

T: +1 (780) 438-5522 F: +1 (780) 434-8586

E: info.Edmonton@element.com W: www.element.com

Report Transmission Cover Page

Bill To: The Black Dirt Company

Box 3130

Spruce Grove, AB, Canada

T7X 3A5

Project Location: LSD:

Attn: Accounts Payable Sampled By: RYAN TOWNSEND

Company: THE BLACK DIRT COMPANY

Project ID:

Project Name:

LSD: P.O.:

Proj. Acct. code:

Lot ID: 1644520

Control Number:

Date Received: Apr 17, 2023
Date Reported: Apr 30, 2023

Report Number: 2862716

Contact	Company	Address			
Accounts Payable	The Black Dirt Company	Box 3130			
		Spruce Grove, AB T7X 3A5			
		Phone: (780) 962-8220 Fax: (780) 962-8215			
		Email: info@blackdirtcompany.com			
Delivery	<u>Format</u>	<u>Deliverables</u>			
Email - Merge	PDF	COC / Invoice			
Charlene Hinkel The Black Dirt Company		300 Saskatchewan Ave			
		Spruce Grove, AB			
		Phone: (780) 962-8220 Fax: (780) 962-8215			
		Email: charlene.hinkel@blackdirtcompany.com			
Delivery	<u>Format</u>	<u>Deliverables</u>			
Email	PDF	COC / Test Report			
Email	Standard Crosstab With Tabs	Test Report			
Email - Merge	PDF	COA			
Email - Merge	PDF	COC / Invoice			

Notes To Clients:

• Apr 21, 2023 - Clubroot and Seed Soil Count analysis was performed by a subcontract laboratory. See attached 4 page report 1158181, 1158182, 1158189, 1158182.

The information contained on this and all other pages transmitted, is intended for the addressee only and is considered confidential.

If the reader is not the intended recipient, you are hereby notified that any use, dissemination, distribution or copy of this transmission is strictly prohibited.

If you receive this transmission by error, or if this transmission is not satisfactory, please notify us by telephone.



T: +1 (780) 438-5522 F: +1 (780) 434-8586

E: info.Edmonton@element.com W: www.element.com

Analytical Report

Bill To: The Black Dirt Company

Box 3130

Spruce Grove, AB, Canada

T7X 3A5 P.O.:

Attn: Accounts Payable Sampled By: RYAN TOWNSEND

Company: THE BLACK DIRT COMPANY Project ID:

Project Name:

Project Location: LSD:

Proj. Acct. code:

Lot ID: 1644520

Control Number:

Date Received: Apr 17, 2023 Date Reported: Apr 30, 2023

Report Number: 2862716

Reference Number 1644520-4 Sample Date Apr 17, 2023 Sample Time NA

Sample Location Sample Description RR265 / GARDEN

MIX

Matrix Soil

		Matrix	Soil			
Analyte		Units	Results	Results	Results	Nominal Detectio Limit
Classification						
Organic Matter	Calculated Value	%	11.2			0.04
Carbon	Total Organic	%	5.60			0.04
Metals Strong Acid Dige:	stion					
Antimony	Strong Acid Extractable	mg/kg	0.4			0.2
Arsenic	Strong Acid Extractable	mg/kg	6.5			0.2
Barium	Strong Acid Extractable	mg/kg	139			1
Beryllium	Strong Acid Extractable	mg/kg	0.4			0.1
Cadmium	Strong Acid Extractable	mg/kg	0.20			0.01
Chromium	Strong Acid Extractable	mg/kg	9.1			0.5
Cobalt	Strong Acid Extractable	mg/kg	6.6			0.1
Copper	Strong Acid Extractable	mg/kg	20.0			1
Lead	Strong Acid Extractable	mg/kg	8.5			0.1
Mercury	Strong Acid Extractable	mg/kg	< 0.05			0.05
Molybdenum	Strong Acid Extractable	mg/kg	<1.0			1
Nickel	Strong Acid Extractable	mg/kg	14.7			0.5
Selenium	Strong Acid Extractable	mg/kg	0.45			0.3
Silver	Strong Acid Extractable	mg/kg	0.1			0.1
Thallium	Strong Acid Extractable	mg/kg	0.09			0.05
Tin	Strong Acid Extractable	mg/kg	<1.0			1
Uranium	Strong Acid Extractable	mg/kg	1.0			0.5
Vanadium	Strong Acid Extractable	mg/kg	15.0			0.1
Zinc	Strong Acid Extractable	mg/kg	70			1
Physical and Aggregate	Properties					
Texture			Loam			
Sand	50 μm - 2 mm	% by weight	46			0.1
Silt	2 μm - 50 μm	% by weight	44			0.1
Clay	<2 μm	% by weight	10			0.1
Salinity						
Electrical Conductivity	Saturated Paste	dS/m	4.76			0.01
SAR	Saturated Paste		1.5			
% Saturation		%	98			
Calcium	Saturated Paste	mg/kg	699			
Magnesium	Saturated Paste	mg/kg	132			
Sodium	Saturated Paste	mg/kg	168			
Potassium	Saturated Paste	mg/kg	221			
Chloride	Saturated Paste	mg/L	364			3
Chloride	Saturated Paste	mg/kg	356			
Sulfate (SO4)	Saturated Paste	mg/kg	1550			



T: +1 (780) 438-5522 F: +1 (780) 434-8586

E: info.Edmonton@element.com

W: www.element.com

Analytical Report

Bill To: The Black Dirt Company

Box 3130

Spruce Grove, AB, Canada

T7X 3A5

Sampled By: RYAN TOWNSEND

Attn: Accounts Payable

Company: THE BLACK DIRT COMPANY Project ID:

Project Name:

Project Location: LSD: P.O.:

Proj. Acct. code:

Lot ID: 1644520

Control Number:

Apr 17, 2023 Date Received: Date Reported: Apr 30, 2023

Report Number: 2862716

Reference Number

1644520-4 Sample Date Apr 17, 2023 Sample Time

NA

Sample Location

RR265 / GARDEN **Sample Description**

MIX

Matrix Soil

Analyte		Units	Results	Results	Results	Nominal Detection
Salinity - Continued						
Boron	Saturated Paste	mg/L	<0.5			0.05
TGR	Saturated Paste	T/ac	<0.1			
Soil Acidity						
рН	1:2 Soil:Water	рН	6.6			
рН	1:2 Soil:CaCl2 sol.	рН	7.1			
Electrical Conductivity	1:2 Soil:Water	dS/m at 25 °C	2.29			0.01
CCE	as CaCO3	%	1.27			0.2
Water Soluble Parameter	s					
Chromium (VI)	Dry Weight	mg/kg	<0.05			0.05
Subcontracted Analysis						
Subcontractor Report Id	Biovision		1158181			

Approved by:

Benjamin Morris, B.Sc

Lot ID: 1644520

Date Reported: Apr 30, 2023

Report Number: 2862716

Apr 17, 2023



Element 7217 Roper Road NW Edmonton, Alberta T6B 3J4, Canada

T: +1 (780) 438-5522 F: +1 (780) 434-8586

Control Number:

Date Received:

E: info.Edmonton@element.com

W: www.element.com

Methodology and Notes

Bill To: The Black Dirt Company

Box 3130

Spruce Grove, AB, Canada

T7X 3A5

Project Location: LSD:

Attn: Accounts Payable

Company: THE BLACK DIRT COMPANY

P.O.:

Proj. Acct. code:

Project ID:

Project Name:

Sampled By: RYAN TOWNSEND

Method of Analysis

Method Name	Reference		Method	Date Analysis Started	Location
1:5 Water Soluble Extraction	APHA	*	Colorimetric Method, 3500-Cr B	Apr 18, 2023	Element Edmonton - Roper Road
1:5 Water Soluble Extraction	McKeague	*	Soluble Salts in Extracts of 1:5 Soil:Water Mixtures, 3.23	Apr 18, 2023	Element Edmonton - Roper Road
Calcium Carbonate in Soil (Dual pH)	Comm. Soil Sci. Pl. Anal.	*	Improvement to Two Routine Methods for CaCO3 in Soil, Vol 28, 1997	Apr 18, 2023	Element Edmonton - Roper Road
Metals ICP (Hot Block) in soil	EPA	*	Sample Preparation Procedure for Spectrochemical Determination of Total Recoverable Elements, October 1999, 200.2	Apr 18, 2023	Element Edmonton - Roper Road
Metals ICP (Hot Block) in soil	US EPA	*	Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Apr 18, 2023	Element Edmonton - Roper Road
Particle Size Analysis - GS	Carter	*	Hydrometer Method, 55.3	Apr 17, 2023	Element Edmonton - Roper Road
pH and Conductivity in general soil 1:2	McKeague	*	1:2 Soil:Water Ratio, 4.12	Apr 18, 2023	Element Edmonton - Roper Road
pH and Conductivity in general soil 1:2	Soil & Environ. Anal.	*	Particle Size Analysis, Direct Method, Chapter 7	Apr 18, 2023	Element Edmonton - Roper Road
pH by CaCl2 (1:2 ratio) in soil	McKeague	*	pH in 0.01M Calcium Chloride, 3.11	Apr 18, 2023	Element Edmonton - Roper Road
Saturated Paste in General Soil	APHA	*	Automated Ferricyanide Method, 4500-CI-E	Apr 17, 2023	Element Edmonton - Roper Road
Saturated Paste in General Soil	Carter	*	Electrical Conductivity and Soluble Ions, Chapter 15	Apr 17, 2023	Element Edmonton - Roper Road
Sublet to Biovision	Ext. Lab		See attached test report,	Apr 18, 2023	SGS Biovision
Total Carbon, Nitrogen in Soil by Leco Combustion (VAN)	SSSA Book Series 5	*	Total Carbon, Organic Carbon, and Organic Matter, Ch 34	Apr 24, 2023	Element Vancouver

* Reference Method Modified

References

APHA Standard Methods for the Examination of Water and Wastewater

Carter Soil Sampling and Methods of Analysis.

Comm. Soil Sci. Pl. Communications in Soil Science and Plant Analysis **EPA** Environmental Protection Agency Test Methods - US

Ext. Lab **External Laboratory**

Manual on Soil Sampling and Methods of Analysis McKeague Soil & Environ. Anal. Soil and Environmental Analysis: Physical Methods

SSSA Book Series 5 Methods of Soil Analysis, Part 3

US EPA US Environmental Protection Agency Test Methods

Comments:

 Apr 21, 2023 - Clubroot and Seed Soil Count analysis was performed by a subcontract laboratory. See attached 4 page report 1158181, 1158182, 1158189, 1158182.





F: +1 (780) 434-8586 E: info.Edmonton@element.com W: www.element.com

T: +1 (780) 438-5522

Methodology and Notes

Bill To: The Black Dirt Company

Box 3130

Spruce Grove, AB, Canada

T7X 3A5

Attn: Accounts Payable

Sampled By: RYAN TOWNSEND

Company: THE BLACK DIRT COMPANY

Project ID:

Project Name:

Project Location:

LSD: P.O.:

Proj. Acct. code:

Lot ID: 1644520

Control Number:

Date Received: Apr 17, 2023 Date Reported: Apr 30, 2023 Report Number: 2862716

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.



Element (Edm) 7217 Roper Road NW Edmonton, AB CA T6B 3J4

P 780.438.5522

Work Order 1158181-01

Received 4/19/2023 Completed 4/21/2023

Tested By: SGS Canada Inc. Unit 310, 280 Portage Close Sherwood Park, Alberta T8H 2R6

P 1 (780) 436-8822 ** CFIA Acc #1172

Sample of: Soil

Designated: POC142993

Sample ID: 1644520-1, Peavey Mart Topsoil



REPORT OF ANALYSIS

*Soil Seed Analysis 50g Completed: 4/20/2023 Method ОТН

Goosefoot 4

Lamb's-quarters 4

Stinkweed 3

Canada Thistle 2

Yellow Nutsedge 1

Water Foxtail 1

Completed: 4/21/2023 *Clubroot Pathogen (DNA) Method OTH

Plasmodiophora brassicae (DNA) Not Detected (LOD: 1000 Spores per gram soil)

1. Method(s) used for promoting germination of dormant seed

*Advisory test - - Method not CFIA M&P prescribed

"Accredited by CFIA to conduct tests in accordance with the laboratory's scope of accreditation and the Canadian Methods and Procedures for Testing Seed

This document is issued by the Company under its General Conditions of Service accessible at https://www.sgs.com/en/terms-and-conditions. Attention is drawn to the limitation of liability, indemnification, and jurisdiction issued defined therein. Any other holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention and only within the limit of the Client's instructions, if any unauthorized attention, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Work Order 1158181-01 Sample of Soil Page 1



Element (Edm) 7217 Roper Road NW Edmonton, AB CA T6B 3J4

P 780.438.5522

Work Order 1158182-01

Received 4/19/2023 Completed 4/21/2023

Tested By: SGS Canada Inc. Unit 310, 280 Portage Close Sherwood Park, Alberta T8H 2R6

P 1 (780) 436-8822 ** CFIA Acc #1172

Sample of: Soil

Designated: POC142993

Sample ID: 1644520-2, West Wind Topsoil



REPORT OF ANALYSIS

*Soil Seed Analysis 50g	Completed: 4/20/2023		Method	ОТН
-------------------------	----------------------	--	--------	-----

None Found 0

*Clubroot Pathogen (DNA)	Completed: 4/21/2023		Method	ОТН
--------------------------	----------------------	--	--------	-----

Plasmodiophora brassicae (DNA) Not Detected (LOD: 1000 Spores per gram soil)

1. Method(s) used for promoting germination of dormant seed

*Advisory test - - Method not CFIA M&P prescribed

*Accredited by CFIA to conduct tests in accordance with the laboratory's scope of accreditation and the Canadian Methods and Procedures for Testing Seed

This document is issued by the Company under its General Conditions of Service accessible at https://www.sgs.com/en/terms-and-conditions. Attention is drawn to the limitation of liability, indemnification, and jurisdiction issued defined therein. Any other holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention and only within the limit of the Client's instructions, if any unauthorized attention, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Sample of Soil Work Order 1158182-01 Page 1



Element (Edm) 7217 Roper Road NW Edmonton, AB CA T6B 3J4

P 780.438.5522

Work Order 1158189-01

Received 4/19/2023 Completed 4/21/2023

Tested By: SGS Canada Inc. Unit 310, 280 Portage Close Sherwood Park, Alberta T8H 2R6

P 1 (780) 436-8822 ** CFIA Acc #1172

Sample of: Soil

Designated: POC142993

Sample ID: 1644520-3, Fairways Topsoil



REPORT OF ANALYSIS

*Soil Seed Analysis 50g	Completed: 4/20/2023		Method	ОТН
-------------------------	----------------------	--	--------	-----

Lamb's-quarters 1

*Clubroot Pathogen (DNA) **OTH** Completed: 4/21/2023 Method

Plasmodiophora brassicae (DNA) Not Detected (LOD: 1000 Spores per gram soil)

1. Method(s) used for promoting germination of dormant seed

*Advisory test - - Method not CFIA M&P prescribed

"Accredited by CFIA to conduct tests in accordance with the laboratory's scope of accreditation and the Canadian Methods and Procedures for Testing Seed

This document is issued by the Company under its General Conditions of Service accessible at https://www.sgs.com/en/terms-and-conditions. Attention is drawn to the limitation of liability, indemnification, and jurisdiction issued defined therein. Any other holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention and only within the limit of the Client's instructions, if any other holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention and only within the limit of the Client's instructions, if any other holder of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Work Order 1158189-01 Sample of Soil Page 1



Element (Edm) 7217 Roper Road NW Edmonton, AB CA T6B 3J4

P 780.438.5522

Work Order 1158192-01

Received 4/19/2023 Completed 4/21/2023

Tested By: SGS Canada Inc. Unit 310, 280 Portage Close Sherwood Park, Alberta T8H 2R6

P 1 (780) 436-8822 ** CFIA Acc #1172

Sample of: Soil

Designated: POC142993

Sample ID: 1644520-4, RR 265 Garden Mix



REPORT OF ANALYSIS

*Soil Seed Analysis 50g Completed: 4/20/2023 Method **OTH**

Chickweed 3

Stinkweed 1

Papaver (Poppy) spp. 9

Lamb's-quarters 2

*Clubroot Pathogen (DNA) ОТН Completed: 4/21/2023 Method

Plasmodiophora brassicae (DNA) Not Detected (LOD: 1000 Spores per gram soil)

1. Method(s) used for promoting germination of dormant seed

*Advisory test - - Method not CFIA M&P prescribed

"Accredited by CFIA to conduct tests in accordance with the laboratory's scope of accreditation and the Canadian Methods and Procedures for Testing Seed

This document is issued by the Company under its General Conditions of Service accessible at https://www.sgs.com/en/terms-and-conditions. Attention is drawn to the limitation of liability, indemnification, and jurisdiction issued defined therein. Any other holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention and only within the limit of the Client's instructions, if any unauthorized attention, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Work Order 1158192-01 Sample of Soil Page 1