

April 6, 2023

File: 101987.001(5) – Rev0

Mayfield Golf Course Inc.
3190 Steeles Avenue East, Suite 300
Markham, Ontario
L3R 1G9

Attention: Vimal Patel, P.Eng.

**Re: Summary of Findings to Date
Phase Two Environmental Site Assessment
12580 and 12552 Torbram Road, Caledon, Ontario**

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) is pleased to present our preliminary summary of findings to date with regards to the Phase Two Environmental Site Assessment (ESA) sampling program carried out for Mayfield Golf Course Inc. (Geranium) at 12580 and 12552 Torbram Road in Caledon, Ontario (the Site).

Figure 1 illustrates the borehole location plan for the environmental sampling conducted to date at the Site.

BACKGROUND

GEMTEC is currently conducting a Phase Two ESA sampling program for the above referenced Site for Geranium's proposed redevelopment of the Mayfield Golf Course into a residential development. GEMTEC recently carried out a Phase One ESA in accordance with Ontario Regulations (O.Reg.) 153/04 requirements for the Site which identified three areas of potential environmental concern (APECs) across the entire golf course and within the workshop area on-Site. A sampling and analysis plan (SAP) was prepared by GEMTEC as per O.Reg. 153/04 that included advancing three boreholes, each completed as a monitoring well, and collecting twenty surface soil samples via hand dug test pits. As of the date of this letter, the three boreholes/monitoring wells have been installed and representative soil samples from the boreholes have been submitted to a lab for chemical analysis. The groundwater samples for the monitoring wells as well as the test pit soil samples will be conducted later in the season when the ground on Site becomes unfrozen. A summary of the current samples collected, and our comments are provided below.

FIELD WORK

A representative from GEMTEC, along with a drilling crew, attended the Site from February 7, 2023 to February 10, 2023 to advance three boreholes (BH23-E1, BH23-E2 and BH23-E3) to

8 m depth, conduct the borehole soil sampling plan, and install the monitoring wells in each borehole. The majority of soil encountered in the boreholes was sandy silty clay till. Borehole logs and detailed descriptions of the soil characteristics will be provided in the Phase Two ESA report. Figure 1 indicates the environmental borehole locations on Site.

The table below provides a summary of the sampling and analytical program for the boreholes.

Borehole ID	Rationale	Borehole Depth (m)	Soil Analysis	Duplicate Soil Samples
BH23-E1, BH23-E2 and BH23-E3	APEC 1 – On-Site storage and application of herbicides/pesticides across entire Phase One Property	8 m or to just below water table	At each borehole location collect SA1 (0 – 2 ft) and submit for M&I, OC Pesticides, and PAHs.	One duplicate for each of M&I, OC Pesticides, PHC F1-F4, VOC, PAH
	APEC 2 – Two fuel storage ASTs observed in the maintenance yard, north of the storage building		At each borehole location collect and submit worse case sample (based on observations and field screening) or sample closest to water table (if no sign of impact) for PHCs F1-F4 and VOCs.	
	APEC 3 – Maintenance activities, such as golf cart and equipment servicing, occur in the workshop. Waste oil and lubricants are also generated and stored in the workshop			

Notes:

M&I = Metals & Inorganics

OC Pesticides = Organochlorine Pesticides

PAH = Polycyclic Aromatic Hydrocarbons

PHC F1-F4 = Petroleum Hydrocarbons fractions F1 to F4

VOC = Volatile Organic Compounds

Based on the sampling and analytical program for the boreholes, a total of eight soil samples (six including two duplicates) were planned for submission for chemical analysis. Due to quantities of surface soils recovered at BH23-E2 and BH23-E3 being smaller than what is necessary for chemical analysis, samples from BH23-E2 and BH23-E3 were not submitted for analysis of M&I, OC Pesticides, and PAHs. Furthermore, a duplicate sample for the noted parameters was also

not submitted due to low volumes of soil recovery resulting from frozen conditions. Additional samples will be collected to serve as duplicates during a subsequent test pit operation planned at the site.

A total then of five soil samples (four including one duplicate) were submitted for chemical analysis. The samples were submitted for chemical analysis to Caduceon Environmental Laboratories (Caduceon) in Barrie, Ontario under chain of custody. The remaining samples will be collected when we return to the site to complete the groundwater sampling.

A summary of the samples collected to date from the Site for analysis is provided below.

Sample ID	Date and Time Collected	Analyses Performed
BH23-E1 SA1	February 8, 2023 3:30pm	M&I OC Pesticides PAHs
BH23-E1 SA6	February 8, 2023 5:30pm	PHC F1-F4 VOCs
BH23-E2 SA7	February 8, 2023 2:40pm	PHC F1-F4 VOCs
BH23-E3 SA6	February 8, 2023 2:30pm	PHC F1-F4 VOCs
BH23-E3 SA6 DUP (Duplicate)	February 8, 2023 -	PHC F1-F4 VOCs

ANALYTICAL RESULTS

The analytical results were compared to the soil quality standards set out in “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act” prepared by the Ministry of the Environment (now referred to as the Ministry of Environment, Conservation and Parks (MECP)), dated April 2011. Specifically, the results were compared to the following standards:

- Table 1 Full Depth Background Site Condition Standards for residential / parkland / institutional / industrial / commercial / community property use (Table 1 Standard).

Based on a review of the analytical results, no exceedances were found above the Table 1 Standards for the borehole soil samples. A copy of the laboratory certificates of analysis for the collected samples are attached.

A more detailed review and provision of the rationale for the selection of the applicable MECF standard will be provided as part of the Phase Two ESA.

CONCLUSION

Based on the results of the soil sampling program, the soil samples collected so far meet the Table 1 Standards. Currently, the following steps of the sampling program for the Phase Two ESA need to be completed:

- Twenty test pits to be hand excavated via shovel to collect and submit soil samples for chemical analysis for M&I and OC Pesticides;
- Add two additional test pits to the test pit sampling program (total twenty-two) for BH23-E2 and BH23-E3 to collect surface samples that were not submitted during the borehole program due to low recovery volumes. Samples to be submitted for chemical analysis of M&I, OC Pesticides, and PAHs. Include duplicate sample at BH23-E3 for the same parameters.
- Develop the monitoring wells followed by groundwater purging and sampling at BH23-E1, BH23-E2, and BH23-E3 and submit for chemical analysis for M&I, OC Pesticides, PHC F1-F4, and VOCs.

Once the above noted sampling program is complete, a Phase Two ESA report in accordance with O.Reg. 153/04 will be prepared. The samples, results, and conclusions for the currently completed borehole sampling program in this report will also be included in the Phase Two ESA report.

LIMITATIONS

This report was prepared for, and the work referred to within it, has been undertaken by GEMTEC for Geranium. It is intended for the exclusive use of Geranium. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC and Geranium. Nothing in this report is intended to provide a legal opinion.

The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared. This report has been prepared for the application noted and it is based, in part, on visual observations made at the site,

all as described in the report. Unless otherwise stated, the findings contained in this report cannot be extrapolated or extended to previous or future site conditions, portions of the site that were unavailable for direct investigation, subsurface locations on the site that were not investigated directly, or chemical parameters, materials or analysis which were not addressed.

Should new information become available during future work, including excavations, borings, or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions presented herein.

CLOSURE

We trust that this report is sufficient for your current needs. If you have any questions or require additional information, please contact the undersigned.

Regards,

GEMTEC Consulting Engineers and Scientists Limited



Curtis Moorhouse, B.Sc.
Junior Environmental Scientist



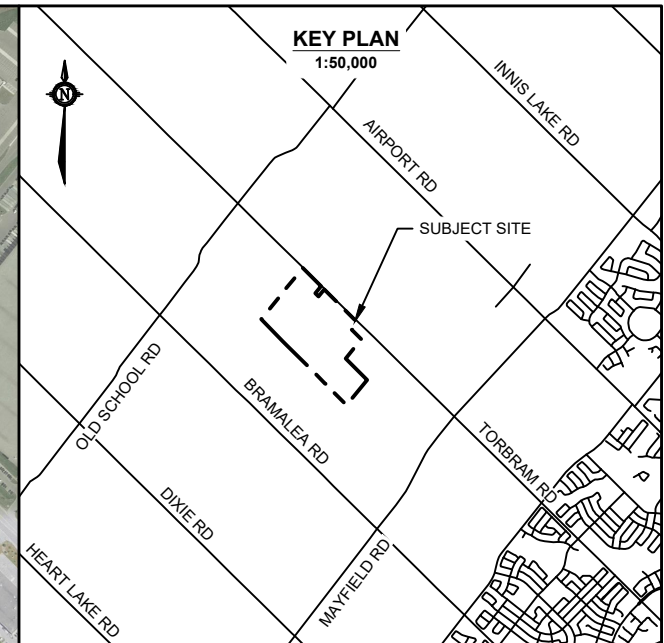
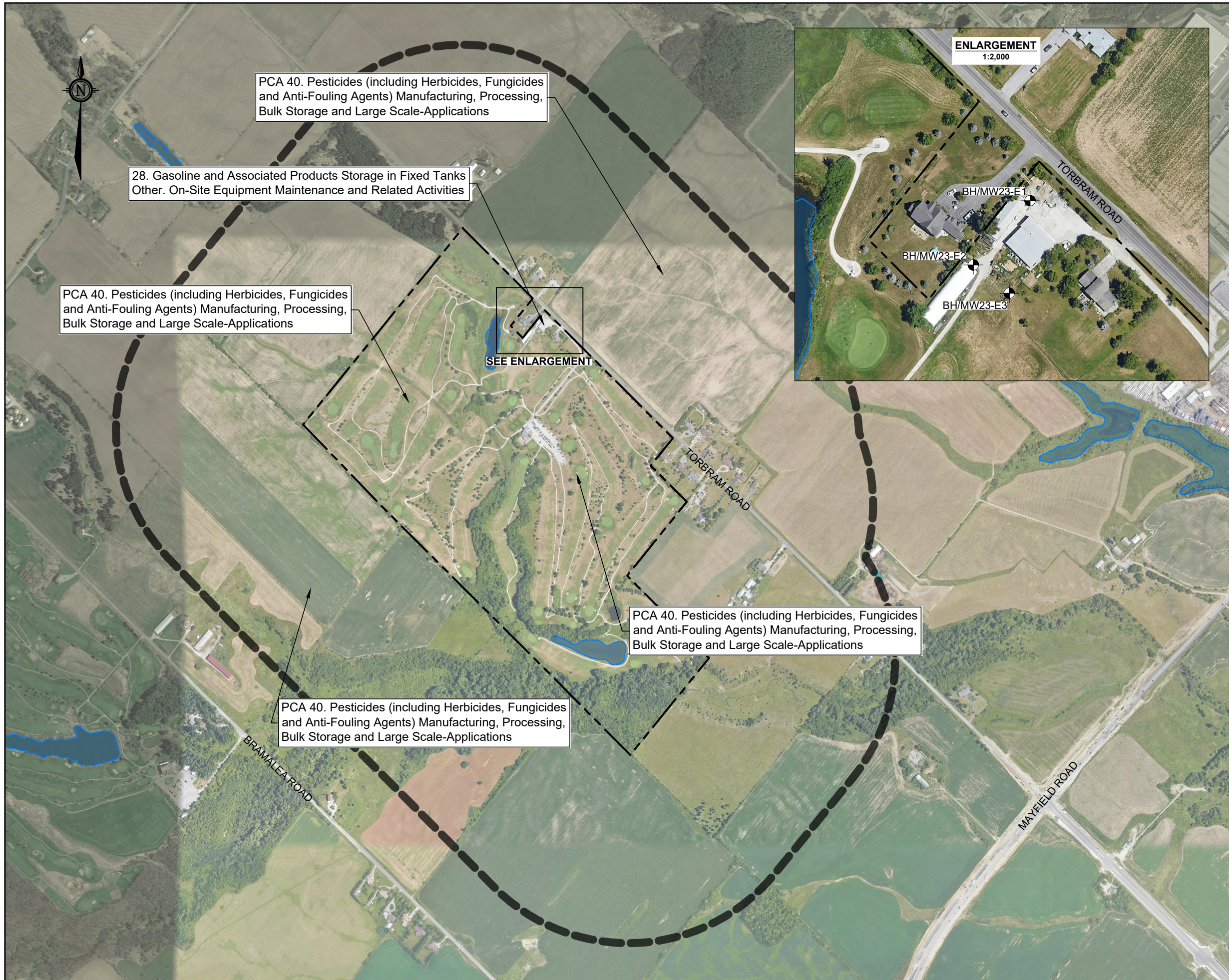
Sherry Eaton, M.Sc., P.Geo., PMP, QP_{ESA}
Senior Environmental Consultant



CM/SE/sv

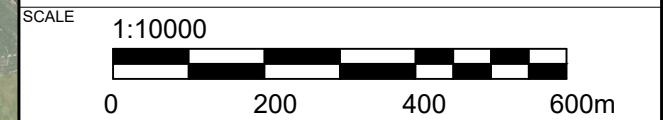
Attachments: Figure 1 – Borehole Location Plan
Laboratory Certificates of Analysis

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LEGEND

BH #	←	BOREHOLE ID
	⊙	APPROXIMATE BOREHOLE LOCATION
---		SUBJECT SITE
---		STUDY AREA (250m RADIUS FROM THE PROPERTY BOUNDARY)
PCA		POTENTIALLY CONTAMINATING ACTIVITIES



DRAWING **BOREHOLE LOCATION PLAN**

CLIENT **MAYFIELD GOLF COURSE INC.**

PROJECT **PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12552 AND 12580 TORBRAM ROAD
CALEDON, ONTARIO**

DRAWN BY	S.L.	CHECKED BY	S.E.
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PROJECT NO.	101987.001	REVISION NO.	0
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DATE	APRIL 2023	FIGURE NO.	FIGURE 1
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GEMTEC
CONSULTING ENGINEERS AND SCIENTISTS

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Oshawa, ON, L1J 8C3
www.gemtec.ca
gta@gemtec.ca

C.O.C.: G00011

REPORT No. B23-01879 (i)

Report To:

GEMTEC Consulting

44 Cedar Pointe Drive, Unit 1102
 Barrie ON L4N 5R7

Attention: Curtis Moorhouse

Caduceon Environmental Laboratories

112 Commerce Park Drive

Barrie ON L4N 8W8

Tel: 705-252-5743

Fax: 705-252-5746

DATE RECEIVED: 13-Feb-23

JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

SAMPLE MATRIX: Soil

P.O. NUMBER: 101987.001

WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
Cyanide	1	Kingston	kwe	16-Feb-23	A-CN s K	in house
Conductivity	1	Holly Lane	ST	15-Feb-23	A-COND-01 (o)	SM 2510B
pH	1	Richmond Hill	JE	16-Feb-23	A-pH-02 (rh)	MOEE3530
Chromium (VI)	1	Holly Lane	ST	16-Feb-23	D-CRVI-02 (o)	EPA7196A
Mercury	1	Holly Lane	PBK	17-Feb-23	D-HG-01 (o)	EPA 7471A
Sodium Adsorption Ratio	1	Holly Lane	aoz	16-Feb-23	D-ICP-01 SAR (o)	SM 3120
Metals - ICP-OES	1	Holly Lane	aoz	16-Feb-23	D-ICP-02 (o)	EPA 6010
Metals - ICP-MS	1	Holly Lane	TPR	16-Feb-23	D-ICPMS-01 (o)	EPA 6020

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg

F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)

F2 C10-C16 hydrocarbons in µg/g, (F2-naph if requested)

F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)

F4 C34-C50 hydrocarbons in µg/g

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

Any deviations from the method are noted and reported for any particular sample.

nC6 and nC10 response factor is within 30% of response factor for toluene:

nC10, nC16 and nC34 response factors within 10% of each other:

C50 response factors within 70% of nC10+nC16+nC34 average:

Linearity is within 15%:

All results expressed on a dry weight basis.

Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met. If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
 Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an *

Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Steve Garrett

Director of Laboratory Services

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

C.O.C.: G00011

REPORT No. B23-01879 (i)

Report To:

GEMTEC Consulting
 44 Cedar Pointe Drive, Unit 1102
 Barrie ON L4N 5R7

Attention: Curtis Moorhouse

Caduceon Environmental Laboratories

112 Commerce Park Drive
 Barrie ON L4N 8W8
 Tel: 705-252-5743
 Fax: 705-252-5746

DATE RECEIVED: 13-Feb-23

JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

P.O. NUMBER: 101987.001

SAMPLE MATRIX: Soil

WATERWORKS NO.

Parameter	Units	R.L.	Client I.D. Sample I.D. Date Collected	BH23-E1 SA1 B23-01879-1 08-Feb-23	O. Reg. 153 Tbl. 1 - All
pH @25°C	pH Units			7.43	
Conductivity @25°C	mS/cm	0.001		0.379	0.57
Cyanide (Free)	µg/g	0.05		< 0.05	0.051
Sodium Adsorption Ratio	units			1.50	2.4
Antimony	µg/g	0.5		< 0.5	1.3
Arsenic	µg/g	0.5		4.7	18
Barium	µg/g	1		91	220
Beryllium	µg/g	0.2		0.8	2.5
Boron	µg/g	0.5		5.7	36
Cadmium	µg/g	0.5		< 0.5	1.2
Chromium	µg/g	1		25	70
Chromium (VI)	µg/g	0.2		< 0.2	0.66
Cobalt	µg/g	1		15	21
Copper	µg/g	1		24	92
Lead	µg/g	5		14	120
Mercury	µg/g	0.005		0.024	0.27
Molybdenum	µg/g	1		< 1	2
Nickel	µg/g	1		26	82
Selenium	µg/g	0.5		0.5	1.5
Silver	µg/g	0.2		< 0.2	0.5
Thallium	µg/g	0.1		0.1	1
Uranium	µg/g	0.1		0.6	2.5
Vanadium	µg/g	1		34	86
Zinc	µg/g	3		65	290

O. Reg. 153 - Soil, Ground Water and Sediment Standards
 Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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SAMPLE MATRIX: Soil

JOB/PROJECT NO.:

P.O. NUMBER: 101987.001

WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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REPORT No. B23-01879 (ii)

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Attention: Curtis Moorhouse

Caduceon Environmental Laboratories

112 Commerce Park Drive
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 Tel: 705-252-5743
 Fax: 705-252-5746

DATE RECEIVED: 13-Feb-23

JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

SAMPLE MATRIX: Soil

P.O. NUMBER: 101987.001

WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
% Moisture	4	Richmond Hill	FAL	14-Feb-23	A-% moisture RH	
PHC(F2-F4)	4	Kingston	KPR	14-Feb-23	C-PHC-S-001 (k)	CWS Tier 1
VOC's	4	Richmond Hill	FAL	13-Feb-23	C-VOC-02 (rh)	EPA 8260
PHC(F1)	4	Richmond Hill	FAL	13-Feb-23	C-VPHS-01 (rh)	CWS Tier 1

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg

F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)

F2 C10-C16 hydrocarbons in µg/g, (F2-naph if requested)

F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)

F4 C34-C50 hydrocarbons in µg/g

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

Any deviations from the method are noted and reported for any particular sample.

nC6 and nC10 response factor is within 30% of response factor for toluene:

nC10, nC16 and nC34 response factors within 10% of each other:

C50 response factors within 70% of nC10+nC16+nC34 average:

Linearity is within 15%:

All results expressed on a dry weight basis.

Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met. If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
 Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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 Director of Laboratory Services

C.O.C.: G00011

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JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

P.O. NUMBER: 101987.001

SAMPLE MATRIX: Soil

WATERWORKS NO.

Parameter	Units	R.L.	Client I.D.	BH23-E1 SA6	BH23-E2 SA7	BH23-E3 SA6	BH23-E3 SA6 DUP	O. Reg. 153	
			Sample I.D.	B23-01879-2	B23-01879-3	B23-01879-4	B23-01879-5	Tbl. 1 - All	
Date Collected			08-Feb-23	08-Feb-23	08-Feb-23	08-Feb-23	08-Feb-23		
Acetone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	
Benzene	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	
Bromodichloromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Bromoform	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Bromomethane	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Carbon Tetrachloride	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Monochlorobenzene (Chlorobenzene)	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Chloroform	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dibromochloromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichlorobenzene, 1,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Dichlorobenzene, 1,3-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Dichlorobenzene, 1,4-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Dichlorodifluoromethane	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Dichloroethane, 1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethane, 1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethylene, 1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethene, cis-1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethene, trans-1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloropropane, 1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloropropene, cis-1,3-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloropropene, trans-1,3-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Dichloropropene 1,3-cis+trans	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Ethylbenzene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
 Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Steve Garrett

Director of Laboratory Services

C.O.C.: G00011

REPORT No. B23-01879 (ii)

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Attention: Curtis Moorhouse

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DATE RECEIVED: 13-Feb-23

JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

P.O. NUMBER: 101987.001

SAMPLE MATRIX: Soil

WATERWORKS NO.

Parameter	Units	R.L.	Client I.D.	BH23-E1 SA6	BH23-E2 SA7	BH23-E3 SA6	BH23-E3 SA6 DUP	O. Reg. 153	
			Sample I.D.	B23-01879-2	B23-01879-3	B23-01879-4	B23-01879-5	Tbl. 1 - All	
			Date Collected	08-Feb-23	08-Feb-23	08-Feb-23	08-Feb-23		
Dibromoethane,1,2- (Ethylene Dibromide)	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Hexane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Methyl Ethyl Ketone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	
Methyl Isobutyl Ketone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	
Methyl-t-butyl Ether	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Dichloromethane (Methylene Chloride)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Styrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Tetrachloroethane,1,1,1,2 -	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Tetrachloroethane,1,1,2,2 -	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Tetrachloroethylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Toluene	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	
Trichloroethane,1,1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Trichloroethane,1,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Trichloroethylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Trichlorofluoromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.25	
Vinyl Chloride	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	
Xylene, m,p-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03		
Xylene, o-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03		
Xylene, m,p,o-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.05	
PHC F1 (C6-C10)	µg/g	10	< 10	< 10	< 10	< 10	< 10	25	
PHC F2 (>C10-C16)	µg/g	5	9	7	8	9	9	10	
PHC F3 (>C16-C34)	µg/g	10	47	56	66	56	56	240	
PHC F4 (>C34-C50)	µg/g	10	14	< 10	11	13	13	120	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
 Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Steve Garrett

Director of Laboratory Services

C.O.C.: G00011

REPORT No. B23-01879 (ii)

Report To:

GEMTEC Consulting
 44 Cedar Pointe Drive, Unit 1102
 Barrie ON L4N 5R7

Attention: Curtis Moorhouse

Caduceon Environmental Laboratories

112 Commerce Park Drive
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 Fax: 705-252-5746

DATE RECEIVED: 13-Feb-23

JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

P.O. NUMBER: 101987.001

SAMPLE MATRIX: Soil

WATERWORKS NO.

Client I.D.	BH23-E1 SA6		BH23-E2 SA7		BH23-E3 SA6		BH23-E3 SA6 DUP		O. Reg. 153 Tbl. 1 - All
Sample I.D.	B23-01879-2		B23-01879-3		B23-01879-4		B23-01879-5		
Date Collected	08-Feb-23		08-Feb-23		08-Feb-23		08-Feb-23		
Parameter	Units	R.L.							
% moisture	%		13.6	13.3	15.3	12.6			

O. Reg. 153 - Soil, Ground Water and Sediment Standards
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P.O. NUMBER: 101987.001

SAMPLE MATRIX: Soil

WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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SAMPLE MATRIX: Soil

P.O. NUMBER: 101987.001

WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
SVOC	1	Kingston	esi	15-Feb-23	C-NAB-S-001 (k)	EPA 8270

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg

F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)

F2 C10-C16 hydrocarbons in µg/g, (F2-naph if requested)

F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)

F4 C34-C50 hydrocarbons in µg/g

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

Any deviations from the method are noted and reported for any particular sample.

nC6 and nC10 response factor is within 30% of response factor for toluene:

nC10, nC16 and nC34 response factors within 10% of each other:

C50 response factors within 70% of nC10+nC16+nC34 average:

Linearity is within 15%:

All results expressed on a dry weight basis.

Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC

requirements and limits for holding time were met.

If analyzed for F4 and F4G they are not to be summed

but the greater of the two numbers are to be used in

application to the CWS PHC

QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards

Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

P.O. NUMBER: 101987.001

SAMPLE MATRIX: Soil

WATERWORKS NO.

Parameter	Units	R.L.	Client I.D. Sample I.D. Date Collected	O. Reg. 153 Tbl. 1 - All			
				BH23-E1 SA1 B23-01879-1 08-Feb-23			
Acenaphthene	µg/g	0.05	< 0.05				0.072
Acenaphthylene	µg/g	0.05	< 0.05				0.093
Anthracene	µg/g	0.05	< 0.05				0.16
Benzo(a)anthracene	µg/g	0.05	< 0.05				0.36
Benzo(a)pyrene	µg/g	0.05	< 0.05				0.3
Benzo(b)fluoranthene	µg/g	0.05	< 0.05				0.47
Benzo(b+k)fluoranthene	µg/g	0.05	< 0.05				
Benzo(g,h,i)perylene	µg/g	0.05	< 0.05				0.68
Benzo(k)fluoranthene	µg/g	0.05	< 0.05				0.48
Chrysene	µg/g	0.05	< 0.05				2.8
Dibenzo(a,h)anthracene	µg/g	0.05	< 0.05				0.1
Fluoranthene	µg/g	0.05	< 0.05				0.56
Fluorene	µg/g	0.05	< 0.05				0.12
Indeno(1,2,3,-cd)pyrene	µg/g	0.05	< 0.05				0.23
Methylnaphthalene,1-	µg/g	0.05	< 0.05				0.59
Methylnaphthalene,2-	µg/g	0.05	< 0.05				0.59
Methylnaphthalene 2-(1-)	µg/g	0.05	< 0.05				0.59
Naphthalene	µg/g	0.05	< 0.05				0.09
Phenanthrene	µg/g	0.05	< 0.05				0.69
Pyrene	µg/g	0.05	< 0.05				1

O. Reg. 153 - Soil, Ground Water and Sediment Standards
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SAMPLE MATRIX: Soil

WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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JOB/PROJECT NO.:

DATE REPORTED: 21-Feb-23

SAMPLE MATRIX: Soil

P.O. NUMBER: 101987.001

WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
OC Pesticides	1	Kingston	CS	17-Feb-23	C-PESTCL-01 K	EPA 8080

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg

F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)

F2 C10-C16 hydrocarbons in µg/g, (F2-naph if requested)

F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)

F4 C34-C50 hydrocarbons in µg/g

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

Any deviations from the method are noted and reported for any particular sample.

nC6 and nC10 response factor is within 30% of response factor for toluene:

nC10, nC16 and nC34 response factors within 10% of each other:

C50 response factors within 70% of nC10+nC16+nC34 average:

Linearity is within 15%:

All results expressed on a dry weight basis.

Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC

requirements and limits for holding time were met.

If analyzed for F4 and F4G they are not to be summed

but the greater of the two numbers are to be used in

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QC will be made available upon request.

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SAMPLE MATRIX: Soil

WATERWORKS NO.

Parameter	Units	R.L.	Client I.D. Sample I.D. Date Collected	O. Reg. 153 Tbl. 1 - All			
				BH23-E1 SA1 B23-01879-1 08-Feb-23			
Aldrin	µg/g	0.05	< 0.05				0.05
Chlordane (alpha)	µg/g	0.05	< 0.05				
Chlordane (Gamma)	µg/g	0.05	< 0.05				
Chlordane Total (alpha+gamma)	µg/g	0.05	< 0.05				0.05
DDD, 2,4-	µg/g	0.05	< 0.05				
DDD, 4,4-	µg/g	0.05	< 0.05				
DDD Total	µg/g	0.05	< 0.05				0.05
DDE, 2,4-	µg/g	0.05	< 0.05				
DDE, 4,4-	µg/g	0.05	< 0.05				
DDE Total	µg/g	0.05	< 0.05				0.05
DDT, 2,4-	µg/g	0.05	< 0.05				
DDT, 4,4-	µg/g	0.05	< 0.05				
DDT Total	µg/g	0.05	< 0.05				1.4
Dieldrin	µg/g	0.05	< 0.05				0.05
Lindane (Hexachlorocyclohexane, Gamma)	µg/g	0.01	< 0.01				0.01
Endosulfan I	µg/g	0.04	< 0.04				
Endosulfan II	µg/g	0.04	< 0.04				
Endosulfan I/II	µg/g	0.04	< 0.04				0.04
Endrin	µg/g	0.04	< 0.04				0.04
Heptachlor	µg/g	0.05	< 0.05				0.05
Heptachlor Epoxide	µg/g	0.05	< 0.05				0.05
Hexachlorobenzene	µg/g	0.01	< 0.01				0.01
Hexachlorobutadiene	µg/g	0.01	< 0.01				0.01
Hexachloroethane	µg/g	0.01	< 0.01				0.01

O. Reg. 153 - Soil, Ground Water and Sediment Standards
 Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun



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DATE REPORTED: 21-Feb-23

P.O. NUMBER: 101987.001

SAMPLE MATRIX: Soil

WATERWORKS NO.

	Client I.D.	BH23-E1 SA1					O. Reg. 153	
	Sample I.D.	B23-01879-1					Tbl. 1 - All	
	Date Collected	08-Feb-23						
Parameter	Units	R.L.						
Methoxychlor	µg/g	0.05	< 0.05				0.05	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
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SAMPLE MATRIX: Soil

WATERWORKS NO.

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