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Report Transmission Cover Page

Project ID: Bill To: The Black Dirt Company

Project Name: 300 Saskatchewan Ave Project Location: Spruce Grove, AB, Canada

LSD: Attn: Charlene Hinkel P.O.: Sampled By: Charlene Henkel

Proj. Acct. code: Company: The Black Dirt Company

Lot ID: 1484354

Control Number:

Date Received: Apr 7, 2021 Date Reported: May 7, 2021 Report Number: 2620906

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
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email - Single Report	PDF	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.
Delivery	<u>Format</u>	<u>Deliverables</u>
Email - Merge Reports	PDF	COC / Test Report
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice

Notes To Clients:

- Apr 12, 2021 Weed seed analysis was performed by a subcontract laboratory. See attached 5 page report 1114468-01
- Apr 12, 2021 Weed seed analysis was performed by a subcontract laboratory. See attached 1 page report 1114469-01
- Apr 12, 2021 Weed seed analysis was performed by a subcontract laboratory. See attached 1 page report 1114470-01
- Apr 16, 2021 Caution Note for Clubroot analysis on identified samples: Although results are below the method detection limits (1000 spores/g), DNA amplification was measured, suggesting low concentrations of pathogen spores may be present. Caution should be taken with the results of this sample and confirmatory resampling is suggested.
- Apr 20, 2021 Report was issued to include missed services :

PS1 service requested on sample(s) 1, 2, 3, 4, 5, 6, 7.

Previous report 2610405.

• May 07, 2021 - Report was reissued to report each sample on thier own report as requested by Charlene Hinkel Previous report 2614789.

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Analytical Report

Bill To: The Black Dirt Company

300 Saskatchewan Ave

Spruce Grove, AB, Canada

Attn: Charlene Hinkel
Sampled By: Charlene Henkel

Company: The Black Dirt Company

Project ID:

Project Name: Project Location:

LSD:

P.O.:

Proj. Acct. code:

Lot ID: 1484354

Control Number:

Date Received: Apr 7, 2021
Date Reported: May 7, 2021
Report Number: 2620906

Reference Number 1484354-1 Sample Date Apr 07, 2021 Sample Time NA

Sample Location

Sample Description Fenwyk (Topsoil)

Matrix Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Dige	stion					
Boron	Saturated Paste	mg/L	<0.5			0.05
Antimony	Strong Acid Extractable	mg/kg	0.3			0.2
Arsenic	Strong Acid Extractable	mg/kg	7.2			0.2
Barium	Strong Acid Extractable	mg/kg	175			1
Beryllium	Strong Acid Extractable	mg/kg	0.5			0.1
Cadmium	Strong Acid Extractable	mg/kg	0.35			0.01
Chromium	Strong Acid Extractable	mg/kg	12.8			0.5
Cobalt	Strong Acid Extractable	mg/kg	8.7			0.1
Copper	Strong Acid Extractable	mg/kg	15.8			1
Lead	Strong Acid Extractable	mg/kg	9.6			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	20.0			0.5
Selenium	Strong Acid Extractable	mg/kg	0.8			0.3
Silver	Strong Acid Extractable	mg/kg	<0.10			0.1
Thallium	Strong Acid Extractable	mg/kg	0.14			0.05
Tin	Strong Acid Extractable	mg/kg	<1.0			1
Uranium	Strong Acid Extractable	mg/kg	2.0			0.5
Vanadium	Strong Acid Extractable	mg/kg	23.6			0.1
Zinc	Strong Acid Extractable	mg/kg	77			1
Physical and Aggregate	Properties					
Texture			Clay Loam			
Sand	50 μm - 2 mm	% by weight	22			0.1
Silt	2 μm - 50 μm	% by weight	50			0.1
Clay	<2 μm	% by weight	28			0.1
Salinity						
Electrical Conductivity	Saturated Paste	dS/m	2.40			0.01
SAR	Saturated Paste		0.4			
% Saturation		%	64			
Calcium	Saturated Paste	mg/kg	343			
Magnesium	Saturated Paste	mg/kg	45			
Sodium	Saturated Paste	mg/kg	26			
Potassium	Saturated Paste	mg/kg	14			
Chloride	Saturated Paste	mg/L	27			2
Chloride	Saturated Paste	mg/kg	17			
Sulfate (SO4)	Saturated Paste	mg/kg	560			
TGR	Saturated Paste	T/ac	<0.1			
Soil Acidity						
рН	1:2 Soil:Water	рН	7.7			



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300 Saskatchewan Ave

Spruce Grove, AB, Canada

Attn: Charlene Hinkel Sampled By: Charlene Henkel

Company: The Black Dirt Company

Project ID:

Project Name: **Project Location:**

LSD: P.O.:

Proj. Acct. code:

Lot ID: 1484354

Control Number:

Date Received: Apr 7, 2021 Date Reported: May 7, 2021

Report Number: 2620906

Reference Number

1484354-1 Apr 07, 2021 Sample Date Sample Time

NA

Sample Location

Sample Description Fenwyk (Topsoil)

Matrix

Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Soil Acidity - Continued						
рН	1:2 Soil:CaCl2 sol.	рН	7.9			
Electrical Conductivity	1:2 Soil:Water	dS/m at 25 °C	0.45			0.01
Water Soluble Parameters						
Chromium (VI)	Dry Weight	mg/kg	< 0.05			0.05
Clubroot Analysis						
Plasmodiophora brassicae	Clubroot Pathogen	spores/g	<1000			1000
Plasmodiophora brassicae	Detected/ Not Detected	spores/g	Not Detected			1000
Subcontracted Analysis						
Subcontractor Report Id	Biovision		1114468-01			

Approved by:

Anthony Neumann, MSc General Manager

Anthony Weuman

Lot ID: 1484354

Apr 7, 2021



Element 7217 Roper Road NW Edmonton, Alberta T6B 3J4, Canada T: +1 (780) 438-5522 F: +1 (780) 434-8586

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Methodology and Notes

Bill To: The Black Dirt Company Project ID:

300 Saskatchewan Ave Project Name: Control Number:

Spruce Grove, AB, Canada Project Location: Date Received:

Attn: Charlene Hinkel LSD: Date Reported: May 7, 2021
Sampled By: Charlene Henkel P.O.: Report Number: 2620906

Company: The Black Dirt Company Proj. Acct. code:

Method of Analysis

Method Name	Reference		Method	Date Analysis Started	Location
1:5 Water Soluble Extraction	APHA	*	Colorimetric Method, 3500-Cr B	Apr 8, 2021	Element Edmonton - Roper Road
1:5 Water Soluble Extraction	McKeague	*	Soluble Salts in Extracts of 1:5 Soil:Water Mixtures, 3.23	Apr 8, 2021	Element Edmonton - Roper Road
Clubroot	Plant Path	*	Wallenhammer et al 2012. In-Field distribution of Plasmodiophora brassicae measured using real-time PCR., Plant Pathology	Apr 16, 2021	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 8, 2021	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 8, 2021	Element Edmonton - Roper Road
Particle Size Analysis - GS	Carter	*	Hydrometer Method, 55.3	Apr 21, 2021	Element Edmonton - Roper Road
pH and Conductivity in general soil 1:2	McKeague	*	1:2 Soil:Water Ratio, 4.12	Apr 8, 2021	Element Edmonton - Roper Road
pH and Conductivity in general soil 1:2	Soil & Environ. Anal.	*	Particle Size Analysis, Direct Method, Chapter 7	Apr 8, 2021	Element Edmonton - Roper Road
pH by CaCl2 (1:2 ratio) in soil	McKeague	*	pH in 0.01M Calcium Chloride, 3.11	Apr 8, 2021	Element Edmonton - Roper Road
Saturated Paste in General Soil	APHA	*	Automated Ferricyanide Method, 4500-CI-E	Apr 8, 2021	Element Edmonton - Roper Road
Saturated Paste in General Soil	Carter	*	Electrical Conductivity and Soluble Ions, Chapter 15	Apr 8, 2021	Element Edmonton - Roper Road
Sublet to Biovision	Ext. Lab		See attached test report,	Apr 8, 2021	SGS Biovision

* Reference Method Modified

References

APHA Standard Methods for the Examination of Water and Wastewater

Carter Soil Sampling and Methods of Analysis.

EPA Environmental Protection Agency Test Methods - US

Ext. Lab External Laboratory

McKeague Manual on Soil Sampling and Methods of Analysis

Plant Path Plant Pathology

Soil & Environ. Anal. Soil and Environmental Analysis: Physical Methods US EPA US Environmental Protection Agency Test Methods

Comments:

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Previous report 2610405.

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Previous report 2614789.

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

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.



Element (Edm) 2395 Speakman Dr. Mississauga, ON CA L5K 1B3

P (905) 822-4111

Lamb's-quarters 1

E info.Edmonton@element.com

Work Order 1114468-01

Received 4/9/2021 Completed 4/12/2021

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: POC103611 Sample ID: 1484354-1 ASSOCIATE MEMBER OF



REPORT OF ANALYSIS

*Soil Seed Analysis 50g Completed: 4/9/2021 Method OTH

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



Element (Edm) 2395 Speakman Dr. Mississauga, ON CA L5K 1B3

P (905) 822-4111

E info.Edmonton@element.com

Work Order 1114471-01

Received 4/9/2021 Completed 4/12/2021

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: POC103611 Sample ID: 1484354-4

ASSOCIATE MEMBER OF



REPORT OF ANALYSIS

*Soil Seed Analysis 50g

Lamb's-quarters 2 Green Foxtail 1

Papaver (Poppy) spp. 1

Completed: 4/9/2021

Method

ОТН



Element (Edm) 2395 Speakman Dr. Mississauga, ON CA L5K 1B3

P (905) 822-4111

E info.Edmonton@element.com

Work Order 1114472-01

Received 4/9/2021 Completed 4/12/2021

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: POC103611 **Sample ID:** 1484354-5

ASSOCIATE MEMBER OF



REPORT OF ANALYSIS

*Soil Seed Analysis 50g Completed: 4/9/2021 Method ОТН

Lamb's-quarters 1

Barnyardgrass 1

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



Element (Edm) 2395 Speakman Dr. Mississauga, ON CA L5K 1B3

P (905) 822-4111

E info.Edmonton@element.com

Work Order 1114473-01

Received 4/9/2021 Completed 4/12/2021

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: POC103611 Sample ID: 1484354-6

ASSOCIATE MEMBER OF



REPORT OF ANALYSIS

*Soil Seed Analysis 50g Completed: 4/9/2021 Method ОТН

chickweed 1

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



Element (Edm) 2395 Speakman Dr. Mississauga, ON CA L5K 1B3

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Work Order 1114474-01

Received 4/9/2021 Completed 4/12/2021

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: POC103611 Sample ID: 1484354-7

ASSOCIATE MEMBER OF



REPORT OF ANALYSIS

*Soil Seed Analysis 50g

Goosefoot 1

Lamb's-quarters 2

Cinquefoil 2

Sedge 1

Completed: 4/9/2021

Method

ОТН



Element (Edm) 2395 Speakman Dr. Mississauga, ON CA L5K 1B3

P (905) 822-4111

E info.Edmonton@element.com

Work Order 1114469-01

Received 4/9/2021 Completed 4/12/2021

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: POC103611 Sample ID: 1484354-2

ASSOCIATE MEMBER OF



A-065 JANEK BARTEL

REPORT OF ANALYSIS

*Soil Seed Analysis 50g Completed: 4/12/2021 Method ОТН

None Found 0

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



Element (Edm) 2395 Speakman Dr. Mississauga, ON CA L5K 1B3

P (905) 822-4111

E info.Edmonton@element.com

Work Order 1114470-01

Received 4/9/2021 Completed 4/12/2021

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: POC103611 Sample ID: 1484354-3

ASSOCIATE MEMBER OF



A-065 JANEK BARTEL

REPORT OF ANALYSIS

*Soil Seed Analysis 50g Completed: 4/12/2021 Method ОТН

None Found 0

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

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