

Report Transmission Cover Page

Bill To: The Black Dirt Company 300 Saskatchewan Ave Spruce Grove, AB, Canada	Project ID: Project Name: Project Location:	Lot ID: 1588677
Attn: Charlene Hinkel	LSD:	Control Number:
Sampled By: Ryan Townsend	P.O.:	Date Received: Jul 29, 2022
Company: The Black Dirt Company	Proj. Acct. code:	Date Reported: Aug 16, 2022
		Report Number: 2772653

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	Format	Deliverables
Email - Single Deliverable	PDF	Invoice

Contact	Company	Address
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	Format	Deliverables
Email - Merge Deliverables	PDF	COC / Test Report
Email - Single Deliverable	PDF	COA
Email - Single Deliverable	PDF	Invoice

Notes To Clients:

- Aug 03, 2022 - Weed seed analysis was performed by a subcontract laboratory. See attached 1 page report 1137851-01.

Analytical Report

Bill To: The Black Dirt Company 300 Saskatchewan Ave Spruce Grove, AB, Canada	Project ID: Project Name: Project Location:	Lot ID: 1588677 Control Number: Date Received: Jul 29, 2022 Date Reported: Aug 16, 2022 Report Number: 2772653
Attn: Charlene Hinkel Sampled By: Ryan Townsend Company: The Black Dirt Company	LSD: P.O.: Proj. Acct. code:	

Reference Number	1588677-1
Sample Date	Jul 27, 2022
Sample Time	NA
Sample Location	
Sample Description	Peavey Mart / Topsoil
Matrix	Soil

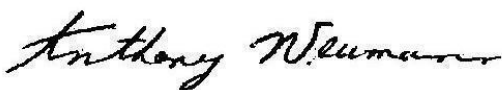
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Classification					
Organic Matter	Calculated Value	%	29.1		0.04
Carbon	Total Organic	%	14.54		0.04
Metals Strong Acid Digestion					
Boron	Saturated Paste	mg/L	0.8		0.05
Antimony	Strong Acid Extractable	mg/kg	<0.2		0.2
Arsenic	Strong Acid Extractable	mg/kg	5.9		0.2
Barium	Strong Acid Extractable	mg/kg	170		1
Beryllium	Strong Acid Extractable	mg/kg	0.3		0.1
Cadmium	Strong Acid Extractable	mg/kg	0.32		0.01
Chromium	Strong Acid Extractable	mg/kg	6.0		0.5
Cobalt	Strong Acid Extractable	mg/kg	5.7		0.1
Copper	Strong Acid Extractable	mg/kg	8.9		1
Lead	Strong Acid Extractable	mg/kg	6.6		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	13.8		0.5
Selenium	Strong Acid Extractable	mg/kg	0.6		0.3
Silver	Strong Acid Extractable	mg/kg	<0.10		0.1
Thallium	Strong Acid Extractable	mg/kg	0.08		0.05
Tin	Strong Acid Extractable	mg/kg	<1.0		1
Uranium	Strong Acid Extractable	mg/kg	4.4		0.5
Vanadium	Strong Acid Extractable	mg/kg	10.6		0.1
Zinc	Strong Acid Extractable	mg/kg	51		1
Physical and Aggregate Properties					
Texture			Silt Loam		
Sand	50 µm - 2 mm	% by weight	25		0.1
Silt	2 µm - 50 µm	% by weight	52		0.1
Clay	<2 µm	% by weight	23		0.1
Salinity					
Electrical Conductivity	Saturated Paste	dS/m	3.55		0.01
SAR	Saturated Paste		0.5		
% Saturation		%	137		
Calcium	Saturated Paste	mg/kg	1000		
Magnesium	Saturated Paste	mg/kg	195		
Sodium	Saturated Paste	mg/kg	85		
Potassium	Saturated Paste	mg/kg	20		
Chloride	Saturated Paste	mg/L	24		3
Chloride	Saturated Paste	mg/kg	32		

Analytical Report

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Reference Number	1588677-1
Sample Date	Jul 27, 2022
Sample Time	NA
Sample Location	
Sample Description	Peavey Mart / Topsoil
Matrix	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Salinity - Continued						
Sulfate (SO4)	Saturated Paste	mg/kg	2470			
TGR	Saturated Paste	T/ac	<0.1			
Soil Acidity						
pH	1:2 Soil:Water	pH	7.5			
pH	1:2 Soil:CaCl2 sol.	pH	7.7			
Electrical Conductivity	1:2 Soil:Water	dS/m at 25 °C	2.60			0.01
CCE	as CaCO3	%	17.30			0.2
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		1137851-01			

Approved by: 
Anthony Neumann, MSc
General Manager

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: The Black Dirt Company 300 Saskatchewan Ave Spruce Grove, AB, Canada	Project ID: Project Name: Project Location:	Lot ID: 1588677
Attn: Charlene Hinkel	LSD:	Control Number:
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		Report Number: 2772653

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
1:5 Water Soluble Extraction	APHA	* Colorimetric Method, 3500-Cr B	Aug 5, 2022	Element Edmonton - Roper Road
1:5 Water Soluble Extraction	McKeague	* Soluble Salts in Extracts of 1:5 Soil:Water Mixtures, 3.23	Aug 5, 2022	Element Edmonton - Roper Road
Calcium Carbonate in Soil (Dual pH)	Comm. Soil Sci. Pl. Anal.	* Improvement to Two Routine Methods for CaCO ₃ in Soil, Vol 28, 1997	Aug 9, 2022	Element Edmonton - Roper Road
Clubroot	Plant Path	* Wallenhammer et al 2012. In-Field distribution of Plasmodiophora brassicae measured using real-time PCR., Plant Pathology	Aug 2, 2022	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	Aug 1, 2022	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	Aug 1, 2022	Element Edmonton - Roper Road
Particle Size Analysis - GS	Carter	* Hydrometer Method, 55.3	Aug 2, 2022	Element Edmonton - Roper Road
pH and Conductivity in general soil 1:2	McKeague	* 1:2 Soil:Water Ratio, 4.12	Aug 2, 2022	Element Edmonton - Roper Road
pH and Conductivity in general soil 1:2	Soil & Environ. Anal.	* Particle Size Analysis, Direct Method, Chapter 7	Aug 2, 2022	Element Edmonton - Roper Road
pH by CaCl ₂ (1:2 ratio) in soil	McKeague	* pH in 0.01M Calcium Chloride, 3.11	Aug 2, 2022	Element Edmonton - Roper Road
Saturated Paste in General Soil	APHA	* Automated Ferricyanide Method, 4500-Cl-E	Aug 2, 2022	Element Edmonton - Roper Road
Saturated Paste in General Soil	Carter	* Electrical Conductivity and Soluble Ions, Chapter 15	Aug 2, 2022	Element Edmonton - Roper Road
Sublet to Biovision	Ext. Lab	See attached test report,	Jul 29, 2022	SGS Biovision
Total Carbon, Nitrogen in Soil by Leco Combustion (VAN)	SSSA Book Series 5	* Total Carbon, Organic Carbon, and Organic Matter, Ch 34	Aug 9, 2022	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
McKeague	Manual on Soil Sampling and Methods of Analysis
Plant Path	Plant Pathology
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

Methodology and Notes

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Comments:

- Aug 03, 2022 - Weed seed analysis was performed by a subcontract laboratory. See attached 1 page report 1137851-01.

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.

Submitted By:
 Element (Edm)
 7217 Roper Road NW
 Edmonton, AB CA T6B 3J4
 P 780.438.5522

Tested By: SGS Canada Inc.
 Unit 310, 280 Portage Close
 Sherwood Park, Alberta T8H 2R6
 P 1 (780) 436-8822
 ** CFIA Acc #1172

Professional Member



Sample of: Soil
Designated: POC138468
Sample ID: 1588677-1, The Black Dirt - Peavey Mart Topsoil.

REPORT OF ANALYSIS

*Soil Seed Analysis 50g	Completed: 8/2/2022		Method OTH
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Lamb's-quarters 4
 Goosefoot 2
 Stinkweed 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

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Project Information

Project ID: _____
 Project Name: _____
 Project Location: _____
 Legal Location: _____
 PO/A/E#: _____
 Proj. Acct. Code: _____
 Quote #: _____

Invoice To

Company: The Black Dirt Company
 Address: 300 Saskatchewan Avenue
 Attention: Charlene Hinkel
 Phone: 780-962-8220
 Cell: 780-616-3566
 Fax: 780-962-8215
 E-mail: charlene.hinkel@blackdirtcompany.com
 Agreement ID: _____
 Copy of Report: YES / NO

Report To

Company: The Black Dirt Company
 Address: 300 Saskatchewan Avenue
 Attention: Charlene Hinkel
 Phone: 780-962-8220
 Cell: 780-616-3566
 Fax: 780-962-8215
 E-mail 1: charlene.hinkel@blackdirtcompany.com
 E-mail 2: info@blackdirtcompany.com
 Copy of Invoice: YES / NO

Additional Reports to

1) Name: _____
 E-mail: _____
 2) Name: _____
 E-mail: _____
 Sample Custody
 Sampled by: Ryan Townsend
 Company: The Black Dirt Company

RUSH Priority

- Same Day (200%)
- Next Day/Two Day (100%)
- Three or Four Days (50%)
- 5 to 7 Days (Regular TAT)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required _____

Special Instructions/Comments (please include contact information including phone number if different from above).

Requirements

- Email QA/QC
- Online PDF
- Fax Excel
- HCDWORG SPIGEC
- AB Tier 1 BCCSR
- Other (list below)

Report Results

MeOH Field Preserved?	<input checked="" type="checkbox"/>
Number of Containers	1
Physical/Aggregate Properties	<input checked="" type="checkbox"/>
Salinity	<input checked="" type="checkbox"/>
Soil Acidity	<input checked="" type="checkbox"/>
Water Soluble Parameters	<input checked="" type="checkbox"/>
Club Root Analysis	<input checked="" type="checkbox"/>
Seed Count	<input checked="" type="checkbox"/>

Site I.D.	Sample Description	Depth start in cm	Depth end in cm	Date/Time sampled	Matrix	Sampling method	Enter tests above (✓ relevant samples below)
1	Peavey Mart			27-Jul-22			<input checked="" type="checkbox"/> Metals Strong Acid Digestion <input checked="" type="checkbox"/> MeOH Field Preserved? <input checked="" type="checkbox"/> Physical/Aggregate Properties <input checked="" type="checkbox"/> Salinity <input checked="" type="checkbox"/> Soil Acidity <input checked="" type="checkbox"/> Water Soluble Parameters <input checked="" type="checkbox"/> Club Root Analysis <input checked="" type="checkbox"/> Seed Count
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

Lot: 1588677 COC



Please indicate any potentially hazardous samples
 Submission of this form acknowledges acceptance of Element's Standard of terms and conditions (<https://www.element.com/terms-and-conditions>)

Page _____ of _____ Control # ED 120-005

Temp. received: 29.5°C Date/Time stamp: _____
 Delivery Method: P.A.W.S.
 Waybill: _____
 Received by: J.S.