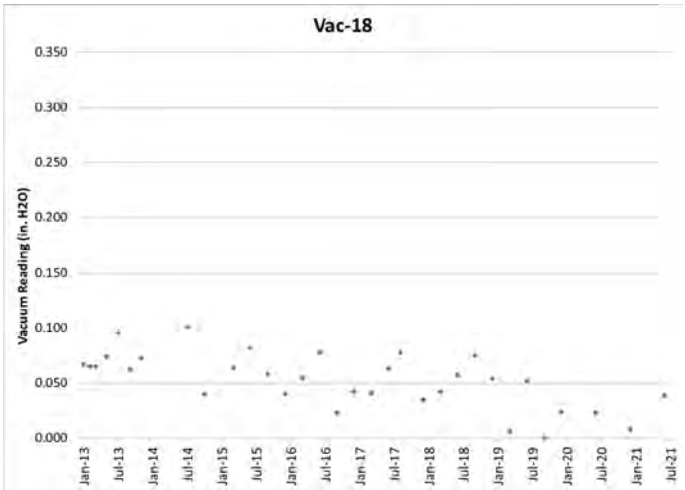












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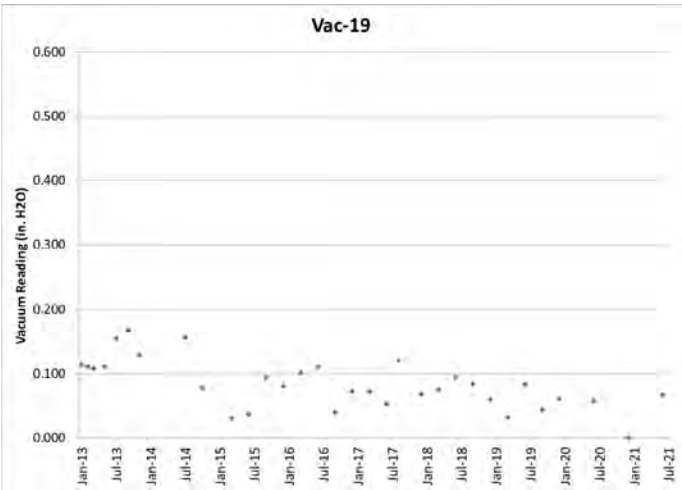
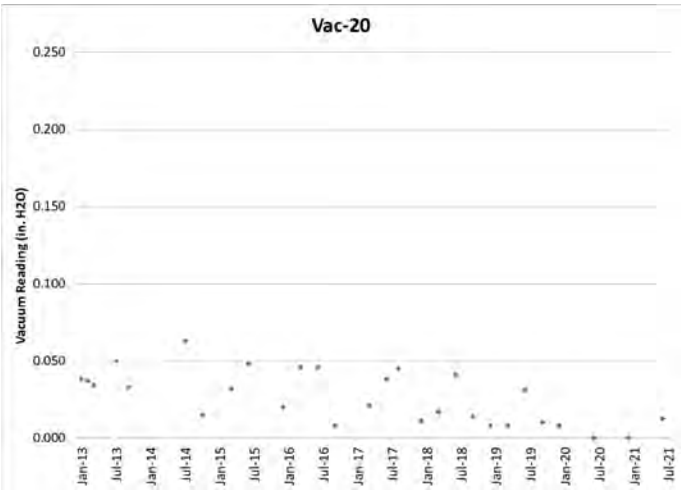
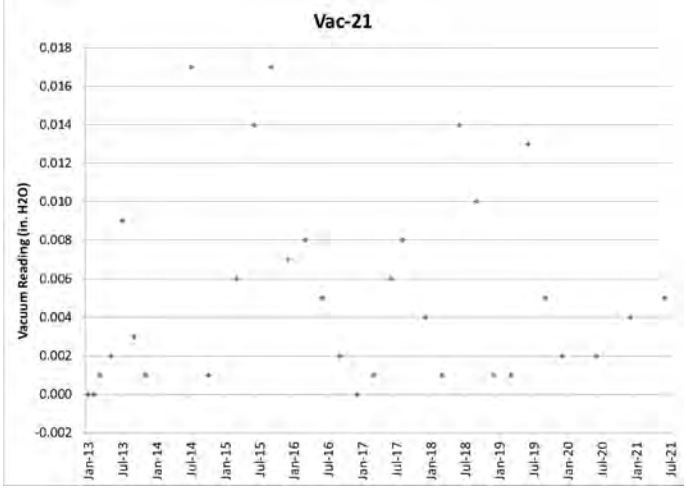
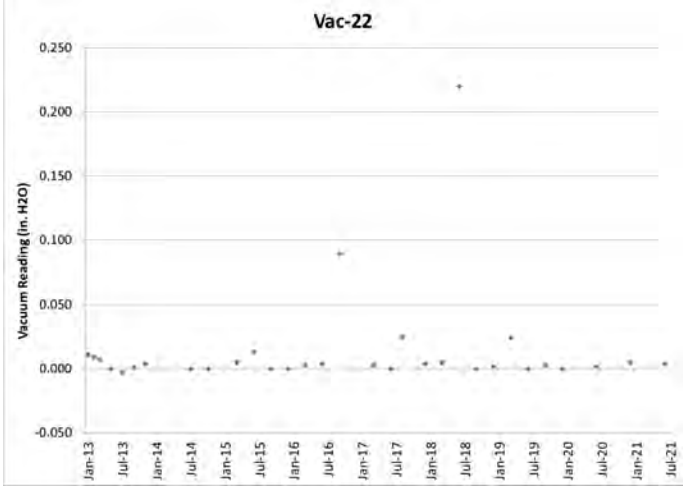
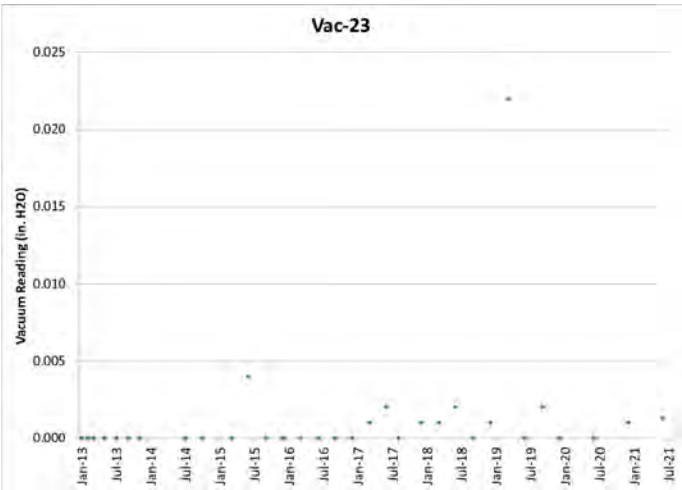
Greif Facility – Tonawanda, NY NYDEC VCP Number V00334-9

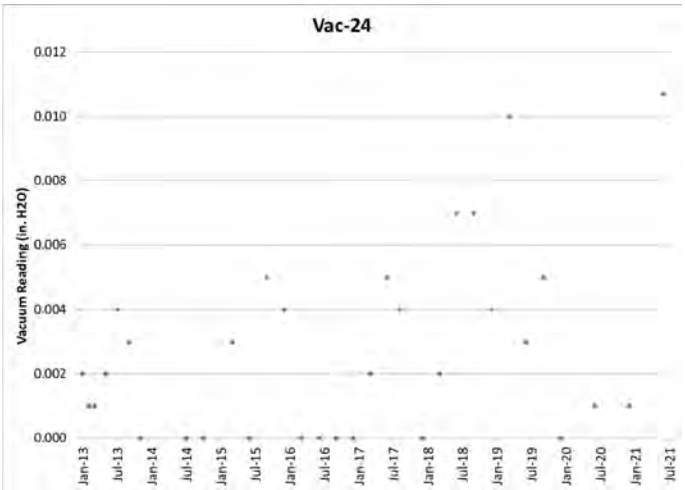












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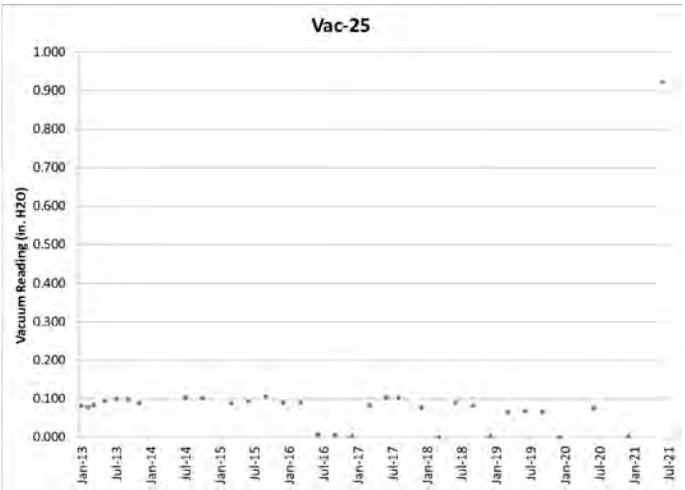
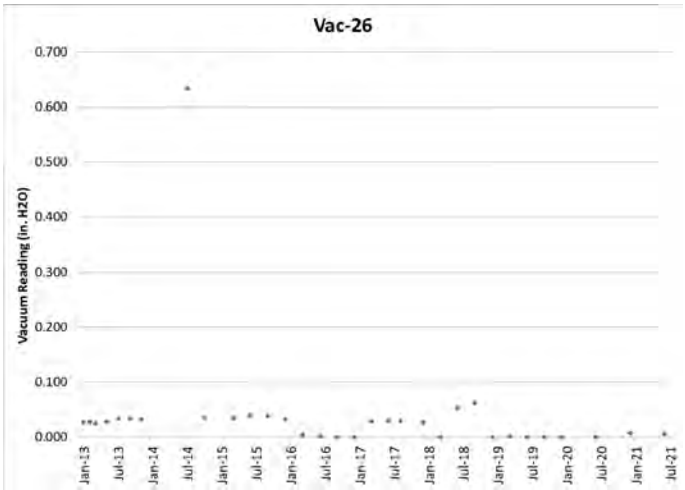
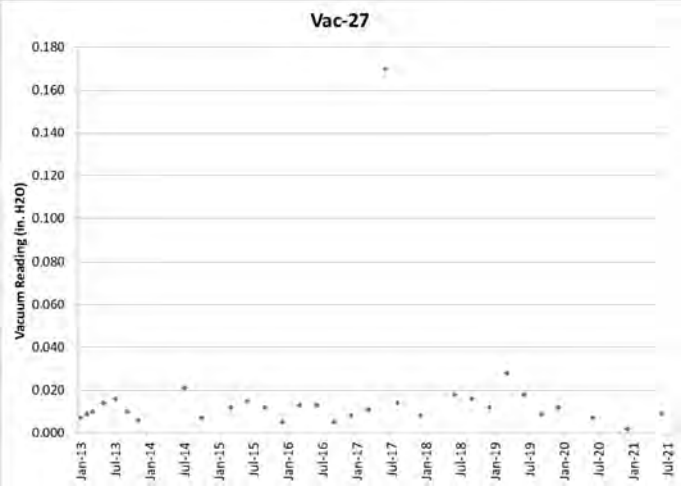
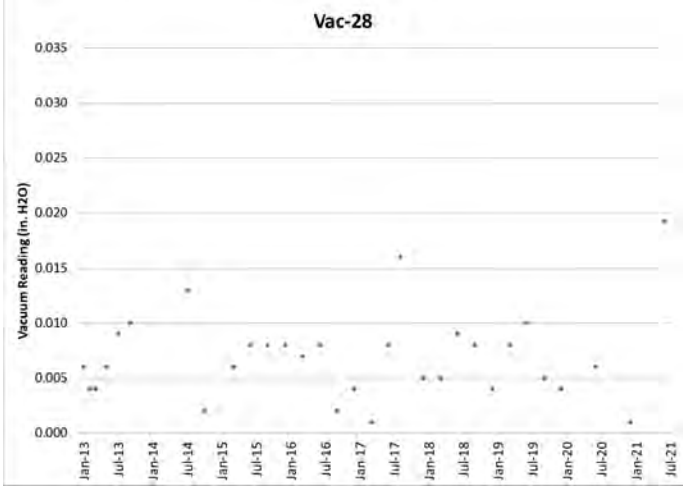
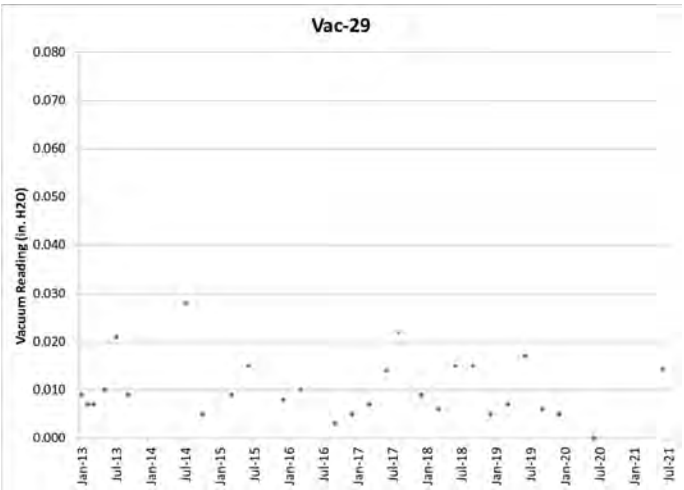
Greif Facility – Tonawanda, NY NYDEC VCP Number V00334-9

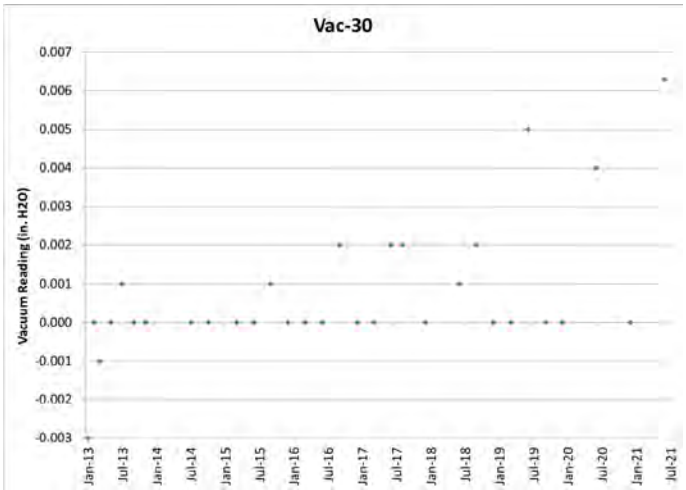












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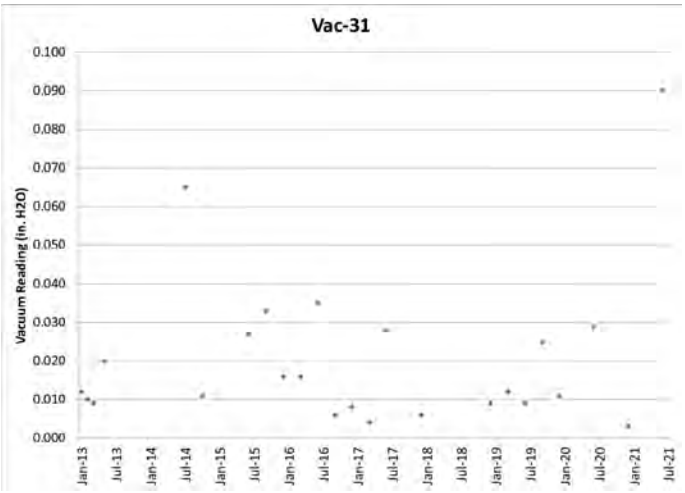

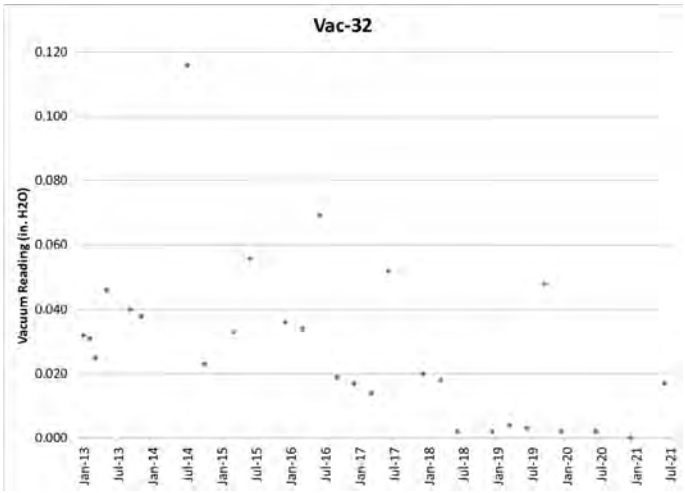

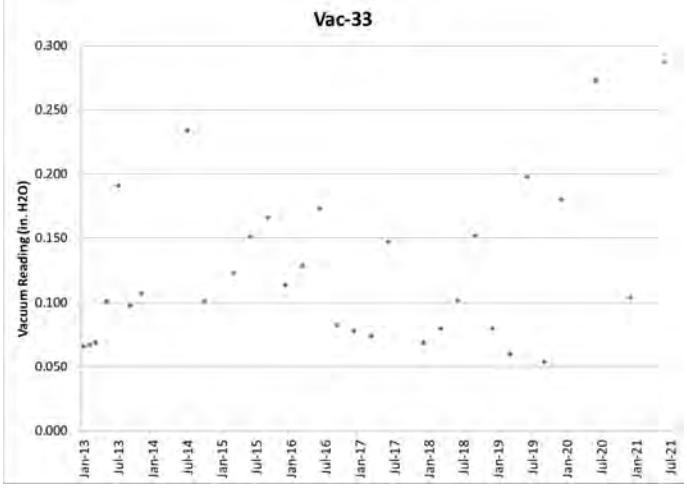

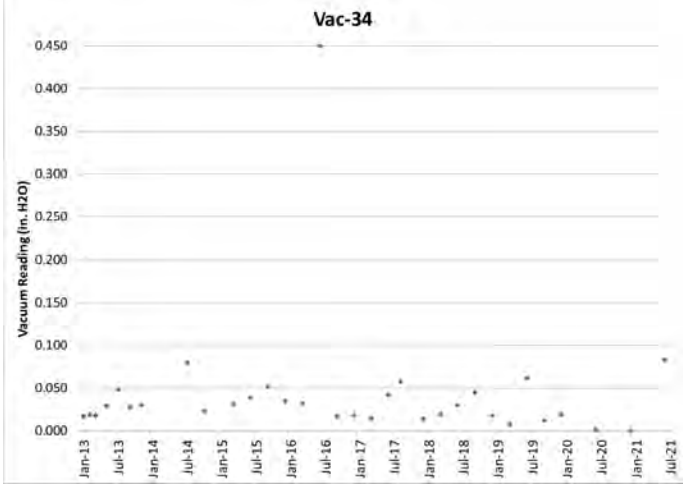

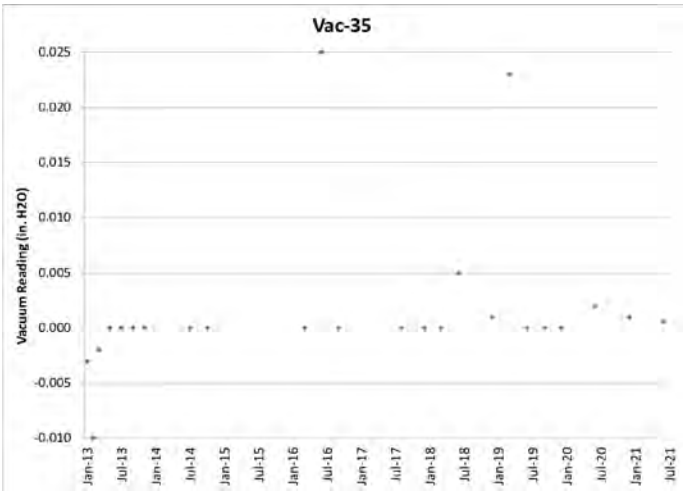

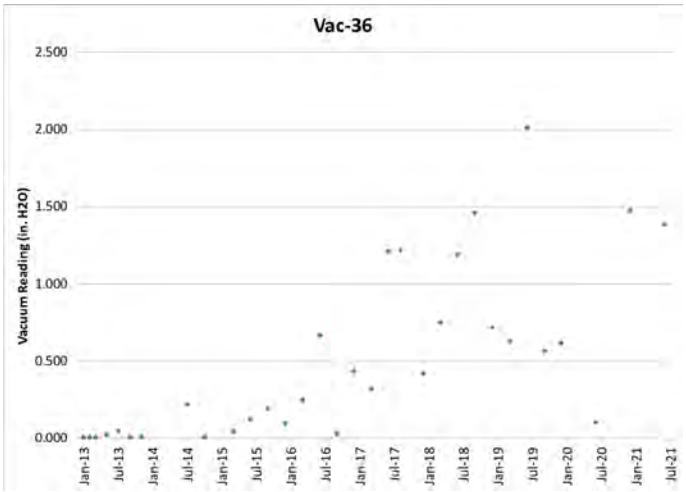

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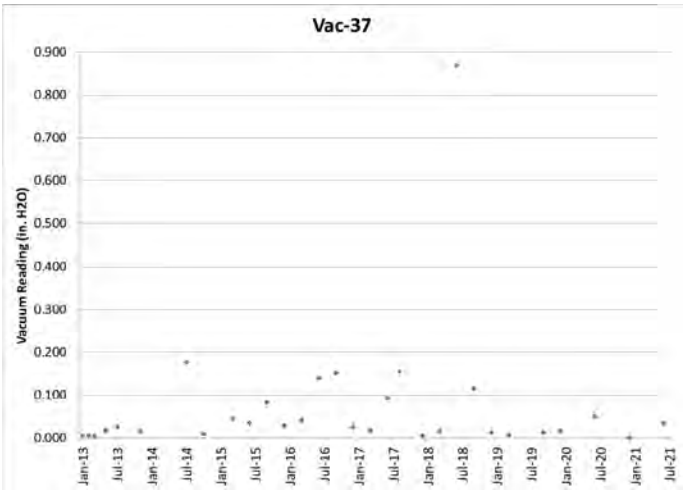

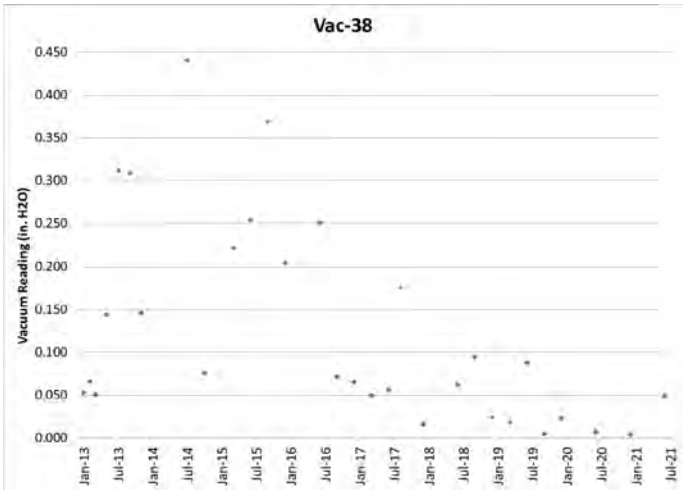

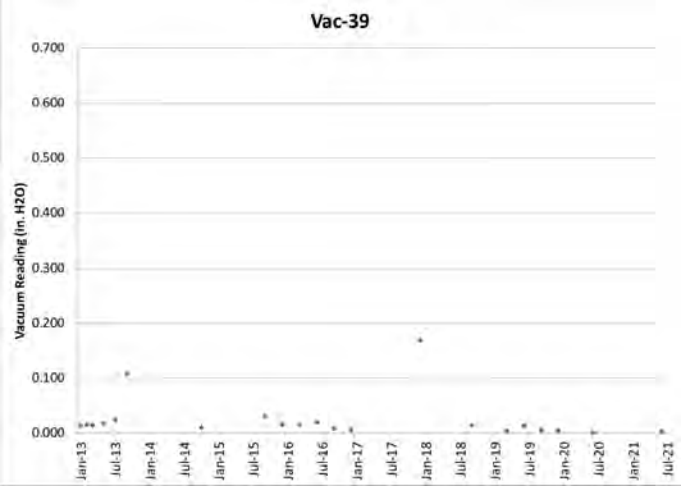

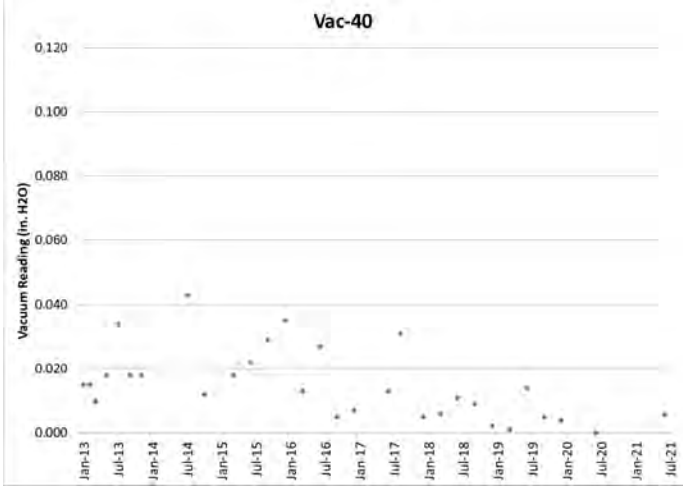

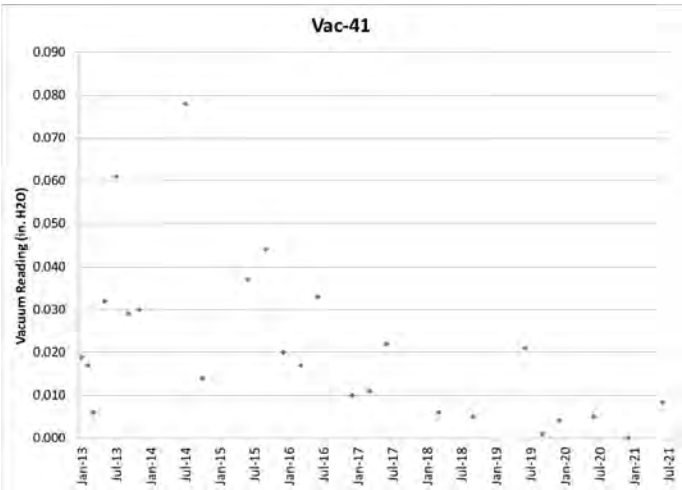

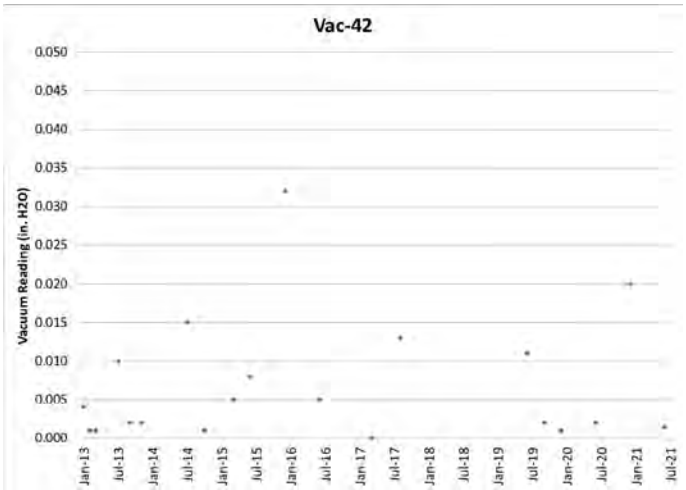

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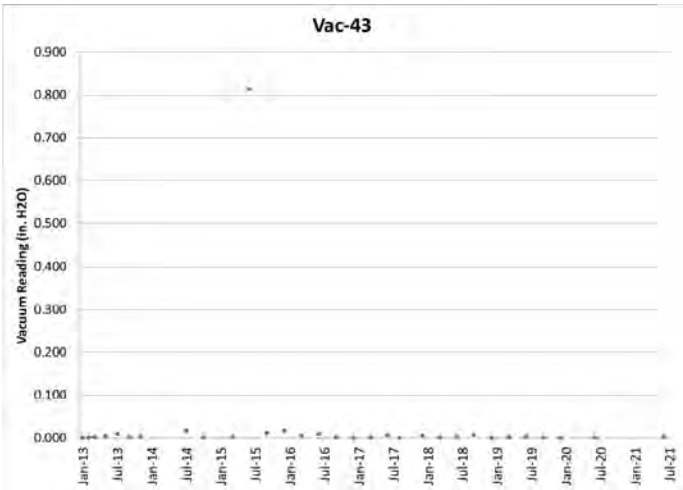

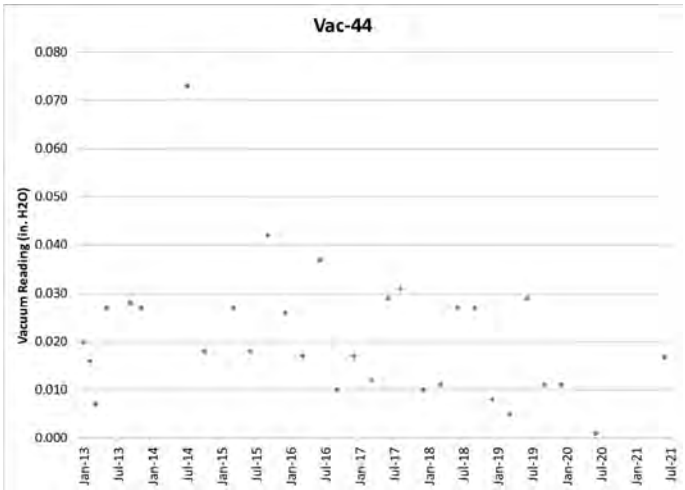

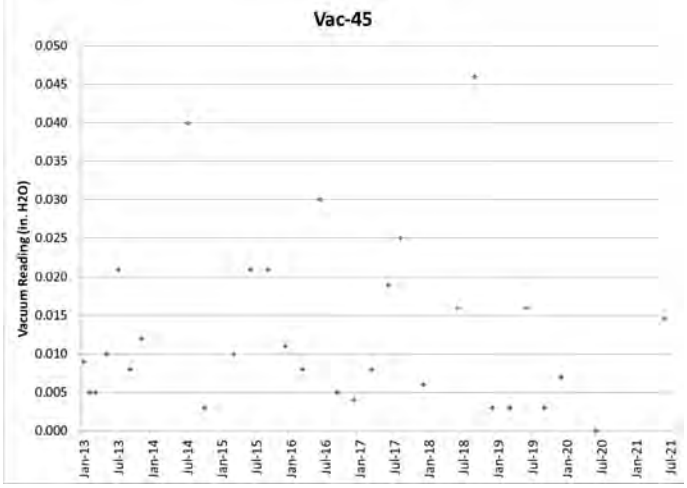

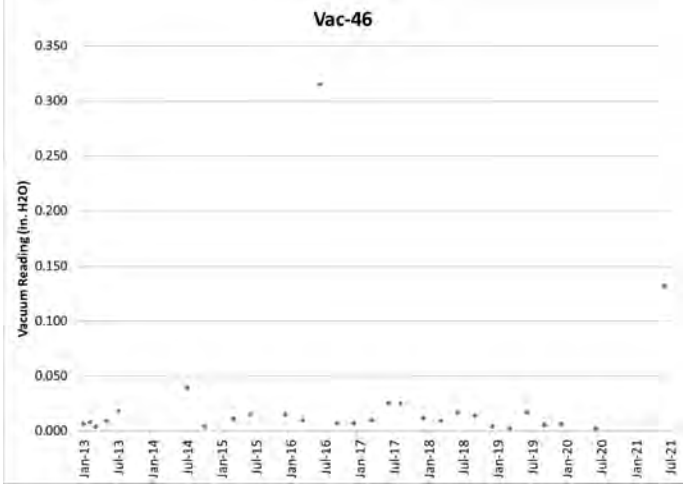

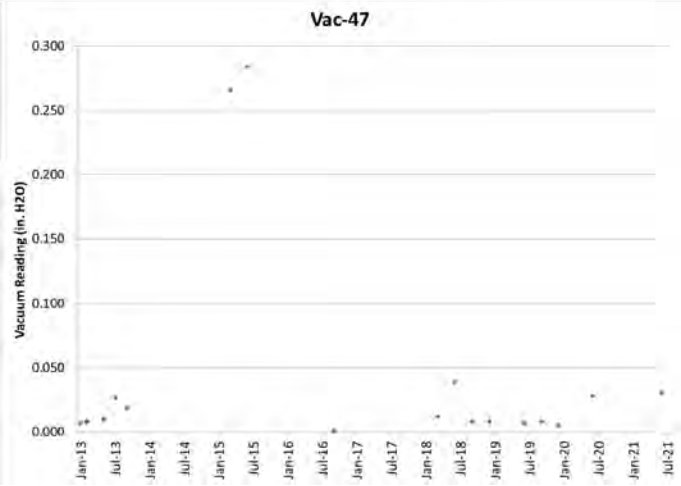

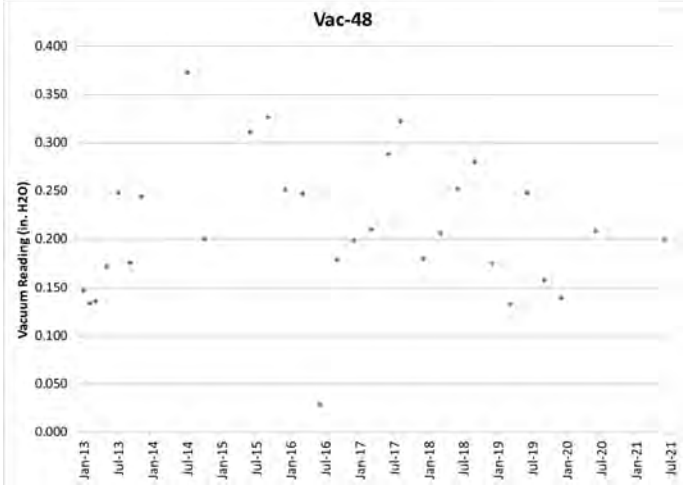

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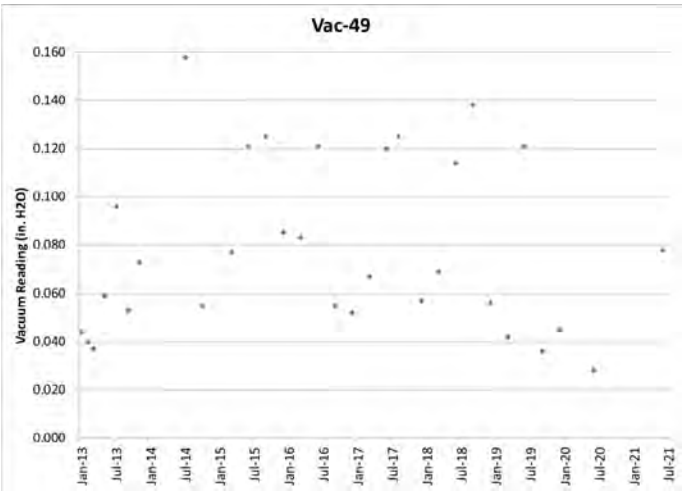

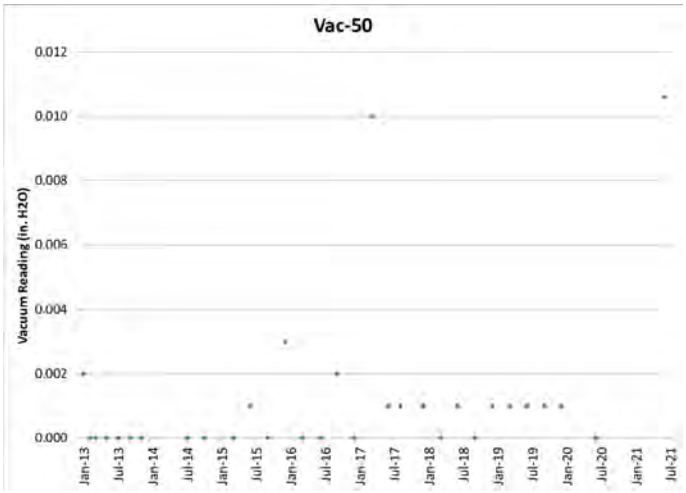

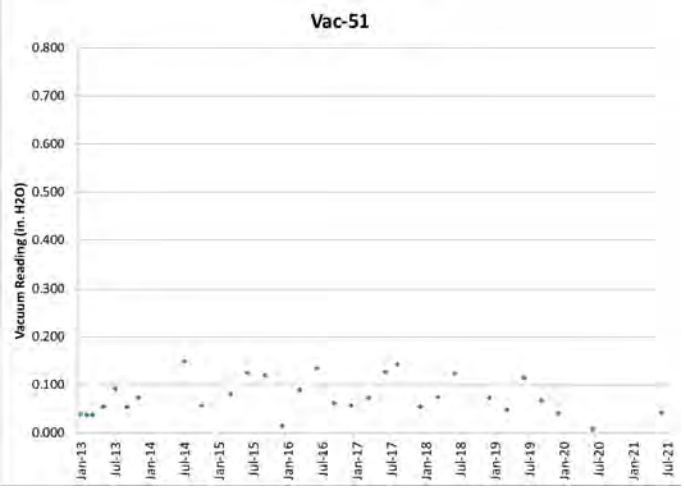

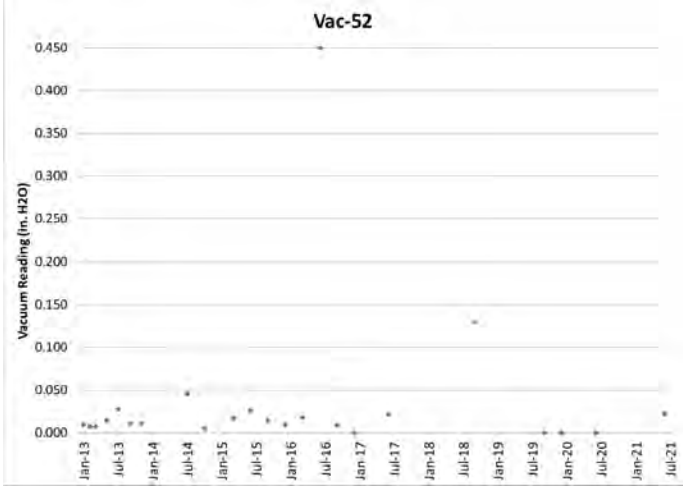

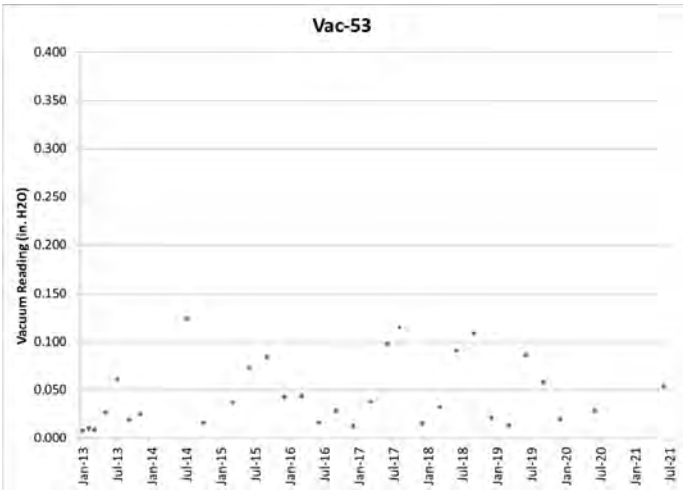

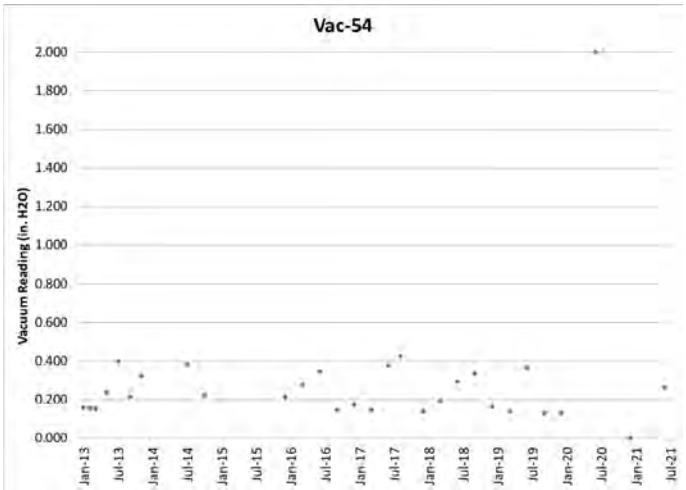

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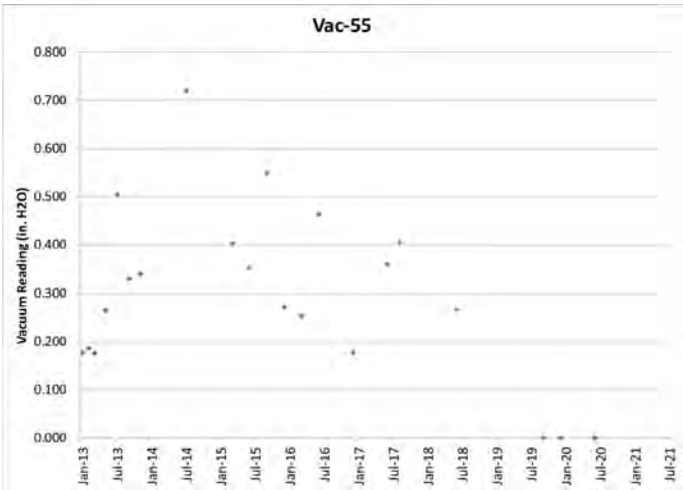

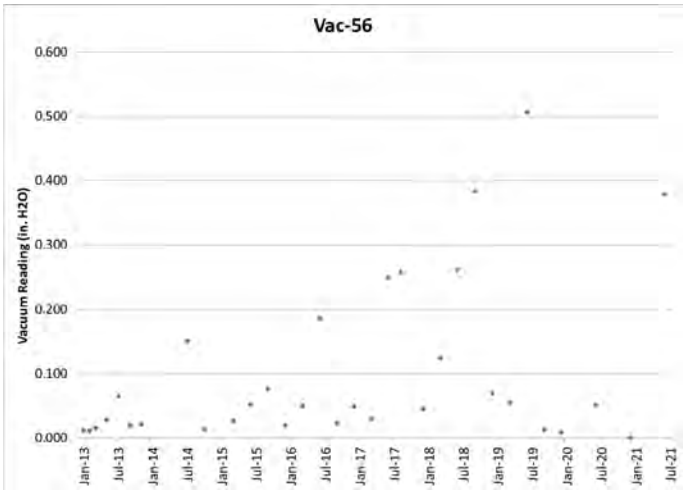

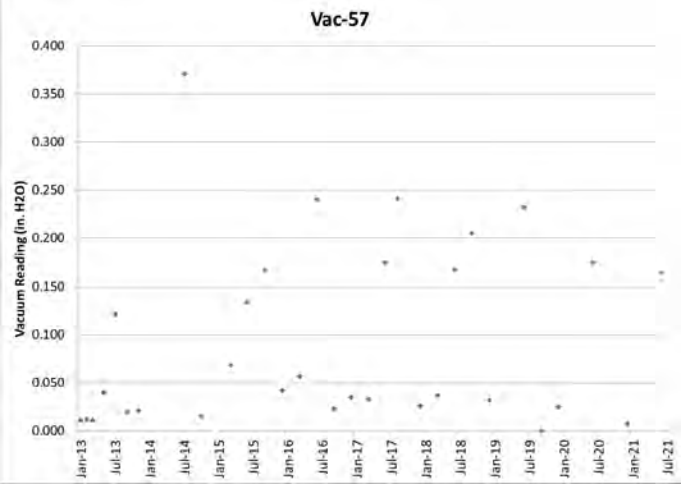

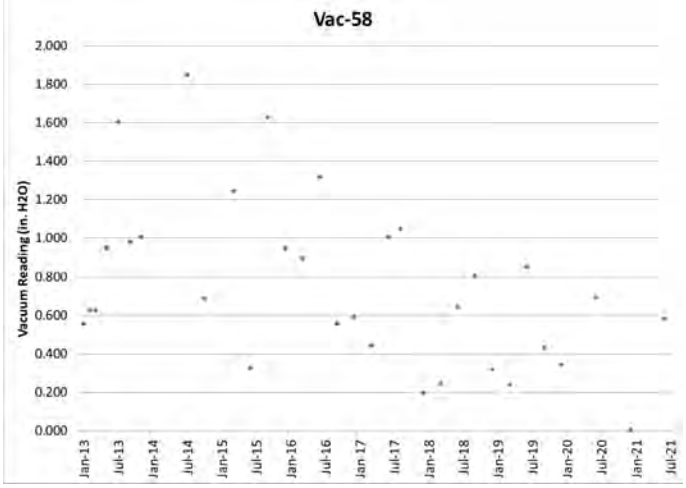

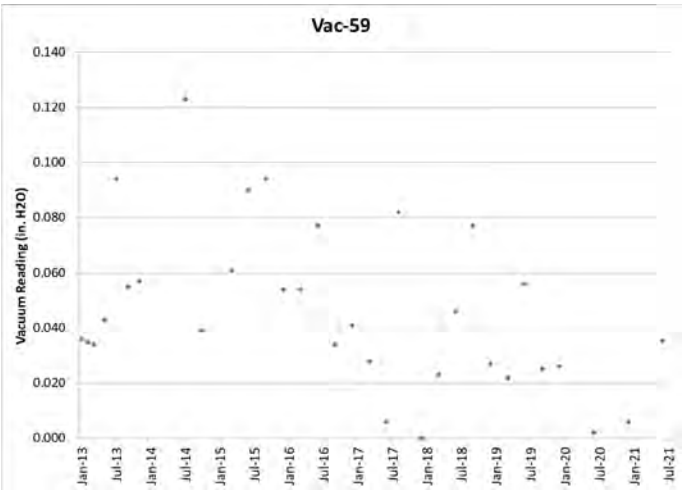

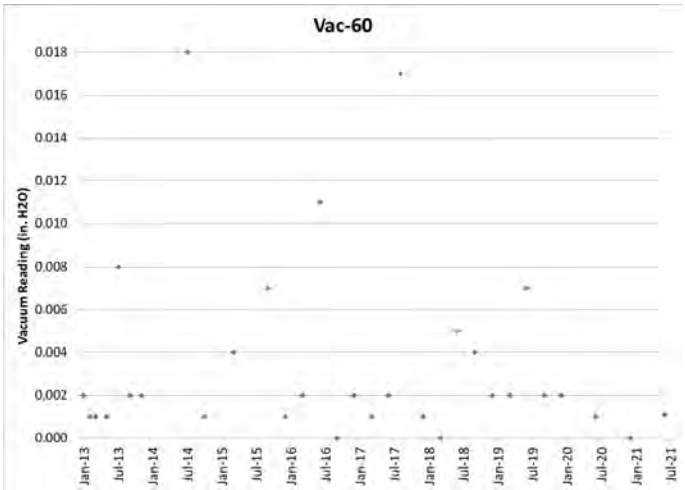

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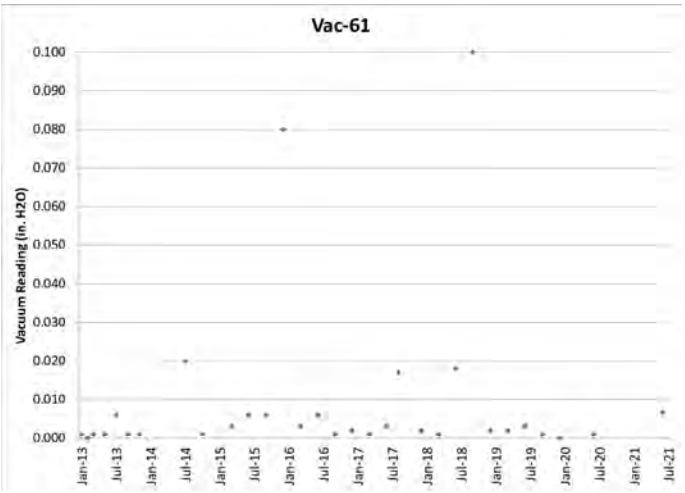
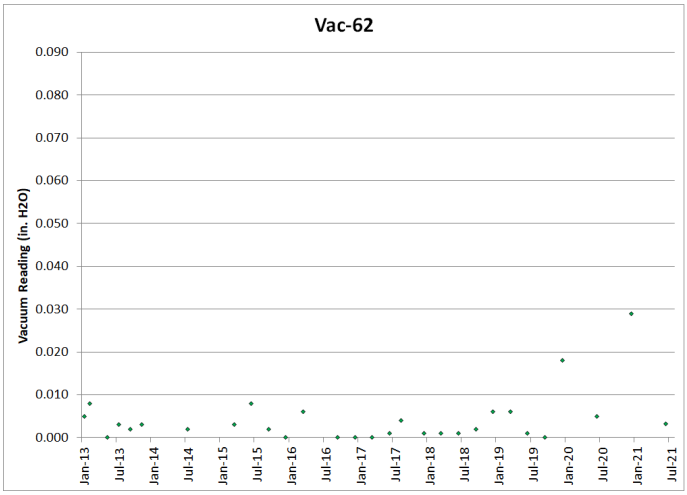
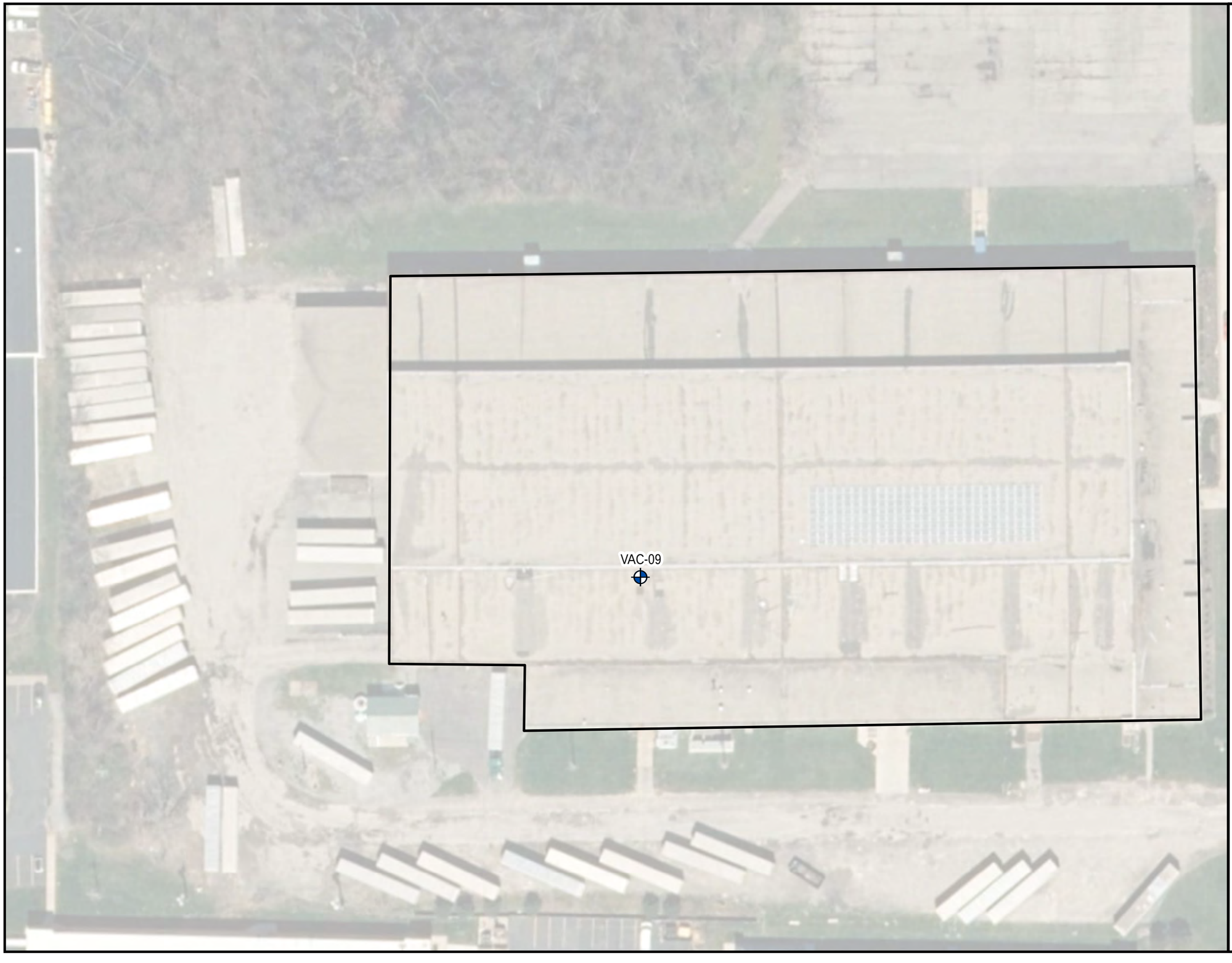






Legend

- Sampled Vacuum Monitoring Point Location
- Building Outline

N

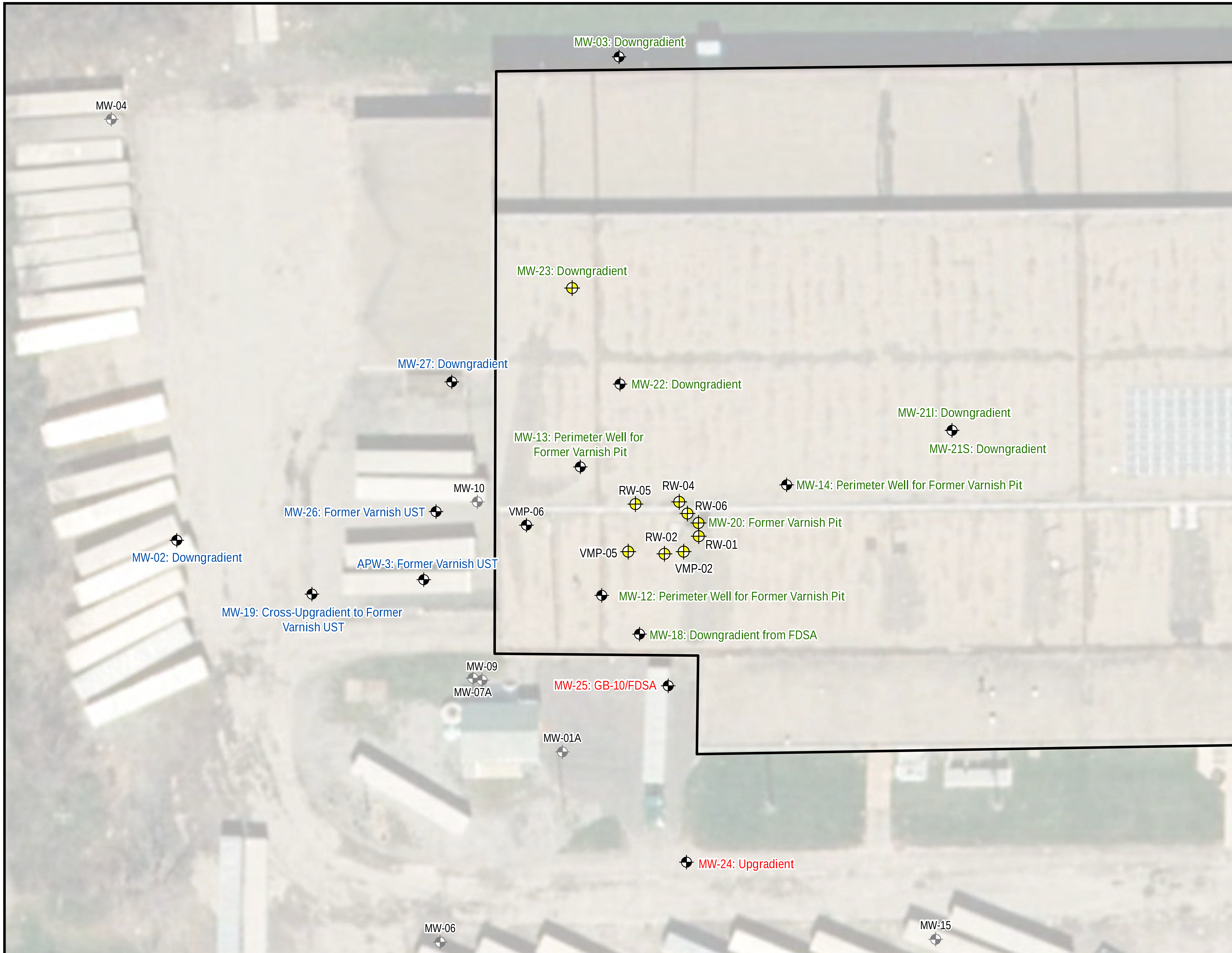
0 12.5 25 50 75 100

Feet

Figure 6
Vapor Intrusion Sampling Locations
March 2021
Sonoco Products Company
Tonowanda, NY

ERM

\\ustdct92\Data\Boston\Team\DMM\Clients_Q_U\Sonoco\Tonawanda_NY\MXD\PRR\Figure6_TW_VAC+AA_Location_20130724.mxd - Caldwell,Payne - 7/27/2020


MW-03: Downgradient
MW-04
MW-23: Downgradient
MW-27: Downgradient
MW-22: Downgradient
MW-21I: Downgradient
MW-21S: Downgradient
MW-13: Perimeter Well for Former Varnish Pit
MW-14: Perimeter Well for Former Varnish Pit
RW-05
RW-04
RW-06
MW-10
MW-26: Former Varnish UST
VMP-06
MW-20: Former Varnish Pit
RW-02
RW-01
VMP-05
VMP-02
MW-02: Downgradient
APW-3: Former Varnish UST
MW-12: Perimeter Well for Former Varnish Pit
MW-19: Cross-Upgradient to Former Varnish UST
MW-18: Downgradient from FDSA
MW-09
MW-07A
MW-25: GB-10/FDSA
MW-01A
MW-24: Upgradient
MW-06
MW-15

Legend

- Monitoring Well / Vapor Monitoring Point
- Monitoring Well/Vapor Monitoring Point for O&M
- Abandoned Monitoring Well
- Building Outline

0 12.5 25 50 75
Feet

Figure 7
Groundwater Monitoring Well Network
Sonoco Products Company
Tonawanda, NY
NYSDEC VCP Site No. V00334-9

ERM

MW-27
577.07'

MW-13
579.97'

MW-26
581.54'

VMP-06
581.15'

MW-02
578.53'

APW-3
579.64'

MW-19
576.03'

MW-12
578.97'

VMP-05
579.09'

RW-02
578.95'

RW-06
576.54'

VMP-02
578.95'

RW-01
578.51'

MW-14
577.04'

MW-25
580.52'

MW-24
582.63'

579'
580'
578'
577'
581'
582'

Legend

- Monitoring Well Location
- 572.45' Groundwater Elevation (ft)
- Shallow Groundwater Contour
- Shallow Groundwater Contour (Inferred)
- Estimated Direction of Groundwater Flow
- Building Outline

NOTES:

1. Groundwater elevation is measured in feet from the elevation of top of casing.
2. Measurements were collected on 9/29/2020.
3. Estimated extent of groundwater countours was modeled using topo-to-raster methods in ArcGIS 10.4.

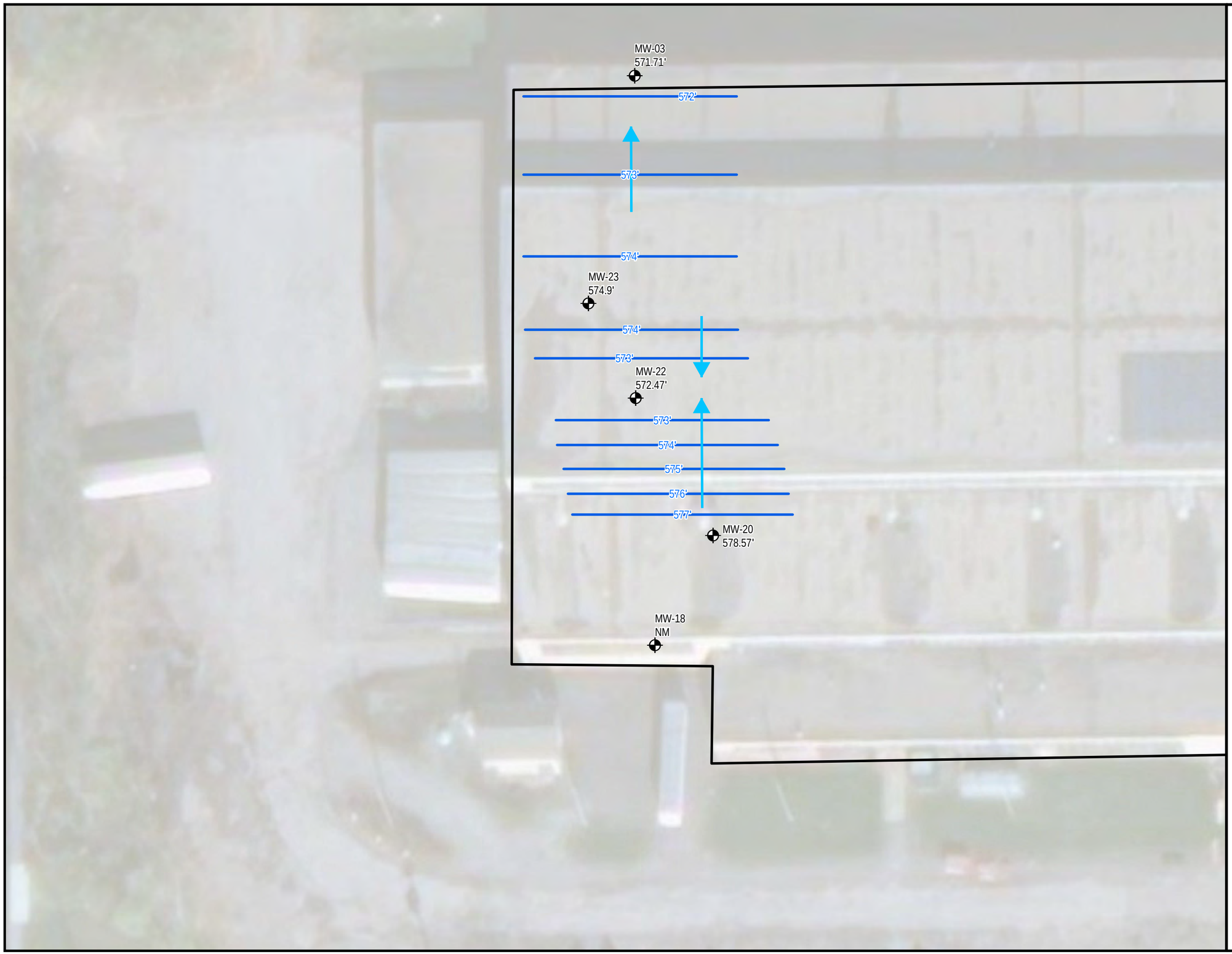
N

0 12.5 25 50
Feet

Figure 8A
Shallow Groundwater Contour Map
29 September 2020
Sonoco Products Company
Tonowanda, NY
NYSDEC VCP Site No. V00334-9

ERM

Q:\Boston\Team\DMM\Clients_Q_U\Sonoco\Tonawanda_NY\MXD\Groundwater\TV_Sept2020_GWContourMap_Figure3_20210709.mxd - Olivia.Bartling - 7/29/2021



Legend

- Monitoring Well Location
- 572.45' Groundwater Elevation (ft)
- Intermediate Groundwater Contour
- Estimated Direction of Groundwater Flow
- Building Outline

NOTES:

1. Groundwater elevation is measured in feet (ft) from the elevation of top of casing.
2. Measurements were collected on 9/29/2020.
3. NM = not measured
4. Estimated extent of groundwater countours was modeled using topo-to-raster methods in ArcGIS 10.4.

N

0 12.5 25 50
Feet

Figure **8B**
Intermediate Groundwater Contour Map
29 September 2020
Sonoco Products Company
Tonowanda, NY
NYSDEC VCP Site No. V00334-9

ERM

Q:\Boston\Team\DMM\Clients_Q_U\Sonoco\Tonawanda_NY\WKD\Groundwater\TW_Sept2020_GWContourMap_Figure4_20210709.mxd - Olivia.Botting - 7/21/2021

Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

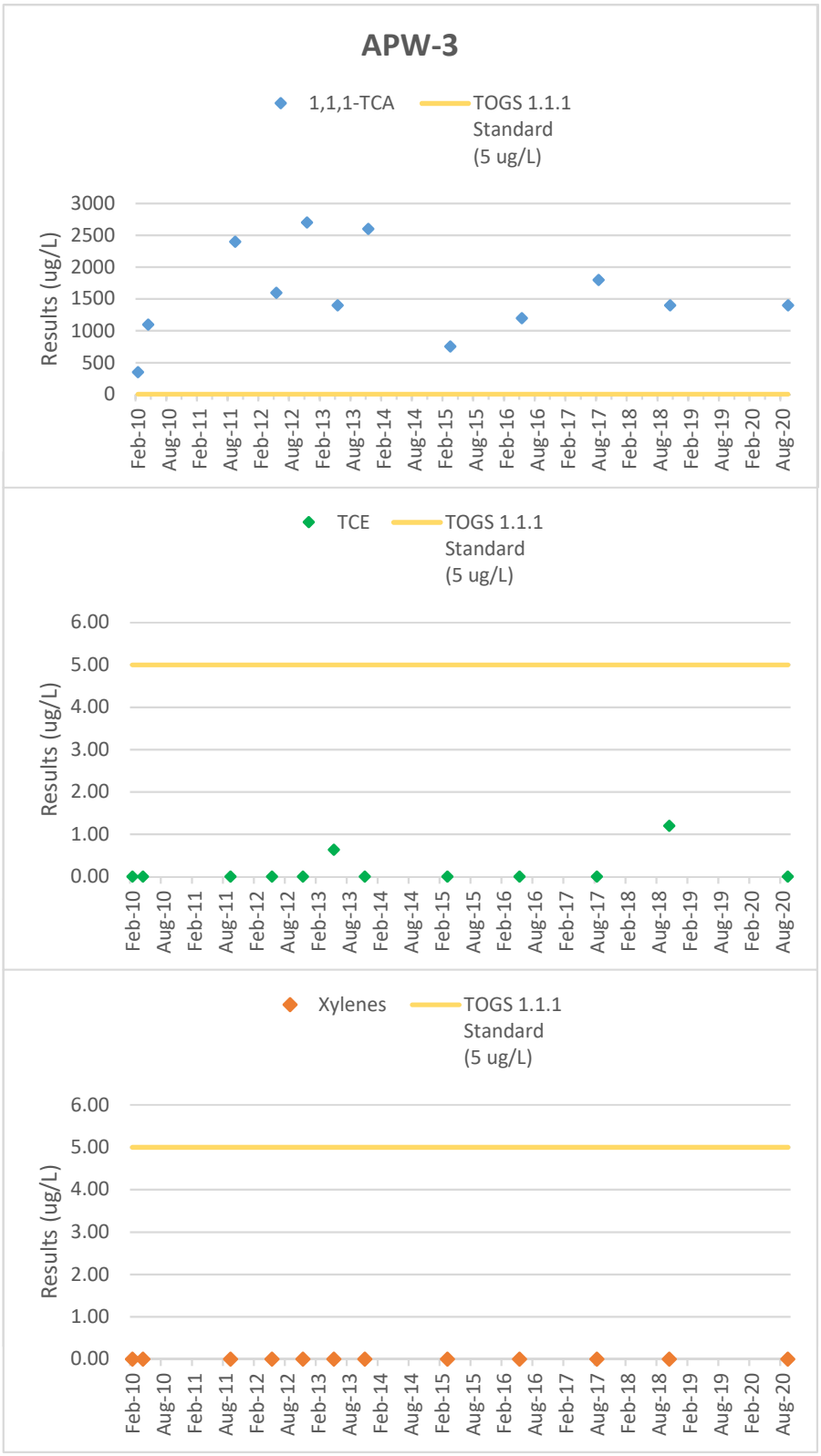


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

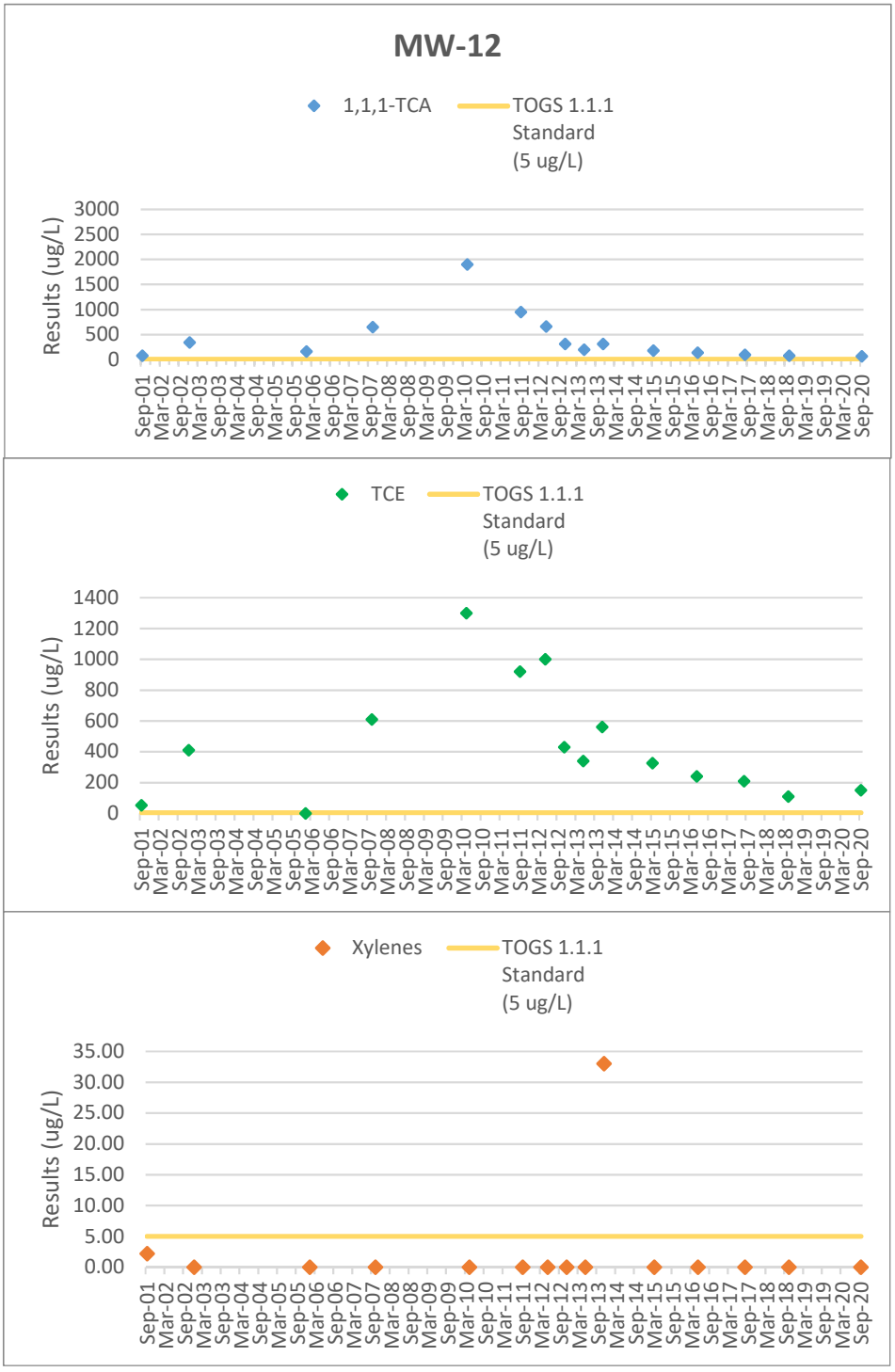


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

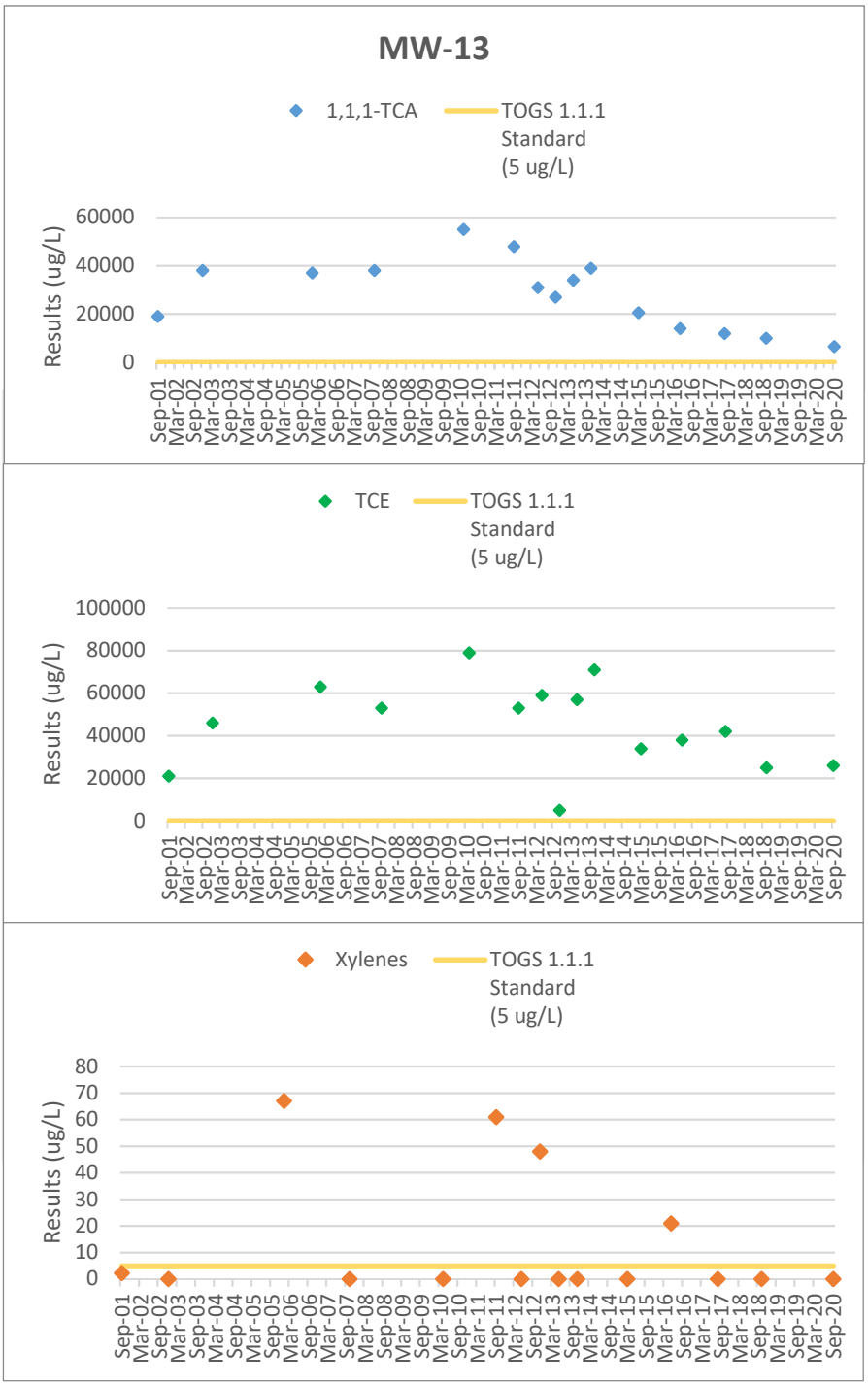


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

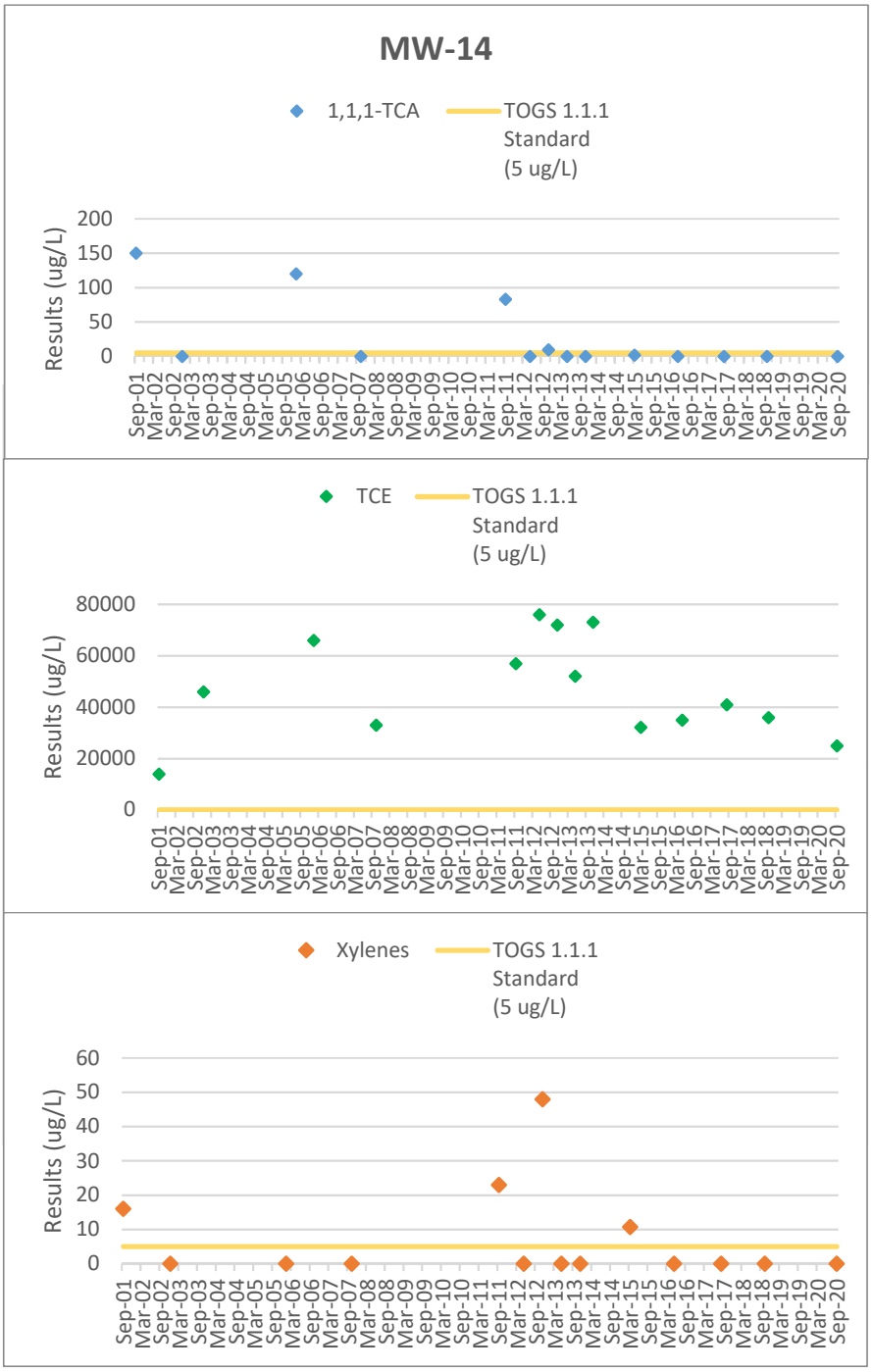


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

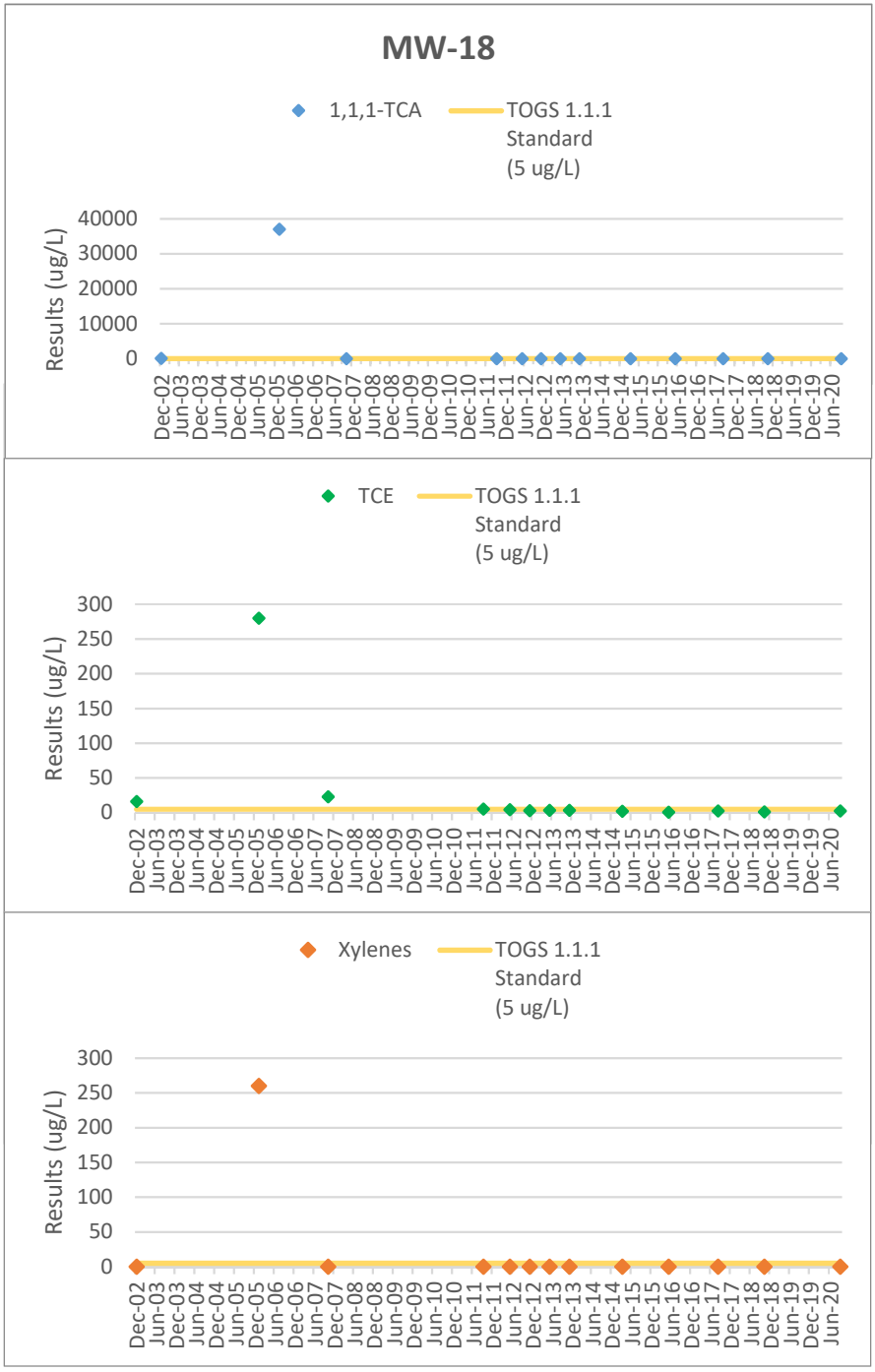


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

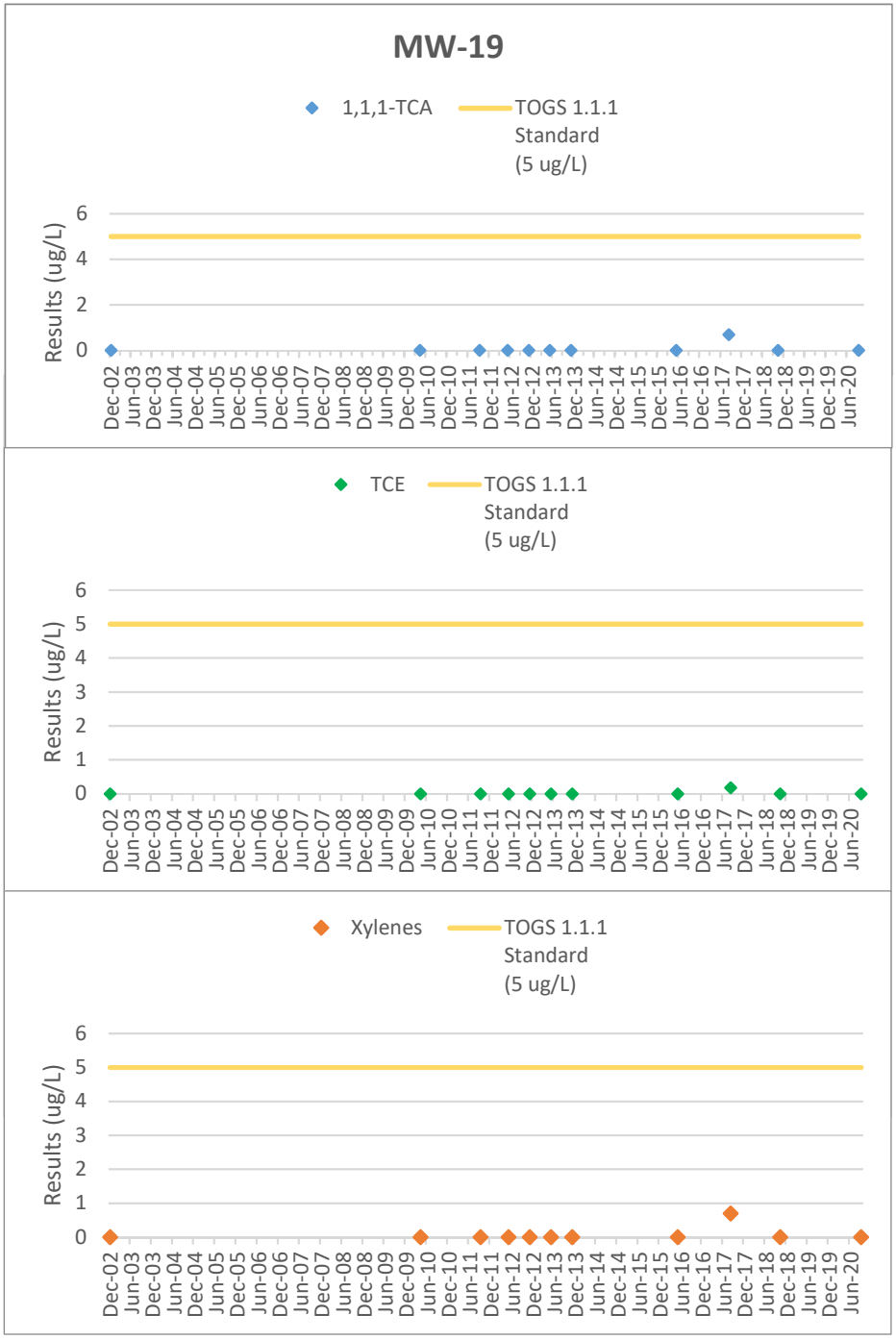


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

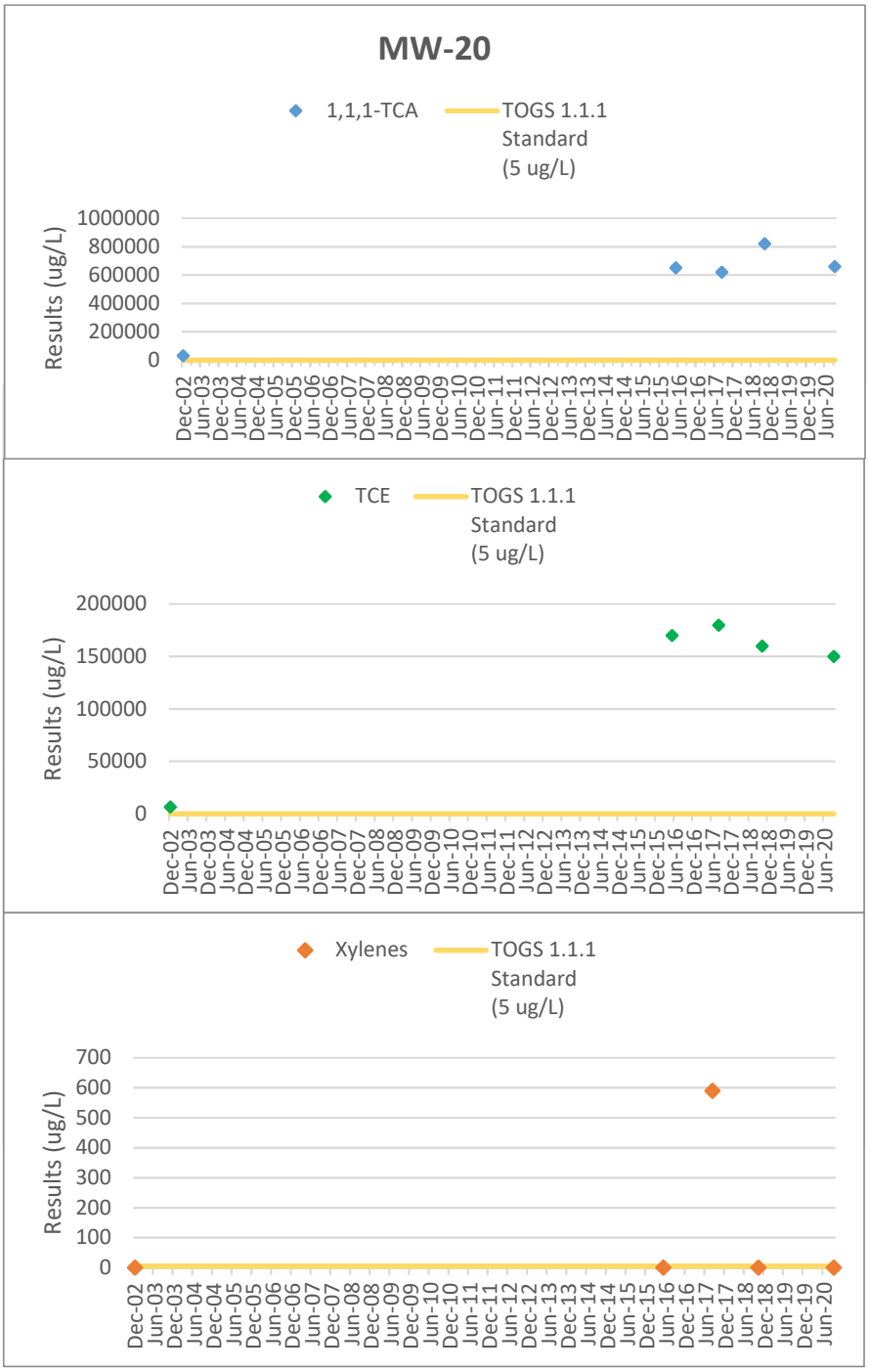


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

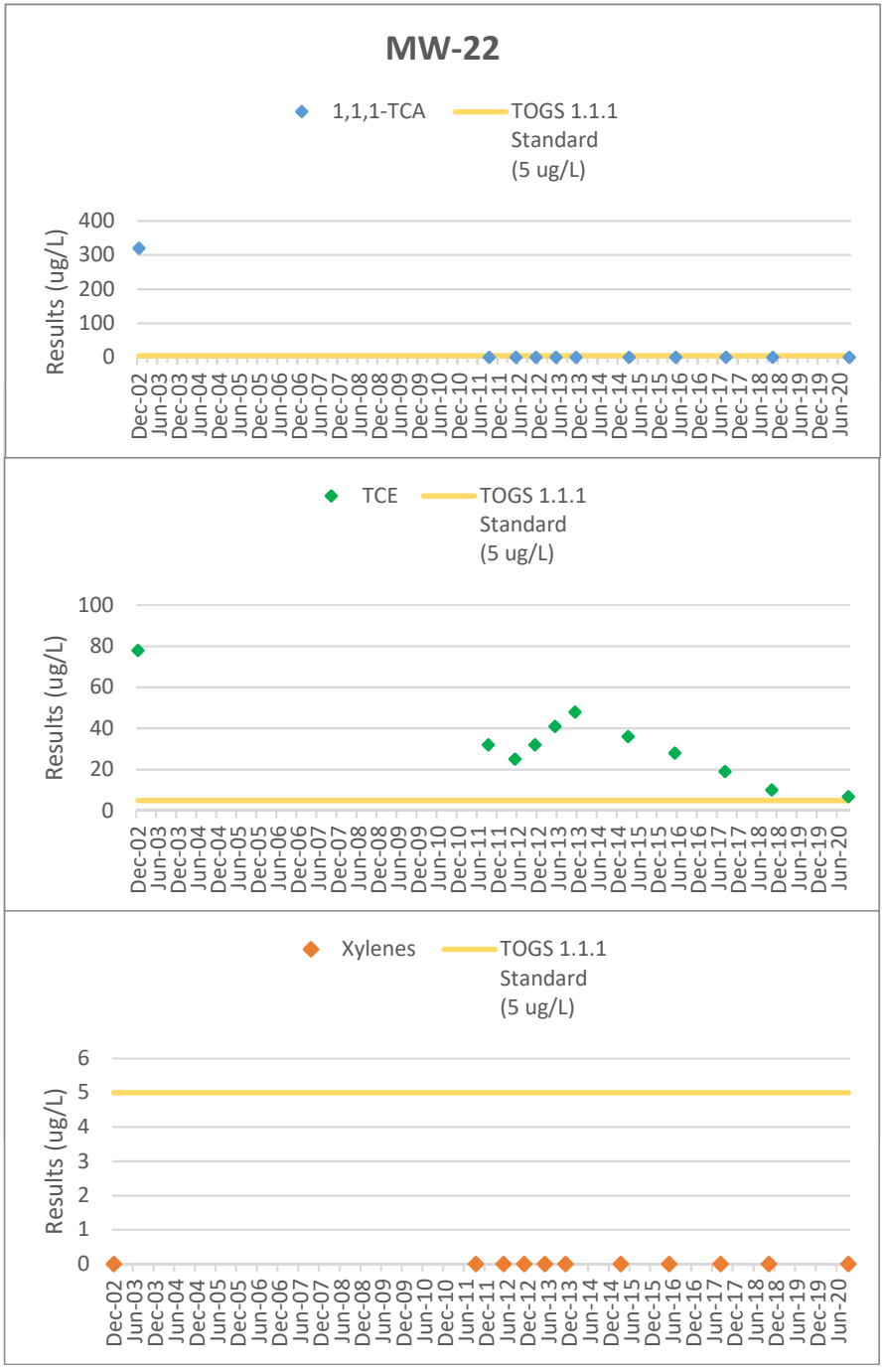


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

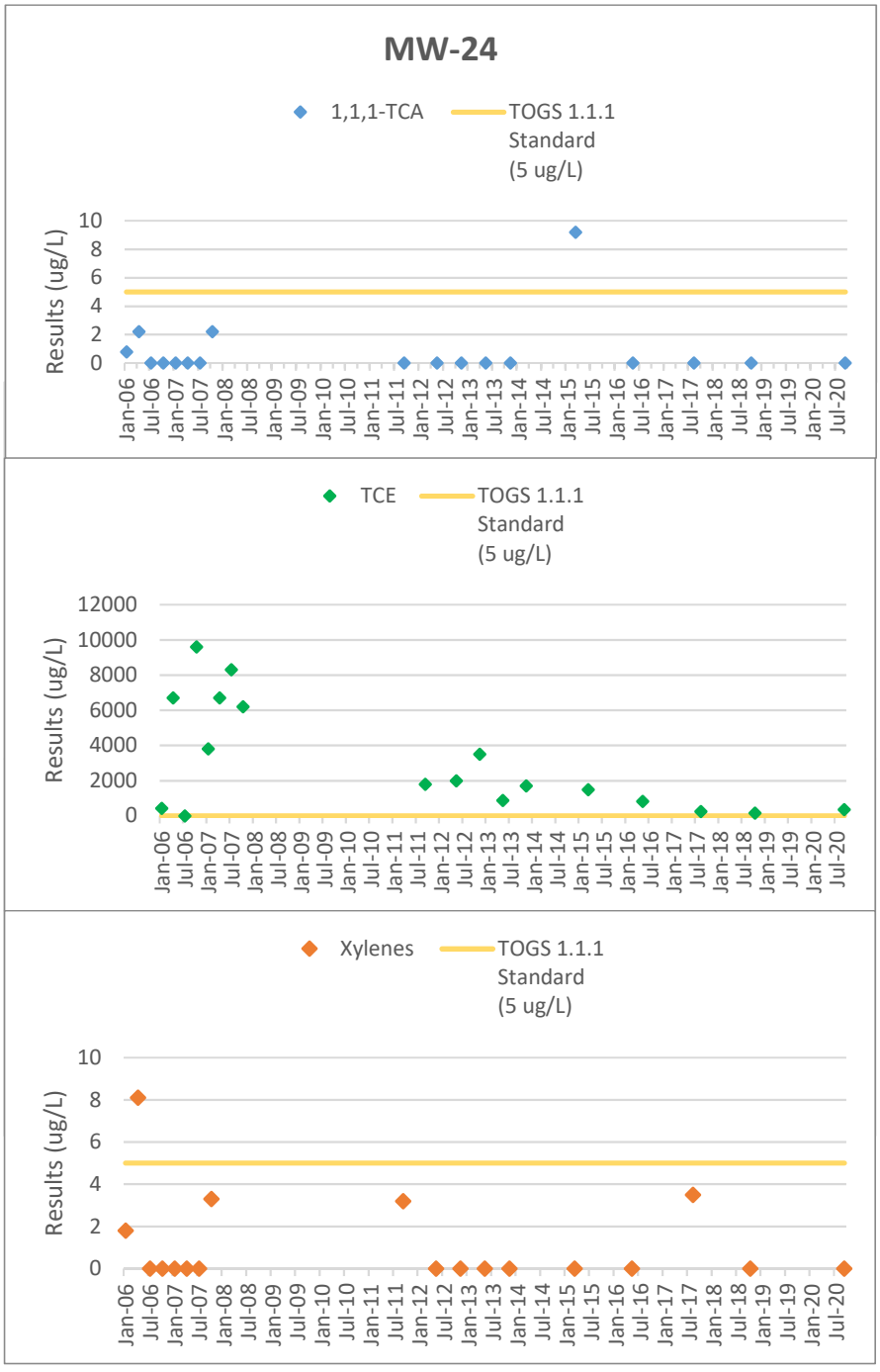


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

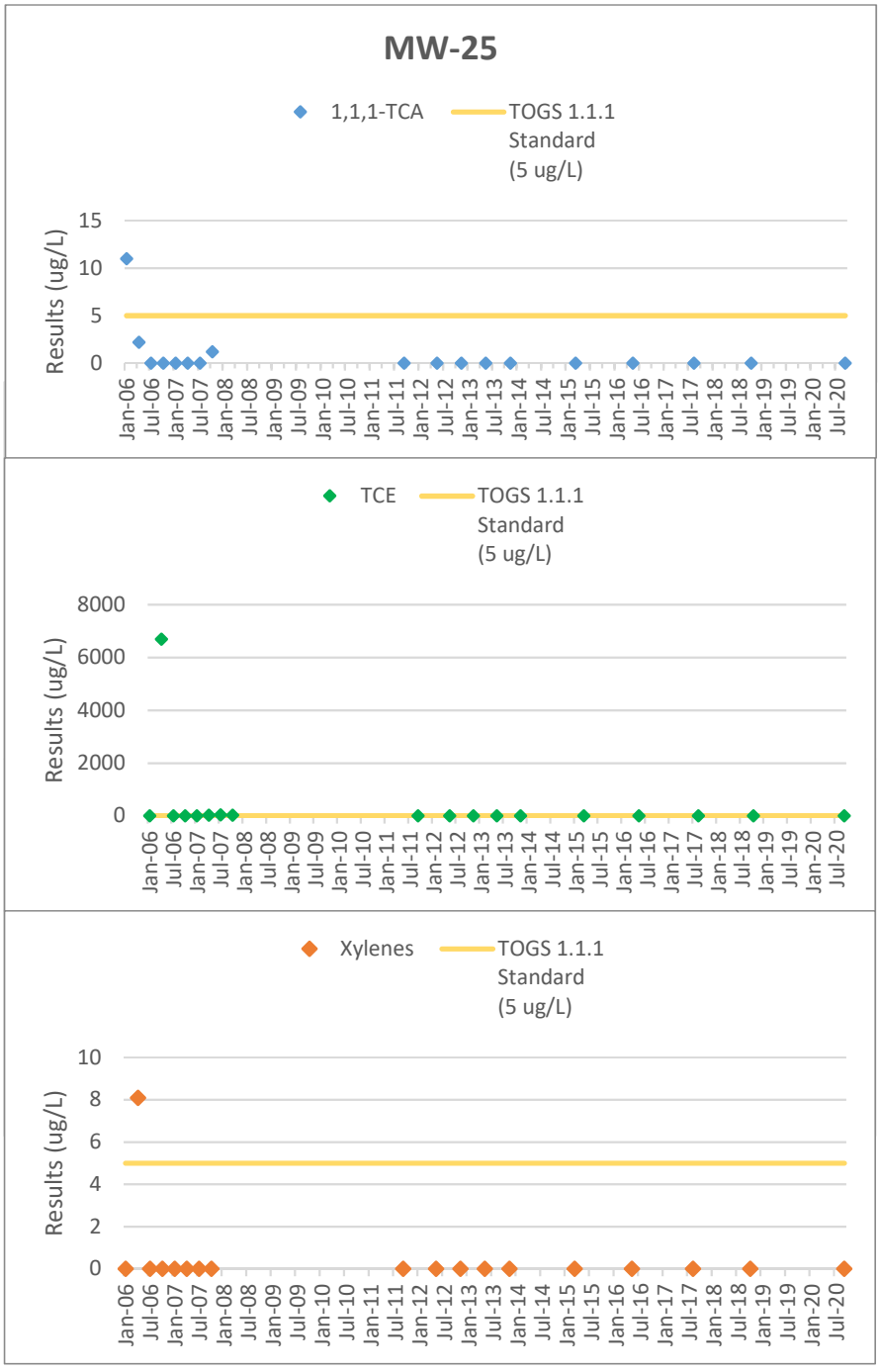


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9

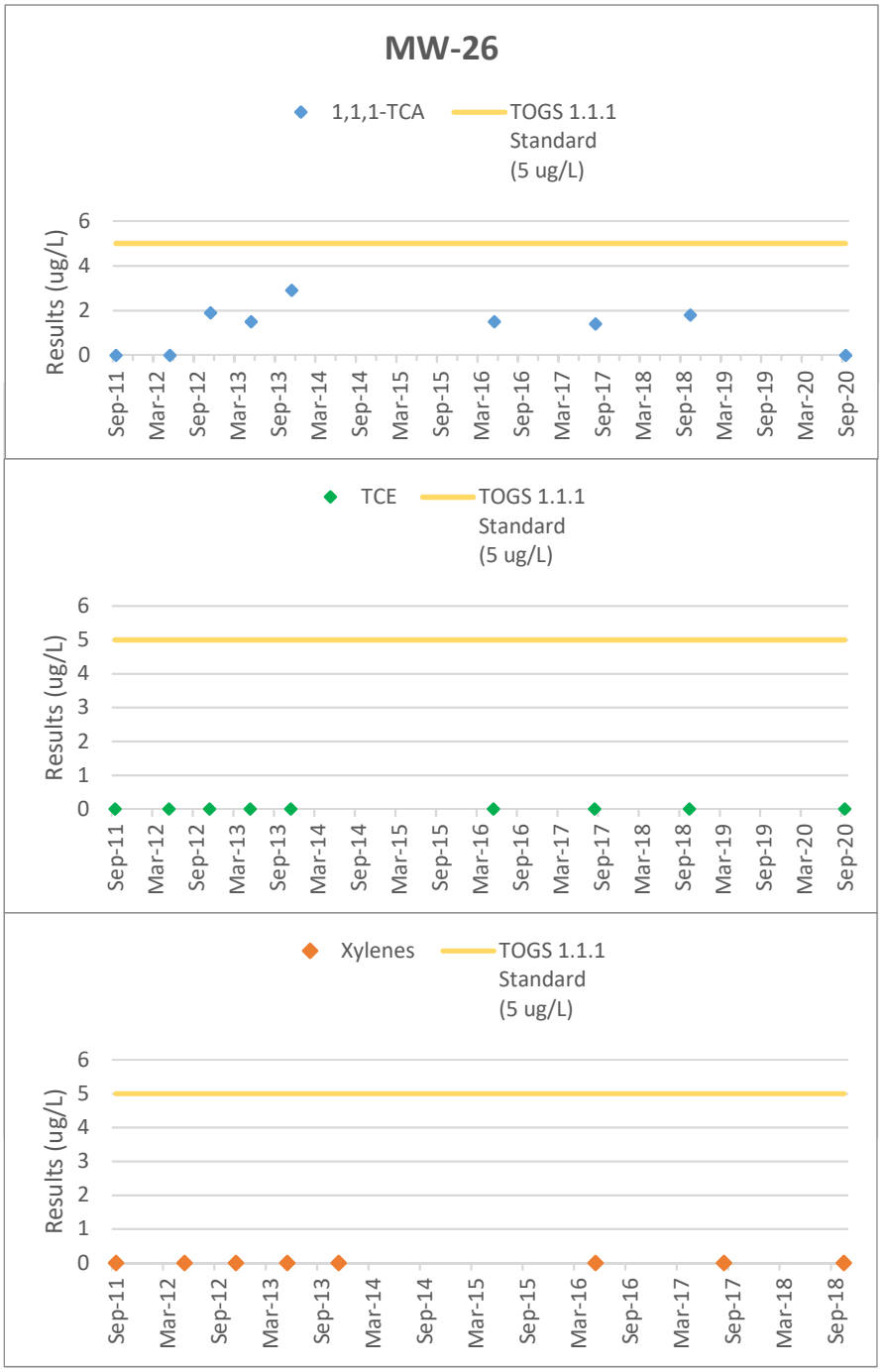
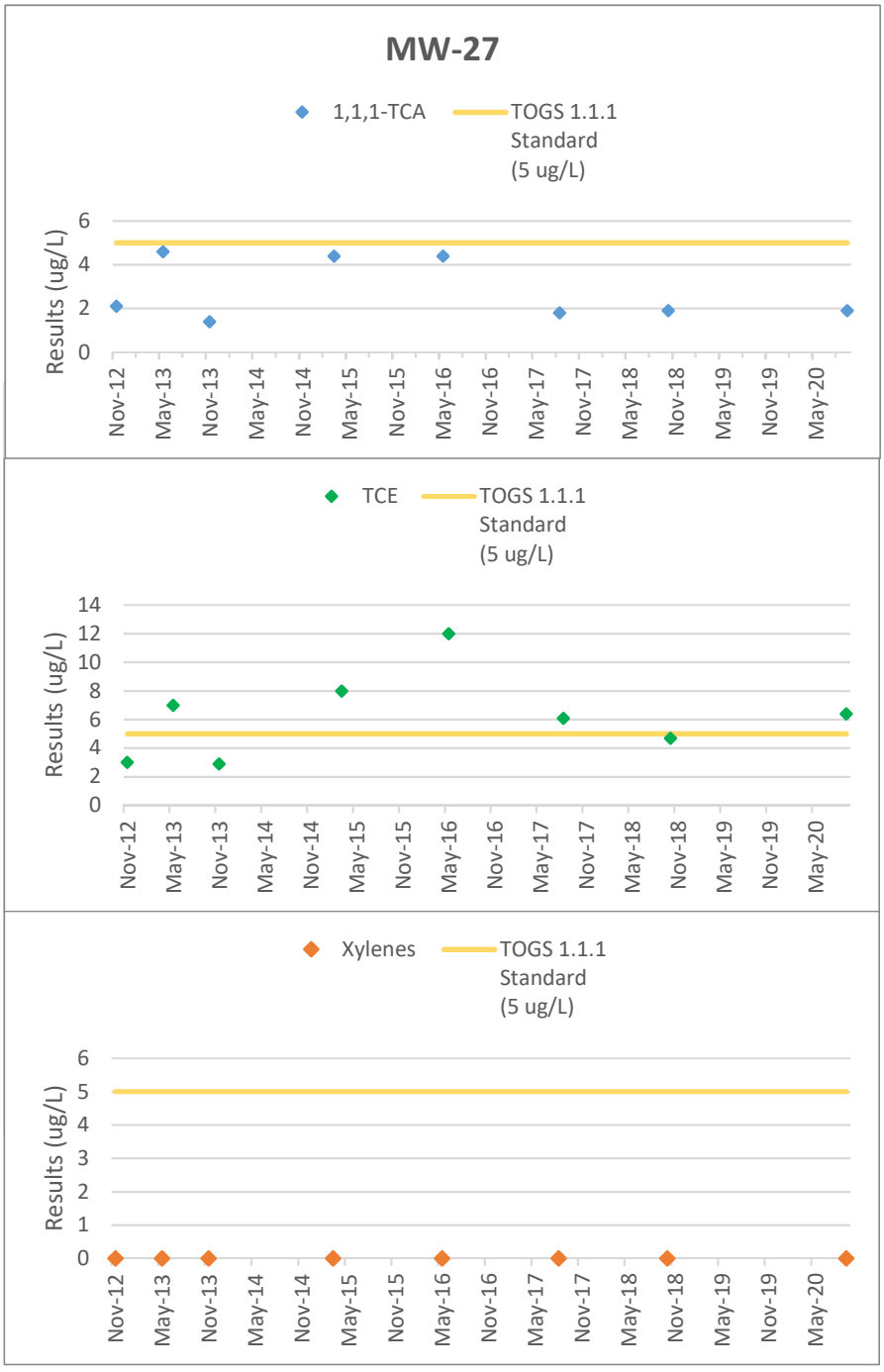


Figure 9
Historical Concentrations for VOCs in Monitoring Wells
Greif Facility - Tonawanda, NY
NYSDEC VCP Number V00334-9



APPENDIX A INSTITUTIONAL CONTROL AND ENGINEERING CONTROL CERTIFICATION

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Site Management Periodic Review Report Notice

Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **V00334**

Site Name Greif Bros. Corporation

Site Address: 2122 Colvin Boulevard Zip Code: 14150
City/Town: Tonawanda
County: Erie
Site Acreage: 11.640

Reporting Period: July 06, 2020 to July 06, 2021

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	X	☐
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below?	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. V00334 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
53.15-1-4.11	Grief Containers Inc	Ground Water Use Restriction Landuse Restriction Site Management Plan

Deed restriction filed with the Erie County Clerk on June 18, 2013 to restrict property and groundwater use as Control #2013142512

Box 4

Description of Engineering Controls

Parcel	Engineering Control
53.15-1-4.11	Vapor Mitigation

Sub-slab depressurization system

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) 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 is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) 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;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. V00334

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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 Edward Harrington (print name) at 1N. Second St, Hartsville SC 29550 (print business address),

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Edward Harrington — Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

8/4/2021 — Date

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 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 Stephen A. Mirabello (print name) at ERM Consulting and Engineering, Inc. 5784 Widewaters Parkway, Syracuse, NY, 13214 (print business address),

am certifying as a Qualified Environmental Professional for the Remedial Party (Owner or Remedial Party)

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

8/5/2021
Date

APPENDIX B ANNUAL SITE INSPECTION FORM

Appendix F - Site-Wide Inspection Form
Greif Inc. Facility; Tonawanda, New York
NYSDEC VCP Site No. V00334-9

Item #	Inspection Item	Yes	No	Inspector Comments	Notes
1	Has a change of ownership occurred	X		Greif, Inc. is in the process of selling the property to Midwest Storage Developers LLC. Prospective sell date is 16-Jul-2021	NYSDEC must be informed 60 days in advance
2	Has there been any change in Site Use?	X		Greif, Inc. ceased operations in December of 2020 and Greif submitted a change of use form.	Current Site Use is Restricted-Residential. NYSDEC must be informed 60 days in advance per 6 NYCRR Part 375-1.11(d)
3	Are there any plans to construct a new building?		X		Per Section 2.3.2 of the SMP, a soil vapor intrusion monitoring plan must be prepared and submitted to NYSDEC prior to any construction.
4	Have any soil disturbances occurred in the past?	X		Soil disturbances were part of a Limited Phase II investigation outside of the VCP area as part of the sale process.	Documentation must be provided as required by the Excavation Work Plan (Appendix D)
5	Are any soil disturbances planned at this time?		X		NYSDEC must be informed 15 days in advance
6	Have there been any disturbances to the elements of the cover system (soil cover, asphalt areas, building concrete slab)?		X		
7	Has any equipment been removed or added that would have affected the building slab (i.e. holes in the floor from former anchor bolts etc.)?	X		Gref, Inc. has removed all equipment from the building resulting in some holes from anchor bolts.	
8	Has there been any modification to the floor system such as pipe runs or sumps added or filled in?		X		
9	Soil Cover - Are there any signs of erosion, settlement, or bare spots?		X		
10	Asphalt Cover - Are there any significant cracks, settlement, or erosion?		X		
11	Has there been any damage to the asphalt cover from construction or snow removal activities?		X		
12	Concrete cover (including building slab)and pavers - Are there any significant cracks, settlement, or erosion?		X		

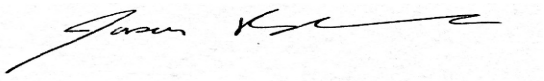
13	Is ground water underlying the Site being used?		X		Use of Site ground water is prohibited without treatment rendering it safe for its intended use.
14	Are there any signs that the SSDS blower and fans are not being maintained? Any signs of operational problems?		X		
15	Are there any vegetable gardens or farming at the Site?		X		These activities are prohibited
16	Is there any activity that may tend to interfere with the completed remedy or the continued ability to implement institutional controls?		X		
Item #	**Inspection Item**	**Yes**	**No**	**Inspector Comments**	**Notes**
17	SSD System - Upon visual inspection of entire system, are any components performing inadequately?		X		
18	SSD System pipes - Are there any holes, cracks, or other physical deficiencies? Are there any blockages in the piping?		X		
19	SSDS system - Are there material reductions in the extent of sub-slab vacuum response?		X		
20	SSD System - Do the blower or inline fans show signs of abnormal operation?		X		
21	SSD System - Is there an air intake or operable window located within 10 feet of any of the three exhaust points?		X		NYSDOH guidance requires SSD exhaust points tobe located at least 10 feet away from an air intake.
22	SSD System - After discussion with building management, have there been any HVAC system modifications that might affect performance of the SSD System?		X		
23	SSD System - Are there any holes or cracks in the floor?	X		Cracks were observed and documents in the photolog. Based on vacuum readings and IA sampling these cracks to not affect the cover system.	Evaluate need for sealing/repairs in combination with vacuum monitoring readings.

Corrective Measures:
During Greif, Inc. ops MW-22 well cover was broken and currently has a steel plate protecting the well. The cover will need to be replaced.

Monitoring Well Inspection:
MW-22 well lid was broken and will need to be replaced. All other wells are OK at the time of this inspection.

Photographs:
See Photolog.

Name of Inspector: Jason Reynolds

Signature of Inspector: 

Date of Inspection: 28-June-2021

Date of Last Inspection: June 2020

Required Date of Next Inspection: June 2022

Identify expected inspector for next inspection: Austin Baker/ Jason Reynolds

Additional comments or drawings:

APPENDIX C ANNUAL SITE INSPECTION PHOTOGRAPHIC LOG

Photo 1: Cover at Former Drum Storage UST Area

Photo 2: MW-3 perimeter well

Photo 3: Cover at Former Varnish UST Area

Photo 4: MW in asphalt cover at Former Varnish UST Area

Photo 5: Vacuum monitoring point (typ)

Photo 6: Building Slab Cover System (typ)

Photo 7: Building Slab Cover System with Varnish Pit Monitoring Well (typ)

Photo 8: Varnish Pit Extraction Points and RW-6

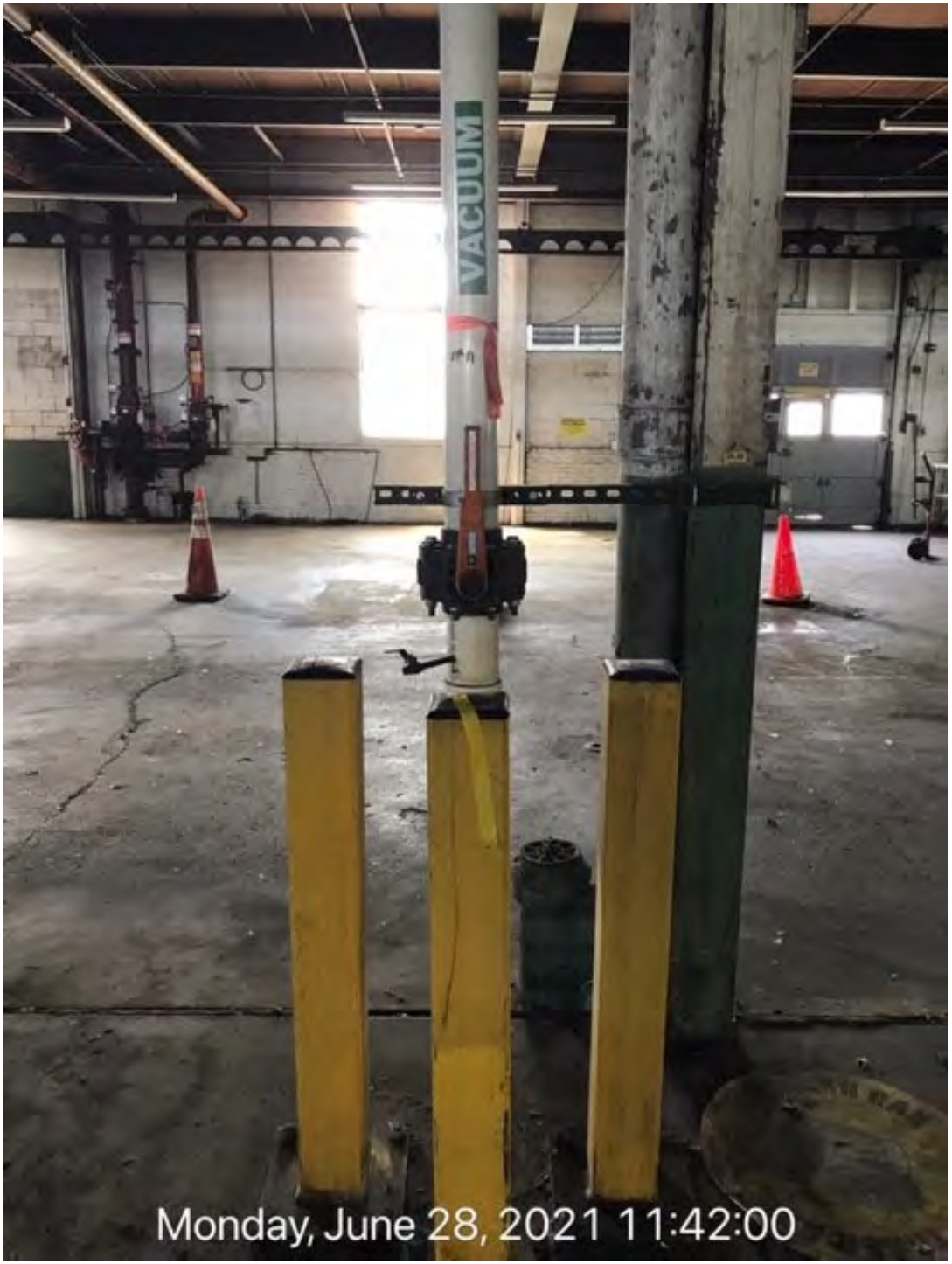


Photo 9: Mid-Facility Extraction Point (typ)

APPENDIX D SITE OPERATION LOGS

Treatment System Data Sheet

Greif Facility - Tonawanda, New York

ERM Project Number

Personnel: Austin Baker

Date 12/18/2020

ERM

	Location	Parameter	Unit	Reading
Headers	MAN-1	Vacuum (Varnish Pit Exterior)	" H_2O	3.5
	MAN-1	Air Velocity	fpm	298
	MAN-2	Vacuum (Varnish Pit Exterior)	" H_2O	3.7
	MAN-2	Air Velocity	fpm	364
	MAN-3	Vacuum (Varnish Pit Exterior)	" H_2O	3.3
	MAN-3	Air Velocity	fpm	630
Panel	Temp-201	Building Temperature	°f	70.6
	LEL-202	LEL	%	-6
Knock-out Pot	VG-301	Vacuum	" H_2O	
Blower	Temp-401	Temperature (in)	°f	69
	VG-402	Vacuum (pre-filter)	" H_2O	64
	VG-403	Vacuum (post-filter)	" H_2O	18
	Temp-404	Temperature (out)	°f	99
	SP-405	Air Velocity (pre-filter)		
	SP-507	Effluent Pressure	" H_2O	1.1
	Temp-~~506~~ 507	Effluent Temperature	°f	91.8
	SP-507	Effluent PID Reading	ppm	0.3
	SP-507	Effluent Relative Humidity	%	31.0
	SP-507	Effluent Air Velocity	fpm	890

NOTES:

4.8kw

6035890 KwH

Vacuum Readings
Greif, Inc. - Tonawanda, NY
NYSDEC VCP Number V00334-9

Date: 12/18/2020

Sampler: Austin Baker

Location	Vac-01	Vac-02	Vac-03	Vac-04	Vac-05	Vac-06	Vac-07	Vac-08	Vac-09	Vac-10	Vac-11	Vac-12	Vac-13	Vac-14
Time	9:51	9:52	9:54	9:56	9:57	9:59	9:27	9:28	9:29	9:26	9:25	9:23	9:24	9:24
Vacuum	0.210	2.489	0.312	0.0018	0.394	0.516	0.173	0.011	0.032	0.001	0.00	0.008	0.012	0.003

Location	Vac-15	Vac-16	Vac-17	Vac-18	Vac-19	Vac-20	Vac-21	Vac-22	Vac-23	Vac-24	Vac-25	Vac-26	Vac-27	Vac-28
Time	9:21	9:20	8:39	8:40	8:41	9:18	8:49	9:17	9:04	9:06	9:08	9:10	7:59	8:01
Vacuum	0.002	0.00	0.009	0.008	0.00	0.00	0.004	0.005	0.004	0.001	0.002	0.008	0.002	0.001

Location	Vac-29	Vac-30	Vac-31	Vac-32	Vac-33	Vac-34	Vac-35	Vac-36	Vac-37	Vac-38	Vac-39	Vac-40	Vac-41	Vac-42
Time	9:45	8:00	8:04	8:05	8:06	8:07	8:08	8:09	8:10	8:19	9:42	9:43	9:31	9:32
Vacuum		0.00	0.003	0.000	0.104	0.00	0.001	1.474	0.00	0.004			9:00	9:02

Location	Vac-43	Vac-44	Vac-45	Vac-46	Vac-47	Vac-48	Vac-49	Vac-50	Vac-51	Vac-52	Vac-53	Vac-54	Vac-55	Vac-56
Time	9:33	9:37	9:38	9:39	9:40	9:41	9:46	9:48	9:48	9:49	9:50	8:10		9:50
Vacuum												0.00	Sealed	0.00

Location	Vac-57	Vac-58	Vac-59	Vac-60	Vac-61	Vac-62	SP-01	SP-02	SP-03	SP-04	SP-05	SP-06	SP-07	SP-08
Time	8:24	8:21	8:20	8:42		8:43	9:26	9:22	9:15	8:56	8:30	8:09	9:30	9:36
Vacuum	0.007	0.006	0.006	0.00	Sealed	0.0029	0.15	3.2	0.8	1.8	0.5	2.40	2.90	2.70

Location	SP-09	SP-10	SP-11
Time	8:11	8:29	8:51
Vacuum	3.60	2.80	3.70

Notes:

- All vacuum and/or pressure readings are reported in inches of water column ("H2O).

Non-Aqueous Phase Liquid Thicknesses in Wells
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

WELL	RW-1 (ft.)	RW-2 (ft.)	RW-4 (ft.)	RW-5 (ft.)	RW-6 (ft.)	VMP-2 (ft.)	VMP-5 (ft.)	MW-20 (ft.)	MW-23 (ft.)
Date	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020
LNAPL	–							–	
Water Level	9.53				8.78				
DNAPL	–				–				

Notes:
All values are reported in feet as measured with an electronic interface probe.
HS - heavy sheen but no measureable thickness.

Sampler: Austin Baker

Meter acting up, product recovery still completed 12/18/2020

Treatment System Data Sheet

Greif Facility - Tonawanda, New York
ERM Project Number

Personnel: AB + JM

Date 6/28/21

	Location	Parameter	Unit	Reading
Headers	MAN-1	Vacuum (Varnish Pit Exterior)	" H_2O	4
	MAN-1	Air Velocity	fpm	825
	MAN-2	Vacuum (Varnish Pit Exterior)	" H_2O	4
	MAN-2	Air Velocity	fpm	406
	MAN-3	Vacuum (Varnish Pit Exterior)	" H_2O	4
	MAN-3	Air Velocity	fpm	840
Panel	Temp-201	Building Temperature	°f	80°
	LEL-202	LEL	%	0
Knock-out Pot	VG-301	Vacuum	" H_2O	19
Blower	Temp-401	Temperature (in)	°f	80
	VG-402	Vacuum (pre-filter)	" H_2O	30
	VG-403	Vacuum (post-filter)	" H_2O	62
	Temp-404	Temperature (out)	°f	140
	SP-405	Air Velocity (pre-filter)		5190
	SP-507	Effluent Pressure	" H_2O	~~0.05~~ ~~1.59~~ 1.200
	Temp-506	Effluent Temperature	°f	119
	SP-507	Effluent PID Reading	ppm	0.6
	SP-507	Effluent Relative Humidity	%	27.4
	SP-507	Effluent Air Velocity	fpm	2620

NOTES:

0359992

Vacuum Readings
Greif, Inc. - Tonawanda, NY
NYSDEC VCP Number V00334-9

Date: 6/28/21
Sampler: A. Baker / J. Reynolds

Location	Vac-01	Vac-02	Vac-03	Vac-04	Vac-05	Vac-06	Vac-07	Vac-08	Vac-09	Vac-10	Vac-11	Vac-12	Vac-13	Vac-14
Time	0930	0931	0934	0935	0934	0935	0927	0926	0920	0928	0925	0923	~~0922~~	0921
Vacuum	0.212	2.531	0.3557	0.0026	0.0467	0.547	0.1437	0.0261	0.0058	0.1316	0.520	0.0021	~~0.0033~~	0.0005

Location	Vac-15	Vac-16	Vac-17	Vac-18	Vac-19	Vac-20	Vac-21	Vac-22	Vac-23	Vac-24	Vac-25	Vac-26	Vac-27	Vac-28
Time	0900	0859	0902	0845	0847	0848	0857	0849	0853	0852	0854	0856	0836	0837
Vacuum	0.0035	0.0044	0.0026	0.0388	0.0674	0.0126	0.0005	0.0025	0.0013	0.0107	0.0923	0.0058	0.0093	0.0192

Location	Vac-29	Vac-30	Vac-31	Vac-32	Vac-33	Vac-34	Vac-35	Vac-36	Vac-37	Vac-38	Vac-39	Vac-40	Vac-41	Vac-42
Time	0851	0835	0838	0839	0840	0841	0842	0843	0910	0852	0915	0917	0918	0919
Vacuum	0.0143	0.0063	0.0902	0.0169	0.2877	0.0832	0.0006	1.385	0.0339	0.0491	0.0022	0.0057	0.0083	0.0014

Location	Vac-43	Vac-44	Vac-45	Vac-46	Vac-47	Vac-48	Vac-49	Vac-50	Vac-51	Vac-52	Vac-53	Vac-54	Vac-55	Vac-56
Time	1013	0914	0910	0912	0913	0941	0944	0946	0942	1014	0937	0909	—	0843
Vacuum	0.0036	0.0168	0.0146	0.132	0.0358	0.1498	0.0776	0.0106	0.0416	0.0227	0.0534	0.2631	—	0.3760

Location	Vac-57	Vac-58	Vac-59	Vac-60	Vac-61	Vac-62	SP-01	SP-02	SP-03	SP-04	SP-05	SP-06	SP-07	SP-08
Time	0844	0908	0906	0905	0904	0922	1004	1003	0851	0850	1002	0855	1000	0859
Vacuum	0.1646	0.1583	0.0354	0.0011	0.0067	0.0033	2.9	2.9	0.725	1.864	0.15	2.3	3.3	3.2

Location	SP-09	SP-10	SP-11
Time	0958	1001	1002
Vacuum	3.2	3.3	4.0

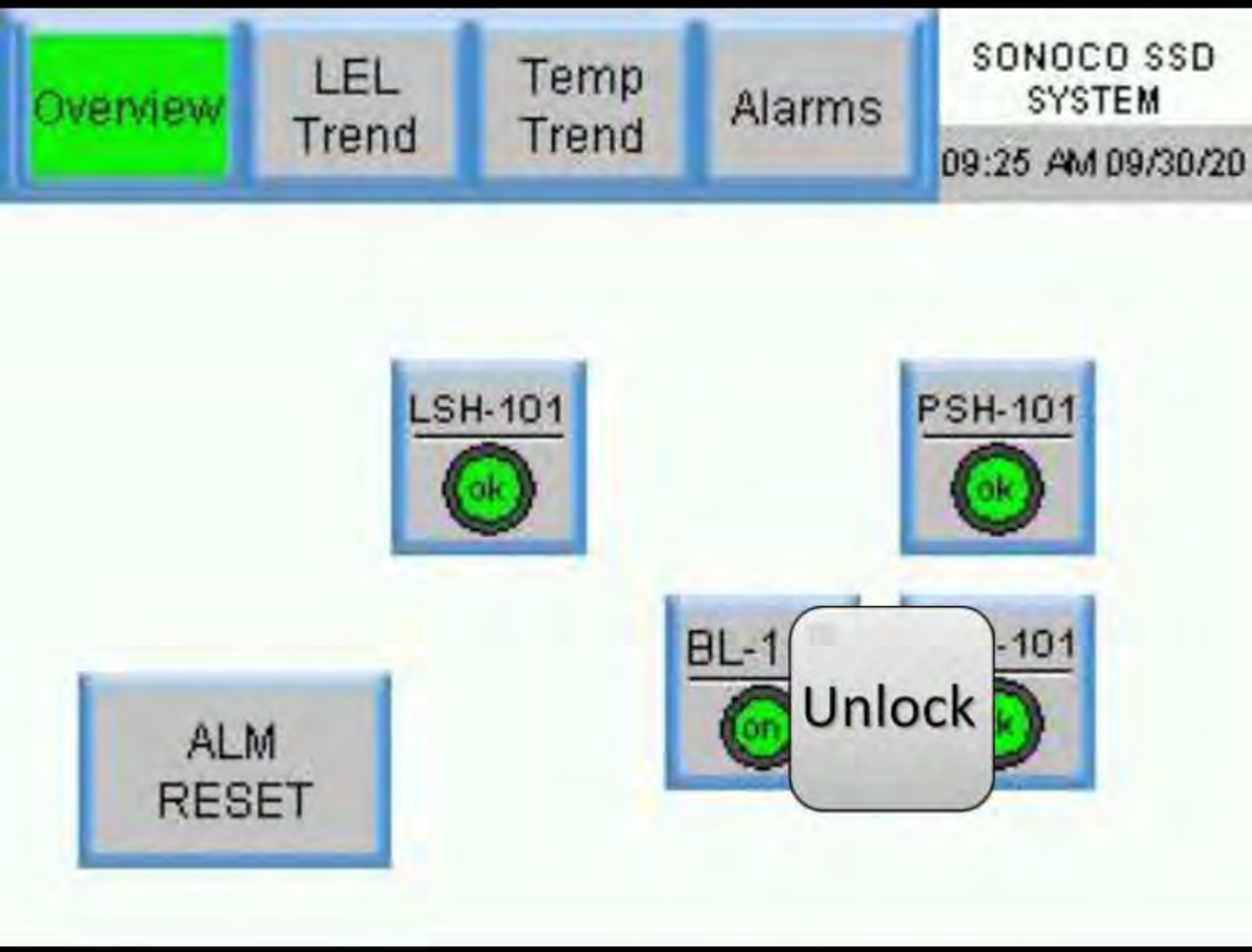
Notes:
- All vacuum and/or pressure readings are reported in inches of water column ("H2O).

Non-Aqueous Phase Liquid Thicknesses in Wells
Greif Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9

WELL	RW-1 (ft.)	RW-2 (ft.)	RW-4 (ft.)	RW-5 (ft.)	RW-6 (ft.)	VMP-2 (ft.)	VMP-5 (ft.)	MW-20 (ft.)	MW-23 (ft.)
Date	6/30/21	6/30/21	6/30/21	6/30/21	6/30/21	6/30/21	6/30/21	6/30/21	6/30/21
LNAPL	—	—	—	—	—	—	—	—	13.45
Water Level	12.28	8.83	11.98	10.24	9.91	Dry	Dry	13.28	13.53
DNAPL	—	—	—	—	~~10.33~~ ~~10.36~~	—	—	—	—

Notes:
All values are reported in feet as measured with an electronic interface probe.
HS - heavy sheen but no measureable thickness.

Sampler: A. Baker / J. Reynolds



OBAR INSTRUMENTS

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Details

Sensor: Sonoco System 1 Applied Vac

Gateway: 975340
Network: ERM - Sonoco Network

6.096 " W.C.

Last Message : 31 Minutes ago Next Check-in:08/05/2021 4:07 PM

Readings

6.096 " W.C.	08/05/2021 3:07 PM
6.068 " W.C.	08/05/2021 2:07 PM
6.112 " W.C.	08/05/2021 1:07 PM
6.104 " W.C.	08/05/2021 12:07 PM
6.108 " W.C.	08/05/2021 11:07 AM

Readings Chart

02/20/2021 - 07/06/2021

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ERM - Sonoco Network

Sonoco System 1 Applied Vac.

Sonoco System 2 Applied Vac.

Sonoco System 3 Applied Vac.

Details

Sensor: Sonoco System 2 Applied Vac.

Gateway: 975340
Network: ERM - Sonoco Network

1.844 " W.C.

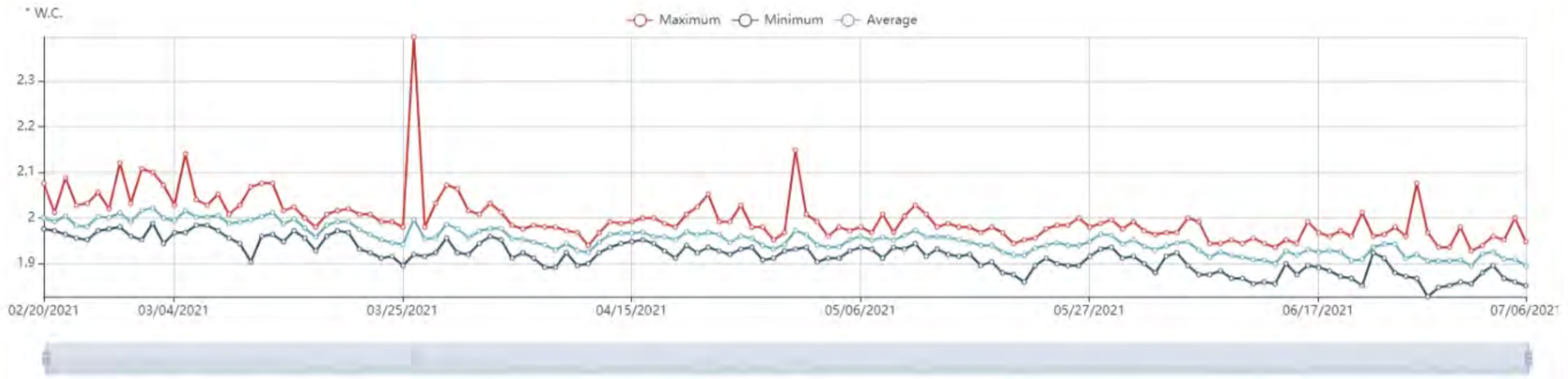
Last Message : 71 Minutes ago Next Check-in:08/05/2021 4:29 PM

Readings

1.844 " W.C.	08/05/2021 2:29 PM
1.876 " W.C.	08/05/2021 1:29 PM
1.876 " W.C.	08/05/2021 12:29 PM
1.88 " W.C.	08/05/2021 11:29 AM
1.884 " W.C.	08/05/2021 10:29 AM

Readings Chart

02/20/2021 - 07/06/2021



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ERM - Sonoco Network

Sonoco System 1 Applied Vac.

Sonoco System 2 Applied Vac.

Sonoco System 3 Applied Vac.

Details

Sensor: Sonoco System 3 Applied Vac.

Gateway: 975340
Network: ERM - Sonoco Network

0.916 "W.C.

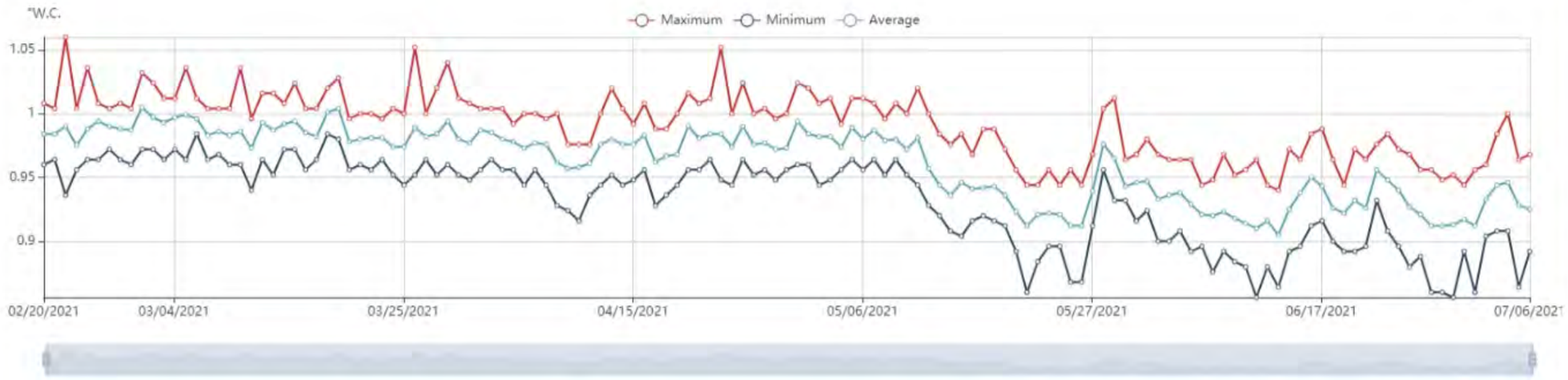
Last Message : 72 Minutes ago Next Check-in:08/05/2021 4:30 PM

Readings

0.916 "W.C.	08/05/2021 2:30 PM
0.936 "W.C.	08/05/2021 1:30 PM
0.936 "W.C.	08/05/2021 12:30 PM
0.968 "W.C.	08/05/2021 11:30 AM
0.948 "W.C.	08/05/2021 10:30 AM

Readings Chart

02/20/2021 - 07/06/2021



Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Greif, Inc. Facility Site Code: Operable Unit:

Building Code: 2122CB Building Name: Greif, Inc. Facility

Address: 2122 Colvin Blvd. Apt/Suite No:

City: Tonawanda State: NY Zip: 14150 County: Erie

Contact Information

Preparer's Name: Austin Baker Phone No: (716) 706-9415

Preparer's Affiliation: Environmental Resources Management Company Code: ERM

Purpose of Investigation: Annual SSV and IA Sampling Event at VAC-09 Date of Inspection: Mar 9, 2021

Contact Name: Thomas J. Zugelder Affiliation: MANAGER

Phone No: 716-408-6134 Alt. Phone No: Email: Tom.Zugelder@greif.com

Number of Occupants (total): Number of Children: 0

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 2 Approx. Year Construction: 1950 ☐ Building Insulated? ☒ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Average tightness.

Foundation Description

Foundation Type: NO BASEMENT/SLAB Foundation Depth (bgs): 10 Unit: FEET

Foundation Floor Material:

Foundation Wall Material:

Foundation Floor Thickness: Foundation Wall Thickness: Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: Vaccuum sample points and SSDS suction points.

☐ Wall penetrations? Describe Wall Penetrations:

Basement is: Basement is: ☒ Sumps/Drains? Water In Sump?: YES

Describe Foundation Condition (cracks, seepage, etc.) :

☐ Radon Mitigation System Installed? ☒ VOC Mitigation System Installed? ☒ Mitigation System On?

Heating / Cooling / Ventilation Systems

Heating System: FORCED AIR Heat Fuel Type: GAS ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: GAS Clothes Dryer Fuel Type: NO CLOTHES DRYER

Water Htr Vent Location: OUTSIDE Dryer Vent Location: NONE

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Greif, Inc. Facility Bldg Code: 2122CB Date: Mar 9, 2021

Bldg Address: 2122 Colvin Blvd. Apt/Suite No:

Bldg City/State/Zip: Tonawanda NY, 14150

Make and Model of PID: MiniRae 3000 11.7eV 592-906004 Date of Calibration: Mar 9, 2021

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes Were there any elevated PID readings taken on site? No ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Greif, Inc. Facility Site Code: Operable Unit:

Building Code: 2122CB Building Name: Greif, Inc. Facility

Address: 2122 Colvin Blvd. Apt/Suite No:

City: Tonawanda State: NY Zip: 14150 County: Erie

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: ALMOST NEVER Floor Material: CEMENT

☐ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☒ Air Fresheners? Description/Location of Air Freshener: Lavatory

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☒ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Facility is now vacant and all machines/materials have been removed

☐ Any Prior Testing For Radon? If So, When?:

☒ Any Prior Testing For VOCs? If So, When?: Jan 15, 2020

Sampling Conditions

Weather Conditions: SUNNY Outdoor Temperature: 27 °F

Current Building Use: MANUFACTURING Barometric Pressure: 29.78 in(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: 2122CB Address: 2122 Colvin Blvd. Tonawanda, NY 14150

Sampling Information

Sampler Name(s): Austin Baker

Sampler Company Code: ERM

Sample Collection Date: Mar 9, 2021

Date Samples Sent To Lab: Mar 9, 2021

Sample Chain of Custody Number:

Outdoor Air Sample Location ID: OA-SW

SUMMA Canister Information

Sample ID:	IA-VAC-09-202103	SSV-VAC-09-	AA-SW-202103	DUP-01-2021	
Location Code:					
Location Type:	FIRST FLOOR	SUBSLAB	OUTDOOR	FIRST FLOOR	
Canister ID:	2838	2969	782	3277	
Regulator ID:	01276	01003	01192	0771	
Matrix:	Indoor Air	Subslab Soil	Ambient Outd	Indoor Air	
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA	SUMMA AIR SA	SUMMA AIR SA	

Sampling Area Info

Slab Thickness (inches):		10			
Sub-Slab Material:		FILL			
Sub-Slab Moisture:		DRY			
Seal Type:		WAX			
Seal Adequate?:	☐	☒	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	03/08/2021 9:03	03/08/2021	03/08/2021	03/08/2021	
Vacuum Gauge Start:	30.35	30.67	30.9	30.39	
Sample End Date/Time:	03/09/2021 9:03	03/09/2021	03/09/2021	03/09/2021	
Vacuum Gauge End:	5.15	8.63	2.58	5.98	
Sample Duration (hrs):	24	24	23.58	23.58	
Vacuum Gauge Unit:	psi	psi	psi	psi	

Sample QA/QC Readings

Vapor Port Purge:	☐	☒	☐	☐	☐
Purge PID Reading:		0.2			
Purge PID Unit:		ppm			
Tracer Test Pass:	☐	☒	☐	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Austin Baker Date/Time Prepared 03/09/2021 9:00

Preparer's Affiliation Environmental Resources Management Phone No. 716-706-9415

Purpose of Investigation Annual IA/SSV Sampling

1. OCCUPANT:

Interviewed: Y ☑ / N ☐

Last Name: Zugelder First Name: Tom

Address: 2122 Colvin Blvd Tonawanda, NY 14150

County: Erie

Home Phone: _____ Office Phone: 716-408-6134

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ☑)

Interviewed: Y ☐ / N ☐

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

☐ Residential ☐ School ☑ Commercial/Multi-use
☐ Industrial ☐ Church ☐ Other: _____

If the property is residential, type?

☐ Ranch	☐ 2-Family	☐ 3-Family
☐ Raised Ranch	☐ Split Level	☐ Colonial
☐ Cape Cod	☐ Contemporary	☐ Mobile Home
☐ Duplex	☐ Apartment House	☐ Townhouses/Condos
☐ Modular	☐ Log Home	☐ Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Manufacturing

Does it include residences (i.e., multi-use)? No If yes, how many? _____

Other characteristics:

Number of floors 2 Building age 1950

Is the building insulated? No How air tight? Average

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Open with ceiling fans circulating air.

Airflow near source

Open with ceiling fans circulating air.

Outdoor air infiltration

None.

Infiltration into air ducts

None.

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	☐ wood frame	☑ concrete	☐ stone	☐ brick
b. Basement type:	☐ full	☐ crawlspace	☐ slab	☑ other None
c. Basement floor:	☐ concrete	☐ dirt	☐ stone	☑ other None
d. Basement floor:	☐ uncovered	☐ covered	☐ covered with _____	
e. Concrete floor:	☐ unsealed	☑ sealed	☐ sealed with _____	
f. Foundation walls:	☑ poured	☐ block	☐ stone	☐ other _____
g. Foundation walls:	☐ unsealed	☑ sealed	☐ sealed with _____	
h. The basement is:	☐ wet	☐ damp	☐ dry	☐ moldy
i. The basement is:	☐ finished	☐ unfinished	☐ partially finished	
j. Sump present?	Yes			
k. Water in sump?	Yes			

Basement/Lowest level depth below grade: 10 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Investigaion is to evaluate IA quality at VAC-09 due to intermittant vacuum coverage observed.

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (select all that apply – note primary)

☑ Hot air circulation	☐ Heat pump	☐ Hot water baseboard
☐ Space Heaters	☐ Stream radiation	☐ Radiant floor
☐ Electric baseboard	☐ Wood stove	☐ Outdoor wood boiler ☐ Other _____

The primary type of fuel used is:

☑ Natural Gas	☐ Fuel Oil	☐ Kerosene
☐ Electric	☐ Propane	☐ Solar
☐ Wood	☐ Coal	

Domestic hot water tank fueled by: Gas

Boiler/furnace located in: ☐ Basement ☐ Outdoors ☐ Main Floor ☑ Other attached garage.

Air conditioning: ☐ Central Air ☐ Window units ☐ Open Windows ☑ None

Are there air distribution ducts present? No

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

_____

7. OCCUPANCY

Is basement/lowest level occupied? ☐ Full-time ☐ Occasionally ☑ Seldom ☐ Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	_____
1st Floor	_____
2nd Floor	_____
3rd Floor	_____
4th Floor	_____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Yes

b. Does the garage have a separate heating unit? Not Applicable

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) No
Please specify_____

d. Has the building ever had a fire? No When?_____

e. Is a kerosene or unvented gas space heater present? No Where? _____

f. Is there a workshop or hobby/craft area? No Where & Type? _____

g. Is there smoking in the building? No How frequently? _____

h. Have cleaning products been used recently? No When & Type? _____

i. Have cosmetic products been used recently? No When & Type? _____

j. Has painting/staining been done in the last 6 months? Yes Where & When? Marking paint, Main facility floor, Dec 2020

k. Is there new carpet, drapes or other textiles? No Where & When? _____

l. Have air fresheners been used recently? No When & Type? _____

m. Is there a kitchen exhaust fan? No If yes, where vented?_____

n. Is there a bathroom exhaust fan? No If yes, where vented?_____

o. Is there a clothes dryer? No If yes, is it vented outside? Select

p. Has there been a pesticide application? No When & Type?_____

Are there odors in the building? No
If yes, please describe: _____

Do any of the building occupants use solvents at work? No
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Select

Do any of the building occupants regularly use or work at a dry-cleaning service? (Select appropriate response)

- ☐ Yes, use dry-cleaning regularly (weekly)
- ☐ Yes, use dry-cleaning infrequently (monthly or less)
- ☐ Yes, work at a dry-cleaning service
- ☐ No
- ☑ Unknown

Is there a radon mitigation system for the building/structure? Yes Date of Installation: January 2013
Is the system active or passive? Active

9. WATER AND SEWAGE

Water Supply: ☑ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well ☐ Other: _____

Sewage Disposal: ☑ Public Sewer ☐ Septic Tank ☐ Leach Field ☐ Dry Well ☐ Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: Select

c. Responsibility for costs associated with reimbursement explained? Select

d. Relocation package provided and explained to residents? Select

Environmental Resources Management
5788 Widewaters Parkway
Dewitt, New York 13213
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #: 0560651
Project Name:
Location: Tonawanda, NY
Project Manager: Jason Reynolds

Sample Location:		**Collector(s):**	Austin Baker
Address:	2122 Colvin Blvd Tonawanda, NY 14150		
PID Meter Used: (Model, Serial #)	MiniRae 3000, Serial #: PGM-7320		

SUMMA Canister Record:

INDOOR AIR		**SUBSTRUCTURE SOIL GAS**		**AMBIENT AIR**	
Canister Serial No:	01276	Canister Serial No:	01003	Canister Serial No:	782
Flow Controller Id No:	2838	Flow Controller Id No:	2969	Flow Controller Id No:	01192
Start Date/Time:	8-Mar-21	Start Date/Time:	8-Mar-21	Start Date/Time:	8-Mar-21
Start Pressure: (inches Hg)	-30.35	Start Pressure: (inches Hg)	-30.67	Start Pressure: (inches Hg)	-30.9
Stop Date/Time:	9-Mar-21	Stop Date/Time:	9-Mar-21	Stop Date/Time:	9-Mar-21
Stop Pressure: (inches Hg)	-5.15	Stop Pressure: (inches Hg)	-8.63	Stop Pressure: (inches Hg)	-2.58
Sample ID:	**IA-VAC-09-2021-0309-01**	**Sample ID:**	**SSV-VAC-09-20210309-01**	**Sample ID:**	**AA-SW-20210309-01**

Other Sampling Information:

Sample Category ID: (B, 1, 2, 3…)	IA	Sample Category ID: (A or A-1)	SSV	Sample Category ID: (AA)	AA
Story/Level	1	Basement or Crawl Space?	SLAB	Direction from Building	SW
Room	MAIN	Floor Slab Thickness (inches) *[if present]*	10"	Distance from Building	30FT
Indoor Air Temp (^{o}F)	68	Potential Vapor Entry Points Observed?	YES	Intake Height Above Ground Level (ft.)	5.5
Intake Height Above Floor Level (ft.)	5.5	Ground Surface Condition (Crawl Space Only)	Good	Intake Tubing used?	None
Noticeable Odor?	None	If *A* , intake depth, if *A-1* , Intake Height (ft. relative to floor level)		Distance to nearest Roadway (ft.)	300
PID Reading (ppm)	0	PID Reading (ppm)	1.7	PID Reading (ppm)	0
Barometric Pressure ("Hg or mb)		Noticeable Odor?	No	Noticeable Odor?	No
Duplicate Sample?	Yes	Percent O_2/CO_2/CH_4		Duplicate Sample?	No
DUP-01-20210309-01		Duplicate Sample?	No		

Comments:

92% in shroud/ 0 ppm at point/ 72% He Post

Signature: _____

Environmental Resources Management
5788 Widewaters Parkway
Dewitt, New York 13213
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #: 0560651
Project Name:
Location: Tonawanda, NY
Project Manager: Jason Reynolds

Sample Location:		**Collector(s):**	Austin Baker
Address:	2122 Colvin Blvd Tonawanda, NY 14150		
PID Meter Used: (Model, Serial #)	MiniRae 3000, Serial #: PGM-7320		

SUMMA Canister Record:

SP-04		**SP-03**		**SP-507**	
Canister Serial No:	3214	Canister Serial No:	3032	Canister Serial No:	3211
Flow Controller Id No:	GRB0076	Flow Controller Id No:	GRB0071	Flow Controller Id No:	GRB0041
Start Date/Time:	8-Mar-21	Start Date/Time:	8-Mar-21	Start Date/Time:	8-Mar-21
Start Pressure: (inches Hg)	-13.75	Start Pressure: (inches Hg)	-9.22	Start Pressure: (inches Hg)	-8.91
Stop Date/Time:	8-Mar-21	Stop Date/Time:	8-Mar-21	Stop Date/Time:	8-Mar-21
Stop Pressure: (inches Hg)	-2.34	Stop Pressure: (inches Hg)	-1.79	Stop Pressure: (inches Hg)	-1.81
Sample ID:	**SP-04-20210309-01**	**Sample ID:**	**SP-03-20210309-01**	**Sample ID:**	**SP-507-20210309-01**

Other Sampling Information:

Sample Category ID: (B, 1, 2, 3…)	SP	Sample Category ID: (A or A-1)	SP	Sample Category ID: (AA)	SP
Story/Level	2	Story/Level	1	Story/Level	1
Room	MEZ	Room	Boiler	Room	Boiler
Indoor Air Temp (^{o}F)	68	Indoor Air Temp (^{o}F)	68	Indoor Air Temp (^{o}F)	68
Intake Height Above Floor Level (ft.)	5	Intake Height Above Floor Level (ft.)	5	Intake Height Above Floor Level (ft.)	5
Noticeable Odor?	None	Noticeable Odor?	None	Noticeable Odor?	None
PID Reading (ppm)	0	PID Reading (ppm)	0	PID Reading (ppm)	0
Barometric Pressure ("Hg or mb)		Noticeable Odor?	No	Noticeable Odor?	No
Duplicate Sample?	No	Duplicate Sample?	No	Duplicate Sample?	No
		Duplicate Sample?	No		

Comments:

Signature: _____

APPENDIX E DATA USABILITY REPORTS

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT (DUSR)
SONOCO, TONAWANDA, NEW YORK

Client: Environmental Resources Management, Inc., Melville, New York
SDG: L2041182
Laboratory: Alpha Analytical, Westborough, Massachusetts
Site: Sonoco, Tonawanda, New York
Date: June 15, 2021

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW-26-09282020	L2041182-01	Water
1MS++	MW-26-09282020MS	L2041182-01MS	Water
2	APW-3-09282020	L2041182-02	Water
3	MW-24-09282020	L2041182-03	Water
4	MW-14-09292020	L2041182-04	Water
4DL*	MW-14-09292020DL	L2041182-04DL	Water
5	DUP-01-09282020	L2041182-05	Water
6	MW-20-09292020	L2041182-06	Water
7	MW-25-09282020	L2041182-07	Water
7MS+	MW-25-09282020MS	L2041182-07MS	Water
7MSD**	MW-25-09282020MSD	L2041182-07MSD	Water
8	MW-27-09282020	L2041182-08	Water
9	MW-19-09282020	L2041182-09	Water
10	MW-22-09292020	L2041182-10	Water
11	MW-13-09292020	L2041182-11	Water
12	MW-12-09292020	L2041182-12	Water
13*	TRIP BLANK-09292020	L2041182-13	Water

* - VOC only + - DOC, VOC, Sulfate & MEE only ** - VOC, Sulfate & MEE only ++ - Sulfate only

A Data Usability Summary Review was performed on the analytical data for twelve water samples and one aqueous trip blank sample collected on September 28-29, 2020 by Environmental Resources Management at the Sonoco site in Tonawanda, New York. The samples were analyzed under the Environmental Protection Agency (USEPA) Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions, the Methods for Chemical Analysis of Water and Wastes and the Standard Methods for Examination of Water and Wastewater.

Specific method references are as follows:

Analysis	*Method References*
VOC	USEPA SW-846 Method 8260C
Dissolved Gases	Method RSK-175
Sulfate	USEPA Method 300.0
TDS	Standard Method SM2540C
DOC	USEPA SW-846 Method 9060A

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 1, September 2016: Low/Medium Volatile Data Validation;
- SOP Number HW-3c, Revision 1, September 2016: Mercury and Cyanide Data Validation;
- and the reviewer's professional judgment.

The following data quality indicators were reviewed for this report:

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

Inorganics

- Holding times and sample preservation
- Initial and continuing calibration verifications
- Method blank and field QC blank contamination
- Laboratory Control Sample (LCS) recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Duplicate Sample Analysis
- Compound Quantitation
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Volatile Organic Compounds (VOC)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded percent difference (%D) criteria and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D	Qualifier	Affected Samples
10/02/20 (1811)	Chloroethane	33.1%	UJ	2, 6

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC sample results are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
TRIP BLANK-09292020	None - ND	-	-	-

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate percent recoveries (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS/MSD Sample ID	Compound	MS %R/MSD %R/RPD	Qualifier
7	Vinyl chloride	49%/OK/OK	J

Laboratory Control Samples (LCS/LCSD)

- The following table presents LCS/LCSD percent recoveries (%R) and/or RPD values outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS/LCSD ID	Compound	LCS %R/LCSD %R/RPD	Qualifier	Affected Samples
WG1417770-3	Chloroethane	OK/140%/OK	None	Sample ND

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- Several samples were analyzed at various dilutions due to high concentrations of target compounds. The reporting limits were adjusted accordingly. No action was required.

- EDS Sample 4 was flagged (E) by the laboratory for trichloroethene indicating a calibration range exceedance. The sample was reanalyzed at a 400X dilution. The dilution result for this compound should be used for reporting purposes.

Tentative Identified Compounds (TICs)

- TICs were not reported.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was unacceptable for 1,1-dichloroethene. These results were qualified as estimated (J).

Compound	MW-14-09292020 ug/L	DUP-01-09282020 ug/L	RPD	Qualifier
1,1-Dichloroethane	1900	1400	30%	None
1,1-Dichloroethene	880	490	57%	J
Trichloroethene	25000	28000	11%	None
cis-1,2-Dichloroethene	760	500	41%	None - <5X RL
1,2-Dichloroethene, total	760	500	41%	None - <5X RL

Dissolved Gases (MEE)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients.

Continuing Calibration

- All %D and RRF criteria were met.

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC samples were not analyzed.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Laboratory Control Samples (LCS)

- The LCS samples exhibited acceptable percent recoveries (%R).

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	MW-14-09292020 ug/L	DUP-01-09282020 ug/L	RPD	Qualifier
Methane	4.34	3.03	36%	None - <5X RL
Ethene	0.822	0.944	14%	None

Sulfate, Total Dissolved Solids, Dissolved Organic Carbon

Holding Times

- All holding time criteria were met.

Initial Calibration Verification

- All initial calibration criteria were met.

Continuing Calibration Verification

- All continuing calibration criteria were met.

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than five times (5x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Sample ID	Compound	Conc. mg/L	Qualifier	Affected Samples
WG1416695-1	DOC	0.17	None	For Wet Chemistry
WG1420129-1	DOC	0.07	None	For Wet Chemistry

Field Blank

- Field QC samples were not analyzed.

Laboratory Control Samples

- The LCS sample exhibited acceptable percent recoveries (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Compound Quantitation

- Several samples were analyzed at various dilutions due to high concentrations of target compounds. The reporting limits were adjusted accordingly. No action was required.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	MW-14-09292020 mg/L	DUP-01-09282020 mg/L	RPD	Qualifier
Sulfate	71.9	68.1	5%	None
Total Dissolved Solids	620	600	3%	
DOC	2.2	2.1	5%	

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 6/18/21

Nancy Weaver
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-01	Date Collected	: 09/28/20 13:30
Client ID	: MW-26-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 12:57
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A14	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	8.1	2.5	0.70	
67-66-3	Chloroform	ND	2.5	0.70	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	0.48	0.50	0.17	J
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
67-64-1	Acetone	ND	5.0	1.5	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

MT 6/15/21

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-02D	Date Collected	: 09/28/20 14:45
Client ID	: APW-3-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/03/20 02:19
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201002N22	Instrument ID	: VOA105
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	800	25	7.0	
67-66-3	Chloroform	ND	25	7.0	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	ND	5.0	1.8	U
107-06-2	1,2-Dichloroethane	1.3	5.0	1.3	J
71-55-6	1,1,1-Trichloroethane	1400	25	7.0	
71-43-2	Benzene	ND	5.0	1.6	U
108-88-3	Toluene	ND	25	7.0	U
100-41-4	Ethylbenzene	ND	25	7.0	U
75-01-4	Vinyl chloride	30	10	0.71	
75-00-3	Chloroethane	ND	25	7.0	U VS
75-35-4	1,1-Dichloroethene	660	5.0	1.7	
156-60-5	trans-1,2-Dichloroethene	ND	25	7.0	U
79-01-6	Trichloroethene	ND	5.0	1.8	U
179601-23-1	p/m-Xylene	ND	25	7.0	U
95-47-6	o-Xylene	ND	25	7.0	U
1330-20-7	Xylenes, Total	ND	25	7.0	U
156-59-2	cis-1,2-Dichloroethene	16	25	7.0	J
540-59-0	1,2-Dichloroethene, Total	16	25	7.0	J
67-64-1	Acetone	ND	50	15.	U
78-93-3	2-Butanone	ND	50	19.	U
108-10-1	4-Methyl-2-pentanone	ND	50	10.	U
95-63-6	1,2,4-Trimethylbenzene	ND	25	7.0	U

mm 6/15/21

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-03D	Date Collected	: 09/28/20 16:30
Client ID	: MW-24-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 15:02
Sample Matrix	: WATER	Dilution Factor	: 2.5
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A19	Instrument ID	: VOA122
Sample Amount	: 4 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	6.2	1.8	U
75-34-3	1,1-Dichloroethane	2.6	6.2	1.8	J
67-66-3	Chloroform	ND	6.2	1.8	U
79-00-5	1,1,2-Trichloroethane	ND	3.8	1.2	U
127-18-4	Tetrachloroethene	ND	1.2	0.45	U
107-06-2	1,2-Dichloroethane	ND	1.2	0.33	U
71-55-6	1,1,1-Trichloroethane	ND	6.2	1.8	U
71-43-2	Benzene	2.9	1.2	0.40	
108-88-3	Toluene	ND	6.2	1.8	U
100-41-4	Ethylbenzene	ND	6.2	1.8	U
75-01-4	Vinyl chloride	83	2.5	0.18	
75-00-3	Chloroethane	ND	6.2	1.8	U
75-35-4	1,1-Dichloroethene	1.6	1.2	0.42	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	1.8	U
79-01-6	Trichloroethene	360	1.2	0.44	
179601-23-1	p/m-Xylene	ND	6.2	1.8	U
95-47-6	o-Xylene	ND	6.2	1.8	U
1330-20-7	Xylenes, Total	ND	6.2	1.8	U
156-59-2	cis-1,2-Dichloroethene	240	6.2	1.8	
540-59-0	1,2-Dichloroethene, Total	240	6.2	1.8	
67-64-1	Acetone	ND	12	3.6	U
78-93-3	2-Butanone	ND	12	4.8	U
108-10-1	4-Methyl-2-pentanone	ND	12	2.5	U
95-63-6	1,2,4-Trimethylbenzene	ND	6.2	1.8	U

MT 6/15/21

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-04D2	Date Collected	: 09/29/20 10:30
Client ID	: MW-14-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/03/20 02:42
Sample Matrix	: WATER	Dilution Factor	: 200
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201002N23	Instrument ID	: VOA105
Sample Amount	: 0.05 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	Results (ug/L)	RL (ug/L)	MDL (ug/L)	Qualifier
75-09-2	Methylene chloride	ND	500	140	U
75-34-3	1,1-Dichloroethane	1900	500	140	
67-66-3	Chloroform	ND	500	140	U
79-00-5	1,1,2-Trichloroethane	ND	300	100	U
127-18-4	Tetrachloroethene	ND	100	36.	U
107-06-2	1,2-Dichloroethane	ND	100	26.	U
71-55-6	1,1,1-Trichloroethane	ND	500	140	U
71-43-2	Benzene	ND	100	32.	U
108-88-3	Toluene	ND	500	140	U
100-41-4	Ethylbenzene	ND	500	140	U
75-01-4	Vinyl chloride	ND	200	14.	U
75-00-3	Chloroethane	ND	500	140	U
75-35-4	1,1-Dichloroethene	880	100	34.	J
156-60-5	trans-1,2-Dichloroethene	ND	500	140	U
79-01-6	Trichloroethene	25000 ~~43000~~	200 ~~100~~	70 ~~35.~~	~~E~~
179601-23-1	p/m-Xylene	ND	500	140	U
95-47-6	o-Xylene	ND	500	140	U
1330-20-7	Xylenes, Total	ND	500	140	U
156-59-2	cis-1,2-Dichloroethene	760	500	140	
540-59-0	1,2-Dichloroethene, Total	760	500	140	
67-64-1	Acetone	ND	1000	290	U
78-93-3	2-Butanone	ND	1000	390	U
108-10-1	4-Methyl-2-pentanone	ND	1000	200	U
95-63-6	1,2,4-Trimethylbenzene	ND	500	140	U

MT 6/15/21

Results Summary
Form 1
Volatile Organics by GC/MS

4DL

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-04D	Date Collected	: 09/29/20 10:30
Client ID	: MW-14-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 15:27
Sample Matrix	: WATER	Dilution Factor	: 400
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A20	Instrument ID	: VOA122
Sample Amount	: 0.025 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

Use original

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
79-01-6	Trichloroethene	25000	200	70.	

MT 6/15/21

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-05D	Date Collected	: 09/29/20 12:00
Client ID	: DUP-01-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 15:52
Sample Matrix	: WATER	Dilution Factor	: 250
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A21	Instrument ID	: VOA122
Sample Amount	: 0.04 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	620	180	U
75-34-3	1,1-Dichloroethane	1400	620	180	
67-66-3	Chloroform	ND	620	180	U
79-00-5	1,1,2-Trichloroethane	ND	380	120	U
127-18-4	Tetrachloroethene	ND	120	45.	U
107-06-2	1,2-Dichloroethane	ND	120	33.	U
71-55-6	1,1,1-Trichloroethane	ND	620	180	U
71-43-2	Benzene	ND	120	40.	U
108-88-3	Toluene	ND	620	180	U
100-41-4	Ethylbenzene	ND	620	180	U
75-01-4	Vinyl chloride	ND	250	18.	U
75-00-3	Chloroethane	ND	620	180	U
75-35-4	1,1-Dichloroethene	490	120	42.	J
156-60-5	trans-1,2-Dichloroethene	ND	620	180	U
79-01-6	Trichloroethene	26000	120	44.	
179601-23-1	p/m-Xylene	ND	620	180	U
95-47-6	o-Xylene	ND	620	180	U
1330-20-7	Xylenes, Total	ND	620	180	U
156-59-2	cis-1,2-Dichloroethene	500	620	180	J
540-59-0	1,2-Dichloroethene, Total	500	620	180	J
67-64-1	Acetone	ND	1200	360	U
78-93-3	2-Butanone	ND	1200	480	U
108-10-1	4-Methyl-2-pentanone	ND	1200	250	U
95-63-6	1,2,4-Trimethylbenzene	ND	620	180	U

MT 6/15/21

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-06D	Date Collected	: 09/29/20 12:05
Client ID	: MW-20-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/03/20 03:05
Sample Matrix	: WATER	Dilution Factor	: 5000
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201002N24	Instrument ID	: VOA105
Sample Amount	: 0.002 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	12000	3500	U
75-34-3	1,1-Dichloroethane	15000	12000	3500	
67-66-3	Chloroform	ND	12000	3500	U
79-00-5	1,1,2-Trichloroethane	ND	7500	2500	U
127-18-4	Tetrachloroethene	ND	2500	900	U
107-06-2	1,2-Dichloroethane	ND	2500	660	U
71-55-6	1,1,1-Trichloroethane	660000	12000	3500	
71-43-2	Benzene	ND	2500	800	U
108-88-3	Toluene	ND	12000	3500	U
100-41-4	Ethylbenzene	ND	12000	3500	U
75-01-4	Vinyl chloride	ND	5000	360	U
75-00-3	Chloroethane	ND	12000	3500	U US
75-35-4	1,1-Dichloroethene	8800	2500	840	
156-60-5	trans-1,2-Dichloroethene	ND	12000	3500	U
79-01-6	Trichloroethene	150000	2500	880	
179601-23-1	p/m-Xylene	ND	12000	3500	U
95-47-6	o-Xylene	ND	12000	3500	U
1330-20-7	Xylenes, Total	ND	12000	3500	U
156-59-2	cis-1,2-Dichloroethene	ND	12000	3500	U
540-59-0	1,2-Dichloroethene, Total	ND	12000	3500	U
67-64-1	Acetone	ND	25000	7300	U
78-93-3	2-Butanone	ND	25000	9700	U
108-10-1	4-Methyl-2-pentanone	ND	25000	5000	U
95-63-6	1,2,4-Trimethylbenzene	ND	12000	3500	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-07	Date Collected	: 09/28/20 15:45
Client ID	: MW-25-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 19:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201002A25	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	3.1	2.5	0.70	
67-66-3	Chloroform	ND	2.5	0.70	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
71-43-2	Benzene	0.33	0.50	0.16	J
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
75-01-4	Vinyl chloride	6.1	1.0	0.07	J
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	4.7	2.5	0.70	
540-59-0	1,2-Dichloroethene, Total	4.7	2.5	0.70	
67-64-1	Acetone	ND	5.0	1.5	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-08	Date Collected	: 09/28/20 14:35
Client ID	: MW-27-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:22
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A15	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	33	2.5	0.70	
67-66-3	Chloroform	ND	2.5	0.70	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	1.9	2.5	0.70	J
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	3.8	0.50	0.17	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	6.4	0.50	0.18	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	1.2	2.5	0.70	J
540-59-0	1,2-Dichloroethene, Total	1.2	2.5	0.70	J
67-64-1	Acetone	ND	5.0	1.5	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-09	Date Collected	: 09/28/20 13:15
Client ID	: MW-19-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:47
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A16	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
67-64-1	Acetone	ND	5.0	1.5	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-10	Date Collected	: 09/29/20 10:25
Client ID	: MW-22-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 14:12
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A17	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	37	2.5	0.70	
67-66-3	Chloroform	ND	2.5	0.70	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
75-01-4	Vinyl chloride	0.65	1.0	0.07	J
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	1.5	0.50	0.17	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	6.8	0.50	0.18	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	18	2.5	0.70	
540-59-0	1,2-Dichloroethene, Total	18	2.5	0.70	
67-64-1	Acetone	ND	5.0	1.5	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-11D	Date Collected	: 09/29/20 11:35
Client ID	: MW-13-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 16:43
Sample Matrix	: WATER	Dilution Factor	: 250
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A23	Instrument ID	: VOA122
Sample Amount	: 0.04 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	620	180	U
75-34-3	1,1-Dichloroethane	4000	620	180	
67-66-3	Chloroform	ND	620	180	U
79-00-5	1,1,2-Trichloroethane	ND	380	120	U
127-18-4	Tetrachloroethene	ND	120	45.	U
107-06-2	1,2-Dichloroethane	41	120	33.	J
71-55-6	1,1,1-Trichloroethane	6600	620	180	
71-43-2	Benzene	ND	120	40.	U
108-88-3	Toluene	ND	620	180	U
100-41-4	Ethylbenzene	ND	620	180	U
75-01-4	Vinyl chloride	98	250	18.	J
75-00-3	Chloroethane	ND	620	180	U
75-35-4	1,1-Dichloroethene	3800	120	42.	
156-60-5	trans-1,2-Dichloroethene	ND	620	180	U
79-01-6	Trichloroethene	26000	120	44.	
179601-23-1	p/m-Xylene	ND	620	180	U
95-47-6	o-Xylene	ND	620	180	U
1330-20-7	Xylenes, Total	ND	620	180	U
156-59-2	cis-1,2-Dichloroethene	4500	620	180	
540-59-0	1,2-Dichloroethene, Total	4500	620	180	
67-64-1	Acetone	ND	1200	360	U
78-93-3	2-Butanone	ND	1200	480	U
108-10-1	4-Methyl-2-pentanone	ND	1200	250	U
95-63-6	1,2,4-Trimethylbenzene	ND	620	180	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-12D	Date Collected	: 09/29/20 13:50
Client ID	: MW-12-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 17:08
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V22201002A24	Instrument ID	: VOA122
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	710	25	7.0	
67-66-3	Chloroform	ND	25	7.0	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	ND	5.0	1.8	U
107-06-2	1,2-Dichloroethane	2.1	5.0	1.3	J
71-55-6	1,1,1-Trichloroethane	69	25	7.0	
71-43-2	Benzene	ND	5.0	1.6	U
108-88-3	Toluene	ND	25	7.0	U
100-41-4	Ethylbenzene	ND	25	7.0	U
75-01-4	Vinyl chloride	71	10	0.71	
75-00-3	Chloroethane	ND	25	7.0	U
75-35-4	1,1-Dichloroethene	180	5.0	1.7	
156-60-5	trans-1,2-Dichloroethene	25	25	7.0	
79-01-6	Trichloroethene	150	5.0	1.8	
179601-23-1	p/m-Xylene	ND	25	7.0	U
95-47-6	o-Xylene	ND	25	7.0	U
1330-20-7	Xylenes, Total	ND	25	7.0	U
156-59-2	cis-1,2-Dichloroethene	850	25	7.0	
540-59-0	1,2-Dichloroethene, Total	880	25	7.0	
67-64-1	Acetone	ND	50	15.	U
78-93-3	2-Butanone	ND	50	19.	U
108-10-1	4-Methyl-2-pentanone	ND	50	10.	U
95-63-6	1,2,4-Trimethylbenzene	ND	25	7.0	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-13	Date Collected	: 09/29/20 00:00
Client ID	: TRIP BLANK-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 12:32
Sample Matrix	: Trip Blank (aqueous)	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: V22201002A13	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
67-64-1	Acetone	ND	5.0	1.5	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

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Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-01	Date Collected	: 09/28/20 13:30
Client ID	: MW-26-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 13:13
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933861	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	929	2.00	2.00	
74-85-1	Ethene	ND	0.500	0.500	U
74-84-0	Ethane	ND	0.500	0.500	U

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Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-02	Date Collected	: 09/28/20 14:45
Client ID	: APW-3-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 13:36
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933862	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	1220	2.00	2.00	
74-85-1	Ethene	6.33	0.500	0.500	
74-84-0	Ethane	5.06	0.500	0.500	

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Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-03	Date Collected	: 09/28/20 16:30
Client ID	: MW-24-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 13:59
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933863	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	363	2.00	2.00	
74-85-1	Ethene	15.5	0.500	0.500	
74-84-0	Ethane	49.9	0.500	0.500	

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4

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-04	Date Collected	: 09/29/20 10:30
Client ID	: MW-14-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 14:21
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933864	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	4.34	2.00	2.00	
74-85-1	Ethene	0.822	0.500	0.500	
74-84-0	Ethane	ND	0.500	0.500	U

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5

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-05	Date Collected	: 09/29/20 12:00
Client ID	: DUP-01-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 14:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933865	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	3.03	2.00	2.00	
74-85-1	Ethene	0.944	0.500	0.500	
74-84-0	Ethane	ND	0.500	0.500	U

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6

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-06	Date Collected	: 09/29/20 12:05
Client ID	: MW-20-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 15:07
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933866	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	9.39	2.00	2.00	
74-85-1	Ethene	1.93	0.500	0.500	
74-84-0	Ethane	11.9	0.500	0.500	

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7

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-07	Date Collected	: 09/28/20 15:45
Client ID	: MW-25-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 11:50
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933857	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	299	2.00	2.00	
74-85-1	Ethene	ND	0.500	0.500	U
74-84-0	Ethane	3.18	0.500	0.500	

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8

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-08	Date Collected	: 09/28/20 14:35
Client ID	: MW-27-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 15:29
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933867	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	ND	2.00	2.00	U
74-85-1	Ethene	ND	0.500	0.500	U
74-84-0	Ethane	ND	0.500	0.500	U

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9

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-09	Date Collected	: 09/28/20 13:15
Client ID	: MW-19-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 16:15
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933869	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	4.86	2.00	2.00	
74-85-1	Ethene	ND	0.500	0.500	U
74-84-0	Ethane	ND	0.500	0.500	U

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10

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-10	Date Collected	: 09/29/20 10:25
Client ID	: MW-22-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 16:38
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933870	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	12.2	2.00	2.00	
74-85-1	Ethene	ND	0.500	0.500	U
74-84-0	Ethane	ND	0.500	0.500	U

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11

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-11	Date Collected	: 09/29/20 11:35
Client ID	: MW-13-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 17:00
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933871	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	274	2.00	2.00	
74-85-1	Ethene	13.2	0.500	0.500	
74-84-0	Ethane	0.854	0.500	0.500	

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12

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-12	Date Collected	: 09/29/20 13:50
Client ID	: MW-12-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/05/20 17:23
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0933872	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	41.8	2.00	2.00	
74-85-1	Ethene	2.04	0.500	0.500	
74-84-0	Ethane	0.960	0.500	0.500	

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Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-01	Date Collected	: 09/28/20 13:30
Client ID	: MW-26-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 15:35
Sample Matrix	: WATER	Dilution Factor	: 100
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	1150	100	45.4	

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2

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-02	Date Collected	: 09/28/20 14:45
Client ID	: APW-3-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 16:11
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	74.8	5.00	2.27	

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3

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-03	Date Collected	: 09/28/20 16:30
Client ID	: MW-24-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 16:23
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	408.	10.0	4.54	

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4

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-04	Date Collected	: 09/29/20 10:30
Client ID	: MW-14-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 16:35
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	71.9	5.00	2.27	

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5

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-05	Date Collected	: 09/29/20 12:00
Client ID	: DUP-01-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 16:47
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	68.1	5.00	2.27	

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6

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-06	Date Collected	: 09/29/20 12:05
Client ID	: MW-20-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 16:59
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
14808-79-8	Sulfate	470.	10.0	4.54	

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7

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-07	Date Collected	: 09/28/20 15:45
Client ID	: MW-25-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:13
Sample Matrix	: WATER	Dilution Factor	: 100
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201002-WG1417652-A	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
14808-79-8	Sulfate	2440	100	45.4	

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8

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-08	Date Collected	: 09/28/20 14:35
Client ID	: MW-27-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 17:11
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	96.6	5.00	2.27	

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9

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-09	Date Collected	: 09/28/20 13:15
Client ID	: MW-19-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 17:24
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	67.4	5.00	2.27	

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10

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-10	Date Collected	: 09/29/20 10:25
Client ID	: MW-22-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/01/20 17:36
Sample Matrix	: WATER	Dilution Factor	: 25
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201001-WG1417651	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	590.	25.0	11.4	

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11

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-11	Date Collected	: 09/29/20 11:35
Client ID	: MW-13-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:26
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201002-WG1417652-A	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	98.4	5.00	2.27	

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12

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-12	Date Collected	: 09/29/20 13:50
Client ID	: MW-12-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:38
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 44,300.0	Analyst	: JT
Lab File ID	: 201002-WG1417652-A	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
14808-79-8	Sulfate	275.	10.0	4.54	

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Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-01	Date Collected	: 09/28/20 13:30
Client ID	: MW-26-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	1700	10	3.1	

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2

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-02	Date Collected	: 09/28/20 14:45
Client ID	: APW-3-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	740	10	3.1	

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3

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-03	Date Collected	: 09/28/20 16:30
Client ID	: MW-24-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	1100	10	3.1	

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4

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-04	Date Collected	: 09/29/20 10:30
Client ID	: MW-14-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	620	10	3.1	

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5

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-05	Date Collected	: 09/29/20 12:00
Client ID	: DUP-01-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	600	10	3.1	

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6

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-06	Date Collected	: 09/29/20 12:05
Client ID	: MW-20-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	1500	10	3.1	

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7

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-07	Date Collected	: 09/28/20 15:45
Client ID	: MW-25-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	4400	10	3.1	

MT 6/15/21

8

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-08	Date Collected	: 09/28/20 14:35
Client ID	: MW-27-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	670	10	3.1	

MM 6/15/21

9

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-09	Date Collected	: 09/28/20 13:15
Client ID	: MW-19-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	600	10	3.1	

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10

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-10	Date Collected	: 09/29/20 10:25
Client ID	: MW-22-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417186.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	1300	10	3.1	

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11

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-11	Date Collected	: 09/29/20 11:35
Client ID	: MW-13-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417189.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	1300	10	3.1	

MM 6/15/21

12

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-12	Date Collected	: 09/29/20 13:50
Client ID	: MW-12-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/02/20 13:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1417189.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	1100	10	3.1	

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Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-01	Date Collected	: 09/28/20 13:30
Client ID	: MW-26-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 08:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	2.1	1.0	0.04	

MT 6/15/21

J

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-02	Date Collected	: 09/28/20 14:45
Client ID	: APW-3-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 08:47
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	4.5	1.0	0.04	

MT 10/15/20

3

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-03	Date Collected	: 09/28/20 16:30
Client ID	: MW-24-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 09:26
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	8.7	1.0	0.04	

MT 6/15/21

4

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-04	Date Collected	: 09/29/20 10:30
Client ID	: MW-14-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 09:57
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	2.2	1.0	0.04	

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5

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-05	Date Collected	: 09/29/20 12:00
Client ID	: DUP-01-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 10:28
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	2.1	1.0	0.04	

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6

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-06	Date Collected	: 09/29/20 12:05
Client ID	: MW-20-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 10:53
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	28	10	0.43	

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7

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-07	Date Collected	: 09/28/20 15:45
Client ID	: MW-25-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 11:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	1.5	1.0	0.04	

MT 6/15/21

8

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-08	Date Collected	: 09/28/20 14:35
Client ID	: MW-27-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 13:49
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	3.2	1.0	0.04	

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9

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-09	Date Collected	: 09/28/20 13:15
Client ID	: MW-19-09282020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 14:17
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	1.5	1.0	0.04	

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10

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-10	Date Collected	: 09/29/20 10:25
Client ID	: MW-22-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 14:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1416695A	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	1.9	1.0	0.04	

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11

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-11	Date Collected	: 09/29/20 11:35
Client ID	: MW-13-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 15:22
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1420129	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	5.9	1.0	0.04	

MT 6/15/21

12

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2041182
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2041182-12	Date Collected	: 09/29/20 13:50
Client ID	: MW-12-09292020	Date Received	: 09/29/20
Sample Location	: TONAWANDA, NY	Date Analyzed	: 10/08/20 15:57
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: WG1420129	Instrument ID	: TOC-VW4
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	2.8	1.0	0.04	

MT 6/15/21

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT (DUSR)
SONOCO, TONAWANDA, NEW YORK

Client: Environmental Resources Management, Inc., Melville, New York
SDG: L2046870
Laboratory: Alpha Analytical, Westborough, Massachusetts
Site: Sonoco, Tonawanda, New York
Date: June 15, 2021

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW-18-10272020-01	L2046870-01	Water
1MS+	MW-18-10272020-01MS	L2046870-01MS	Water
2*	TRIP BLANK	L2046870-02	Water

* - VOC only + - DOC only

A Data Usability Summary Review was performed on the analytical data for one water sample and one aqueous trip blank sample collected on October 27, 2020 by Environmental Resources Management at the Sonoco site in Tonawanda, New York. The samples were analyzed under the Environmental Protection Agency (USEPA) Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions, the Methods for Chemical Analysis of Water and Wastes and the Standard Methods for Examination of Water and Wastewater.

Specific method references are as follows:

Analysis	*Method References*
VOC	USEPA SW-846 Method 8260C
Dissolved Gases	Method RSK-175
TDS	Standard Method SM2540C
DOC	USEPA SW-846 Method 9060A

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 1, September 2016: Low/Medium Volatile Data Validation;
- SOP Number HW-3c, Revision 1, September 2016: Mercury and Cyanide Data Validation;
- and the reviewer's professional judgment.

The following data quality indicators were reviewed for this report:

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

Inorganics

- Holding times and sample preservation
- Initial and continuing calibration verifications
- Method blank and field QC blank contamination
- Laboratory Control Sample (LCS) recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Duplicate Sample Analysis
- Compound Quantitation
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Volatile Organic Compounds (VOC)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded percent difference (%D) criteria and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D	Qualifier	Affected Samples
10/30/20 (0713)	Dichlorodifluoromethane	62.7%	UJ	1, 2
	Vinyl chloride	31.8%	J/UJ	

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC sample results are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
TRIP BLANK	None - ND	-	-	-

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- MS/MSD samples were not analyzed.

Laboratory Control Samples (LCS/LCSD)

- The following table presents LCS/LCSD percent recoveries (%R) and/or RPD values outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

LCS/LCSD ID	Compound	LCS %R/LCSD %R/RPD	Qualifier	Affected Samples
WG1428747-3	Dichlorodifluoromethane	160%/160%/OK	None	All Associated ND

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- All criteria were met.

Tentative Identified Compounds (TICs)

- TICs were not reported.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Dissolved Gases (MEE)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients.

Continuing Calibration

- All %D and RRF criteria were met.

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC samples were not analyzed.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- MS/MSD samples were not analyzed.

Laboratory Control Samples (LCS/LCSD)

- The LCS/LCSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Total Dissolved Solids & Dissolved Organic Carbon

Holding Times

- All holding time criteria were met.

Initial Calibration Verification

- All initial calibration criteria were met.

Continuing Calibration Verification

- All continuing calibration criteria were met.

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than five times (5x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Sample ID	Compound	Conc. mg/L	Qualifier	Affected Samples
WG1429795-1	DOC	0.08	None	For Wet Chemistry

Field Blank

- Field QC samples were not analyzed.

Laboratory Control Samples

- The LCS sample exhibited acceptable percent recoveries (%R).

Matrix Spike (MS) Recoveries

- The MS samples exhibited acceptable percent recoveries (%R).

Compound Quantitation

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 6/18/21

Nancy Weaver
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-01	Date Collected	: 10/27/20 16:25
Client ID	: MW-18-10272020-01	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 10/30/20 10:42
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: V05201030A10	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	24	2.5	0.70	
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	28	2.5	0.70	
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	0.61	1.0	0.07	J
75-00-3	Chloroethane	2.6	2.5	0.70	
75-35-4	1,1-Dichloroethene	3.2	0.50	0.17	

MT 6/15/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-01	Date Collected	: 10/27/20 16:25
Client ID	: MW-18-10272020-01	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 10/30/20 10:42
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: V05201030A10	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	2.4	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	3.1	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-01	Date Collected	: 10/27/20 16:25
Client ID	: MW-18-10272020-01	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 10/30/20 10:42
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: V05201030A10	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

2

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-02	Date Collected	: 10/27/20 00:00
Client ID	: TRIP BLANK	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 10/30/20 10:19
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: V05201030A09	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

2

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-02	Date Collected	: 10/27/20 00:00
Client ID	: TRIP BLANK	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 10/30/20 10:19
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: V05201030A09	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	~~V~~ U5
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

MT 6/15/21

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-02	Date Collected	: 10/27/20 00:00
Client ID	: TRIP BLANK	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 10/30/20 10:19
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: V05201030A09	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

MT 6/15/21

Results Summary
Form 1
Dissolved Gases by GC

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-01	Date Collected	: 10/27/20 16:25
Client ID	: MW-18-10272020-01	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 11/02/20 15:25
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 117,-	Analyst	: AW
Lab File ID	: R0934305	Instrument ID	: AIRLAB9
Sample Amount	: 0.5 ml	GC Column	:
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-82-8	Methane	284	2.00	2.00	
74-85-1	Ethene	ND	0.500	0.500	U
74-84-0	Ethane	ND	0.500	0.500	U

MT 6/15/21

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-01	Date Collected	: 10/27/20 16:25
Client ID	: MW-18-10272020-01	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 11/02/20 08:05
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 121,2540C	Analyst	: DW
Lab File ID	: WG1429141.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	1000	10	3.1	

MT 6/15/21

Form 1
WETCHEM

Client	: ERM, Inc.	Lab Number	: L2046870
Project Name	:	Project Number	:
Lab ID	: L2046870-01	Date Collected	: 10/27/20 16:25
Client ID	: MW-18-10272020-01	Date Received	: 10/27/20
Sample Location	:	Date Analyzed	: 11/02/20 05:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,9060A	Analyst	: DW
Lab File ID	: wg1429795.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	: 10/28/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Dissolved Organic Carbon	4.0	1.0	0.04	

MW 6/18/21

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
SONOCO, TONAWANDA, NEW YORK

Client: Environmental Resources Management, Inc., Melville, New York
SDG: L2111441
Laboratory: Alpha Analytical, Westborough, Massachusetts
Site: Sonoco, Tonawanda, New York
Date: June 18, 2021

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1*	SP-04-20210308-01	L2111441-01	Air
2*	SP-03-20210308-01	L2111441-02	Air
3*	SP-507-20210308-01	L2111441-03	Air
4	AA-SW-20210309-01	L2111441-04	Air
5*	SSV-VAC-09-20210309-01	L2111441-05	Air
6	IA-VAC-09-20210309-01	L2111441-06	Air
7	DUP-01-20210309-01	L2111441-07	Air

* - TO-15 only

A Data Usability Summary Review was performed on the analytical data for seven air samples collected on March 8-9, 2021 by Environmental Resources Management at the Sonoco site in Tonawanda, New York. The samples were analyzed under "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B", Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)".

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA Method TO-15
VOCs	USEPA Method TO-15 SIM

The data have been validated according to the protocols and quality control (QC) requirements of the analytical method and the USEPA National Functional Guidelines for Organic Data Review as follows:

- The USEPA "Contract Laboratories Program National Functional Guidelines for Organic Superfund Methods Data Review," January 2017;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

Organics

- Data Completeness
- Chains-of-Custody and Traffic Reports
- Holding Times and sample preservation
- GC/MS Tuning
- Initial and Continuing Calibration Summaries
- Method Blank Contamination
- Laboratory Control Sample (LCS) recoveries
- Internal Standard (IS) Area Performance
- Compound Quantitation
- Field Duplicate Sample Precision

Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes. There were no qualifications.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Chains-of-Custody and Traffic Reports

- All criteria were met.

Holding Times

- All samples were analyzed within 30 days for air samples.

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD, and/or correlation coefficient, and mean RRF values.

Continuing Calibration

- The continuing calibrations exhibited acceptable %D and RRF values.

Method Blank

- The method blanks were free of contamination.

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Compound Quantitation

- EDS Samples 3 and 5 were analyzed at various dilutions due to high concentrations of target compounds. The reporting limits were adjusted accordingly. No action was required.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

TO-15				
Compound	IA-VAC-09-20210309-01 ug/m3	DUP-01-20210309-01 ug/m3	RPD	Qualifier
Dichlorodifluoromethane	2.66	2.66	0%	None
Chloromethane	1.29	1.28	1%	
Acetone	5.08	4.35	15%	
Trichlorofluoromethane	1.40	1.37	2%	
2-Butanone	1.47U	2.66	NC	
Benzene	0.655	0.542	19%	
Toluene	1.10	0.754U	NC	

TO-15 SIM				
Compound	IA-VAC-09-20210309-01 ug/m3	DUP-01-20210309-01 ug/m3	RPD	Qualifier
1,1,1-Trichloroethane	0.627	0.551	13%	None
Carbon Tetrachloride	0.459	0.478	4%	
Trichloroethene	0.113	0.107	5%	

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 6/19/21

Nancy Weaver
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limits is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-01	Date Collected	: 03/08/21 09:14
Client ID	: SP-04-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 02:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314581	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.351	0.200	--	1.74	0.989	--	
74-87-3	Chloromethane	0.243	0.200	--	0.502	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U

mw 6/18/21

Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-01	Date Collected	: 03/08/21 09:14
Client ID	: SP-04-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 02:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314581	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U

MW 6/18/21

Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-01	Date Collected	: 03/08/21 09:14
Client ID	: SP-04-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 02:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314581	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-02	Date Collected	: 03/08/21 09:16
Client ID	: SP-03-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 03:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314582	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.375	0.200	--	1.85	0.989	--	
74-87-3	Chloromethane	0.377	0.200	--	0.779	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.30	1.00	--	3.09	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.560	0.500	--	1.65	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-02	Date Collected	: 03/08/21 09:16
Client ID	: SP-03-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 03:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314582	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	0.309	0.200	--	1.69	1.09	--	
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.295	0.200	--	1.11	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U

mw 6.8.21

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-02	Date Collected	: 03/08/21 09:16
Client ID	: SP-03-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 03:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314582	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-03D	Date Collected	: 03/08/21 09:08
Client ID	: SP-507-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 04:00
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 6.25
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314583	Instrument ID	: AIRPIANO3
Sample Amount	: 40.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	1.25	--	ND	6.18	--	U
74-87-3	Chloromethane	ND	1.25	--	ND	2.58	--	U
76-14-2	Freon-114	ND	1.25	--	ND	8.74	--	U
75-01-4	Vinyl chloride	ND	1.25	--	ND	3.20	--	U
106-99-0	1,3-Butadiene	ND	1.25	--	ND	2.77	--	U
74-83-9	Bromomethane	ND	1.25	--	ND	4.85	--	U
75-00-3	Chloroethane	ND	1.25	--	ND	3.30	--	U
64-17-5	Ethanol	ND	31.2	--	ND	58.8	--	U
593-60-2	Vinyl bromide	ND	1.25	--	ND	5.47	--	U
67-64-1	Acetone	ND	6.25	--	ND	14.8	--	U
75-69-4	Trichlorofluoromethane	ND	1.25	--	ND	7.02	--	U
67-63-0	Isopropanol	ND	3.12	--	ND	7.67	--	U
75-35-4	1,1-Dichloroethene	60.6	1.25	--	240	4.96	--	
75-65-0	Tertiary butyl Alcohol	ND	3.12	--	ND	9.46	--	U
75-09-2	Methylene chloride	ND	3.12	--	ND	10.8	--	U
107-05-1	3-Chloropropene	ND	1.25	--	ND	3.91	--	U
75-15-0	Carbon disulfide	ND	1.25	--	ND	3.89	--	U
76-13-1	Freon-113	ND	1.25	--	ND	9.58	--	U
156-60-5	trans-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--	U
75-34-3	1,1-Dichloroethane	15.0	1.25	--	60.7	5.06	--	
1634-04-4	Methyl tert butyl ether	ND	1.25	--	ND	4.51	--	U
78-93-3	2-Butanone	ND	3.12	--	ND	9.20	--	U
156-59-2	cis-1,2-Dichloroethene	38.4	1.25	--	152	4.96	--	
141-78-6	Ethyl Acetate	ND	3.12	--	ND	11.2	--	U
67-66-3	Chloroform	ND	1.25	--	ND	6.10	--	U
109-99-9	Tetrahydrofuran	ND	3.12	--	ND	9.20	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-03D	Date Collected	: 03/08/21 09:08
Client ID	: SP-507-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 04:00
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 6.25
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314583	Instrument ID	: AIRPIANO3
Sample Amount	: 40.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	1.25	--	ND	5.06	--	U
110-54-3	n-Hexane	ND	1.25	--	ND	4.41	--	U
71-55-6	1,1,1-Trichloroethane	480	1.25	--	2620	6.82	--	
71-43-2	Benzene	ND	1.25	--	ND	3.99	--	U
56-23-5	Carbon tetrachloride	ND	1.25	--	ND	7.86	--	U
110-82-7	Cyclohexane	ND	1.25	--	ND	4.30	--	U
78-87-5	1,2-Dichloropropane	ND	1.25	--	ND	5.78	--	U
75-27-4	Bromodichloromethane	ND	1.25	--	ND	8.37	--	U
123-91-1	1,4-Dioxane	2.66	1.25	--	9.59	4.50	--	
79-01-6	Trichloroethene	265	1.25	--	1420	6.72	--	
540-84-1	2,2,4-Trimethylpentane	ND	1.25	--	ND	5.84	--	U
142-82-5	Heptane	ND	1.25	--	ND	5.12	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	U
108-10-1	4-Methyl-2-pentanone	ND	3.12	--	ND	12.8	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	U
79-00-5	1,1,2-Trichloroethane	ND	1.25	--	ND	6.82	--	U
108-88-3	Toluene	ND	1.25	--	ND	4.71	--	U
591-78-6	2-Hexanone	ND	1.25	--	ND	5.12	--	U
124-48-1	Dibromochloromethane	ND	1.25	--	ND	10.6	--	U
106-93-4	1,2-Dibromoethane	ND	1.25	--	ND	9.61	--	U
127-18-4	Tetrachloroethene	ND	1.25	--	ND	8.48	--	U
108-90-7	Chlorobenzene	ND	1.25	--	ND	5.76	--	U
100-41-4	Ethylbenzene	ND	1.25	--	ND	5.43	--	U
179601-23-1	p/m-Xylene	ND	2.50	--	ND	10.9	--	U
75-25-2	Bromoform	ND	1.25	--	ND	12.9	--	U
100-42-5	Styrene	ND	1.25	--	ND	5.32	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-03D	Date Collected	: 03/08/21 09:08
Client ID	: SP-507-20210308-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 04:00
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 6.25
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314583	Instrument ID	: AIRPIANO3
Sample Amount	: 40.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.25	--	ND	8.58	--	U
95-47-6	o-Xylene	ND	1.25	--	ND	5.43	--	U
622-96-8	4-Ethyltoluene	ND	1.25	--	ND	6.15	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	1.25	--	ND	6.15	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	1.25	--	ND	6.15	--	U
100-44-7	Benzyl chloride	ND	1.25	--	ND	6.47	--	U
541-73-1	1,3-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U
106-46-7	1,4-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U
95-50-1	1,2-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	1.25	--	ND	9.28	--	U
87-68-3	Hexachlorobutadiene	ND	1.25	--	ND	13.3	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-04	Date Collected	: 03/09/21 08:24
Client ID	: AA-SW-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 17:46
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314567	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.548	0.200	--	2.71	0.989	--	
74-87-3	Chloromethane	0.646	0.200	--	1.33	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	7.24	5.00	--	13.6	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.87	1.00	--	4.44	2.38	--	
75-69-4	Trichlorofluoromethane	0.249	0.200	--	1.40	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-04	Date Collected	: 03/09/21 08:24
Client ID	: AA-SW-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 17:46
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314567	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.201	0.200	--	0.757	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-04	Date Collected	: 03/09/21 08:24
Client ID	: AA-SW-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 17:46
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314567	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-05D	Date Collected	: 03/09/21 09:01
Client ID	: SSV-VAC-09-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 04:39
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 37.99
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314584	Instrument ID	: AIRPIANO3
Sample Amount	: 6.58 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	7.60	--	ND	37.6	--	U
74-87-3	Chloromethane	ND	7.60	--	ND	15.7	--	U
76-14-2	Freon-114	ND	7.60	--	ND	53.1	--	U
75-01-4	Vinyl chloride	ND	7.60	--	ND	19.4	--	U
106-99-0	1,3-Butadiene	ND	7.60	--	ND	16.8	--	U
74-83-9	Bromomethane	ND	7.60	--	ND	29.5	--	U
75-00-3	Chloroethane	ND	7.60	--	ND	20.1	--	U
64-17-5	Ethanol	ND	190	--	ND	358	--	U
593-60-2	Vinyl bromide	ND	7.60	--	ND	33.2	--	U
67-64-1	Acetone	ND	38.0	--	ND	90.3	--	U
75-69-4	Trichlorofluoromethane	ND	7.60	--	ND	42.7	--	U
67-63-0	Isopropanol	ND	19.0	--	ND	46.7	--	U
75-35-4	1,1-Dichloroethene	387	7.60	--	1530	30.1	--	
75-65-0	Tertiary butyl Alcohol	ND	19.0	--	ND	57.6	--	U
75-09-2	Methylene chloride	ND	19.0	--	ND	66.0	--	U
107-05-1	3-Chloropropene	ND	7.60	--	ND	23.8	--	U
75-15-0	Carbon disulfide	ND	7.60	--	ND	23.7	--	U
76-13-1	Freon-113	ND	7.60	--	ND	58.3	--	U
156-60-5	trans-1,2-Dichloroethene	ND	7.60	--	ND	30.1	--	U
75-34-3	1,1-Dichloroethane	448	7.60	--	1810	30.8	--	
1634-04-4	Methyl tert butyl ether	ND	7.60	--	ND	27.4	--	U
78-93-3	2-Butanone	ND	19.0	--	ND	56.0	--	U
156-59-2	cis-1,2-Dichloroethene	ND	7.60	--	ND	30.1	--	U
141-78-6	Ethyl Acetate	ND	19.0	--	ND	68.5	--	U
67-66-3	Chloroform	ND	7.60	--	ND	37.1	--	U
109-99-9	Tetrahydrofuran	ND	19.0	--	ND	56.0	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-05D	Date Collected	: 03/09/21 09:01
Client ID	: SSV-VAC-09-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 04:39
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 37.99
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314584	Instrument ID	: AIRPIANO3
Sample Amount	: 6.58 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	7.60	--	ND	30.8	--	U
110-54-3	n-Hexane	10.8	7.60	--	38.1	26.8	--	
71-55-6	1,1,1-Trichloroethane	3010	7.60	--	16400	41.5	--	
71-43-2	Benzene	ND	7.60	--	ND	24.3	--	U
56-23-5	Carbon tetrachloride	ND	7.60	--	ND	47.8	--	U
110-82-7	Cyclohexane	11.2	7.60	--	38.6	26.2	--	
78-87-5	1,2-Dichloropropane	ND	7.60	--	ND	35.1	--	U
75-27-4	Bromodichloromethane	ND	7.60	--	ND	50.9	--	U
123-91-1	1,4-Dioxane	ND	7.60	--	ND	27.4	--	U
79-01-6	Trichloroethene	2350	7.60	--	12600	40.8	--	
540-84-1	2,2,4-Trimethylpentane	ND	7.60	--	ND	35.5	--	U
142-82-5	Heptane	24.9	7.60	--	102	31.1	--	
10061-01-5	cis-1,3-Dichloropropene	ND	7.60	--	ND	34.5	--	U
108-10-1	4-Methyl-2-pentanone	ND	19.0	--	ND	77.9	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	7.60	--	ND	34.5	--	U
79-00-5	1,1,2-Trichloroethane	ND	7.60	--	ND	41.5	--	U
108-88-3	Toluene	20.7	7.60	--	78.0	28.6	--	
591-78-6	2-Hexanone	ND	7.60	--	ND	31.1	--	U
124-48-1	Dibromochloromethane	ND	7.60	--	ND	64.7	--	U
106-93-4	1,2-Dibromoethane	ND	7.60	--	ND	58.4	--	U
127-18-4	Tetrachloroethene	ND	7.60	--	ND	51.5	--	U
108-90-7	Chlorobenzene	ND	7.60	--	ND	35.0	--	U
100-41-4	Ethylbenzene	ND	7.60	--	ND	33.0	--	U
179601-23-1	p/m-Xylene	ND	15.2	--	ND	66.0	--	U
75-25-2	Bromoform	ND	7.60	--	ND	78.6	--	U
100-42-5	Styrene	ND	7.60	--	ND	32.4	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-05D	Date Collected	: 03/09/21 09:01
Client ID	: SSV-VAC-09-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/16/21 04:39
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 37.99
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314584	Instrument ID	: AIRPIANO3
Sample Amount	: 6.58 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.60	--	ND	52.2	--	U
95-47-6	o-Xylene	ND	7.60	--	ND	33.0	--	U
622-96-8	4-Ethyltoluene	ND	7.60	--	ND	37.4	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	7.60	--	ND	37.4	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	7.60	--	ND	37.4	--	U
100-44-7	Benzyl chloride	ND	7.60	--	ND	39.4	--	U
541-73-1	1,3-Dichlorobenzene	ND	7.60	--	ND	45.7	--	U
106-46-7	1,4-Dichlorobenzene	ND	7.60	--	ND	45.7	--	U
95-50-1	1,2-Dichlorobenzene	ND	7.60	--	ND	45.7	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	7.60	--	ND	56.4	--	U
87-68-3	Hexachlorobutadiene	ND	7.60	--	ND	81.1	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-06	Date Collected	: 03/09/21 09:03
Client ID	: IA-VAC-09-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 18:26
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314568	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.537	0.200	--	2.66	0.989	--	
74-87-3	Chloromethane	0.623	0.200	--	1.29	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	2.14	1.00	--	5.08	2.38	--	
75-69-4	Trichlorofluoromethane	0.250	0.200	--	1.40	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	0.205	0.200	--	0.655	0.639	--	

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-06	Date Collected	: 03/09/21 09:03
Client ID	: IA-VAC-09-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 18:26
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314568	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.291	0.200	--	1.10	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-06	Date Collected	: 03/09/21 09:03
Client ID	: IA-VAC-09-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 18:26
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314568	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-07	Date Collected	: 03/09/21 09:03
Client ID	: DUP-01-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 19:44
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314570	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.538	0.200	--	2.66	0.989	--	
74-87-3	Chloromethane	0.618	0.200	--	1.28	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.83	1.00	--	4.35	2.38	--	
75-69-4	Trichlorofluoromethane	0.243	0.200	--	1.37	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.902	0.500	--	2.66	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	0.201	0.200	--	0.642	0.639	--	

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-07	Date Collected	: 03/09/21 09:03
Client ID	: DUP-01-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 19:44
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314570	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

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Results Summary
Form 1
Volatile Organics in Air

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-07	Date Collected	: 03/09/21 09:03
Client ID	: DUP-01-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 19:44
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R314570	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

MW 6/18/21

4

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-04	Date Collected	: 03/09/21 08:24
Client ID	: AA-SW-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 17:46
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R314567_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.073	0.020	--	0.459	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

MW 6/18/21

6

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-06	Date Collected	: 03/09/21 09:03
Client ID	: IA-VAC-09-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 18:26
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R314568_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	0.115	0.020	--	0.627	0.109	--	
56-23-5	Carbon tetrachloride	0.073	0.020	--	0.459	0.126	--	
79-01-6	Trichloroethene	0.021	0.020	--	0.113	0.107	--	
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

mw 6/18/21

7

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: ERM, Inc.	Lab Number	: L2111441
Project Name	: SONOCO	Project Number	: 0560651
Lab ID	: L2111441-07	Date Collected	: 03/09/21 09:03
Client ID	: DUP-01-20210309-01	Date Received	: 03/09/21
Sample Location	: TONAWANDA, NY	Date Analyzed	: 03/15/21 19:44
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R314570_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	0.101	0.020	--	0.551	0.109	--	
56-23-5	Carbon tetrachloride	0.076	0.020	--	0.478	0.126	--	
79-01-6	Trichloroethene	0.020	0.020	--	0.107	0.107	--	
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

NW 6/18/21

APPENDIX F DAR-1 ANALYSIS

Section II - Basic Cavity Impact Analysis

Use this method only if the shortest distance from the building to the property line is less than 3 times the building height (h_b). Cavity impacts would then occur to offsite receptors.

Emission Point: SP-03

h_b - building height (ft): 33.29167

If the physical stack height is greater than 1.5 h_b, no annual or short term cavity impacts occur from this source.

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_c (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
Acetone	67-64-1	1.24E-06	1.08E-02	1.68E-05	1.01E-03	30,000	180,000
1,1,1-Trichloroethane	71-55-6	6.77E-07	5.93E-03	9.20E-06	5.52E-04	5000	9000
Dichlorodifluoromethane	75-71-8	7.41E-07	6.49E-03	1.01E-05	6.04E-04	12,000	None
Toluene	108-88-3	4.44E-07	3.89E-03	6.04E-06	3.62E-04	5,000	37,000
2-Butanone	78-93-3	6.61E-07	5.79E-03	8.98E-06	5.39E-04	5,000	37,000
Chloromethane	74-87-3	3.12E-07	2.73E-03	4.24E-06	2.54E-04	90	22,000

Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Annual Cavity Impact

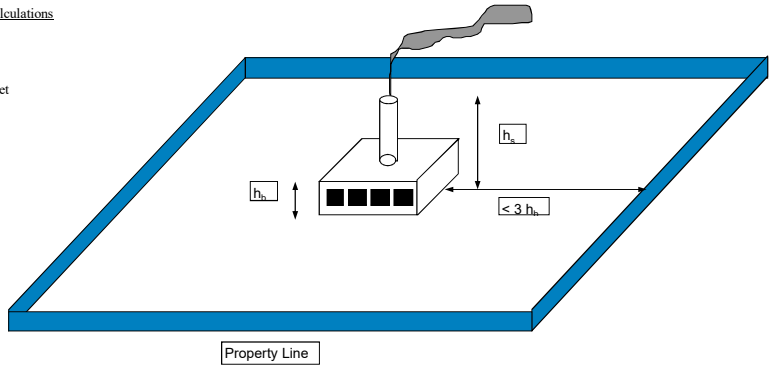
C_c (µg/m^3) = (1.72*Q_a)/(h_b^2)

where Q_a is in lbs/yr and h_b is in feet

Short Term Cavity Impact

C_{st} (µg/m^3) = (904000*Q)/(h_b^2)

where Q is lbs/hr and h_b is in feet



	ug/m3	ug/m3 to ug/ft3	ug/ft3 to lbs/ft3	fpm	cfm	lb/min	min/hr	lb/hr
		0.0283127	2.20E-09	1226	107.0		60	
Acetone	3.09	0.0874862	1.927E-10			2.062E-08		1.237E-06
1,1,1-Trichloroethane	1.69	0.0478485	1.054E-10			1.128E-08		6.766E-07
Dichlorodifluoromethane	1.85	0.0523785	1.154E-10			1.234E-08		7.406E-07
Toluene	1.11	0.0314271	6.922E-11			7.406E-09		4.444E-07
2-Butanone	1.65	0.046716	1.029E-10			1.101E-08		6.605E-07
Chloromethane	0.779	0.0220556	4.858E-11			5.198E-09		3.119E-07

AIRGUIDE-XL™

Section III - Point Source Method - Conservative Approach

Use this method only if the stack height to building height ratio is less than 1.5 (no credit given for plume rise rise due to buoyancy or momentum).

Emission Point	SP-03
h_e - stack height (ft)	40

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_a (µg/m^3)	C_p (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
Acetone	67-64-1	1.24E-06	1.08E-02	1.62E-05	1.61E-05	1.05E-03	30,000	180,000
1,1,1-Trichloroethane	71-55-6	6.77E-07	5.93E-03	8.84E-06	8.83E-06	5.74E-04	5,000.000	9,000
Dichlorodifluoromethane	75-71-8	7.41E-07	6.49E-03	9.67E-06	9.66E-06	6.28E-04	12,000	None
Toluene	108-88-3	4.44E-07	3.89E-03	5.80E-06	5.80E-06	3.77E-04	5,000	37,000
2-Butanone	78-93-3	6.61E-07	5.79E-03	8.63E-06	8.62E-06	5.60E-04	5,000	37,000
Chloromethane	74-87-3	3.12E-07	2.73E-03	4.07E-06	4.07E-06	2.64E-04	90	22,000

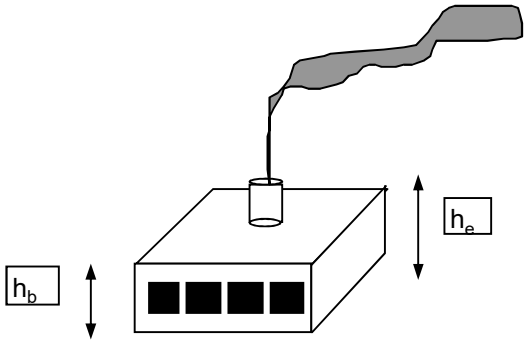
Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Maximum Actual Annual Impact
C_a (µg/m^3) = $(6.0*Q_a)/(h_e^{2.25})$
where Q_a is in lbs/yr and h_e is in feet

Maximum Potential Annual Impact
C_p (µg/m^3) = $(52500*Q)/(h_e^{2.25})$
where Q is lbs/hr and h_e is in feet

Maximum Short Term Impact
C_{st} (µg/m^3) = C_p * 65



Section II - Basic Cavity Impact Analysis

Use this method only if the shortest distance from the building to the property line is less than 3 times the building height (h_b). Cavity impacts would then occur to offsite receptors.

Emission Point: SP-04

h_b - building height (ft): 33.29167 If the physical stack height is greater than 1.5 h_b, no annual or short term cavity impacts occur from this source.

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_c (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
Dichlorodifluoromethane	75-71-8	1.49E-07	1.30E-03	2.02E-06	1.21E-04	12,000	None
Chloromethane	74-87-3	4.29E-08	3.76E-04	5.84E-07	3.50E-05	90	22000

Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Annual Cavity Impact

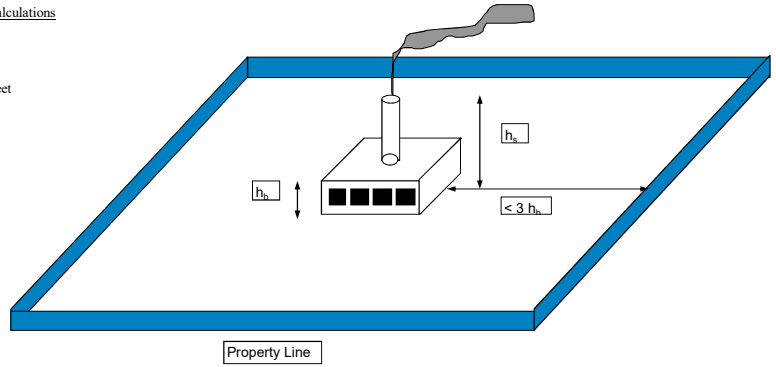
C_c (µg/m^3) = $(1.72*Q_a)/(h_b^2)$

where Q_a is in lbs/yr and h_b is in feet

Short Term Cavity Impact

C_{st} (µg/m^3) = $(904000*Q)/(h_b^2)$

where Q is lbs/hr and h_b is in feet



	ug/m3	ug/m3 to ug/ft3	ug/ft3 to lbs/ft3	fpm	cfm	lb/min	min/hr	lb/hr
		0.0283127	2.20E-09	262	22.863794		60	
Dichlorodifluoromethane	1.74	0.0492641	1.085E-10			2.481E-09		1.489E-07
Chloromethane	0.502	0.014213	3.131E-11			7.158E-10		4.295E-08

Section III - Point Source Method - Conservative Approach

Use this method only if the stack height to building height ratio is less than 1.5 (no credit given for plume rise rise due to buoyancy or momentum).

Emission Point	SP-04
h_e - stack height (ft)	40

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_a (µg/m^3)	C_p (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
Dichlorodifluoromethane	75-71-8	1.49E-07	1.30E-03	1.94E-06	1.94E-06	1.26E-04	12,000	None
Chloromethane	74-87-3	4.29E-08	3.76E-04	5.61E-07	5.60E-07	3.64E-05	90	22000

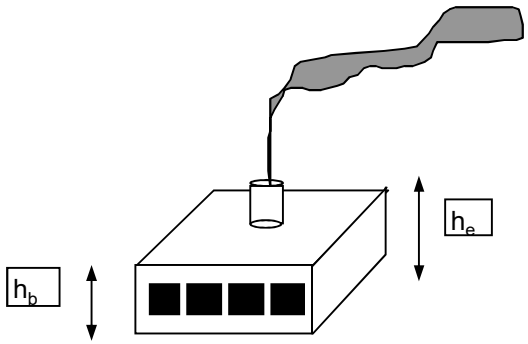
Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Maximum Actual Annual Impact
C_a (µg/m^3) = $(6.0*Q_a)/(h_e^{2.25})$
where Q_a is in lbs/yr and h_e is in feet

Maximum Potential Annual Impact
C_p (µg/m^3) = $(52500*Q)/(h_e^{2.25})$
where Q is lbs/hr and h_e is in feet

Maximum Short Term Impact
C_{st} (µg/m^3) = C_p * 65



Section II - Basic Cavity Impact Analysis

Use this method only if the shortest distance from the building to the property line is less than 3 times the building height (h_b). Cavity impacts would then occur to offsite receptors.

Emission Point: SSDS Effluent

h_b - building height (ft): 33.29167 If the physical stack height is greater than 1.5 h_b, no annual or short term cavity impacts occur from this source.

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_c (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
1,1,1 Trichloroethane	71-55-6	4.92E-03	4.31E+01	6.69E-02	4.01E+00	5,000	9,000
1,1 Dichloroethane	75-34-3	1.14E-04	9.98E-01	1.55E-03	9.30E-02	0.63	None
1,4-Dioxane	123-91-1	1.80E-05	1.58E-01	2.45E-04	1.47E-02	0.20	3,000
1,1-Dichloroethene	75-35-4	4.51E-04	3.95E+00	6.13E-03	3.68E-01	0.20	3,000
cis-1,2-Dichloroethene	156-59-2	2.85E-04	2.50E+00	3.88E-03	2.33E-01	0.20	3,000
Trichloroethene	79-01-6	2.67E-03	2.34E+01	3.62E-02	2.17E+00	0.21	20

Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Annual Cavity Impact

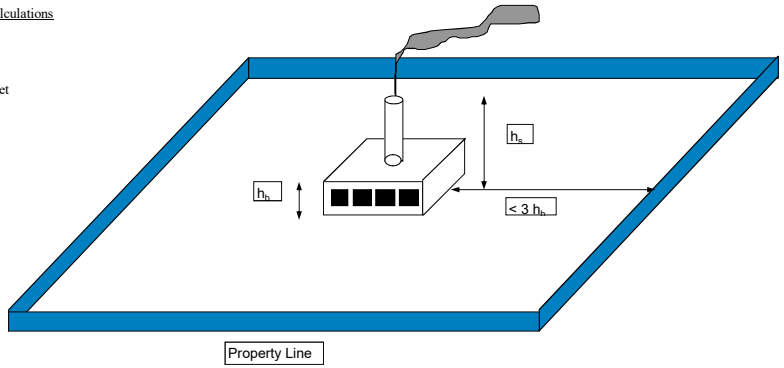
C_c (µg/m^3) = $(1.72*Q_a)/(h_b^2)$

where Q_a is in lbs/yr and h_b is in feet

Short Term Cavity Impact

C_{st} (µg/m^3) = $(904000*Q)/(h_b^2)$

where Q is lbs/hr and h_b is in feet



	ug/m3	ug/m3 to ug/ft3	ug/ft3 to lbs/ft3	cfm	lb/min	min/hr	lb/hr
		0.0283127	2.20E-09	501.76		60	
1,1,1 Trichloroethane	2620	74.179278	1.6339E-07		8.198E-05		0.004919
1,1 Dichloroethane	60.7	1.718581	3.79E-09		1.90E-06		0.0001
1,4-Dioxane	9.59	0.2715188	5.98059E-10		3.001E-07		1.8E-05
1,1-Dichloroethene	240	6.7950483	1.50E-08		7.51E-06		0.0004506
cis-1,2-Dichloroethene	152	4.3035306	9.48E-09		4.756E-06		0.0002854
Trichloroethene	1420	40.204036	8.86E-08		4.443E-05		0.002666

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Section III - Point Source Method - Conservative Approach

Use this method only if the stack height to building height ratio is less than 1.5 (no credit given for plume rise rise due to buoyancy or momentum).

Emission Point	SSDS Effluent
h_e - stack height (ft)	40

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_a (µg/m^3)	C_p (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
1,1,1 Trichloroethane	71-55-6	4.92E-03	4.31E+01	6.43E-02	6.42E-02	4.17E+00	5,000	9,000
1,1 Dichloroethane	75-34-3	1.14E-04	9.98E-01	1.49E-03	1.49E-03	9.66E-02	0.63	None
1,4-Dioxane	123-91-1	1.80E-05	1.58E-01	2.35E-04	2.35E-04	1.53E-02	0.2	3,000
1,1-Dichloroethene	75-35-4	4.51E-04	3.95E+00	5.89E-03	5.88E-03	3.82E-01	0.2	3,000
cis-1,2-Dichloroethene	156-59-2	2.85E-04	2.50E+00	3.73E-03	3.72E-03	2.42E-01	0.2	3,000
Trichloroethene	79-01-6	2.67E-03	2.34E+01	3.48E-02	3.48E-02	2.26E+00	0.21	20

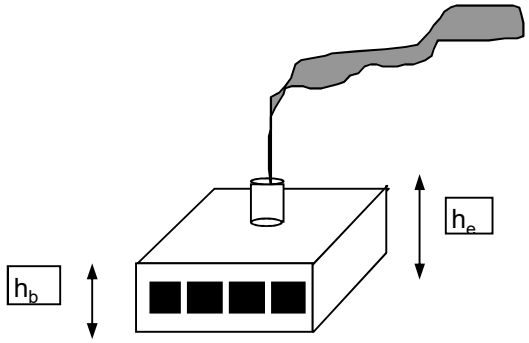
Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Maximum Actual Annual Impact
C_a (µg/m^3) = $(6.0*Q_a)/(h_e^{2.25})$
where Q_a is in lbs/yr and h_e is in feet

Maximum Potential Annual Impact
C_p (µg/m^3) = $(52500*Q)/(h_e^{2.25})$
where Q is lbs/hr and h_e is in feet

Maximum Short Term Impact
C_{st} (µg/m^3) = C_p * 65



Section II - Basic Cavity Impact Analysis

Use this method only if the shortest distance from the building to the property line is less than 3 times the building height (h_b). Cavity impacts would then occur to offsite receptors.

Emission Point: SP-03, 04, SSDS Eff

h_b - building height (ft): Mixed

If the physical stack height is greater than 1.5 h_b, no annual or short term cavity impacts occur from this source.

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_c (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
Acetone	67-64-1	1.24E-06	1.08E-02	1.68E-05	1.01E-03	30,000.00	180,000
1,1,1-Trichloroethane	71-55-6	4.92E-03	4.31E+01	6.69E-02	4.01E+00	5,000.0	9,000
Dichlorodifluoromethane	75-71-8	2.67E-03	2.34E+01	3.63E-02	2.18E+00	12,000	None
Toluene	108-88-3	4.44E-07	3.89E-03	6.04E-06	3.62E-04	5,000	37,000
2-Butanone	78-93-3	6.61E-07	5.79E-03	8.98E-06	5.39E-04	5,000	37,000
Chloromethane	74-87-3	3.55E-07	3.11E-03	4.82E-06	2.89E-04	90	22,000
1,1 Dichloroethane	75-34-3	1.14E-04	9.98E-01	1.55E-03	9.30E-02	0.63	None
1,4-Dioxane	123-91-1	1.80E-05	1.58E-01	2.45E-04	1.47E-02	0.20	3,000
1,1-Dichloroethene	75-35-4	4.51E-04	3.95E+00	6.13E-03	3.68E-01	0.20	3,000
cis-1,2-Dichloroethene	156-59-2	2.85E-04	2.50E+00	3.88E-03	2.33E-01	0.63	None
Trichloroethene	79-01-6	2.67E-03	2.34E+01	3.62E-02	2.17E+00	0.21	20

Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Annual Cavity Impact

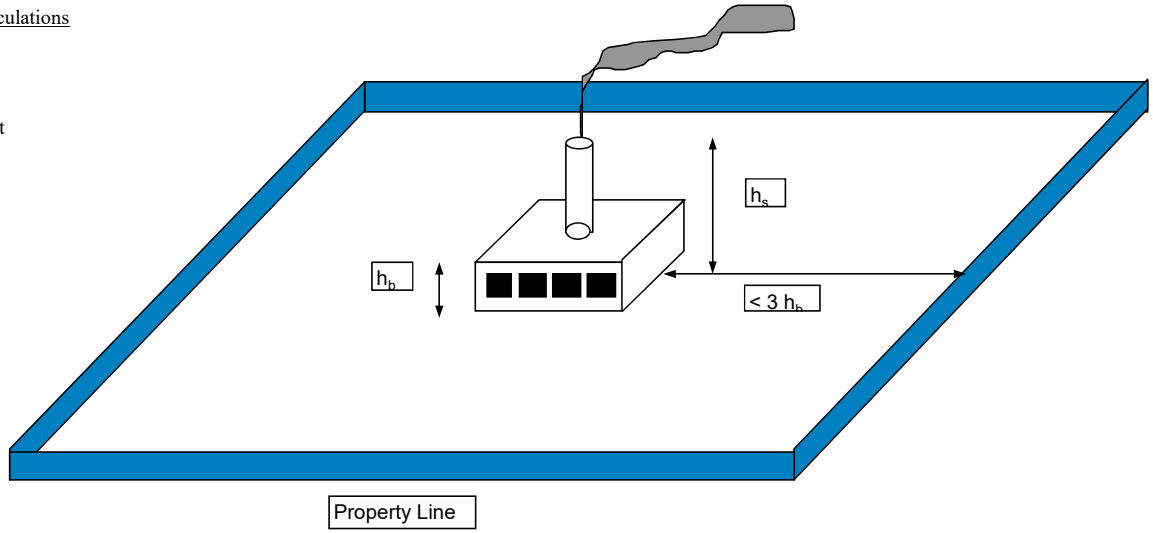
C_c (µg/m^3) = (1.72*Q_a)/(h_b^2)

where Q_a is in lbs/yr and h_b is in feet

Short Term Cavity Impact

C_{st} (µg/m^3) = (904000*Q)/(h_b^2)

where Q is lbs/hr and h_b is in feet



Section III - Point Source Method - Conservative Approach

Use this method only if the stack height to building height ratio is less than 1.5 (no credit given for plume rise rise due to buoyancy or momentum).

Emission Point	SP-03, 04, SSDS Eff
h_e - stack height (ft)	Mixed

Contaminant	CAS Number	Q (lb/hr)	Q_a (lb/yr)	C_a (µg/m^3)	C_p (µg/m^3)	C_{st} (µg/m^3)	AGC (µg/m^3)	SGC (µg/m^3)
Acetone	67-64-1	1.24E-06	1.08E-02	1.62E-05	1.61E-05	0.00	30,000	180,000
1,1,1-Trichloroethane	71-55-6	4.92E-03	4.31E+01	6.43E-02	6.42E-02	4.17	5,000	9,000
Dichlorodifluoromethane	75-71-8	2.85E-04	2.50E+00	3.73E-03	3.72E-03	0.24	12,000	None
Toluene	108-88-3	4.44E-07	3.89E-03	5.80E-06	5.80E-06	0.00	5,000	37,000
2-Butanone	78-93-3	6.61E-07	5.79E-03	8.63E-06	8.62E-06	0.00	None	None
Chloromethane	74-87-3	6.61E-07	5.79E-03	8.63E-06	8.62E-06	0.00	90	22,000
1,1 Dichloroethane	75-34-3	4.92E-03	4.31E+01	6.43E-02	6.42E-02	4.17	0.63	None
1,4-Dioxane	123-91-1	1.80E-05	1.58E-01	2.35E-04	2.35E-04	0.02	0.20	3,000
1,1-Dichloroethene	75-35-4	4.51E-04	3.95E+00	5.89E-03	5.88E-03	0.38	None	None
cis-1,2-Dichloroethene	156-59-2	4.51E-04	3.95E+00	5.89E-03	5.88E-03	0.38	0.63	None
Trichloroethene	79-01-6	2.85E-04	2.50E+00	3.73E-03	3.72E-03	0.24	0.21	20

Note: Input values only into gray cells.

Equations Used For Airguide-1 Calculations

Maximum Actual Annual Impact

C_a (µg/m^3) = $(6.0*Q_a)/(h_e^{2.25})$

where Q_a is in lbs/yr and h_e is in feet

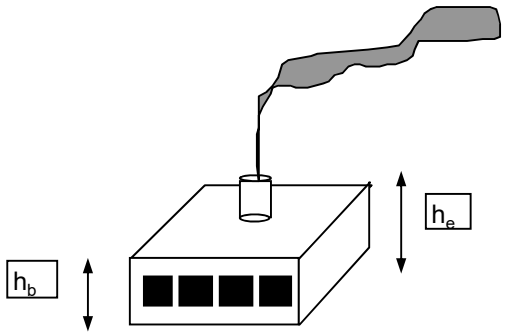
Maximum Potential Annual Impact

C_p (µg/m^3) = $(52500*Q)/(h_e^{2.25})$

where Q is lbs/hr and h_e is in feet

Maximum Short Term Impact

C_{st} (µg/m^3) = C_p * 65



APPENDIX G Groundwater Sampling Forms

Low-Flow Groundwater Sampling Form

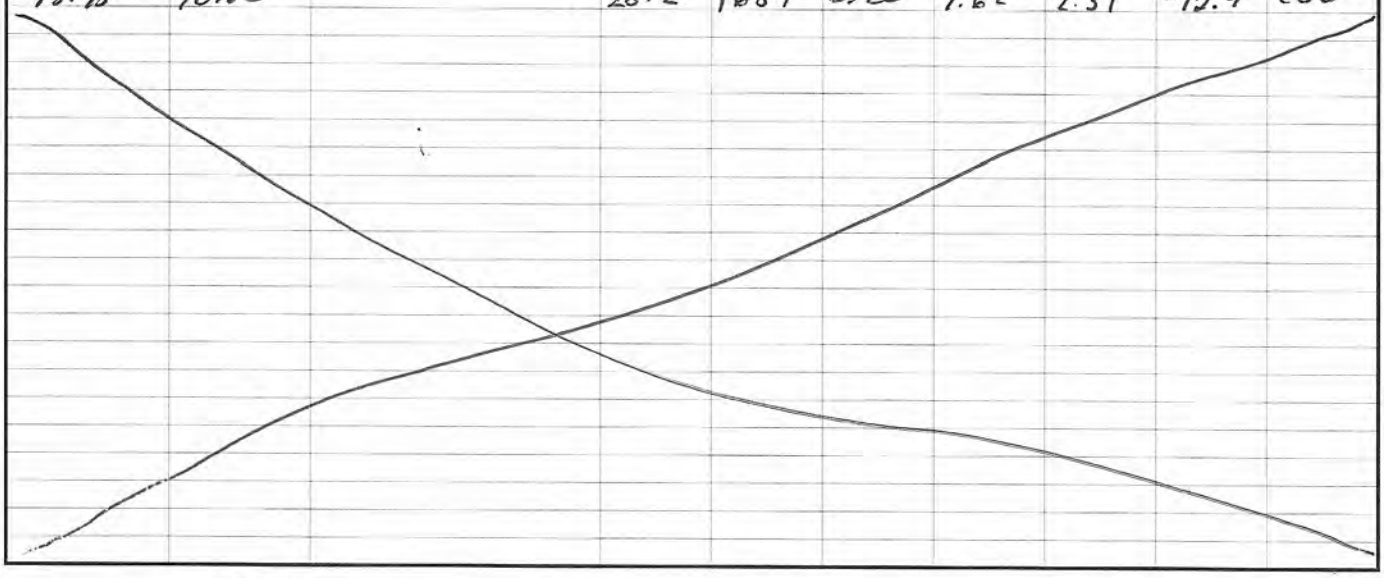
Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-12	Area: Indoors
Date: 9/29/2020	Sampling Device: Peristaltic Pump
Sampling Personnel: AB	
Weather Conditions: Indoors	
Time: 13:10	

Total Depth (TD)[1]: 15.98'	Screen Length (feet):
Depth to Water (DTW): 8.14'	Well Diameter (inches): 2.0
Total Volume Purged (USG): 2.0	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 0.0
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: Clear Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
13:15	8.38		19.2	1784	1.05	7.58	4.85	-45.0	200
13:20	8.61		19.3	1760	0.27	7.49	4.31	-65.0	200
13:25	9.18		19.8	1761	0.17	7.55	4.12	-91.3	200
13:30	9.56		20.1	1730	0.14	7.60	4.01	-94.5	200
13:35	9.95		20.2	1656	0.23	7.70	3.22	-76.2	200
13:40	10.40		20.1	1651	0.22	7.68	2.40	-83.1	200
13:45	10.80		20.2	1659	0.20	7.62	2.31	-92.4	200



Sampling Time: 13:50

Sample ID: MW-12-09292020

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 9060A	N	N
DISSGAS	N	HCl
TDS-2540	N	N
Sulfate EPA300	N	N

Additional Field Measurements

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

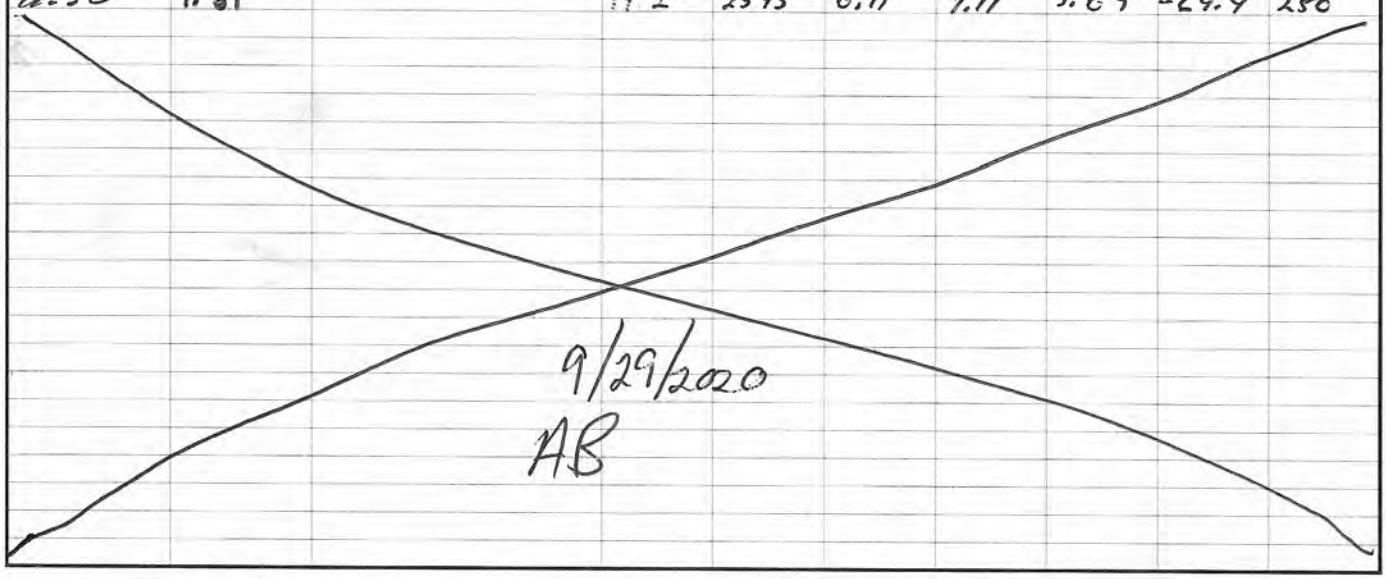
Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-13	Area: Indoors
Date: 9/29/2020	Sampling Device: Peristaltic Pump
Sampling Personnel: AB	
Weather Conditions: Indoors	
Time: 10:55	

Total Depth (TD)[1]: 16.67'	Screen Length (feet):
Depth to Water (DTW): 7.18'	Well Diameter (inches): 2.0
Total Volume Purged (USG): 2.0	Casing Type: PVC
Average Purge Rate: 250	PID Headspace (ppm): 0.0
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: Clear Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
11:00	7.45		18.2	2648	1.24	7.39	6.87	-81.0	250
11:05	7.91		18.4	2607	0.16	7.14	6.51	-62.5	250
11:10	8.27		18.5	2603	0.11	7.15	6.43	-67.4	250
11:15	8.80		18.5	2602	0.11	7.13	3.85	-69.0	250
11:20	9.04		19.0	2580	0.11	7.11	3.21	-69.6	250
11:25	9.48		19.1	2565	0.10	7.12	3.18	-69.7	250
11:30	9.61		19.2	2543	0.11	7.11	3.09	-69.4	250



Sampling Time: 11:35

Sample ID: MW-13-09292020

Additional Field Measurements

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 90601	N	N
Dissolved Gases	N	HCl
TDS-2540	N	N
Sulfate EPA 300	N	N

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-14	Area: Indoors
Date: 9/29/20	Sampling Device: Peristaltic Pump
Sampling Personnel: JR	
Weather Conditions: Indoors	
Time: 0950	

Total Depth (TD)[1]: 16.78'	Screen Length (feet):
Depth to Water (DTW): 10.18'	Well Diameter (inches): 2.0
Total Volume Purged (USG): 2.6	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 1.79 ppm
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: Clear Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
0955	10.45		19.1	1223	2.20	7.32	7.44	-71.3	200
1000	10.98		19.12	1224	0.71	7.00	7.12	-112.5	200
1005	11.62		19.14	1223	1.08	7.05	5.56	-104.1	200
1010	12.01		19.15	1235	0.96	7.08	5.72	-92.8	200
1015	12.47		19.15	1244	0.53	7.08	5.64	-105.7	200
1020	12.84		19.21	1246	0.51	7.09		-111.4	200
1025	13.38		19.13	1242	0.58	7.08		-109.7	200

JR
8/29/2020

Sampling Time: 1030

Sample ID: MW-14-09292020
DUP-01-09292020

Additional Field Measurements

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 9060A	N	N
Dissolved Gases	N	HCl
TDS-2540	N	N
Sulfate EPA 300	N	N

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

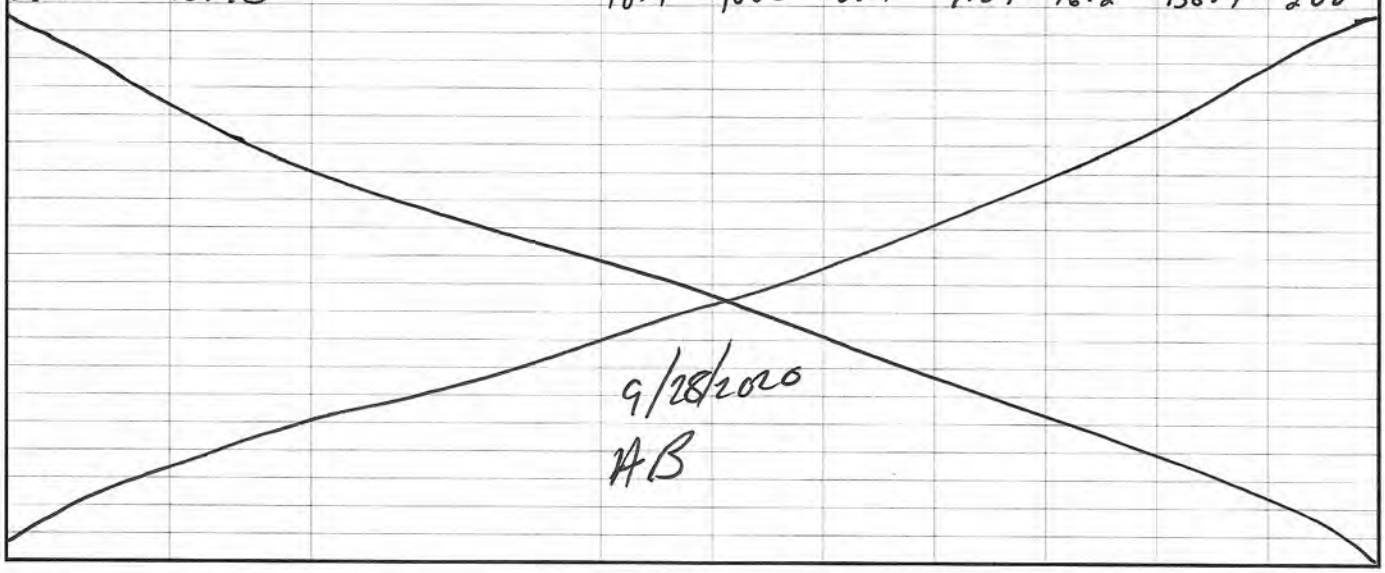
Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-19	Area: Outdoors
Date: 9/28/20	Sampling Device: Peristaltic pump
Sampling Personnel: Austin Baker	
Weather Conditions: cloudy 75	
Time: 12:58	

Total Depth (TD)[1]: 17.38'	Screen Length (feet):
Depth to Water (DTW): 8.20	Well Diameter (inches): 2.0
Total Volume Purged (USG): 2.5	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 0.0
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: clear Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
12:40	8.22		17.1	1110	1.18	7.81	21.3	191.2	200
12:45	8.73		16.5	1092	0.24	7.59	15.5	172.0	200
12:50	9.12		17.0	1094	0.19	7.61	12.1	162.7	200
12:55	9.45		17.7	1092	0.15	7.63	18.3	157.6	200
13:00	9.79		18.3	1090	0.15	7.64	16.3	151.8	200
13:05	10.48		18.2	1084	0.15	7.63	16.4	143.7	200
13:10	10.90		18.4	1083	0.14	7.64	16.2	138.4	200



Sampling Time: 13:15

Sample ID: mw-19 - 09282020

Additional Field Measurements

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 90601	N	N
Dissgas	N	HCl
TDS - 2540	N	N
Sulfate EPA 300	N	N

Notes:
[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
[2] = Stabilization criteria based on three most recent consecutive measurements.
[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

Site Name: Greif
Project No.: ~~0560651~~ 0560651

ERM

Monitoring Well: MW-20	Area: Indoors
Date: 9/29/2020	Sampling Device: Peristaltic Pump
Sampling Personnel: JR	
Weather Conditions: Indoors	
Time: 1115	

Total Depth (TD)[1]: NM	Screen Length (feet):
Depth to Water (DTW): 13.56	Well Diameter (inches): ~~2~~ 4.0
Total Volume Purged (USG): 2.0	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 129
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: Clear Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
1125	14.08		18.10	2287	3.19	6.88	81.91	61.6	200
1130	15.90		17.19	2277	1.19	6.30	8.93	20.16	200
1135	16.83	Battery dyed	17.79	2273	2.44	6.29	~~1.78~~	-75.15	200
1140	16.50		18.16	2285	6.45	6.44	1.47	-45.3	200
1145	17.01		17.18	2296	15.98	6.59	6.77	-53.5	200
1150	17.42		18.10	2274	62.27	6.68	5.55	-73.9	200
1155	17.97		17.17	2262	75.20	6.67	5.94	-81.9	200
1200	18.45		17.16	2269	75.97	6.70	5.78	-85.3	200
1205	18.84		17.16	2283	72.21	6.72		-86.8	200

Sampling Time: 1205

Sample ID: MW-20-09292020

Analysis Requested:	Filtered Y/N:	Preservative:
Tcl VOCs 8260	N	HCl
DOC 90601	N	N
Diss GCS	N	HCl
TDS-2540	N	N
Sulfate EPA 300	N	N

Additional Field Measurements

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

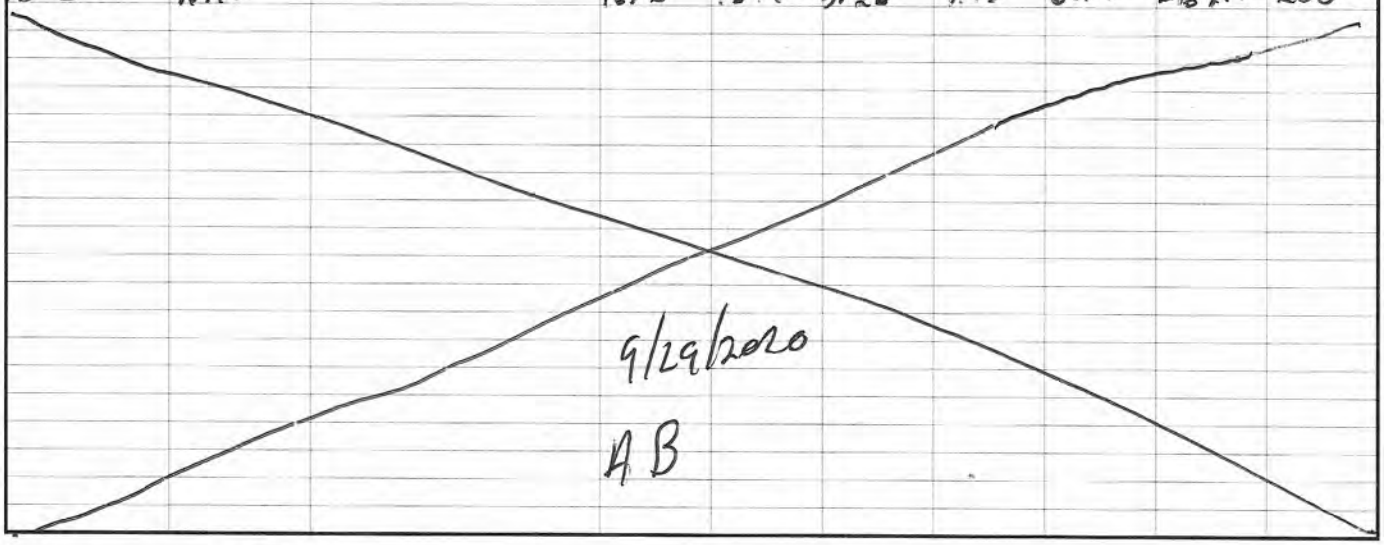
Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-22	Area: Indoors
Date: 9/29/2020	Sampling Device: peristaltic pump
Sampling Personnel: AB	
Weather Conditions: Indoor	
Time: 9:40	

Total Depth (TD)[1]: 29.98'	Screen Length (feet):
Depth to Water (DTW): 14.73'	Well Diameter (inches): 2.0
Total Volume Purged (USG): 2.5	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 13.6
Tubing Type: HDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: - Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
9:45	14.98		17.4	1801	3.76	7.84	12.11	-50.4	200
9:50	15.21		16.8	1814	1.06	7.64	8.62	-120.4	200
9:55	15.36		16.7	1795	0.72	7.66	8.45	-138.9	200
10:00	15.62		16.7	1764	0.42	7.69	6.23	-146.6	200
10:05	15.74		16.7	1740	0.64	7.71	6.18	-151.3	200
10:10	15.83		16.6	1720	0.21	7.71	6.43	-157.3	200
10:15	16.02		16.6	1710	0.19	7.72	6.49	-162.8	200
10:20	16.10		16.6	1698	0.20	7.73	6.51	-167.1	200



Sampling Time: 10:25

Sample ID: MW-22-09292020

Additional Field Measurements

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 90601	N	N
Dissgas	N	HCl
TDS-2540	N	N
Sulfate EPA 300	N	N

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-24	Area: Outdoors
Date: 9/28/2020	Sampling Device: Peristaltic
Sampling Personnel: JR	
Weather Conditions: Sunny, 80	
Time: 1510	

Total Depth (TD)[1]: 14.27'	Screen Length (feet):
Depth to Water (DTW): 3.18'	Well Diameter (inches): 2.0
Total Volume Purged (USG): 2.0	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 0.6
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: clear Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
1515	~~15~~ 3.22		17.1	1947	0.28	7.24	1240	-177.8	200
1520	3.22		18.0	1965	0.34	7.19	48.4	-156.8	200
1525	3.22		18.2	1970	0.32	7.19	30.70	-166.8	200
1530	3.25		19.1	2067	0.163	7.19	15.2	-189.10	200
1535	3.26		19.4	1925	0.23	7.30	15.18	-203.3	200
1540	3.26		20.2	1835	0.14	7.35	12.8	-200.8	200
1545	3.26		20.4	1815	0.13	7.41	9.28	-198.1	200
1550	3.26		20.5	1826	0.17	7.44	8.61	-188.2	200
~~1555~~ 1600	3.26		20.6	1828	0.26	7.46	8.20	-174.4	200
1600	3.26		20.7	1822	0.40	7.47	6.00	-156.8	200
1605	3.26		20.7	1818	0.44	7.48	6.12	-148.3	200
1610	3.26		20.8	1812	0.51	7.49	6.34	-141.7	200
1615	3.26		20.8	1813	0.52	7.49	5.84	-136.9	200
1620	3.26	Battery out	21.4	1809	0.65	7.48	5.77	-125.4	200
1625	3.26		20.8	1813	0.65	7.48		-125.8	200
1630	3.26		20.8	1809	0.66	7.46		-123.0	200

JR 9/28/2020

Sampling Time: 1630

Sample ID:	Analysis Requested:	Filtered Y/N:	Preservative:
MW-24-09282020	Tcl VOCs 8260	N	HCl
	DOC 9060A	N	N
Additional Field Measurements	Dissgas	N	HCl
	TDS - 2540	N	N
	Sulfate EPA 300	N	N

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

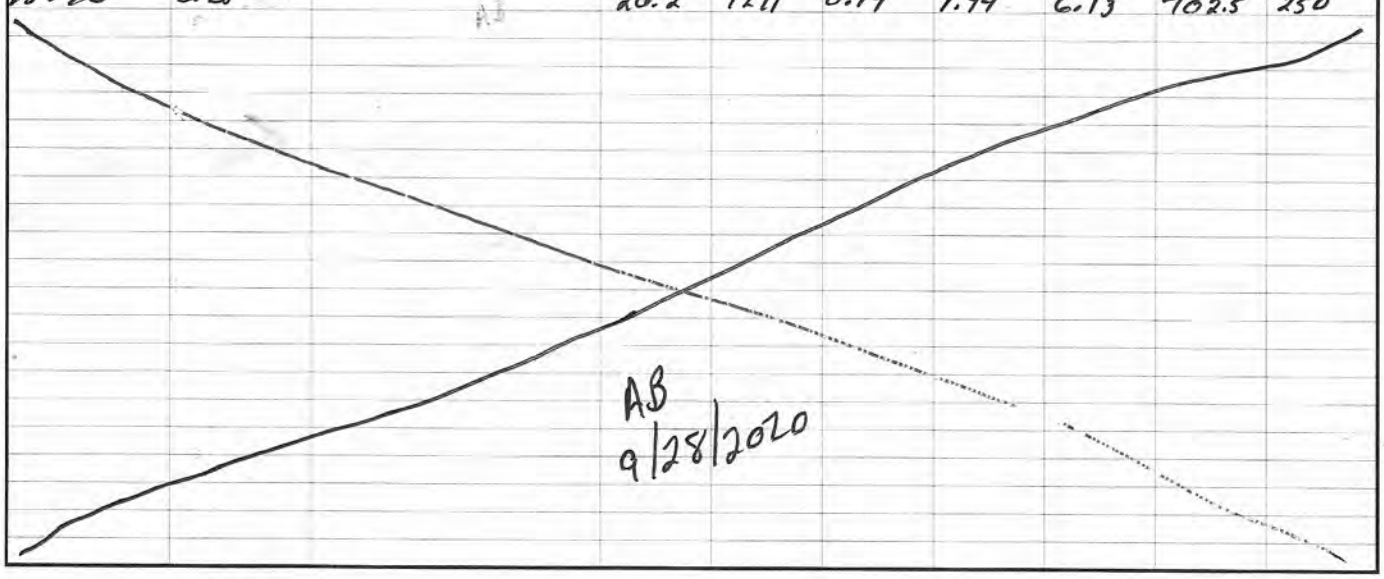
Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-25	Area: outdoors
Date: 9/28/2020	Sampling Device: Peristaltic Pump
Sampling Personnel: AB	
Weather Conditions: Cloudy, 78	
Time: 13:05	

Total Depth (TD)[1]: 14.3'	Screen Length (feet):
Depth to Water (DTW): 6.26'	Well Diameter (inches): 2.6
Total Volume Purged (USG): 2.0	Casing Type: PVC
Average Purge Rate: 250	PID Headspace (ppm): 0.0
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: — Odor: —

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
15:10	6.28		19.3	4813	1.46	7.74	+1234	-13.7	250
15:15	6.25		18.8	4754	0.23	7.48	19.28	-57.3	250
15:20	6.25		19.1	4228	0.15	7.47	7.32	-82.8	250
15:25	6.25		19.3	4122	0.11	7.45	6.18	-92.2	250
15:30	6.25		20.0	4137	0.15	7.45	6.08	-97.1	250
15:35	6.25		20.3	4179	0.15	7.44	6.10	-99.5	250
15:40	6.25		20.2	4211	0.14	7.44	6.13	-102.5	250



Sampling Time: 15:45

Sample ID: MW-25-09282020

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
	N	
DOC 9060	N	HCl
Dissgas	N	N
TDS-2540	N	N
Sulfate EPA 300	N	

Additional Field Measurements

MS & MSD collected on MW-25

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

19 2 3.90

ERM

Site Name: Greif
Project No.: 0560651

Monitoring Well: MW-26	Area: Outdoors
Date: 9/28/20	Sampling Device: Peristaltic Pump
Sampling Personnel: J. Reynolds	
Weather Conditions: Overcast ~75°F	
Time: 1230	

Total Depth (TD)[1]: 17.24'	Screen Length (feet):
Depth to Water (DTW): 3.90'	Well Diameter (inches): 4"
Total Volume Purged (USG): 2.0	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 0.0
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: Clear Odor: —

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
1240	3.90		18.8	2315	2.78	7.16	13.7	-100.1	200
1245	3.70		18.10	2280	0.73	7.16	11.2	-165.1	200
1250	3.70		18.14	2277	0.83	7.32	6.55	-193.1	200
1255	3.90		18.15	2278	1.18	7.42	10.24	-210.3	200
1300	3.90		18.19	2275	1.44	7.48	10.41	-219.3	200
1305	3.90		19.1	2277	1.52	7.49	9.87	-220.4	200
1310	3.90		19.2	2270	1.38	7.52	9.48	-223.6	200
1315	3.90		19.1	2272	1.42	7.55	8.70	-226.2	200
1320	3.90		19.2	2268	1.20	7.56	6.89	-227.4	200
1325	3.90		19.5	2270	1.25	7.57	7.71	-227.4	200
1330	3.90		19.8	2265	1.19	7.57	7.75	-227.8	200

Sampling Time: 1330

Sample ID: MW-26-09282020

Additional Field Measurements

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 90601	N	N
Dissolved	N	HCl
TDS-2540	N	N
Sulfate EPA 300	N	N

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: MW-27	Area: outdoors
Date: 9/28/20	Sampling Device: Peristaltic Pump
Sampling Personnel: AB	
Weather Conditions: Sunny, 80	
Time: 13:50	

Total Depth (TD)[1]: 17.71'	Screen Length (feet):
Depth to Water (DTW): 8.55'	Well Diameter (inches): 4.0
Total Volume Purged (USG): 2.5	Casing Type: PVC
Average Purge Rate: 250	PID Headspace (ppm): 0.0
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: clear Odor: –

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
13:50	8.70		16.1	1180	1.19	7.31	12.8	179.0	250
13:55	8.90		15.9	1171	0.87	7.76	11.2	175.0	250
14:00	9.0		15.8	1166	0.87	7.74	10.7	171.7	250
14:05	9.32		16.2	1166	0.79	7.74	10.2	163.8	250
14:10	9.50		16.5	1164	0.69	7.75	10.1	160.4	250
14:15	9.65		18.0	1175	0.58	7.77	10.7	154.1	250
14:20	9.72		18.1	1187	0.66	7.80	9.4	150.9	250
14:25	9.83		18.2	1175	0.55	7.77	9.7	152.0	250
14:30	9.87		18.0	1174	0.53	7.76	9.6	151.9	250

AB
9/28/2020

Sampling Time: 14:35

Sample ID: MW-27-09282020

Additional Field Measurements

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 9060A	N	N
D:55925	N	HCl
TDS-2540	N	N
Sulfate EPA 300	N	N

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

Site Name: Greif
Project No.: 0560651

ERM

Monitoring Well: APW-3	Area: Outdoors
Date: 9/28/2020	Sampling Device: Peristaltic pump
Sampling Personnel: JR	
Weather Conditions: Sunny, 80	
Time: 1350	

Total Depth (TD)[1]: 17.98'	Screen Length (feet):
Depth to Water (DTW): 7.89'	Well Diameter (inches): 2.0
Total Volume Purged (USG): 2.0	Casing Type: PVC
Average Purge Rate: 200	PID Headspace (ppm): 0.0
Tubing Type: LDPE	Measuring Point: TOC
Pump Intake (feet below MP): 1.0	Color: Clear Odor: -

Time: (min) Stabilization Criteria[2]	DTW: (feet)	Comments:	Temp (°C) +/- 3%	SpC (uS/cm³) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[3]	ORP mV +/- 10 mV	Flow (mL/min) 100-400
1355	6.93		18.8	1407	1.93	7.140	8.88	106.1	200
1400	7.10		18.7	1358	0.62	7.125	8.42	-176.9	200
1405	7.20		18.10	1362	2.91	7.126	8.47	-193.8	200
1410	7.41		18.9	1364	3.72	7.128	8.57	-202	200
1415	7.73		18.11	1363	3.20	7.129	8.23	-205.7	200
1420	7.76		18.10	1363	2.14	7.129	8.18	-208.7	200
1425	7.87		18.11	1358	0.34	7.129	7.93	-209.0	200
1430	8.11		18.12	1352	0.27	7.124	7.76	-209.3	200
1435	8.29		18.12	1346	0.24	7.131	8.10	-209.3	200
1440	8.50		18.12	1340	0.21	7.129	8.20	208.6	200
1445	8.75		18.19	1333	0.20	7.130	8.10	208.7	200

Sampling Time: 1445

Sample ID: APW-3-09282020

Additional Field Measurements

Analysis Requested:	Filtered Y/N:	Preservative:
TCL VOCs 8260	N	HCl
DOC 90601	N	N
Dissolved	N	HCl
TDS-2540	N	N
Sulfide EPA 300	N	N

Notes:

[1] = Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

[2] = Stabilization criteria based on three most recent consecutive measurements.

[3] = Plus or minus 10-percent when turbidity is over 10 NTUs.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab

ALPHA Job #

Client Information

Client: ERM
Address: 5784 Widewaters Pkwy, Syracuse, NY
Phone:
Fax:
Email: jason.reynolds@erm.com

Project Information

Project Name: Sonoco
Project Location: Tonawanda, NY
Project # 0560651
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Only report project specific VOC list.

Please specify Metals or TAL.

Sample Filtration
☐ Done
☑ Lab to do
Preservation
☑ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs 8260	DOC 9060A	Dissolved	TDS-2540	Sulfate EPA300				Sample Specific Comments	Total Bottles
	MW-26-09282020	9/28/20	1330	Water	GR	X	X	X	X	X					5
	APW-3-09282020	9/28/20	1445	Water	GR	X	X	X	X	X					5
	MW-24-09282020	9/28/20	1630	Water	GR	X	X	X	X	X					5
	MW-14-09292020	9/29/20	1030	Water	GR	X	X	X	X	X					5
	DUP-01-09292020	9/29/20	1200	Water	GR	X	X	X	X	X					5
	MW-20-09292020	9/29/20	1205	Water	GR	X	X	X	X	X					5
	MW-25-09282020 MS/MSD	9/28/20	1545	Water	AB	X	X	X	X	X					21
	MW-27-09282020	9/28/20	1435	Water	AB	X	X	X	X	X					5
	MW-19-09282020	9/28/20	1350	Water	AB	X	X	X	X	X					5
	MW-22-09292020	9/29/20	1025	Water	AB	X	X	X	X	X					5

	TCL VOCs 8260	DOC 9060A	Dissolved	TDS-2540	Sulfate EPA300
Container Type	V	V	V	P	
Preservative	B	A	B	A	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
D. Bol	9/29/2020 15:50	AAL	9/29/20 1550

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Date Rec'd in Lab:

ALPHA Job #:

Project Information
Project Name: Sonoco
Project Location: Tonawanda, NY
Project # 0560651
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Client Information
Client: ERM
Address: 5784 Widewaters Pkwy Syracuse, NY
Phone:
Fax:
Email: jason.reynolds@erm.com

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Only report project specific VOC list.

Please specify Metals or TAL.

Sample Filtration
☐ Done
☒ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCS 8260	DOC 9060A	DISS GAS	TDS - 2540	Sulfate				Sample Specific Comments	Total Bottles
	MW-13-09292020	9/29/20	1135	Water	AB	X	X	X	X	X					9
	MW-17-09292020	9/29/20	1315	Water	AB	X	X	X	X	X					9
	Trip Blank-09292020	—	—	Water	AB	X									1

	TCL VOCS	DOC	DISS GAS	TDS	Sulfate
Container Type	V	V	V		P
Preservative	B	A	B		A

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	9/29/2020 15:50	[signature] AAL	9/29/20 1550

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

APPENDIX H WASTE DOCUMENTATION

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD099340408	1	(800) 483-3718	005652071 SKS

GENERATOR

5. Generator's Name and Mailing Address
Orbit, Inc.
5788 Widewater Parkway
Syracuse, NY 13214
Generator's Phone: (716) 725-5389 ATTN: Jason Reynolds

Generator's Site Address (if different than mailing address)
2122 Colvin Blvd
Tonawanda, NY 14150

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc

U.S. EPA ID Number
MAD039322260

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors El Dorado LLC
209 American Circle
El Dorado, AR 71730
Facility's Phone: (870) 963-7173

U.S. EPA ID Number
ARD069748192

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3082, HAZARDOUS WASTE, LIQUID, N.O.S., (1, 1-DICHLOROETHANE, 1,1,1-TRICHLOROETHANE), 9, PG III	001	DM	250	P	D002 D043 D076 D078 D226 B		
X	2. NA3077 HAZARDOUS WASTE, SOLID, N.O.S., (1, 1-DICHLOROETHANE, 1,1,1-TRICHLOROETHANE), 9, PG III	001	DM	40	P	D002 D043 D076 D078 D226 B		
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. CB1614825 ERG#171
2. CB1614825DEBLIS ERG#171

Contract retained by generator confers agency authority on UHH Logistics to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience or safety

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
Patrick Lake	Pat Lake			

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
G Tarapo		12	10	2020
Transporter 2 Printed/Typed Name	**Signature**	**Month**	**Day**	**Year**

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)	Month	Day	Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040	H040		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name	Signature	Month	Day	Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

LAW 20062999395 002 PPW

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD0[illegible]340402	1	(800) 483-3718	013489195 FLE

5. Generator's Name and Mailing Address
[illegible], Inc.
5788 Widewater Parkway
Syracuse, NY 13214
Generator's Phone: (716) 725-2369 ATTN:Jason Reynolds

Generator's Site Address (if different than mailing address)
2122 Colvin Blvd.
Tonawanda,NY 14150

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc. — U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Spring Grove Resource Recovery Inc.
4879 Spring Grove Avenue
Cincinnati, OH 45232
Facility's Phone: (513) 681-5738
U.S. EPA ID Number: OHD000816629

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, HAZARDOUS WASTE, SOLID, N.O.S., (1, 1-DICHLOROETHANE, 1,1,1-TRICHLOROETHANE), 9, PG III	1	DM	30	P	U002 U043 U076 U078 U226 B
X	2. NA3082, HAZARDOUS WASTE, LIQUID, N.O.S., (1, 1-DICHLOROETHANE, 1,1,1-TRICHLOROETHANE), 9, PG III	1	DM	30	P	U002 U043 U076 U078 U226 B
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.CH1614826[illegible] ERG#171
2.CH1614829 ERG#171

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience or safety

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: TOM ZUGELDER — Signature: [signature] — Month 7 Day 15 Year 21

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: John Welsh — Signature: [signature] Welsh — Month 7 Day 15 Year 21
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H141		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

GENERATOR · INT'L · TRANSPORTER · DESIGNATED FACILITY

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping. LAW 21035780[illegible] PPW

Clean Harbors Manifest Addendum

Generator ID Number:		Sales Order Number:
N Y D 0 9 9 3 4 0 4 0 8	013489195FLE	2103576087-002

Greif, Inc.
2122 Colvin Blvd.
Tonawanda, NY14150

Line #:	Profile No:	Profile Description:	Waste Codes:
1.	CH1614828DEBRIS		U226 U239 D029 D040 F001 F002 F003
		CH Container # / Customer Container #	
2.	CH1614828		U226 U239 D029 D040 F001 F002 F003
		CH Container # / Customer Container #	

CleanHarbors
ENVIRONMENTAL SERVICES®

Land Disposal Restriction Notification Form

Printed Date :Jul 13, 2021

MANIFEST INFORMATION

Generator : Greif, Inc.

Address: 2122 Colvin Blvd.
Tonawanda,NY 14150

EPA ID #: N Y D 0 9 9 3 4 0 4 0 8

Manifest Tracking Info.

013489195FLE

Sales Order No: 2103576087-002

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category
1.	1	CH1614828DEB RIS	NON-WASTEWATER	2 (This is subject to LDR.)

EPA Waste Code	EPA Waste SubCategory
D029D040F001F002F003U002U043U076U078U226U239	NONE

LDR Chemical Data

Chemical	Underlying Hazardous Constituents	Constituents of Concern	Contaminants Subject to Treatment
1,1,1-TRICHLOROETHANE	Y	Y	N
1,1-DICHLOROETHANE	Y	N	N
1,1-DICHLOROETHYLENE	Y	N	N
1,2-DICHLOROETHANE	Y	N	N
ACETONE	Y	Y	N
BENZENE	Y	Y	N
TETRACHLOROETHYLENE	Y	Y	N
TRICHLOROETHYLENE	Y	Y	N
VINYL CHLORIDE	Y	N	N
XYLENES (MIXED ISOMERS)	Y	Y	N

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category
2.	1	CH1614828	WASTEWATER	2 (This is subject to LDR.)

EPA Waste Code	EPA Waste SubCategory
D029D040F001F002F003U002U043U076U078U226U239	NONE

LDR Chemical Data

Chemical	Underlying Hazardous Constituents	Constituents of Concern	Contaminants Subject to Treatment
1,1,1-TRICHLOROETHANE	Y	Y	N
ACETONE	N	Y	N
BENZENE	Y	Y	N
TETRACHLOROETHYLENE	Y	Y	N
TRICHLOROETHYLENE	Y	Y	N
XYLENES (MIXED ISOMERS)	Y	Y	N

CleanHarbors
ENVIRONMENTAL SERVICES®

Land Disposal Restriction Notification Form

Printed Date :Jul 13, 2021

Certification	Applies to Manifest Line Items
Pursuant to 40 CFR 268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268.	1. 2.

Waste analysis data, where available, is attached.

Signature : _____ Print Name TOM ZUEHLKE

Title : ENGINEER Date : 7-15-21

ERM has over 160 offices across the following countries and territories worldwide

Argentina
Australia
Belgium
Brazil
Canada
Chile
China
Colombia
France
Germany
Guyana
Hong Kong
India
Indonesia
Ireland
Italy
Japan
Kazakhstan
Kenya
Malaysia
Mexico
Mozambique
Myanmar
The Netherlands
New Zealand
Norway
Panama
Peru
Poland
Portugal
Puerto Rico
Romania
Russia
Singapore
South Africa
South Korea
Spain
Sweden
Switzerland
Taiwan
Tanzania
Thailand
UK
US
Vietnam

ERM's Syracuse Office
5784 Widewaters Parkway
Dewitt, New York
13214

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F: +1 315 445 2543

www.erm.com

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ERM