TEXTRON

Gregory L. Simpson
Director – Site Remediation and Sustainability
Textron Inc.

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Providence, RI 02903
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August 24, 2021

Joseph T. Martella II
Environmental Engineer III
Office of Land Revitalization & Sustainable Materials Management
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, RI 02908

RE: 333 Adelaide Avenue
Providence, RI

Dear Mr. Martella,

Pursuant to a recent approval by the Narragansett Bay Commission (NBC), Textron is writing to notify you of plans to modify the groundwater treatment system located at 333 Adelaide Avenue in Providence, Rhode Island. This system has discharged to City of Providence and NBC sewer facilities under Wastewater Discharge Permit #P4012-079-0825 and Temporary Sewer Connection Permit SC200222 since January of 2021. The groundwater treatment system, which has been in operation since 2013, previously discharged to surface water under a Rhode Island Pollutant Discharge Elimination System (RIPDES) Remediation General Permit (RGP). Because the RGP discharge limits for metals are significantly lower than the NBC limits, the system has employed two Evoqua SCUTM Trace Metals Removal Media ion exchange vessels, which provide polishing for soluble metals necessary to meet the very low RGP treatment standards. These vessels had been introduced after initial system startup under the RGP as a polishing mechanism to remove the trace soluble metals contained in the groundwater prior to discharging to Mashapaug Pond. Now that the treated groundwater discharges to NBC facilities, the vessels are no longer necessary as concentrations are well below NBC limits.

Based on the higher effluent limitations for discharge under the NBC Wastewater Discharge Permit and robust historical analytical data results from the system influent, the two Evoqua SCUTM vessels are not necessary to meet NBC discharge limits. Textron, therefore, is preparing to optimize the system by removing this unit process. The proposed change will simplify system operations, resulting in reduced operations and maintenance costs, reduced energy demands due to improved system hydraulics, and reduced greenhouse gas emissions by eliminating the need for the transportation and regeneration of the SCUTM media.

In conjunction with NBC-required monthly effluent sampling for the months of May and June, samples were collected from the system midpoint upstream of the ion exchange vessels over the same two 24-hour periods as the monthly effluent samples. Samples were collected using the same sampling techniques and laboratory

analyses required for monthly effluent monitoring. This midpoint in the system contains water with concentrations reflective of what will be the new system effluent under the proposed change, as shown in the attached figure (Figure 1).

All effluent monitoring parameters, which include volatile organic compounds (VOCs) and metals, were measured at concentrations below permit limits at this midpoint during the May and June sampling event. The analytical results from the midpoint monitoring and effluent monitoring over these two sampling events are attached, including a table summarizing the analytical results compared to NBC effluent limitations (Table 1). Laboratory analytical reports are included as Attachment A.

NBC approved the system modification described herein on August 16, 2021. Their approval letter is included as Attachment B.

Based on these results, AECOM and Textron will remove the ion exchange vessels from the treatment system and are hereby notifying you of the change.

If you have any questions regarding this letter, please do not hesitate to contact me. Thanks in advance for your consideration.

Best Regards,

TEXTRON INC.

Gregory L. Simpson

Director – Site Remediation and Sustainability

Figure

Figure 1 – Groundwater Treatment System Process and Instrumentation Diagram

Tables

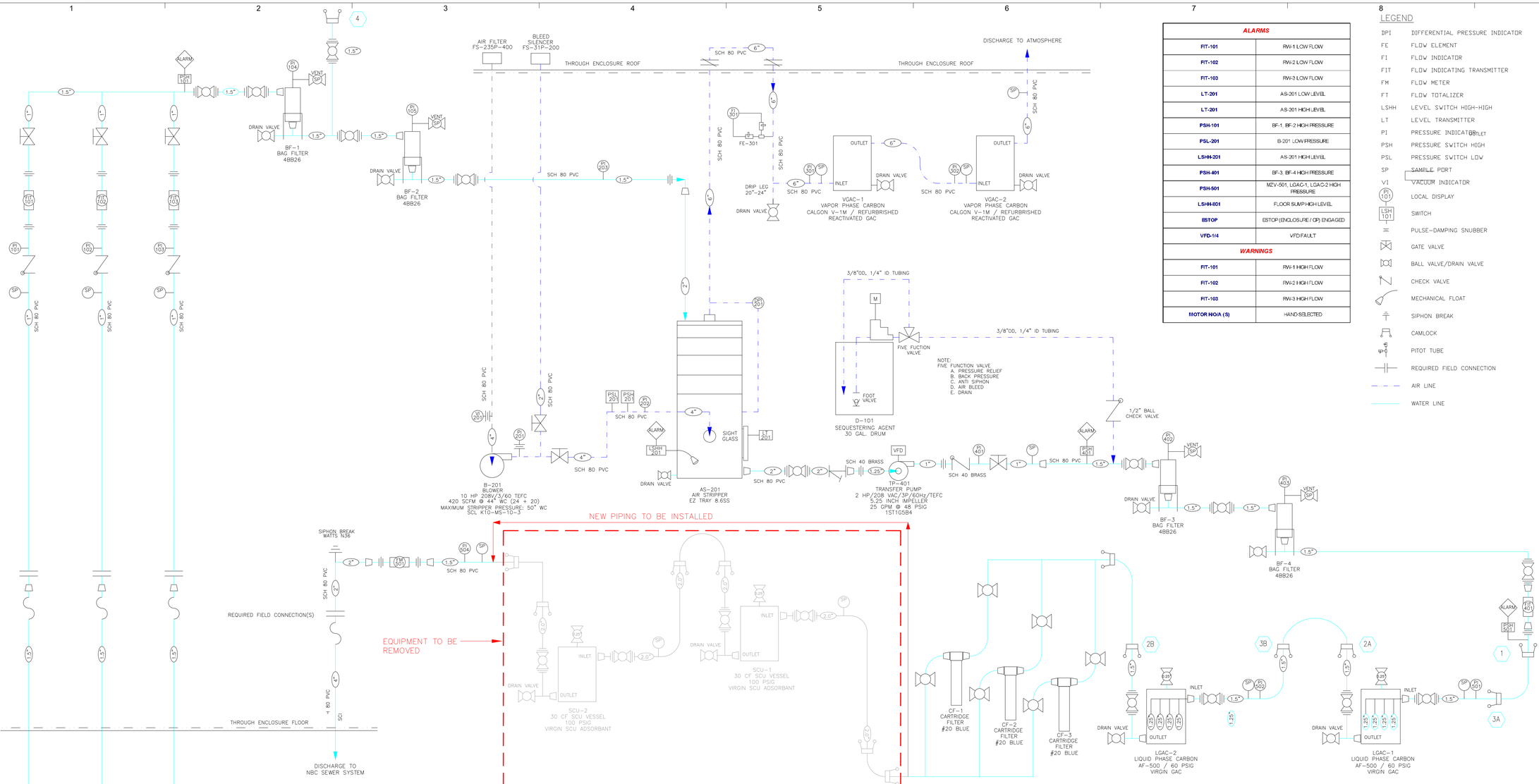
Table 1 – Summary of Laboratory Analytical Results

Attachments

Attachment A – Laboratory Analytical Data Reports

Attachment B – NBC Approval Letter

Figure



ALARMS	
FIT-101	RW-1 LOW FLOW
FIT-102	RW-2 LOW FLOW
FIT-103	RW-3 LOW FLOW
LT-201	AS-201 LOW LEVEL
LT-201	AS-201 HIGH LEVEL
PSH-101	BF-1, BF-2 HIGH PRESSURE
PSL-201	B-201 LOW PRESSURE
LSHH-201	AS-201 HIGH LEVEL
PSH-401	BF-3, BF-4 HIGH PRESSURE
PSH-501	MZV-501, LGAC-1, LGAC-2 HIGH PRESSURE
LSHH-801	FLOOR SUMP HIGH LEVEL
ESTOP	ESTOP (ENCLOSURE / CP) ENGAGED
VFD-1/4	VFD FAULT
WARNINGS	
FIT-101	RW-1 HIGH FLOW
FIT-102	RW-2 HIGH FLOW
FIT-103	RW-3 HIGH FLOW
MOTOR H/O/A (5)	HAND SELECTED

LEGEND

- DPI DIFFERENTIAL PRESSURE INDICATOR
- FE FLOW ELEMENT
- FI FLOW INDICATOR
- FIT FLOW INDICATING TRANSMITTER
- FM FLOW METER
- FT FLOW TOTALIZER
- LSHH LEVEL SWITCH HIGH-HIGH
- LT LEVEL TRANSMITTER
- PI PRESSURE INDICATOR
- PSH PRESSURE SWITCH HIGH
- PSL PRESSURE SWITCH LOW
- SP SAMPLE PORT
- VI VACUUM INDICATOR
- (PI 101) LOCAL DISPLAY
- [LSH 101] SWITCH
- PULSE-DAMPING SNUBBER
- GATE VALVE
- BALL VALVE/DRAIN VALVE
- CHECK VALVE
- MECHANICAL FLOAT
- SIPHON BREAK
- CAMLOCK
- PITOT TUBE
- REQUIRED FIELD CONNECTION
- AIR LINE
- WATER LINE

TAG No	ITEM	MANUFACTURER	MODEL	SPEC
FIT-101/FIT-103 & FIT-501	FLOW INDICATING TRANSMITTER	GF SIGNET	3-2551-P0-42	MAGMETER, POLYPROPYLENE BODY, 316SS ELECTRODE, GROUNDING RINGS, 0.5 - 4 INCH (DN15 TODN100) PIPE SIZE WITH DISPLAY, 4-20mA OUTPUT / WITH 1 INHC PVC INSTALLATION TEE (WITH PIPE SECTIONS)
PI-101 / PI-103	PRESSURE GAUGE	MARSH	98152410	0 - 100 PSIG RANGE / 2.5 INCH STAINLESS STEEL CASE / BRASS WETTED PARTS / LIQUID FILLED / 0.25 INCH BOTTOM MOUNT CONNECTION
PI-104 / PI-106	PRESSURE GAUGE	MARSH	98152409	0 - 60 PSIG RANGE / 2.5 INCH STAINLESS STEEL CASE / BRASS WETTED PARTS / LIQUID FILLED / 0.25 INCH BOTTOM MOUNT CONNECTION
PSH-101, PSH-401 & PSH-501	HIGH PRESSURE SWITCH	DWYER	CS-150	10 - 150 PSI RANGE / 5 PSI FIXED DEADBAND / 0.25 INCH BOTTOM CONNECTION PORT / BUNA-N & STEEL WETTED MATERIALS / 175 PSIG PRESSURE LIMIT / SPDT SNAP SWITCH / ADJUSTABLE SET POINT
VI-201	VACUUM GAUGE	MILJOCO	LP2507O210	15 - 0 WC RANGE / DIAPHRAGM GAUGE / 2.5 INCH STAINLESS STEEL CASE / 0.25" BACK CONNECTION
PI-201 & PI-202	PRESSURE GAUGE	MILJOCO	LP2507L250	0 - 100 WC RANGE / DIAPHRAGM GAUGE / 2.5 INCH STAINLESS STEEL CASE / 0.25" BOTTOM CONNECTION
PI-203	PRESSURE GAUGE	MILJOCO	LP2507L220	0 - 30 WC RANGE / DIAPHRAGM GAUGE / 2.5 INCH STAINLESS STEEL CASE / 0.25" BOTTOM CONNECTION
PSH-201	HIGH PRESSURE SWITCH	DWYER	1950P-2-2F	0.5 TO 2 PSI / 0.3 MAX DEAD BAND / (-)40 TO 140 F TEMPERATURE LIMITS / 35 PSI MAX PRESSURE / SPDT SWITCH TYPE 0.125 INCH PROCESS CONNECTION / ADJUSTABLE SET POINT
PSL-201	LOW PRESSURE SWITCH	DWYER	1950-20-2F	4 TO 20 WC / 0.4 MIN TO 0.8 MAX DEAD BAND / (-)40 TO 140 F TEMPERATURE LIMITS / 45 INCHES WATER MAX PRESSURE / SPDT SWITCH TYPE / 0.125 INCH PROCESS CONNECTION / ADJUSTABLE SET POINT
DPI-201	DIFFERENTIAL PRESSURE INDICATOR	DWYER	2050	0-50 WC / 4 INCH / -20 IN Hg TO 15 PSIG PRESSURE LIMITS / 20 - 140 F TEMPERATURE RANGE / 0.125" CONNECTION
LSHH-201	HIGH-HIGH LEVEL SWITCH	GEMS	MYEL40T	NARROW ANGLE / NORMALLY CLOSED / 40 FEET OF POWER CORD / 2 WIRE / 32 F TO 221 F TEMPERATURE RATING / NON MERCURY
LT-201	LEVEL TRANSMITTER	GEMS	XT800-3-SR-BN-13-11 5-7.1300-J-H-COLLARS	BRASS CONSTRUCTION / 2 INCH TOP MOUNT FITTING / BUNA-N FLOAT / 4 - 20mA OUTPUT
FE-301	FLOW ELEMENT	DWYER	DS-300-6	6 INCH AVERAGING PITOT TUBE / S.S. WITH BRASS ISOLATION VALVE / 0 - 200 F TEMP LIMITS
FI-301	FLOW INDICATOR	DWYER	2001	0-1 WC / 4 INCH / -20 IN Hg TO 15 PSIG PRESSURE LIMITS / 20 - 140 F TEMPERATURE RANGE / 0.125" CONNECTION
PI-301 & PI-302	PRESSURE GAUGE	MILJOCO	LP2507L220	0 - 30 INCHES WATER RANGE / 2.5 INCH STEEL CASE / BRASS WETTED PARTS / 0.25 INCH BOTTOM MOUNT CONNECTION
FM-401	FLOW METER	NEPTUNE	T10-1	1-50GPM / MECHANICAL FLOW TOTALIZER / LOCAL DISPLAY / BRONZE CONSTRUCTION / TIN CONNECTIONS / NON RESETTABLE REGISTER
PI-401/PI-403	PRESSURE GAUGE	MARSH	98152410	0 -100 PSIG RANGE / 2.5 INCH STAINLESS STEEL CASE / BRASS WETTED PARTS / LIQUID FILLED / 0.25 INCH BOTTOM MOUNT CONNECTION
PI-501 & PI-502	PRESSURE GAUGE	MARSH	98152410	0 -100 PSIG RANGE / 2.5 INCH STAINLESS STEEL CASE / BRASS WETTED PARTS / LIQUID FILLED / 0.25 INCH BOTTOM MOUNT CONNECTION
PI-503	PRESSURE GAUGE	MARSH	98152409	0 -60 PSIG RANGE / 2.5 INCH STAINLESS STEEL CASE / BRASS WETTED PARTS / LIQUID FILLED / 0.25 INCH BOTTOM MOUNT CONNECTION
PI-504	PRESSURE GAUGE	MARSH	98152408	0 - 30 PSIG RANGE / 2.5 INCH STAINLESS STEEL CASE / BRASS WETTED PARTS / LIQUID FILLED / 0.25 INCH BOTTOM MOUNT CONNECTION
LSHH-801	LEVEL SWITCH	DWYER	F7-SB	LEVEL SWITCH BUNA-N & EPOXY W 316 SS

LGAC BACKWASH

LGAC-1: CONNECT 1 TO 2A AND 3A TO 4

LGAC-2: CONNECT 1 TO 2B AND 3B TO 4

SITE POWER: 208 VAC / 3 Ø / 60 Hz

CLASSIFICATION: NON HAZARDOUS INTERIOR & EXTERIOR LOCATION

E-STOP - LOCATED INSIDE NEAR LIGHT SWITCH

E-STOP - LOCATED ON PANEL

SOURCE:
NATIONAL ENVIRONMENTAL SYSTEMS
GROUNDWATER TREATMENT SYSTEM P&ID
DATED: MARCH 5, 2013

NO.	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
7							
6							
5							
4							
3							
2							
1							
0							

AECOM

AECOM Environment
250 Apollo Drive
Chelmsford, MA 01824
www.aecom.com

TEXTRON PROVIDENCE
333 ADELAIDE AVENUE
PROVIDENCE, RHODE ISLAND

DATE: 6/23/21

PROJ. NO.: 60656789

GROUNDWATER TREATMENT SYSTEM
PROCESS & INSTRUMENTATION DIAGRAM

SYSTEM OPTIMIZATION -
PROPOSED RECONFIGURATION

DRAWING NUMBER: 1

SHEET NUMBER: 1 OF 1

REVISION 0

Table

Table 1
System Optimization Monitoring Results Summary
May and June, 2021

Category	Analyte	Unit	NBC Limit*	May Midpoint (5/18/21 - 5/19/21)		May Effluent (5/18/21 - 5/19/21)		June Midpoint (6/3/21 - 6/4/21)		June Effluent (6/3/21 - 6/4/21)	
				Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Metals	Cadmium, Total	mg/L	0.11	0.00026	0.0002	0.00008 J	0.0002	0.00009 J	0.0002	ND	0.0002
	Chromium, Total	mg/L	2.77	0.00689	0.001	0.00729	0.001	0.00817	0.001	0.00924	0.001
	Copper, Total	mg/L	1.2	0.026	0.001	0.00069 J	0.001	0.01151	0.001	0.01133	0.001
	Lead, Total	mg/L	0.6	0.00233	0.001	ND	0.001	0.00071 J	0.001	ND	0.001
	Nickel, Total	mg/L	1.62	0.00397	0.002	0.00112 J	0.002	0.003	0.002	0.00136 J	0.002
	Silver, Total	mg/L	0.43	ND	0.0004	ND	0.0004	ND	0.0004	ND	0.0004
	Zinc, Total	mg/L	2.61	0.04023	0.01	0.01043	0.01	0.0286	0.01	0.01097	0.01
VOCs	Methylene chloride	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	1,1-Dichloroethane	ug/L	N/A	ND	1.5	ND	1.5	ND	1.5	ND	1.5
	Chloroform	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Carbon tetrachloride	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	1,2-Dichloropropane	ug/L	N/A	ND	3.5	ND	3.5	ND	3.5	ND	3.5
	Dibromochloromethane	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	1,1,2-Trichloroethane	ug/L	N/A	ND	1.5	ND	1.5	ND	1.5	ND	1.5
	2-Chloroethylvinyl ether	ug/L	N/A	ND	10	ND	10	ND	10	ND	10
	Tetrachloroethene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Chlorobenzene	ug/L	N/A	ND	3.5	ND	3.5	ND	3.5	ND	3.5
	Trichlorofluoromethane	ug/L	N/A	ND	5	ND	5	ND	5	ND	5
	1,2-Dichloroethane	ug/L	N/A	ND	1.5	ND	1.5	ND	1.5	ND	1.5
	1,1,1-Trichloroethane	ug/L	N/A	ND	2	ND	2	ND	2	ND	2
	Bromodichloromethane	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	trans-1,3-Dichloropropene	ug/L	N/A	ND	1.5	ND	1.5	ND	1.5	ND	1.5
	cis-1,3-Dichloropropene	ug/L	N/A	ND	1.5	ND	1.5	ND	1.5	ND	1.5
	Bromoform	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	1,1,2,2-Tetrachloroethane	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Benzene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Toluene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Ethylbenzene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Chloromethane	ug/L	N/A	ND	5	ND	5	ND	5	ND	5
	Bromomethane	ug/L	N/A	ND	5	ND	5	ND	5	ND	5
	Vinyl chloride	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Chloroethane	ug/L	N/A	ND	2	ND	2	ND	2	ND	2
	1,1-Dichloroethene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	trans-1,2-Dichloroethene	ug/L	N/A	ND	1.5	ND	1.5	ND	1.5	ND	1.5
	cis-1,2-Dichloroethene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Trichloroethene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	1,2-Dichlorobenzene	ug/L	N/A	ND	5	ND	5	ND	5	ND	5
	1,3-Dichlorobenzene	ug/L	N/A	ND	5	ND	5	ND	5	ND	5
	1,4-Dichlorobenzene	ug/L	N/A	ND	5	ND	5	ND	5	ND	5
	p/m-Xylene	ug/L	N/A	ND	2	ND	2	ND	2	ND	2
	o-xylene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Xylenes, Total	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Styrene	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Acetone	ug/L	N/A	ND	10	ND	10	ND	10	ND	10
	Carbon disulfide	ug/L	N/A	ND	5	ND	5	ND	5	ND	5
	2-Butanone	ug/L	N/A	ND	10	ND	10	ND	10	ND	10
	Vinyl acetate	ug/L	N/A	ND	10	ND	10	ND	10	ND	10
	4-Methyl-2-pentanone	ug/L	N/A	ND	10	ND	10	ND	10	ND	10
	2-Hexanone	ug/L	N/A	ND	10	ND	10	ND	10	ND	10
	Acrolein	ug/L	N/A	ND	8	ND	8	ND	8	ND	8
	Acrylonitrile	ug/L	N/A	ND	10	ND	10	ND	10	ND	10
	Dibromomethane	ug/L	N/A	ND	1	ND	1	ND	1	ND	1
	Total VOCs	ug/L	2,130	ND	N/A	ND	N/A	ND	N/A	ND	N/A

Notes:
J: indicates that concentration was below reporting limit and is estimated.
ND: not detected.
*Effluent limits reflect new Field's Point discharge limits which became final and enforceable on June 1, 2021.

Attachment A

ANALYTICAL REPORT

Lab Number:	L2126621
Client:	AECOM 250 Apollo Dr. Chelmsford, MA 01824
ATTN:	Rory Henderson
Phone:	(978) 905-2277
Project Name:	TEXTRON PROVIDENCE
Project Number:	60656789.400
Report Date:	06/08/21

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2126621
Report Date: 06/08/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2126621-01	MID-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	05/18/21 06:30	05/20/21
L2126621-02	COMPOSITE MID-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	05/18/21 06:30	05/20/21
L2126621-03	MID-1	WATER	PRODIVENCE, RI	05/18/21 12:50	05/20/21

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126621
Project Number:	60656789.400	**Report Date:**	06/08/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126621
Project Number:	60656789.400	**Report Date:**	06/08/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics by Method 624

The WG1503016-3 LCS recoveries, associated with L2126621-01, are above the acceptance criteria for bromoform (140%) and 2-hexanone (144%); however, the associated sample is non-detect to the RL for these target analytes. The results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Cristin Walker

Title: Technical Director/Representative Date: 06/08/21

ORGANICS

VOLATILES

Project Name: TEXTRON PROVIDENCE
Lab Number: L2126621
Project Number: 60656789.400
Report Date: 06/08/21

SAMPLE RESULTS

Lab ID: L2126621-01
Client ID: MID-1A, 1B, 1C, 1D
Sample Location: PRODIVENCE, RI

Date Collected: 05/18/21 06:30
Date Received: 05/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/21/21 11:06
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1.0	0.56	1
1,1-Dichloroethane	ND		ug/l	1.5	0.40	1
Chloroform	ND		ug/l	1.0	0.38	1
Carbon tetrachloride	ND		ug/l	1.0	0.24	1
1,2-Dichloropropane	ND		ug/l	3.5	0.46	1
Dibromochloromethane	ND		ug/l	1.0	0.27	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.35	1
Tetrachloroethene	ND		ug/l	1.0	0.26	1
Chlorobenzene	ND		ug/l	3.5	0.30	1
Trichlorofluoromethane	ND		ug/l	5.0	0.28	1
1,2-Dichloroethane	ND		ug/l	1.5	0.47	1
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29	1
Bromodichloromethane	ND		ug/l	1.0	0.28	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34	1
Bromoform	ND		ug/l	1.0	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20	1
Benzene	ND		ug/l	1.0	0.38	1
Toluene	ND		ug/l	1.0	0.31	1
Ethylbenzene	ND		ug/l	1.0	0.28	1
Chloromethane	ND		ug/l	5.0	1.0	1
Bromomethane	ND		ug/l	5.0	1.2	1
Vinyl chloride	ND		ug/l	1.0	0.38	1
Chloroethane	ND		ug/l	2.0	0.37	1
1,1-Dichloroethene	ND		ug/l	1.0	0.31	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17	1

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2126621

Project Number: 60656789.400 **Report Date:** 06/08/21

SAMPLE RESULTS

Lab ID: L2126621-01 Date Collected: 05/18/21 06:30

Client ID: MID-1A, 1B, 1C, 1D Date Received: 05/20/21

Sample Location: PRODIVENCE, RI Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.33	1
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28	1
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27	1
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29	1
p/m-Xylene	ND		ug/l	2.0	0.30	1
o-xylene	ND		ug/l	1.0	0.34	1
Xylenes, Total	ND		ug/l	1.0	0.30	1
Styrene	ND		ug/l	1.0	0.37	1
Acetone	ND		ug/l	10	2.4	1
Carbon disulfide	ND		ug/l	5.0	0.28	1
2-Butanone	ND		ug/l	10	1.0	1
Vinyl acetate	ND		ug/l	10	0.41	1
4-Methyl-2-pentanone	ND		ug/l	10	0.19	1
2-Hexanone	ND		ug/l	10	0.55	1
Acrolein	ND		ug/l	8.0	1.8	1
Acrylonitrile	ND		ug/l	10	0.33	1
Dibromomethane	ND		ug/l	1.0	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	107		60-140
Fluorobenzene	89		60-140
4-Bromofluorobenzene	91		60-140

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2126621

Project Number: 60656789.400 **Report Date:** 06/08/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 05/21/21 09:14
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1503016-4					
Methylene chloride	ND		ug/l	1.0	0.56
1,1-Dichloroethane	ND		ug/l	1.5	0.40
Chloroform	ND		ug/l	1.0	0.38
Carbon tetrachloride	ND		ug/l	1.0	0.24
1,2-Dichloropropane	ND		ug/l	3.5	0.46
Dibromochloromethane	ND		ug/l	1.0	0.27
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34
2-Chloroethylvinyl ether	ND		ug/l	10	0.35
Tetrachloroethene	ND		ug/l	1.0	0.26
Chlorobenzene	ND		ug/l	3.5	0.30
Trichlorofluoromethane	ND		ug/l	5.0	0.28
1,2-Dichloroethane	ND		ug/l	1.5	0.47
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29
Bromodichloromethane	ND		ug/l	1.0	0.28
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34
Bromoform	ND		ug/l	1.0	0.22
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20
Benzene	ND		ug/l	1.0	0.38
Toluene	ND		ug/l	1.0	0.31
Ethylbenzene	ND		ug/l	1.0	0.28
Chloromethane	ND		ug/l	5.0	1.0
Bromomethane	ND		ug/l	5.0	1.2
Vinyl chloride	ND		ug/l	1.0	0.38
Chloroethane	ND		ug/l	2.0	0.37
1,1-Dichloroethene	ND		ug/l	1.0	0.31
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17
Trichloroethene	ND		ug/l	1.0	0.33

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400
Lab Number: L2126621
Report Date: 06/08/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 05/21/21 09:14
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1503016-4					
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29
p/m-Xylene	ND		ug/l	2.0	0.30
o-xylene	ND		ug/l	1.0	0.34
Xylenes, Total	ND		ug/l	1.0	0.30
Styrene	ND		ug/l	1.0	0.37
Acetone	ND		ug/l	10	2.4
Carbon disulfide	ND		ug/l	5.0	0.28
2-Butanone	ND		ug/l	10	1.0
Vinyl acetate	ND		ug/l	10	0.41
4-Methyl-2-pentanone	ND		ug/l	10	0.19
2-Hexanone	ND		ug/l	10	0.55
Acrolein	ND		ug/l	8.0	1.8
Acrylonitrile	ND		ug/l	10	0.33
Dibromomethane	ND		ug/l	1.0	0.23

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	109		60-140
Fluorobenzene	89		60-140
4-Bromofluorobenzene	92		60-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2126621

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1503016-3								
Methylene chloride	90		-		60-140	-		28
1,1-Dichloroethane	90		-		50-150	-		49
Chloroform	100		-		70-135	-		54
Carbon tetrachloride	100		-		70-130	-		41
1,2-Dichloropropane	95		-		35-165	-		55
Dibromochloromethane	130		-		70-135	-		50
1,1,2-Trichloroethane	125		-		70-130	-		45
2-Chloroethylvinyl ether	110		-		1-225	-		71
Tetrachloroethene	130		-		70-130	-		39
Chlorobenzene	100		-		65-135	-		53
Trichlorofluoromethane	90		-		50-150	-		84
1,2-Dichloroethane	95		-		70-130	-		49
1,1,1-Trichloroethane	95		-		70-130	-		36
Bromodichloromethane	120		-		65-135	-		56
trans-1,3-Dichloropropene	110		-		50-150	-		86
cis-1,3-Dichloropropene	120		-		25-175	-		58
Bromoform	**140**	Q	-		70-130	-		42
1,1,2,2-Tetrachloroethane	140		-		60-140	-		61
Benzene	100		-		65-135	-		61
Toluene	120		-		70-130	-		41
Ethylbenzene	110		-		60-140	-		63
Chloromethane	70		-		1-205	-		60
Bromomethane	85		-		15-185	-		61

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2126621

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1503016-3								
Vinyl chloride	75		-		5-195	-		66
Chloroethane	90		-		40-160	-		78
1,1-Dichloroethene	90		-		50-150	-		32
trans-1,2-Dichloroethene	90		-		70-130	-		45
cis-1,2-Dichloroethene	105		-		60-140	-		30
Trichloroethene	95		-		65-135	-		48
1,2-Dichlorobenzene	120		-		65-135	-		57
1,3-Dichlorobenzene	115		-		70-130	-		43
1,4-Dichlorobenzene	120		-		65-135	-		57
p/m-Xylene	108		-		60-140	-		30
o-xylene	110		-		60-140	-		30
Styrene	100		-		60-140	-		30
Acetone	116		-		40-160	-		30
Carbon disulfide	85		-		60-140	-		30
2-Butanone	124		-		60-140	-		30
Vinyl acetate	108		-		60-140	-		30
4-Methyl-2-pentanone	136		-		60-140	-		30
2-Hexanone	**144**	Q	-		60-140	-		30
Acrolein	95		-		60-140	-		30
Acrylonitrile	112		-		60-140	-		60
Dibromomethane	80		-		70-130	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2126621

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1503016-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	108				60-140
Fluorobenzene	88				60-140
4-Bromofluorobenzene	91				60-140

METALS

Project Name: TEXTRON PROVIDENCE
Lab Number: L2126621
Project Number: 60656789.400
Report Date: 06/08/21

SAMPLE RESULTS

Lab ID: L2126621-03
Client ID: MID-1
Sample Location: PRODIVENCE, RI
Date Collected: 05/18/21 12:50
Date Received: 05/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Cadmium, Total	0.00026		mg/l	0.00020	0.00005	1	05/27/21 11:13	06/03/21 11:02	EPA 3005A	3,200.8	CD
Chromium, Total	0.00689		mg/l	0.00100	0.00017	1	05/27/21 11:13	06/03/21 11:02	EPA 3005A	3,200.8	CD
Copper, Total	0.02600		mg/l	0.00100	0.00038	1	05/27/21 11:13	06/03/21 11:02	EPA 3005A	3,200.8	CD
Lead, Total	0.00233		mg/l	0.00100	0.00034	1	05/27/21 11:13	06/03/21 11:02	EPA 3005A	3,200.8	CD
Nickel, Total	0.00397		mg/l	0.00200	0.00055	1	05/27/21 11:13	06/03/21 11:02	EPA 3005A	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/27/21 11:13	06/03/21 11:02	EPA 3005A	3,200.8	CD
Zinc, Total	0.04023		mg/l	0.01000	0.00341	1	05/27/21 11:13	06/03/21 11:02	EPA 3005A	3,200.8	CD

Project Name: TEXTRON PROVIDENCE
Lab Number: L2126621
Project Number: 60656789.400
Report Date: 06/08/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1502958-1										
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2126621

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1502958-2								
Cadmium, Total	107		-		85-115	-		
Chromium, Total	105		-		85-115	-		
Copper, Total	108		-		85-115	-		
Lead, Total	106		-		85-115	-		
Nickel, Total	103		-		85-115	-		
Silver, Total	105		-		85-115	-		
Zinc, Total	113		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2126621
Report Date: 06/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1502958-3 QC Sample: L2125023-01 Client ID: MS Sample												
Cadmium, Total	0.0001J	0.051	0.05237	103		-	-		70-130	-		20
Chromium, Total	0.0011	0.2	0.2004	100		-	-		70-130	-		20
Copper, Total	0.0049	0.25	0.2665	105		-	-		70-130	-		20
Lead, Total	0.00867	0.51	0.5086	98		-	-		70-130	-		20
Nickel, Total	0.0015J	0.5	0.5004	100		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05129	102		-	-		70-130	-		20
Zinc, Total	0.0405	0.5	0.5885	110		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2126621

Report Date: 06/08/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1502958-4 QC Sample: L2125023-01 Client ID: DUP Sample						
Lead, Total	0.00867	0.00860	mg/l	1		20

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2126621
Report Date: 06/08/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2126621-01A	Vial Na2S2O3 preserved split	A	NA		4.5	Y	Absent		624.1(3)
L2126621-01B	Vial Na2S2O3 preserved split	A	NA		4.5	Y	Absent		624.1(3)
L2126621-01C	Vial Na2S2O3 preserved split	A	NA		4.5	Y	Absent		624.1(3)
L2126621-02A	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02A1	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02A2	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02A3	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02B	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02B1	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02B2	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02B3	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02C	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02C1	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02C2	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-02C3	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		COMP-VOA()
L2126621-03A	Plastic 250ml HNO3 preserved	A	<2	<2	4.5	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),AG-2008T(180),CR-2008T(180),PB-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126621
Project Number:	60656789.400	**Report Date:**	06/08/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126621
Project Number:	60656789.400	**Report Date:**	06/08/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126621
Project Number:	60656789.400	**Report Date:**	06/08/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126621
Project Number:	60656789.400	**Report Date:**	06/08/21

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/19/21

ALPHA Job #: L2126621

ALPHA ANALYTICAL — Part of the Eastern Analytical Group
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: AECOM-Environment

Address: 10 Dorrance St, Providence RI 02903 Suite 400

Phone: 401-854-7890

Email: rory.henderson@aecom.com
bryan.macdonald@aecom.com

Additional Project Information:

* Lab to composite samples MW-1A, MW-1B, MW-1C & MW-1D

Project Information

Project Name: Textron Providence

Project Location: Providence RI

Project #: 60656789.400

Project Manager:

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: VOC: ☐ 8260 ☐ 624 / ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	Metals 200.7 (Cd, Cr, Cu, Pb, Ni, Ag, Zn)	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
26621-01	MW-1A	5-18-21	1235	GW		X											3
-01	MW-1B	05-18-21	1800	GW		X											3
-01	MW-1C	05-19-21	0630	GW		X											3
-01	MW-1D	05-19-21	1235	GW		X											3
-03	MW-1	5-19-21	1250	GW									X				1

Container Type	V									P	
Preservative	H									C	

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	5/19/21 1530	ARC-Atc	5/19/21 1530

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L2126626
Client:	AECOM 250 Apollo Dr. Chelmsford, MA 01824
ATTN:	Rory Henderson
Phone:	(978) 905-2277
Project Name:	TEXTRON PROVIDENCE
Project Number:	60656789.100
Report Date:	06/08/21

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.100

Lab Number: L2126626
Report Date: 06/08/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2126626-01	EFF-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	05/18/21 06:35	05/20/21
L2126626-02	COMPOSITE EFF-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	05/18/21 06:35	05/20/21
L2126626-03	EFF-1	WATER	PRODIVENCE, RI	05/18/21 12:45	05/20/21

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126626
Project Number:	60656789.100	**Report Date:**	06/08/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126626
Project Number:	60656789.100	**Report Date:**	06/08/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics by Method 624

The WG1503016-3 LCS recoveries, associated with L2126626-01, are above the acceptance criteria for bromoform (140%) and 2-hexanone (144%); however, the associated sample is non-detect to the RL for these target analytes. The results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Cristin Walker

Title: Technical Director/Representative Date: 06/08/21

ORGANICS

VOLATILES

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2126626

Project Number: 60656789.100 **Report Date:** 06/08/21

SAMPLE RESULTS

Lab ID: L2126626-01
Client ID: EFF-1A, 1B, 1C, 1D
Sample Location: PRODIVENCE, RI

Date Collected: 05/18/21 06:35
Date Received: 05/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 05/21/21 11:44
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1.0	0.56	1
1,1-Dichloroethane	ND		ug/l	1.5	0.40	1
Chloroform	ND		ug/l	1.0	0.38	1
Carbon tetrachloride	ND		ug/l	1.0	0.24	1
1,2-Dichloropropane	ND		ug/l	3.5	0.46	1
Dibromochloromethane	ND		ug/l	1.0	0.27	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.35	1
Tetrachloroethene	ND		ug/l	1.0	0.26	1
Chlorobenzene	ND		ug/l	3.5	0.30	1
Trichlorofluoromethane	ND		ug/l	5.0	0.28	1
1,2-Dichloroethane	ND		ug/l	1.5	0.47	1
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29	1
Bromodichloromethane	ND		ug/l	1.0	0.28	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34	1
Bromoform	ND		ug/l	1.0	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20	1
Benzene	ND		ug/l	1.0	0.38	1
Toluene	ND		ug/l	1.0	0.31	1
Ethylbenzene	ND		ug/l	1.0	0.28	1
Chloromethane	ND		ug/l	5.0	1.0	1
Bromomethane	ND		ug/l	5.0	1.2	1
Vinyl chloride	ND		ug/l	1.0	0.38	1
Chloroethane	ND		ug/l	2.0	0.37	1
1,1-Dichloroethene	ND		ug/l	1.0	0.31	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17	1

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2126626

Project Number: 60656789.100 **Report Date:** 06/08/21

SAMPLE RESULTS

Lab ID: L2126626-01 Date Collected: 05/18/21 06:35

Client ID: EFF-1A, 1B, 1C, 1D Date Received: 05/20/21

Sample Location: PRODIVENCE, RI Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.33	1
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28	1
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27	1
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29	1
p/m-Xylene	ND		ug/l	2.0	0.30	1
o-xylene	ND		ug/l	1.0	0.34	1
Xylenes, Total	ND		ug/l	1.0	0.30	1
Styrene	ND		ug/l	1.0	0.37	1
Acetone	ND		ug/l	10	2.4	1
Carbon disulfide	ND		ug/l	5.0	0.28	1
2-Butanone	ND		ug/l	10	1.0	1
Vinyl acetate	ND		ug/l	10	0.41	1
4-Methyl-2-pentanone	ND		ug/l	10	0.19	1
2-Hexanone	ND		ug/l	10	0.55	1
Acrolein	ND		ug/l	8.0	1.8	1
Acrylonitrile	ND		ug/l	10	0.33	1
Dibromomethane	ND		ug/l	1.0	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	112		60-140
Fluorobenzene	91		60-140
4-Bromofluorobenzene	92		60-140

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2126626

Project Number: 60656789.100 **Report Date:** 06/08/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 05/21/21 09:14
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1503016-4					
Methylene chloride	ND		ug/l	1.0	0.56
1,1-Dichloroethane	ND		ug/l	1.5	0.40
Chloroform	ND		ug/l	1.0	0.38
Carbon tetrachloride	ND		ug/l	1.0	0.24
1,2-Dichloropropane	ND		ug/l	3.5	0.46
Dibromochloromethane	ND		ug/l	1.0	0.27
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34
2-Chloroethylvinyl ether	ND		ug/l	10	0.35
Tetrachloroethene	ND		ug/l	1.0	0.26
Chlorobenzene	ND		ug/l	3.5	0.30
Trichlorofluoromethane	ND		ug/l	5.0	0.28
1,2-Dichloroethane	ND		ug/l	1.5	0.47
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29
Bromodichloromethane	ND		ug/l	1.0	0.28
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34
Bromoform	ND		ug/l	1.0	0.22
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20
Benzene	ND		ug/l	1.0	0.38
Toluene	ND		ug/l	1.0	0.31
Ethylbenzene	ND		ug/l	1.0	0.28
Chloromethane	ND		ug/l	5.0	1.0
Bromomethane	ND		ug/l	5.0	1.2
Vinyl chloride	ND		ug/l	1.0	0.38
Chloroethane	ND		ug/l	2.0	0.37
1,1-Dichloroethene	ND		ug/l	1.0	0.31
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17
Trichloroethene	ND		ug/l	1.0	0.33

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.100
Lab Number: L2126626
Report Date: 06/08/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 05/21/21 09:14
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1503016-4					
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29
p/m-Xylene	ND		ug/l	2.0	0.30
o-xylene	ND		ug/l	1.0	0.34
Xylenes, Total	ND		ug/l	1.0	0.30
Styrene	ND		ug/l	1.0	0.37
Acetone	ND		ug/l	10	2.4
Carbon disulfide	ND		ug/l	5.0	0.28
2-Butanone	ND		ug/l	10	1.0
Vinyl acetate	ND		ug/l	10	0.41
4-Methyl-2-pentanone	ND		ug/l	10	0.19
2-Hexanone	ND		ug/l	10	0.55
Acrolein	ND		ug/l	8.0	1.8
Acrylonitrile	ND		ug/l	10	0.33
Dibromomethane	ND		ug/l	1.0	0.23

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	109		60-140
Fluorobenzene	89		60-140
4-Bromofluorobenzene	92		60-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.100

Lab Number: L2126626

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1503016-3								
Methylene chloride	90		-		60-140	-		28
1,1-Dichloroethane	90		-		50-150	-		49
Chloroform	100		-		70-135	-		54
Carbon tetrachloride	100		-		70-130	-		41
1,2-Dichloropropane	95		-		35-165	-		55
Dibromochloromethane	130		-		70-135	-		50
1,1,2-Trichloroethane	125		-		70-130	-		45
2-Chloroethylvinyl ether	110		-		1-225	-		71
Tetrachloroethene	130		-		70-130	-		39
Chlorobenzene	100		-		65-135	-		53
Trichlorofluoromethane	90		-		50-150	-		84
1,2-Dichloroethane	95		-		70-130	-		49
1,1,1-Trichloroethane	95		-		70-130	-		36
Bromodichloromethane	120		-		65-135	-		56
trans-1,3-Dichloropropene	110		-		50-150	-		86
cis-1,3-Dichloropropene	120		-		25-175	-		58
Bromoform	**140**	Q	-		70-130	-		42
1,1,2,2-Tetrachloroethane	140		-		60-140	-		61
Benzene	100		-		65-135	-		61
Toluene	120		-		70-130	-		41
Ethylbenzene	110		-		60-140	-		63
Chloromethane	70		-		1-205	-		60
Bromomethane	85		-		15-185	-		61

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.100

Lab Number: L2126626

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1503016-3								
Vinyl chloride	75		-		5-195	-		66
Chloroethane	90		-		40-160	-		78
1,1-Dichloroethene	90		-		50-150	-		32
trans-1,2-Dichloroethene	90		-		70-130	-		45
cis-1,2-Dichloroethene	105		-		60-140	-		30
Trichloroethene	95		-		65-135	-		48
1,2-Dichlorobenzene	120		-		65-135	-		57
1,3-Dichlorobenzene	115		-		70-130	-		43
1,4-Dichlorobenzene	120		-		65-135	-		57
p/m-Xylene	108		-		60-140	-		30
o-xylene	110		-		60-140	-		30
Styrene	100		-		60-140	-		30
Acetone	116		-		40-160	-		30
Carbon disulfide	85		-		60-140	-		30
2-Butanone	124		-		60-140	-		30
Vinyl acetate	108		-		60-140	-		30
4-Methyl-2-pentanone	136		-		60-140	-		30
2-Hexanone	**144**	Q	-		60-140	-		30
Acrolein	95		-		60-140	-		30
Acrylonitrile	112		-		60-140	-		60
Dibromomethane	80		-		70-130	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.100

Lab Number: L2126626

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1503016-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	108				60-140
Fluorobenzene	88				60-140
4-Bromofluorobenzene	91				60-140

METALS

Project Name: TEXTRON PROVIDENCE
Lab Number: L2126626
Project Number: 60656789.100
Report Date: 06/08/21

SAMPLE RESULTS

Lab ID: L2126626-03
Client ID: EFF-1
Sample Location: PRODIVENCE, RI
Date Collected: 05/18/21 12:45
Date Received: 05/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	05/27/21 11:13	06/03/21 11:26	EPA 3005A	3,200.8	CD
Chromium, Total	0.00729		mg/l	0.00100	0.00017	1	05/27/21 11:13	06/03/21 11:26	EPA 3005A	3,200.8	CD
Copper, Total	0.00069	J	mg/l	0.00100	0.00038	1	05/27/21 11:13	06/03/21 11:26	EPA 3005A	3,200.8	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/27/21 11:13	06/03/21 11:26	EPA 3005A	3,200.8	CD
Nickel, Total	0.00112	J	mg/l	0.00200	0.00055	1	05/27/21 11:13	06/03/21 11:26	EPA 3005A	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/27/21 11:13	06/03/21 11:26	EPA 3005A	3,200.8	CD
Zinc, Total	0.01043		mg/l	0.01000	0.00341	1	05/27/21 11:13	06/03/21 11:26	EPA 3005A	3,200.8	CD

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.100
Lab Number: L2126626
Report Date: 06/08/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1502958-1										
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/27/21 11:13	06/03/21 10:23	3,200.8	CD

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.100

Lab Number: L2126626

Report Date: 06/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1502958-2								
Cadmium, Total	107		-		85-115	-		
Chromium, Total	105		-		85-115	-		
Copper, Total	108		-		85-115	-		
Lead, Total	106		-		85-115	-		
Nickel, Total	103		-		85-115	-		
Silver, Total	105		-		85-115	-		
Zinc, Total	113		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.100

Lab Number: L2126626
Report Date: 06/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1502958-3 QC Sample: L2125023-01 Client ID: MS Sample												
Cadmium, Total	0.0001J	0.051	0.05237	103		-	-		70-130	-		20
Chromium, Total	0.0011	0.2	0.2004	100		-	-		70-130	-		20
Copper, Total	0.0049	0.25	0.2665	105		-	-		70-130	-		20
Lead, Total	0.00867	0.51	0.5086	98		-	-		70-130	-		20
Nickel, Total	0.0015J	0.5	0.5004	100		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05129	102		-	-		70-130	-		20
Zinc, Total	0.0405	0.5	0.5885	110		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.100

Lab Number: L2126626

Report Date: 06/08/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1502958-4 QC Sample: L2125023-01 Client ID: DUP Sample						
Lead, Total	0.00867	0.00860	mg/l	1		20

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.100

Lab Number: L2126626
Report Date: 06/08/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2126626-01A	Vial Na2S2O3 preserved split	B	NA		3.5	Y	Absent		624.1(3)
L2126626-01B	Vial Na2S2O3 preserved split	B	NA		3.5	Y	Absent		624.1(3)
L2126626-01C	Vial Na2S2O3 preserved split	B	NA		3.5	Y	Absent		624.1(3)
L2126626-02A	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02A1	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02A2	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02A3	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02B	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02B1	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02B2	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02B3	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02C	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02C1	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02C2	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-02C3	Vial Na2S2O3 preserved	B	NA		3.5	Y	Absent		COMP-VOA()
L2126626-03A	Plastic 250ml HNO3 preserved	B	<2	<2	3.5	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),AG-2008T(180),PB-2008T(180),CR-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126626
Project Number:	60656789.100	**Report Date:**	06/08/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126626
Project Number:	60656789.100	**Report Date:**	06/08/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126626
Project Number:	60656789.100	**Report Date:**	06/08/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2126626
Project Number:	60656789.100	**Report Date:**	06/08/21

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd In Lab: 5/19/21

ALPHA Job #: L2126626

Client Information

Client: AECOM-Environment
Address: 10 Dorrance St., Suite 400, Providence, RI 02904
Phone: 401-854-7840
Email: rory.henderson@aecom.com, bryan.macdonald@aecom.com

Project Information

Project Name: Textron Providence
Project Location: Providence, RI
Project #: ~~60647242~~ 60655784.100
Project Manager: Rory Henderson
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Additional Project Information:
*Lab to composite samples EFF-1A, EFF-1B, EFF-1C & EFF-1D

ANALYSIS

VOC: ☐ 8260 ☒ 624 / ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint
Metals: 200.7 (Cd, Cr, Cu, Pb, Ni, Ag, Zn)

SAMPLE INFO

Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

Sample Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	TPH	Metals	TOTAL # BOTTLES
2126626-01	EFF-1A	05-18-21	1230	GW		X			3
-02	EFF-1B	05-18-21	1805	GW		X			3
-04	EFF-1C	05-19-21	0635	GW		X			3
-01	EFF-1D	05-19-21	1230	GW		X			3
-03	EFF-1	05-19-21	1245	GW			X		1

Container Type: V | P
Preservative: H | C

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	5/19/21 1530	VCC - AAC	5/19/21 1532

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L2129983
Client:	AECOM 250 Apollo Dr. Chelmsford, MA 01824
ATTN:	Rory Henderson
Phone:	(978) 905-2277
Project Name:	TEXTRON PROVIDENCE
Project Number:	60656789.400
Report Date:	06/17/21

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2129983
Report Date: 06/17/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2129983-01	MID-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	06/03/21 11:00	06/04/21
L2129983-02	COMPOSITE MID-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	06/03/21 11:00	06/04/21
L2129983-03	MID-1	WATER	PRODIVENCE, RI	06/03/21 10:40	06/04/21

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129983
Project Number:	60656789.400	**Report Date:**	06/17/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Sebastian Corbin

Title: Technical Director/Representative Date: 06/17/21

ORGANICS

VOLATILES

Project Name: TEXTRON PROVIDENCE
Lab Number: L2129983
Project Number: 60656789.400
Report Date: 06/17/21

SAMPLE RESULTS

Lab ID: L2129983-01
Client ID: MID-1A, 1B, 1C, 1D
Sample Location: PRODIVENCE, RI

Date Collected: 06/03/21 11:00
Date Received: 06/04/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 06/06/21 16:44
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1.0	0.56	1
1,1-Dichloroethane	ND		ug/l	1.5	0.40	1
Chloroform	ND		ug/l	1.0	0.38	1
Carbon tetrachloride	ND		ug/l	1.0	0.24	1
1,2-Dichloropropane	ND		ug/l	3.5	0.46	1
Dibromochloromethane	ND		ug/l	1.0	0.27	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.35	1
Tetrachloroethene	ND		ug/l	1.0	0.26	1
Chlorobenzene	ND		ug/l	3.5	0.30	1
Trichlorofluoromethane	ND		ug/l	5.0	0.28	1
1,2-Dichloroethane	ND		ug/l	1.5	0.47	1
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29	1
Bromodichloromethane	ND		ug/l	1.0	0.28	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34	1
Bromoform	ND		ug/l	1.0	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20	1
Benzene	ND		ug/l	1.0	0.38	1
Toluene	ND		ug/l	1.0	0.31	1
Ethylbenzene	ND		ug/l	1.0	0.28	1
Chloromethane	ND		ug/l	5.0	1.0	1
Bromomethane	ND		ug/l	5.0	1.2	1
Vinyl chloride	ND		ug/l	1.0	0.38	1
Chloroethane	ND		ug/l	2.0	0.37	1
1,1-Dichloroethene	ND		ug/l	1.0	0.31	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17	1

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2129983

Project Number: 60656789.400 **Report Date:** 06/17/21

SAMPLE RESULTS

Lab ID: L2129983-01 Date Collected: 06/03/21 11:00

Client ID: MID-1A, 1B, 1C, 1D Date Received: 06/04/21

Sample Location: PRODIVENCE, RI Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.33	1
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28	1
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27	1
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29	1
p/m-Xylene	ND		ug/l	2.0	0.30	1
o-xylene	ND		ug/l	1.0	0.34	1
Xylenes, Total	ND		ug/l	1.0	0.30	1
Styrene	ND		ug/l	1.0	0.37	1
Acetone	ND		ug/l	10	2.4	1
Carbon disulfide	ND		ug/l	5.0	0.28	1
2-Butanone	ND		ug/l	10	1.0	1
Vinyl acetate	ND		ug/l	10	0.41	1
4-Methyl-2-pentanone	ND		ug/l	10	0.19	1
2-Hexanone	ND		ug/l	10	0.55	1
Acrolein	ND		ug/l	8.0	1.8	1
Acrylonitrile	ND		ug/l	10	0.33	1
Dibromomethane	ND		ug/l	1.0	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	102		60-140
Fluorobenzene	95		60-140
4-Bromofluorobenzene	89		60-140

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2129983

Project Number: 60656789.400 **Report Date:** 06/17/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 06/06/21 16:04
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1509602-4					
Methylene chloride	ND		ug/l	1.0	0.56
1,1-Dichloroethane	ND		ug/l	1.5	0.40
Chloroform	ND		ug/l	1.0	0.38
Carbon tetrachloride	ND		ug/l	1.0	0.24
1,2-Dichloropropane	ND		ug/l	3.5	0.46
Dibromochloromethane	ND		ug/l	1.0	0.27
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34
2-Chloroethylvinyl ether	ND		ug/l	10	0.35
Tetrachloroethene	ND		ug/l	1.0	0.26
Chlorobenzene	ND		ug/l	3.5	0.30
Trichlorofluoromethane	ND		ug/l	5.0	0.28
1,2-Dichloroethane	ND		ug/l	1.5	0.47
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29
Bromodichloromethane	ND		ug/l	1.0	0.28
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34
Bromoform	ND		ug/l	1.0	0.22
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20
Benzene	ND		ug/l	1.0	0.38
Toluene	ND		ug/l	1.0	0.31
Ethylbenzene	ND		ug/l	1.0	0.28
Chloromethane	ND		ug/l	5.0	1.0
Bromomethane	ND		ug/l	5.0	1.2
Vinyl chloride	ND		ug/l	1.0	0.38
Chloroethane	ND		ug/l	2.0	0.37
1,1-Dichloroethene	ND		ug/l	1.0	0.31
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17
Trichloroethene	ND		ug/l	1.0	0.33

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400
Lab Number: L2129983
Report Date: 06/17/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 06/06/21 16:04
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1509602-4					
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29
p/m-Xylene	ND		ug/l	2.0	0.30
o-xylene	ND		ug/l	1.0	0.34
Xylenes, Total	ND		ug/l	1.0	0.30
Styrene	ND		ug/l	1.0	0.37
Acetone	ND		ug/l	10	2.4
Carbon disulfide	ND		ug/l	5.0	0.28
2-Butanone	ND		ug/l	10	1.0
Vinyl acetate	ND		ug/l	10	0.41
4-Methyl-2-pentanone	0.19	J	ug/l	10	0.19
2-Hexanone	ND		ug/l	10	0.55
Acrolein	ND		ug/l	8.0	1.8
Acrylonitrile	ND		ug/l	10	0.33
Dibromomethane	ND		ug/l	1.0	0.23

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	93		60-140
4-Bromofluorobenzene	90		60-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129983

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1509602-3								
Methylene chloride	90		-		60-140	-		28
1,1-Dichloroethane	90		-		50-150	-		49
Chloroform	90		-		70-135	-		54
Carbon tetrachloride	90		-		70-130	-		41
1,2-Dichloropropane	90		-		35-165	-		55
Dibromochloromethane	110		-		70-135	-		50
1,1,2-Trichloroethane	100		-		70-130	-		45
2-Chloroethylvinyl ether	100		-		1-225	-		71
Tetrachloroethene	100		-		70-130	-		39
Chlorobenzene	85		-		65-135	-		53
Trichlorofluoromethane	75		-		50-150	-		84
1,2-Dichloroethane	90		-		70-130	-		49
1,1,1-Trichloroethane	90		-		70-130	-		36
Bromodichloromethane	110		-		65-135	-		56
trans-1,3-Dichloropropene	90		-		50-150	-		86
cis-1,3-Dichloropropene	100		-		25-175	-		58
Bromoform	100		-		70-130	-		42
1,1,2,2-Tetrachloroethane	120		-		60-140	-		61
Benzene	90		-		65-135	-		61
Toluene	105		-		70-130	-		41
Ethylbenzene	95		-		60-140	-		63
Chloromethane	49		-		1-205	-		60
Bromomethane	55		-		15-185	-		61

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129983

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1509602-3								
Vinyl chloride	60		-		5-195	-		66
Chloroethane	70		-		40-160	-		78
1,1-Dichloroethene	70		-		50-150	-		32
trans-1,2-Dichloroethene	90		-		70-130	-		45
cis-1,2-Dichloroethene	95		-		60-140	-		30
Trichloroethene	85		-		65-135	-		48
1,2-Dichlorobenzene	95		-		65-135	-		57
1,3-Dichlorobenzene	95		-		70-130	-		43
1,4-Dichlorobenzene	95		-		65-135	-		57
p/m-Xylene	92		-		60-140	-		30
o-xylene	90		-		60-140	-		30
Styrene	85		-		60-140	-		30
Acetone	92		-		40-160	-		30
Carbon disulfide	80		-		60-140	-		30
2-Butanone	100		-		60-140	-		30
Vinyl acetate	82		-		60-140	-		30
4-Methyl-2-pentanone	116		-		60-140	-		30
2-Hexanone	120		-		60-140	-		30
Acrolein	78		-		60-140	-		30
Acrylonitrile	110		-		60-140	-		60
Dibromomethane	75		-		70-130	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129983

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1509602-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	94				60-140
Fluorobenzene	91				60-140
4-Bromofluorobenzene	99				60-140

METALS

Project Name: TEXTRON PROVIDENCE
Lab Number: L2129983
Project Number: 60656789.400
Report Date: 06/17/21

SAMPLE RESULTS

Lab ID: L2129983-03
Client ID: MID-1
Sample Location: PRODIVENCE, RI
Date Collected: 06/03/21 10:40
Date Received: 06/04/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Cadmium, Total	0.00009	J	mg/l	0.00020	0.00005	1	06/15/21 16:39	06/17/21 11:27	EPA 3005A	3,200.8	CD
Chromium, Total	0.00817		mg/l	0.00100	0.00017	1	06/15/21 16:39	06/17/21 11:27	EPA 3005A	3,200.8	CD
Copper, Total	0.01151		mg/l	0.00100	0.00038	1	06/15/21 16:39	06/17/21 11:27	EPA 3005A	3,200.8	CD
Lead, Total	0.00071	J	mg/l	0.00100	0.00034	1	06/15/21 16:39	06/17/21 11:27	EPA 3005A	3,200.8	CD
Nickel, Total	0.00300		mg/l	0.00200	0.00055	1	06/15/21 16:39	06/17/21 11:27	EPA 3005A	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/15/21 16:39	06/17/21 11:27	EPA 3005A	3,200.8	CD
Zinc, Total	0.02860		mg/l	0.01000	0.00341	1	06/15/21 16:39	06/17/21 11:27	EPA 3005A	3,200.8	CD

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400
Lab Number: L2129983
Report Date: 06/17/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1512294-1										
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129983

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1512294-2								
Cadmium, Total	111		-		85-115	-		
Chromium, Total	110		-		85-115	-		
Copper, Total	106		-		85-115	-		
Lead, Total	108		-		85-115	-		
Nickel, Total	99		-		85-115	-		
Silver, Total	107		-		85-115	-		
Zinc, Total	108		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2129983
Report Date: 06/17/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1512294-3 QC Sample: L2131070-01 Client ID: MS Sample												
Cadmium, Total	ND	0.051	0.05388	106		-	-		70-130	-		20
Chromium, Total	ND	0.2	0.2250	112		-	-		70-130	-		20
Copper, Total	0.01740	0.25	0.2727	102		-	-		70-130	-		20
Lead, Total	0.00493J	0.51	0.5406	106		-	-		70-130	-		20
Nickel, Total	ND	0.5	0.4884	98		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05222	104		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5539	111		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129983

Report Date: 06/17/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1512294-4 QC Sample: L2131070-01 Client ID: DUP Sample						
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	0.01740	0.01994	mg/l	14		20
Lead, Total	0.00493J	0.00518J	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2129983
Report Date: 06/17/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2129983-01A	Vial Na2S2O3 preserved split	A	NA		3.2	Y	Absent		624.1(3)
L2129983-01B	Vial Na2S2O3 preserved split	A	NA		3.2	Y	Absent		624.1(3)
L2129983-01C	Vial Na2S2O3 preserved split	A	NA		3.2	Y	Absent		624.1(3)
L2129983-02A	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02A1	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02A2	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02A3	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02B	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02B1	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02B2	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02B3	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02C	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02C1	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02C2	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-02C3	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129983-03A	Plastic 250ml HNO3 preserved	A	<2	<2	3.2	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),AG-2008T(180),HOLD-METAL-TOTAL(180),CR-2008T(180),PB-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129983
Project Number:	60656789.400	**Report Date:**	06/17/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129983
Project Number:	60656789.400	**Report Date:**	06/17/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129983
Project Number:	60656789.400	**Report Date:**	06/17/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129983
Project Number:	60656789.400	**Report Date:**	06/17/21

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 6/4/21

ALPHA Job #: L2129983

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: AECOM - ENVIRONMENT
Address: 10 ORMS ST. SUITE 400
PROVIDENCE, RI
Phone: 401-854-7840
Email: RORY.HENDERSON@AECOM.COM
BRYAN.MACDONALD@AECOM.COM

Project Information

Project Name: TEXTRON PROVIDENCE
Project Location: PROVIDENCE, RI
Project #: 60656789.400
Project Manager: RORY HENDERSON
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Additional Project Information:

LAB TO COMPOSITE SAMPLES MID-1A, MID-1B, MID-1C AND MID-1D

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint
Metals 200.7 (Cd, Cr, Cu, Pb, Ni, As, Zn, As)

SAMPLE INFO

Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS	METALS	EPH	VPH	PCB	TPH	Metals 200.7						Sample Comments	TOTAL # BOTTLES
29983-01,02	MID-1A	6/3/21	1100	GW	TWL	X															3
-01,02	MID-1B	6/3/21	1605	GW	TWL	X															3
-01,02	MID-1C	6/4/21	0635	GW	TWL	X															3
-01,02	MID-1D	6/4/21	1040	GW	TWL	X															3
-03	MID-1	6/4/21	1040	GW	TWL									X						HOLD. ARSENIC	1
Container Type						V								P							
Preservative						H								C							

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
TWL AH	6/4/21 1045	TWL AH	6/4/21 1045
TWL AH	6/4/21 1810	[signature]	6/4/21 1810

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L2129991
Client:	AECOM 250 Apollo Dr. Chelmsford, MA 01824
ATTN:	Rory Henderson
Phone:	(978) 905-2277
Project Name:	TEXTRON PROVIDENCE
Project Number:	60656789.400
Report Date:	06/17/21

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2129991
Report Date: 06/17/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2129991-01	EFF-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	06/03/21 10:00	06/04/21
L2129991-02	COMPOSITE EFF-1A, 1B, 1C, 1D	WATER	PRODIVENCE, RI	06/03/21 10:00	06/04/21
L2129991-03	EFF-1	WATER	PRODIVENCE, RI	06/04/21 09:40	06/04/21

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129991
Project Number:	60656789.400	**Report Date:**	06/17/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400
Lab Number: L2129991
Report Date: 06/17/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Sebastian Corbin

Title: Technical Director/Representative Date: 06/17/21

ORGANICS

VOLATILES

Project Name: TEXTRON PROVIDENCE
Lab Number: L2129991
Project Number: 60656789.400
Report Date: 06/17/21

SAMPLE RESULTS

Lab ID: L2129991-01
Client ID: EFF-1A, 1B, 1C, 1D
Sample Location: PRODIVENCE, RI

Date Collected: 06/03/21 10:00
Date Received: 06/04/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 06/06/21 17:25
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1.0	0.56	1
1,1-Dichloroethane	ND		ug/l	1.5	0.40	1
Chloroform	ND		ug/l	1.0	0.38	1
Carbon tetrachloride	ND		ug/l	1.0	0.24	1
1,2-Dichloropropane	ND		ug/l	3.5	0.46	1
Dibromochloromethane	ND		ug/l	1.0	0.27	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.35	1
Tetrachloroethene	ND		ug/l	1.0	0.26	1
Chlorobenzene	ND		ug/l	3.5	0.30	1
Trichlorofluoromethane	ND		ug/l	5.0	0.28	1
1,2-Dichloroethane	ND		ug/l	1.5	0.47	1
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29	1
Bromodichloromethane	ND		ug/l	1.0	0.28	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34	1
Bromoform	ND		ug/l	1.0	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20	1
Benzene	ND		ug/l	1.0	0.38	1
Toluene	ND		ug/l	1.0	0.31	1
Ethylbenzene	ND		ug/l	1.0	0.28	1
Chloromethane	ND		ug/l	5.0	1.0	1
Bromomethane	ND		ug/l	5.0	1.2	1
Vinyl chloride	ND		ug/l	1.0	0.38	1
Chloroethane	ND		ug/l	2.0	0.37	1
1,1-Dichloroethene	ND		ug/l	1.0	0.31	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17	1

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2129991

Project Number: 60656789.400 **Report Date:** 06/17/21

SAMPLE RESULTS

Lab ID: L2129991-01 Date Collected: 06/03/21 10:00

Client ID: EFF-1A, 1B, 1C, 1D Date Received: 06/04/21

Sample Location: PRODIVENCE, RI Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.33	1
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28	1
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27	1
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29	1
p/m-Xylene	ND		ug/l	2.0	0.30	1
o-xylene	ND		ug/l	1.0	0.34	1
Xylenes, Total	ND		ug/l	1.0	0.30	1
Styrene	ND		ug/l	1.0	0.37	1
Acetone	ND		ug/l	10	2.4	1
Carbon disulfide	ND		ug/l	5.0	0.28	1
2-Butanone	ND		ug/l	10	1.0	1
Vinyl acetate	ND		ug/l	10	0.41	1
4-Methyl-2-pentanone	ND		ug/l	10	0.19	1
2-Hexanone	ND		ug/l	10	0.55	1
Acrolein	ND		ug/l	8.0	1.8	1
Acrylonitrile	ND		ug/l	10	0.33	1
Dibromomethane	ND		ug/l	1.0	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	94		60-140
4-Bromofluorobenzene	90		60-140

Project Name: TEXTRON PROVIDENCE **Lab Number:** L2129991

Project Number: 60656789.400 **Report Date:** 06/17/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 06/06/21 16:04
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1509602-4					
Methylene chloride	ND		ug/l	1.0	0.56
1,1-Dichloroethane	ND		ug/l	1.5	0.40
Chloroform	ND		ug/l	1.0	0.38
Carbon tetrachloride	ND		ug/l	1.0	0.24
1,2-Dichloropropane	ND		ug/l	3.5	0.46
Dibromochloromethane	ND		ug/l	1.0	0.27
1,1,2-Trichloroethane	ND		ug/l	1.5	0.34
2-Chloroethylvinyl ether	ND		ug/l	10	0.35
Tetrachloroethene	ND		ug/l	1.0	0.26
Chlorobenzene	ND		ug/l	3.5	0.30
Trichlorofluoromethane	ND		ug/l	5.0	0.28
1,2-Dichloroethane	ND		ug/l	1.5	0.47
1,1,1-Trichloroethane	ND		ug/l	2.0	0.29
Bromodichloromethane	ND		ug/l	1.0	0.28
trans-1,3-Dichloropropene	ND		ug/l	1.5	0.31
cis-1,3-Dichloropropene	ND		ug/l	1.5	0.34
Bromoform	ND		ug/l	1.0	0.22
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.20
Benzene	ND		ug/l	1.0	0.38
Toluene	ND		ug/l	1.0	0.31
Ethylbenzene	ND		ug/l	1.0	0.28
Chloromethane	ND		ug/l	5.0	1.0
Bromomethane	ND		ug/l	5.0	1.2
Vinyl chloride	ND		ug/l	1.0	0.38
Chloroethane	ND		ug/l	2.0	0.37
1,1-Dichloroethene	ND		ug/l	1.0	0.31
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.17
Trichloroethene	ND		ug/l	1.0	0.33

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400
Lab Number: L2129991
Report Date: 06/17/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 06/06/21 16:04
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1509602-4					
1,2-Dichlorobenzene	ND		ug/l	5.0	0.28
1,3-Dichlorobenzene	ND		ug/l	5.0	0.27
1,4-Dichlorobenzene	ND		ug/l	5.0	0.29
p/m-Xylene	ND		ug/l	2.0	0.30
o-xylene	ND		ug/l	1.0	0.34
Xylenes, Total	ND		ug/l	1.0	0.30
Styrene	ND		ug/l	1.0	0.37
Acetone	ND		ug/l	10	2.4
Carbon disulfide	ND		ug/l	5.0	0.28
2-Butanone	ND		ug/l	10	1.0
Vinyl acetate	ND		ug/l	10	0.41
4-Methyl-2-pentanone	0.19	J	ug/l	10	0.19
2-Hexanone	ND		ug/l	10	0.55
Acrolein	ND		ug/l	8.0	1.8
Acrylonitrile	ND		ug/l	10	0.33
Dibromomethane	ND		ug/l	1.0	0.23

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	93		60-140
4-Bromofluorobenzene	90		60-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129991

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1509602-3								
Methylene chloride	90		-		60-140	-		28
1,1-Dichloroethane	90		-		50-150	-		49
Chloroform	90		-		70-135	-		54
Carbon tetrachloride	90		-		70-130	-		41
1,2-Dichloropropane	90		-		35-165	-		55
Dibromochloromethane	110		-		70-135	-		50
1,1,2-Trichloroethane	100		-		70-130	-		45
2-Chloroethylvinyl ether	100		-		1-225	-		71
Tetrachloroethene	100		-		70-130	-		39
Chlorobenzene	85		-		65-135	-		53
Trichlorofluoromethane	75		-		50-150	-		84
1,2-Dichloroethane	90		-		70-130	-		49
1,1,1-Trichloroethane	90		-		70-130	-		36
Bromodichloromethane	110		-		65-135	-		56
trans-1,3-Dichloropropene	90		-		50-150	-		86
cis-1,3-Dichloropropene	100		-		25-175	-		58
Bromoform	100		-		70-130	-		42
1,1,2,2-Tetrachloroethane	120		-		60-140	-		61
Benzene	90		-		65-135	-		61
Toluene	105		-		70-130	-		41
Ethylbenzene	95		-		60-140	-		63
Chloromethane	49		-		1-205	-		60
Bromomethane	55		-		15-185	-		61

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129991

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1509602-3								
Vinyl chloride	60		-		5-195	-		66
Chloroethane	70		-		40-160	-		78
1,1-Dichloroethene	70		-		50-150	-		32
trans-1,2-Dichloroethene	90		-		70-130	-		45
cis-1,2-Dichloroethene	95		-		60-140	-		30
Trichloroethene	85		-		65-135	-		48
1,2-Dichlorobenzene	95		-		65-135	-		57
1,3-Dichlorobenzene	95		-		70-130	-		43
1,4-Dichlorobenzene	95		-		65-135	-		57
p/m-Xylene	92		-		60-140	-		30
o-xylene	90		-		60-140	-		30
Styrene	85		-		60-140	-		30
Acetone	92		-		40-160	-		30
Carbon disulfide	80		-		60-140	-		30
2-Butanone	100		-		60-140	-		30
Vinyl acetate	82		-		60-140	-		30
4-Methyl-2-pentanone	116		-		60-140	-		30
2-Hexanone	120		-		60-140	-		30
Acrolein	78		-		60-140	-		30
Acrylonitrile	110		-		60-140	-		60
Dibromomethane	75		-		70-130	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129991

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1509602-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	94				60-140
Fluorobenzene	91				60-140
4-Bromofluorobenzene	99				60-140

METALS

Project Name: TEXTRON PROVIDENCE
Lab Number: L2129991
Project Number: 60656789.400
Report Date: 06/17/21

SAMPLE RESULTS

Lab ID: L2129991-03
Client ID: EFF-1
Sample Location: PRODIVENCE, RI
Date Collected: 06/04/21 09:40
Date Received: 06/04/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/15/21 16:39	06/17/21 11:32	EPA 3005A	3,200.8	CD
Chromium, Total	0.00924		mg/l	0.00100	0.00017	1	06/15/21 16:39	06/17/21 11:32	EPA 3005A	3,200.8	CD
Copper, Total	0.01133		mg/l	0.00100	0.00038	1	06/15/21 16:39	06/17/21 11:32	EPA 3005A	3,200.8	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/15/21 16:39	06/17/21 11:32	EPA 3005A	3,200.8	CD
Nickel, Total	0.00136	J	mg/l	0.00200	0.00055	1	06/15/21 16:39	06/17/21 11:32	EPA 3005A	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/15/21 16:39	06/17/21 11:32	EPA 3005A	3,200.8	CD
Zinc, Total	0.01097		mg/l	0.01000	0.00341	1	06/15/21 16:39	06/17/21 11:32	EPA 3005A	3,200.8	CD

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400
Lab Number: L2129991
Report Date: 06/17/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1512294-1										
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/15/21 16:39	06/17/21 11:06	3,200.8	CD

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129991

Report Date: 06/17/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1512294-2								
Cadmium, Total	111		-		85-115	-		
Chromium, Total	110		-		85-115	-		
Copper, Total	106		-		85-115	-		
Lead, Total	108		-		85-115	-		
Nickel, Total	99		-		85-115	-		
Silver, Total	107		-		85-115	-		
Zinc, Total	108		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2129991
Report Date: 06/17/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1512294-3 QC Sample: L2131070-01 Client ID: MS Sample												
Cadmium, Total	ND	0.051	0.05388	106		-	-		70-130	-		20
Chromium, Total	ND	0.2	0.2250	112		-	-		70-130	-		20
Copper, Total	0.01740	0.25	0.2727	102		-	-		70-130	-		20
Lead, Total	0.00493J	0.51	0.5406	106		-	-		70-130	-		20
Nickel, Total	ND	0.5	0.4884	98		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05222	104		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5539	111		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: TEXTRON PROVIDENCE

Project Number: 60656789.400

Lab Number: L2129991

Report Date: 06/17/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1512294-4 QC Sample: L2131070-01 Client ID: DUP Sample						
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	0.01740	0.01994	mg/l	14		20
Lead, Total	0.00493J	0.00518J	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

Project Name: TEXTRON PROVIDENCE
Project Number: 60656789.400

Lab Number: L2129991
Report Date: 06/17/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2129991-01A	Vial Na2S2O3 preserved split	A	NA		3.2	Y	Absent		624.1(3)
L2129991-01B	Vial Na2S2O3 preserved split	A	NA		3.2	Y	Absent		624.1(3)
L2129991-01C	Vial Na2S2O3 preserved split	A	NA		3.2	Y	Absent		624.1(3)
L2129991-02A	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02A1	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02A2	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02A3	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02B	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02B1	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02B2	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02B3	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02C	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02C1	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02C2	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-02C3	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		COMP-VOA()
L2129991-03A	Plastic 250ml HNO3 preserved	A	<2	<2	3.2	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),AG-2008T(180),CR-2008T(180),PB-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129991
Project Number:	60656789.400	**Report Date:**	06/17/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129991
Project Number:	60656789.400	**Report Date:**	06/17/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129991
Project Number:	60656789.400	**Report Date:**	06/17/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TEXTRON PROVIDENCE	**Lab Number:**	L2129991
Project Number:	60656789.400	**Report Date:**	06/17/21

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 6/4/21

ALPHA Job #: L2129941

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: AECOM - ENVIRONMENT
Address: 10 ORMS ST. SUITE 400
PROVIDENCE, RI
Phone: 401-854-7840
Email: RORY.HENDERSON@AECOM.COM
BRYAN.MACDONALD@AECOM.COM

Project Information

Project Name: TEXTRON PROVIDENCE
Project Location: PROVIDENCE, RI
Project #: 60585787-200
Project Manager: RORY HENDERSON
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due:

Additional Project Information:

* LAB TO COMPOSITE SAMPLES EFF-1A, EFF-1B, EFF-1C AND EFF-1D

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint
METALS 200.7 (Cd, Cr, Cu, Pb, Ni, Ag, Zn)

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS	METALS	EPH	VPH	PCB	TPH	METALS	Sample Comments	TOTAL # BOTTLES
29941-01,02	EFF-1A	6/3/21	1000	GW	TWL	X										3
-01,-02	EFF-1B	6/3/21	1600	GW	TWL	X										3
-01-02	EFF-1C	6/4/21	0630	GW	TWL	X										3
-01-02	EFF-1D	6/4/21	0940	GW	TWL	X										3
-03	EFF-1	6/4/21	0940	GW	TWL									X		1

Container Type	V												P			
Preservative	H												C			

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	6/4/21 1045		6/4/21 1045
	6/4/21 1810		6/4/21 1810

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Attachment B

August 16, 2021

Mr. Gregory Simpson
Textron, Inc.
40 Westminster Street
Providence, RI 02903-2525

RE: 333 Adelaide Avenue

Dear Mr. Simpson:

The pretreatment system modification plans that we received on July 8, 2021 are acceptable to the Narragansett Bay Commission (NBC).

Acceptance of these plans by the NBC does not constitute any form of guarantee or insurance with respect to the performance of the equipment and processes reviewed, nor does it relieve you from the responsibility of modifying equipment as necessary in the future to produce an effluent which meets NBC discharge limitations.

Any review of process and/or pretreatment system plans and inspection(s) conducted by the NBC are for the sole purpose of determining compliance with the technical provisions of State, Federal and NBC regulations. The NBC does not assume responsibility for means, methods or techniques used, or for the safety of construction works, the site, or for compliance by users with any other applicable laws and regulations.

If you have any questions, please contact me at 461-8848, ext. 490.

Sincerely,

Kerry M. Britt
Pretreatment Manager

KMB:smb