



Remediation Monitoring

568 Gunn Road
Winnipeg, Manitoba

Prepared for:

Trademark Properties

695 Osborne Street
Winnipeg, MB R3L 2B8

October 1, 2021

Pinchin File: 293685



Remediation Monitoring
568 Gunn Road, Winnipeg, Manitoba
Trademark Properties

October 1, 2021
Pinchin File: 293685

Issued To: Trademark Properties
Issued On: October 1, 2021
Pinchin File: 293685
Issuing Office: Winnipeg, MB
Primary Pinchin Contact: Valeriy Tyshchuk, B.E.Sc., P.Eng., QP_{ESA}
Senior Project Manager
204.891.9171
vtyshchuk@pinchin.com

Author:

Mario Muan, B.Sc.
Environmental Scientist
204.250.2316
mmuan@pinchin.com

Reviewer:

Grant Eftoda, B.Sc. (Eng.)
Senior Technical Manager
204.770.8919
geftoda@pinchin.com



EXECUTIVE SUMMARY

Pinchin Ltd. (Pinchin) was retained through an Authorization to Proceed, Limit of Liability and Terms of Engagement signed by Trademark Properties (Client) to conduct a Remediation Monitoring for the property located at 568 Gunn Road in Winnipeg, Manitoba (hereafter referred to as the Site).

The Site consists of vacant land that divided into separate storage areas by chain link fences and is used for the storage of vehicles in various stages of disrepair as well as campers, trailers, and boats.

The purposes of the Remediation Monitoring were as follows:

- To address the findings of a recent Phase II Environmental Site Assessment (ESA) completed by Pinchin, which identified the presence of metals-related impacts in soil on-Site; and
- To conduct a verification soil sampling program following the removal of impacted soils to assess whether the soil at the final limits of the excavation meets the applicable regulatory criteria.

The excavation activities, which consisted of soil excavation and transportation of excavated material were conducted by Winnipeg Digger & Demolition Inc. (Winnipeg Digger) at the Site between August 25, 2021 and September 14, 2021.

Following the excavation of soil with known impacts, soil samples were collected from the floor and sidewalls at the final limits of the excavation for field screening. Based on the results of field screening, a total of eleven (13) "worst case" soil samples collected from the final limits of the excavations were submitted for laboratory analysis of metals to assess soil quality at the excavation limits.

Based on Site-specific information, the soil quality was assessed based on the Canadian Council of Ministers of the Environment (CCME) "*Environmental Quality Guidelines*" accessed on the CCME web site in September 2021 (hereafter referred to as the Soil Quality Guidelines).

Reported concentrations in the verification soil samples submitted for analysis of metals satisfied the Soil Quality Guidelines, with the exception of soil sample EX1-E1 collected from the east sidewall of Excavation 1, which had a concentration of Hot Water Soluble (HWS) boron that exceeded the Soil Quality Guidelines, and soil sample soil sample EX1-S1 collected from the south sidewall of Excavation 1, which had a concentration of HWS boron that exceeded the Soil Quality Guidelines.

The HWS boron guideline is intended to be protective of plant rooting zones and is considered for surface soils only. Due to absence of vegetation and the current use of the Site as a commercial property, the HWS boron exceedances are not considered to be an issue of potential environmental concern.



Based on the findings of the verification soil sampling program completed for the Remediation Monitoring, it is Pinchin's opinion that no further remedial work is required in relation to the metal impacts in soil at the Site.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.



TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Background.....	1
1.2	Scope of Work	2
2.0	METHODOLOGY	3
2.1	Contractors	3
2.2	Excavation Activities	3
2.2.1	Pre-Excavation Activities	3
2.2.2	Excavation Activities	3
2.2.3	Verification Soil Sampling	4
2.2.4	Excavation Backfilling	4
2.3	Analytical Laboratory	4
2.4	QA/QC Protocols	4
2.5	Regulatory Criteria.....	5
3.0	RESULTS.....	7
3.1	Excavation Limits and Site Geology	7
3.1.1	Excavation 1.....	7
3.1.2	Excavation 2.....	7
3.2	Field Observations.....	8
3.3	Analytical	8
3.4	Waste Disposal and Backfilling	8
4.0	FINDINGS AND CONCLUSIONS.....	8
5.0	TERMS AND LIMITATIONS	9

APPENDICES

APPENDIX I	Figures
APPENDIX II	Summary Tables
APPENDIX III	Photographs
APPENDIX IV	Laboratory Certificates of Analysis
APPENDIX V	Waste Manifests and Weigh Bills



FIGURES

Figure 1 – Key Map

Figure 2 – Site Plan with Excavation Locations

Figure 3 – Excavation Plan with Confirmatory Sample Locations – Excavation 1

Figure 4 – Excavation Plan with Confirmatory Sample Locations – Excavation 2

TABLES

Table 1 – Soil Samples Submitted for Laboratory Analysis

Table 2 – Metals Analysis for Soil



1.0 INTRODUCTION

Pinchin Ltd. (Pinchin) was retained through an Authorization to Proceed, Limit of Liability and Terms of Engagement signed by Trademark Properties (Client) to conduct a Remediation Monitoring for the property located at 568 Gunn Road in Winnipeg, Manitoba (hereafter referred to as the Site). The Site location is shown on Figure 1 and Figure 2 (all Figures are provided in Appendix I).

The Site consists of vacant land that divided into separate storage areas by chain link fences and is used for the storage of vehicles in various stages of disrepair as well as campers, trailers, and boats.

The purposes of the Remediation Monitoring were as follows:

- To address the findings of a recent Phase II Environmental Site Assessment (ESA) completed by Pinchin, which identified the presence of metals-related impacts in soil on-Site; and
- To conduct a verification soil sampling program following the removal of impacted soils to assess whether the soil at the final limits of the excavation meets the applicable regulatory criteria.

1.1 Background

Pinchin completed a Phase I ESA in relation to the Site, the findings of which are provided in the report entitled "*Phase I Environmental Site Assessment, 568 Gunn Road, Winnipeg, Manitoba*", prepared for Alliance Tree Care Inc., dated January 8, 2021. Based on the results of the Phase I ESA completed by Pinchin, the following was noted that could result in potential subsurface impacts at the Site:

- Potential airborne metals impacts from an industrial facility and foundry located south of the Site;
- Potential fill of unknown quality and origin observed throughout the Site in the 1979 to 1997 aerial photographs; and
- Staining associated with the storage of derelict vehicles on-Site since at least the early 2000s.

Based on the findings noted above, Pinchin recommended completing a Phase II ESA at the Site.

Pinchin completed a Phase II ESA in relation to the Site, the findings of which are provided in the report entitled "*Phase II Environmental Site Assessment, 568 Gunn Road, Winnipeg, Manitoba*", prepared for Alliance Tree Care Inc., dated March 15, 2021.

The Phase II ESA was completed at the Site by Pinchin between February 19, 2021 and February 23, 2021, and consisted of the advancement of 5 boreholes, all of which were completed as groundwater monitoring wells. All groundwater monitoring wells were dry during the Phase II ESA.



The reported concentrations of benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX), petroleum hydrocarbons (PHCs) in the F1 to F3 fraction ranges (F1-F4), volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs) and metals in the soil samples submitted for analysis met the applicable Soil Quality Guidelines, with the following exceptions:

- Soil sample BH03-01 collected at borehole BH03, which had concentrations of total chromium that exceeded the Soil Quality Guidelines; and
- Soil sample BH04-01 collected at borehole MW04, which had concentrations of total chromium that exceeded the Soil Quality Guidelines.

Pinchin also noted that soil sample BH04-01 collected at borehole MW04 had a concentration of vanadium equal to the Soil Quality Guideline.

Pinchin noted that the metal-impacted soils are not considered to present an immediate concern to human health or environment under current Site conditions and use. As such, it was Pinchin's recommendation that a Management Plan be developed for the Site and submitted to Manitoba Conservation and Climate for approval.

It is understood that the Client is the owner of the Site and preferred to remediate the metal-impacted soils, as such a Remediation Plan was required for submission to Manitoba Conservation and Climate for approval. The Remediation Plan was approved on August 19, 2021.

The location of the boreholes with identified metal impacts are presented on Figure 2.

1.2 Scope of Work

The scope of work completed by Pinchin, as outlined in the Pinchin work plan / proposal entitled "*Proposal for Remedial Plan and Remediation Monitoring, 568 Gunn Road, Winnipeg, Manitoba*", submitted to the Client on May 25, 2021, included the following:

- Underground services in the vicinity of the work area were cleared by public utility locators and a private utility locator retained by the Client;
- Collection of soil samples from the final limits of the excavation for field screening;
- Submission of select "worst case" soil samples based on the results of field screening for laboratory analysis of metals;
- Comparison of the soil laboratory analytical results to the applicable regulatory criteria; and
- Preparation of a factual report detailing the findings of the Remediation Monitoring and recommendations.



2.0 METHODOLOGY

The Remediation Monitoring and verification sampling program were conducted in general accordance with the following documents:

- Manitoba Conservation and Climate information bulletins entitled:
 - “*Contaminated Sites Remediation Regulation Reporting Requirements and Standards*”, dated October 2015.
- Canadian Council of Ministers of the Environment (CCME) publication entitled “Guidance Manual for Environmental Site Characterization in Support of Environmental and Human Health Risk Assessment – Volume 4 Analytical Methods”, dated 2016.
- Canadian Standards Association publication entitled “*Phase II Environmental Site Assessment, CSA Standard Z769-00 (R 2018)*”.
- Pinchin’s standard operating procedures (SOPs).

2.1 Contractors

The Remediation Monitoring activities were conducted by Winnipeg Digger & Demolition Inc. (Winnipeg Digger), under contract to the Client.

2.2 Excavation Activities

The Remediation Monitoring was conducted at the Site between August 25, 2021 and September 14, 2021.

2.2.1 Pre-Excavation Activities

The following activities were completed prior to conducting the excavation:

- Underground services in the vicinity of the work area were cleared by public utility locators and a private utility locator retained by the Client.

2.2.2 Excavation Activities

Upon completion of the pre-excavation activities, the following were completed by Winnipeg Digger:

- Using a track-mounted excavator, soil with previously identified impacts was excavated from the ground by Winnipeg Digger and transported directly from the Site for disposal at an approved waste disposal facility; and
- Existing monitoring wells with previously identified soil exceedances were decommissioned in conjunction with the soil excavation.



2.2.3 *Verification Soil Sampling*

Following the completion of the excavation, Pinchin documented the environmental status of the soil at the excavation limits by completing the following activities:

- Soil samples were collected directly from the sidewalls and floor of the excavation by Pinchin personnel at the frequency specified in Pinchin's SOPs; and
- Select soil samples were submitted to the laboratory for analysis of metals.

Table 1 provides a summary of the soil samples submitted for laboratory analysis (all Tables are provided in Appendix II).

2.2.4 *Excavation Backfilling*

Backfilling of the excavations were not observed by Pinchin.

2.3 Analytical Laboratory

Selected soil samples were delivered to Bureau Veritas Laboratories (BV Labs) in Winnipeg, Manitoba for analysis. BV Labs is an independent laboratory accredited by the Standards Council of Canada and the Canadian Association for Laboratory Accreditation. Formal chain of custody records of the sample submissions were maintained between Pinchin and the staff at BV Labs.

2.4 QA/QC Protocols

Various quality assurance/quality control (QA/QC) protocols were followed during the Remediation Monitoring to ensure that representative samples were obtained and that representative analytical data were reported by the laboratory.

Field QA/QC protocols that were employed by Pinchin included the following:

- Soil samples were extracted from areas not in direct contact with the excavator bucket, where possible, to minimize the potential for cross-contamination;
- Soil samples were placed in laboratory-supplied sample jars;
- Soil samples were placed in coolers on ice immediately upon collection, with appropriate sample temperatures maintained prior submission to the laboratory;
- Dedicated and disposable nitrile gloves were used for sample handling;
- Non-dedicated sampling equipment (e.g., trowel, shovel, sampling knife) was cleaned before initial use and between uses to minimize the potential for cross-contamination by washing with an Alconox™/potable water mixture followed by a deionized water rinse; and



- Sample collection and handling procedures were performed in general accordance with the *Manitoba Conservation and Climate Guidelines* and Pinchin's SOPs for excavations.

BV Labs' internal laboratory QA/QC consisted of the analysis of laboratory duplicate, method blank, matrix spike and spiked blank samples, and an evaluation of surrogate recoveries.

2.5 Regulatory Criteria

Manitoba Conservation and Climate has adopted Canadian Council of Ministers of the Environment (CCME) guidelines as the regulatory criteria applicable to soil conditions in Manitoba. Analytical results of soil samples are compared to criteria set forth in the CCME "*Environmental Quality Guidelines*" that are accessed at the CCME web site, and the CCME "*Canada-Wide Standards for Petroleum Hydrocarbons in Soil*", dated 2008. These guidelines are collectively referred to as the "CCME Soil Guidelines". For assessing soil quality parameters not included in the CCME Soil Guidelines, Manitoba Conservation and Climate has adopted the following guidelines:

- Ontario Ministry of the Environment, Conservation and Parks (MECP) "Soil, Ground water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", dated April 15, 2011 (MECP Soil Guidelines); and
- Alberta Environment and Parks (AEP) guidelines specified by the AEP document entitled "Alberta Tier 1 Soil and Groundwater Remediation Guidelines", dated January 10, 2019 (AEP Soil Guidelines).

The above guidelines have been developed using a risk-based approach. The application of the appropriate criteria is dependent upon several site-specific conditions including:

- The existing/proposed land use;
- The existing/potential groundwater use;
- Soil depth; and
- Soil texture.

Guidelines are further subdivided into the following types of protection:

- Human health guidelines; and
- Environmental health guidelines.



Within each of these categories, several pathways are listed that describe how the chemical or compound in question would come in contact with the receptor. If a pathway is not applicable to a site, or a specific area of a site, then the corresponding guideline value is not applicable. For example, if the site is covered with asphalt or concrete, access to the soil is limited and the human health guideline for soil ingestion is not applicable because there is no pathway for humans to come into contact with the soil if the cover is maintained. If future use of a site is modified, pathways that were not applicable can become applicable and need to be reassessed. Site-specific details for the evaluation of applicable pathways are as noted below.

- The Site is a commercial property and commercial land use guidelines are applicable to the Site.
- Water utilities are not present at the Site and potable water in the surrounding area is supplied by the City of Winnipeg, with Shoal Lake serving as the water source. As such, groundwater is not a potable source on-Site or in the vicinity of the Site.
- Groundwater is not used for livestock watering at the Site and the Site is located more than 30 metres from the nearest water body. Therefore, the livestock watering and freshwater aquatic life pathways are not applicable to the Site.
- Native soils at the Site are prominently comprised of fine-grained soils (clay and silt) and fine-grained guidelines are applicable to the Site.
- The human health vapour inhalation pathway is applicable within 30 centimetres (cm) of a building foundation (or proposed building foundation). For the purpose of this Remediation Monitoring, the human health vapour inhalation pathway has been considered applicable to the Site.
- The environmental health soil contact, human health ingestion, and human health dermal contact pathways are applicable in areas where access to the soil is possible (i.e., not under asphalt, concrete, or a building foundation). The areas of the Site included in this Remediation Monitoring were not hard-surfaced and, therefore, the environmental health soil contact, human health ingestion, and human health dermal contact pathways are considered to be applicable to the Site.
- The off-Site migration check, management limit, and nutrient and energy cycling checks are applicable to all areas of the Site.



Based on the above evaluation, soil analytical results have been compared to the CCME and MECP Soil Guidelines for commercial land use and fine-grained soils, excluding the protection of potable groundwater, livestock watering and freshwater aquatic life (hereafter referred to as the Soil Quality Guidelines). The above evaluation is based on Pinchin's observation of Site conditions at the time of the Remediation Monitoring. If Site conditions or use of the Site changes in the future, the applicable pathways should be re-evaluated.

3.0 RESULTS

The following subsections present the results of the Remediation Monitoring. Photographs depicting various aspects of the Remediation Monitoring work are included in Appendix III.

3.1 Excavation Limits and Site Geology

3.1.1 Excavation 1

The final excavation was roughly square in shape (refer to Figure 3) and measured approximately 5 metres long by 5 metres wide, and extended to a depth of 1.5 metres below ground surface (mbgs).

Based on observations of soil conditions during the Remediation Monitoring activities, the soil stratigraphy within the excavation below the gravel surface generally consisted of fill material comprised of brown gravel, sand, silt, and debris followed by brown to grey silty clay, gravel and debris to a depth of approximately 1 mbgs.

Native subsurface material underlying the fill material was observed to generally consist of brown silty clay that extended to the maximum excavation depth of 1.5 mbgs.

3.1.2 Excavation 2

The final excavation was roughly square in shape (refer to Figure 4) and measured approximately 5 metres long by 5 metres wide, and extended to a depth of 1 mbgs.

Based on observations of soil conditions during the Remediation Monitoring activities, the soil stratigraphy within the excavation below the gravel surface generally consisted of fill material comprised of brown gravel, sand, silt, and debris followed by brown to grey silty clay, gravel and debris to a depth of approximately 1 mbgs.

Native subsurface material underlying the fill material was not observed in Excavation 2, however, based on the soil stratigraphy in Excavation 1, native subsurface material underlying the fill material was observed to generally consist of brown silty clay that extended to 1.5 mbgs.



3.2 Field Observations

No odours, staining or evidence of non-aqueous phase liquids or sheen were observed during the excavation activities.

3.3 Analytical

As indicated in Table 2, reported concentrations of metals in the soil samples that were collected from the final limits of the excavation, and submitted for analysis met the Soil Quality Guidelines, with the following exceptions:

- Soil sample EX1-E1 collected from the east sidewall of Excavation 1 exceeded the Soil Quality Guidelines for Hot Water Soluble (HWS) boron (2.2 milligrams per kilogram (mg/kg) vs. the Soil Quality Guideline of 2 mg/kg); and
- Soil sample EX1-S1 collected from the south sidewall of Excavation 1 exceeded the Soil Quality Guidelines for HWS boron (3.1 mg/kg vs. the Soil Quality Guideline of 2 mg/kg).

The soil represented by sample EX1-F1 was subsequently excavated and removed for off-Site disposal. Additional verification soil samples collected following removal of this soil met the Soil Quality Guidelines.

The HWS boron guideline is intended to be protective of plant rooting zones and is considered for surface soils only. Due to absence of vegetation and the current use of the Site as a commercial property, the HWS boron exceedances are not considered to be an issue of potential environmental concern.

The laboratory Certificates of Analysis for the soil samples are provided in Appendix IV.

3.4 Waste Disposal and Backfilling

Based on information provided by the Client, approximately 150 tonnes of impacted soil were removed by Winnipeg Digger for disposal as non-hazardous waste at the MidCanada Environmental Services Ltd. facility in Ile des Chenes, Manitoba. The soil disposal tickets are presented in Appendix V.

Backfilling of the excavations was not observed by Pinchin.

4.0 FINDINGS AND CONCLUSIONS

Based on the work completed, the following is a summary of the activities and findings of this Remediation Monitoring:

- The Remediation Monitoring was conducted at the Site between August 25, 2021 and September 14, 2021;
- A total of 149.05 tonnes of impacted soil were excavated for off-Site disposal at an approved waste disposal facility;



- The soil stratigraphy observed during the excavation activities consisted of brown gravel, sand, silt, and debris followed by brown to grey silty clay, gravel and debris fill material to a depth of approximately 1 mbgs overlying native soil comprised of brown silty clay that extended to the maximum excavation depth of 1.5 mbgs;
- Based on Site specific information, the soil quality was assessed based on the CCME and MECP Soil Guidelines for commercial land use and fine-grained soils, excluding the protection of potable groundwater, livestock watering and freshwater aquatic life (hereafter referred to as the Soil Quality Guidelines);
- Following the removal of impacted soils, Pinchin conducted a verification soil sampling and analysis program that included the collection of soil samples for field screening from the excavation floor and sidewalls at the final limits of the excavation. Based on the results of field screening, 13 “worst case” soil samples collected from the final limits of the excavations were submitted for laboratory analysis of metals;
- Reported concentrations in the soil samples submitted for analysis of metals satisfied their respective Soil Quality Guidelines, with the exception of soil sample EX1-E1 collected from the east sidewall of Excavation 1, which had a concentration of HWS boron that exceeded the Soil Quality Guidelines, and soil sample EX1-S1 collected from the south sidewall of Excavation 1, which had a concentration of HWS boron that exceeded the Soil Quality Guidelines; and
- The HWS boron guideline is intended to be protective of plant rooting zones and is considered for surface soils only. Due to absence of vegetation and the current use of the Site as a commercial property, the HWS boron exceedances are not considered to be an issue of potential environmental concern.

Based on the findings of the verification soil sampling program completed for the Remediation Monitoring, it is Pinchin’s opinion that no further remedial work is required in relation to the metal impacts in soil at the Site.

5.0 TERMS AND LIMITATIONS

This Remediation Monitoring was performed for Trademark Properties (Client) in order to identify current and/or recognized environmental conditions at 568 Gunn Road in Winnipeg, Manitoba (Site). The term recognized environmental condition means the presence or likely presence of any hazardous substance on a property under conditions that indicate an existing release, past release, or a material threat of a release of a hazardous substance into structures on the property or into the ground, groundwater, or surface water of the property. This Remediation Monitoring does not quantify the extent of the current and/or recognized environmental condition or the cost of any remediation.



Conclusions derived are specific to the immediate area of study and cannot be extrapolated extensively away from sample locations. Samples have been analysed for a limited number of contaminants that are expected to be present at the Site, and the absence of information relating to a specific contaminant does not indicate that it is not present.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions on a property. Performance of this Remediation Monitoring to the standards established by Pinchin is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions on the Site and recognizes reasonable limits on time and cost.

This Remediation Monitoring was performed in general compliance with currently acceptable practices for environmental site investigations, and specific Client requests, as applicable to this Site.

This report was prepared for the exclusive use of the Client, subject to the terms, conditions and limitations contained within the duly authorized proposal for this project. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

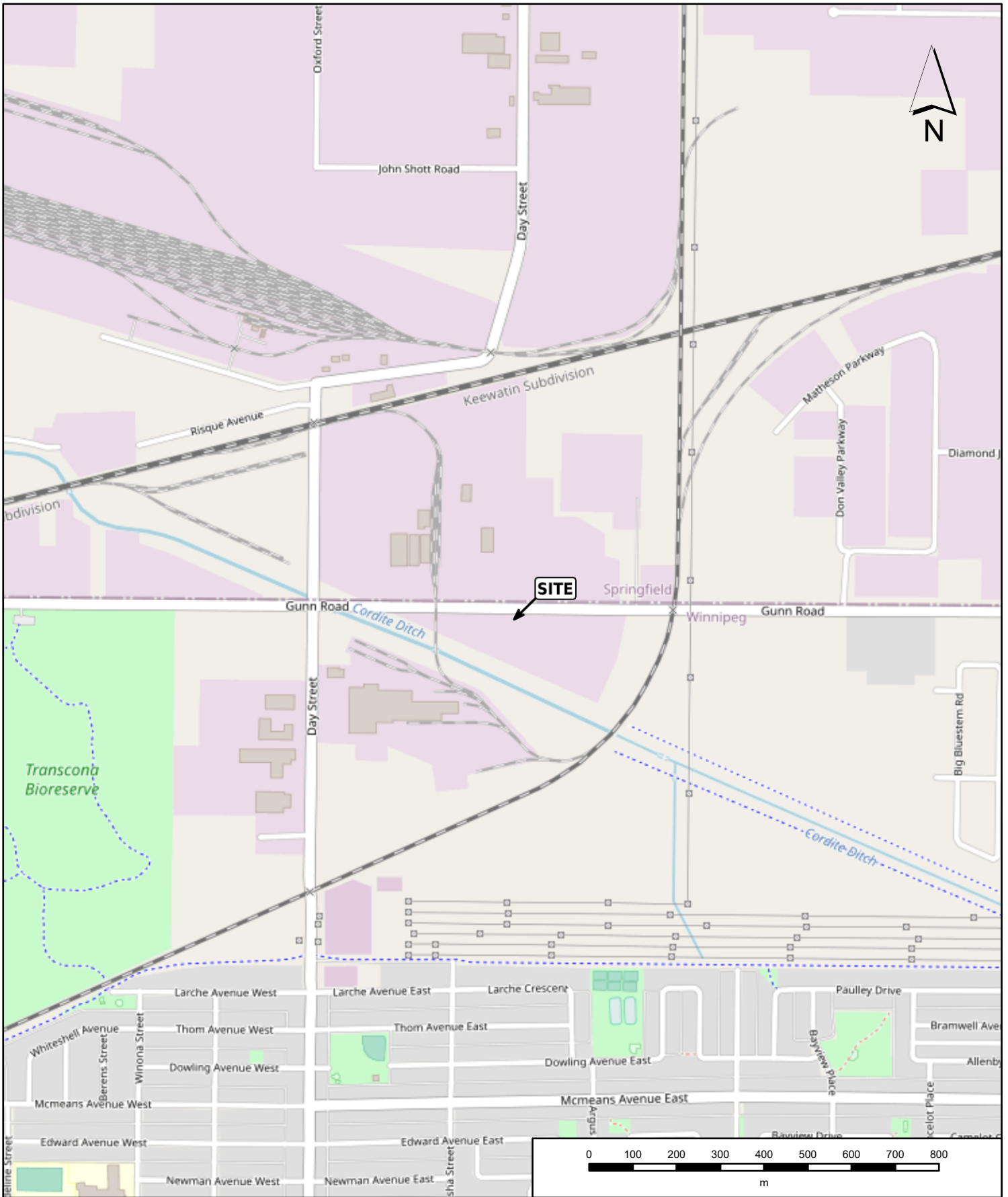
If additional parties require reliance on this report, written authorization from Pinchin will be required. Pinchin disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs. No other warranties are implied or expressed. Furthermore, this report should not be construed as legal advice. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law.

Pinchin makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and these interpretations may change over time.

\\pinchin.com\wpg\Job\293000s\0293685.000 TrademarkBuilders,568GunnRd,Wpg,DDIL,Rem\Deliverables\REPORT\293685 Report Remediation Monitoring 568 Gunn Rd Winnipeg, MB Trademark Prop October 1, 2021.docx

Template: Master Report for Remedial Excavation, EDR, July 14, 2019

APPENDIX I
Figures



PROJECT NAME:		REMEDATION MONITORING	
CLIENT NAME:		TRADEMARK PROPERTIES	
PROJECT LOCATION:		568 GUNN ROAD, WINNIPEG, MANITOBA	
FIGURE NAME:		KEY MAP	
PROJECT NUMBER:	SCALE:	DRAWN BY:	REVIEWED BY:
293685	1:18,000	MBM	GEE
DATE:			FIGURE NUMBER
SEPTEMBER 2021			1



GUNN ROAD

EXCAVATION 2

MW04

EXCAVATION 1

MW03



- LEGEND**
- - - SITE BOUNDARY
 - BOREHOLE WITH IDENTIFIED EXCEEDANCES
 - - - EXCAVATION

LEGEND IS COLOUR DEPENDENT.
NON-COLOUR COPIES MAY ALTER INTERPRETATION.



PROJECT NAME:
REMEDATION MONITORING

CLIENT NAME:
TRADEMARK PROPERTIES

PROJECT LOCATION:
568 GUNN ROAD,
WINNIPEG, MANITOBA

FIGURE NAME:
SITE PLAN
WITH EXCAVATION LOCATIONS

PROJECT NUMBER:
293685

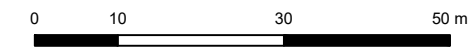
SCALE:
AS SHOWN

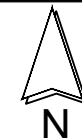
DRAWN BY:
MBM

REVIEWED BY:
GEE

DATE:
SEPTEMBER 2021

FIGURE NUMBER:
2





LEGEND

--- EXCAVATION EXTENTS

● CONFIRMATORY SOIL SAMPLE
SUBMITTED FOR LABORATORY
ANALYSIS

LEGEND IS COLOUR DEPENDENT.
NON-COLOUR COPIES MAY ALTER
INTERPRETATION.



PROJECT NAME:
REMEDIATION MONITORING

CLIENT NAME:
TRADEMARK PROPERTIES

PROJECT LOCATION:
568 GUNN ROAD,
WINNIPEG, MANITOBA

FIGURE NAME:
EXCAVATION PLAN WITH
CONFIRMATORY SAMPLE LOCATIONS
- EXCAVATION 1

PROJECT NUMBER:
293685

SCALE:
AS SHOWN

DRAWN BY:
MBM

REVIEWED BY:
GEE

DATE:
SEPTEMBER 2021

FIGURE NUMBER:
3

NORTH WALL

1.5 m

EX1-N1

EX1-F3

WEST WALL

EX1-W1

EAST WALL

EX1-E1

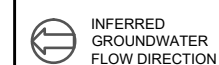
5 m

EX1-F4

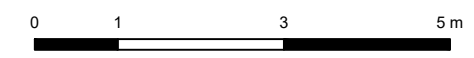
5 m

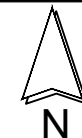
EX1-S1

SOUTH WALL



INFERRED
GROUNDWATER
FLOW DIRECTION





LEGEND

--- EXCAVATION EXTENTS

● CONFIRMATORY SOIL SAMPLE
SUBMITTED FOR LABORATORY
ANALYSIS

LEGEND IS COLOUR DEPENDENT.
NON-COLOUR COPIES MAY ALTER
INTERPRETATION.



PROJECT NAME:
REMEDATION MONITORING

CLIENT NAME:
TRADEMARK PROPERTIES

PROJECT LOCATION:
568 GUNN ROAD,
WINNIPEG, MANITOBA

FIGURE NAME:
EXCAVATION PLAN WITH
CONFIRMATORY SAMPLE LOCATIONS
- EXCAVATION 2

PROJECT NUMBER:
293685

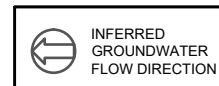
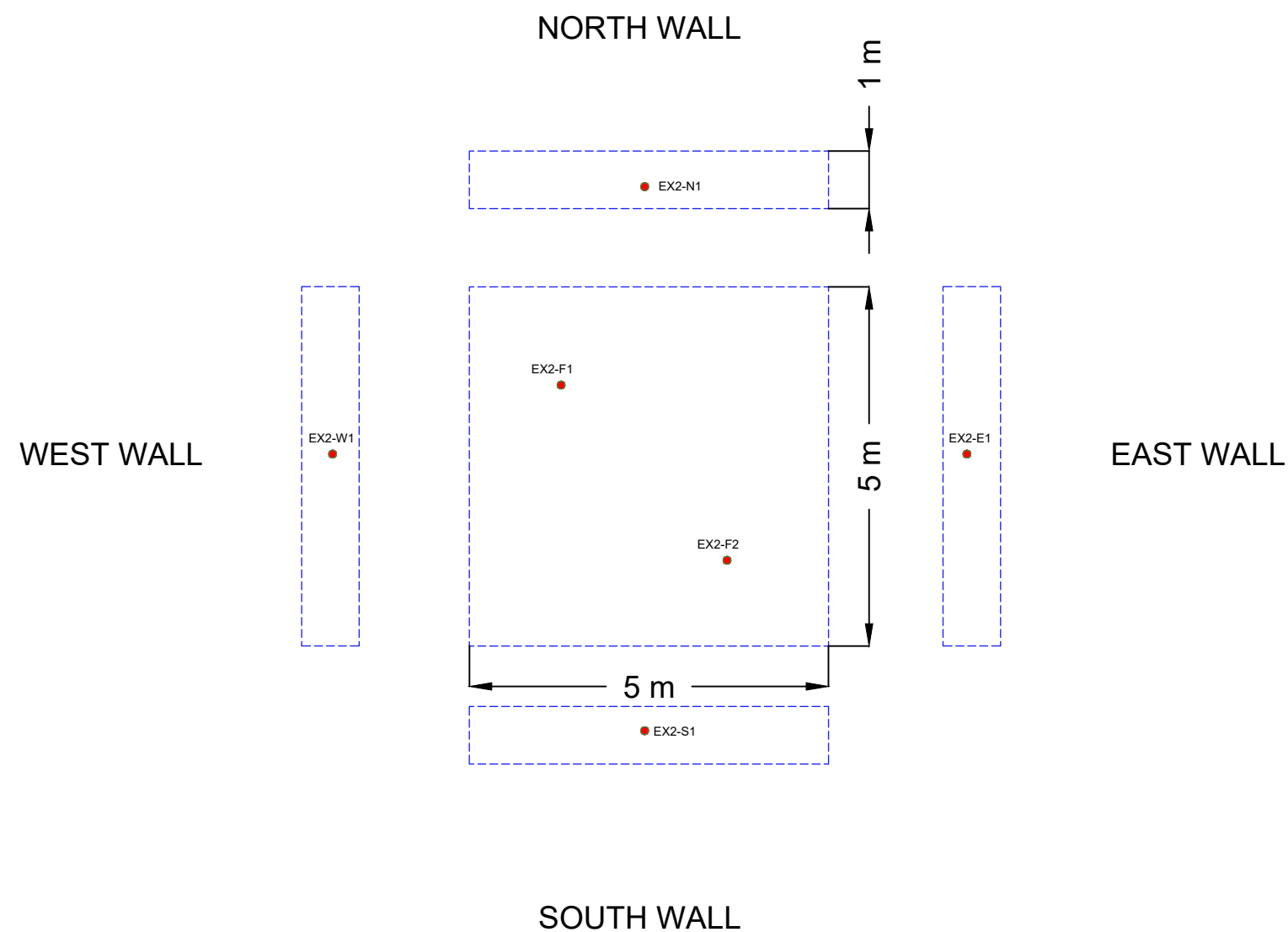
SCALE:
AS SHOWN

DRAWN BY:
MBM

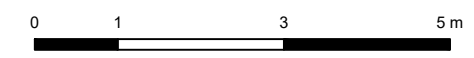
REVIEWED BY:
GEE

DATE:
SEPTEMBER 2021

FIGURE NUMBER:
4



INFERRED
GROUNDWATER
FLOW DIRECTION



APPENDIX II
Summary Tables

TABLE 1
SAMPLES SUBMITTED FOR LABORATORY ANALYSIS
 Trademark Properties
 568 Gunn Road, Winnipeg, Manitoba

<i>Samples</i>			<i>Parameters</i>	<i>Rationale/Notes</i>
<i>Sample Location</i>	<i>Sample ID</i>	<i>Sample Depth (mbgs)</i>	<i>Metals</i>	
Excavation 1 north sidewall	EX1-N1	0.5	●	Assess soil conditions in relation to previously identified metal impacts within borehole MW03
Excavation 1 east sidewall	EX1-E1	0.5	●	
Excavation 1 west sidewall	EX1-W1	0.5	●	
Excavation 1 south sidewall	EX1-S1	0.5	●	
Excavation 1 floor	EX1-F1	1	●	
Excavation 1 floor	EX1-F2	1	●	
Excavation 1 floor	EX1-F3	1.5	●	
Excavation 1 floor	EX1-F4	1.5	●	
Excavation 2 north sidewall	EX2-N1	0.5	●	Assess soil conditions in relation to previously identified metal impacts within borehole MW04
Excavation 2 east sidewall	EX2-E1	0.5	●	
Excavation 2 west sidewall	EX2-W1	0.5	●	
Excavation 2 south sidewall	EX2-S1	0.5	●	
Excavation 2 floor	EX2-F1	1	●	
Excavation 2 floor	EX2-F2	1	●	

Notes:

mbgs Metres Below Ground Surface

TABLE 2
METALS ANALYSIS FOR SOIL
 Trademark Properties
 568 Gunn Road, Winnipeg, Manitoba

Parameter	Soil Quality Guidelines	Sample Designation							
		Sample Collection Date (dd/mm/yyyy)							
		Sample Depth (mbgs)							
		EX1-N1	EX1-E1	EX1-W1	EX1-S1	EX1-F1	EX1-F2	EX1-F3	EX1-F4
		25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021	14/09/2021	14/09/2021
		0.5	0.5	0.5	0.5	1	1	1.5	1.5
Antimony	40 ^a	<0.50	<0.50	<0.50	<0.50	0.56	0.51	<0.50	<0.50
Arsenic	12 ^a	5.6	5.3	4.9	4.6	6.7	7.9	8.7	8.0
Barium	2000 ^a	150	110	140	100	150	150	180	290
Beryllium	8 ^a	0.78	0.58	0.57	0.71	0.81	1.1	1.3	1.1
Boron (Hot Water Soluble)*	2 ^a	1.3	2.2	1.9	3.1	0.71	1.7	0.80	0.71
Cadmium	22 ^a	0.36	0.32	0.35	0.31	0.36	0.37	0.16	0.18
Chromium (Total)	87 ^a	70	75	64	71	120	85	54	45
Chromium (Hexavalent)	1.4 ^a	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
Cobalt	300 ^a	10	8.5	7.5	9.0	11	13	16	13
Copper	91 ^a	31	24	27	35	46	39	35	30
Lead	260 ^a	22	38	37	23	31	22	15	12
Mercury	24 ^a	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Molybdenum	40 ^a	1.1	1.0	1.8	1.4	3.4	2.5	0.43	0.64
Nickel	89 ^a	33	29	25	28	40	39	47	38
Selenium	2.9 ^a	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	40 ^b	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	1 ^a	0.22	0.17	0.16	0.21	0.24	0.31	0.37	0.29
Tin	300 ^a	1.5	1.4	1.9	1.5	2.4	1.7	1.2	1.1
Uranium	33 ^a	1.3	1.3	1.2	1.2	1.2	1.6	2.6	2.7
Vanadium	130 ^a	63	55	52	63	74	81	86	73
Zinc	410 ^a	84	110	98	87	110	110	90	71

Parameter	Soil Quality Guidelines	Sample Designation					
		Sample Collection Date (dd/mm/yyyy)					
		Sample Depth (mbgs)					
		EX2-N1	EX2-E1	EX2-W1	EX2-S1	EX2-F1	EX2-F2
		25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
		0.5	0.5	0.5	0.5	1	1
Antimony	40 ^a	<0.50	<0.50	<0.50	<0.50	0.57	<0.50
Arsenic	12 ^a	8.8	8.9	11	7.4	10	8.6
Barium	2000 ^a	170	170	230	160	230	190
Beryllium	8 ^a	1.2	1.2	1.7	1.4	1.6	1.3
Boron (Hot Water Soluble)*	2 ^a	0.93	1.3	0.74	1.1	0.67	1.3
Cadmium	22 ^a	0.21	1.4	0.29	0.16	0.32	0.24
Chromium (Total)	87 ^a	55	58	76	53	71	53
Chromium (Hexavalent)	1.4 ^a	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
Cobalt	300 ^a	15	22	20	16	18	14
Copper	91 ^a	36	37	46	35	40	33
Lead	260 ^a	15	18	18	15	17	13
Mercury	24 ^a	<0.050	<0.050	<0.050	0.060	<0.050	<0.050
Molybdenum	40 ^a	0.44	0.58	0.44	<0.40	0.59	0.42
Nickel	89 ^a	49	41	59	46	55	45
Selenium	2.9 ^a	<0.50	0.72	<0.50	<0.50	<0.50	<0.50
Silver	40 ^b	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	1 ^a	0.40	0.41	0.51	0.38	0.42	0.33
Tin	300 ^a	1.2	1.2	1.6	1.2	1.5	1.1
Uranium	33 ^a	0.83	2.6	1.2	0.97	2.9	1.9
Vanadium	130 ^a	87	91	120	75	110	82
Zinc	410 ^a	94	100	130	97	100	84

Notes:

CCME Canadian Council of the Ministries of the Environment
BOLD Exceeds soil quality guideline

Units All units in mg/kg

mbgs Metres below ground surface

NG No guideline for corresponding parameter

- Not analyzed

< Indicates concentration is less than the laboratory's minimum reportable detection limit

Intermediate sample; Represented soil sampling location was re-excavated until guidelines were satisfied.

^a Referenced from the CCME Canadian Environmental Quality Guidelines, accessed on-line in September 2021.

Data represents the most stringent criteria for commercial land-use excluding the protection of potable water, livestock watering and aquatic life.

^b Ontario Ministry of the Environment and Climate Change's "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Medium to Fine-Textured Soils, Non-Potable Groundwater Condition, for All Types of Property Use."

* Hot Water Soluble Boron guidelines apply to surface soils only (<1.5 mbgs)

APPENDIX III
Photographs



Photo 1 – Excavation 1 dimensions prior to re-excavation.



Photo 2 – Soil stratigraphy at Excavation 1 extending to 1 metre below ground surface.



Photo 3 – Excavation 1 final limits after re-excitation.



Photo 4 – Soil stratigraphy at Excavation 1 extending to 1.5 metre below ground surface.



Photo 5 – PVC pipe from former monitoring well MW04 in Excavation 2.



Photo 6 – Excavation 2 final limits.

APPENDIX IV
Laboratory Certificates of Analysis



Your Project #: 293685
 Site Location: GUNN RD.
 Your C.O.C. #: 1/1

Attention: MARIO MUAN

PINCHIN LTD.
 54 Terracon Pl.
 Winnipeg, MB
 CANADA R2J 4G7

Report Date: 2021/09/04
 Report #: R3067740
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C163186

Received: 2021/08/27, 15:29

Sample Matrix: Soil
 # Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Boron (Hot Water Soluble) (1)	2	2021/09/03	2021/09/03	AB SOP-00034 / AB SOP-00042	EPA 6010d R5 m
Boron (Hot Water Soluble) (1)	10	2021/09/03	2021/09/04	AB SOP-00034 / AB SOP-00042	EPA 6010d R5 m
Hexavalent Chromium (1, 2)	12	2021/09/02	2021/09/03	AB SOP-00063	SM 23 3500-Cr B m
Elements by ICPMS - Soils (1)	7	2021/09/02	2021/09/03	AB SOP-00001 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Soils (1)	5	2021/09/02	2021/09/04	AB SOP-00001 / AB SOP-00043	EPA 6020b R2 m
Moisture (1)	12	N/A	2021/09/02	AB SOP-00002	CCME PHC-CWS m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary Environmental

(2) Some soil samples may react with the Cr(VI) spike reducing it to Cr(III). These samples are highly unlikely to contain native hexavalent chromium. Thus a failed spike recovery



Your Project #: 293685
Site Location: GUNN RD.
Your C.O.C. #: 1/1

Attention: MARIO MUAN

PINCHIN LTD.
54 Terracon Pl.
Winnipeg, MB
CANADA R2J 4G7

Report Date: 2021/09/04
Report #: R3067740
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C163186

Received: 2021/08/27, 15:29

does not invalidate a negative result on the native sample.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Cynny Hagen, Key Account Specialist

Email: Cynny.HAGEN@bureauveritas.com

Phone# (403)735-2273

=====

This report has been generated and distributed using a secure automated process.

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

BV Labs Job #: C163186
Report Date: 2021/09/04

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD.
Sampler Initials: MBM

RESULTS OF CHEMICAL ANALYSES OF SOIL

BV Labs ID		AES169	AES170	AES171		AES172	AES173		
Sampling Date		2021/08/25	2021/08/25	2021/08/25		2021/08/25	2021/08/25		
COC Number		1/1	1/1	1/1		1/1	1/1		
	UNITS	EX1-N1	EX1-E1	EX1-W1	QC Batch	EX1-S1	EX1-F1	RDL	QC Batch
Elements									
Soluble (Hot water) Boron (B)	mg/kg	1.3	2.2	1.9	A341306	3.1	0.71	0.10	A341306
Hex. Chromium (Cr 6+)	mg/kg	<0.080	<0.080	<0.080	A340342	<0.080	<0.080	0.080	A340619
RDL = Reportable Detection Limit									

BV Labs ID		AES174	AES175	AES176		AES177		AES178		
Sampling Date		2021/08/25	2021/08/25	2021/08/25		2021/08/25		2021/08/25		
COC Number		1/1	1/1	1/1		1/1		1/1		
	UNITS	EX1-F2	EX2-N1	EX2-E1	QC Batch	EX2-W1	QC Batch	EX2-S1	RDL	QC Batch
Elements										
Soluble (Hot water) Boron (B)	mg/kg	1.7	0.93	1.3	A341306	0.74	A340965	1.1	0.10	A341306
Hex. Chromium (Cr 6+)	mg/kg	<0.080	<0.080	<0.080	A340342	<0.080	A340342	<0.080	0.080	A340342
RDL = Reportable Detection Limit										

BV Labs ID		AES179		AES180		
Sampling Date		2021/08/25		2021/08/25		
COC Number		1/1		1/1		
	UNITS	EX2-F1	QC Batch	EX2-F2	RDL	QC Batch
Elements						
Soluble (Hot water) Boron (B)	mg/kg	0.67	A340965	1.3	0.10	A341306
Hex. Chromium (Cr 6+)	mg/kg	<0.080	A340342	<0.080	0.080	A340342
RDL = Reportable Detection Limit						



BUREAU
VERITAS

BV Labs Job #: C163186
Report Date: 2021/09/04

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD.
Sampler Initials: MBM

PHYSICAL TESTING (SOIL)

BV Labs ID		AES169	AES170	AES171		AES172	AES173	AES174		
Sampling Date		2021/08/25	2021/08/25	2021/08/25		2021/08/25	2021/08/25	2021/08/25		
COC Number		1/1	1/1	1/1		1/1	1/1	1/1		
	UNITS	EX1-N1	EX1-E1	EX1-W1	QC Batch	EX1-S1	EX1-F1	EX1-F2	RDL	QC Batch

Physical Properties										
Moisture	%	20	26	23	A339576	23	23	27	0.30	A339595
RDL = Reportable Detection Limit										

BV Labs ID		AES175	AES176	AES177	AES178	AES179	AES180		
Sampling Date		2021/08/25	2021/08/25	2021/08/25	2021/08/25	2021/08/25	2021/08/25		
COC Number		1/1	1/1	1/1	1/1	1/1	1/1		
	UNITS	EX2-N1	EX2-E1	EX2-W1	EX2-S1	EX2-F1	EX2-F2	RDL	QC Batch

Physical Properties									
Moisture	%	25	28	25	29	26	26	0.30	A339595
RDL = Reportable Detection Limit									



BUREAU
VERITAS

BV Labs Job #: C163186
Report Date: 2021/09/04

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD.
Sampler Initials: MBM

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID		AES169	AES170	AES171	AES172	AES173	AES174	AES175		
Sampling Date		2021/08/25	2021/08/25	2021/08/25	2021/08/25	2021/08/25	2021/08/25	2021/08/25		
COC Number		1/1	1/1	1/1	1/1	1/1	1/1	1/1		
	UNITS	EX1-N1	EX1-E1	EX1-W1	EX1-S1	EX1-F1	EX1-F2	EX2-N1	RDL	QC Batch

Elements										
Total Antimony (Sb)	mg/kg	<0.50	<0.50	<0.50	<0.50	0.56	0.51	<0.50	0.50	A340400
Total Arsenic (As)	mg/kg	5.6	5.3	4.9	4.6	6.7	7.9	8.8	1.0	A340400
Total Barium (Ba)	mg/kg	150	110	140	100	150	150	170	1.0	A340400
Total Beryllium (Be)	mg/kg	0.78	0.58	0.57	0.71	0.81	1.1	1.2	0.40	A340400
Total Cadmium (Cd)	mg/kg	0.36	0.32	0.35	0.31	0.36	0.37	0.21	0.050	A340400
Total Chromium (Cr)	mg/kg	70	75	64	71	120	85	55	1.0	A340400
Total Cobalt (Co)	mg/kg	10	8.5	7.5	9.0	11	13	15	0.50	A340400
Total Copper (Cu)	mg/kg	31	24	27	35	46	39	36	1.0	A340400
Total Lead (Pb)	mg/kg	22	38	37	23	31	22	15	0.50	A340400
Total Mercury (Hg)	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	A340400
Total Molybdenum (Mo)	mg/kg	1.1	1.0	1.8	1.4	3.4	2.5	0.44	0.40	A340400
Total Nickel (Ni)	mg/kg	33	29	25	28	40	39	49	1.0	A340400
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	A340400
Total Silver (Ag)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	A340400
Total Thallium (Tl)	mg/kg	0.22	0.17	0.16	0.21	0.24	0.31	0.40	0.10	A340400
Total Tin (Sn)	mg/kg	1.5	1.4	1.9	1.5	2.4	1.7	1.2	1.0	A340400
Total Uranium (U)	mg/kg	1.3	1.3	1.2	1.2	1.2	1.6	0.83	0.20	A340400
Total Vanadium (V)	mg/kg	63	55	52	63	74	81	87	1.0	A340400
Total Zinc (Zn)	mg/kg	84	110	98	87	110	110	94	10	A340400

RDL = Reportable Detection Limit



BUREAU
VERITAS

BV Labs Job #: C163186
Report Date: 2021/09/04

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD.
Sampler Initials: MBM

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID		AES176		AES177		AES178		AES179		
Sampling Date		2021/08/25		2021/08/25		2021/08/25		2021/08/25		
COC Number		1/1		1/1		1/1		1/1		
	UNITS	EX2-E1	QC Batch	EX2-W1	QC Batch	EX2-S1	QC Batch	EX2-F1	RDL	QC Batch
Elements										
Total Antimony (Sb)	mg/kg	<0.50	A340400	<0.50	A340404	<0.50	A340400	0.57	0.50	A340404
Total Arsenic (As)	mg/kg	8.9	A340400	11	A340404	7.4	A340400	10	1.0	A340404
Total Barium (Ba)	mg/kg	170	A340400	230	A340404	160	A340400	230	1.0	A340404
Total Beryllium (Be)	mg/kg	1.2	A340400	1.7	A340404	1.4	A340400	1.6	0.40	A340404
Total Cadmium (Cd)	mg/kg	1.4	A340400	0.29	A340404	0.16	A340400	0.32	0.050	A340404
Total Chromium (Cr)	mg/kg	58	A340400	76	A340404	53	A340400	71	1.0	A340404
Total Cobalt (Co)	mg/kg	22	A340400	20	A340404	16	A340400	18	0.50	A340404
Total Copper (Cu)	mg/kg	37	A340400	46	A340404	35	A340400	40	1.0	A340404
Total Lead (Pb)	mg/kg	18	A340400	18	A340404	15	A340400	17	0.50	A340404
Total Mercury (Hg)	mg/kg	<0.050	A340400	<0.050	A340404	0.060	A340400	<0.050	0.050	A340404
Total Molybdenum (Mo)	mg/kg	0.58	A340400	0.44	A340404	<0.40	A340400	0.59	0.40	A340404
Total Nickel (Ni)	mg/kg	41	A340400	59	A340404	46	A340400	55	1.0	A340404
Total Selenium (Se)	mg/kg	0.72	A340400	<0.50	A340404	<0.50	A340400	<0.50	0.50	A340404
Total Silver (Ag)	mg/kg	<0.20	A340400	<0.20	A340404	<0.20	A340400	<0.20	0.20	A340404
Total Thallium (Tl)	mg/kg	0.41	A340400	0.51	A340404	0.38	A340400	0.42	0.10	A340404
Total Tin (Sn)	mg/kg	1.2	A340400	1.6	A340404	1.2	A340400	1.5	1.0	A340404
Total Uranium (U)	mg/kg	2.6	A340400	1.2	A340404	0.97	A340400	2.9	0.20	A340404
Total Vanadium (V)	mg/kg	91	A340400	120	A340404	75	A340400	110	1.0	A340404
Total Zinc (Zn)	mg/kg	100	A340400	130	A340404	97	A340400	100	10	A340404
RDL = Reportable Detection Limit										



BUREAU
VERITAS

BV Labs Job #: C163186
Report Date: 2021/09/04

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD.
Sampler Initials: MBM

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID		AES180		
Sampling Date		2021/08/25		
COC Number		1/1		
	UNITS	EX2-F2	RDL	QC Batch
Elements				
Total Antimony (Sb)	mg/kg	<0.50	0.50	A340400
Total Arsenic (As)	mg/kg	8.6	1.0	A340400
Total Barium (Ba)	mg/kg	190	1.0	A340400
Total Beryllium (Be)	mg/kg	1.3	0.40	A340400
Total Cadmium (Cd)	mg/kg	0.24	0.050	A340400
Total Chromium (Cr)	mg/kg	53	1.0	A340400
Total Cobalt (Co)	mg/kg	14	0.50	A340400
Total Copper (Cu)	mg/kg	33	1.0	A340400
Total Lead (Pb)	mg/kg	13	0.50	A340400
Total Mercury (Hg)	mg/kg	<0.050	0.050	A340400
Total Molybdenum (Mo)	mg/kg	0.42	0.40	A340400
Total Nickel (Ni)	mg/kg	45	1.0	A340400
Total Selenium (Se)	mg/kg	<0.50	0.50	A340400
Total Silver (Ag)	mg/kg	<0.20	0.20	A340400
Total Thallium (Tl)	mg/kg	0.33	0.10	A340400
Total Tin (Sn)	mg/kg	1.1	1.0	A340400
Total Uranium (U)	mg/kg	1.9	0.20	A340400
Total Vanadium (V)	mg/kg	82	1.0	A340400
Total Zinc (Zn)	mg/kg	84	10	A340400
RDL = Reportable Detection Limit				



**BUREAU
VERITAS**

BV Labs Job #: C163186

Report Date: 2021/09/04

PINCHIN LTD.

Client Project #: 293685

Site Location: GUNN RD.

Sampler Initials: MBM

GENERAL COMMENTS

Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: C163186

Report Date: 2021/09/04

QUALITY ASSURANCE REPORT

PINCHIN LTD.

Client Project #: 293685

Site Location: GUNN RD.

Sampler Initials: MBM

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
A339576	Moisture	2021/09/02					<0.30	%	0.47	20		
A339595	Moisture	2021/09/02					<0.30	%	5.3	20		
A340342	Hex. Chromium (Cr 6+)	2021/09/03	111	75 - 125	97	80 - 120	<0.080	mg/kg	NC	35		
A340400	Total Antimony (Sb)	2021/09/03	87	75 - 125	107	80 - 120	<0.50	mg/kg	NC	30	115	15 - 182
A340400	Total Arsenic (As)	2021/09/03	99	75 - 125	103	80 - 120	<1.0	mg/kg	0.42	30	100	53 - 147
A340400	Total Barium (Ba)	2021/09/03	NC	75 - 125	100	80 - 120	<1.0	mg/kg	7.8	35	100	80 - 119
A340400	Total Beryllium (Be)	2021/09/03	110	75 - 125	105	80 - 120	<0.40	mg/kg	14	30		
A340400	Total Cadmium (Cd)	2021/09/03	101	75 - 125	98	80 - 120	<0.050	mg/kg	22	30	96	72 - 128
A340400	Total Chromium (Cr)	2021/09/03	NC	75 - 125	102	80 - 120	<1.0	mg/kg	3.4	30	90	59 - 141
A340400	Total Cobalt (Co)	2021/09/03	101	75 - 125	103	80 - 120	<0.50	mg/kg	14	30	98	58 - 142
A340400	Total Copper (Cu)	2021/09/03	110	75 - 125	105	80 - 120	<1.0	mg/kg	1.6	30	108	83 - 117
A340400	Total Lead (Pb)	2021/09/03	101	75 - 125	104	80 - 120	<0.50	mg/kg	12	35	115	79 - 121
A340400	Total Mercury (Hg)	2021/09/03	92	75 - 125	106	80 - 120	<0.050	mg/kg	0.033	35		
A340400	Total Molybdenum (Mo)	2021/09/03	104	75 - 125	101	80 - 120	<0.40	mg/kg	NC	35	102	67 - 133
A340400	Total Nickel (Ni)	2021/09/03	115	75 - 125	103	80 - 120	<1.0	mg/kg	4.7	30	110	79 - 121
A340400	Total Selenium (Se)	2021/09/03	98	75 - 125	104	80 - 120	<0.50	mg/kg	NC	30		
A340400	Total Silver (Ag)	2021/09/03	100	75 - 125	99	80 - 120	<0.20	mg/kg	NC	35	90	47 - 153
A340400	Total Thallium (Tl)	2021/09/03	99	75 - 125	104	80 - 120	<0.10	mg/kg	0.57	30		
A340400	Total Tin (Sn)	2021/09/03	106	75 - 125	100	80 - 120	<1.0	mg/kg	5.8	35	107	67 - 133
A340400	Total Uranium (U)	2021/09/03	93	75 - 125	102	80 - 120	<0.20	mg/kg	1.8	30	94	77 - 123
A340400	Total Vanadium (V)	2021/09/03	NC	75 - 125	102	80 - 120	<1.0	mg/kg	0.90	30	98	79 - 121
A340400	Total Zinc (Zn)	2021/09/03	NC	75 - 125	103	80 - 120	<10	mg/kg	2.2	30	105	79 - 121
A340404	Total Antimony (Sb)	2021/09/03	106	75 - 125	119	80 - 120	<0.50	mg/kg	28	30	116	15 - 182
A340404	Total Arsenic (As)	2021/09/03	NC	75 - 125	102	80 - 120	<1.0	mg/kg	14	30	105	53 - 147
A340404	Total Barium (Ba)	2021/09/03	NC	75 - 125	101	80 - 120	<1.0	mg/kg	9.4	35	96	80 - 119
A340404	Total Beryllium (Be)	2021/09/03	106	75 - 125	99	80 - 120	<0.40	mg/kg	5.6	30		
A340404	Total Cadmium (Cd)	2021/09/03	109	75 - 125	104	80 - 120	<0.050	mg/kg	12	30	105	72 - 128
A340404	Total Chromium (Cr)	2021/09/03	NC	75 - 125	107	80 - 120	<1.0	mg/kg	6.9	30	108	59 - 141
A340404	Total Cobalt (Co)	2021/09/03	106	75 - 125	108	80 - 120	<0.50	mg/kg	2.5	30	99	58 - 142
A340404	Total Copper (Cu)	2021/09/03	NC	75 - 125	112	80 - 120	<1.0	mg/kg	12	30	107	83 - 117
A340404	Total Lead (Pb)	2021/09/03	105	75 - 125	104	80 - 120	<0.50	mg/kg	22	35	112	79 - 121
A340404	Total Mercury (Hg)	2021/09/03	107	75 - 125	109	80 - 120	<0.050	mg/kg	NC	35		



BUREAU
VERITAS

BV Labs Job #: C163186

Report Date: 2021/09/04

QUALITY ASSURANCE REPORT(CONT'D)

PINCHIN LTD.

Client Project #: 293685

Site Location: GUNN RD.

Sampler Initials: MBM

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
A340404	Total Molybdenum (Mo)	2021/09/03	115	75 - 125	116	80 - 120	<0.40	mg/kg	0.88	35	105	67 - 133
A340404	Total Nickel (Ni)	2021/09/03	107	75 - 125	107	80 - 120	<1.0	mg/kg	4.1	30	110	79 - 121
A340404	Total Selenium (Se)	2021/09/03	109	75 - 125	109	80 - 120	<0.50	mg/kg	NC	30		
A340404	Total Silver (Ag)	2021/09/03	108	75 - 125	103	80 - 120	<0.20	mg/kg	NC	35	118	47 - 153
A340404	Total Thallium (Tl)	2021/09/03	107	75 - 125	105	80 - 120	<0.10	mg/kg	1.3	30		
A340404	Total Tin (Sn)	2021/09/03	112	75 - 125	113	80 - 120	<1.0	mg/kg	NC	35	94	67 - 133
A340404	Total Uranium (U)	2021/09/03	114	75 - 125	113	80 - 120	<0.20	mg/kg	2.4	30	100	77 - 123
A340404	Total Vanadium (V)	2021/09/03	NC	75 - 125	107	80 - 120	<1.0	mg/kg	3.7	30	109	79 - 121
A340404	Total Zinc (Zn)	2021/09/03	NC	75 - 125	107	80 - 120	<10	mg/kg	2.0	30	105	79 - 121
A340619	Hex. Chromium (Cr 6+)	2021/09/03	96	75 - 125	110	80 - 120	<0.080	mg/kg	NC	35		
A340965	Soluble (Hot water) Boron (B)	2021/09/03	107	75 - 125	101	80 - 120	<0.10	mg/kg	NC	35		
A341306	Soluble (Hot water) Boron (B)	2021/09/04	108	75 - 125	105	80 - 120	<0.10	mg/kg	26	35		

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



BUREAU
VERITAS

BV Labs Job #: C163186
Report Date: 2021/09/04

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD.
Sampler Initials: MBM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

INVOICE INFORMATION		REPORT INFORMATION (if different from invoice)		PROJECT INFORMATION		MAXXAM JOB NUMBER	
Company Name: <u>PINCHIN LTD</u>		Company Name: <u>PINCHIN LTD</u>		Quotation #: <u>B70359</u>		<u>C163186</u>	
Contact Name: <u>ACCOUNTS PAYABLE</u>		Contact Name: <u>MARIO MUAN</u>		P.O. #:		CHAIN OF CUSTODY #	
Address:		Address: <u>54 Terracon Place</u>		Project #: <u>293685</u>		N 017274	
Phone: _____ Fax: _____		Phone: _____ Fax: _____		Project Name: <u>REMEDIATION MONITORING</u>			
Email: <u>ape@pinchin.com</u>		Email: <u>mmuan@pinchin.com</u>		Location: <u>GUNN RD.</u>			
				Sampled By: <u>MBM</u>			

REGULATORY REQUIREMENTS SERVICE REQUESTED:				ANALYSIS REQUESTED (Please be specific)										TURNAROUND TIME (TAT) REQUIRED																																					
<input type="checkbox"/> CCME <input type="checkbox"/> DRINKING WATER Other: _____				Drinking Water? (Y/N) <table border="1"> <tr> <td>Coliforms:</td> <td>Total</td> <td>Fecal</td> <td>E. coli</td> </tr> <tr> <td>(Method)</td> <td>MF</td> <td>MPN</td> <td>QT</td> </tr> <tr> <td>Dissolved Metals</td> <td>Field Filtered?</td> <td>Field Acidified?</td> <td>Field Acidified?</td> </tr> <tr> <td>Total Metal</td> <td></td> <td></td> <td></td> </tr> <tr> <td>BTEX / F1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>F2 - F4</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PCB</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Biochemical Oxygen Demand</td> <td></td> <td></td> <td></td> </tr> <tr> <td>MEALS</td> <td></td> <td></td> <td></td> </tr> </table>										Coliforms:	Total	Fecal	E. coli	(Method)	MF	MPN	QT	Dissolved Metals	Field Filtered?	Field Acidified?	Field Acidified?	Total Metal				BTEX / F1				F2 - F4				PCB				Biochemical Oxygen Demand				MEALS				PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS. Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TATs for certain tests are > 5 days. Please contact your Project Manager for details.	
Coliforms:	Total	Fecal	E. coli																																																
(Method)	MF	MPN	QT																																																
Dissolved Metals	Field Filtered?	Field Acidified?	Field Acidified?																																																
Total Metal																																																			
BTEX / F1																																																			
F2 - F4																																																			
PCB																																																			
Biochemical Oxygen Demand																																																			
MEALS																																																			
Special Instructions: <u>also send lab results to: vtyshchuk@pinchin.com</u>				HOLD - DO NOT ANALYZE																																															
SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM.																																																			
Lab Use	Sample Identification	Date Sampled	Time Sampled	Matrix (GW, SW, Soil etc)	Coliforms (Method)	Dissolved Metals	Total Metal	BTEX / F1	F2 - F4	PCB	Biochemical Oxygen Demand	MEALS	# of Cont.	COMMENTS																																					
1	EX1 - N1	25AUG	PM	SOIL								X	1																																						
2	EX1 - E1											X	1																																						
3	EX1 - W1											X	1																																						
4	EX1 - S1											X	1																																						
5	EX1 - F1											X	1																																						
6	EX1 - F2											X	1																																						
7	EX2 - N1											X	1																																						
8	EX2 - E1											X	1																																						
9	EX2 - W1											X	1																																						
10	EX2 - S1											X	1																																						
11	EX2 - F1											X	1																																						
12	EX2 - F2											X	1																																						

RELINQUISHED BY (Signature/Print) <u>M. MUAN</u>	RECEIVED BY (Signature/Print) <u>Brooklyn Hiebert</u> <u>Maria Mann</u>	Date <u>21/08/28</u>	Time <u>10:00</u>	RECEIVED ON ICE Y <input type="checkbox"/> N <input type="checkbox"/>	Laboratory Use Only Temperature (°C) on Receipt <u>6.9, 4.9, 3.9</u>
--	--	--------------------------------	-----------------------------	---	---

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are available for viewing at www.maxxam.ca/terms

***MANDATORY SECTIONS IN GREY MUST BE FILLED OUT. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS. ACTR**



Your Project #: 293685
 Site Location: GUNN RD
 Your C.O.C. #: N017276

Attention: MARIO MUAN

PINCHIN LTD.
 54 Terracon Pl.
 Winnipeg, MB
 CANADA R2J 4G7

Report Date: 2021/09/21
 Report #: R3074409
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C168499

Received: 2021/09/14, 14:00

Sample Matrix: Soil
 # Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Boron (Hot Water Soluble) (1)	2	2021/09/19	2021/09/20	AB SOP-00034 / AB SOP-00042	EPA 6010d R5 m
Hexavalent Chromium (1, 2)	2	2021/09/20	2021/09/20	AB SOP-00063	SM 23 3500-Cr B m
Elements by ICPMS - Soils (1)	2	2021/09/19	2021/09/20	AB SOP-00001 / AB SOP-00043	EPA 6020b R2 m
Moisture (1)	2	N/A	2021/09/18	AB SOP-00002	CCME PHC-CWS m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) Some soil samples may react with the Cr(VI) spike reducing it to Cr(III). These samples are highly unlikely to contain native hexavalent chromium. Thus a failed spike recovery does not invalidate a negative result on the native sample.



Your Project #: 293685
Site Location: GUNN RD
Your C.O.C. #: N017276

Attention: MARIO MUAN

PINCHIN LTD.
54 Terracon Pl.
Winnipeg, MB
CANADA R2J 4G7

Report Date: 2021/09/21
Report #: R3074409
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C168499
Received: 2021/09/14, 14:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Cynny Hagen, Key Account Specialist
Email: Cynny.HAGEN@bureauveritas.com
Phone# (403)735-2273

=====
This report has been generated and distributed using a secure automated process.
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

BV Labs Job #: C168499

Report Date: 2021/09/21

PINCHIN LTD.

Client Project #: 293685

Site Location: GUNN RD

Sampler Initials: MBM

RESULTS OF CHEMICAL ANALYSES OF SOIL

BV Labs ID		AFY512	AFY513		
Sampling Date		2021/09/14	2021/09/14		
COC Number		N017276	N017276		
	UNITS	EX1-F3	EX1-F4	RDL	QC Batch
Elements					
Soluble (Hot water) Boron (B)	mg/kg	0.80	0.71	0.10	A357808
Hex. Chromium (Cr 6+)	mg/kg	<0.080	<0.080	0.080	A358506
RDL = Reportable Detection Limit					



**BUREAU
VERITAS**

BV Labs Job #: C168499
Report Date: 2021/09/21

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD
Sampler Initials: MBM

PHYSICAL TESTING (SOIL)

BV Labs ID		AFY512	AFY513		
Sampling Date		2021/09/14	2021/09/14		
COC Number		N017276	N017276		
	UNITS	EX1-F3	EX1-F4	RDL	QC Batch

Physical Properties					
Moisture	%	31	29	0.30	A356968
RDL = Reportable Detection Limit					



BUREAU
VERITAS

BV Labs Job #: C168499
Report Date: 2021/09/21

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD
Sampler Initials: MBM

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID		AFY512	AFY513		
Sampling Date		2021/09/14	2021/09/14		
COC Number		N017276	N017276		
	UNITS	EX1-F3	EX1-F4	RDL	QC Batch
Elements					
Total Antimony (Sb)	mg/kg	<0.50	<0.50	0.50	A357730
Total Arsenic (As)	mg/kg	8.7	8.0	1.0	A357730
Total Barium (Ba)	mg/kg	180	290	1.0	A357730
Total Beryllium (Be)	mg/kg	1.3	1.1	0.40	A357730
Total Cadmium (Cd)	mg/kg	0.16	0.18	0.050	A357730
Total Chromium (Cr)	mg/kg	54	45	1.0	A357730
Total Cobalt (Co)	mg/kg	16	13	0.50	A357730
Total Copper (Cu)	mg/kg	35	30	1.0	A357730
Total Lead (Pb)	mg/kg	15	12	0.50	A357730
Total Mercury (Hg)	mg/kg	<0.050	<0.050	0.050	A357730
Total Molybdenum (Mo)	mg/kg	0.43	0.64	0.40	A357730
Total Nickel (Ni)	mg/kg	47	38	1.0	A357730
Total Selenium (Se)	mg/kg	<0.50	<0.50	0.50	A357730
Total Silver (Ag)	mg/kg	<0.20	<0.20	0.20	A357730
Total Thallium (Tl)	mg/kg	0.37	0.29	0.10	A357730
Total Tin (Sn)	mg/kg	1.2	1.1	1.0	A357730
Total Uranium (U)	mg/kg	2.6	2.7	0.20	A357730
Total Vanadium (V)	mg/kg	86	73	1.0	A357730
Total Zinc (Zn)	mg/kg	90	71	10	A357730
RDL = Reportable Detection Limit					



**BUREAU
VERITAS**

BV Labs Job #: C168499

Report Date: 2021/09/21

PINCHIN LTD.

Client Project #: 293685

Site Location: GUNN RD

Sampler Initials: MBM

GENERAL COMMENTS

Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: C168499

Report Date: 2021/09/21

QUALITY ASSURANCE REPORT

PINCHIN LTD.

Client Project #: 293685

Site Location: GUNN RD

Sampler Initials: MBM

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
A356968	Moisture	2021/09/18					<0.30	%	6.7	20		
A357730	Total Antimony (Sb)	2021/09/20	87	75 - 125	106	80 - 120	<0.50	mg/kg			106	15 - 182
A357730	Total Arsenic (As)	2021/09/20	89	75 - 125	97	80 - 120	<1.0	mg/kg	5.4	30	96	53 - 147
A357730	Total Barium (Ba)	2021/09/20	NC	75 - 125	99	80 - 120	<1.0	mg/kg			94	80 - 119
A357730	Total Beryllium (Be)	2021/09/20	99	75 - 125	97	80 - 120	<0.40	mg/kg				
A357730	Total Cadmium (Cd)	2021/09/20	96	75 - 125	99	80 - 120	<0.050	mg/kg			90	72 - 128
A357730	Total Chromium (Cr)	2021/09/20	NC	75 - 125	98	80 - 120	<1.0	mg/kg			86	59 - 141
A357730	Total Cobalt (Co)	2021/09/20	91	75 - 125	98	80 - 120	<0.50	mg/kg			87	58 - 142
A357730	Total Copper (Cu)	2021/09/20	84	75 - 125	100	80 - 120	<1.0	mg/kg			97	83 - 117
A357730	Total Lead (Pb)	2021/09/20	95	75 - 125	98	80 - 120	<0.50	mg/kg			104	79 - 121
A357730	Total Mercury (Hg)	2021/09/20	89	75 - 125	99	80 - 120	<0.050	mg/kg				
A357730	Total Molybdenum (Mo)	2021/09/20	98	75 - 125	102	80 - 120	<0.40	mg/kg			97	67 - 133
A357730	Total Nickel (Ni)	2021/09/20	89	75 - 125	97	80 - 120	<1.0	mg/kg			97	79 - 121
A357730	Total Selenium (Se)	2021/09/20	92	75 - 125	96	80 - 120	<0.50	mg/kg				
A357730	Total Silver (Ag)	2021/09/20	97	75 - 125	99	80 - 120	<0.20	mg/kg			92	47 - 153
A357730	Total Thallium (Tl)	2021/09/20	95	75 - 125	98	80 - 120	<0.10	mg/kg				
A357730	Total Tin (Sn)	2021/09/20	99	75 - 125	100	80 - 120	<1.0	mg/kg			92	67 - 133
A357730	Total Uranium (U)	2021/09/20	87	75 - 125	92	80 - 120	<0.20	mg/kg			85	77 - 123
A357730	Total Vanadium (V)	2021/09/20	NC	75 - 125	99	80 - 120	<1.0	mg/kg			90	79 - 121
A357730	Total Zinc (Zn)	2021/09/20	NC	75 - 125	98	80 - 120	<10	mg/kg			93	79 - 121
A357808	Soluble (Hot water) Boron (B)	2021/09/20	109	75 - 125	102	80 - 120	<0.10	mg/kg	4.7	35		
A358506	Hex. Chromium (Cr 6+)	2021/09/20	93	75 - 125	99	80 - 120	<0.080	mg/kg	NC	35		

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



BUREAU
VERITAS

BV Labs Job #: C168499
Report Date: 2021/09/21

PINCHIN LTD.
Client Project #: 293685
Site Location: GUNN RD
Sampler Initials: MBM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Gita Pokhrel, Laboratory Supervisor

Maria Magdalena Florescu, Ph.D., P.Chem., QP, Inorganics Manager

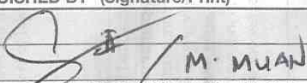
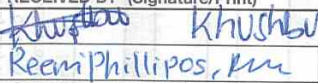
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

INVOICE INFORMATION		REPORT INFORMATION (if different from invoice)		PROJECT INFORMATION		MAXXAM JOB NUMBER
Company Name:	PINCHIN LTD	Company Name:	PINCHIN LTD	Quotation #:	B70359	CHAIN OF CUSTODY # N 017276
Contact Name:	ACCOUNTS PAYABLE	Contact Name:	MARIO MUAN	P.O. #:		
Address:		Address:	54 Terracen Place Winnipeg, MB	Project #:	293685	
Phone:		Phone:		Project Name:	REMEDIATION	
Email:	apepinchin.com	Email:	mmuan@pinchin.com	Location:	GUNN RD.	
				Sampled By:	MBM	

REGULATORY REQUIREMENTS SERVICE REQUESTED:			ANALYSIS REQUESTED (Please be specific)										TURNAROUND TIME (TAT) REQUIRED																					
<input checked="" type="checkbox"/> CCME <input type="checkbox"/> DRINKING WATER Other:			Drinking Water? (Y/N) <table border="1"> <tr> <td>Coliforms:</td> <td>Total</td> <td>Fecal</td> <td>E. coli</td> </tr> <tr> <td>(Method)</td> <td>MF</td> <td>MPN</td> <td>QT</td> </tr> <tr> <td>Field Filtered?</td> <td>Y</td> <td>N</td> <td>N</td> </tr> <tr> <td>Field Acidified?</td> <td>Y</td> <td>N</td> <td>N</td> </tr> <tr> <td>Field Acidified?</td> <td>Y</td> <td>N</td> <td>N</td> </tr> </table>										Coliforms:	Total	Fecal	E. coli	(Method)	MF	MPN	QT	Field Filtered?	Y	N	N	Field Acidified?	Y	N	N	Field Acidified?	Y	N	N	PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS. Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required:	
Coliforms:	Total	Fecal	E. coli																															
(Method)	MF	MPN	QT																															
Field Filtered?	Y	N	N																															
Field Acidified?	Y	N	N																															
Field Acidified?	Y	N	N																															
Special Instructions: also send results to: vtyshchuk@pinchin.com													TATs for certain tests are > 5 days. Please contact your Project Manager for details																					
SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM.													HOLD - DO NOT ANALYZE																					
Lab Use	Sample Identification	Date Sampled	Time Sampled	Matrix (GW, SW, Soil etc)	Drinking Water? (Y/N)	Coliforms (Method)	Field Filtered?	Field Acidified?	Field Acidified?	Total Metal	BTEX / F1	F2 - F4	PCB	Biochemical Oxygen Demand	Metals	# of Cont.	COMMENTS																	
1	EX1-F3	14 SEP	PM	SOIL											X	1																		
2	EX1-F4	14 SEP	PM	SOIL											X	1																		
3																																		
4																																		
5																																		
6																																		
7																																		
8																																		
9																																		
10																																		
11																																		
12																																		

14-Sep-21 14:00
 Cynny Hagen

 C168499
 DKR INS-0498

RELINQUISHED BY (Signature/Print)	RECEIVED BY (Signature/Print)	Date	Time	RECEIVED ON ICE	Laboratory Use Only
 M. MUAN	 Reem Phillipos, Rm	21/09/14 2021/09/15	2:00pm 08:45	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Temperature (°C) on Receipt 13.4, 13.1, 13.3 2, 1, 1 ice: Yes

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are available for viewing at www.maxxam.ca/terms

***MANDATORY SECTIONS IN GREY MUST BE FILLED OUT. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.**

APPENDIX V
Waste Manifests and Weigh Bills



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin
Origin:

Ticket: SO-20077

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 1:50 pm

25-Aug-2021 1:50 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK 761

BOL:

GROSS WEIGHT 39,460.00kg
TARE WEIGHT 14,850.00kg
NET WEIGHT 24,610.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 24.61, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin

Ticket: SO-20077

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 1:50 pm

25-Aug-2021 1:50 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK 761

BOL:

GROSS WEIGHT 39,460.00kg
TARE WEIGHT 14,850.00kg
NET WEIGHT 24,610.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 24.61, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin
Origin:

Ticket: SO-20079

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 2:04 pm

25-Aug-2021 2:04 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK 795

BOL:

GROSS WEIGHT 23,830.00kg
TARE WEIGHT 10,300.00kg
NET WEIGHT 13,530.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 13.53, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin

Ticket: SO-20079

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 2:04 pm

25-Aug-2021 2:04 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK 795

BOL:

GROSS WEIGHT 23,830.00kg
TARE WEIGHT 10,300.00kg
NET WEIGHT 13,530.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 13.53, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin
Origin:

Ticket: SO-20080

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 1:58 pm

25-Aug-2021 2:17 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CXM 638

BOL:

GROSS WEIGHT 48,930.00kg
TARE WEIGHT 17,220.00kg
NET WEIGHT 31,710.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 31.71, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin

Ticket: SO-20080

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 1:58 pm

25-Aug-2021 2:17 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CXM 638

BOL:

GROSS WEIGHT 48,930.00kg
TARE WEIGHT 17,220.00kg
NET WEIGHT 31,710.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 31.71, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin
Origin:

Ticket: SO-20081

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 3:11 pm

25-Aug-2021 3:11 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK 761

BOL:

GROSS WEIGHT 22,510.00kg
TARE WEIGHT 14,860.00kg
NET WEIGHT 7,650.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 7.65, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin

Ticket: SO-20081

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 3:11 pm

25-Aug-2021 3:11 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK 761

BOL:

GROSS WEIGHT 22,510.00kg
TARE WEIGHT 14,860.00kg
NET WEIGHT 7,650.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 7.65, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin
Origin:

Ticket: SO-20074

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 12:16 pm

25-Aug-2021 12:30 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK761 WDD

BOL:

GROSS WEIGHT 44,450.00kg
TARE WEIGHT 14,850.00kg
NET WEIGHT 29,600.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 29.60, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin

Ticket: SO-20074

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 12:16 pm

25-Aug-2021 12:30 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK761 WDD

BOL:

GROSS WEIGHT 44,450.00kg
TARE WEIGHT 14,850.00kg
NET WEIGHT 29,600.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 29.60, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin
Origin:

Ticket: SO-20075

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 12:27 pm

25-Aug-2021 12:34 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK759 WDD 401

BOL:

GROSS WEIGHT 25,490.00kg
TARE WEIGHT 10,300.00kg
NET WEIGHT 15,190.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 15.19, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin

Ticket: SO-20075

Weighmaster: MSAUVE

Date

Date

25-Aug-2021 12:27 pm

25-Aug-2021 12:34 pm

Vehicle: TRADEMARK BUILDERS -

Reference: CGK759 WDD 401

BOL:

GROSS WEIGHT 25,490.00kg
TARE WEIGHT 10,300.00kg
NET WEIGHT 15,190.00 kg

INBOUND

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 15.19, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin
Origin:

Ticket: SO-20383

Weighmaster: MSAUVE

Date
13-Sep-2021 10:09 am

Date
13-Sep-2021 10:38 am

Vehicle: TRADEMARK BUILDERS -
Reference: WDD 145
BOL:

INBOUND
GROSS WEIGHT 43,770.00kg
TARE WEIGHT 17,010.00kg
NET WEIGHT 26,760.00 kg

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 26.76, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002



Environmental Services Ltd.

MidCanada Soil Division
1373 Bernat Road
Ile des Chenes, MB R0A 0T0
PH:(204) 987-9600 FX:(204) 987-9601
Scale Office PH:(204) 878-2369 FX:(204) 878-4924
Stephen McCabe:(204) 781-7804

002438 - Trademark Builders
695 Osborne St
Winnipeg, MB R3L 2B8

Contract: S21-145 - 568 Gunn Road - Pinchin

Ticket: SO-20383

Weighmaster: MSAUVE

Date
13-Sep-2021 10:09 am

Date
13-Sep-2021 10:38 am

Vehicle: TRADEMARK BUILDERS -
Reference: WDD 145
BOL:

INBOUND
GROSS WEIGHT 43,770.00kg
TARE WEIGHT 17,010.00kg
NET WEIGHT 26,760.00 kg

Table with 7 columns: Quantity, Unit, Description, Rate, Extension, Tax, Total. Row 1: 26.76, MT, CONTAMINATED SOIL

Signature: _____

G.S.T # 86278 7322 RT0002