APPENDIX 'C'

Remediation Report



City of Winnipeg North Transit Garage Replacement Design Remedial Plan

Winnipeg, Manitoba

City of Winnipeg

Prepared by: AECOM Canada ULC. 99 Commerce Drive Winnipeg, MB R3P 0Y7

T: 204.477.5381 F: 204.284.2040 www.aecom.com

Date: February 2025 Project number: 60721079

Delivering a better world

Statement of Qualifications and Limitations

The attached Report (the "Report") has been prepared by AECOM Canada ULC. ("AECOM") for the benefit of the Client ("Client") in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the "Agreement").

The information, data, recommendations and conclusions contained in the Report (collectively, the "Information"):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the "Limitations");
- represents AECOM's professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to AECOM which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time..

AECOM shall be entitled to rely upon the accuracy and completeness of information that was provided to it and has no obligation to update such information. AECOM accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

AECOM agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but AECOM makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

Without in any way limiting the generality of the foregoing, any estimates or opinions regarding probable construction costs or construction schedule provided by AECOM represent AECOM's professional judgement in light of its experience and the knowledge and information available to it at the time of preparation. Since AECOM has no control over market or economic conditions, prices for construction labour, equipment or materials or bidding procedures, AECOM, its directors, officers and employees are not able to, nor do they, make any representations, warranties or guarantees whatsoever, whether express or implied, with respect to such estimates or opinions, or their variance from actual construction costs or schedules, and accept no responsibility for any loss or damage arising therefrom or in any way related thereto. Persons relying on such estimates or opinions do so at their own risk.

Except (1) as agreed to in writing by AECOM and Client; (2) as required by-law; or (3) to the extent used by governmental reviewing agencies for the purpose of obtaining permits or approvals, the Report and the Information may be used and relied upon only by Client.

AECOM accepts no responsibility, and denies any liability whatsoever, to parties other than Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information ("improper use of the Report"), except to the extent those parties have obtained the prior written consent of AECOM to use and rely upon the Report and the Information. Any injury, loss or damages arising from improper use of the Report shall be borne by the party making such use.

This Statement of Qualifications and Limitations is attached to and forms part of the Report and any use of the Report is subject to the terms hereof.

AECOM: 2015-04-13 © 2009-2015 AECOM Canada ULC. All Rights Reserved. City of Winnipeg North Transit Garage Replacement Design Remedial Plan

Quality information

Prepared by	Checked by	Approved by
	SERVINGE OF MANITOR	12
Jonnifer Mourant	50214 50214 PRAFECE B. 14, 20	25 - Fritous
Jen Murray, B.Env.Sc., EP	Chuck Jocheme, P.Eng.	Lindsey Beaton, P.Eng. (BC),
Environmental Scientist	Senior Environmental Engineer	Program Manager, Remediation, Canada



Revision History

Revision	Revision date	Details	Name	Position	
0	December 20, 2024	Draft for Comment			
1	February 14, 2025	Final Report			

Distribution List

# Hard Copies	PDF Required	Association / Company Name	
	1	City of Winnipeg	
2			

Prepared for:

City of Winnipeg

Prepared by:

AECOM Canada ULC. 99 Commerce Drive Winnipeg, MB R3P 0Y7 Canada

T: 204.477.5381 F: 431.800.1210 aecom.com

© 2024 AECOM Canada ULC. All Rights Reserved.

This document has been prepared by AECOM Canada ULC. ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1	Introduction	. 1
1.1	Objective and Scope	1
2	Site Description	. 2
2.1	Physical Setting	2
2.2	Geology	3
2.2.1	Surficial Geology	3
2.2.2	Bedrock Geology	4
2.3	Hydrogeology	4
2.4	Topography and Drainage	4
2.5	Water Wells	4
3	Summary of Site Conditions	. 5
3.1	Previous Environmental Site Assessments	5
3.2	Subsurface Impacts	5
3.2.1	Soil Impacts	5
3.2.2	Groundwater Impacts	9
4	Provincial Regulations	11
4.1	Remedial Guideline Selection	11
4.2	Land Use and Soil Type	12
4.3	Exposure Pathways Evaluation	12
4.3.1	Applicable Receptors	14
	· · · · · · · · · · · · · · · · · · ·	
5	Remediation Guidelines	
		14
5	Remediation Guidelines	14
5 5.1	Remediation Guidelines	14 14 15
5 5.1 5.2	Remediation Guidelines Soil Groundwater	14 14 15 15
5 5.1 5.2 5.3	Remediation Guidelines Soil Groundwater Landfill Acceptance Criteria	14 14 15 15 16
5 5.1 5.2 5.3 6	Remediation Guidelines Soil Groundwater Landfill Acceptance Criteria Proposed Remedial Actions	14 14 15 15 16
5 5.1 5.2 5.3 6 6.1	Remediation Guidelines Soil Groundwater Landfill Acceptance Criteria Proposed Remedial Actions Preliminary Health and Safety Planning	14 15 15 16 16
5 5.1 5.2 5.3 6 6.1 6.2 6.2.1	Remediation Guidelines Soil Groundwater Landfill Acceptance Criteria Proposed Remedial Actions Preliminary Health and Safety Planning Soil Management	14 15 15 16 16 16
5 5.1 5.2 5.3 6 6.1 6.2 6.2.1	Remediation Guidelines Soil Groundwater Landfill Acceptance Criteria Proposed Remedial Actions Preliminary Health and Safety Planning Soil Management Pre-Construction Drilling Program and Assessment of Program Results Soil Volume Estimate	14 15 15 16 16 16 17 18
5 5.1 5.2 5.3 6 6.1 6.2 6.2.1 6.2.2 6.2.3	Remediation Guidelines Soil	14 15 15 16 16 17 18 19
5 5.1 5.2 5.3 6 6.1 6.2 6.2.1 6.2.2 6.2.3	Remediation Guidelines	14 15 15 16 16 17 18 19 21
5 5.1 5.2 5.3 6 6.1 6.2 6.2.1 6.2.2 6.2.3	Remediation Guidelines	14 14 15 15 16 16 16 17 18 19 21 21
$5 \\ 5.1 \\ 5.2 \\ 5.3 \\ 6 \\ 6.1 \\ 6.2 \\ 6.2.1 \\ 6.2.2 \\ 6.2.3 \\ 6.2.4 \\ 6.2.5 \\ 6.2.6 \\ \end{array}$	Remediation Guidelines Soil	14 14 15 15 16 16 17 18 19 21 21 21
$5 \\ 5.1 \\ 5.2 \\ 5.3 \\ 6 \\ 6.1 \\ 6.2 \\ 6.2.1 \\ 6.2.2 \\ 6.2.3 \\ 6.2.4 \\ 6.2.5 \\ 6.2.6 \\ \end{array}$	Remediation Guidelines Soil	14 14 15 15 16 16 16 17 18 19 21 21 21 22
$5 \\ 5.1 \\ 5.2 \\ 5.3 \\ 6 \\ 6.1 \\ 6.2 \\ 6.2.1 \\ 6.2.2 \\ 6.2.3 \\ 6.2.4 \\ 6.2.5 \\ 6.2.6 \\ 6.2.7 \\ 6.2.8 \\ \end{cases}$	Remediation Guidelines	14 .14 .15 .15 16 .16 .17 .18 .21 .21 .21 .22 .22
$5 \\ 5.1 \\ 5.2 \\ 5.3 \\ 6 \\ 6.1 \\ 6.2 \\ 6.2.1 \\ 6.2.2 \\ 6.2.3 \\ 6.2.4 \\ 6.2.5 \\ 6.2.6 \\ 6.2.7 \\ 6.2.8 \\ 6.2.9 \\ 6.2.10 \\$	Remediation Guidelines	14 15 15 16 16 16 16 17 18 21 21 21 22 22 22 22 22
$5 \\ 5.1 \\ 5.2 \\ 5.3 \\ 6 \\ 6.1 \\ 6.2 \\ 6.2.1 \\ 6.2.2 \\ 6.2.3 \\ 6.2.4 \\ 6.2.5 \\ 6.2.6 \\ 6.2.7 \\ 6.2.8 \\ 6.2.9 \\ 6.2.10 \\$	Remediation Guidelines	14 15 15 16 16 16 16 17 18 21 21 21 22 22 22 22 22
$5 \\ 5.1 \\ 5.2 \\ 5.3 \\ 6 \\ 6.1 \\ 6.2 \\ 6.2.1 \\ 6.2.2 \\ 6.2.3 \\ 6.2.4 \\ 6.2.5 \\ 6.2.6 \\ 6.2.7 \\ 6.2.8 \\ 6.2.9 \\ 6.2.10 \\$	Remediation Guidelines	14 15 15 16 16 16 17 21 21 21 22 22 22 22 22

Tables (in Text)

Table 2-1: Summary of Hydraulic Conductivity Results	4
Table 2-2: Summary of Hydraulic Conductivity Results	5
Table 3-1: Maximum Soil Contaminant Concentrations - AEC 1 - Former Brooklands Landfill	6
Table 3-2: Maximum Soil Contaminant Concentrations - AEC 2 - Former Brooklands Speedway	7
Table 3-3: Maximum Soil Contaminant Concentrations - AEC 3 - Former Gas Station	8
Table 3-4: Maximum Soil Contaminant Concentrations - AEC 4 - Former Imperial Oil Retail Fuel Outlet	9
Table 3-5: Maximum Groundwater Contaminant Concentrations - AEC 1 - Former Brooklands Landfill	9
Table 3-6: Maximum Groundwater Contaminant Concentrations - AEC 2 - Former Brooklands Speedway	10
Table 3-7: Maximum Groundwater Contaminant Concentrations - AEC 3 - Former Gas Station	10
Table 4-1: Exposure Pathway Evaluation	13
Table 5-1: Remedial Objectives for Soil	14
Table 5-2: Remedial Objectives for Groundwater	15
Table 6-1: Soil Handling Methods for Impacted and Potentially Impacted Soil	20

Figures (Attachment)

- Figure 1 Site Location
- Figure 2 Site Plan
- Figure 3 Profile View of Cross Section of the Site (A and B)
- Figure 4 Shallow Groundwater Contours (March 2024)
- Figure 5 AEC 1 Former Landfill Soil Sample Locations Exceeding Soil Quality Guidelines
- Figure 6 AEC 2 Former Speedway Soil Sample Locations Exceeding Soil Quality Guidelines
- Figure 7 AEC 3 Former Gas Station Soil Sample Locations Exceeding Soil Quality Guidelines
- Figure 8 AEC 4 Former IOL Retail Fuel Outlet Soil Sample Locations Exceeding Soil Quality Guidelines
- Figure 9 Groundwater Sample Locations With Analytical Results Exceeding Environmental Quality Guidelines

Tables (Attachment)

- Table 1: Soil Analytical Results Particle Size Analysis
- Table 2: Groundwater Monitoring Results
- Table 3: Soil Analytical Results Petroleum Hydrocarbons
- Table 4: Soil Analytical Results Polycyclic Aromatic Hydrocarbons
- Table 5: Soil Analytical Results Volatile Organic Carbons
- Table 6: Soil Analytical Results Metals
- Table 7: Soil Analytical Results EC/pH/SAR
- Table 8: Soil Analytical Results Dioxin and Furans
- Table 9: Soil Analytical Results Toxicity Characteristic Leaching Procedure
- Table 10: Groundwater Analytical Results Petroleum Hydrocarbons
- Table 11: Groundwater Analytical Results Polycyclic Aromatic Hydrocarbons
- Table 12: Groundwater Analytical Results Volatile Organic Carbons
- Table 13: Groundwater Analytical Results Nutrients
- Table 14: Groundwater Analytical Results Dissolved Metals
- Table 15: Groundwater Analytical Results Dioxin and Furans

Appendices

Appendix A: Borehole Logs Appendix B: Historical Borehole Logs

1 Introduction

The City of Winnipeg (the City) requested AECOM Canada ULC. (AECOM) to complete a Remedial Plan (RP) for the proposed location of the new North Transit Garage, located along Oak Point Highway in Winnipeg, Manitoba (the Site). The location and layout of the Site are shown on **Figure 1** and **Figure 2**, respectively. The purpose of this RP is to describe the remedial activities to be undertaken at the Site.

1.1 Objective and Scope

The objective of this report is to provide a summary of the proposed soil remediation activities to excavate and manage petroleum hydrocarbon (PHC), polycyclic aromatic hydrocarbon (PAH) and metal impacted soil to mitigate risks to human health and the environment. The remedial plan for the site addresses impacted soil encountered during site grading, remedial excavations and the residual impacted soil present at the Site. Depending on the area of the Site and contaminant of concern (COC), the remedial strategies consist of excavation and off-site disposal or excavation and onsite engineered containment. In addition, the project design and remedial plan will comply with the *City of Winnipeg Standards and Guidelines for the Mitigation of Methane Gas at Buildings and Utilities and Guideline for Construction on Landfill Sites, December 2006.*

This RP includes a review of the previous environmental site assessment activities at the Site and of the current and planned future property use, risk analyses via human health and ecological pathway evaluation, selection of appropriate site-specific guidelines and a summary of the proposed remediation activities to be completed at the Site.

2 Site Description

2.1 Physical Setting

The Site is located within the City of Winnipeg, south of Oak Point Highway, between Selkirk Avenue and Egesz Street, and north of the Canadian Pacific Kansas City (CPKC) Rail Right-of-Way. The Site encompasses four areas of environmental concern (AECs), namely; 1) the former Brooklands Landfill; 2) the former Brooklands Speedway; 3) a former gas station; and 4) a former Imperial Oil Retail Fuel Outlet (see **Figure 2**). The Site contains no above grade infrastructure aside from the concrete and asphalt floor and foundations on the former gas station and Imperial Oil properties along Oak Point Highway.

The Site is defined by the legal land descriptions:

- Block 3, Plan 17744 (City of Winnipeg Roll Number [CofW RN] 14096460000);
- Lot 49, Plan 24342 (CofW RN 7092321000);
- Lot 50, Plan 24342 (CofW RN 7092308000);
- Lot 51, Plan 24342 (CofW RN 7092313000);
- Lot 52, Lot 56 and Lot 57, Plan 24342 (CofW RN 7092163000);
- Lot 53, Plan 24342 (CofW RN 7092238000);
- Lot 54, Plan 24342 (CofW RN 7092304000);
- Lot 55, Plan 24342 (CofW RN 7092190000); and
- Lot 58, Plan 24342 (CofW RN 7092127100) (WSP, 2023a).

AEC 1: Former Brooklands Landfill

The former Brooklands Landfill was operational between 1950 and 1968 before it was decommissioned, however the Village of Brooklands may have used this area as a dumping ground prior to the 1950s. It was reported that the waste included local garbage and septic waste, rubble and inorganic material and burning was also carried out at the Site (WSP, 2023a). The Brooklands landfill covered approximately 2.4 hectares, with the waste placed approximately 1.5 m to 3 m above ground and 1.5 m below surface, and reportedly capped with 0.3 m to 0.6 m of low permeability clay during decommissioning (Golder, 2015).

AEC 2: Former Brooklands Speedway

The Brooklands Speedway was in operation from 1953 to 1973 and occupied parcels Lot 52 and part of Lot 57, Plan 24342. Historical archives indicated the racetrack as a major racing venue in Manitoba summer months during its 20 years of operation as a paved quarter-mile racetrack featuring stock, modified and super modified race cars. It was eventually sold to Motorways, a trucking company in 1974 (WSP, 2023a).

AEC 3: Former Gas Station

The City of Winnipeg's Brooklands Landfill Site – Landfill No. 28 report (1984) indicated that this area had previously been developed for a gas station and consists of subject Parcel PT 7, Plan 9218 WLTO, Block 3, Plan 17744 WLTO, and 200 Oak Point Highway (WSP, 2023).

AEC 4: Former Imperial Oil Retail Fuel Outlet

The former Imperial Oil Esso (IOL) retail fuel outlet and cardlock facility was in operation from approximately 1988 to 2012, with a restaurant from the late 1990s to 2012 (Parsons, 2015).

The Site was decommissioned in 2013 and prior to decommissioning, this portion of the Site consisted of canopy covered pump islands and approximately four cardlock semi-truck gas stations to the south, two petroleum warehouse buildings, two 45,456 litre (L) USTs containing gasoline, one 45,456 L UST containing diesel, one

36,365 L UST containing diesel, one 9,090 L UST containing wastewater, pump islands, and associated product distribution piping.

The Site is surrounded by the following land uses:

- North: Traction Heavy Duty Parts, Oak Point Highway, single family residential housing (northeast) and various industrial and commercial lots (northwest).
- South: CPKC Rail Right-of-Way followed by various commercial and industrial lots.
- West/Northwest: Paul's Hauling at 250 Oak Point Highway and Gardewine shipping at 60 Eagle Drive.
- East: North End Spring & Trailer at 70 Oak Point Highway and Royal Bros Yard at 61 Hyde Avenue, followed by various industrial lots and Woodsworth Park.

2.2 Geology

2.2.1 Surficial Geology

The Site is located within the Lake Agassiz clay plain, which was formed through the offshore lake bottom deposits of historic glacial Lake Agassiz (Matile G. T., 1998) and surficial soils at the Site have been mapped as offshore glaciolacustrine sediments, consisting of clay, silt, and minor sand (Matile & Keller, 2004). General surficial geology encountered during previous environmental investigations conducted by AECOM at the Site consisted of a clay or silt fill layer with some sand or gravel, ranging in depth from surface to about 4.5 m below ground surface (bgs), underlain by alternating layers of clay and silt (AECOM, 2024a). Beneath the clay horizon, a grey silt till was identified varying between depths of approximately 10 - 20 m bgs (AECOM, 2024b). A more detailed description by AEC is summarized below.

AEC 1 – Former Brooklands Landfill

The soil of AEC 1 is highly disturbed and consists of mixed fill and debris associated with landfill waste. Debris was encountered in the majority of the boreholes and test pits advanced within AEC 1 in 2024. The debris included glass, plastic, metal, wood, ceramics, bricks, concrete, vehicle parts, tires, metal rebar and cable. The soil intermixed with the debris consisted of clay, silt and sand and was dark brown to black in colour. Soil logs indicate the presence of a clay/silt/sand cover of approximately 0.5 to 1 m thickness over the debris fill layer throughout the landfill area. Native clay was typically encountered at a depth of approximately 5 m bgs.

AEC 2 – Former Brooklands Speedway

The soil encountered in AEC 2 consists of an overlying fill zone varying in thickness from 1 to 4 m overlying a native silt layer typically 1 m thick in turn overlying a firm to high plasticity clay. The clay layer is typically 6 to 7 m thick and overlies a silt till. The fill material was occasionally noted to contain concrete, wood and plastic debris and varied widely from clay and silt to sand and gravel (AECOM, 2024a).

AEC 3 – Former Gas Station

The soil in AEC 3 was disturbed and soil was covered by concrete or asphalt. The stratigraphy generally consisted of silty sands and gravels to a maximum depth of 3 m, but typically 1 to 2 m in thickness. This was underlain by a silt or silty clay layer to a depth of approximately 3 m at which point the soil transitioned to a high plasticity clay. Silt till was encountered at depths of 9.2 and 10.6 m. Hydrocarbon odors were occasionally noted in the upper 1 to 3 m of the soil column (AECOM, 2024a).

AEC 4 – Former Imperial Oil Retail Fuel Outlet

The soil in AEC 4 was disturbed and soil stratigraphy generally consisted of concrete or asphalt at surface underlain by silty sands and gravels to a maximum depth of 3 m, but typically were 1 to 2 m in thickness. This was underlain by a silt or silty clay layer to a depth of approximately 3 m at which point the soil transitioned to a high plasticity clay. Silt till was encountered at depths of 7.5 to 9 m (AECOM, 2024a).

Cross section profile views of the Site are attached, on **Figure 3**, with the location of the cross sections shown on **Figure 2**.

2.2.2 Bedrock Geology

The Winnipeg area straddles the boundary between the Paleozoic and Precambrian outcrop areas. The bedrock geology of the Site consists of Winnipeg Formation sandstones and shales overlain by mottled dolomitic limestones of the Red River Formation, 150 – 175 m in thickness. The Red River Formation consists of the lower and upper Red River Strata (Manitoba Energy and Mines, 1990). During a geotechnical investigation, a clay mudstone (Stony Mountain Formation, Gunn Member, calcareous shale to argillaceous dolomite) was observed at depths ranging between 13 m bgs to 21 m bgs underlain by dolomite (Stony Mountain Formation, Gunn Member) to approximately 26 m bgs (AECOM, 2024b).

2.3 Hydrogeology

The Site is located within the City of Winnipeg and potable water is supplied to residences and businesses via piped distribution. There is currently no water supply to the Site, however the potable water for the proposed North Transit Garage building will likely be supplied by the City's piped municipal distribution system.

The closest surface water bodies to the Site are Omand's Creek, which is located approximately 1.2 km southwest of the Site and the Red River, which is located about 6 km east of the Site.

In March 2024, the depth to groundwater in shallow monitoring wells ranged from approximately 2.3 to 3.8 m bgs, 231.8 to 234.7 meters above sea level (m asl), and the shallow groundwater flow direction was inferred to be northeast, as illustrated on **Figure 4**. Historical groundwater levels ranged from 0.89 m bgs to 4.98 m bgs with inferred flow direction to the northeast and northwest (Dillon, 2023, WSP, 2023, Parsons, 2019).

In March 2024, hydraulic conductivity tests were performed in two monitoring wells (wells MW24-01 and MW24-06) to determine the hydraulic conductivity of the soil. The hydraulic conductivities estimated from these tests are summarized in **Table 2-1** below. The hydraulic conductivities are generally within the range typical of silt and clay soils specified in Freeze and Cherry (1979).

MW ID	Screened Interval (m bgs)	Screened Unit	Test Type	Analytical Solution	Hydraulic Conductivity (m/s)
MW24-01	1.5 – 3.0	Silt, Some Clay	Bail Test	Bouwer-Rice	7.36 x 10 ⁻⁷
MW24-06	3.0 – 5.0	Clay, Silt and Sand	Bail Test	Bouwer-Rice	2.29 x 10 ⁻⁸

Table 2-1: Summary of Hydraulic Conductivity Results

2.4 Topography and Drainage

The majority of the Site has a surface elevation ranging from 234 to 240.5 meters above sea level (m asl) with the highest elevations located in the former landfill area. Omand's Creek is located about 1 km southwest of the Site and surface water runoff is expected to flow north towards Oak Point Highway to be captured by the City's surface drainage network. Regional groundwater flow direction is inferred to be east towards the Red River.

2.5 Water Wells

A search of the Groundwater Information Network (GIN, 2021) identified no wells on-Site and five wells within 500 m of the Site. Distances are approximate since the GIN database does not always identify specific well locations. The reported well details are summarized in **Table 2-2** below.

Well ID	Year Drilled	Water Use	Status Well Casing (m bgs)		Installed Depth (m bgs)
37008	1979	Industrial, production	Unknown	0 to 20 <u>.</u> 27	75.29
37009	1979	Unknown, observation	Unknown	0 to 21.64	28.96
74846	1992	Industrial, production	Unknown	0 to 18.14	67.06
106762	1998	Domestic, production	Active	0 to 21.66	39.65
8766	1966	Domestic, production	Unknown	0 to 9.75	21.34

Table 2-2: Summary of Hydraulic Conductivity Results

Based on the information provided, the status of most wells are unknown and they range in depth from 21.3 to 75.3 m bgs.

3 Summary of Site Conditions

3.1 **Previous Environmental Site Assessments**

Historical reports date back to 1984 for the former Brooklands Landfill portion of the Site (WSP, 2023a). Several environmental investigations have been completed by Dillon Consulting Limited (Dillon), WSP Canada Inc. (WSP), Parsons Canada Ltd (Parsons), Golder Associates (Golder), and J&D Environmental, such as Phase I and Phase II Environmental Site Assessments (ESAs) and groundwater sampling programs, with reports dating between 2013 and 2023. The former IOL Cardlock portion of the Site has had the most environmental work completed and impacts in this area are largely defined. The most recent environmental site assessment on the entire site was completed by AECOM in 2024. Recent AECOM borehole and test pit logs are in **Appendix A**. Borehole logs from historical reports are in **Appendix B**.

3.2 Subsurface Impacts

A summary of the subsurface impacts in soil and groundwater is presented in the following subsections as the summary of site condition. Due to the varying historical land uses at the Site, COCs vary among the AECs. This summary is based on the results of previous environmental investigations performed at the Site and others as described in **Section 3.1**.

3.2.1 Soil Impacts

Soil impacts are characterized by select COCs in AECs at concentrations exceeding the referenced applied guidelines.

3.2.1.1 AEC 1 – Former Brooklands Landfill

The soil of AEC 1 is highly disturbed and consists of mixed fill and debris associated with landfill waste. Debris was encountered in the majority of the boreholes and test pits advanced within AEC 1 in 2024. The debris included glass, plastic, metal, wood, ceramics, bricks, concrete, vehicle parts, tires, metal rebar and cable. The soil intermixed with the debris consisted of clay, silt and sand and was dark brown to black in colour. Native clay soil was encountered at a depth of approximately 5 m bgs (AECOM, 2024a).

The presence of metals (arsenic, copper, lead, nickel, tin, zinc), pH and electrical conductivity in soil above applicable EQGs was reported for most of the sampling locations across the landfill area in AECOM, 2024. Of the 28 investigation points located in and immediately adjacent to the landfill, 15 had soil with concentrations exceeding EQGs, as illustrated on **Figure 5**. Of those 15, four were minor exceedances of pH or electrical conductivity (EC) guidelines, which affect plant growth and are not considered further here, implying that 11 of 28 locations exhibited a guideline exceedance (39%). Due to the cost of laboratory analysis, not all samples were analyzed for dioxins/furans. In AEC 1, a total of nine samples were analyzed for dioxins/furans in the 2023 Dillon and 2024 AECOM programs,

with results below the human health soil ingestion guideline of 175 picogram per gram (pg/g). All the soil samples retrieved from this area were analyzed for metals and 10 of 28 investigation points had metals concentrations that exceeded EQGs (36%). In an effort to assess leachability of lead in areas of high lead levels, in October 2024 sample TH24-19-4.4 at 4.4 m bgs was submitted for analysis of total and leachable lead to assess the potential for encountering hazardous waste during construction. The total lead result was 265 mg/kg and below the EQG and the toxicity characteristic leaching procedure (TCLP) leachate result for lead was below the detection limit and below its EQG. It is recommended to complete additional soil sampling in areas of high lead concentrations (>1,000 mg/kg) for analysis of TCLP lead prior to construction to assess the potential for encountering hazardous waste.

Soil logs indicate the presence of a clay/silt/sand cover of approximately 0.5 to 1 m thickness over the debris fill layer throughout the landfill area. Although a smaller number of samples of this cover material was retrieved, some samples in the 0.75 to 1.5 m depth range were impacted and, as such, it is not possible to conclude that the upper cover layer is not impacted. Regarding vertical delineation of the impacted soil in the landfill area, native clay was typically encountered at a depth of approximately 5 m bgs. Soil impacts were reported for TP24-09-07 where zinc concentrations above the EQG was observed at 5.0 - 6.0 m bgs and in TP24-12 at 5.0 - 6.0 m bgs where copper and lead concentrations were above EQGs. Note these locations are near the center of the landfill and thus are likely to have the deepest waste placement. The horizontal extent of impacts in the landfill area (AEC 1) has not been confirmed as there are limited boreholes along the boundaries. It is evident from site inspections that the area of fill in the vicinity of the landfill extends beyond the boundary noted in historical reports, particularly in the northwest corner of the Site. Some debris was noted in borehole BH23-12 near the northwest corner of the Site, well outside of the historical landfill boundary. Without additional investigation points along the Site boundaries, it must be assumed that soil impacts may extend to the property boundaries (AECOM, 2024a).

Parameter	Units	Soil Quality Guideline ^a	Concentration Range	Location with Maximum Concentration					
	Soil Metals								
Arsenic (As)	mg/kg	12	1.49 - 57.3 ^b	MW24-05-05					
Barium (Ba)	mg/kg	2,000	32 - 2,090 ^b	MW24-05-05					
Chromium (Cr)	mg/kg	87	11.9 - 101 ^ь	MW24-05-05					
Copper (Cu)	mg/kg	91	4.7 - 4,700	MW24-05-05					
Lead (Pb)	mg/kg	600	2.7 - 6,020	MW24-05-05					
Nickel (Ni)	mg/kg	89	7.5 - 172	MW24-05-05					
Tin (Sn)	mg/kg	300	< 2.0 - 1,269 ^b	MW24-05-05					
Zinc (Zn)	mg/kg	410	19.0 - 7,340	MW24-05-05					
	·	Soil EC-pH-SAR							
pH (1:2 soil:water)	pH units	6-8	7.77 - 8.56	TP24-06-06					

Table 3-1: Maximum Soil Contaminant Concentrations - AEC 1 - Former Brooklands Landfill

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (accessed in November 2024), Industrial Land Use.

^b Average concentration of MW24-05-05 and its duplicate DUP-10.

3.2.1.2 AEC 2 - Former Brooklands Speedway

The soil encountered in AEC 2 consists of an overlying fill zone varying in thickness from 1 to 4 m overlying a native silt layer typically 1 m thick in turn overlying a firm to high plasticity clay. The clay layer is typically 6 to 7 m thick and overlies a silt till. The fill material was occasionally noted to contain concrete, wood and plastic debris and varied widely from clay and silt to sand and gravel (AECOM, 2024a).

The presence of metals (arsenic, copper, lead, tin and zinc), pH, SAR and electrical conductivity in soil at concentrations above applicable EQGs was observed in many of the sampling locations in the former Brooklands Speedway area. Of the 35 investigation points located in AEC 2, 8 had soil with concentrations exceeding guidelines, as illustrated on **Figure 6**. Of the 8, three were for minor exceedances of pH, SAR or electrical conductivity (EC) guidelines, which affect plant growth and are not considered further here, implying that 5 of 35 locations exhibited a

guideline exceedance (23%). Similar to AEC 1, not all samples were analyzed for dioxins/furans. In AEC 2, a total of 11 samples were analyzed for dioxins/furans in the 2023 Dillon and 2024 AECOM programs, with results below the human health soil ingestion guideline (175 pg/g). All the soil samples retrieved from this area were analyzed for metals and 5 of 35 investigation points exhibited exceedance of guidelines for metals (14%) located in the north, central and southern portions of the AEC (AECOM, 2024a).

The depth of impacted soil samples ranged from 0.8 m bgs to 3.0 m bgs in the fill layer. In regard to vertical delineation, samples obtained from the native silt or clay underlying the fill did not indicate exceedances of guidelines. The horizontal extent of impacts in AEC 2 has not been confirmed as there are limited boreholes along the property lines. Note that some impacts were noted near the property boundary as illustrated on **Figure 6**. Without additional investigation points along the site boundaries, it must be assumed that soil impacts may extend to the property boundaries.

Parameter	Units	Soil Quality Guideline ^a	Concentration Range	Location with Maximum Concentration					
	Soil Metals								
Copper (Cu)	Copper (Cu) mg/kg 91 9.6 - 5,050 BH24-08-03								
Lead (Pb)	mg/kg	600	4.5 - 2,610	BH24-08-03					
Tin (Sn)	mg/kg	300	2.0 - 367	BH24-08-03					
Zinc (Zn)	mg/kg	410	19.2 - 2,690	BH24-08-03					
	S	oil EC-pH-SAR		·					
Conductivity (1:2 leachate)	mS/cm	4	1.47 - 4.99 ^b	TH24-13-02					
pH (1:2 soil:water)	pH units	6-8	7.52 - 8.24	TH24-03-02					
Sodium adsorption ratio [SAR]	no unit listed	12	2.8 - 43	BH23-23					

Table 3-2: Maximum Soil Contaminant Concentrations - AEC 2 - Former Brooklands Speedway

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (accessed in November 2024), Industrial Land Use.

^b Concentration Range for 2024 results only.

3.2.1.3 AEC 3 – Former Gas Station

The soil in AEC 3 was disturbed and soil was covered by concrete or asphalt. The stratigraphy consisted of silty sands and gravels to a maximum depth of 3 m, but generally 1 to 2 m in thickness. This was generally underlain by a silt or silty clay layer to a depth of approximately 3 m at which point the soil transitioned to a high plasticity clay. The two geotechnical test holes in this area encountered silt till at depths of 9.2 and 10.6 m. Hydrocarbon odors were occasionally noted in the upper 1 to 3 m of the soil column (AECOM, 2024a).

Test pit TP24-01, located in the area of the suspected buried tank, had concentrations of arsenic (13.6 mg/kg) above the EQG at a depth of 4 to 5 m bgs in the native clay. This concentration slightly exceeds the guideline limit of 12 mg/kg and is not representative of the average arsenic concentration in this area which is 6 mg/kg, therefore this isolated exceedance will not be considered further. TP24-02 had concentrations of PHC F2 and acenaphthylene exceeding EQGs from surface to approximately 2.0 m bgs, while a sample from a depth of 3 to 4 m was not impacted. Clean depths were established at this location at 3.0 m bgs. In BH23-01, a sample from a depth of 1.5 m showed exceedances of PHC F1 and F2 and at the next sample depth at 4.5 m, PHC F1 and F2 concentrations were below EQGs. Based on combustible soil vapour readings, the hydrocarbon impacts did not appear to extend below 2 m. Horizontal closure was not completely obtained in the vicinity of these two points.

Based on historical and current soil results, soil impacts cover an area of 280 m² and range from surface to 2.5 m deep, with an estimated volume of impacted soil at 700 m³. However, clean extents have not been fully established in this area. The estimated extent of impacted soil is indicated on **Figure 7** along with the historical and recent soil results exceeding EQGs.

While a 2023 geophysical survey indicated the possible presence of an underground storage tank, the test pits advanced in this area did not locate a tank but did encounter metallic debris which may have caused the anomalous electromagnetic readings.

Parameter	Units	Soil Quality Guideline ª	Concentration Range	Location with Maximum Concentration		
Soil PHC						
PHC F1 (C6-C10) minus BTEX	mg/kg	320	<5.0 - 1,700	BH23-01		
PHC F2 (>C10-C16)	mg/kg	260	<25 - 4,920	TP24-02-01		
		Soil PAH				
Acenaphthylene	mg/kg	0.17	<0.0050 - 0.417	TP24-02-01		
Soil Metals						
Arsenic (As)	mg/kg	12	2.3 - 13.6	TP24-01-05		

Table 3-3: Maximum Soil Contaminant Concentrations - AEC 3 - Former Gas Station

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (accessed in November 2024), Industrial Land Use.

3.2.1.4 AEC 4 - Former Imperial Oil Retail Fuel Outlet

The soil in AEC 4 was disturbed and soil stratigraphy generally consisted of concrete or asphalt at surface underlain by silty sands and gravels to a maximum depth of 3 m, but generally 1 to 2 m in thickness. This was underlain by a silt or silty clay layer to a depth of approximately 3 m at which point the soil transitioned to a high plasticity clay. The geotechnical test holes in this area encountered silt till at depths of 7.5 to 9 m (AECOM, 2024a).

Several historical environmental investigations completed in AEC 4 since 2013 have identified PHC F2 and F3 impacts in soil in the northern portion of the AEC. As indicated on **Figure 8**, a substantial number of boreholes and test pits have been advanced in AEC 4 in past investigations and vertical delineation has been achieved with the majority of clean depths at 2.4 m bgs. When applying surface soil guidelines to the Site, the deepest impacts are in TP-5 at 3.7 m bgs, with the next clean sample at 4.9 m bgs. Horizontal delineation has been achieved to the east, south and west, but not to the north. It is expected impacts extend north to the property boundary. **Figure 8** illustrates the locations which showed evidence of soil exceeding SQGs and the estimated extent of hydrocarbon impacts in the northern portion of AEC 4. Based on an area of 2,720 m² and depths of PHC impacts extending from approximately 0.8 m bgs to 2.5 m bgs, the estimated volume of hydrocarbon impacted soil in the northern portion of AEC 4 is approximately 4,625 m³.

Metal impacted soil identified in previous reports is present on the southern portion of the AEC 4 at depths ranging from 1.2 to 3 m bgs, aside from one location (BH-19) where copper impacts were detected at surface. In 2024, one borehole (BH24-09) was advanced in the southern portion of APEC 5 in the area of potential cinders and ash. The duplicate sample (DUP-04) of BH24-09-04 exceeded EQGs for copper and zinc at 1.5 - 2.0 m. Dillon 2023 completed a surface soil sampling program in the southern portion of the site to assess metal in the surface soil (0.1 m bgs) and all results were below EQGs. A few pockets of PHC and/or PAH impacts in soil were also identified in historical reports for the southern portion of the Site. **Figure 8** illustrates the estimated extent of hydrocarbon impacts (50 m³) in the southern portion of AEC 4. The total estimated volume of non-hydrocarbon impacted soil in the southern portion of AEC 4 is 9,000 m³. Note however that the total estimated volume of impacted soil resulting from site grading of the entire site is calculated separately as discussed in **Section 6.2.2**.

Parameter	Units	Soil Quality Guideline ^a	Concentration Range	Location with Maximum Concentration
		Soil PHC		
PHC F2 (>C10-C16)	mg/kg	260	<25 - 5,400	TP-7 (1.2.)
PHC F3 (>C16-C34)	mg/kg	5,000	<50 - 9,000	TP-47 (2.4)
		Soil PAH		
Benzo(a)anthracene	mg/kg	10	<0.010 - 20	TP-66 (1.8)
Benzo(a)pyrene total potency equivalents	mg/kg	5.3	<0.020 - 23	TP-66 (1.8)
Chrysene	mg/kg	9.6	<0.010 - 14	TP-66 (1.8)
		Soil Metals		
Arsenic	mg/kg	12	1.7 - 34	TP-72 (2.4)
Copper	mg/kg	91	7.8 - 560	BH-22 (1.8-2.4)
Lead	mg/kg	600	8.8 - 5,700	TP-72 (2.4)
Selenium	mg/kg	2.9	<0.20 - 4.9	TP-69 (2.4)
Zinc	mg/kg	410	20 - 2,100	TP-72 (2.4)

Table 3-4: Maximum Soil Contaminant Concentrations - AEC 4 - Former Imperial Oil Retail Fuel Outlet

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (accessed in November 2024), Industrial Land Use.

3.2.2 Groundwater Impacts

The groundwater analytical results from sampling events conducted in 2023 and 2024 indicate that select COCs are present within the shallow groundwater bearing unit at concentrations exceeding the referenced groundwater quality guidelines (GQGs) across all AECs.

Elevated concentrations of chloride are present through all four AECs. The American Concrete Institute (ACI) indicates that threshold chloride concentration values are typically in the range of 0.05% to 0.1% by weight of concrete (ACI 318 Building Code) for reinforced concrete due to the potential for corrosion of reinforcing steel. Chloride concentrations in site groundwater were found to be as high as 3,600 mg/L or 0.0036% by weight in groundwater. Based on the new construction, a perimeter cutoff wall and foundation drain will keep groundwater from contact with the new building concrete foundation. If groundwater did come in contact with reinforced concrete, the chloride concentrations in groundwater are an order of magnitude lower than the lower range of the ACI threshold (0.05%) and therefore, are not of concern.

3.2.2.1 AEC 1 – Former Brooklands Landfill

The groundwater sample collected from BH23-11 located northwest of the landfill showed elevated levels of sodium and uranium. MW24-06, located in the southwest portion of the landfill showed elevated levels of chloride of approximately 3,500 mg/L. MW24-06 was also submitted for dioxin and furan analysis and results were below GQGs.

Based on groundwater results from 2023 and 2024, the primary COCs in AEC 1 are dissolved uranium, sodium and chloride. **Figure 9** shows the groundwater locations and results above groundwater quality guidelines.

Table 3-5: Maximum	Groundwater	Contaminant	Concentrations	- AFC 1	- Former	Brooklands	Landfill
	Groundwater	Contanniant	Concentrations	-ALC I		DIOUKIanus	Lanum

Parameter	Units	Groundwater Quality Guideline ª	Concentration Range	Location with Maximum Concentration	
GW Nutrients					
Chloride	mg/L	2,300	880 - 3,470	MW24-06	
Sodium	mg/L	2,300	510 - 2,400	BH23-11	
Uranium	mg/L	0.42	0.0030 - 0.45	BH23-11	

^a Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

3.2.2.2 AEC 2 - Former Brooklands Speedway

Groundwater samples from BH23-09 located northeast of the landfill and BH23-28 located on the central/eastern portion of the AEC showed elevated levels of chloride of 3,100 to 3,600 mg/L. Concentrations of dissolved lead (BH23-21) were also reported above GQGs. MW24-04 located in the southeast corner of the AEC and adjacent to potential buried refuse, cinders and ash, had the highest number of parameter exceedances; PHC F3, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene.

Based on groundwater results from 2023 and 2024, the primary COCs in AEC 2 are dissolved lead, chloride, PHC F3, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene. The PAHs and PHC groundwater impacts are likely attributed to the adjacent AEC 3. **Figure 9** shows the groundwater locations and results above groundwater quality guidelines.

Parameter	Units	Groundwater Quality Guideline ^a	Concentration Range	Location with Maximum Concentration
		G	W PHC	
PHC F3 (>C16-C34 range)	mg/L	0.500 ^b	<0.10 - 0.52	MW24-04
		G	W PAH	
Benzo(g,h,i)perylene	mg/L	0.0002 ^b	<0.000010 - 0.00118	MW24-04
Benzo(k)fluoranthene	mg/L	0.0004 ^b	<0.00010 - 0.000878	MW24-04
Chrysene	mg/L	0.001	<0.00010 - 0.0017	MW24-04
Indeno(1,2,3-cd)pyrene	mg/L	0.0002	<0.00010 - 0.00147	MW24-04
GW Nutrients				
Chloride	mg/L	2,300 ^b	224 - 3,600	BH23-28

Table 3-6: Maximum Groundwater Contaminant Concentrations - AEC 2 - Former Brooklands Speedway

^a Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

3.2.2.3 AEC 3 – Former Gas Station

Groundwater samples were collected from three wells (MW24-01, MW24-02 and MW24-03) in 2024 and results indicated that MW24-01 exceeded the GQG for PHC F2 with a concentration of 3.88 mg/L and MW24-02 exceeded the GQG for PHC F3 with a concentration of 1.2 mg/L. None of the wells exceeded GQGs for dissolved metals, PAH or nutrient groundwater parameters. The PHC exceedances are relatively minor, and the concentrations are expected to decrease with time as the source contaminated soil will be remediated as part of site development. The estimated extent of groundwater impacts is 820 m² as illustrated on **Figure 9**.

Based on groundwater results from 2023 and 2024, the primary COCs in AEC 3 are PHC F2 and PHC F3.

Table 3-7: Maximum Groundwater Contaminant Concentrations - AEC 3 - Former Gas Station

Parameter	Units	Groundwater Quality Guideline ª	Concentration Range	Location with Maximum Concentration
GW PHC				
PHC F2 (>C10-C16)	mg/L	3.1	<0.10 - 3.88	MW24-01
PHC F3 (>C16-C34 range)	mg/L	0.500 ^b	<0.25 - 1.20	MW24-02

^a Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

3.2.2.4 AEC 4 - Former Imperial Oil Retail Fuel Outlet

Monitoring well MW03 located on the northern boundary of AEC 4 had concentrations of PHC F2 and PHC F3 exceeding applied GQGs in 2023. WSP 2023 estimated a groundwater plume of 560 m² area in the northern portion of the AEC as shown on **Figure 9**. Historical groundwater sampling results are illustrated on **Figure 9**, as no wells were sampled from this AEC in 2024 No PHC impacts were reported in AEC 4 during 2017/2018 sampling events conducted by Parsons.

Based on groundwater results from 2023 and 2017/2018, the primary COCs in AEC 4 are PHC F2 and PHC F3.

4 **Provincial Regulations**

4.1 Remedial Guideline Selection

The Province of Manitoba currently references documents from the Canadian Council of Ministers of the Environment (CCME), Ontario Ministry of the Environment (Ontario MOE) and Alberta Environment and Parks (AEP) as Primary, Secondary and Tertiary standards under the *Contaminated Sites Remediation (CSR) Act*. The applicable standards are summarized below.

Primary standards:

- Canadian Environmental Quality Guidelines (CEQG), Canadian Council of Ministers of the Environment (CCME) (most recent online version).
- Canada-Wide Standards (CWS) for Petroleum Hydrocarbons (PHC) in Soil, CCME (CCME) (most recent online version).
- Federal Contaminated Sites Action Plan (FCSAP), Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (2016) Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.
- Government of Manitoba Hazardous Waste Regulation 195/2015. *The Dangerous Goods Handling and Transportation Act* (C.C.S.M.c.D12). November 25, 2015.

Secondary standard:

• Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act*, Ontario Ministry of the Environment, April 15, 2011.

Tertiary standard:

• Alberta Environment and Parks (AEP), 2023. Alberta Soil and Groundwater Remediation Guidelines.

The CCME guidelines and CWS standards utilize a risk-based approach allowing limited modification of the generic soil quality guidelines (SQGs) in light of prescribed site-specific factors affecting contaminant mobility and receptor characterization. In other words, in cases where soil concentrations exceed the generic guidelines, an analysis of risk factors specific to the site in question is acceptable in order to allow for a realistic assessment of the actual risks at the Site. Using this approach, SQGs are selected based on a step-through procedure eliminating the exposure pathways that do not apply to receptors in the vicinity of the Site and finally selecting the appropriate and most conservative guideline remaining after the elimination procedure. The guidelines are protective of both human and environmental receptors.

This approach was undertaken in order to provide a more realistic assessment of human and environmental risks at the Site. The applicable site-specific factors at the Site and the rationale for the use of CCME Tier 2 SQGs for BTEX and CWS SQGs for PHC fractions F1 to F4 are described in the subsections below and in **Table 3-1**.

In the CCME guidance documents, surface soil extends from ground surface to 1.5 m bgs, and subsurface soil extends below 3.0 m bgs, with classification of soil between 1.5 m and 3.0 m bgs up to the discretion of the provincial regulator. Manitoba Environment and Climate Change (MECC) has defined surface soil as extending from surface to

1.5 m bgs, and subsoil including materials below 1.5 m bgs. Considering the grading required at the Site prior to construction and subsoil excavations likely required for building construction, we have applied surface soil guidelines to subsoil anticipating that what is currently classified as subsoil will likely be brought up to surface soil depths. As adopted by MECC, soil quality guidelines for benzene use a lifetime incremental cancer risk of 10⁻⁵ for human health exposure.

As indicated in the CWS technical guidance document (CCME, 2008), if circumstances arise where one of the following factors becomes a pathway, there would be a requirement for a Tier 2 or Tier 3 assessment:

- Contamination within 30 cm of a building foundation;
- Contamination within 10 m of a surface water body;
- Hydraulic conductivity significantly greater than 10⁻⁵ m/s;
- Contamination within fractured bedrock;
- Ecological receptors of high sensitivity or socio-economic value; or
- Greater than normal frequency of human or ecological exposure.

4.2 Land Use and Soil Type

The Site is located within the City of Winnipeg and zoned as M1-M3 and MMU Manufacturing (light, general and heavy) and manufacturing mixed use (City of Winnipeg, 2022). Future use of the Site will be a transit bus garage. As such, industrial land use environmental quality guidelines (EQGs) are applied for this assessment.

During the subsurface soil investigation activities completed by AECOM in January and February 2024, clay and silt units were observed beneath the Site to a depth of 6.1 m below grade and soil samples were submitted to the laboratory for grain size analysis. Laboratory grain size analysis (**Table 1**) identified the soil at the Site as fine-grained; therefore, the soil type governing the transport and fate of contaminants in the surface and subsurface is considered fine-grained (AECOM, 2024a).

4.3 Exposure Pathways Evaluation

A review of the applicable exposure pathways was conducted as part of the 2024 Supplemental Environmental Site Investigation (AECOM 2024a). A summary of the exposure pathways evaluation is presented in the following table.

Table 4-1: Exposure Pathway Evaluation

Exposure Scenarios	Pathway /Receptor	Tier 2 Considerations	Applies (Y/N)	Rationale/Notes
Human Health	Human Health Soil Ingestion	Pathway required direct exposure to soil and is applicable to all soil shallower than 1.5 m bgs. Direct contact below 1.5 m bgs would apply during activities where subsoil is exposed, such as during construction. Pathway may be eliminated below 1.5 m bgs. provided there are Site conditions prohibiting the exposure of the subsoil, including	Y	The soil ingestion and dermal contact pa
	Dermal Contact	excavation and stockpiling of subsoil at the surface. ^(a)	Y	
	Indoor Vapour Inhalation, including basement and slab-on-grade	Pathway is applicable to any site that has a building. Unless precluding factors, including preferential migration pathways or a low permeability surface cap, buildings would need to be located at least 30 m from the Site. May be eliminated if there are no buildings, but site controls restricting the future construction of a building would be required. ^(a)	Y	The Site is proposed to be used for the vapour inhalation pathway is used for th
	Off Site Migration	Based on wind and water transport of soil from a commercial or industrial site to an adjacent, more sensitive site, such as agricultural or residential. May not be applicable for volatile organic compounds, which are not typically associated with wind and water transport of soil particles. ^(b)	Ν	Site is Industrial / manufacturing and adj
	Soil for Protection of Potable Groundwater	May be excluded if aquifer is not suitable as a potential source for potable water use. Considerations to determine if pathway can be excluded include: - Current source of water at the site; - Existing water wells, typically within 500 m of the site; - Depth below grade of usable aquifer; - Yield of usable aquifer; and - Location of usable surface water sources for potable water. ^(a) Additional considerations to exclude the pathway include: - Municipal bylaws prohibiting water wells for potable water; - Naturally non-potable shallow groundwater; - No hydrological connection between impacted soil and groundwater aquifer with sufficient recharge for potable water use. ^(b)	Ν	The Site is located within the City of Wir there are groundwater wells identified w if a site is underlain by a shallow domess are hydraulically connected to a deep D is confirmed by the presence of 5 m of s hydraulic conductivity less than 1.0 x 10 within the uppermost saturated silt horiz less than the minimum hydraulic conduc Clay soils were identified at the Site to a suggesting a suitable hydraulic barrier is Furthermore, if a water source is require the City of Winnipeg. The potable ground
	Produce, Meat and Milk	Applies to agricultural and residential land use as an indirect pathway through food-chain contamination/bioaccumulation during production and consumption of produce, meat, and milk. ^(b)	Ν	The Site is not used for agricultural purp
Ecological Ecological Soil Contact Soil (and Food) Ingestion by Livestock/Wildlife	Ecological Soil Contact	Pathway is applied for soils with a depth shallower than 1.5 m bgs. Between 1.5 m and 3 m, ecological soil contact may be required depending on the jurisdiction. The pathway may be eliminated for soil below 3 m. ^(a) MECC defines surface soil as soil at or above 1.5 m bgs with subsurface soil defined as soil below 1.5 m bgs ^(d) . Therefore, ecological soil contact may be eliminated below a depth of 1.5 m bgs provided the site maintains 1.5 m of cover.	Y	The ecological soil contact pathway has of up to 2 m and potential excavations b
	Con (and Food) mgoodon by	Includes resident and mobile livestock and wildlife, as well as secondary and tertiary consumers where a substance may bioaccumulate ^(b) . May be eliminated if the site is fully capped or paved ^(a) .	Ν	Soil ingestion by wildlife on industrial lar industrial lands is expected to be low rel
	Off Site Migration	Based on wind and water transport of soil from a commercial or industrial site to an adjacent, more sensitive site, such as agricultural or residential. May not be applicable for volatile organic compounds, which are not typically associated with wind and water transport of soil particles. ^(b)	Ν	Site is Industrial / manufacturing and adj
	Soil for Protection of Groundwater for Aquatic Life (including Freshwater Life ¹)	It is expected that the surface water body is located at least 10 m away from the impacted area. May be eliminated if: - No permanent surface water bodies are present, typically within 500 m of the site; and - There is no hydrological connection between the groundwater at the site and the surface water body (groundwater does not discharge to a surface water body). ^(a) Transient/short term surface water bodies may also need to be considered if they have the ability to support aquatic life. With supporting data, the guideline value may be modified at Tier 2 to account for dilution. ^(a)	Ν	Omand's Creek is located approximately No wetlands are located within 500 m of
	Soil for Protection of Water for Livestock and Wildlife Watering/Irrigation	Applicable to agricultural land use where there is a suitable water source, including groundwater or surface water. ^(e) It is expected that the water source could be located immediately adjacent to the edge of the impacts (no separation distance for dilution). Considerations to determine if pathway can be excluded include: - Location of existing permanent and seasonal water sources (ground and surface), typically within 500 m of the site; - Depth below grade of usable water source; - Yield of usable water source; and - Hydrological connection between impacts and water source. ^(a)	N	The site is not used for agricultural purp the site is industrial, there is no presenc irrigation/livestock groundwater pathway
Other Managen	Management Limits	Management limits always apply, regardless of depths of impact if the ecological pathway has been removed, and takes into account: - Free phase formation; - Exposure of workers in trenches to PHC vapours; - Fire and explosive hazards; - Effects on buried infrastructure; and - Aesthetic consideration. ^(a)	Y	Cannot be removed.
	Interim Soil Quality Criteria	Interim value as the data is insufficient to calculate a provisional or Soil Quality Guideline protective of human health and/or the environment. Use it at discretion. Consultation with other jurisdictions is recommended. ^(c)	Y	Applicable where no new guideline valu
	Provisional Soil Quality Guideline	Provisional value as the data is insufficient to calculate a Soil Quality Guideline protective of human health and/or the environment. Use it at discretion. Consultation with other jurisdictions is recommended. ^(c)	Y	Applicable where no new guideline value

<u>Notes:</u> 1 Freshwater is water with a total dissolved salt content \leq 1,000 mg/L, marine water is water with a total dissolved salt content > 5,000 mg/L^(f)

^(a) Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, User Guidance (CCME 2008).

^(b) A Protocol for the Derivation of Environmental and Human Health Soil Quality Guidelines (CCME 2006).

(c) Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health – Polycyclic Aromatic Hydrocarbons (CCME 2010).

(d) Manitoba Criteria for BTEX in Investigation Results (MCCC 2016).
 (e) Alberta Tier 1 Soil and Groundwater Remediation Guidelines (AEP 2019a).

^(f) A Protocol for the Derivation of Water Quality Guidelines for the Protection of Aquatic Life (CCME 2007)

t pathways are considered applicable to the Site.

ne City of Winnipeg North Transit Garage and buildings may exist on the Site, the this assessment so this property will not be restricted on future land use.

adjacent properties are commercial and industrial.

Winnipeg where potable water is provided via a piped municipal distribution. Although within 500 m of the Site, in Manitoba, the potable groundwater pathway is applicable nestic use aquifer (DUA) and if soil or groundwater containing contaminants of concern DUA (Alberta Environment and Parks, 2016). Hydraulic isolation of the contaminants of saturated fine-grained material containing no contaminants of concern with a bulk 10⁻⁷ m/s. Hydraulic conductivity assessments completed during this investigation were prizon (water table) 7.36 x 10⁻⁷ m/s. This hydraulic conductivity range is significantly ductivity defined by AEP that is required to be indicative of a DUA.

to at least 8 m below grade with a measured hydraulic conductivity of 2.29 x 10^{-8} m/s, er is present. The clay is underlain by silt till from 12.5 m to 20 m below grade uired in the future, the Site will be connected to the municipal water source provided by oundwater pathway is not considered applicable for the Site.

urposes.

has been included for depths greater than 1.5 m bgs due to the anticipated site grading s bringing subsoil up to surface.

lands at a generic level is not thought to be significant because residence time on relative to agricultural or residential/parkland.

adjacent properties are commercial and industrial.

tely 1.2 km southwest of the Site and Red River is located about 6 km east of the Site. n of the Site. As a result, the freshwater aquatic life pathway has not been considered.

urposes. There is one observation well identified within 500 m of the site. Considering ence of livestock or irrigation wells, and with no potential for future well installations, the way has not been considered applicable for the Site.

alues have been derived.

alues have been derived.

4.3.1 Applicable Receptors

Based on the findings of the exposure pathways evaluation, the following receptors are considered applicable at the Site:

- Ecological through direct contact;
- Soil health via nutrient and energy cycling; and
- Human health through direct soil contact, soil ingestion and inhalation (including indoor vapour inhalation, including basement and slab-on-grade).

5 Remediation Guidelines

5.1 Soil

The selected soil remediation guidelines for the Site are the Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health or Ontario Ministry of Environment with the most conservative guidelines for the exposure pathways applicable at the Site. These include vapour inhalation of indoor air (slab-on-grade and basement), human direct soil contact, ecological soil contact, and management limits.

Table 5-1 summarizes the remedial soil objectives for the contaminants of concern at the Site.

Table 5-1: Remedial Objectives for Soil

Parameter	SQG Surface Soil (<1.5 m bgs) ª ^{, c}	SQG Subsoil (≥1.5 m bgs) ª.℃
	Soil PHC	
PHC F2	260	1,000
PHC F3	2,500	5,000
	Soil Metal	
Arsenic	12	12
Barium	2,000	2,000
Chromium	87	87
Copper	91	91
Lead	600	600
Nickel	89	89
Selenium	2.9	2.9
Tin	300	300
Zinc	410	410
	Soil PAH	
Acenaphthylene	0.17 ^b	0.17 ^b
Benzo(a)anthracene	10	10
Benzo(a)pyrene total potency equivalents	5.3	5.3
Chrysene	9.6 ^b	9.6 ^b

Notes:

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (most recent online version) – Industrial Land Use, Fine Grained Soil, Human Health Guidelines Check Values

^b Ontario Ministry of the Environment (MOE) Soil Standards (2011) – Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (Industrial Land Use, Fine Grain Soil).

° Soil Quality Guidelines in mg/kg unless otherwise indicated

The remedial objectives for PHCs, PAHs, metals and dioxin and furans in soil are summarized in Table 3 to Table 8.

5.2 Groundwater

The selected groundwater remediation guidelines for the Site are the Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil or Ontario Ministry of Environment with the most conservative guidelines for the exposure pathways applicable at the Site. These include vapour inhalation of indoor air (slab-on-grade and basement), human direct soil contact, ecological soil contact, and management limits.

 Table 5-2 summarizes the remedial groundwater objectives for the contaminants of concern at the Site.

Table 5-2: Remedial Obje	ectives for Groundwater
--------------------------	-------------------------

Demonster	One we down the one life Oreidaling a fl				
Parameter	Groundwater Quality Guidelines ^a				
Ground	water Nutrients				
Chloride	2,300 ^b				
Sodium	2,300 ^b				
Uranium	0.42 ^b				
Grou	Groundwater PHC				
PHC F2 (>C10-C16) 3.1					
PHC F3 (>C16-C34 range)	0.500 ^b				
Grou	ndwater PAH				
Benzo(g,h,i)perylene	0.0002 ^b				
Benzo(k)fluoranthene	0.0004 ^b				
Chrysene	0.001 ^b				
Indeno(1,2,3-cd)pyrene	0.0002 ^b				

^a Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

The remedial objectives for PHCs, PAHs, and nutrients in groundwater are summarized in Tables 10 to 15.

5.3 Landfill Acceptance Criteria

As described in the July 2023 MECC Guideline, *Criteria for Acceptance of Contaminated Soil at Waste Disposal Grounds*, the waste disposal ground soil acceptance criteria are based on the CCME EQGs and CWS for PHC in Soil (2008) for fine grained surface soil at industrial land use sites, the environmental health guidelines, and the soil contact pathway. Any soil found to contain concentrations of parameters exceeding these criteria is required to be disposed at a licenced facility that accepts contaminated soil. The Prairie Green Landfill has provided preliminary acceptance of the impacted and non impacted material from the Site based on review of the analytical results from the 2024 Supplemental Environmental Investigation (AECOM, 2024a). After additional site data is obtained from the pre-construction investigation, review of lab results and approval for disposal at the landfill will be required. Landfill acceptance criteria based on the MECC guidance is shown in **Tables 3** to **8**. If impacted material (i.e. above the remedial guidelines presented in **Section 5.1** is also above landfill acceptance criteria, the material is considered contaminated by the landfill and therefore, is treated differently (i.e. higher tipping fee) then if impacted material is below the landfill acceptance criteria. AECOM has reached out to Prairie Green Landfill for their clean and contaminated soil criteria, including dioxin and furans and at the time of this report, have not received a response. Soil management is further discussed below in **Section 6.2**.

As discussed further in **Section 6.2**, a sampling program to assess fill quality and determine disposal requirements, assess clay quality for use as the site-wide cap and delineate PHC impacts in AEC 3 will be conducted. Due to the size of the site, the density of grid sampling for soil classification, is not sufficient to confirm that all of the volume represented by a single lab sample from a 35 m x 35 m grid is not impacted. Therefore, to mitigate the risk of impacting a third-party property with potentially impacted soil, it is recommended that the soil from zones represented

by samples which do not show exceedances of guideline concentrations, and are not being used for the engineered clay cap, be retained by the City and hauled to a suitable site, such as Brady Landfill or commercial landfill for their use or to a City construction and demolition waste site for commercial/industrial use only.

6 **Proposed Remedial Actions**

6.1 Preliminary Health and Safety Planning

A Health and Safety Plan (HASP) will be completed to address safety, health and security considerations for the Site tasks required for remediation. Special care should be taken during construction and excavation to protect workers from inhalation of soil particles due to the presence of heavy metals and other contaminants of concern detected in the soil. Mitigation measures include keeping the dust down during excavation, not excavating during high winds or very dry conditions, using wetting agents, implementing segregation or work zones, workers wearing half mask respirators, as well as washing work clothes.

6.2 Soil Management

Due to the varying historical land uses at the Site, COCs vary among the AECs and therefore the remedial strategy is specific to each AEC and COC. The following strategy/actions were developed for soil remediation or onsite soil management (engineered containment) and the protection of human health and environment at the Site.

While the results of environmental site assessments at the site have identified that a portion of the soil samples analyzed are impacted above guidelines, it is not possible to delineate broad areas of impact versus non-impacted soils due to the random nature of material deposition over the years. It is proposed below that a pre-construction grid-based test-pit program be undertaken to aid in managing impacted soils.

The results of the grid pattern sampling and analysis will be used to identify zones of impacted soil, which will be disposed of off site at a licenced facility or will be capped on site. Areas for which a soil sample did not show exceedances cannot be assumed to be non-impacted given the random nature of the historical placement of the soil and are described as potentially impacted. It would be impractical, given the size of the site, to initiate a grid sampling program of sufficient density to reduce the risk of false negative results (i.e. falsely concluding a non-exceedance of guidelines) to acceptable levels. In other words, the proposed drilling pattern density of 35 m x 35 m within the building footprint and in other areas of the site to fill data gaps can be used to identify impacted soils as that is a conservative approach. However, that density is not sufficient to confirm that all of the volume represented by a single lab sample from a 35 m x 35 m area is not impacted and could not contaminate a third-party's property. Therefore, to mitigate the risk of impacting a third-party property with potentially impacted soil, it is recommended that the soil from zones represented by samples which do not show exceedances of guideline concentrations, and are not being used for the engineered clay cap, be retained by the City and hauled to a suitable site, such as Brady Landfill or commercial landfill for their use or to a City construction and demolition waste site for commercial/industrial use only.

AEC 1 (former Landfill), AEC 2 (former Speedway) and South Portion of AEC 4 (former Imperial Oil Fuel Outlet)

- Site Remediation Strategy: Excavation and Disposal at an Off-Site Facility Combined with Engineered Containment
 - Pre-construction drilling program to determine impacted and potentially-impacted areas and disposal destination.
 - All excavated soil from within the landfill boundary will be hauled offsite to a licenced landfill that accepts contaminated soil.
 - All landfill solid waste encountered during Site development will be excavated, segregated and disposed at an approved off-site landfill.
 - Surplus soil excavated during site development, aside from soil from the landfill, will be disposed of in accordance with the results of the pre-construction drilling program. Approximately 17,600 m³ of excavated impacted soil will be placed in the onsite containment berm located on the southern portion of

the Site (see **Figure 2**). Remaining excavated impacted soil will be disposed of at a licenced landfill. Potentially impacted excavated soil will be disposed at a City of Winnipeg property.

- The residual in-situ impacted soil remaining after required site excavations and removal of any potential landfill waste will be capped by either the constructed building concrete floor, asphalt or concrete pavements, or will be capped with an engineered clay cap of 0.3 m thickness in undeveloped areas of the site to remove the exposure risk.
- A portion of the surplus excavated soil from AEC 2 would be placed as backfill in the PHC excavations in AEC 3 and AEC 4.
- Post-Remediation Activities:
 - Post-remediation groundwater monitoring and sampling.

AEC 3 (former Gas Station) and North Portion of AEC 4 (Former Imperial Oil Fuel Outlet)

- Site Remediation Strategy: Excavation and Disposal at an Off-Site Facility
 - Excavate identified impacted soil (PHC and PAH) from the affected areas.
 - Transport the impacted soil off-site for disposal at an approved disposal facility.
 - Backfill the excavated areas with impacted soil from AEC 1 or AEC 2, and cap with 0.3 m of clay if the area is not to be developed with the transit garage or pavement.
- Post-Remediation Activities:
 - Post-remediation groundwater monitoring and sampling.

6.2.1 Pre-Construction Drilling Program and Assessment of Program Results

Given the widespread and random distribution of impacts in the fill material at site, a pre-construction soil sampling program is proposed. The objective of the drilling program is to assess fill quality and determine disposal requirements, assess clay quality for use as the site-wide cap and delineate PHC impacts in AEC 3. The sample locations and depths would be completed in areas of the Site where there are soil quality gaps in areas where excavations will take place and are generally summarized below.

- All material excavated from within the landfill footprint will be disposed at a landfill that accepts impacted soil. Eleven boreholes will be completed along the northern portion of AEC 1 within the footprint of the parking lot and along the planned drainage ditch that will run along the western and southern property boundaries. Soil samples will be submitted for analysis of metals and one sample per borehole will be submitted for analysis of dioxin and furans.
- In the area of the proposed building footprint in AEC 2, sampling at excavation depths will be completed based on a grid spacing of approximately 35 m x 35 m between existing test locations.
- Approximately three sample locations are proposed to test the top 1.0 m of fill in the PHC excavation in AEC 3 to assess the suspected clean overburden and an additional five boreholes are proposed to aid in PHC delineation and assess disposal requirements.
- Approximately 15 sample locations, located approximately 10 m apart, are proposed to test the top 1.0 m of fill in the PHC excavation in the northern section of AEC 4 to assess the suspected clean overburden. This soil sampling is proposed to be completed instead of stockpile sampling of the potentially clean overburden during remediation of AEC 4.
- Four boreholes (1 in the pond) are proposed in the central portion of AEC 4 to assess clay quality.

Approximately 76 shallow boreholes will be completed at the Site. One to two composite samples created from several grab samples at 1 m or 0.5 m depth intervals, depending on the depth of the borehole, will be submitted for laboratory analysis of metals, PHCs or PAHs. In areas including the landfill where high lead concentrations (>1,000 mg/kg) were reported in previous site investigations and within the AEC 4 PHC remediations, samples will also be submitted for analysis for TCLP lead, VOCs and PAHs to assess the potential for encountering and allowing for disposal of hazardous waste and as a landfill acceptance requirement.

6.2.2 Soil Volume Estimate

Overall Site

The estimated volume of soil excavation required during site development is 150,000 m³. Given the random distribution of contaminants in the fill material, an estimated 60% or 90,000 m³ of impacted soil will require engineered containment or offsite disposal and the remaining 40% is estimated not to require engineered containment or disposal at a licenced facility. Approximately 30,000 m³ of impacted soil will be placed in the onsite containment berm and approximately 5,350 m³ will be used as backfill in the PHC remediations in AEC 3 and AEC 4. After completion of the pre-construction drilling program, a refined surplus fill impacted soil volume will be calculated.

AEC 1 (former Brooklands Landfill Footprint)

Proposed development within the landfill footprint includes the parking lot (shown on **Figure 5**) and a section of the site drainage ditch that will run along the west and south side of the Site. The estimated extent of the parking lot and ditch within the landfill footprint covers an approximate area of 5,500 m², with an estimated impacted soil volume of 13,750 m³. Volume estimates are based on the following assumptions:

- All soil excavated from within the landfill footprint is impacted.
- Excavation depths average 2.5 m.
- No soil will be removed from beneath the containment berm that covers a portion of the landfill.

Entire Site Excluding the Brooklands Landfill Footprint and PHC Excavations

The volume of metals impacted soil at the Site is estimated to be the remainder of the 90,000 m³ of impacted soils not sourced from the landfill itself (13,750 m³) i.e. 76,250 m³.

AEC 3 (Former Gas Station)

The estimated extent of the remediation excavation in AEC 3 is shown on **Figure 7** along with the historical and recent soil results exceeding EQGs. Based on historical and current soil results, soil impacts cover an area of 280 m², with an estimated volume of impacted soil at 700 m³. However, clean extents have not been fully established in this area. Volume estimates are based on the following assumptions:

- The volume estimate assumes that impacts extend laterally approximately halfway to the nearest clean borehole (no previously reported impacts) or 5 m laterally from each of the impacted boreholes.
- Impacts extend from surface to 2.0 m across the northern plume and surface to 2.5 m bgs across the southern plume.

North Portion of AEC 4 (Former Imperial Oil Fuel Outlet)

The estimated extent of the remediation excavation in the northern portion of AEC 4 is shown on **Figure 8** along with the historical and recent soil results exceeding EQGs. Based on historical and current soil results, soil impacts cover an area of 2,750 m², the estimated volume of hydrocarbon impacted soil in the northern portion of AEC 4 is approximately 4,625 m³. Volume estimates are based on the following assumptions:

- The volume estimate assumes that impacts extend laterally approximately halfway to the nearest clean borehole (no previously reported impacts) or 5 m laterally from each of the impacted boreholes.
- Impacts extend from 0.8 m bgs to 2.5 m bgs.
- Impacts extend north to the property boundary.

South PHC/PAH Impacted Portion of AEC 4 (Former Imperial Oil Fuel Outlet)

The estimated extent of the remediation excavation to remove the PHC and PAH impacts in the southern portion of AEC 4 is shown on **Figure 8** along with the historical and recent soil results exceeding EQGs. Based on historical soil results, soil hydrocarbon impacts cover three areas of 16 m² each and the combined estimated volume of hydrocarbon impacted soil in the southern portion of AEC 4 is 50 m³ and is based on the following assumptions:

- The volume estimate assumes that impacts extend laterally approximately 4 m laterally from each of the impacted test pits.
- PHC impacts extend from 2.0 m bgs to 3.0 m bgs surrounding TP-47.
- PAH impacts extend from 1.4 m bgs to 2.4 m bgs surrounding TP-51 and TP-66.

These volumes do not include any contingency to account for locations where over-excavation may be required.

6.2.3 Excavation and Disposal of Soil

6.2.3.1 AEC 1 (former Landfill), AEC 2 (former Speedway) and South Metals Impacted Portion of AEC 4 (former Imperial Oil Fuel Outlet)

Soil will likely be excavated using a track-mounted excavator. AECOM personnel will directly supervise all stages of site grading and excavation. Excavated soils will be visually screened for landfill debris and soil impacts. All soil originating from within the landfill footprint will be treated as impacted soil and will be transported off-site for disposal at an approved licensed landfill or treatment facility that accepts contaminated soil. The Prairie Green Landfill in the Rural Municipality of Rosser is located approximately 11 km north of the Site. The selected disposal location must be approved by the City and is expected to have sufficient capacity to dispose the volume of contaminated soil at the Site. Based on the results of the pre-construction drilling program, soil will be assessed against the applicable guidelines presented in **Section 5.1** and designated as impacted or not impacted for disposal or reuse consideration.

Temporary stockpiles of excavated soil may be required to facilitate additional soil characterization prior to transport off-site. Stockpiling of potentially impacted soil will be minimized to curtail off-site transfer of contaminants via erosion and to minimize logistical disruptions during construction. Where stockpile sampling is required, one composite sample for each 50 m³ of soil will be submitted to the laboratory analysis of metals and dioxin and furans. Each composite sample will be made up of five discrete samples. The maximum stockpile volume will be 250 m³.

6.2.3.2 AEC 3 (former Gas Station) and PHC/PAH Impacts in AEC 4 (former Imperial Oil Fuel Outlet)

Considering utility corridors for land drainage and wastewater utilities are proposed in the area of the hydrocarbon impacts and to mitigate potential contaminant migration, removal of the PHC impacted soil is the preferred method of remediation. Soil will likely be excavated using a track-mounted excavator. AECOM personnel will directly supervise all stages of soil excavation. Excavated soils will be visually screened for impacts and representative grab samples collected at 1 m depth intervals, or at obvious stratigraphic boundaries along the face of the excavation. Combustible headspace readings (CHR) will be used as a preliminary screening tool during the excavation activities and selection of soil samples for analysis.

The primary limits of the remediation will be based on the boundaries outlined on **Figures 7** and **8**, in addition to CHRs of soil samples obtained at the time of excavation, as well as any visual indicators of PHC impacts (i.e., staining). Confirmatory samples will be collected once the primary margins of the excavation have been reached in a given section of the excavation. Discrete samples will be collected at 1 m depth intervals on excavation walls, spaced 5 m laterally and at the base of the excavation in a minimum 3 m x 3 m grid. The CHRs will be recorded for each sample collected.

Select soil samples from the excavation extents will be determined by AECOM to confirm that residual soils meet the remedial objectives. Soil samples will be submitted for laboratory analysis of PHCs, PAHs and metals from AEC 3 and the southern pockets in AEC 4 and only PHCs will be submitted for analysis from the northern portion of AEC 4. Samples selected for laboratory analysis will represent worst case potential impacts from the sampled area, based on CHRs and field observations. Samples from the excavation base will be collected and submitted for laboratory analysis for approximately every 100 m² in area, and one sample from every wall profile (i.e. minimum every 5 m laterally along the excavation walls) will be submitted for laboratory analysis. If PHC or PAH analytical results exceed the established remedial objectives, additional soil will be excavated, and representative samples collected from the new limits of the excavation. Metal impacted soil will remain in-situ for eventual concrete, asphalt or clay capping.

Temporary stockpiles of excavated soil may be required to facilitate additional soil characterization prior to transport off-site. Stockpiling of potentially impacted soil will be minimized to curtail off-site transfer of contaminants via erosion.

If stockpiling is required, soil will be stockpiled within the excavation following collection of confirmatory samples or placed on tarps outside of the excavation areas.

It is proposed that the suspected non-impacted soil (0 to 0.8 m bgs) from the northern portion of AEC 4, 0 – 1.0 m in AEC 3 and 0 - 1.5 m from the southern portion of AEC 4 be sampled during the pre-construction drilling program to determine disposal / re-use requirements. For other suspected non-impacted soil resulting from excavation side sloping or overburden, the soil will be placed in 50 m³ stockpiles. One soil sample for each 10 m³ of soil will be collected for observation and CHR analysis. Based on field results, one discrete soil sample for each 50 m³ of soil will be submitted to the laboratory for COCs for that AEC – one or all of BTEX, PHC fractions F1 to F4, PAH and metals analysis (i.e. sample with the highest CHR of the five collected per 50 m³ will be submitted for laboratory analysis). Should any analytical PHC or PAH result exceed the established remedial criteria, the impacted soil stockpile will be combined with other impacted soils for offsite disposal, as appropriate, based on the analytical results. If only metal results exceed remedial criteria, the soil may be used as backfill below a 0.3 m clay cap.

The estimated maximum and minimum extent of PHC and PAH impacted soil is shown on Figures 7 and 8.

Excavated PHC/PAH impacted soil will be removed and transported off-site for disposal at an approved licensed landfill or treatment facility that accepts contaminated soil such as the Prairie Green Landfill. The selected disposal location is expected to have sufficient capacity to dispose the volume of contaminated soil at the Site. Stockpiling of potentially impacted soil will be minimized to limit off-site transfer of contaminants via erosion.

6.2.3.3 Supply of Backfill Material

Approximately 5,350 m³ (in-situ volume) of fill material may be required to replace the PHC/PAH impacted soils that are to be excavated for offsite disposal from AEC 3 and AEC 4. AECOM proposes that the fill be obtained from the surplus fill from AEC 2 or the surplus fill originating from the metal impacted soil from the southern portion of AEC 4. The fill will be covered with an engineered clay cap or covered with the concrete building or paved surface.

6.2.3.4 Summary of Site Material Handling

The estimated volume of soil excavation required during site development is 150,000 m³ for civil works, plus 5,350 m³ for remediation in the vicinity of former fuel tanks in AECs 3 and 4. An estimated 60% of civil works excavation total or 90,000 m³ is assumed to be impacted soil and will require engineered containment or offsite disposal. Approximately 30,000 m³ of the impacted soil will be placed in the onsite containment berm and approximately 5,350 m³ will be used as backfill in the PHC remediations in AECs 3 and 4. The remaining 40% of the excavated soil will be assumed to be potentially impacted and will be disposed of at a City facility for industrial/commercial use or a landfill for use.

The table below summarizes the volumes and proposed handling methods for both impacted and potentially impacted soils at the site.

Area	Material Type	Destination
AEC 1 – Within the footprint of the Former Brooklands Landfill	Fill and Solid Waste – treated as impacted (13,750 m ³)	Offsite disposal at approved landfills that accept impacted soil and/or solid waste
AEC 1 – Outside of the footprint of the Former Brooklands Landfill AEC 2 – Former Brooklands Speedway	Impacted Soil (76,250 m ³)	 Onsite containment berm/capped onsite (30,000 m³) Backfill for PHC/PAH remedial excavations in AECs 3 and 4 (5,350 m³) Offsite disposal at an approved landfill that accepts impacted soil (60,000 m³ backfill volume)

Table 6-1: Soil Handling Methods for Impacted and Potentially Impacted Soil

Project No. 60721079

Area	Material Type	Destination
	Potentially Impacted Soil (60,000 m ³)	 City owned property for commercial / industrial use only such as the Brady Landfill, a City construction and demolition waste site or for use at a commercial landfill, or the engineered clay cap.
AEC 3 – Former Gas Station AEC 4 – Former Imperial Oil Fuel Outlet	PHC/PAH Impacted Soil (5,350 m ³)	Offsite disposal at an approved landfill that accepts impacted soil
	Impacted Soil (2,500 m³)	 Onsite containment berm/capped onsite Backfill for PHC/PAH remedial excavations in AECs 3 and 4 Offsite disposal at an approved landfill that accepts soil above the remediation guidelines (Section 5.1).
	Potentially Impacted Soil (2,000 m ³)	City owned property for commercial / industrial use such as Brady Landfill, to a City construction and demolition waste site or to a commercial landfill for use.

6.2.4 Waste Management

Any waste (manmade, non-soil, non-inert material, household garbage and organic waste) encountered during excavations of the onsite landfill will be hauled offsite to an approved landfill. Based on the footprint of the parking lot, it is expected approximately 5,000 m³ of waste from within the landfill will require offsite disposal. It is assumed that soil and waste from within the landfill boundary is impacted. Debris (inert materials such as concrete, steel, or rubble) will be placed in temporary storage on Site for segregation as required by the receiving landfill. Waste will be secured and stored separately from the impacted soil before off-site disposal and impacted soil must be removed as required prior to offsite disposal.

The Prairie Green Landfill has provided preliminary acceptance of the impacted and non impacted soil from the Site based on review of the analytical results (including metals, PAHs, PHCs and dioxin/furan) from the 2024 Supplemental Environmental Investigation (AECOM, 2024a). After additional Site data is obtained from the pre-construction investigation, review of lab results and approval for disposal at the landfill will be required prior to acceptance of soil disposal.

6.2.5 Excavation Liner

The excavation in AEC 4 at the former Imperial Oil property is expected to abut the north property boundary. Since the northern extent of impacts in AEC 3 is unknown, there is potential the excavation may also extend to the north boundary. The use of PHC-resistant liners will be considered based on observed Site conditions at the property boundary following excavation. If PHC concentrations in soil remain above remediation guidelines at the property boundary, a liner will be installed along the completed excavation face prior to backfilling.

6.2.6 Containment Berm and Site Wide Cap

To eliminate human and ecological exposure risk, any residual impacted soil at the site will be capped. An approximate 325 m long x 75 m wide containment berm is proposed to be constructed along the southern boundary of the Site (see **Figure 2**) and covering a portion of the landfill. The berm will store approximately 30,000 m³ of impacted soil and will be encapsulated beneath 0.3 m of an engineered clay cap, which will be seeded and vegetated. All other remaining in-situ impacted soil will be capped by either the constructed building concrete floor,

asphalt or concrete pavements, or placed beneath a site wide engineered clay cap (0.3 m thick) in undeveloped areas of the site, thus eliminating the exposure risk.

6.2.7 Cut off Wall

As noted in the City Methane guideline, leachate from a landfill can generate odors and pose a health risk to site occupants. Accordingly, it will be necessary to control the flow of impacted groundwater from the landfill towards the development. At the present design stage this will be accomplished by capping landfill waste to prevent infiltration of precipitation and leachate generation. In addition, a clay cutoff wall will be placed between the landfill and the development to restrict migration of leachate towards the development. A clay cutoff is also planned for the perimeter of the building itself for geotechnical design reasons to control groundwater in the building foundation.

6.2.8 Monitoring Well Decommissioning

Any groundwater monitoring wells located within the excavation extents will be decommissioned prior to excavation and remedial activities by filling the well annulus with bentonite chips and hydrating with water. The metal road boxes, PVC well casing, and other monitoring well components will be removed during the excavation and disposed. Decommissioning of other wells located at the Site will be reviewed following completion of remedial activities.

Decommissioning of approximately 25 monitoring wells is expected to be required. Monitoring wells and vapour wells will be protected where possible for use during post-remediation monitoring.

6.2.9 Groundwater Management

During construction, excavation depths will reach a maximum of approximately 4 m bgs in select areas. Groundwater seepage is expected given historical groundwater levels at the Site have ranged from approximately 1 to 5 m bgs. PHC impacted groundwater is estimated to extend approximately 825 m² in AEC 3 and 555 m² in AEC 4 and it is expected the remedial excavation will reach depths of 2.5 m bgs. If required, any accumulated seepage water or precipitation affecting excavation activities or leachate from within the landfill will either be pumped to temporary storage tanks or a small, lined containment cell and water will be sampled and submitted for laboratory analysis as required. Based on the laboratory results, water will be disposed of by the contractor at an approved location. Mitigations to minimize surface water infiltration into the excavation includes perimeter berms or swales to direct clean surface water away from the excavation area.

6.2.10 Site Restoration

Following excavation and construction, undeveloped areas of the Site will be restored. Development will include construction of the North Transit Bus Garage Building, an asphalt parking lot, a transformer pad, paved sidewalks and driveways and a retention pond. All undeveloped areas including the onsite containment berm will be capped with 0.3 m of impermeable clay, topsoil and be seeded. The Site cap will eliminate potential exposure pathways such as dermal contact and soil ingestion. Placement of topsoil and seeding will encourage vegetative growth and prevent erosion which could damage the cap over time.

6.2.11 Post-Remediation Groundwater and Landfill Gas Monitoring Sampling

It is recommended that the groundwater monitoring wells and vapour probes that remain beyond the extent of the remediation and development areas be monitored and sampled to confirm groundwater quality following remediation and monitor groundwater quality and methane gas surrounding the landfill. Given the extensive earth works, installation of new groundwater monitoring wells and vapour probes may be necessary.

7 Summary

The Remedial Plan presented in this report describes the activities that are recommended to be undertaken by the City of Winnipeg to remediate and manage the environmental impacts at the North Transit Bus Garage redevelopment site. The key activities in the Remedial Plan include the following:

- Completion of a pre-construction test pit program to determine fill quality and disposal requirements.
- Excavate and manage approximately 150,000 m³ of potentially impacted surplus fill, plus approximately 5,350 m³ of petroleum impacted soil from AECs 3 and 4 on the east side of the site.
- Soil excavated from within the landfill footprint and soil from other areas of the site identified as being impacted by the pre-construction test pit program should be disposed of at a licenced facility.
- Excavated soil not identified as being impacted by the pre-construction drilling program should be transported to a landfill or City of Winnipeg facility or property to avoid potential future liability for commercial and industrial use only. Given the random nature of the historical material placement at the site, it may be very difficult to confirm that a particular volume of soil is not impacted. Placement of that material at a landfill or City of Winnipeg site will avoid the potential future liability of the City having to remediate a third-party property that received soil from the site.
- Disposal of any water accumulated in the excavations at an approved disposal location.
- Backfill the PHC/PAH excavations in AECs 3 and 4 with metal impacted soil from AEC 2 or the southern portion of AEC 4.
- Segregate and dispose of any landfill debris at an approved landfill.
- Construction of an approximately 325 m long x 75 m wide containment berm along the southern boundary of the Site and covering a portion of the landfill. The berm will store approximately 30,000 m³ of impacted soil and will be encapsulated beneath 0.3 m of an engineered clay cap, which will be seeded and vegetated.
- To eliminate human and ecological exposure risk through dermal contact and soil ingestion, any residual impacted soil at the site will be capped. All remaining in-situ impacted soil will be capped by either the constructed building concrete floor, asphalt or concrete pavements, or placed beneath a site wide engineered clay cap (0.3 m thick) in undeveloped areas of the site to eliminate the exposure risk.
- Special care should be taken during construction and excavation to protect workers from inhalation of soil particles. Mitigation measures include keeping the dust down during excavation, not excavating during high winds or very dry conditions, using wetting agents, implementing segregation or work zones, workers wearing half mask respirators or dust masks, as well as washing work clothes.

8 References

AECOM, 2024a. Winnipeg North Transit Garage Supplemental Environmental Site Investigation, Winnipeg, Manitoba – Draft Report, April 1, 2024.

AECOM, 2024b. City of Winnipeg North Transit Garage Geotechnical Report - Draft Report, February 19, 2024.

Dillion, 2023. Phase II Environmental Site Assessment – North Garage Replacement at Oak Point, Winnipeg, Manitoba.

CLU-IN, 2024. Contaminated Site Clean-Up Information. Website accessed August 14, 2024. <u>https://clu-in.org/contaminantfocus/default2.focus/sec/Dioxins/cat/Treatment_Technologies/#:~:text=Heat%2Dbased%20destruction%20techniques%20for,effective%20way%20of%20destroying%20dioxins</u>

Geo Engineer, 2013. Soil Washing. The International Information Center for Geotechnical Engineers. January 19, 2013. <u>https://www.geoengineer.org/education/web-class-projects/cee-549-geoenvironmental-engineering-winter-2013/assignments/soil-washing</u>

Golder, 2015. Golder Associates Ltd. - Landfill Status Report for Closed Landfills, Winnipeg, Manitoba, 2015.

Matile, G. T., 1998. Geology of the Winnipeg region NATMAP project (NTS 62H/W, 62I and 52L/W); Manitoba Energy and Mine, Geological Services, Report of Activities.

Matile, G., & Keller, G., 2004. Surficial geology of Winnipeg map sheet (NTS 62H). Manitoba Geological Survey, Economic Development and Mines.

Parsons, 2015. Pre-Excavation Groundwater Assessment Program, Site Decommissioning Activities and Subsurface Investigation Program. Former Retail Fuel Outlet, Restaurant and Cardlock Facility100 Oak Point Highway, Winnipeg, Manitoba. Location No.: 88000583. April 16, 2015.

Parsons, 2019. 2019 Groundwater Monitoring and Sampling Data Package. Ref. No.: 10-5133. December 12, 2019.

WSP, 2023a. Phase I Environmental Site Assessment, North Garage Oak Point Highway, Winnipeg, Manitoba, January 2023.

WSP, 2023b. Phase II Environmental Site Assessment - 100 Oak Point Highway, Winnipeg, Manitoba.





REMEDIAL PLAN CITY OF WINNIPEG Project No.: 60721079 Date: 2024-12-05

Thu Dec 05, 2024

ΑΞϹΟΜ Figure: 1














Sample ID		TP24-04			
Parameter	Date	Depth (m)	As		
Results	30-Jan-2024	2.0-3.0	12.7	1	
Results	30-Jan-2024	5.0-6.0	9.48]	
Sample ID		1	P24-05		
Parameter	Date	Depth (m)	Cu	Ni	Zn
Results	31-Jan-2024	3.3 - 3.4	197	104	640
Sample ID		TP24-06]	
Parameter	Date	Depth (m)	pH	1	
Results	30-Jan-2024	4.0 - 5.0	8.56]	
Sample ID		TP24-09	1		
Parameter	Date	Depth (m)	Zn	1	
Results	31-Jan-2024	5.0 - 6.0	694]	
Sample ID				TP24-12	
Parameter	Date	Depth (m)	As	Cu	Pb
		2.0 - 3.0	30.1	146	940
Results	31-Jan-2024	5.0 - 6.0	9.81	35.5	36.6
		(DUP-01) 5.0 - 6.0	10.4	104	3120
Sample ID		BH24-05] .	
Parameter	Date	Depth (m)	Zn	1	
		0.5-1.0	72.7	1	
Results	12-Feb-2024	2.0-3.0	510	1	
		4.0-5.0	68.4	1	

Sample ID	BH24-06						
Parameter	Date	Depth (m)	As	Cu	Pb	Zn	pН
	31-Jan-2024	1.0-1.5	12.0	97.8	368	1560	8.21
Results		(DUP-09) 1.0-1.5	18.2	250	719	3100	-
Results		2.0-3.0	10.7	51.2	40.3	126	-
		3.0-4.0	1.93	7.30	4.71	19.0	-

mple ID	MW24-05										
ameter	Date	Depth (m)	As	Ba	Cr	Cu	Pb	Ni	Sn	Zn	pН
esults	12-Feb-2024	1.0-1.5	4.90	175	33.7	23.3	27.6	25.8	<2.0	66.0	
		2.0-3.0	49.9	1920	95.1	4700	6020	172	967	7340	-
		(DUP-10) 2.0-3.0	64.7	2260	107	1360	4530	154	1570	6960	×
		4.0-5.0	9.52	257	43.3	35.4	14.6	41.2	<2.0	88.6	8.1

Sample ID		MW24-06			
Parameter	Date	Depth (m)	pН		
Results	30-Jan-2024	0.8	8.09		
Sample ID		TH24-18			
Parameter	Date	Depth (m)	Cu		
Results	29-Jan-2024	1.8	263		
Sample ID		TH24-19			
Parameter	Date	Depth (m)	Pb		
Results	29-Jan-2024	1.6	21.1		
Results	20-0411-2024	4.2	1280		

Sample ID			BH23-12		
Parameter	Date	Depth (m)	Cu	Zn	
Results	12-Sept-2023	1.5	370	620	
Sample ID		BH23-13			
Parameter	Date	Depth (m)	pН		
Results	13-Sept-2023	0.75	8.18		
Sample ID		BH23-14			
Parameter	Date	Depth (m)	EC		
Results	12-Sept-2023	1.5	6.8		
Sample ID		BH23-18			
Parameter	Date	Depth (m)	EC		
Results	12-Sent-2023	0.8	6.1		

	Parameter	As	Ва	Cr	Cu	Pb	Ni	Sn	Zn	pl
S	ioil Quality Guideline ^{, b}	12	2000	87	91	600	89	300	410	6-



Sample ID		BH24-08					
Parameter	Date	Depth (m)	Cu	Pb	Sn	Zn	
		1.0-1.5	5050	2610	367	2690	
Results	Results 12-Feb-2024	2.0-3.0	33.5	22.5	<2.0	64.3	
		3.0-3.4	17.2	12.1	<2.0	30.6	

Sample ID	MW24-04				
Parameter	Date	Depth (m)	Cu	Pb	
	12-Feb-2024	0.5-1.0	35.6	105	
Results		2.0-3.0	997	1480	
		3.0-4.0	81.8	70.4	
	1				

Sample ID		TH24-03	
Parameter	Date	Depth (m)	pН
Results	30-Jan-2024	1.1	8.24

Sample ID	TH24-13					
Parameter	Date	Depth (m)	EC	SAR		
Results	30-Jan-2024	0.8	4.99	17.3		

Sample ID		BH2	23-23		
Parameter	Date	Depth (m)	EC (ds/m)	SAR	pН
Results	13-Sept-2023	0.8	14	43	8.13
Sample ID		BH23-28			
Parameter	Date	Depth (m)	Cu		

r aramotor	Duto	Bopar (m)	ou	
Results	13-Sept-2023	2.3	110	
				_

Sample ID				
Parameter	Date	Depth (m)	Cu	EC
Results 12-S	Sept-2023	0.8	130	5.3

Sample ID	BH23-09			
Parameter	Date	Depth (m)	Cu	Zn
Results	12-Sept-2023	2.3	530	510

Parameter	Cu	Pb	Sn	Zn	рН	EC (mS/cm)
Soil Quality Guideline ^{a, b}	91	600	300	410	6-8	4

Notes

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Accessed December 2024) - Industrial Land Use, Human Health Guidelines

^b Ontario Ministry of the Environment (MOE) Soil Standards (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (Industrial Land Use, Fine Grain Soil).

Abbreviatio Cu - Copper; Pb - Lead; Sn - Tin; Zn - Zinc; EC - Conductivity; SAR - Sodium Adsorption Ratio

mg/kg Unit for all soil quality guideline criteria and analytical results is milligrams per kilogram, unless otherwise noted.

XX Red analytical results exceeded applied standards



E SAVED: 2025-01-28 USER NAME: WONGJ14



Sample ID		TP24-01	
Parameter	Date	Depth (m)	As
		1.0-2.0	3.76
Results	1-Feb-2024	2.0-3.0	9.19
Results	1-1-60-2024	(DUP-02)2.0-3.0	9.05
		4.0 - 5.0	13.6

Sample ID	TP24-02			
Parameter	Date	Depth (m)	PHC F2	Acenaphthylene
		0.0 - 1.0	4,920	0.417
Results	1-Feb-2024	1.0 - 2.0	3,710	0.378
		3.0 - 4.0	<25	<0.0050

Sample ID	BH23-01				
Parameter	Date	Depth (m)	Benzene	PHC F1	PHC F2
Results	11-Sept-2023	1.5	3.1	1,700	510
results	11-06pt=2020	4.5	0.6	<10	<10

Parameter	Benzene	PHC F1	PHC F2	Acenaphthylene	As
Soil Quality Guideline ^{a, b}	2.8	320	260	0.17	12

Notes:

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Accessed December 2024) - Industrial Land Use, Human Health Guidelines ^b Ontario Ministry of the Environment (MOE) Soil Standards (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (Industrial Land Use, Fine Grain Soil).

Abbreviations As - Arsenic; PHC - Petroleum Hydrocarbon

mg/kg Unit for all soil quality guideline criteria and analytical results is milligrams per kilogram, unless otherwise noted.

XX Red analytical results exceeded applied standards



This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except a agreed by AECOM and its client, as required by law or for use any governmental eventing agreeds. AECOM accepts no responsibility, and denies any lability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Sample ID BH24-04	Sample ID TP-33	Sample ID BH-7		
Sample ID BH24-04 Parameter Date Depth (m) PHC F2	Sample ID TP-33 Parameter Date Depth (m) Cu	Sample ID BH-7 Parameter Date Depth (m) PHC F2		
0.0 - 0.6 <25	1.2 190	0.6-1.2 470		
Results 12-Feb-2024 1.0 - 1.5 711	Results 12-Nov-13 1.8 30	Results 08-Apr-14 1.8-2.4 <10 (DUP) 1.8-2.4 <10		The second second
2.0 - 3.0 <25	(DUP) 1.8 29 2.4 65	(DUP) 1.8-2.4 <10 2.4-3.1 <10		
Sample ID BH24-09		Sample ID BH-8		and the second sec
Parameter Date Depth (m) Cu Zn 0.5-1.0 21.1 56.8	Sample ID TP-47 Parameter Date Depth (m) PHC F3 As Cu Zn	Parameter Date Depth (m) PHC F2		And a second second
15.20 211 52.7	1.2 - 3.6 44 51	1.8-2.4 550		A DESCRIPTION OF THE OWNER OF THE
(DUP-04) 1.5-2.0 140 1140	1.8 200 6.3 210 620	Results 08-Apr-14 (DUP) 1.8-2.4 <10	TRA	
3.0-4.0 80.7 121	Results 15-Nov-14 2.4 520 20 61 190 (DUP) 2.4 9000 20 130 200	2.4-3.1 <10	TP-40	
Sample ID TP-5	3.0 - 2.9 9.9 21	Sample ID BH-19		CALLER AND AND A DAY OF A DAY
Parameter Date Depth (m) PHC F2	Sample ID TP.51	Parameter Date Depth (m) Cu 0.0-0.6 110		The second s
2.4 190 Results 04-Nov-13 3.7 370	Parameter Date Depth (m) As Cu B(a)P TPE	0.6-1.2 370	TP-37	and the second second
4.9 72	1.2 3.9 74 -	Results 16-Apr-26 2.4-3.0 29 3.0-3.7 7.1	TP-36	
Sample ID TP-6	1.8 6.0 250 5.97 2.4 3.8 23 0.26	3.0-3.7 7.1 3.7-4.3 39	MW01	
Parameter Date Depth (m) PHC F2	Results 15-Oct-14 3.0 17 75 -	4.3-5.0 35	TD 28	
Results 04-Nov-13 (DUP) 1.2 340	3.7 7.6 37 -	Sample ID BH-20	TH24-02 TP-17 TP-21	
Results 04-Nov-13 (DUP) 1.2 340 2.4 11	(DUP) 3.7 7.6 35 -	Parameter Date Depth (m) As pH		ALE ALE ALE
	Sample ID TP-52	0.0-0.6 6.3 7.52 0.0-0.06 (dup) 6.0 7.51	■ TH10 TP-5 BH- BH24-03 TP-1	TP-14 Octo Politicity
Sample ID TP-7 Parameter Date Depth (m) PHC F2 PHC F3	Parameter Date Depth (m) Cu 1.2 73	0.6-1.2 7.4 7.49	BH24-03	11 Sta
1.2 5400 3500	1.2 73 1.8 190	1.2-1.8 9.8 7.56	-TP-1	5 000
Results 04-Nov-13 (DUP) 1.2 5400 3500	Results 15-Oct-14 2.4 <5.0	Results 16-Apr-26 1.8-2.4 15 7.62 2.4-3.0 8.1 8.69		TP-14
2.4 <10 <50 3.7 29 78	3.0 190	3.0-3.7 6.3 7.76	TP-4 Estimated Volume = 4,622m ³ TH02	
	3.7 44	3.7-4.3 9.5 7.54	Estimated Area = 2,719.03m ²	BH24-04
Sample ID TP-8 Parameter Date Depth (m) PHC F2	Sample ID TP-65	4.3-5.0 10 8.36		Ψ
1.8 3000	Parameter Date Depth (m) Cu 1.8 200	Sample ID BH-21		TP-22
Results 08-Nov-13 (DUP) 1.8 3800	Results 15 Dec.14 3.0 19	Parameter Date Depth (m) pH Results 16-Apr-26 4.3-5.0 8.19	TP-18 TP-16	
3 53	3.7 11			MW03
Sample ID TP-15	4.3 36	Sample ID BH-22 Parameter Date Depth (m) pH As Cu	Pb Zn TP-3 TP-13	BH-10
Parameter Date Depth (m) PHC F2 0.6 1300	Sample ID TP-69 Parameter Date Depth (m) As Pb Se Zn	0.0-0.6 7.38 6.5 27	18 72	IP-6
Results 12-Nov-13 (DUP) 0.6 2000	Parameter Date Depth (m) As Pb Se Zn 1.8 4.5 88 <0.50	0.6-1.2 7.53 6.5 34		
Results 12-Ivov-13 1.8 <10	Besults 15-Dec-14 2.4 16 620 4.9 730	0.6-1.2 (dup) 7.55 6.7 35 1.2-1.8 7.44 9.4 38	38 87 15 97 TH07	24-01 TP-2
2.4 <10	3.0 5.9 16 <0.50 54	Results 16-Apr-26 1.8-2.4 7.91 13 560		TH24-22
Sample ID TP-19	3.7 2.2 5.1 <0.50 20	2.4.3.0 8.09 4.8 25		
Parameter Date Depth (m) PHC F2	Sample ID TP-70	<u>3.0-3.7</u> 7.78 <u>3.1</u> <u>13</u> <u>3.7-4.3</u> 7.63 <u>9.6</u> 42		
Results 13-Nov-13 1.2 680 2.4 <10	Parameter Date Depth (m) As Pb Zn 1.8 3.5 12 40	4.3-5.0 8.19 8.4 42	15 100 BH-8	TP-12
	Results 15-Dec-14 2.4 9.8 27 77	Sample ID BH-23	MW11 TP-25	TP-7
Sample ID TP-21 Parameter Date Depth (m) PHC F2	3.0 17 1700 1100	Parameter Date Depth (m) pH As	TH24-05 📐 📉 TP-8	
Pesults 29. luly 14 0.6 690	3.7 2.9 40 62	0.0-0.6 7.52 5.5	TP-34 TH08 TD 40	TP-39
1.2 <10	Sample ID TP-71	0.6-1.2 7.58 5.7 1.2-1.8 7.53 8.3	TP-34 TP-34	TP-19 TH05
Sample ID TP-22	Parameter Date Depth (m) As Pb Zn 1.2 5.0 170 72	1.2-1.8 (dup) 7.42 8.5		
Parameter Date Depth (m) PHC F2 PHC F3	1.8 4.9 19 58	Results 16-Apr-27 1.8-2.4 8.08 5.8	TP-11	THOS
0.6 <u>3800</u> <u>2700</u> (DUP) 0.6 <u>3600</u> <u>2500</u>	Results 15-Dec-14 2.4 12 740 450	2.4-3.0 7.62 13 3.0-3.7 7.60 2.2	TP-11	TH06
Results 29-July-14 1.2 30 55	3.0 16 280 530 3.7 6.8 21 75	3.7-4.3 7.52 7.4	TP-42	TP-24
1.8 <10 <50		4.3-5.0 7.51 9.4		9
Sample ID TP-25	Sample ID TP-72 Parameter Date Depth (m) As Cu Pb Se Zn	Sample ID BH-25		
Parameter Date Depth (m) PHC F2 PHC F3	1.8 2.0 7.9 14 <5.0 27	Parameter Date Depth (m) pH As 0.0-0.6 7.44 5.7		
0.6 <10 <50 1.2 2000 1600	<u>2.4</u> <u>34</u> <u>170</u> <u>5700</u> <u>3.8</u> <u>2100</u>	06-12 763 64		
Results 29-July-14 (DUP) 1.2 3500 2800	Results 15-Dec-14 (DUP) 2.4 32 85 4500 4.1 2100 3.0 2.9 8.1 29 <0.50	1.2-1.0 7.32 0.0	TP-1	
1.8 <10 <50	3.7 5.8 28 12 <0.50 64			TH24-04
Sample ID TP-27	Sample ID TP-66	3.0-3.7 7.71 7.5	BH23-32	
Parameter Date Depth (m) Cu Pb	Perameter Date Denth (m) Benzo(a) B(a)P TPE Chusene	3.7-4.3 7.65 10	\oplus	
1.8 210 700 (DUP) 1.8 240 1200	1.8 20 23 14	4.3-5.0 8.32 13		
Results 29-July-14 2.4 28 44	2.4 1.5 1.4 1.2	Sample ID BH-26	Estimate	ed Volume = 16m ³ each
3.1 17 8.5	Results 15-Dec-14 3 0.21 0.27 0.16	Parameter Date Depth (m) pH As Zn 0.0-0.6 7.46 4.4 53	Es	timated Area = 30.97m ²
Sample ID TP-36	3.7 <0.0050 <0.0050 <0.0050 4.3 <0.0050	0.6-1.2 7.56 6.8 68		Λ
Parameter Date Depth (m) PHC F2 PHC F3		0.6-1.2 (dup) 7.56 6.7 65	TP-29 TP-55	
Deculto 12 Aug 14 0.6 10 <50 1.2 3600 2400	Sample ID TP-67 Parameter Date Depth (m) As	1.2-1.8 7.60 5.5 60 Results 16-Apr-27 1.8-2.4 7.41 8.7 75	T9-56 TP-31	-54 📐 TP-49
Results 13-Aug-14 (DUP) 1.2 4600 3200	1.8 4.9	2.4-3.0 7.95 15 890		
1.8 <10 <50	1.8 (dup) 4.0	3.0-3.7 7.54 3.9 35	TP-26	
Sample ID TP-44	Results 15-Dec-14 2.4 8.9 3.0 14	3.7-4.4 7.60 8.6 81 4.4-5.1 8.27 6.4 74		TP-50
	Zn 3.7 2.9	Sample ID BH-27	TP-27 TP-30	-48 / - /
19 20 12 57	51 53mple ID TH-07	Parameter Date Depth (m) pH		
Results 16-Oct-14 2.4 23 110 1100 7	Borneter Date Depth (m) PHC F2	0.0-0.6 8.89	TP-28	
	S6 2.29 1150 Results 27-Jan-23 (DUP) 2.29 1800	0.6-1.2 7.76 1.2-1.8 7.67		TP-64
Sample ID TP-30	Results 27-Jan-23 (DDP) 2.29 1800 4.57 95	1.2-1.8 (dup) 7.91	TP-32	TP-47
Parameter Date Depth (m) As Pb Zn	Sample ID TH-08	Results 16-Apr-26 1.8-2.4 7.62		
1.2 6.0 35 69 (DUP) 1.2 7.0 38 78	Parameter Date Depth (m) PHC F2 PHC F3 As Cu	2.4-3.0 7.69 3.0-3.7 7.84		BH23-40 BH23-39
Results 12-Aug-14 100(7) 1.2 7.0 38 78 1.8 15 700 600	Results 27-Jan.23 1.52 4550 3710 13 99.4	3.7-4.3 7.59	TP-43 BH23-41	\oplus / \oplus
2.4 3.8 5.8 31	Topology 2 Four-20 3.81 55 89 12.3 33.1	4.3-5.0 7.57	BH22-42	TP-63
Sample ID TP-32	Sample ID BH-17			TP-46 / N TP-52
Parameter Date Depth (m) Cu	Parameter Date Depth (m) PHC F2		BH23-44 🕂 TP-44 🕨 TP-45 📐 🔿 BH 25	BH-21 /
1.2 94 Results 12-Aug-13 1.8 31	Results 09-Apr-14 0.6-1.2 4/0 1.8-2.4 <10		BH-25	TP-60
2.4 19	Sample ID BH-10			TP-66 BH23-48
	Parameter Date Depth (m) PHC F2		TP-72	
	0.6-1.2 520			
	Results 08-Apr-14 1.8-2.4 <10 2.4-3.1 <10		BH23-53 MW12 BH-24A HH-24B BH-22	
	(DUP) 2.4-3.1 <10			TP-65 TP-62
				A
			BH-27A BH-26A BH-20B	
Parameter PHC F2 PHC F3 Benzo(a) B(a)P TPE	Chrysene As Cr Cu Pb Se Zn pH		BH-27B BH23-52 + E	BH23-47 🕂 BH23-49
Soil Quality Guideline ^{, b} 260 2,500 10 5.3	9.6 12 87 91 600 2.9 410 6-8		BH23-50	
Notes:			BH24-09	
	lity Guidelines (Accessed December 2024) - Industrial Land Use, Human Health Guideline	s		A STREET STREET STREET STREET STREET
	Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water	-		
Condition (Industrial Land Use, Fine Grain Soil).				AND
Abbreviations As - Arsenic; Benzo(a) - Benzo(a)anthrac	ene; B(a)P TPE - Benzo(a)pyrene total potency equivalents; Cr - Chromium; Cu - Copper;			CARD DATE OF THE OWNER OF
Abbreviations As - Arsenic; Benzo(a) - Benzo(a)anthrac Pb - Lead; Se - Selenium; Zn - Zinc.				
Abbreviations As - Arsenic; Benzo(a) - Benzo(a)anthrac Pb - Lead; Se - Selenium; Zn - Zinc.	d analytical results is milligrams per kilogram, unless otherwise noted.			





Sample ID:	MW24-01
Date Sampled:	3/6/2024
Petroleum Hydrocarbon F2	3.88

Sample ID:	MW24-02
Date Sampled:	3/6/2024
Petroleum Hydrocarbon F3	1.2
Sample ID:	MW24-04
Date Sampled:	3/6/2024
Petroleum Hydrocarbon F3	0.52
Chloride	224
Benzo(g,h,i)perylene	0.00118
Benzo(k)fluoranthene	0.000878
Chrysene	0.0017
Indeno(1,2,3-cd)pyrene	0.001470
Sample ID:	MW24-06

Sample ID:	BH23-	09
Date Sampled:	3/6/2024	10/3/2023
Chloride	3500	3100

BH23-28

10/3/2023

0.1

F

3/6/2024

3600

-

BH23-11

10/3/2023

2400

0.45

Sample ID:

Chloride

Lead (Pb)

Sample ID:

Date Sampled

Sodium (Na)

Uranium (U)

Date Sampled:

Sample ID:	BH23-21
Date Sampled:	10/3/2023
Lead (Pb)	0.043

Sample ID:	MW03	DUP-GW-1 (MW03)
Date Sampled:	2/1/2023	2/1/2023
Petroleum Hydrocarbon F2	9.65	8.29
Petroleum Hydrocarbon F3	7.1	6.08

Parameter	WQG ^{a, b}	Units
Petroleum Hydrocarbon F2	3.1	mg/L
Petroleum Hydrocarbon F3	0.500	mg/L
Benzo(g,h,i)perylene	0.0002	mg/L
Benzo(k)fluoranthene	0.0004	mg/L
Chrysene	0.001	mg/L
Indeno(1,2,3-cd)pyrene	0.0002	mg/L
Chloride	2300	mg/L
Sodium (Na)	2300	mg/L
Lead (Pb)	0.025	mg/L
Uranium (U)	0.42	mg/L

a Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

WQG Water Quality Guideline

mg/L milligram per litre

Denotes concentration less than RDL.

RDL Laboratory reportable detection limit.

XX Red and bold - analytical result exceeds applied WQG.

Benzo(k)fluoranthene	0.000878
Chrysene	0.0017
Indeno(1,2,3-cd)pyrene	0.001470
Sample ID:	MW24-06
Date Sampled:	3/6/2024
Chloride	3470





Winnipeg North Transit Garage Table 1: Soil Analytical Results - Particle Size Analysis

	Sample Location	TP24-06	BH24-06	MW24-05	BH24-02
Sa	mple Date (dd/mmm/yyyy):	30-Jan-2024	12-Feb-2024	12-Feb-2024	13-Feb-2024
	Sample ID	TP24-06-06	BH24-06-03	MW24-05-07	BH24-02-03
	Sample Depth (m bgs)	4.0-5.0	1.0-1.5	4.0-5.0	1.0-1.5
Parameter	Units				
Texture Class	N/A	Fine	Fine	Fine	Fine
Sieve - (>0.075mm)	%	7.1	37.6	1.1	21.8
Sieve - (<0.075mm)	%	92.9	62.4	98.9	78.2

Notes:

mbgs: meters below ground surface

N/A: not applicable

Monitoring Well	Date Monitored	Ground Surface Elevation* (m asl)	Stick- up/Stick Down	Top of MW Elevation (m asl)	Depth to Groundwater ^a (m)	Depth to Groundwater (m bgs)	Depth to Liquid Hydrocarbon ^a (m)	Liquid Hydrocarbon Thickness (mm)	Groundwater Elevation (m asl)	Monitoring Well Vapour Concentration ^b (ppm)	Temperature	EC (mS/cm)	рН	ORP (mV)	DO (mg/L)
MW24-01	5-Mar-2024	235.608	0.74	236.3484	3.050	2.310	-	-	233.298	20 % LEL	1.51	4.452	6.99	-125.1	9.51
MW24-02	5-Mar-2024	235.345	1.00	236.3454	4.530	3.530	-	-	231.815	15	-	-	-	-	-
MW24-03	5-Mar-2024	235.662	0.69	236.3522	3.030	2.340	-	-	233.322	15	1.66	0.065	6.7	17.5	13.52
MW24-04	5-Mar-2024	236.874	0.95	237.8238	3.400	2.450	-	-	234.424	0	3.31	2.346	6.73	-39.5	5.03
MW24-05	5-Mar-2024	237.866	0.91	238.7756	DRY	DRY	-	-	N/A	5	-	-	-	-	-
MW24-06	5-Mar-2024	238.088	0.95	239.0380	4.290	3.340	-	-	234.748	15	3.63	8.845	6.7	23.1	13.95
BH23-09 ^d	5-Mar-2024	236.200	-0.09	236.1100	2.280	2.370	-	-	233.830	25	3.85	8.504	7.03	26.2	9.84
BH23-11 ^d	5-Mar-2024	237.200	-0.13	237.0700	3.220	3.350	-	-	233.850	60	-	-	-	-	-
BH23-21 ^d	5-Mar-2024	237.900	-0.13	237.7700	3.640	3.770	-	-	234.130	35	-	-	-	-	-
BH23-28 ^d	5-Mar-2024	237.000	-0.14	236.8600	3.310	3.450	-	-	233.550	60	4.02	9.13	6.75	26.4	5.69

<u>Notes:</u> * Ground suface elevation for wells installed in 2024 calculated by subtracting top of MW elevation from stick-up height.

^a Measured from top of monitoring well.

^b Measured using an RKI Eagle hydrocarbon vapour analyser set to "methane elimination" mode.

^c Measured using a YSI 556 Multimeter

^d Dillon Consulting, 2023

m asl - metres above sea level.

"-" Value not present/obtainable.

			Sa Sample Date (d	AEC mple Location d/mmm/yyyy):	1 - Landfill TP24-04 30-Jan-2024	2 - Speedway TH24-20 29-Jan-2024	3 - Former Gas Station TP24-01 01-Feb-2024	3 - Former Gas Station TP24-02 01-Feb-2024	3 - Former Gas Station TP24-02 01-Feb-2024	3 - Former Gas Station TP24-02 01-Feb-2024	3 - Former Gas Station TH24-17 09-Feb-2024	3 - Former Gas Station TH24-17 09-Feb-2024	3 - Former Gas Station TH24-16 09-Feb-2024	3 - Former Gas Station TH24-16 09-Feb-2024			
				Sample ID	TP24-04-04	TH24-20-04	TP24-01-02	TP24-01-03	DUP-02 (Dup of TP24-01-03)	TP24-01-05	TP24-02-01	TP24-02-02	TP24-02-04	TH24-17-04	TH24-17-03	TH24-16-03	TH24-16-04
			Sample I	Depth (m bgs)	2.0-3.0	2.4	1.0-2.0	2.0-3.0	2.0-3.0	4.0-5.0	0.0-1.0	1.0-2.0	3.0-4.0	1.7	1.2	1.6	2.3
Parameter	CCME Surface Soil (<1.5 m bgs) ^{a,b}	CCME-Subsoil (>1.5 m bgs) ^{a,b}	Landfill Acceptance Criteria ^c	Units													
Benzene	2.8	2.9	310	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0422	0.0177	< 0.0050	<0.0050	0.0237	< 0.0050	< 0.0050
Toluene	330	660	330	mg/kg	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.050	< 0.050	< 0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	430	860	430	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	1.63	0.552	< 0.015	<0.015	<0.015	<0.015	<0.015
Xylenes, Total	230	460	230	mg/kg	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	0.508	0.375	< 0.050	<0.050	<0.050	<0.050	<0.050
PHC F1 (C6-C10) minus BTEX	320	800	320	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	213	135	<5.0	<5.0	<5.0	<5.0	<5.0
PHC F2 (>C10-C16)	260	1,000	260	mg/kg	30	<50	<25	<25	<25	<25	4,920	3,710	<25	<25	<25	<25	<25
PHC F3 (>C16-C34 range)	2,500	5,000	2,500	mg/kg	577	206	<50	53	<50	<50	2160	1650	<50	<50	<50	<50	<50
PHC F4 (>C34-C50 range)	6,600	10,000	6,600	mg/kg	86	326	<50	<50	<50	<50	<50	<50	<50	<50	62	<50	<50
Moisture	n/g	n/g	n/g	%	34.50	35.90	19.40	32.90	31.50	35.50	27.20	24.70	32.60	19	19.1	17.7	28.4

Guidelines 10⁻⁵ incremental risk

^b CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils

Clandfill Acceptance Criteria - CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils, Environmental Health Guideline, Soil Contact Pathway

m bgs: meters below ground surface

mg/kg: milligrams per kilogram

< :Denotes concentration less than indicated detection limit

n/g: no guideline

PHC: Petroleum Hydrocarbons

 BOLD
 Reportable Detection Limit (RDL) exceeds the regulatory standard

 Yellow
 Exceeds Applied Soil Quality Guideline

 Blue
 Exceeds Landfill Acceptance Criteria

				AEC	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station				
				ple Location	-	BH24-02	BH24-02	BH24-01	DUP-07	BH24-01	BH24-01	MW24-02	MW24-02	MW24-02
			Sample Date (dd	/mmm/yyyy):	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	14-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024
				Sample ID	BH24-02-03	BH24-02-04	BH24-02-06	BH24-01-03	DUP-07 (dup of BH24-01-03)	BH24-01-04	BH24-01-07	MW24-02-03	MW24-02-04	MW24-02-06
			Sample D	epth (m bgs)	1.0-1.5	1.5-2.5	3.0-4.0	1.0-1.5	1.0-1.5	1.5-2.0	4.0-5.0	1.0-1.5	1.5-2.0	3.0-4.0
Parameter	CCME Surface Soil (<1.5 m bgs) ^{a,b}	CCME-Subsoil (>1.5 m bgs) ^{a,b}	Landfill Acceptance Criteria ^c	Units										
Benzene	2.8	2.9	310	mg/kg	< 0.0050	< 0.0050	< 0.0050	0.0368	0.0056	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Toluene	330	660	330	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050
Ethylbenzene	430	860	430	mg/kg	< 0.015	< 0.015	< 0.015	0.017	< 0.015	< 0.015	<0.015	<0.015	< 0.015	< 0.015
Xylenes, Total	230	460	230	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050
PHC F1 (C6-C10) minus BTEX	320	800	320	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
PHC F2 (>C10-C16)	260	1,000	260	mg/kg	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
PHC F3 (>C16-C34 range)	2,500	5,000	2,500	mg/kg	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
PHC F4 (>C34-C50 range)	6,600	10,000	6,600	mg/kg	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Moisture	n/g	n/g	n/g	%	18.1	23	36.5	21.3	23.4	19.2	32.9	18.8	20.4	30.5
Notes:					•	-	•		•				•	

Guidelines 10⁻⁵ incremental risk

^b CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils

⁶ Landfill Acceptance Criteria - CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils, Environmental Health Guideline, Soil Contact Pathway

m bgs: meters below ground surface

mg/kg: milligrams per kilogram

< :Denotes concentration less than indicated detection limit

n/g: no guideline

PHC: Petroleum Hydrocarbons

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

 Yellow
 Exceeds Applied Soil Quality Guideline

 Blue
 Exceeds Landfill Acceptance Criteria

					3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	4 - Former IOL						
				AEC	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station
			San	nple Location	MW24-03	DUP-08	MW24-03	MW24-03	MW24-01	MW24-01	MW24-01	TH24-01	TH24-02	TH24-02	TH24-05	TH24-05	TH24-04	TH24-22
			Sample Date (do	d/mmm/yyyy):	13-Feb-2024	14-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	29-Jan-2024	07-Feb-2024	07-Feb-2024	05-Feb-2024	05-Feb-2024	05-Feb-2024	29-Jan-2024
				Sample ID	MW24-03-02	DUP-08 (dup of MW24-03-02)	MW24-03-03	MW24-03-04	MW24-01-01	MW24-01-03	MW24-01-07	TH24-01-03	TH24-02-01	TH24-02-02	TH24-05-01	TH24-05-02	TH24-04-01	TH24-22-01
			Sample D	Depth (m bgs)	0.7-1.0	0.7-1.0	1.0-1.5	1.5-2.0	0.0-0.6	1.0-1.5	4.0-5.0	1.8	0.4	1.4	0.6	1.1	0.6	0.6
Parameter	CCME Surface Soil (<1.5 m bgs) ^{a,b}	CCME-Subsoil (>1.5 m bgs) ^{a,b}	Landfill Acceptance Criteria ^c	Units														
Benzene	2.8	2.9	310	mg/kg	0.0065	0.0099	0.123	< 0.0050	0.0098	0.137	1.19	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.0050
Toluene	330	660	330	mg/kg	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	0.162	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050
Ethylbenzene	430	860	430	mg/kg	< 0.015	< 0.015	0.017	< 0.015	< 0.015	0.717	2.11	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015
Xylenes, Total	230	460	230	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	3.37	2.4	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
PHC F1 (C6-C10) minus BTEX	320	800	320	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	89.3	25.7	69.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
PHC F2 (>C10-C16)	260	1,000	260	mg/kg	<25	<25	<25	<25	<25	180	<25	177	<25	<25	<25	<25	<25	<25
PHC F3 (>C16-C34 range)	2,500	5,000	2,500	mg/kg	<50	<50	<50	<50	<50	74	<50	124	99	<50	<50	<50	92	<50
PHC F4 (>C34-C50 range)	6,600	10,000	6,600	mg/kg	<50	<50	<50	<50	<50	<50	<50	<50	61	<50	<50	<50	161	<50
Moisture	n/g	n/g	n/g	%	13.3	13.2	26.1	18.9	14.5	8.04	30.8	22.30	18.2	25.6	6.51	22.2	20.8	11.40

Guidelines 10⁻⁵ incremental risk

^b CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils

⁶ Landfill Acceptance Criteria - CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils, Environmental Health Guideline, Soil Contact Pathway

m bgs: meters below ground surface

mg/kg: milligrams per kilogram

< :Denotes concentration less than indicated detection limit

n/g: no guideline

PHC: Petroleum Hydrocarbons

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

 Yellow
 Exceeds Applied Soil Quality Guideline

 Blue
 Exceeds Landfill Acceptance Criteria

				AEC	4 - Former IOL Station	4 - Former IOL Station	Station	Station	Station	4 - Former IOL Station	4 - Former IOL Station	Station
				nple Location	TH24-22	BH24-04	BH24-04	BH24-04	BH24-03	BH24-03	DUP-05	BH24-03
			Sample Date (do	d/mmm/yyyy):	29-Jan-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	13-Feb-2024	13-Feb-2024	14-Feb-2024	13-Feb-2024
				Sample ID	TH24-22-02	BH24-04-01	BH24-04-03	BH24-04-05	BH24-03-02	BH24-03-04	DUP-05 (dup of BH24-03-04)	BH24-03-06
			Sample D	epth (m bgs)	1.2	0.0-0.6	1.0-1.5	2.0-3.0	0.4-1.0	1.5-2.0	1.5-2.0	3.0-4.0
Parameter	CCME Surface Soil (<1.5 m bgs) ^{a,b}	CCME-Subsoil (>1.5 m bgs) ^{a,b}	Landfill Acceptance Criteria ^c	Units								
Benzene	2.8	2.9	310	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Toluene	330	660	330	mg/kg	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Ethylbenzene	430	860	430	mg/kg	<0.015	< 0.015	< 0.015	<0.015	<0.015	<0.015	< 0.015	< 0.015
Xylenes, Total	230	460	230	mg/kg	<0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050
PHC F1 (C6-C10) minus BTEX	320	800	320	mg/kg	<5.0	<5.0	7	<5.0	<5.0	<5.0	<5.0	<5.0
PHC F2 (>C10-C16)	260	1,000	260	mg/kg	<25	<25	711	<25	37	<25	<25	<25
PHC F3 (>C16-C34 range)	2,500	5,000	2,500	mg/kg	<50	64	743	<50	184	<50	<50	<50
PHC F4 (>C34-C50 range)	6,600	10,000	6,600	mg/kg	<50	58	<50	<50	132	<50	<50	<50
Moisture	n/g	n/g	n/g	%	24.80	9.05	7.04	30.8	24.2	26.1	26.7	32.7

Guidelines 10⁻⁵ incremental risk

^b CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils

Contral, Vanada Vita Grana Vita Grana Vita Standard Vita Standard for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils, Environmental Health Guideline, Soil Contact Pathway

m bgs: meters below ground surface

mg/kg: milligrams per kilogram

< :Denotes concentration less than indicated detection limit

n/g: no guideline

PHC: Petroleum Hydrocarbons

<u>BOLD</u> Reportable Detection Limit (RDL) exceeds the regulatory standard

 Yellow
 Exceeds Applied Soil Quality Guideline

 Blue
 Exceeds Landfill Acceptance Criteria

				AEC	1 - Landfill	2 - Speedway	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station
			Sam	ole Location	TP24-04	TH24-20	TP24-01	TP24-01	TP24-01	TP24-01	TP24-02	TP24-02	TP24-02	BH24-02	BH24-02	BH24-02	BH24-01	DUP-07	BH24-01	BH24-01
		Sa	mple Date (dd/	mmm/yyyy):	30-Jan-2024	29-Jan-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	14-Feb-2024	13-Feb-2024	13-Feb-2024
				Sample ID	TP24-04-04	TH24-20-04	TP24-01-02	TP24-01-03	DUP-02 (Dup of TP24-01-03)	TP24-01-05	TP24-02-01	TP24-02-02	TP24-02-04	BH24-02-03	BH24-02-04	BH24-02-06	BH24-01-03	DUP-07 (dup of BH24-01-03)	BH24-01-04	BH24-01-07
			Sample De	epth (m bgs)	2.0-3.0	2.4	1.0-2.0	2.0-3.0	2.0-3.0	4.0-5.0	0.0-1.0	1.0-2.0	3.0-4.0	1.0-1.5	1.5-2.5	3.0-4.0	1.0-1.5	1.0-1.5	1.5-2.0	4.0-5.0
Parameter	Parameter CCME ^a MOE ^b Landfill Acceptance Criteria ^d a n/g 96 n/g		Units																	
Acenaphthene	n/g	96	n/g	mg/kg	0.107	0.0388	< 0.0050	< 0.0050	< 0.0050	< 0.0050	1.38	1.21	< 0.0050	<0.0050	<0.0050	<0.0050	< 0.0050	< 0.0050	<0.0050	<0.0050
Acenaphthylene	n/g	0.17	n/g	mg/kg	< 0.0050	0.0180	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.417	0.378	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050
Acridine	n/g	n/g	n/g	mg/kg	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	2.65	2.35	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010
Anthracene	32	0.74	32	mg/kg	0.0514	0.0973	< 0.0040	< 0.0040	< 0.0040	< 0.0040	0.0078	<0.0080	< 0.0040	< 0.0040	< 0.0041	< 0.0049	< 0.0040	< 0.0040	< 0.0040	< 0.0046
Benz(a)anthracene	10 °	0.96	n/g	mg/kg	< 0.010	0.164	< 0.010	< 0.010	< 0.010	< 0.010	0.011	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Benzo(a)pyrene	72	0.3	72	mg/kg	< 0.010	0.167	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Benzo(b+j)fluoranthene	n/g	n/g	n/g	mg/kg	0.014	0.222	< 0.010	< 0.010	< 0.010	0.010	0.012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.016	<0.010	< 0.010
Benzo(g,h,i)perylene	n/g	9.6	n/g	mg/kg	< 0.010	0.132	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Benzo(k)fluoranthene	10 °	0.96	n/g	mg/kg	< 0.010	0.080	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Chrysene	n/g	9.6	n/g	mg/kg	0.014	0.210	< 0.010	< 0.010	< 0.010	< 0.010	0.027	0.012	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Dibenz(a,h)anthracene	10 °	0.1	n/g	mg/kg	<0.0050	0.0247	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050
Fluoranthene	180	9.6	180	mg/kg	0.037	0.367	< 0.010	< 0.010	< 0.010	< 0.010	0.113	0.029	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	0.013	<0.010	< 0.010
Fluorene	n/g	69	n/g	mg/kg	0.139	0.054	< 0.010	< 0.010	< 0.010	< 0.010	3.43	3.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Indeno(1,2,3-c,d)pyrene	10 °	0.95	n/g	mg/kg	<0.010	0.110	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010
Methylnaphthalene, 1-	n/g	85	n/g	mg/kg	0.138	0.029	< 0.010	< 0.010	< 0.010	< 0.010	20.6	17.1	0.015	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Methylnaphthalene, 2-	n/g	85	n/g	mg/kg	0.273	0.028	<0.010	< 0.010	< 0.010	<0.010	0.337	1.83	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010
Naphthalene	22	28	n/g	mg/kg	0.561	0.043	<0.010	<0.010	< 0.010	<0.010	<1.16	<1.52	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010
Phenanthrene	50	16	n/g	mg/kg	0.112	0.314	< 0.010	< 0.010	< 0.010	< 0.010	5.00	4.30	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Pyrene	100 °	96	n/g	mg/kg	0.026	0.343	< 0.010	< 0.010	< 0.010	< 0.010	0.160	0.151	< 0.010	< 0.010	<0.010	<0.010	< 0.010	0.011	<0.010	< 0.010
Quinoline	n/g	n/g	n/g	mg/kg	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.790	<0.660	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010
Benzo(a)pyrene total potency equivalents (B(a)P TPE)	5.3	n/g	n/g	mg/kg	<0.020	0.253	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

^d Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Fine Grain Soil, Environmental Health Guidelines, Soil Contact Pathway m bgs: meters below ground surface

mg/kg: milligrams per kilogram

< :Denotes concentration less than indicated detection limit - :Not analyzed

n/g: no guideline

PAH: Polycoclic Aromatic Hydrocarbons
BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard
Yellow Exceeds Applied Soil Quality Guideline
Blue Exceeds Landfill Acceptance Criteria

Winnipeg North Transit Garage Table 4: Soil Analytical Results - Polycyclic Aromatic Hydrocarbons

				AEC	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	4 - Former IOL Station	4 - Former IOL Station	4 - Former IOL Station			
			Sam	nple Location	MW24-02	MW24-02	MW24-02	DUP-08	MW24-03	MW24-03	MW24-03	MW24-01	MW24-01	MW24-01	TH24-17	TH24-17	TH24-16	TH24-16	TH24-22	TH24-22	TH24-01
		Sa	ample Date (dd	d/mmm/yyyy):	13-Feb-2024	13-Feb-2024	13-Feb-2024	14-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	09-Feb-	09-Feb-2024	09-Feb-2024	09-Feb-2024	29-Jan-2024	29-Jan-2024	29-Jan-2024
				Sample ID	MW24-02-03	MW24-02-04	MW24-02-06	DUP-08 (dup of BH24-02-06)	MW24-03-02	MW24-03-03	MW24-03-04	MW24-01-01	MW24-01-03	MW24-01-07	TH24-17-04	TH24-17-03	TH24-16-03	TH24-16-04	TH24-22-01	TH24-22-02	TH24-01-03
			Sample D	Depth (m bgs)	1.0-1.5	1.5-2.0	3.0-4.0	3.0-4.0	0.7-1.0	1.0-1.5	1.5-2.0	0.0-0.6	1.0-1.5	4.0-5.0	1.7	1.2	1.6	2.3	0.6	1.2	1.8
Parameter	CCME ^a	MOE⁵	Landfill Acceptance Criteria ^d	e Units																	
Acenaphthene	n/g	96	n/g	mg/kg	<0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	0.0321	<0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	<0.0050	0.141
Acenaphthylene	n/g	0.17	n/g	mg/kg	<0.0050	< 0.0050	< 0.0050	<0.0050	<0.0050	<0.0050	< 0.0050	0.0239	0.0192	< 0.0050	< 0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	< 0.0050	0.0352
Acridine	n/g	n/g	n/g	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.053	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.407
Anthracene	32	0.74	32	mg/kg	< 0.0040	< 0.0040	< 0.0043	<0.0040	< 0.0040	< 0.0042	< 0.0040	0.0119	0.0122	< 0.0044	<0.0040	< 0.0040	< 0.0040	<0.0040	<0.0040	<0.0040	<0.0280
Benz(a)anthracene	10 °	0.96	n/g	mg/kg	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	0.052	0.025	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(a)pyrene	72	0.3	72	mg/kg	<0.010	< 0.010	<0.010	0.010	<0.010	<0.010	< 0.010	0.048	0.025	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010
Benzo(b+j)fluoranthene	n/g	n/g	n/g	mg/kg	0.016	<0.010	<0.010	0.016	0.012	<0.010	<0.010	0.122	0.055	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010
Benzo(g,h,i)perylene	n/g	9.6	n/g	mg/kg	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	0.068	0.036	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010
Benzo(k)fluoranthene	10 °	0.96	n/g	mg/kg	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	0.049	0.021	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010
Chrysene	n/g	9.6	n/g	mg/kg	0.011	< 0.010	< 0.010	0.011	< 0.010	< 0.010	< 0.010	0.057	0.031	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)anthracene	10 °	0.1	n/g	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0239	0.0098	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Fluoranthene	180	9.6	180	mg/kg	0.020	< 0.010	< 0.010	0.018	0.014	< 0.010	< 0.010	0.057	0.033	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.012	< 0.010	< 0.010
Fluorene	n/g	69	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.037	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.381
Indeno(1,2,3-c,d)pyrene	10 °	0.95	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.076	0.032	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010
Methylnaphthalene, 1-	n/g	85	n/g	mg/kg	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	1.97	0.030	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.070
Methylnaphthalene, 2-	n/g	85	n/g	mg/kg	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	3.35	0.064	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.020
Naphthalene	22	28	n/g	mg/kg	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	0.024	1.45	0.120	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.120
Phenanthrene	50	16	n/g	mg/kg	0.012	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	0.022	0.044	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	0.718
Pyrene	100 °	96	n/g	mg/kg	0.015	< 0.010	<0.010	0.014	0.011	<0.010	< 0.010	0.052	0.036	<0.010	<0.010	<0.010	< 0.010	<0.010	0.011	<0.010	0.107
Quinoline	n/g	n/g	n/g	mg/kg	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.037	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.040
Benzo(a)pyrene total potency equivalents (B(a)P TPE)	5.3	n/g	n/g	mg/kg	<0.020	< 0.020	<0.020	<0.020	< 0.020	< 0.020	< 0.020	0.103	0.049	<0.020	<0.020	< 0.020	< 0.020	<0.020	<0.020	<0.020	< 0.020

mg/kg: milligrams per kilogram

< :Denotes concentration less than indicated detection limit

- :Not analyzed

n/g: no guideline

PAH: Polycyclic Aromatic Hydrocarbons
BOLD
Reportable Detection Limit (RDL) exceeds the regulatory standard
Yellow
Exceeds Applied Soil Quality Guideline
Etue
Etue

				AEC	4 - Former IOL Station	4 - Former IOL Station	4 - Former IOL Station	4 - Former IOL Station	4 - Former IOL Station							
			Samp	le Location	TH24-02	TH24-02	TH24-05	TH24-05	TH24-04	BH24-04	BH24-04	BH24-04	BH24-03	BH24-03	DUP-05	BH24-03
		Sai	mple Date (dd/n	nmm/yyyy):	07-Feb-2024	07-Feb-2024	05-Feb-2024	05-Feb-2024	05-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	13-Feb-2024	13-Feb-2024	14-Feb-2024	13-Feb-2024
				Sample ID	TH24-02-01	TH24-02-02	TH24-05-01	TH24-05-02	TH24-04-01	BH24-04-01	BH24-04-03	BH24-04-05	BH24-03-02	BH24-03-04	DUP-05 (dup of BH24-03- 04)	
			Sample Dep	oth (m bgs)	0.4	1.4	0.6	1.1	0.6	0.0-0.6	1.0-1.5	2.0-3.0	0.4-1.0	1.5-2.0	1.5-2.0	3.0-4.0
			Landfill													1
Parameter	CCME ^a	MOE	Acceptance Criteria ^d	Units												
Acenaphthene	n/g	96	n/g	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0086	< 0.0050	0.0681	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Acenaphthylene	n/g	0.17	n/g	mg/kg	< 0.0050	< 0.0050	<0.0050	< 0.0050	0.0092	< 0.0050	< 0.0222	<0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Acridine	n/g	n/g	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.292	< 0.010	< 0.017	< 0.010	< 0.010	< 0.010
Anthracene	32	0.74	32	mg/kg	< 0.0041	0.0040	< 0.0040	< 0.0040	0.0323	< 0.0040	< 0.0528	< 0.0045	< 0.0048	< 0.0040	< 0.0043	< 0.0045
Benz(a)anthracene	10 °	0.96	n/g	mg/kg	< 0.010	0.013	< 0.010	< 0.010	0.061	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo(a)pyrene	72	0.3	72	mg/kg	< 0.010	0.012	< 0.010	< 0.010	0.068	< 0.010	< 0.010	< 0.010	0.012	< 0.010	< 0.010	< 0.010
Benzo(b+j)fluoranthene	n/g	n/g	n/g	mg/kg	< 0.010	0.021	< 0.010	< 0.010	0.098	< 0.010	< 0.010	< 0.010	0.026	< 0.010	< 0.010	< 0.010
Benzo(g,h,i)perylene	n/g	9.6	n/g	mg/kg	< 0.010	0.014	< 0.010	< 0.010	0.066	< 0.010	0.010	< 0.010	0.018	< 0.010	< 0.010	< 0.010
Benzo(k)fluoranthene	10 °	0.96	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	0.035	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	n/g	9.6	n/g	mg/kg	< 0.010	0.017	< 0.010	< 0.010	0.069	< 0.010	< 0.019	< 0.010	< 0.045	< 0.010	< 0.010	< 0.010
Dibenz(a,h)anthracene	10 °	0.1	n/g	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0136	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Fluoranthene	180	9.6	180	mg/kg	< 0.010	0.032	< 0.010	< 0.010	0.134	< 0.010	< 0.029	< 0.010	0.011	< 0.010	< 0.010	< 0.010
Fluorene	n/g	69	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	0.014	< 0.010	0.092	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)pyrene	10 °	0.95	n/g	mg/kg	< 0.010	0.012	< 0.010	< 0.010	0.052	< 0.010	< 0.010	< 0.010	0.012	< 0.010	< 0.010	< 0.010
Methylnaphthalene, 1-	n/g	85	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	0.016	< 0.010	< 0.034	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Methylnaphthalene, 2-	n/g	85	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	0.027	< 0.010	< 0.014	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Naphthalene	22	28	n/g	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	0.016	< 0.010	< 0.051	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	50	16	n/g	mg/kg	< 0.010	0.023	< 0.010	< 0.010	0.109	< 0.010	<0.051	< 0.010	0.011	< 0.010	< 0.010	< 0.010
Pyrene	100 °	96	n/g	mg/kg	<0.010	0.028	<0.010	<0.010	0.125	< 0.010	0.137	< 0.010	0.024	< 0.010	< 0.010	< 0.010
Quinoline	n/g	n/g	n/g	mg/kg	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo(a)pyrene total potency equivalents (B(a)P TPE)	5.3	n/g	n/g	mg/kg	<0.020	<0.020	<0.020	<0.020	0.108	<0.020	<0.020	<0.020	< 0.020	<0.020	<0.020	<0.020
Notes: ^a Canadian Council of Ministers of the Environment (CCME) Soil Qualit Fine Grain Soil, Human Health and Environmental Health Guidelines 10 ^b Ontario Ministry of the Environment (MOE) Soil Standards (2011) - TE Potable Ground Water Condition (Industrial Land Use, Fine Grain Soil). ^c interim Soil Quality Criteria CCME 1991) ^d Landfill Acceptance Criteria - Canadian Council of Ministers of the En	0 ⁻⁵ incremental able 3 Full Deptl	risk n Generic Site C	Condition Standards i													

^d Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Fine Grain Soil, Environmental Health Guidelines, Soil Contact Pathway m bgs: meters below ground surface

mg/kg: milligrams per kilogram

< :Denotes concentration less than indicated detection limit

- :Not analyzed

n/g: no guideline

PAH: Polycyclic Aromatic Hydrocarbons
BOLD
Reportable Detection Limit (RDL) exceeds the regulatory standard
Yellow
Exceeds Applied Soil Quality Guideline
Blue
Exceeds Landfill Acceptance Criteria

				AEC	1 Leadfill	3 - Former Gas	s 3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	s 3 - Former Gas	s 3 - Former Gas	s 3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	s 3 - Former Gas									
					1 - Landfill	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station										
			Sam	ple Location	TP24-04	TP24-01	TP24-01	TP24-01	TP24-02	TP24-02	TP24-02	BH24-02	BH24-02	BH24-02	BH24-01	DUP-07	BH24-01	BH24-01	MW24-02	MW24-02	MW24-02	MW24-03	DUP-08	MW24-03	MW24-03	MW24-01	MW24-01	MW24-01
		Sa	ample Date (dd	/mmm/yyyy)	30-Jan-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	14-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	14-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024
			• •																									
				Sample ID	TP24-04-04	TP24-01-02	TP24-01-03	TP24-01-05	TP24-02-01	TP24-02-02	TP24-02-04	BH24-02-03	BH24-02-04	BH24-02-06	BH24-01-03	DUP-07 (dup of BH24-01-03)	FBH24-01-04	BH24-01-07	MW24-02-03	MW24-02-04	MW24-02-06	MW24-03-02	DUP-08 (dup of MW24-03-02)	f MW24-03-03	MW24-03-04	MW24-01-01	MW24-01-03	MW24-01-07
			Sample D	epth (m bgs)	2.0-3.0	1.0-2.0	2.0-3.0	4.0-5.0	0.0-1.0	1.0-2.0	3.0-4.0	1.0-1.5	1.5-2.5	3.0-4.0	1.0-1.5	1.0-1.5	1.5-2.0	4.0-5.0	1.0-1.5	1.5-2.0	3.0-4.0	0.7-1.0	0.7-1.0	1.0-1.5	1.5-2.0	0.0-0.6	1.0-1.5	4.0-5.0
Parameter	CCME ^a	MOE ^b	Landfill Acceptance Criteria ^c	e Units																								
Bromodichloromethane	n/a	18	n/q	mg/kg	< 0.050	< 0.050	<0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	< 0.050
Bromoform	n/g	1.7	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Bromomethane	n/g	0.05	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Tetrachloromethane (Carbon Tetrachloride)	50	1.5	50	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Chloroethane (Ethyl Chloride)	n/g	n/g	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Trichloromethane (Chloroform)	50	0.18	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.052
Chloromethane (Methyl Chloride)	n/g	n/g	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dibromochloromethane [DBCM]	n/g	13	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dibromoethane, 1,2-	n/g	n/g	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	<0.060	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dichlorobenzene, 1,2-	10	8.5	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dichlorobenzene,1,3-	10	12 0.84	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dichlorobenzene,1,4- Dichloroethane, 1,1-	10 50	21	n/g	mg/kg ma/ka	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichloroethane, 1,1-	50	0.05	n/g	mg/kg ma/ka	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichloroethylene, 1,1-	50	0.05	n/g	mg/kg	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	< 0.050	<0.050	< 0.050
Dichloroethylene, 1,2- cis-	n/g	37	n/g	ma/ka	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichloroethylene, 1,2- trans-	n/a	9.3	n/g	ma/ka	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichloromethane (Methylene chloride)	50	2	n/g	ma/ka	< 0.045	< 0.045	<0.045	<0.045	< 0.045	<0.045	< 0.045	< 0.045	<0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	<0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045
Dichloropropane, 1,2-	50	0.68	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dichloropropylene, 1,3- cis-	n/g	0.21	n/g	mg/kg	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030
Dichloropropylene, 1,3- trans-	n/g	n/g	n/g	mg/kg	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030
Chlorobenzene	n/g	2.7	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Tetrachloroethane, 1,1,2,2-	50	0.094	n/g	mg/kg	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Tetrachloroethane,1,1,1,2-	n/g	0.11	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Tetrachloroethylene	n/g	21	n/g	mg/kg	<0.050	< 0.050	<0.050	<0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	< 0.050
Trichloroethane, 1,1,1-	50	12	n/g	mg/kg	<0.050	< 0.050	<0.050	<0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	< 0.050
Trichloroethane, 1,1,2-	50	0.11	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Trichloroethylene	0.92	0.61	50	mg/kg	< 0.010	< 0.011	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.013	< 0.011	< 0.010	< 0.010	< 0.010	< 0.010
Trichlorofluoromethane	n/g	5.8	n/g	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	<0.050
Vinyl chloride ^a Canadian Council of Ministers of the Environment (CC	n/g	0.25	n/q	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

⁶ Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Accessed in December 2024) - Industrial Land Use, Human Health Guidelines 10⁵ incremental risk

^b Ontario Ministry of the Environment (MOE) Soil Standards (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (Industrial Land Use).

^c Landill Acceptance Criteria - CCME, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2008) - Industrial, Fine Grained Soils, Environmental Health Guideline, Soil Contact Pathway

(2009) - maustrai, i-mie craned solat, Environmental Healen Guideline, Soil Contac m bgs: meters below ground surface mg/kg: miligrams per kilogram -: Denotes concentration less than indicated detection limit n/g: no guideline BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard Yellow Exceeds Applied Soil Quality Guideline

							1																	
			AEC	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill
			Sample ID:	TP24-03-03	TP24-03-07	TP24-04-04	TP24-04-07	TP24-11-07	TP24-06-06	TP24-10-07	TP24-07-07	TP24-12-04	TP24-12-07	DUP-01 (Dup of	TP24-08-03	TP24-08-06	TP24-09-07	TP24-13-07	TP24-05-05	TH24-18-03	TH24-19-03	TH24-19-06	TH24-19-4.4	MW24-06-03
														TP24-12-07)										
		Date Sample	d (dd/mmm/yyyy):	30-Jan-2024	30-Jan-2024	30-Jan-2024	30-Jan-2024	30-Jan-2024	30-Jan-2024	30-Jan-2024	31-Jan-2024	31-Jan-2024	31-Jan-2024	31-Jan-2024	31-Jan-2024	31-Jan-2024	31-Jan-2024	31-Jan-2024	31-Jan-2024	29-Jan-2024	29-Jan-2024	29-Jan-2024	29-Jan-2024	12-Feb-2024
			Depth (m bgs)	1.0-2.0	5.0-5.5	2.0-3.0	5.0-6.0	5.0-6.0	4.0-5.0	5.0-6.0	5.0-6.0	2.0-3.0	5.0-6.0	5.0-6.0	2.0-3.0	4.0-5.0	5.0-6.0	5.0-6.0	3.0-4.0	1.8	1.6	4.2	4.4	1.0-1.5
	SQG ª	Landfill Acceptance Criteria ^b	Units																					
Aluminum (Al)	NG	NG	mg/kg	26.700	3.720	25.000	19.600	25,400	27.300	25.400	19,100	10.100	26.200	19.400	13.200	21.500	23.900	16.800	18.400	14,900	17.500	11.600	-	15.100
Antimony (Sb)	40	NG	mg/kg	0.19	<0.10	1.64	0.40	0.40	0.49	0.41	0.30	5.71	0.50	<0.10	0.46	0.75	0.59	0.73	5.46	4.58	0.43	8.26	-	0.64
Arsenic (As)	12	26	mg/kg	6.17	1.49	12.7	9.48	9.94	8.98	9.67	7.16	30.1	9.81	10.4	4.34	11.3	9.83	8.12	9.18	8.78	5.16	7.63	-	5.38
Barium (Ba)	2,000	NG	mg/kg	143	31.5	294	207	226	335	237	237	506	184	330	122	182	608	148	269	409	138	299	-	155
Beryllium (Be)	8	NG	mg/kg	0.94	0.13	1.01	0.87	1.16	1.06	1.14	0.84	0.35	1.03	0.91	0.52	0.99	1.04	0.74	0.63	0.70	0.64	0.42	-	0.59
Bismuth (Bi)	NG	NG	mg/kg	0.21	<0.20	1.32	0.24	0.30	0.27	0.29	0.21	0.54	0.26	0.32	<0.20	0.27	0.30	0.21	0.37	0.20	<0.20	0.21	-	<0.20
Boron (B)	NG	NG	mg/kg	20.1	14.5	26.6	14.2	16.4	18.5	16.7	14.5	56.6	17.1	10.9	14.1	18.3	14.5	14.8	22.8	36.7	18.4	39.6	-	17.5
Cadmium (Cd)	22	22	mg/kg	0.27	0.02	0.34	0.20	0.40	0.28	0.31	0.25	2.72	0.35	0.83	0.22	0.32	3.65	0.26	0.78	0.91	0.21	0.79	-	0.19
Calcium (Ca)	NG	NG	mg/kg	4,850	122,000	31,600	48,200	26,400	32,600	24,600	58,200	31,100	21,600	30,800	60,200	25,200	30,300	57,800	47,100	61,400	57,100	64,000	-	78,400
Chromium (Cr)	87	87	mg/kg	44.4	12.1	48.0	35.8	48.2	59.9	47.4	35.9	51.6	50.5	43.7	25.1	46.3	47.9	34.4	49	35.8	34	44.8	-	28.6
Cobalt (Co)	300	NG	mg/kg	12.2	2.39	13.2	11.3	17.2	15.1	19.4	9.2	14.3	13.0	16.6	6.93	14.0	13.1	10.4	10.6	8.95	8.7	7.34	-	7.84
Copper (Cu)	91	91	mg/kg	25.3	4.71	42.9	27.1	40.6	40.5	33.6	24.4	146	35.5	104	16.6	34.1	70	30.7	197	263	20.4	79.9	-	19.7
Iron (Fe)	NG	NG	mg/kg	24,400	5,740	34,000	26,100	31,100	36,100	31,100	24,000	146,000	32,700	50,000	15,300	36,400	35,200	27,000	46,400	31,100	19,800	38,500	-	18,800
Lead (Pb)	600	600	mg/kg	12.4	2.67	53.3	11.9	16.4	31.8	13.8	11.5	940	36.6	3,120	18.7	40.1	217	23.8	320	460	21.1	1,280	265	24.8
Lithium (Li)	NG	NG	mg/kg	25.5	7.5	28.4	22.4	28.9	36.3	27.9	22.2	11.4	25.9	26.5	14.8	25.1	28.1	22.5	18.7	17.0	20.6	15.1	-	20.9
Magnesium (Mg)	NG	NG	mg/kg	11,800	57,800	17,900	26,400	16,800	19,200	15,500	30,600	14,200	17,400	19,000	28,200	18,000	17,400	30,900	28,100	25,300	29,500	31,400	-	47,600
Manganese (Mn)	NG	NG	mg/kg	428	177	587	350	979	452	585	347	749	384	626	325	453	514	493	503	441	435	391	-	375
Molybdenum (Mo)	40	NG	mg/kg	0.41	0.37	1.40	1.06	1.66	1.32	1.24	0.81	5.09	1.07	0.92	0.46	1.44	1.18	1.44	1.68	2.18	0.60	6.02	-	0.78
Nickel (Ni)	89	89	mg/kg	29.8	7.5	43	33.2	51.9	47.3	43.4	31.1	96.7	44.4	49	19.8	42.8	39.5	31.9	104	32.1	26.2	51.4	-	22
Phosphorus (P)	NG	NG	mg/kg	609	227	1,640	528	519	513	541	429	1,610	498	628	483	526	961	434	542	717	444	682	-	466
Potassium (K)	NG	NG	mg/kg	5,520	1,150	4,690	3,310	4,670	5,300	4,610	3,470	3,080	5,120	3,850	2,590	4,460	4,290	3,290	3,450	2,740	3,330	2,250	-	2,710
Selenium (Se)	2.9	2.9	mg/kg	0.34	<0.20	0.53	0.50	0.53	<0.20	0.92	0.30	0.61	0.54	0.26	<0.20	0.58	0.50	0.24	0.30	0.28	<0.20	0.28	-	<0.20
Silver (Ag)	40	NG	mg/kg	< 0.10	< 0.10	0.25	<0.10	0.13	< 0.10	0.11	0.12	0.33	0.10	0.19	<0.10	0.13	0.17	0.10	0.43	0.35	< 0.10	0.29	-	<0.10
Sodium (Na)	NG	NG	mg/kg	2,310	448	2,050	1,680	1,330	1,130	1,530	1,400	706	1,320	1,220	303	1,090	1,540	732	772	1,240	913	1,310	-	1,010
Strontium (Sr)	NG NG	NG	mg/kg	59.5	59.5	82.3	69.6	78	94.7	79.7	69.2	118	60.4	81.1	66.6	63.1	94.3	72	148	248	73.5	234	-	64.4
Sulfur (S)		NG	mg/kg	1,400	<1000	1,600	<1000	<1000	<1000	<1000	<1000	2,100	<1000	1,000	<1000	<1000	1,200	1,200	2,700	<1000	<1000	<1000	-	<1000
Thallium (TI)	1 300	3.6 NG	mg/kg	0.27	< 0.050	0.26	0.24	0.32	0.35	0.30	0.25	0.10	0.29	0.30	0.17	0.26	0.32	0.22	0.19	0.16	0.21	0.14	-	0.18
Tin (Sn) Titanium (Ti)	300 NG	NG	mg/kg	<2.0	<2.0	53.3 147	<2.0 74.6	<2.0	10.1	<2.0 87.8	<2.0 74.1	1,170	5.2	4.6	<2.0 143	11.5 65.9	35.4 38	2.9	92.8 141	25 239	<2.0 210	132 387	-	<2.0 278
	NG	NG	mg/kg	256	335 <0.50		<0.50	<0.50	250 <0.50	87.8 <0.50	<0.50	131	123 <0.50	15.8 <0.50	143 <0.50	<0.50	38 <0.50	<0.50	141 <0.50	<0.50	<0.50		-	<0.50
Tungsten (W)	300		mg/kg		<0.50	<0.50 1.97	<0.50	<0.50		<0.50	<0.50	0.91	<0.50	<0.50			<0.50					0.62	-	<0.50
Uranium (U)		2,000	mg/kg	1.46		-	-		1.8				78.1		0.99	1.66	68	1.33	1.11	1.25	0.94	1.3	-	44.9
Vanadium (V) Zinc (Zn)	<u>130</u> 410	130 450	mg/kg	67.8 89.8	10.5 11	70.4	55.7 72.8	76.5 91.2	79.6 114	76.1 89.7	55.4 66.1	22.4 3,010	106	46.7 328	55.5	60.2 118	694	48.4 201	49.1 640	40.6	47.9 63.7	29 374	-	44.9
Zirconium (Zr)	410 NG	450 NG	mg/kg mg/kg	10.3	5.6	8.9	8.7	91.2 8.8	114	9.6	7.4	1.8	9.7	7.8	50.5	11.8	7.2	11	10	7.3	5.8	4.3		46.9
	NO ING		iiig/kg	10.3	0.0	0.9	0.7	0.0	14.7	9.0	7.4	1.0	3.1	1.0	5	11.0	1.4		10	1.3	0.0	4.3		10.1

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use.
^b Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use, Soil Contact Pathway SQG - soil quality guideline.
^m bgs - metres below ground surface.
^mg/kg - milligram per kilogram.
NG - No Guideline.
<c- Denotes concentration less than indicated detection limit.
BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard
<u>Yellow</u>
Exceeds Applied Soil Quality Guideline
Blue Exceeds Applied Landfill Acceptance Guideline

																				1				
			AEC	C 1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	1 - Landfill	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway
			Sample ID:	MW24-06-05	MW24-06-06	BH24-05-02	BH24-05-05	BH24-05-07	BH24-06-03	DUP-09 (dup of BH24-06-03)	BH24-06-05	BH24-06-06	BH24-07-02	BH24-07-04	DUP-03 (dup of BH24-07-04)	BH24-07-06	MW24-05-03	MW24-05-05	DUP-10 (dup of MW24-05-05)	MW24-05-07	TH24-20-02	TH24-20-04	TH24-03-02	TH24-12-03
		Date Sampled	d (dd/mmm/yyyy):	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	29-Jan-2024	29-Jan-2024	30-Jan-2024	31-Jan-2024
			Depth (m bgs)	2.0-3.0	3.0-4.0	0.5-1.0	2.0-3.0	4.0-5.0	1.0-1.5	1.0-1.5	2.0-3.0	3.0-4.0	0.5-1.0	1.5-2.0	1.5-2.0	3.0-4.0	1.0-1.5	2.0-3.0	2.0-3.0	4.0-5.0	1.2	2.4	1.1	1.7
	SQG ª	Landfill Acceptance	Units																					
	000	Criteria b																						
Aluminum (Al)	NG	NG	mg/kg	23,300	26,200	19,700	20,000	21,000	18,100	22,200	26,200	5,190	22,200	17,300	19,500	21,000	19,300	13,300	17,400	23,200	16,700	21,700	24,300	10,100
Antimony (Sb)	40	NG	mg/kg	2.08	0.48	0.91	2.81	0.42	5.32	11.10	0.83	<0.10	0.84	1.82	0.68	0.42	0.54	21.10	19.20	0.54	0.87	1.28	0.36	0.99
Arsenic (As)	12	26	mg/kg	9.3	9.58	8.54	11.4	8.06	12	18.2	10.7	1.93	6.22	6.94	4.41	7.34	4.9	49.9	64.7	9.52	5.09	7.44	7.55	4.12
Barium (Ba)	2,000	NG	mg/kg	240	220	187	616	138	1,030	1,870	258	39.3	139	206	154	190	175	1,920	2,260	257	149	215	203	134
Beryllium (Be)	8	NG	mg/kg	1.02	1.08	0.74	0.94	0.86	1.05	1.42	1.19	0.21	0.80	0.60	0.64	0.87	0.76	<2.00	<2.00	1.15	0.61	0.90	0.92	0.40
Bismuth (Bi)	NG	NG	mg/kg	0.24	0.27	<0.20	1.10	0.22	0.35	0.44	0.32	<0.20	<0.20	<0.20	<0.20	0.23	<0.20	<4.00	<4.00	0.30	<0.20	0.24	0.24	<0.20
Boron (B)	NG	NG	mg/kg	29.8	22.4	19.8	71.7	20	52.6	97.4	22.4	18	23.4	45.9	53.5	18.7	18	<100	<100	20.2	18.1	27.5	38.8	20.3
Cadmium (Cd)	22	22	mg/kg	0.43	0.21	0.26	3.57	0.25	3.15	5.42	0.38	0.04	0.31	1.60	0.45	0.27	0.19	11.20	16.80	0.30	0.36	0.35	0.20	0.34
Calcium (Ca)	NG	NG	mg/kg	46,200	43,200	55,800	44,400	62,600	59,400	64,800	28,000	143,000	72,000	65,400	46,300	54,400	58,200	49,100	57,400	31,100	87,200	40,600	40,600	109,000
Chromium (Cr)	87	87	mg/kg	41.1	48.2	38.1	43.7	36.9	43.6	64.4	49.5	11.9	35.9	35.3	33.3	39.5	33.7	95.1	107	43.3	32	44.3	49.6	23.4
Cobalt (Co)	300	NG	mg/kg	14.4	14.3	10.7	10.6	10.5	11.5	20.5	18.2	3.14	9.64	8.69	8.3	10	9	23.2	28.2	14.2	8	10.5	13.1	5.16
Copper (Cu)	91 NG	91 NG	mg/kg	43	32.2 31.600	27.5 27.800	90.5	26.2	97.8	250 71.000	51.2 34.400	7.3	34.2	73.2 35.600	29.7 20.500	28	23.3 21.400	4,700	1,360 241.000	35.4 29.500	20.7 18.100	39.8	30.8	23.4
Iron (Fe)	600	600	mg/kg	28,500		1	32,800	25,700	48,200	71,000		8,270 4,71	22,900		20,500	26,800	1	202,000	1			29,600 98	28,600	12,800 44.1
Lead (Pb) Lithium (Li)	NG	NG	mg/kg	100 24.9	15 31.6	33.6 23.8	298 21.7	11.8 23.6	368 20.7	21.9	40.3	9.5	66.3 21.6	133 18.3	46	13.4 24.6	27.6 21.6	6,020	4,530	14.6 30.7	32.4 18.8	98 26.4	14.2 31.6	44.1
Magnesium (Mg)	NG	NG	mg/kg ma/ka	24.9	17.200	30.300	17.800	33.600	24.600	21.9	29.7	9.5	42.400	21.200	21.700	31.600	31.200	14.600	20.800	18.400	41,900	23.600	27.000	48.700
Magnesium (Mg)	NG	NG	mg/kg	25,800	457	453	494	445	735	20,800	649	199	42,400	445	374	31,600	31,200	14,600	20,800	427	331	310	466	263
Molybdenum (Mo)	40	NG	mg/kg	1.74	1.25	1.18	1.69	0.98	3.94	5.87	1.46	0.29	0.93	5.57	5.92	1.02	0.53	22.5	14.2	1.27	0.52	0.88	1.08	0.64
Nickel (Ni)	89	89	mg/kg	40	41.1	31.2	31.8	31.9	38	59.3	49.2	8.42	28	30.2	22.5	34.6	25.8	172	154	41.2	23.6	33.5	39.2	16.3
Phosphorus (P)	NG	NG	mg/kg	574	497	574	2,100	502	1.080	1.620	589	270	411	809	796	509	488	1.710	2.270	596	364	468	475	396
Potassium (K)	NG	NG	mg/kg	4,290	4,480	3.770	5,150	3.850	2,980	2,980	5.120	1.500	4.020	3,980	4.550	3.970	3.660	<2000	2,310	4.310	3,160	4,460	5.290	2.090
Selenium (Se)	2.9	2.9	mg/kg	0.62	0.36	0.33	0.86	0.62	0.66	0.87	<0.20	<0.20	0.32	0.73	0.69	0.27	0.20	<4.00	<4.00	0.54	< 0.20	0.26	0.22	<0.20
Silver (Ag)	40	NG	mg/kg	0.17	0.12	0.12	0.58	0.10	0.49	1.40	0.12	<0.10	0.12	0.24	0.11	<0.10	< 0.10	<2.00	<2.00	0.14	< 0.10	0.12	0.11	<0.10
Sodium (Na)	NG	NG	mg/kg	1,830	2,510	710	1,800	1,640	1,120	1,570	1,740	363	528	696	664	1,310	319	<1000	1,140	2,190	274	732	1,490	404
Strontium (Sr)	NG	NG	mg/kg	168	108	91.3	279	74.4	528	745	85.5	68.1	71.1	372	213	69.8	107	291	369	77.4	85.8	104	79.7	94.5
Sulfur (S)	NG	NG	mg/kg	3,200	22,700	<1000	2,000	<1000	<1000	1,700	<1000	<1000	<1000	6,000	2,600	<1000	<1000	<20000	<20000	<1000	<1000	4,800	<1000	<1000
Thallium (TI)	1	3.6	mg/kg	0.26	0.30	0.23	0.24	0.23	0.17	0.16	0.33	0.07	0.22	0.17	0.20	0.25	0.22	<1.00	<1.00	0.31	0.17	0.26	0.31	0.13
Tin (Sn)	300	NG	mg/kg	2.2	<2.0	<2.0	154	<2.0	40.4	85.2	2.4	<2.0	3.4	86.5	4.4	<2.0	<2.0	967	1,570	<2.0	<2.0	4.3	<2.0	3.2
Titanium (Ti)	NG	NG	mg/kg	196	232	284	306	190	321	475	187	260	213	313	343	198	235	344	401	148	169	122	301	229
Tungsten (W)	NG	NG	mg/kg	<0.50	<0.50	<0.50	0.65	<0.50	<0.50	2.08	<0.50	<0.50	<0.50	0.61	< 0.50	<0.50	<0.50	<10.0	<10.0	<0.50	<0.50	<0.50	<0.50	<0.50
Uranium (U)	300	2,000	mg/kg	1.64	2.2	1.61	1.3	1.44	1.63	1.89	2.14	0.79	1.05	1.07	1.04	1.49	1.21	2.55	2.44	2.07	0.85	1.32	1.47	0.83
Vanadium (V)	130	130	mg/kg	71.2	80.4	58.6	50.3	61.2	45	47.5	80.7	14.9	62.2	35	36.3	61.6	52.3	28.1	37.8	73	47	62.5	71.7	31.1
Zinc (Zn)	410	450	mg/kg	114	84.6	72.7	510	68.4	1,560	3,100	126	19	85.1	398	177	77.8	66	7,340	6,960	88.6	66.5	130	78.8	55.6
Zirconium (Zr)	NG	NG	mg/kg	12.5	20.6	8.7	7	13.2	11	11.6	14.2	7.8	9.1	4.1	3.8	13.6	9.8	<20.0	<20.0	13.5	6.4	14.3	14	4.4

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use.
^b Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use, Soil Contact Pathway SQG - soil quality guideline.
^m ggs - metres below ground surface.
^m grkg - milligram per kilogram.
^{NG} - No Guideline.
^{SOLD} Reportable Detection Limit (RDL) exceeds the regulatory standard
<u>Veltow</u>
<sup>Exceeds Applied Soil Quality Guideline
Blue Exceeds Applied Landfill Acceptance Guideline
</sup>

			AEC	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	3 - Former Gas Station	3 - Former Gas Station
			Sample ID:	TH24-14-02	TH24-13-02	TH24-13-04	TH24-15-04	TH24-15-06	TH24-11-03	TH24-10-02	TH24-10-04	TH24-09-04	TH24-09-05	TH24-08-02	TH24-07-04	TH24-06-02	BH24-08-03	BH24-08-05	BH24-08-06	MW24-04-02	MW24-04-05	MW24-04-06	TP24-01-02	TP24-01-03
		Date Sampled	l (dd/mmm/yyyy):	09-Feb-2024	09-Feb-2024	09-Feb-2024	07-Feb-2024	07-Feb-2024	07-Feb-2024	07-Feb-2024	07-Feb-2024	06-Feb-2024	06-Feb-2024	02-Feb-2024	05-Feb-2024	02-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	01-Feb-2024	01-Feb-2024
			Depth (m bgs)	1.2	0.8	2.4	2.6	3.8	2	1.2	2.3	2.7	3.4	1.5	2.4	1	1.0-1.5	2.0-3.0	3.0-3.4	0.5-1.0	2.0-3.0	3.0-4.0	1.0-2.0	2.0-3.0
	SQG ª	Landfill Acceptance Criteria ^b	Units																					
Aluminum (Al)	NG	NG	mg/kg	20,200	22,300	15,400	15,500	23,500	17,900	18,800	27,700	15,000	8,420	14,800	22,100	12,600	15,200	15,200	9,000	10,500	14,900	26,500	7,640	26,100
Antimony (Sb)	40	NG	mg/kg	0.82	0.61	0.36	0.86	0.66	1.26	1.02	0.55	0.62	0.13	0.50	0.33	0.30	37.80	0.40	0.20	1.68	15.90	1.53	0.14	0.41
Arsenic (As)	12	26	mg/kg	5.26	5.87	4.16	4.73	7.6	7.48	5.37	9	4.66	3.37	4.77	5.25	3.96	8.48	3.9	2.67	4.5	5.09	9.3	3.76	9.19
Barium (Ba)	2,000	NG	mg/kg	179	176	149	133	222	157	178	179	308	63.2	146	200	93.7	242	126	65.8	222	195	199	71.4	236
Beryllium (Be)	8	NG	mg/kg	0.70	0.84	0.59	0.59	1.05	0.80	0.83	1.37	0.72	0.32	0.53	0.89	0.57	<2.00	0.56	0.35	0.41	<2.00	1.22	0.30	1.17
Bismuth (Bi)	NG	NG	mg/kg	<0.20	<0.20	<0.20	<0.20	0.22	0.21	<0.20	0.34	<0.20	<0.20	<0.20	<0.20	<0.20	<4.00	<0.20	<0.20	<0.20	<4.00	0.31	<0.20	0.30
Boron (B)	NG	NG	mg/kg	26.8	28.1	19.3	20.6	27.7	21.5	23.8	21.7	52.6	17.9	24.7	23.3	27.2	<100	16	15.4	22.6	<100	18.6	13	13.3
Cadmium (Cd)	22	22	mg/kg	0.50	0.38	0.22	0.22	0.42	0.33	0.41	0.31	0.18	0.09	0.19	0.33	0.15	0.83	0.21	0.12	0.51	0.42	0.28	0.10	0.23
Calcium (Ca)	NG	NG	mg/kg	96,800	65,900	82,600	99,600	49,900	71,800	72,300	30,500	92,600	140,000	96,600	63,300	103,000	32,500	77,500	108,000	105,000	60,100	29,400	102,000	19,800
Chromium (Cr)	87	87	mg/kg	36.6	35.5	29.8	28.2	40.9	32.4	33.0	49.9	34.6	17.7	26.8	38.1	23.6	44	26.9	18.6	27.8	26	47.3	19	50.8
Cobalt (Co)	300	NG	mg/kg	8.26	9.22	7.38	7.72	11.7	10	9.24	15	8	4.48	6.36	10.6	6.17	8.15	6.77	4.31	5.89	6.23	15.5	4.34	15.1
Copper (Cu)	91 NG	91	mg/kg	27.7	28.1	18.5	19.3	30.1	27.8	21.7	36.1	20.8	9.55	16.4	23.1	15.7	5,050	33.5	17.2	35.6	997	81.8	10.9	33.6
Iron (Fe)	600	NG 600	mg/kg	20,100	22,100	17,700 21,4	17,700	26,100	23,100	21,300	33,700 15.9	15,900	10,400	15,700	23,800	16,500	30,700	15,900	10,500	16,000	16,700	32,200	11,000	32,200 14,9
Lead (Pb)	NG	NG	mg/kg	90.4 21.9	26 21.6	17.5	45.3 20.1	78.3 26.2	59.3 24.3	23.5 23.3	33.7	41 20.3	4.48	28.1 21.5	15.1 30.4	13.6 17.2	2,610	22.5 18.1	12.1 13.9	105 14.4	1,480	70.4	4.92	31.8
Lithium (Li) Magnesium (Mg)	NG	NG	mg/kg mg/kg	46.000	40.900	42.300	49.800	26.2	38.000	31.000	18.600	43,700	63.700	52.800	25.000	41.600	<40.0 15.100	33.400	60.200	44.100	33.200	19.600	13.6 58.900	17.600
Manganese (Mn)	NG	NG	mg/kg	48,000	40,900	535	49,600 341	26,600	554	407	574	330	260	317	636	278	1,000	374	230	44,100	463	565	237	438
Molvbdenum (Mo)	40	NG	mg/kg	0.42	1.34	0.45	0.53	0.58	0.90	0.54	1.27	0.69	0.24	0.35	0.63	0.60	<2.00	0.27	0.24	1.70	<2.00	1.26	0.17	1.12
Nickel (Ni)	89	89	mg/kg	24.8	27.4	21.2	22.6	34.2	28.6	26.4	43.9	20.9	12.9	18.9	29.5	18.8	52.6	20.4	13.6	20.1	22.00	41.2	12.6	41.1
Phosphorus (P)	NG	NG	mg/kg	663	436	499	457	592	528	467	536	496	370	486	520	363	<1000	475	393	516	<1000	534	302	501
Potassium (K)	NG	NG	mg/kg	3.840	3.860	2.750	2.950	4,480	3.550	3.810	4.850	2.780	1.570	2.800	3.710	2.610	2,230	2.640	1.490	1,990	2,900	4.470	1.700	5.000
Selenium (Se)	2.9	2.9	mg/kg	0.22	0.31	<0.20	<0.20	0.33	0.37	0.28	0.81	0.30	<0.20	<0.20	0.30	< 0.20	<4.00	0.25	<0.20	0.21	<4.00	1.74	<0.20	<0.20
Silver (Ag)	40	NG	mg/kg	<0.10	0.10	<0.10	<0.10	0.14	0.10	<0.10	0.14	<0.10	<0.10	<0.10	0.13	0.65	<2.00	0.13	<0.10	0.62	<2.00	0.16	<0.10	0.12
Sodium (Na)	NG	NG	mg/kg	1,390	3,270	720	433	365	653	687	1,710	1,600	698	441	1,020	885	<1000	578	368	415	<1000	2,050	456	1,960
Strontium (Sr)	NG	NG	mg/kg	124.0	112	90.2	88.9	93.8	91.8	98.1	80.7	192	68.8	98.7	124	76.7	87	93.5	56.6	118	208	68.1	62.5	67.9
Sulfur (S)	NG	NG	mg/kg	<1000	<1000	<1000	<1000	<1000	2,200	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<20000	1,400	<1000	<1000	<20000	5,400	<1000	<1000
Thallium (TI)	1	3.6	mg/kg	0.19	0.20	0.16	0.18	0.26	0.23	0.22	0.35	0.17	0.10	0.16	0.24	0.15	<1.00	0.18	0.11	0.13	<1.00	0.30	0.12	0.33
Tin (Sn)	300	NG	mg/kg	<2.0	<2.0	<2.0	2.6	3.5	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	367	<2.0	<2.0	2.3	<40.0	4.1	<2.0	<2.0
Titanium (Ti)	NG	NG	mg/kg	324	225	325	309	230	198	222	177	443	365	370	300	246	250	301	336	229	242	178	332	77.2
Tungsten (W)	NG	NG	mg/kg	<0.50	< 0.50	<0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.50	< 0.50	<10.0	<0.50	< 0.50	<0.50	<10.0	<0.50	<0.50	<0.50
Uranium (U)	300	2,000	mg/kg	1.07	1.16	0.98	1.26	1.17	1.36	1.19	2.22	1.4	1.23	1.31	1.58	0.87	1.64	2.7	1.74	0.85	1.92	2.24	0.67	1.85
Vanadium (V)	130	130	mg/kg	53.8	60.8	44.5	44	64.2	51.7	55	83.6	37.3	29.7	40.4	60.1	36	42.4	38.2	27.2	27.3	34.7	76.9	24.5	73.1
Zinc (Zn)	410	450	mg/kg	76.9	85.2	59.2	58.2	96.1	70.9	62.7	91.4	64.7	19.2	49.6	69.3	40.2	2,690	64.3	30.6	115	277	103	23.8	93.6
Zirconium (Zr)	NG	NG	mg/kg	5.9	8.8	5.4	7.3	8.2	10.1	6.9	17.8	6	5.1	5.4	5.6	7.8	<20.0	3.8	4	2.3	<20.0	14.9	8.9	13.1

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use.
^b Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use, Soil Contact Pathway SQG - soil quality guideline.
^m ggs - metres below ground surface.
^m grkg - milligram per kilogram.
^{NG} - No Guideline.
^{SOLD} Reportable Detection Limit (RDL) exceeds the regulatory standard
<u>Veltow</u>
<sup>Exceeds Applied Soil Quality Guideline
Blue Exceeds Applied Landfill Acceptance Guideline
</sup>

				3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	3 - Former Gas	4 - Former IOL	4 - Former IOL	4 - Former IOL	4 - Former IOL	4 - Former IOL
			AEC	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station	Station
			Sample ID:	DUP-02 (Dup of TP24-01-03)	TP24-01-05	TP24-02-01	TP24-02-02	TP24-02-04	BH24-02-03	DUP-06 (dup of BH24-02-03)	BH24-02-04	BH24-02-06	MW24-03-02	DUP-08(dup of MW24-03-02)	MW24-03-03	MW24-03-04	BH24-09-02	BH24-09-04	DUP-04 (dup of BH24-09-04)	BH24-09-05	TH24-21-04
		Date Sample	d (dd/mmm/yyyy):	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	01-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	13-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	29-Jan-2024
			Depth (m bgs)	2.0-3.0	4.0-5.0	0.0-1.0	1.0-2.0	3.0-4.0	1.0-1.5	1.0-15	1.5-2.5	3.0-4.0	0.7-1.0	0.7-1.0	1.0-1.5	1.5-2.0	0.5-1.0	1.5-2.0	1.5-2.0	3.0-4.0	2.4
	SQG ^a	Landfill Acceptance Criteria ^b	Units																		
Aluminum (Al)	NG	NG	mg/kg	21,500	26,900	14,200	28,500	24,900	19,500	16,900	31,900	25,700	8,320	8,300	17,300	8,360	17,300	13,800	22,500	22,600	19,200
Antimony (Sb)	40	NG	mg/kg	<0.10	0.50	0.15	0.27	0.36	0.13	0.20	0.41	0.56	0.20	0.12	0.23	0.11	0.38	0.62	2.21	4.85	1.08
Arsenic (As)	12	26	mg/kg	9.05	13.6	3.82	6.3	7.54	4.53	4.49	8.13	8.12	2.5	2.3	5.08	2.7	4.42	4.40	8.07	7.43	5.26
Barium (Ba)	2,000	NG	mg/kg	256	187	107	265	266	105	102	236	197	55.8	53.1	162	55.8	120	170	218	351	498
Beryllium (Be)	8 NG	NG	mg/kg	1.09	1.30	0.49	0.96	1.16	0.68	0.54	1.24	1.27	0.32	0.28	0.65	0.34	0.67	0.54	1.02	1.15	0.93
Bismuth (Bi)	-	NG	mg/kg	0.27	0.34	< 0.20	0.27	0.29	< 0.20	< 0.20	0.29	0.30	< 0.20	< 0.20	<0.20 24.6	<0.20	<0.20	< 0.20	0.24	0.24	<0.20
Boron (B)	NG 22	NG	mg/kg	\$ 11	12.2	20.2	18.2		20.6	26.6	24.3	17.8	13.3 0.18	13.5 0.13	0.19		18.5	20.8		45.4 0.24	• • •
Cadmium (Cd) Calcium (Ca)	NG	22 NG	mg/kg	0.29 18.100	16.600	0.23	0.13 31,900	0.23 35.000	20.200	0.25 37.800	0.19	0.31 28,000	0.18	0.13 91.600	0.19	0.09 106.000	0.23 79.400	0.17 89,700	0.26 52,200	0.24 54.600	0.33 26,500
Chromium (Cr)	87	87	mg/kg ma/ka	43.2	48.6	26.4	62.7	45.9	32.1	27.3	61.6	46.2	14.4	16.4	29.6	108,000	29.5	26.4	40.3	40	34.2
Cobalt (Co)	300	NG	mg/kg	43.2	21.5	6.21	16.4	45.9	8.35	6.83	16.8	46.2	4.19	4.1	7.12	4.49	29.5	6.6	40.3	40	6.39
Copper (Cu)	91	91	mg/kg	34.3	34.5	14.3	37.3	30.3	17.5	17.7	37.5	33.6	10	9.18	19.2	10.5	21.1	31.1	140	80.7	22.8
Iron (Fe)	NG	NG	mg/kg	29.700	35.300	15.200	32.800	29.500	19,700	16.400	35.200	31.200	11,100	10.900	17.000	11.300	18,400	15.800	27,400	25.700	20.500
Lead (Pb)	600	600	mg/kg	16.1	17	9.27	12.6	13.6	9.28	11.1	13.5	13.9	7.30	6.42	7.97	4.38	19	25.4	418	120	80.2
Lithium (Li)	NG	NG	mg/kg	32.6	29.7	17.0	48.4	30.4	18.2	17.3	42.1	30.4	12.3	11.1	27	15.2	19.7	21.2	27.7	27.2	18.6
Magnesium (Mg)	NG	NG	mg/kg	16.200	14.200	21.000	21,600	21.000	12.100	19,400	19,900	16.500	34.500	42.000	31,700	63.300	37.600	51.800	29,500	27.100	11,900
Manganese (Mn)	NG	NG	mg/kg	793	641	377	456	392	286	405	491	465	259	271	313	244	325	310	454	408	157
Molybdenum (Mo)	40	NG	mg/kg	0.38	1.40	0.30	0.43	0.98	0.18	0.33	0.68	1.59	0.30	0.45	0.28	0.26	0.33	0.49	1.02	1.04	4.41
Nickel (Ni)	89	89	mg/kg	59.1	46.6	18.6	51	39.7	22.7	19.1	49.4	46	10.3	10.4	21.9	13.3	23.2	20	38.3	33.1	23
Phosphorus (P)	NG	NG	mg/kg	493	532	593	560	471	616	752	584	512	909	810	598	337	412	448	642	588	831
Potassium (K)	NG	NG	mg/kg	4,180	4,790	3,080	6,000	4,710	4,000	3,690	5,520	4,420	1,550	1,540	2,780	1,620	3,350	2,550	4,080	3,880	3,890
Selenium (Se)	2.9	2.9	mg/kg	<0.20	0.73	0.30	<0.20	0.40	0.31	0.50	<0.20	1.93	<0.20	<0.20	0.29	<0.20	0.20	<0.20	0.46	0.49	0.83
Silver (Ag)	40	NG	mg/kg	<0.10	0.12	<0.10	<0.10	0.11	0.11	<0.10	0.12	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.14	0.18	0.15
Sodium (Na)	NG	NG	mg/kg	1,930	2,470	710	1,350	1,560	570	660	1,010	1,570	520	492	930	451	349	458	790	1,060	1,600
Strontium (Sr)	NG	NG	mg/kg	62.4	64.3	172	97.5	78.2	68.6	97.8	97.7	79.2	44	48	187	48.6	71.7	112	116	226	328
Sulfur (S)	NG	NG	mg/kg	<1000	<1000	10,100	<1000	<1000	1,000	1,400	<1000	<1000	<1000	<1000	1,700	<1000	<1000	<1000	<1000	1,300	3,200
Thallium (TI)	1	3.6	mg/kg	0.31	0.33	0.17	0.42	0.29	0.21	0.17	0.37	0.30	0.10	0.09	0.19	0.11	0.20	0.15	0.26	0.26	0.27
Tin (Sn)	300 NG	NG	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5.3	59.2	8.1	2.2
Titanium (Ti)	NG	NG NG	mg/kg	10	41	183	733	71.3	351	295	458	155	290	290	327	537	253	380	237	340	379
Tungsten (W) Uranium (U)	300	2.000	mg/kg	<0.50 1.8	<0.50 2.14	<0.50 1.86	<0.50 1.63	<0.50	<0.50	<0.50	<0.50 1.64	<0.50	<0.50	<0.50 0.54	<0.50 1.89	<0.50 0.71	<0.50	<0.50	<0.50 1.36	<0.50	<0.50 2.92
Vanadium (V)	130	1	mg/kg	1.8	76.1	34.5	76.7	69.7	41.9	36.8	-	78	22.5		1.89	26	48.3	42.1	68.4		2.92
Zinc (Zn)	410	130 450	mg/kg mg/kg	91	99.2	34.5 55.3	89.8	69.7 85.1	69	36.8	95.5 88.7	90.2	65	22.6 52.6	50.9	26	48.3	42.1	1.140	65.6 121	43.4
Zirconium (Zr)	410 NG	450 NG	mg/kg	6.2	10.9	3.2	15.7	10	3.8	2.4	18.7	90.2	1.2	52.0	4.2	10	6.3	6.4	12.4	14.1	7.2
	NG	NO NO	iiig/kg	0.2	10.9	5.2	13.7	10	5.0	2.4	10.7	13	1.2	1	7.2	10	0.3	0.4	12.4	14.1	1.2

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use.
^b Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use, Soil Contact Pathway SQG - soil quality guideline.
^m ggs - metres below ground surface.
^m grkg - milligram per kilogram.
^{NG} - No Guideline.
^{SOLD} Reportable Detection Limit (RDL) exceeds the regulatory standard
<u>Veltow</u>
<sup>Exceeds Applied Soil Quality Guideline
Blue Exceeds Applied Landfill Acceptance Guideline
</sup>

			AEC	1 - Landfill	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	3 - Former Gas Station				
			Sample ID:	TP24-06-06	TP24-12-07	MW24-06-03	BH24-06-03	MW24-05-07	TH24-03-02	TH24-13-02	TH24-15-04	TH24-11-03	BH24-02-03
		Date Sample	d (dd/mmm/yyyy):	30-Jan-2024	31-Jan-2024	12-Feb-2024	12-Feb-2024	12-Feb-2024	30-Jan-2024	09-Feb-2024	07-Feb-2024	07-Feb-2024	13-Feb-2024
			Depth (m bgs)	4.0-5.0	5.0-6.0	1.0-1.5	1.0-1.5	4.0-5.0	1.1	0.8	2.6	2.0	1.0-1.5
	SQG Surface Soil ^a	Landfill Acceptance Criteria ^b	Units										
Conductivity (1:2 leachate)	4	NG	mS/cm	1.60	1.90	1.09	0.835	1.52	3.43	4.99	1.91	1.93	1.47
pH (1:2 soil:water	6-8	NG	pH units	8.56	8.23	8.09	8.21	8.10	8.24	7.92	7.87	7.97	7.94
Calcium, soluble ion content	NG	NG	mg/L	38.80	95.8	12.1	26.5	22.4	212.00	78.30	79.1	87.4	74.5
Magnesium, soluble ion content	NG	NG	mg/L	69.4	114	8.20	28.3	26.2	167	71.8	89.3	107	84.7
Sodium, soluble ion content	NG	NG	mg/L	182	158	189	84.7	254	356	880	191	174	135
Sodium adsorption ratio [SAR]	12	NG	-	4.05	2.58	10.3	2.73	8.64	4.44	17.30	3.50	2.95	2.54

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Accessed in December 2024) Industrial Land Use.

^b Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024) , Industrial Land Use, Environmental Soil Contact Pathway

SQG - soil quality guideline.

m bgs - metres below ground surface. mg/kg - milligram per kilogram. NG - No Guideline.

< - Denotes concentration less than indicated detection limit.

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

Yellow Exceeds Applied Soil Quality Guideline

Blue Exceeds Applied Landfill Acceptance Guideline

AEC	SQG Surface Soil	SQG Subsoil (>1.5 m bgs) ^a	Landfill Acceptance	Units	1 - Landfill	2 - Speedway	2 - Speedway	2 - Speedway	2 - Speedway	4 - Former IOL Station				
Sample ID:	(<1.5 m bgs) ^a	(**************************************	Criteria ^b		TP24-08-03	MW24-06-03	BH24-05-05	BH24-06-03	BH24-07-04	TH24-12-04	TH24-14-02	MW24-04-05	BH24-08-03	BH24-09-04
Date Sampled (dd/mmm/yyyy):					31-Jan-24	12-Feb-24	12-Feb-24	12-Feb-24	12-Feb-24	31-Jan-24	9-Feb-24	12-Feb-24	12-Feb-24	12-Feb-24
Depth (m bgs)					1.0-2.0	1.0-1.5	2.0-3.0	1.0-1.5	1.5-2.0	2.2-2.4	1.2-1.4	2.0-3.0	1.0-1.5	1.5-2.0
2,3,7,8-TCDD	NG	NG	NG	pg/g	0.04	0.09	0.11	2.76	1.02	0.28	0.34	0.10	0.28	0.13
1,2,3,7,8-PeCDD	NG	NG	NG	pg/g	0.167	0.171	0.194	10.7	3.71	1.32	1.45	0.49	1.16	0.27
1,2,3,4,7,8-HxCDD	NG	NG	NG	pg/g	0.11	0.10	0.11	7.80	2.78	1.99	0.66	0.30	1.13	0.16
1,2,3,6,7,8-HxCDD	NG	NG	NG	pg/g	0.25	0.633	0.667	32.3	8.73	13.2	7.33	0.972	2.65	0.651
1,2,3,7,8,9-HxCDD	NG	NG	NG	pg/g	0.21	0.37	0.41	20.40	6.25	5.15	3.89	0.54	1.94	0.45
1,2,3,4,6,7,8-HpCDD	NG	NG	NG	pg/g	5.09	11	5.14	723	139	633	73	20.3	29.8	10.4
OCDD	NG	NG	NG	pg/g	34.8	87.4	22.7	4320	593	6200	500	109	154	80.5
Total-TCDD	NG	NG	NG	pg/g	6.61	16.9	12.3	91.4	62	23.9	14.6	8.34	20.7	34.4
Total-PeCDD	NG	NG	NG	pg/g	9.75	29.6	15.6	142	83.4	30.9	23.4	3.06	34.8	50.7
Total-HxCDD	NG	NG	NG	pg/g	8.7	22.1	14.3	300	109	108	55	7.24	46.9	36.2
Total-HpCDD	NG	NG	NG	pg/g	10.2	19.6	9.29	1260	243	1180	132	36.5	61.3	19.7
2,3,7,8-TCDF	NG	NG	NG	pg/g	0.663	0.16	0.93	23.8	8.2	2.76	0.56	2.33	4.41	0.44
1,2,3,7,8-PeCDF	NG	NG	NG	pg/g	0.77	5.8	0.62	48	11	5.5	14	3.4	16	2.9
2,3,4,7,8-PeCDF	NG	NG	NG	pg/g	0.362	5.6	0.779	25	13.1	3.76	4	4.93	8.16	1.2
1,2,3,4,7,8-HxCDF	NG	NG	NG	pg/g	0.15	0.34	0.65	17.90	9.39	3.15	0.99	4.49	6.11	0.4
1,2,3,6,7,8-HxCDF	NG	NG	NG	pg/g	0.218	0.972	0.59	14.8	7.9	2.46	1.14	2.66	4.85	0.382
1,2,3,7,8,9-HxCDF	NG	NG	NG	pg/g	0.07	0.35	0.10	4.11	2.38	0.59	0.46	0.70	2.00	0.16
2,3,4,6,7,8-HxCDF	NG	NG	NG	pg/g	0.165	0.944	0.56	15.4	11.3	1.8	1.21	1.11	6.56	0.27
1,2,3,4,6,7,8-HpCDF	NG	NG	NG	pg/g	1.5	6.08	5.33	243	58.9	42.1	16.2	7.94	28	3.59
1,2,3,4,7,8,9-HpCDF	NG	NG	NG	pg/g	0.12	0.407	0.22	12.7	3.03	2.98	1.04	0.916	2.93	0.23
OCDF	NG	NG	NG	pg/g	5.12	23.1	2.9	954	49.4	162	50.7	11	27.8	14.7
Total-TCDF	NG	NG	NG	pg/g	1.42	12.4	19.7	468	196	85.1	22.7	50.2	76.9	9.12
Total-PeCDF	NG	NG	NG	pg/g	2.18	70	4.56	337	159	57.1	62.1	60.4	109	16.1
Total-HxCDF	NG	NG	NG	pg/g	3.05	34.1	4.9	401	111	54.5	35.8	30.5	66.9	8.66
Total-HpCDF	NG	NG	NG	pg/g	3.67	19.20	8.68	937	102	126	46.80	16	46.2	12.4
PCDD/F TEQ	175	175	NG	ng TEQ/kg	0.604	2.71	1.07	47.4	16.9	14.7	6.1	3.81	7.99	1.31

^a Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (2002), Industrial Land Use. PCDD/F TEQ: polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans total toxicity equivalent, CCME 2002 ^b Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use, Environmental Soil Contact Pathway

m bgs - metres below ground surface.

p/g - picogram per gram.

NG - No Guideline. < - Denotes concentration less than indicated detection limit.

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

 Yellow
 Exceeds Applied Soil Quality Guideline

 Blue
 Exceeds Applied Landfill Acceptance Guideline

AEC	EQG ^a	Landfill Acceptance	Units	1 - Landfill
Sample ID:		Criteria ^c		TH24-19-4.4
Date Sampled (dd/mmm/yyyy):				29-Jan-2024
Depth (m bgs)				4.4
Parameter				
pH, TCLP 1st preliminary	NG	NG	pH units	9.37
pH, TCLP 2nd preliminary	NG	NG	pH units	5.64
pH, TCLP extraction fluid initial	NG	NG	pH units	2.87
pH, TCLP final	NG	NG	pH units	5.14
Lead, TCLP	5	5 ^a	mg/L	<0.25
Total Lead	600 ^b	600	mg/kg	265

^a Government of Manitoba Hazardous Waste Regulation 195/2015. The Dangerous Goods Handling and Transportation Act (C.C.S.M.c.D12). November 25, 2015.

^b Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use.

^c Landfill Acceptance Criteria - Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines (Acessed in December 2024), Industrial Land Use, Environmental Soil Contact Pathway

m bgs - metres below ground surface.

mg/L - miligram per litre.

NG - No Guideline.

< - Denotes concentration less than indicated detection limit.

<u>Yellow</u> Exceeds Applied Guideline

Blue Exceeds Applied Landfill Acceptance Guideline

		AEC	3 - Former Gas Station	2 - Speedway			
	Sam	ple Location	MW24-01	MW24-02	MW24-03	DUP-01 (Duplicate of MW24-03)	MW24-04
Sar	nple Date (dd/	mmm/yyyy):	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024
		Sample ID	MW24-01	MW24-02	MW24-03	DUP-01	MW24-04
Parameter	GQG ^a	Units					
Benzene	19	mg/L	2.17	0.00051	0.00161	0.00079	<0.00050
Toluene	240	mg/L	0.1	<0.00050	0.00056	< 0.00050	<0.00050
Ethylbenzene	150	mg/L	1.99	0.00104	0.00109	0.00055	<0.00050
Xylenes, Total	74	mg/L	2.74	0.00146	0.00097	< 0.50	0.00059
PHC F1 (C6-C10) minus BTEX	9.9	mg/L	2.04	<0.10	<0.10	<0.10	<0.10
PHC F2 (>C10-C16)	3.1	mg/L	3.88	0.45	<0.10	<0.10	0.15
PHC F3 (>C16-C34 range)	0.500 ^b	mg/L	0.28	1.2	<0.25	<0.25	0.52
PHC F4 (>C34-C50 range)	0.500 b	mg/L	<0.25	0.45	<0.25	<0.25	<0.25

^a Federal Contaminated Sites Action Plan (FCSAP), Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use) mg/L: milligrams per litres

< :Denotes concentration less than indicated detection limit

n/g: no guideline

PHC: Petroleum Hydrocarbons

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

			AEC	3 - Former Gas Station	1 - Landfill	2 - Speedway	2 - Speedway	2 - Speedway			
		Sample	e Location	MW24-01	MW24-02	MW24-03	DUP-01 (Duplicate of MW24-03)	MW24-06	MW24-04	BH23-09	BH23-28
		ample Date (dd/mi	nm/yyyy):		6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024
			Sample ID	MW24-01	MW24-02	MW24-03	DUP-01	MW24-06	MW24-04	BH23-09	BH23-28
Parameter	GQG ^a	MOE ^b	Units								
Acenaphthene	NG	1.7	mg/L	0.000594	< 0.000060	< 0.000010	< 0.000010	< 0.000010	0.000427	< 0.000010	< 0.000010
Acenaphthylene	NG	0.0018	mg/L	< 0.000150	< 0.000030	< 0.000010	< 0.000010	< 0.000010	0.000064	< 0.000010	< 0.000010
Acridine	NG	NG	mg/L	< 0.000230	< 0.000200	< 0.000010	< 0.000010	< 0.000010	< 0.000470	< 0.000010	< 0.000010
Anthracene	0.32	0.0024	mg/L	< 0.000060	< 0.000040	< 0.000010	< 0.000010	< 0.000010	0.00118	< 0.000010	< 0.000010
Benzo(a)anthracene	NG	0.0047	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.0025	< 0.000010	< 0.000010
Benzo(a)pyrene	0.0066	0.00081	mg/L	< 0.0000050	< 0.000050	< 0.0000050	< 0.0000050	<0.0000050	0.0022300	< 0.0000050	< 0.0000050
Benzo(b&j)fluoranthene	NG	NG	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.002660	< 0.000010	< 0.000010
Benzo(g,h,i)perylene	NG	0.0002	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.00118	< 0.000010	< 0.000010
Benzo(k)fluoranthene	NG	0.0004	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.000878	< 0.000010	< 0.000010
Chrysene	NG	0.001	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.0017	< 0.000010	< 0.000010
Dibenz(a,h)anthracene	NG	0.00052	mg/L	<0.000050	< 0.000050	<0.000050	< 0.0000050	<0.0000050	0.00029	< 0.0000050	<0.000050
Fluoranthene	0.86	0.13	mg/L	< 0.000030	0.000013	< 0.000010	<0.000010	<0.000010	0.005280	< 0.000010	0.000014
Fluorene	NG	0.4	mg/L	0.000459	< 0.000140	< 0.000010	< 0.000010	< 0.000010	0.000648	< 0.000010	< 0.000010
Indeno(1,2,3-cd)pyrene	NG	0.0002	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.001470	< 0.000010	< 0.000010
1-Methylnaphthalene	150	1.8	mg/L	0.067600	0.000098	0.000019	0.000014	<0.000010	0.000144	< 0.000010	0.000014
2-Methylnaphthalene	150	1.8	mg/L	0.144000	0.000075	0.000035	0.000018	<0.000010	0.000157	< 0.000010	0.000019
Naphthalene	NG	6.4	mg/L	0.467	< 0.000075	< 0.000100	< 0.000050	<0.000050	0.000268	< 0.000050	< 0.000050
Phenanthrene	NG	0.580	mg/L	0.000331	0.000216	<0.000020	<0.000020	<0.000020	0.0038	<0.000020	<0.000020
Pyrene	NG	0.068	mg/L	0.000046	0.000067	< 0.000010	0.000012	<0.000010	0.004670	< 0.000010	0.000022
Quinoline	NG	NG	mg/L	< 0.0184	< 0.000150	< 0.000050	< 0.000050	< 0.000050	< 0.000050	< 0.000050	< 0.000050

* Federal Contaminated Sites Action Plan (FCSAP), Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

mg/L: milligrams per litres

< :Denotes concentration less than indicated detection limit

n/g: no guideline

NA: Not Analyzed

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard



		Moni	itoring Well ID	MW24-01	MW24-02	MW24-03	DUP-01 (Duplicate of MW24-03)	MW24-04
		Date Sampled (d	ld/mmm/vvvv):	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024
	GQG ^a	GQG ^b	Units	0 11101 2021	0 10101 2021	0 11101 2021	0 11101 2021	0 11141 2021
Acetone	110.000	130	mg/L	0.034	< 0.0020	<0.0020	<0.0020	< 0.0020
Benzene	19	0.43	mg/L	2.17	0.00051	0.00161	0.00079	< 0.00050
Bromodichloromethane	NG	85	mg/L	0.00112	<0.00050	< 0.00050	< 0.00050	<0.00050
Bromoform	13	0.77	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bromomethane	0.23	0.056	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Carbon disulfide	NG	NG	mg/L	0.0013	<0.0010	<0.0010	<0.0010	<0.0010
Carbon Tetrachloride	0.078	0.0084	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Chlorobenzene	2.2	0.630	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Dibromochloromethane	250	82	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Chloroethane	NG	NG	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	< 0.00050
Chloroform	NG	0.022	mg/L	0.0111	<0.00050	<0.00050	<0.00050	<0.00050
Chloromethane	NG	NG	mg/L	0.0052	<0.0020	<0.0020	<0.0020	<0.0020
1,2-Dibromoethane	NG	NG	mg/L	0.00042	<0.00020	<0.00020	<0.00020	<0.00020
1,2-Dichlorobenzene	NG	9.6	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,3-Dichlorobenzene	NG	9.6	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,4-Dichlorobenzene	32	0.067	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dichlorodifluoromethane	NG	4.4	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,1-Dichloroethane	44	3.1	mg/L	0.001	<0.00050	<0.00050	< 0.00050	<0.00050
1,2-Dichloroethane	1.2	0.012	mg/L	0.0119	<0.00050	<0.00050	<0.00050	<0.00050
1,1-Dichloroethylene	NG	0.017	mg/L	< 0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dichloroethylene, cis+trans-1,2-	NG	NG	mg/L	< 0.00071	< 0.00071	< 0.00071	< 0.00071	< 0.00071
Dichloroethylene, cis-1,2-	NG	0.017	mg/L	<0.00050	<0.00050	< 0.00050	< 0.00050	<0.00050
Dichloroethylene, trans-1,2-	NG	0.017	mg/L	<0.00050	<0.00050	< 0.00050	< 0.00050	<0.00050
Dichloromethane	410	NG	mg/L	0.213	< 0.0010	< 0.0010	< 0.0010	< 0.0010
1,2-Dichloropropane	2	0.140	mg/L	0.00405	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Dichloropropylene, cis+trans-1,3-	NG	NG	mg/L	0.0009	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Dichloropropylene, cis-1,3-	NG	NG	mg/L	0.0009	< 0.00030	< 0.00030	< 0.00030	< 0.00030
Dichloropropylene, trans-1,3-	NG	NG	mg/L	< 0.00030	< 0.00030	< 0.00030	< 0.00030	< 0.00030
Ethylbenzene	150	2.300	mg/L	1.990	0.00104	0.00109	0.00055	< 0.00050
Hexane	NG	0.520	mg/L	0.483	< 0.00050	< 0.00050	< 0.00050	< 0.00050
2-Hexanone (Methyl butyl ketone)	2,500	580	mg/L	<0.020	< 0.020	< 0.020	< 0.020	<0.020
MEK	NG	NG	mg/L	0.026	<0.020	<0.020	<0.020	<0.020
MIBK	NG	NG	mg/L	< 0.020	<0.020	<0.020	<0.020	<0.020
MTBE	40	1.4	mg/L	< 0.00050	< 0.00050	<0.00050	<0.00050	<0.00050
Styrene	NG	9.1	mg/L	0.0032	< 0.00050	<0.00050	<0.00050	<0.00050
1,1,1,2-Tetrachloroethane	0.38	0.028	mg/L	< 0.00050	<0.00050	< 0.00050	< 0.00050	<0.00050
1,1,2,2-Tetrachloroethane	0.38	0.028	mg/L	< 0.00050	<0.00050	< 0.00050	<0.00050	<0.00050
Tetrachloroethvlene	NG			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene		0.017	mg/L	<0.00050 0.1	<0.00050	0.00050	<0.00050	<0.00050
	240	18	mg/L					
1,1,1-Trichloroethane 1,1,2-Trichloroethane	95	6.7	mg/L	<0.00050	< 0.00050	<0.00050	<0.00050 <0.00050	<0.00050
	0.41	0.030	mg/L	<0.00050	<0.00050	<0.00050		<0.00050
Trichloroethylene	0.27	0.017	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	<0.00050
Trichlorofluoromethane	NG	2.5	mg/L	<0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Vinyl Chloride	0.12	0.0017	mg/L	<0.00050	<0.00050	<0.00050	< 0.00050	<0.00050
Xylene, m+p-	NG	NG	mg/L	2.72	0.00146	0.00097	0.00043	0.00059
Xylene, o-	NG	NG	mg/L	0.0164	<0.00030	<0.00030	<0.00030	<0.00030
Xylenes, total	74	4.2	mg/L	2.74	1.46	0.97	<0.50	0.59
BTEX, total	NG	NG	mg/L	7.00	0.003	0.0042	0.0018	<0.001

^a Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

All results and water quality guidelines in mg/L, unless otherwise noted.

GQG - groundwater quality guideline.

mg/L - milligram per Litre. NG - No Guideline.

< - Denotes concentration less than indicated detection limit.

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

			AEC	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	3 - Former Gas Station	1 - Landfill	2 - Speedway	2 - Speedway	2 - Speedway
		Mon	itoring Well ID	MW24-01	MW24-02	MW24-03	DUP-01 (Duplicate of MW24-03)	MW24-06	BH23-09	BH23-28	MW24-04
		Date Sampled (d	d/mmm/yyyy):	6-Mar-2024	6-Mar-2024	6-Mar-2024	7-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024	6-Mar-2024
	GQG ^a	GQG [♭]	Units								
Ammonia, total (as N)	NG	NG	mg/L	1.51	N/A	0.0333	0.0387	0.0155	0.136	0.196	1.3
Bromide	NG	NG	mg/L	<5.00	N/A	<2.00	<5.00	<10.0	<5.00	<10.0	<2.00
Chloride	NG	2300	mg/L	1040	N/A	678	670	3470	3500	3600	224
Fluoride	NG	NG	mg/L	<1.00	N/A	<0.400	<1.00	<2.00	<1.00	<2.00	<0.400
Kjeldahl nitrogen, total [TKN]	NG	NG	mg/L	4.53	N/A	0.528	0.6	1.25	1.1	1.14	3.81
Nitrate (as N)	NG	NG	mg/L	<1.00	N/A	<0.400	<1.00	2.86	<1.00	<2.00	<0.400
Nitrite (as N)	NG	NG	mg/L	<0.500	N/A	<0.200	<0.500	<1.00	<0.500	<1.00	<0.200
Phosphorus, total	NG	NG	mg/L	0.778	N/A	0.061	0.234	0.142	0.057	0.043	0.745
Sulfate (as SO4)	NG	NG	mg/L	2580	N/A	2150	2140	4440	3890	4460	172

^a Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of the Environment (MOE) Soil Quality Guidelines (2011) - Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition (All Types of Property Use)

All results and water quality guidelines in mg/L, unless otherwise noted.

GQG - groundwater quality guideline.

mg/L - milligram per Litre.

NG - No Guideline.

< - Denotes concentration less than indicated detection limit.

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

				3 - Former Gas	3 - Former	3 - Former	3 - Former	1 - Landfill	2 - Speedway	2 - Speedway	2- Speedway
			AEC	Station	Gas Station	Gas Station	Gas Station				
		Monitorin	g Well ID	MW24-01	MW24-02	MW24-03	DUP-01 (Duplicate of MW24-03)	MW24-06	BH23-09	BH23-28	MW24-04
	Dat	e Sampled (dd/mm	m/yyyy):	06-Mar-2024	06-Mar-2024	06-Mar-2024	7-Mar-2024	06-Mar-2024	06-Mar-2024	06-Mar-2024	06-Mar-2024
	GQG ^a	MOE ^b	Units								
Aluminum (AI)-Dissolved	NG	NG	mg/L	0.0151	N/A	0.0047	0.0198	<0.0100	< 0.0100	0.0105	0.0068
Antimony (Sb)-Dissolved	NG	20	mg/L	0.00164	N/A	0.00023	<0.00100	<0.00100	0.00101	<0.00100	0.00963
Arsenic (As)-Dissolved	NG	1.9	mg/L	0.0462	N/A	0.00142	< 0.00100	0.00133	0.00224	0.00145	0.00352
Barium (Ba)-Dissolved	NG	29	mg/L	0.108	N/A	0.0228	0.021	0.0357	0.0238	0.0298	0.353
Beryllium (Be)-Dissolved	NG	0.067	mg/L	<0.000200	N/A	<0.000020	< 0.000200	< 0.000200	<0.000200	< 0.000200	<0.000020
Bismuth (Bi)-Dissolved	NG	NG	mg/L	<0.000500	N/A	< 0.000050	< 0.000500	<0.000500	< 0.000500	< 0.000500	< 0.000050
Boron (B)-Dissolved	NG	45	mg/L	0.145	N/A	0.392	0.413	0.414	0.264	0.244	1.56
Cadmium (Cd)-Dissolved	NG	0.0027	mg/L	< 0.0000500	N/A	0.0000371	<0.0000500	0.000134	0.000148	0.0000773	0.0000122
Calcium (Ca)-Dissolved	NG	NG	mg/L	423	N/A	547	508	569	550	488	243
Cesium (Cs)-Dissolved	NG	NG	mg/L	< 0.000100	N/A	< 0.000010	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000010
Chromium (Cr)-Dissolved	NG	0.810	mg/L	< 0.00500	N/A	< 0.00050	< 0.00500	< 0.00500	< 0.00500	< 0.00500	0.00232
Cobalt (Co)-Dissolved	NG	0.066	mg/L	< 0.00100	N/A	0.0105	0.0101	< 0.00100	0.00309	0.00264	0.00317
Copper (Cu)-Dissolved	NG	0.087	mg/L	< 0.00200	N/A	0.00237	0.00256	0.00728	0.003	0.00392	0.00484
Iron (Fe)-Dissolved	NG	NG	mg/L	0.22	N/A	0.184	< 0.100	<0.100	<0.100	< 0.100	0.189
Lead (Pb)-Dissolved	NG	0.025	mg/L	0.00412	N/A	< 0.000050	< 0.000500	< 0.000500	0.000885	< 0.000500	0.0022
Lithium (Li)-Dissolved	NG	NG	mg/L	0.199	N/A	0.342	0.288	0.611	0.539	0.64	0.21
Magnesium (Mg)-Dissolved	NG	NG	mg/L	766	N/A	518	426	1020	1120	1440	322
Manganese (Mn)-Dissolved	NG	NG	mg/L	0.924	N/A	2.75	3.23	0.158	1.17	1.15	0.783
Molybdenum (Mo)-Dissolved	NG	9.2	mg/L	0.00132	N/A	0.00964	0.012	0.0032	0.00842	0.0152	0.00497
Nickel (Ni)-Dissolved	NG	0.490	mg/L	< 0.00500	N/A	0.0248	0.0269	0.0188	0.0198	0.0218	0.0106
Phosphorus (P)-Dissolved	NG	NG	mg/L	0.634	N/A	0.076	< 0.500	< 0.500	< 0.500	< 0.500	0.118
Potassium (K)-Dissolved	NG	NG	mg/L	5.14	N/A	4.15	2.61	10.7	9.42	4.75	15.8
Rubidium (Rb)-Dissolved	NG	NG	mg/L	< 0.00200	N/A	0.00117	< 0.00200	0.00469	< 0.00200	0.00268	0.00242
Selenium (Se)-Dissolved	NG	0.063	mg/L	0.00058	N/A	0.000255	< 0.000500	0.00094	0.00063	< 0.000500	0.000342
Silicon (Si)-Dissolved	NG	NG	mg/L	17.3	N/A	9.33	7.04	11.2	9.29	6.28	11.5
Silver (Ag)-Dissolved	NG	0.0015	mg/L	< 0.000100	N/A	0.000011	< 0.000100	< 0.000100	< 0.000100	< 0.000100	0.000024
Sodium (Na)-Dissolved	NG	2300	mg/L	750	N/A	411	394	2270	1520	1290	328
Strontium (Sr)-Dissolved	NG	NG	mg/L	1.9	N/A	4.93	4.87	4.91	3.29	3.35	2.78
Sulfur (S)-Dissolved	NG	NG	mg/L	978	N/A	761	734	1660	1390	1400	80.5
Tellurium (Te)-Dissolved	NG	NG	mg/L	<0.00200	N/A	0.00021	< 0.00200	<0.00200	<0.00200	<0.00200	<0.00020
Thallium (TI)-Dissolved	NG	0.510	mg/L	<0.000100	N/A	< 0.000010	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000010
Thorium (Th)-Dissolved	NG	NG	mg/L	< 0.00100	N/A	< 0.00010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00010
Tin (Sn)-Dissolved	NG	NG	mg/L	0.00185	N/A	0.00069	< 0.00100	0.0024	0.00124	0.00109	0.002
Titanium (Ti)-Dissolved	NG	NG	mg/L	< 0.00300	N/A	< 0.00030	< 0.00300	< 0.00300	< 0.00300	< 0.00300	0.00124
Tungsten (W)-Dissolved	NG	NG	mg/L	< 0.00100	N/A	< 0.00010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	0.00019
Uranium (U)-Dissolved	NG	0.420	mg/L	0.00435	N/A	0.036	0.034	0.161	0.134	0.0976	0.00732
Vanadium (V)-Dissolved	NG	0.250	mg/L	0.00544	N/A	0.00064	< 0.00500	<0.00500	< 0.00500	< 0.00500	0.00236
Zinc (Zn)-Dissolved	NG	1.1	mg/L	< 0.0100	N/A	0.0033	<0.0100	0.0289	0.0148	0.0133	0.0123
Zirconium (Zr)-Dissolved	NG	NG	mg/L	0.00615	N/A	0.00206	< 0.00300	<0.00300	< 0.00300	0.00905	0.00902

^a Federal Contaminated Sites Action Plan (FCSAP), Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of Environment (MOE), Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition, July 1, 2011.

All results and water quality guidelines in mg/L, unless otherwise noted.

mg/L - milligram per Litre.

NG - No Guideline.

< - Denotes concentration less than indicated detection limit.

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

			AEC	1 - Landfill
		Monitorin	ig Well ID	MW24-06
	Dat	e Sampled (dd/mn	nm/yyyy):	06-Mar-2024
	GQG ^a	MOE ^b	Units	
2,3,7,8-TCDD	NG	NG	pg/L	<0.58
1,2,3,7,8-PeCDD	NG	NG	pg/L	<0.79
1,2,3,4,7,8-HxCDD	NG	NG	pg/L	<0.73
1,2,3,6,7,8-HxCDD	NG	NG	pg/L	<0.74
1,2,3,7,8,9-HxCDD	NG	NG	pg/L	<0.69
1,2,3,4,6,7,8-HpCDD	NG	NG	pg/L	0.74
OCDD	NG	NG	pg/L	4.5
Total-TCDD	NG	NG	pg/L	<0.58
Total-PeCDD	NG	NG	pg/L	<0.79
Total-HxCDD	NG	NG	pg/L	<0.74
Total-HpCDD	NG	NG	pg/L	<0.68
2,3,7,8-TCDF	NG	NG	pg/L	<0.53
1,2,3,7,8-PeCDF	NG	NG	pg/L	<0.36
2,3,4,7,8-PeCDF	NG	NG	pg/L	<0.37
1,2,3,4,7,8-HxCDF	NG	NG	pg/L	<0.35
1,2,3,6,7,8-HxCDF	NG	NG	pg/L	<0.37
1,2,3,7,8,9-HxCDF	NG	NG	pg/L	<0.51
2,3,4,6,7,8-HxCDF	NG	NG	pg/L	<0.37
1,2,3,4,6,7,8-HpCDF	NG	NG	pg/L	0.47
1,2,3,4,7,8,9-HpCDF	NG	NG	pg/L	<0.56
OCDF	NG	NG	pg/L	2.0
Total-TCDF	NG	NG	pg/L	<0.53
Total-PeCDF	NG	NG	pg/L	<0.37
Total-HxCDF	NG	NG	pg/L	<0.51
Total-HpCDF	NG	NG	pg/L	<0.56
Toxic Equivalency (Water)				
Lower Bound PCDD/F TEQ (WHO 2005)	NG	NG	pg/L	0.0047
Mid Point PCDD/F TEQ (WHO 2005)	NG	23,000	pg/L	0.977
Upper Bound PCDD/F TEQ (WHO 2005)	NG	NG	pg/L	1.94

^a Federal Contaminated Sites Action Plan (FCSAP), Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (2016) - Generic Guidelines for Commercial and Industrial Land Uses, Fine Grained Soil.

^b Ontario Ministry of Environment (MOE), Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition, July 1, 2011.

All results and water quality guidelines in pg/L, unless otherwise noted.

mg/L - milligram per Litre.

NG - No Guideline.

< - Denotes concentration less than indicated detection limit.

BOLD Reportable Detection Limit (RDL) exceeds the regulatory standard

Appendix A Borehole Logs

			ENT: City of Winnipeg					_		OLE NO: TH24-01	
		: UTM: 14U, 5532433.279 m N, 0628334.527 m E						_		CT NO.: 60721079	
			THOD: Solid Stem Auger/Co							TION (m): 234.84	
SAMP		PE GRAB SHELBY TUBE	SPLIT SPOON	JLK			\angle	NO R	ECOVE		
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTIO	N	SAMPLE TYPE	SAMPLE #		(p	Reading om)		COMMENTS	
0	\otimes	ASPHALT - 100 mm thick				10) <u>1</u>	00 1	1000 ::::::::::::::::::::::::::::::::::		
-1		FILL: biege poorly graded gravel with sand - moist, loose to compact FILL: black fat CLAY (CH)			01 02		8				2
-2		- moist, firm to stiff firm to stiff brown fat CLAY (CH)			03 04		8	\mathbf{b}		Sample TH24-01-03 submitted for analysis of	2
-3		- moist below 1.98 m - silt inclusions								BTEX, PHC F1 - F4, and PAHs.	2
- 1		- Sit inclusions			05 Ø						2
-3 -4 -5 -6 -7					06 🛇	9					2
6											2
-7		- grey - soft to firm									2
-8	0.0	very loose to loose grey silt (ML) TILL									2
9	000	-moist below 3.05 m - dense to very dense									2
·10											2
·11	0.0	- cobbles and boulders									2
12											2
·13											2
14		- boulders									2
-15		CLAY MUDSTONE (Stony Mountain Formation, Gunn Member) - dark greyish red to purplish grey									2
-16		 calcareous shale to argillaceous dolomite interbeds of relatively clean limestone 									2
17		DOLOMITE (Stony Mountain Formation, Gunton Member)									2
18		- buff - finely crystalline									
19		- sparsely fossiliferous - nodular-bedded									2
20		END OF TEST HOLE - auger refusal at a depth of 10.67 m in silt (ML) TILL									
21		- sloughing observed at a depth of 10,36 m in silt (ML) TILL - heavy seepage observed at a depth of 8.53 m in silt (ML) TILL - water level unavailable due to uuse of coring method									
22		mais tore interaliable due to dube of colling filetiou									2
23 24											
25			LOGGED BY: (:::::] /		: .ETION DEPTH: 19.81 m	
		AECOM	REVIEWED BY							ETION DATE: 24-1-30	
			PROJECT ENG			Russ (-	ioliaht			Page	1

		oeg North Transit Garag		of Winnipeg						OLE NO: TH24-02	
		: 14U, 5532473.116 m N								CT NO.: 60721079	
		Paddock Drilling		lid Stem Auger						TION (m): 235.07	
SAMP		GRAB			< 	-	\angle	JNO R	ECOVE		1
DEPTH (m)	SOIL SYMBOL	SC	DIL DESCRIPTION	SAMPI E TVDE				pm)	g⊗ 1000	COMMENTS	
0		DIL: black, moist, with organic	content	/							
·1	FILL: b - moist, - black	rown gravelly fat CLAY (CH) soft to firm, high plastic		-	01		8			Sample TH24-02-01 submitted for analysis of BTEX, PHC F1 - F4, and PAHs. Sample TH24-02-02 submitted for analysis of	2
2	soft to f - moist	irm brown fat CLAY (CH) below 1.83 m			03 04					BTEX, PHC F1 - F4, and PAHs.	2
3					05)))))))))))))))))))				
5	- silt ind - grey	clusions			06	&					
6						· · · · · · · · · · · · · · · · · · ·					;
7											:
8	Part very lo	ose to loose grey silt (ML) TIL					· · · · · · · · · · · · · · · · · · ·				
9 10	0,90,1 0,90,1 0,90,0	below 8.53 m					· · · · · · · · · · · · · · · · · · ·				:
10 11	- auger - heavy - no slo	refusal at a depth of 9.45 m in seepage observed at a depth ughing observed dwater was observed at a dep	of 8.53 m in silt (ML) TILL				· · · · · · · · · · · · · · · · · · ·				
11											
12 13											
14 15											
16				LOGGED BY: CV	 V	·····	· · · · · ·	······· / [ETION DEPTH: 9.60 m	
		AECON	l l	REVIEWED BY: 0						ETION DATE: 24-2-7	

			City of Winnipeg					_		OLE NO: TH24-03	
		I: UTM: 14U, 5532502.090 m N, 0628225.720 m E). Calid Stom Auror/Ca					_		CT NO.: 60721079	
	LE T		D: Solid Stem Auger/Co PLIT SPOON						ECOVE		
SAIVIP							Z	JNO R	ECOVE		1
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION		SAMPLE TYPE	SAMPLE #			om)	9⊗	COMMENTS	
0	***	\TOPSOIL: black, moist, with organic content		-		1	0 1	00	1000 :::::::::		
1		FILL: brown gravelly fat CLAY (CH) with sand - moist, soft to firm, high plastic	/		01						2
1		- wood debris			02					Sample TH24-03-02 submitted for analysis of	2
2	μ	∖- black ∖loose to compact brown SILT (ML)	/		03					metals, EC, SAR, and pH.	
3		- moist below 1.83 m			04						2
J		firm to stiff brown sandy fat CLAY (CH) - moist below 2.13 m			05			[2
4					06						
5		- grey		$\left \right $							
J											
6										-	
7											
I											
8											
9	00	loose to compact grey silt (ML) TILL		$\left \right $							
9	00	- moist below 8.69 m									
10	00										
11	000	- compact to dense									2
	000	- cobbles and boulders									2
12											
12 13		CLAY MUDSTONE (Stony Mountain Formation, Gunn Member) - dark greyish red to purplish grey									2
10	۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲	- calcareous shale to argillaceous dolomite									
14		- interbeds of relatively clean limestone									
15											2
10											
16											
17										-	2
		DOLOMITE (Stopy Mountain Formation, Custor Mountain)									
14 15 16 17 18 19 20		DOLOMITE (Stony Mountain Formation, Gunton Member) - buff								· · ·	
19		- finely crystalline - sparsely fossiliferous									
10		- nodular-bedded									
20	<u>kt</u>	END OF TESTHOLE		$\left \right $							
21 22		 auger refusal at a depth of 11.43 m in silt (ML) TILL heavy seepage observed at a depth of 9.14 m in silt (ML) TILL 									
<u> </u>		 sloughing observed at a depth of 10.97 m in silt (ML) TILL 									
22		- water level unavailable due to use of coring method									
23											
22 23 24											
24											
25									: : : : : : : :	· · ·	
			LOGGED BY:							LETION DEPTH: 19.96 m	1
		AECOM	REVIEWED BY PROJECT ENG				<u></u>		JOMPL	LETION DATE: 24-1-31 Page	

		Winnipeg North Transit Garage CLIENT: City of	f Winnipeg				_		OLE NO: TH24-04	
		I: UTM: 14U, 5532383.943 m N, 0628344.708 m E							CT NO.: 60721079	
		TOR: Paddock Drilling METHOD: Solid							TION (m): 235.39	
SAMF	PLE TY	(PE GRAB SPLIT SP		-		Z	INO R	ECOVE		
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #			om)	g⊗ 1000	COMMENTS	
0		ASPHALT - 100 mm thick FILL: tan dayey gravel (GC) with sand FILL	/							2
		FILL: tan gravelly fat day (CH) FILL		01		×			Sample TH24-04-01 submitted for analysis of	
1		- moist, loose to compact		02			∮		BTEX, PHC F1 - F4, and PAHs.	2
		loose to compact brown SILT (ML)		03	; ;					
2		- moist below 1.52 m stiff to very stiff brown sandy fat CLAY (CH)	/			Į/				
		- high plastic - moist below 1.83 m		04		P				2
3					; ;					
				05	ø					2
4										
				06 (2
5		- grey - very soft to soft								
5										
										'
6										
7										
										2
8										
										2
9	0.0	very loose to loose grey silt (ML) TILL								
	0.0	- moist below 8.84 m								2
10	00									
11										
11		END OF TESTHOLE - testhole was terminated at a depth of 10.06 m in silt (ML) TILL								
11		- heavy seepage observed at 10.06 m silt (ML) TILL			; ;					
46		- groundwater was observed at a depth of 9.14 m								.
12								· · · · · · · · · · · · · · · · · · ·		
						;				
13								· · · · · · · · · · · · · · · · · · ·		
					;- ;-	;				
14										
14 15					; ;	; ;				
16					·····;·		····;			
		AECOM	LOGGED BY: CW REVIEWED BY: G						ETION DEPTH: 10.52 m ETION DATE: 24-2-5	<u> </u>
			PROJECT ENGINE		Russ	Goliah			Page	1

		Winnipeg North Transit Garage CLIENT: City of	Winnipeg								OLE NO: TH24-05	
		: UTM: 14U, 5532417.307 m N, 0628302.753 m E TOR: Paddock Drilling METHOD: Solid	Stom Augor					-			CT NO.: 60721079 TION (m): 234.95	
	PLE TY			K						COVE		
							<u> </u>	1.10				
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	1	SAMPLE TYPE	SAMPLE #			r Read opm) 100	ling Q		COMMENTS	
0	\otimes	ASPHALT - 100 mm thick	/									
·1		FILL: tan clayey gravel (GC) with sand FILL - moist, loose to compact FILL: tan gravelly fat clay (CH) FILL - moist, loose to compact			01 02	Ģ	\otimes	· · · · · · · · · · · · · · · · · · ·			Sample TH24-05-01 submitted for analysis of BTEX, PHC F1 - F4, and	2
		stiff to very stiff brown fat CLAY (CH) - high plastic			03	÷÷	[····	· · · · · · · · ·	PAHs. Sample TH24-05-02	
2		- moist below 1.22 m					· · · · · · · ·		··· · · · · ·		submitted for analysis of BTEX, PHC F1 - F4, and	2
					04 🛇				· · · · ·		PAHs.	
3		- grey - firm to stiff				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · ·		2
					05 🛇)			····			
4					06 Ø) 	· · · · · · · ·	· · · · · ·	÷ : : : : :			
						····;			· · · · · ·			
5						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · ·		
						· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·			
-6		- very soft to soft				· · · · · · · · · · · · · · · · · · ·						
7						····;· ····;·	· · · · · · · · · · · · · · · · · · ·		수 수 수 	• • • • • • • •		
,						· · · · · · · · · · · · · · · · · · ·						
8						· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·			2
						····;·			· · · · · · · · · · · · · · · · · · ·			
9						····;·	· · · · · · · ·		····			2
9 10		very loose to loose grey silt (ML) TILL - moist below 9.14 m				····;						
10	000					· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · ·		2
	040	END OF TESTHOLE				····;						
11		 testhole was terminated at a depth of 10.06 m in silt (ML) TILL heavy seepage observed at 9.14 m silt (ML) TILL 				•••••			··· · · · · · · · · · · · · · · · · ·			2
		 - sloughing was observed at a depth of 9.14 m in silt (ML) TILL - no groundwater observed 				· · · · · · · · · · · · · · · · · · ·			· · · ·			
12						····;	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	··· · ··· · ··· ·	· · · · · · · · · · · · · · · · · · ·		2
12						· · · · · · · · · · · · · · · · · · ·			····			.
13						· · · · · · · · · · · · · · · · · · ·			··· · · · · ·	· · · · · · · · · ·		
						····;·						
14						· · · · · · · · · · · · · · · · · · ·			4	· · · · · · · · · · ·		
14 15									· · · · · · · · · · · · · · · · · · ·			
IJ								· · · · · ·				'
16						····;·			· · · · · · · · · ·	•••••		
		AECOM	LOGGED BY: C ¹ REVIEWED BY:								ETION DEPTH: 10.52 m ETION DATE: 24-2-5	1
			PROJECT ENGI				كملامة	th,			ETION DATE: 24-2-5 Page	1
		Winnipeg North Transit Garage CLIENT: City of	Winnipeg					_		OLE NO: TH24-06		
------------	-------------	---	------------------------------	-------------	----------	---------------------------------------	---------------------------------------	-------------	---------------------------------------	---	----------	
		: UTM: 14U, 5532462.977 m N, 0628231.994 m E						_		CT NO.: 60721079		
		TOR: Paddock Drilling METHOD: Solid	Stem Auger/Ho	llow	Ster	n Auç	ger			TION (m): 235.64		
SAMF		PE GRAB SHELBY TUBE SPLIT SPC		LK			\angle	NO R	ECOVE		<u> </u>	
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION		SAMPLE TYPE	SAMPLE #			om)	3⊗	COMMENTS		
0		TOPSOIL: black, moist, with organic content	/			·····; ·				•		
		FILL: tan dayey gravel (GC) with sand FILL - moist, loose to compact			01		· · · · · · · · · ·				2	
1		FILL: tan gravelly fat day (CH) FILL - moist, firm to stiff			02	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · ·			Sample TH24-06-02 submitted for analysis of		
		- high plastic			03		· · · · · · · · · · ·			metals.		
-2						•••••						
		very loose to loose brown SILT (ML) - moist below 1.83 m			04					•		
n						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · ·					
-3					05	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · ·	 		•		
					05	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · ·			•		
-4					06	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · ·					
		firm to stiff grey fat CLAY (CH)				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · ·	· · · · · ·				
5		- high plastic										
		- moist below 4.57 m										
-6						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · ·					
0						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · ·					
•7						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
						· · · · · · · · · · · · · · · · · · ·						
-8						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · ·	· · · · · ·				
						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · ·					
9	00	very loose to loose grey silt (ML) TILL				· · · · · · · · · ·				· ·		
		- moist below 8.84 m				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · ·					
10		END OF TESTHOLE - auger refusal at a depth of 9.14 m in silt (ML) TILL										
10		 heavy seepage was observed at a depth of 8.84 m in silt (ML) TILL 				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
		- sloughing observed at 2.13 m in SILT (ML) - no groundwater observed				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · ·			•		
·11						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · ·					
12						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · ·					
12								 			'	
14						· · · · · · · · · · · · · · · · · · ·						
·14 ·15						· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·			
						· · · · · · · · · · · · · · · · · · ·						
15						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · ·	 	· · · · · · · · ·			
						· · · · · · · · · · · · · · · · · · ·						
16								 			<u> </u>	
		AECOM	LOGGED BY: C REVIEWED BY:							ETION DEPTH: 9.60 m ETION DATE: 24-2-2		
			PROJECT ENG			Russ (Soliaht			Page	1	

			ty of Winnipeg TESTHOLE NO:	
		I: UTM: 14U, 5532375.238 m N, 0628273.388 m E	PROJECT NO.: (
			Solid Stem Auger/Hollow Stem Auger ELEVATION (m):	
SAMP		(PE GRAB SHELBY TUBE SPL	T SPOON BULK ON RECOVERY	
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	WWS S ⊗ Vapour Reading ⊗ (ppm)	IMENTS
0		TOPSOIL: black, moist, with organic content		2
		FILL: black gravelly fat clay (CH) with sand FILL - moist, firm to stiff		
1		- high plastic	02 02	2
		- grey		4
<u>^</u>		- black		
2		JIGON	04 🕅	2
	ĬĬĬĬ	very loose to loose brown SILT (ML)		for analysis of
3		- moist below 2.44 m	metals.	
				· · · · · · · · · · · · · · · · · · ·
4				
+				
		firm to stiff grey fat CLAY (CH)		
5		- high plastic - moist below 4.57 m		
6				
0				2
7				
8		- soft to firm		
				2
9	0 g	loose to compact grey silt (ML) TILL		
	0.0	- moist below 8.84 m		
10	0.0			2
	0,0			
11	0,00	- tan - dense to very dense		
	0,0			
11 12 13 14	0,0			
12	0,0			
	01.49.4	END OF TESTHOLE		
13		 auger refusal at a depth of 12.19 m in silt (ML) TILL heavy seepage was observed at a depth of 9.14 m in silt (ML) TILL 		
		- sloughing observed at 2.44 m in SILT (ML) and at 10.67 m in silt (ML) TILL		
1/		- final groundwater depth at 4.11 m		
14				
14 15				
16				
			LOGGED BY: CW COMPLETION DEI	
		AECOM	REVIEWED BY: GL COMPLETION DA PROJECT ENGINEER: Russ Golightly	TE: 24-2-5 Page 1

		Winnipeg North Transit Garage	CLIENT: City of Winnipe	eg							OLE NO: TH24-08				
		: UTM: 14U, 5532449.508 m N, 0628193.277 m E								PROJECT NO.: 60721079 ELEVATION (m): 236.84					
		TOR: Paddock Drilling	METHOD: Solid Stem A												
SAMP	LE TY	PE GRAB SHELBY TUBE	SPLIT SPOON	BU	LK			\angle	JNO R	ECOVE		1			
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIP	TION		SAMPLE TYPE	SAMPLE #			pm)	-	COMMENTS				
0	***	∖TOPSOIL: black, moist, with organic content					····;·		00	<u>1000</u>					
1		FILL: black gravelly fat clay (CH) with sand FILL - moist, firm to stiff - high plastic - brown				01						2			
2		- black				02 03					Sample TH24-08-02 submitted for analysis of metals.	2			
3		very loose to loose brown SILT (ML)				04						2			
4		- moist below 3.05 m - very wet firm to stiff grey fat CLAY (CH)				05 06	· · · · · · · · · · · · · · · · · · ·								
5		- high plastic - moist below 4.11 m					· · · · · · · · · · · · · · · · · · ·					2			
6		- soft to firm													
7							· · · · · · · · · · · · · · · · · · ·					2			
8															
9							· · · · · · · · · · · · · · · · · · ·								
10	000	compact to dense grey silt (ML) TILL - moist below 9.75 m										2			
11	0000 0000 0000						· · · · · · · · · · · · · · · · · · ·								
12 13	00000 00000														
13		END OF TESTHOLE - auger refusal at a depth of 12.50 m in silt (ML) TILL - heavy seepage was observed at a depth of 9.75 m in silt (M - sloughing observed at 3.05 m in SILT (ML) and at 10.67 m i	L) TILL n silt (MI) TILL												
14		- final groundwater depth at 7.77 m	n on (mr) the												
14 15															
16							····;	· · · · · · ·	· · · · ·						
				GED BY: C							ETION DEPTH: 12.65 m	1			
		AECOM	REVIE	EWED BY:	GL	-				COMPL	ETION DATE: 24-2-2				

		Winnipeg North Transit Garage CLIENT: City	of Winnipeg						HOLE NO: TH24-09 ECT NO.: 60721079	
		I: UTM: 14U, 5532323.360 m N, 0628267.783 m E TOR: Paddock Drilling METHOD: So	blid Stem Auger/Core				-		TION (m): 236.91	
SAMPI										
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPI F #			pm)	-	COMMENTS	
0	***	רק TOPSOIL: black, moist, with organic content	/	-		10	100	1000	:	
1		FILL: brown gravelly fat CLAY (CH)		01	1					2
'		- moist, soft to firm - high plastic		02 03						-
2		very loose to loose brown SILT (ML)								2
		- moist below 0.30 m		04					Sample TH24-09-04	
3		firm to stiff black gravelly fat CLAY (CH) - moist below 0.76 m							submitted for analysis of	2
		∖- black layer		05					metals.	
4		very loose to loose brown SILT (ML)		06					Sample TH24-09-05 submitted for analysis of	
_		- moist below 3.35 m firm to stiff brown gravelly fat CLAY (CH)	/				-		metals.	
5		- moist below 0.76 m								'
3		- black layer								
-		- grey								
6 7										
		very soft to soft								
8		- very soft to soft							1	
9										
										1
10									1	
									1	
11	00	compact to dense grey silt (ML) TILL								
	0.00	- boulders								.
12	0903									
12	a da M									
13										1
14										
	D D				;					
15	o o									
	0 d									
16	0.0									1
17	090									
		CLAY MUDSTONE (Stony Mountain Formation, Gunn Member) - dark greyish red to purplish grey								
14 15 16 17 18 19 20	KXX	 calcareous shale to argillaceous dolomite 								
		- interbeds of relatively clean limestone								
19	KXX									
20										
20		END OF TEST HOLE								'
21		 auger refusal at a depth of 10.82 m in silt (ML) TILL sloughing observed at a depth of 3.35 m in SILT (ML) 								
21 22		 heavy seepage observed at a depth of 9.14 m in silt (ML) TILL 								
22		- water level unavailable due to use of cor								
23										1
22 23 24										
25				/	1::::3		::::::: . T			<u> </u>
		AECOM	LOGGED BY: CW REVIEWED BY: G						LETION DEPTH: 20.12 m LETION DATE: 24-2-6	I
			PROJECT ENGINE		D	Caller			LETION DATE: 24-2-6 Page	

			City of Winnipeg				_		OLE NO: TH24-10	
		: UTM: 14U, 5532349.209 m N, 0628235.631 m E							ECT NO.: 60721079	
			Solid Stem Auger						TION (m): 236.91	
SAIVIP	PLE TY	(PE GRAB SHELBY TUBE SF			1	\vee	JNO R	ECOVE		1
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗	(p	Readin pm)	-	COMMENTS	
0	***	∖TOPSOIL: black, moist, with organic content				····;	00 	<u>1000</u>		
		FILL: black gravelly fat CLAY (CH) with sand		01						
1		- moist, firm to stiff - high plastic		01						2
				02					Sample TH24-10-02	
				03		•••••	· • • • • • •		submitted for analysis of metals.	
2										2
				04		•••••		•••••••		
0										2
3		very loose to loose brown sandy SILT (ML)				· · · · · · · · · · · · · · · · · · ·			1	'
		- moist below 3.05 m		05		· · · · :			Sample TH24-10-04 submitted for analysis of	
4				06					metals.	
		firm to stiff brown fat CLAY (CH) - high plastic		00						
_	\square	- moist below 4.11 m								
5						•••••	· · · · · ·			
6						•••••				
		- grey - soft to firm								
					<u>-</u>	•••••		• • • • • • •		
7						· · · · ;				
8						•••••				2
-										
								· · · · · · · · · · ·		
9		very self to self								
		- very soft to soft				· · · · · · · ·				
10										2
	0g	compact to dense grey silt (ML) TILL								
11	0.0	- moist below 10.67 m								2
	0.0									
12 13	0.0									
	000									
	מדוג מדוג <u>מ</u>	END OF TESTHOLE			;-					
13		 auger refusal at a depth of 12.19 m in silt (ML) TILL heavy seepage was observed at a depth of 9.14 m in silt (ML) TILL 							-	1
		 sloughing observed at 3.05 m in SILT (ML) and at 10.67 m in silt (ML) TILL 								
14		- final groundwater depth observed at 3.69 m								
						· · · · · · · · · · · · · · · · · · ·				
14 15										.
15										:
					;					
16						•••••				
			LOGGED BY: CW						LETION DEPTH: 12.65 m	۱
		AECOM	REVIEWED BY: G PROJECT ENGINE					COMP	LETION DATE: 24-2-7 Page	



		Winnipeg North Transit Garage CLIENT: City of I: UTM: 14U, 5532443.423 m N, 628118.013 m E	Winnipeg					_		HOLE NO: TH24-12	
			I Stem Auger/Cor	e						ATION (m): 237.93	
SAMP							\square		RECO\		
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION		SAMPLE TYPE	SAMPLE #	⊗		om)	g⊗ 1000	COMMENTS	
0 -1 -2 -3		TOPSOIL: black, moist, with organic content FILL: brown gravelly fat CLAY (CH) with sand - moist, soft to firm - low plastic - black organics - boulder loose to compact brown sandy SILT (ML)	/		01 02 03 04 05					Sample TH24-12-03 submitted for analysis of metals. Sample TH24-12-04 submitted for analysis of	2:
-4 -5 -6 -7 -8 -9		- moist below 3.66 m firm to stiff grey fat CLAY (CH) - high plastic - moist below 4.57 m - cobbles and boulders - soft to firm			06					dioxins and furans.	2: 2: 2: 2: 2: 2: 2: 2:
-10 -11 -12 -13 -14 -15		compact to dense grey silt (ML) TILL - moist below 10.67 m - dense to very dense - cobbles and boulders									2 2 2 2 2 2 2
-16 -17 -18 -19 -20 -21		CLAY MUDSTONE (Stony Mountain Formation, Gunn Member) - dark greyish red to purplish grey - calcareous shale to argillaceous dolomite - interbeds of relatively clean limestone									22
-22 -23 -24		DOLOMITE (Stony Mountain Formation, Gunton Member) - buff - finely crystalline - sparsely fossiliferous - nodular-bedded - bedrock poor quality Void in bedrock to 24.69 m Sand seam									2 2 2 2 2 2
-25 -26 -27 -28 -29		END OF TESTHOLE - auger refusal at a depth of 12.19 m in silt (ML) TILL - heavy seepage was observed at a depth of 9.14 m in fat CLAY (CH) - sloughing was observed at a depth of 10.36 m in silt (ML) TILL - water level unavailable due to use of coring method									2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
30	<u> </u>	AECOM	LOGGED BY: C REVIEWED BY: PROJECT ENGI	GL						∷:] PLETION DEPTH: 25.76 m PLETION DATE: 24-2-1 Page	





LOCATION: UTM: 14U, 5532334.920 m N, 0628084.718 m E CONTRACTOR: Paddock Drilling SAMPLE TYPE GRAB SAMPLE TYPE GRAB SOIL DESCRIPTION O O TOPSOIL: black, moist, with organic content T T T T T T T T T T T T T	79						
SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE Image: Construction of the second se	PROJECT NO.: 60721079						
Image: Constraint of the second se	1						
0 TOPSOIL: black, moist, with organic content 1 FILL: brown gravelly fat CLAY (CH) with sand - noist, soft to firm - noist, soft to firm - adjustic - adjustic - very loose to loose brown SILT (ML) - adjustic - moist - adjustic - adjustic - adjustic - bigh plastic - adjustic - adjustic - adjustic <td< td=""><td></td></td<>							
0 TOPSOIL: black, moist, with organic content 1 FILL: brown gravelly fat CLAY (CH) with sand - moist, soft to firm - moist, soft to firm - noist - moist - moist - moist FILL: black gravelly fat CLAY (CH) with sand - moist - moist FILL: black gravelly fat CLAY (CH) with sand - moist, firm to stiff - high plastic - firm to stiff - high plastic - moist, firm to stiff - high plastic - moist below 3.05 m - black organics layer - brown - 8	ELEVATION (m)						
 1 The born growing for early for Cert (eff) with solid - moist, soft to firm - high plastic - woist - moist - FILL: black gravelly fat CLAY (CH) with sand - moist, firm to stiff - high plastic - moist, firm to stiff - high plastic - moist black organics layer - brown - silt inclusions - grey 	238 -						
 - high plastic - wery loose to loose brown SILT (ML) - moist - moist - FILL: black gravelly fat CLAY (CH) with sand - moist, firm to stiff - high plastic - firm to stiff brown fat CLAY (CH) - high plastic - moist below 3.05 m - black organics layer - brown - silt inclusions - grey 	237 -						
 moist FILL: black gravelly fat CLAY (CH) with sand moist, firm to stiff high plastic firm to stiff brown fat CLAY (CH) high plastic moist below 3.05 m black organics layer brown silt inclusions grey 	236 -						
 HLL: black gravely fat CLAY (CH) with sand moist, firm to stiff high plastic firm to stiff brown fat CLAY (CH) high plastic moist below 3.05 m black organics layer brown silt inclusions grey 	1 3						
Sample TH24-15-06 firm to stiff brown fat CLAY (CH) - high plastic - moist below 3.05 m - black organics layer - brown - silt inclusions - grey	nd 200						
 high plastic moist below 3.05 m black organics layer brown silt inclusions grey 	de ef E						
- black organics layer - brown - silt inclusions - grey	233						
- silt inclusions - grey	232 -						
	231 -						
9 - some silt	230 -						
	229 -						
10 R R dense to very dense tan silt (ML) TILL	228 -						
E 9793 - moist below 9.91 m	227 -						
	226						
13 Or D 13 Or D 13 Or D 14 Or D 14 Or D 14 Or D 14 Or D 15 Or D 16	220						
	224 –						
	223 -						
	222						
	221 -						
	220 -						
	219 -						
DOLOMITE (Stony Mountain Formation, Gunton Member)	218						
- buff - finely crystalline	217 -						
- sparsely fossiliferous - nodular-bedded	216						
[™] ₂ - poor bedrock	215						
	214 -						
	213						
END OF TESTHOLE - auger refusal at a depth of 12.19 m in silt (ML) TILL = 27	212						
C 27 - heavy seepage was observed at a depth of 12.19 m in silt (ML) TILL C - no sloughing observed C - no sloughing observed	211-						
OB - water level unavailable due to use of coring method	210 -						
14 16 16 16 17 17 18 19 19 20 20 DOLOMITE (Story Mountain Formation, Gunton Member) 21 - Suff - Suff - Suff <t< td=""><td>209 -</td></t<>	209 -						
REVIEWED BY: GL COMPLETION DATE: 24-2 PROJECT ENGINEER: Russ Golightly	2-8 Page 1 of 1						

		Winnipeg North Transit Garage CLIENT: City of V	Vinnipeg				-		HOLE NO: TH24-16	
		: UTM: 14U, 5532549.964 m N, 0628161.513 m E					+		ECT NO.: 60721079 ATION (m): 235.6	
	I RAC PLE TY	TOR: Paddock Drilling METHOD: Solid \$ (PE ■ GRAB □ SHELBY TUBE □ SPLIT SPORT		,			_		. ,	
SAIVIP				` 			JRI	ECOV		
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPI E TYPE	11 -	OAINIFLE #	⊗ Vapour Rea (ppm) 10 100	-	1⊗	COMMENTS	
0		TOPSOIL: black, moist, with organic content FILL: brown sandy silt (ML)	/				· · · ·			23
1		- moist, loose to compact		01 02		*			· · · · · · · · · · · · · · · · · · ·	
2		FILL: black fat CLAY (CH) - moist, firm to stiff		03	3					2
3		- high plastic FILL: brown silt (ML) - moist, loose to compact	\int	04	4	·····			Sample TH24-16-03	2
•		firm to stiff brown fat CLAY (CH) - high plastic - moist below 2.44 m		05	5	\$			BTEX, PHC F1 - F4, PAHs. Sample TH24-16-04	2
4		- silt inclusions		06	5	*		· · · · · · · ·	submitted for analysis of BTEX, PHC F1 - F4, PAHs.	2
5		- soft to firm - silt inclusions - firm to stiff								
6		- grey								
7										2
8		- soft to firm								2
٥										2
9 10										2
		dense to very dense top oil (MI) TU I								2
11	10000 10000	dense to very dense tan silt (ML) TILL - moist below 10.67 m						· · · · · · · · · · · · · · · · · · ·		2
12		END OF TESTHOLE							· · · · · · · · · · · · · · · · · · ·	
13		 auger refusal at a depth of 12.19 m in silt (ML) TILL heavy seepage was observed at a depth of 10.67 m in silt (ML) TILL sloughing observed at a depth of 2.13 m 						· · · · · · ·		2
14		- final groundwater depth observed at 6.10 m						· · · · · · · ·		2
15										2
16									· · · · · · · · · · · · · · · · · · ·	2
			LOGGED BY: CW						LETION DEPTH: 12.19 m	
		AECOM	REVIEWED BY: O PROJECT ENGIN	GL				COMP	LETION DATE: 24-2-9	

		Winnipeg North Transit Garage CLIENT: City of	Winnipeg TESTHOLE NO: TH24-17 PROJECT NO.: 60721079	
		I: UTM: 14U, 5532571.153 m N, 0628175.964 m E TOR: Paddock Drilling METHOD: Sol		
			5	
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	H H H H H H H H H H H H H H H H H H H	
0		TOPSOIL: black, moist, with organic content		2
		FILL: black gravelly fat CLAY (CH) - moist, firm to stiff	01	
1		- high plastic	02	
			03	2
2	XXX	very loose to loose grey SILT (ML)		
		- moist below 1.83 m	04 (************************************	2
3		firm to stiff brown fat CLAY (CH)	i i i i i i i i i i i i i i i i i i i	f
•		- high plastic - moist below 2.74 m	BTEX, PHC F1 - F4, 05 (\$)	2
			Sample TH24-17-04	
4			06 (B) BTEX, PHC F1 - F4,	f 2
		- some silt	PAHs.	
5		- soft to firm		
				2
6				
				2
7				
7				2
		- very soft		
8				
				1
9				
		dense to very dense tan silt (ML) TILL - moist below 10.67 m		2
10	ildifi	END OF TESTHOLE		
		 auger refusal at a depth of 9.91 m in silt (ML) TILL no seepage observed 		2
11		- sloughing observed at a depth of 1.83 m		
		- no groundwater observed		2
12				2
13				
9 10 11 12 13 14				2
14				
				2
14 15				
16				
		A = 0011	LOGGED BY: CW COMPLETION DEPTH: 9.91 n	1
		AECOM	REVIEWED BY: GL COMPLETION DATE: 24-2-9 PROJECT ENGINEER: Russ Golightly Page	e 1 (

			City of Winnipeg					-			OLE NO: TH24-18	
		I: UTM: 14U, 5532504.346 m N, 0628098.352 m E									CT NO.: 60721079 TION (m): 236.67	
			Solid Stem Auger									
SAIVIP	LE TY	(PE GRAB SHELBY TUBE SP		T			Z	JNO	κE	CUVE		
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	11 -	DAINIFLE #	⊗		pm)			COMMENTS	
0		TOPSOIL: black, moist, with organic content	/					100 · · · · ·	10	<u>00</u>		
		FILL: tan poorly graded gravel with sand - moist, loose		0	1							2
·1		FILL: brown gravelly fat CLAY with sand (CH) containing metal debris							··· · ·: · ·: ·	· · · · · · · · · ·		
	\bigotimes	-moist, soft to firm		0	۲ 			•	· · · ·			
0		FILL: grey gravelly fat CLAY (CH) - moist		0	3	•••••	····;	•	:::- :::-		Sample TH24-18-03	2
2	\bigotimes			0	4			•	· · · ·		submitted for analysis of metals.	
	\bigotimes	FILL: black fat CLAY (CH) - moist		ľ								2
-3	\bigotimes	- silt Inclusions								· · · · · · · · · ·	•	
	\bigotimes	- firm to stiff		0	5				· · · · · · · ·			2
4	Ø	¬- metal debris							:::: :::::			
		firm to stiff grey fat CLAY (CH) moist below 4.00 m		0	•							
-		END OF TEST HOLE										2
5		 testhole terminated at a depth of 4.57 m in fat CLAY (CH). no seepage or sloughing observed. 								· · · · · · · · · ·		
												2
6								•	···· ····			1
									··· · ·· ·	· · · · · · · · · · ·		
7												2
						· · · · ·			:: ::	· · · · · · · · ·		1
•												2
8												1
								· · · · ·	: : :	· · · · · · · · · · ·		2
9								· · · · · ·	· · · · · · · ·	· · · · · · · · ·		
·10						· · · · ·	•••••		::::: ::::::::::::::::::::::::::::::::	· · · · · · · · ·		
10												2
-11								•	···· ····			
									··· · ·· · ·· ·	· · · · · · · · ·		2
11								· · · · · ·	· · · · · · · · · · · · · · · · · · ·			
						· · · · ·	•••••		 	· · · · · · · · · ·		
12									:::: ::::: ::::::			
12 13												.
13									··· · ·· · ·· ·	· · · · · · · · · ·		
								· · · · · ·	··· · ··· ·			
							•••••	•		· · · · · · · · ·		2
14												
									· · · · · · · ·			
14 15								· · · · · ·	44 - 1 14 - 1 14 - 1	· · · · · · · · · ·		'
16							•••••		~~~ ~~~			
	· · · ·		LOGGED BY: CW								ETION DEPTH: 4.57 m	
		AECOM	REVIEWED BY: G	GL					0	OMPL	ETION DATE: 24-1-29	

PRO	JECT:	Winnipeg North Transit Garage	CLIENT: City of Win	nipeg					TESTH	OLE NO: TH24-19						
LOC	ATION	: UTM: 14U, 5532455.565 m N, 0628067.835 m E								PROJECT NO.: 60721079						
		TOR: Paddock Drilling	METHOD: Solid Ste							TION (m): 238.19						
SAMF		PE GRAB SHELBY TUBE	SPLIT SPOON	ВО	ILK				NO RECOVE		1					
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPT	ΓΙΟΝ		SAMPLE TYPE	SAMPLE #		Vapour F (ppr 0 10		COMMENTS	ELEVATION (m)					
E 0		TOPSOIL: black, moist, with organic content		/							238 -					
		FILL: clayey gravel with sand - moist, black, loose - brown				01 02 03				Sample TH24-19-03 submitted for analysis of	237 -					
-2		FILL: brown fat CLAY (CH) debris (wood, glass, ceramic, and I	black organics)			04				metals.	236 -					
- - 		- moist	oraon organico <i>j</i>			05 06				Sample TH24-19-06	235 -					
5		firm to stiff grey fat CLAY (CH) - moist below 4.11 m END OF TEST HOLE - testhole terminated at a depth of 4.57 m in fat CLAY (CH).					· · · · · · · · · · · · · · · · · · ·			submitted for analysis of metals.	234 -					
6		- no seepage or sloughing observed.					· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			232 -					
7							· · · · · · · · · · · · · · · · · · ·									
-3-15 7 - 1 - 1 - 1 - 1 - 1 - 1 - 1											231 -					
MA.GDT 24											230 -					
							·····;·				229 -					
							· · · · · · · · · · · · · · · · · · ·				228 -					
- SBO							······································	· · · · · · · · · · · · · · · · · · ·			227 -					
EST HOLE I											226 -					
721079 - TI 11											225 -					
											224 -					
ENVIRONMENTAL (VAPOUR ONLY) 60721079 - TEST HOLE LOGS - DRAFT LOGS ENV.GPJ UMA.GDT 24-3-15 1 1 01 6 0 01 00 00 00 00 00 00 00 00 00 00 00 0											223 -					
16 IS			1	0.055 51			•••••	•••••								
SONA		AECOM		OGGED BY: (EVIEWED BY:						ETION DEPTH: 4.57 m ETION DATE: 24-1-29						
ENVIE				ROJECT ENG			Russ (Golightl			1 of 1					

PRO	JECT:	Winnipeg North Transit Garage	CLIENT: City of Winr	nipeg					_		OLE NO: TH24-20	
		I: UTM: 14U, 5532269.874 m N, 0628254.992 m E							-		CT NO.: 60721079	
SAMF		TOR: Paddock Drilling YPE GRAB SHELBY TUBE	METHOD: Solid Ster	n Auger Шви	IIK					ELEVA RECOVE	TION (m): 236.85 RY	
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIP			SAMPLE TYPE	SAMPLE #		Vapour (pr	Readir		COMMENTS	ELEVATION (m)
ENVIRONMENTAL (APPOUR ONLY) 60721079 - TEST HOLE LOGS - DRAFT LOGS ENV.GPJ UNAGEDT 24-3-15 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		TOPSOIL: black, moist, with organic content FILL: black to brown gravelly fat CLAY (CH) with sand - moist, firm to stiff - high plastic firm to stiff brown fat CLAY (CH) - high plastic - moist below 1.22 m - black, wet, debris (waste and plywood) - soft to firm - black END OF TESTHOLE - testhole terminated at a depth of 3.05 m in fat CLAY (CH). - no sepage observed - no sloughing observed - no groundwater observed - no groundwater observed				01 02 03 04		0 1			Sample TH24-20-02 submitted for analysis of metals. Sample TH24-20-04 submitted for analysis of BTEX, PHC F1 - F4, and PAHs.	236 235 234 233 232 231 230 229 228 229 228 229 228 229 228 229 228 229 228 229 228 229 228 229 228 229 228 222 224 222
ENVIRONMENT		AECOM	RE	GGED BY: (VIEWED BY OJECT ENG	: Gl		Russ C	Goliaht			ETION DEPTH: 3.05 m ETION DATE: 24-1-29 Page	221 -

		Winnipeg North Transit Garage	CLIENT: City of Winnipeg						_		HOLE NO: TH24-21	
		: UTM: 14U, 5532314.445 m N, 0628358.535 m E									ECT NO.: 60721079	
			METHOD: Solid Stem Aug								ATION (m): 236.47	
SAIMP	PLE TY		E SPLIT SPOON	BUL	LK 			Z	JINO F			1
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIF	TION		SAMPLE TYPE	SAMPLE #	⊗∿ 10	(p	Readin pm)	g⊗ 1000	COMMENTS	
0	×	TOPSOIL: black, moist, with organic content						;			 	
		FILL: black gravelly fat CLAY (CH) - moist, firm to stiff				01	\otimes			<mark>.</mark> 		2
1		- high plastic				02 🛠					Sample TH24-21-02	
		harring.				03 🔇	2				submitted for analysis of	2
-2		- brown						••••		· · · · · · · · · · · ·	metals.	
-		- black				04		· · · · ·		· · · · · · · · ·	Sample TH24-21-04	2
		- firm to stiff FILL: grey poorly graded sand (SP)		Γ						· · · · · · · ·	submitted for analysis of metals.	
.3		\- moist, loose to compact		/							. 11150010. 	
		END OF TESTHOLE - testhole terminated at a depth of 3.05 m in fat clay (CH) FIL	1									2
4		- no seepage observed								· · · · · · · · ·		
		- no sloughing observed - no groundwater observed						· · · · · · · · · · · · · · · · · · ·		· · · · · · · · ·		2
5										· · · · · · · · ·		
0								••••				
										· · · · · · · · ·		2
6						l		••••		· · · · · · · · ·		
								····;	• • • • • •	<mark>.</mark>		2
7												
								· · · · · · · · · · · · · · · · · · ·				2
0												
8										· · · · · · · · ·		
												2
9											· · · · ·	
10								····;		· · · · · · · ·		2
10										· · · · · · · ·		
-11										· · · · · · ·		2
11										· · · · · · · · · ·		
12								····; ···;		· · · · · · · ·		2
12										· · · · · · ·		
										· · · · · · ·		2
13								••••				
												2
								···· ···:		· · · · · · · ·		
14								····;		· · · · · · · ·		
										· · · · · · ·		2
14 15								····; ···;		· · · · · · · · · · · ·		
								· · · · · · · · · · · · · · · · · · ·		· · · · · · · ·	•• •• • • • • •	
16							· · · · · · · · · · · ·			· · · · · · · ·		
			LOGGED								PLETION DEPTH: 3.05 m	
		AECOM	REVIEWE PROJEC							COMF	PLETION DATE: 24-1-29 Page	

		Winnipeg North Transit Garage	CLIENT: City of Winnip	beg					_		OLE NO: TH24-22				
		I: UTM: 14U, 5532429.165 m N, 0628361.120 m E							-		CT NO.: 60721079				
SAMF		TOR: Paddock Drilling (PE GRAB ISHELBY TUBE)	METHOD: Solid Stem	Auger BU	IK					RECOVER	TION (m): 234.2 RY				
DEPTH (m)		SOIL DESCRIP			SAMPLE TYPE	SAMPLE #		Vapour I (pp	Readin om)	ng⊗	COMMENTS	ELEVATION (m)			
E 0	\otimes	ASPHALT - 100 mm thick		/			1	<u>0 10</u>	00	1000		234 -			
1		FILL: biege poorly graded gravel with sand - moist, loose to compact FILL: brown fat CLAY (CH) - moist, firm to stiff				01 Ø 02 03		8			Sample TH24-22-01 submitted for analysis of BTEX, PHC F1 - F4, PAHs. Sample TH24-21-02 submitted for analysis of	233			
-2	$\widetilde{\mathcal{I}}$	firm to stiff black fat CLAY (CH) - high plastic - moist below 2.13 m				04	Ø	§			BTEX, PHC F1 - É4, PAHs.	232			
-3		END OF TESTHOLE - testhole terminated at a depth of 3.05 m in fat clay (CH) FILL - no seepage observed - no sloughing observed										231			
5		- no groundwater observed										230			
6												228			
7							· · · · · · · · · · · · · · · · · · ·					227 -			
24-3-15 11111111 0												226			
UMA.GDT												225			
BENV.GP								······				224 -			
- DRAFT LO												223			
12 12 12 12 12 12 12												222			
1019 - TEST 11111 13												221			
NLY) 60721. 11111111111111111111111111111111111												220 -			
ENVIRONMENTAL (VAPOUR ONLY) 60721079 - TEST HOLE LOGS - DRAFT LOGS ENV.GPJ UMA.GDT 24-3-15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1												219			
ENTA 19															
RONN	AECOM			GED BY: (EWED BY:							ETION DEPTH: 3.05 m ETION DATE: 24-1-29				
ENV			REVIEWED BY: GL PROJECT ENGINEER: Russ Goligi					Golight							

		Winnipeg North Transit Ga 1: 628195.4907 5532545.4		LIENT: City of Winnip	eg					-		E NO: TP24-01 NO.: 60721079	
		TOR: KBL Projects Ltd.		ETHOD: Excavator						-		N (m):	
				SPLIT SPOON	BU	ILK				, D RECC	VERY	CORE	
DEPTH (m)	SOIL SYMBOL		SOIL DESCRIPTI	ON		SAMPLE TYPE	SAMPLE #	⊗	Vapour Rea (ppm)) 100	ading⊗ 1000		COMMENTS	
-1		SAND and GRAVEL (fill) - dark					01				: su	ample TP24-01-02 bmitted for analysis of 'EX F1-F4, PAHs	
-3		CLAY - brown, moist, firm, medi	um plasticity, no debris.				03		• • • • • •		su	ample TP24-01-03 bmitted for analysis of 'EX F1-F4, PAHs	
-4							05 06 Ø				: su	ample TP24-01-05 bmitted for analysis of 'EX F1-F4, PAHs	
-6 -7		END OF TESTPIT @ 6.1 M BEI Notes: 1. Soil description is primarily ba 2. Borehole backfilled with excar 3. DUP-02 is associated with sa	sed on visual observation. rated material upon completion.	AY			00						
8		AECO	м	REVIE	GED BY: EWED BY IECT ENG	: Jei	n Mu	ray	Osiowy	CON		ON DEPTH: 6.10 m ON DATE: 24-2-1 Page	1

0 SAND and GRAVEL - some day, brownblack, molst, loses, fine to coarse grained sand, fine to 0 you you 0 - SAND and GRAVEL - some day, brownblack, molst, loses, fine to coarse grained sand, fine to 0 you 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - - 1 - - - - - -		T: Winnipeg North Transit Garage	CLIENT: City of Winnipeg				OLE NO: TP24-02	
SAMPLE TYPE GRAB SHITS TUBE SPLIT SPOON BULK NO RECOVERY CORE SOIL DESCRIPTION SAND and GRAVEL - some day, brownblack, moist, loose, fine to coarse grained sand, fine to coarse grained gravel, hydrocarbon odour. CLAY and SILT - grey, moist, soft, medium plasticity, debris (metal pipes), hydrocarbon odour. CLAY and SILT - grey, moist, soft, medium plasticity, debris (metal pipes), hydrocarbon odour. CLAY - brown, moist, firm, medium plasticity, no debris. CLAY - brown, moist, firm, medium plasticity, no debris. Sample TP24-02-04 submitted for analysis of BTEX F1-F4, PAHs Sample TP24-02-04 Sample TP24-02-04 Sa								
Image: Solution of the second seco				ILK				
0 SAND and GRAVEL - some day, brown/black, moist, loose, fine to coarse grained sand, fine to coarse grained gravel, hydrocarbon odour. 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 02 Sample TP24-02-01 03 Sample TP24-02-02 04 Sample TP24-02-02 05 Sample TP24-02-02 05 Sample TP24-02-04 06 Sample TP24-02-04 06 Sample TP24-02-04 06 Sample TP24-02-04 06 Sample TP24-02-04 07 Sample TP24-02-04 08 Sample TP24-02-04 09 Sample TP24-02-04 00 Sample TP24-02-04 01 Sample TP24-02-04 02 Sample TP24-02-04 02 Sample TP24-02-04 02 Sample TP24-02-04					# J J WBLE S Vapot (ur Reading ⊗ ppm)		DEPTH (m)
CLAY - brown, moist, firm, medium plasticity, no debris.		 coarse grained gravel, hydrocarbon odour. 		(submitted for analysis of	1-
02 ♥······	-2	CLAY - brown, moist, firm, medium plasticity, no debris.				\$	submitted for analysis of	2 -
				()6 [⊗] ·····		submitted for analysis of	3 -
Solid escription is primarily based on visual observation. 2. Borehole backfilled with excavated material upon completion. -7 -8 LOGGED BY: Jonathan Ota COMPLETION DEPTH: 6.10 m REVIEWED BY: Jen Murray COMPLETION DATE: 24-2-1								5-
LOGGED BY: Jonathan Ota COMPLETION DEPTH: 6.10 m REVIEWED BY: Jen Murray COMPLETION DATE: 24-2-1		Notes: 1. Soil description is primarily based on visual observation.					· ·	6 -
REVIEWED BY: Jen Murray COMPLETION DATE: 24-2-1		A=0044						•
PROJECT ENGINEER: Kimber Osiowy Page 1 o		AECOM						1 of 1

PRO	JECT:	Winnipeg North Transit Garage	CLIENT: City of \	Vinnipeg					TE	ESTH	OLE NO: TP24-03		
		1: 627931.0651 5532443.414							_		CT NO.: 60721079		
			METHOD: Excav						_		TION (m): RY		
DEPTH (m)					SAMPLE TYPE	SAMPLE #	⊗	Vapour F (pp	Reading (m)			DEPTH (m)	
-1		CLAY and SILT - some sand and gravel, light brown, moist, soft sand, fine to coarse grained gravel. CLAY - some silt, trace gravels, brown, moist, stiff, medium plas - black, low plasticity below 1.3 m				01 02 03 04					Sample TP24-03-03 submitted for analysis of metals	2	
GDT 24-3-26		 light brown, stiff, medium plasticity below 3.5 m trace cobbles, high plasticity below 4.5 m. 				05 06 07					Sample TP24-03-07 submitted for analysis of	4	
ENVIRONMENTAL (VAPOUR ONLY) 60721079 TESTPIT LOGS.GPJ UMA.GDT 243-26		END OF TESTPIT @ 5.5 M BELOW GROUND SURFACE IN C Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material upon completion.									metals	6 	
RONM		AECOM		LOGGED BY: REVIEWED BY					COMPLETION DEPTH: 6.10 m COMPLETION DATE: 24-1-30				
ENC				REVIEWED BY: Jen Murray PROJECT ENGINEER: Kimber									

PROJE	ECT:	Winnipeg North Transit Garage CL	IENT: City of Winnipeg						T	ESTH	OLE NO: TP24-04	
		: 627970.2185 5532468.144							_		CT NO.: 60721079	
CONTF SAMPL			ETHOD: Excavator		/					ELEVA ECOVE	TION (m): RY CORE	
vTH (m)						SAMPLE #	⊗	Vapour (pr	Reading		COMMENTS	DEPTH (m)
ENVIRONMENTAL (VAPOUR ONLY) 60721079 TESTPIT LOGS.GPJ UMA.GDT 24-3-26		CLAY and SILT - some sand and gravel, light brown, moist, firm, m sand, fine to coarse grained gravel. CLAY - trace gravels, light brown, moist,stiff, medium plasticity, fine and metal). - black, low plasticity below 1.5 m - grey, debris (glass bottles, ceramics, cobble, wood), slight hydroca - grey, debris (glass bottles, ceramics, cobble, wood), slight hydroca CLAY - light brown, wet, stiff, high plasticity, no debris. END OF TESTPIT @ 6.1 M BELOW GROUND SURFACE IN CLAY Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material upon completion.	e grained gravels, debris (woor			2 ··· 3 ··· 4 ··· 5 ··· 6 ···					Sample TP24-04-04 submitted for analysis o BTEX F1-F4, PAHs and metals Sample TP24-04-07 submitted for analysis o metals	3-
8 - 12		AECOM	REVIEW	LOGGED BY: Jonathan Ota REVIEWED BY: Jen Murray PROJECT ENGINEER: Kimber Osic				Osio	(ETION DEPTH: 6.10 n ETION DATE: 24-1-30 Pag	

	City of Winnipeg				OLE NO: TP24-05	
LOCATION: 628082.8757 5532465.868	Evenyeter				CT NO.: 60721079 TION (m):	
	Excavator					
(IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	SAMPLE TYPE		⊗Vapour Re (ppm)		COMMENTS	DEPTH (m)
CLAY - some silt, some gravel, light brown, moist, soft, non-plastic, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine grained grave organics. CLAY - trace gravel, brown, moist, stiff, medium plasticity, fine gravel, brown, model, stiff, brown, model, stiff, debris, debravel, stiff, debravel, stiff	Is, debris (wood, roots),				Sample TP24-05-05 submitted for analysis of metals	1 2 3 4 5 6 7
	LOGGED BY: Jon REVIEWED BY: J PROJECT ENGINI	en Mu	rray	COMPL	ETION DEPTH: 5.10 m ETION DATE: 24-1-31 Page	1 of 1

		Winnipeg North Transit Garage	CLIENT: City of W	ïnnipeg					_		OLE NO: TP24-06			
		I: 627995.2033 5532400.078 TOR: KBL Projects Ltd.	METHOD: Excava	tor					_		CT NO.: 60721079			
SAMP					JLK				_					
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIP	TION		SAMPLE TYPE	SAMPLE #	8	Vapour R (ppn	n)	⊗	COMMENTS	DEPTH (m)		
_ 0 _ _ _ _ _ _		CLAY - some silt, brown, moist, stiff, medium plasticity. - some fine gravel, light brown, below 0.6 m.				01 02								
1 		- brown/black, debris (bricks, glass, wood, ceramics, metal) be	elow 1 m to 3 m.			03						2 -		
- - - - - - - - - - - - - - - - - - -		CLAY - light brown, moist, stiff, high plasticity, no debris.				04						3 -		
- - - - - - - - - - - - - - - - - - -						05						4		
- - - - - - - - - - - - - - - - - - -		- brown, wet, soft below 5 m.				06					Sample TP24-06-06 submitted for analysis of SAR, EC, pH, and metals	5		
						07						6		
		END OF TESTPIT @ 6.1 M BELOW GROUND SURFACE IN Notes: 1. Soil description is primarily based on visual observation. 2. Groundwater encountered at 5.0 m bgs. 3. Borehole backfilled with excavated material upon completion										7.		
8				LOGGED BY:	Jona	than	: Ota	:		OMPI	ETION DEPTH: 6.10 m			
		AECOM		REVIEWED BY: Jen Murray PROJECT ENGINEER: Kimber Osio						COMPLETION DATE: 24-1-30				

		Winnipeg North Transit Garage	CLIENT: City of Win	nipeg								NO: TP24-07	
		: 627980.2203 5532425.771									IECT N ATION	NO.: 60721079	
SAMP		TOR: KBL Projects Ltd. /PE GRAB ISHELBY TUBE	METHOD: Excavato	r ВU	ILK			$\overline{\nabla}$					
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIP			SAMPLE TYPE	SAMPLE #		Vapour (p	· Readir pm)	ng⊗		COMMENTS	DEPTH (m)
- 0		CLAY - some silt, some gravel, brown, moist, stiff, medium pla	asticity, fine grained gravel.			01 02 03 04							1-
- - - - - - - - - - - - - - - - - - -		- black/grey, wet, low plasticity, debris (metal, plastic, glass, c below 3 m to 5 m. CLAY - grey, moist, stiff, high plasticity, no debris.	ables, wood), slight hydroca	rbon smell		05			• 🛛 • •				3 - 4 - 5 -
06S.GPJ UMA.GDT 24- 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						07					San subi met	nple TP24-07-05 mitted for analysis of als	6 -
ENVIRONMENTAL (VAPOUR ONLY) 60721079 TESTPIT LOGS.GPJ UMA.GDT 243-26		END OF TESTPIT @ 6.1 M IN BELOW GROUND SURFACE Notes: 1. Soil description is primarily based on visual observation. 2. Groundwater encountered at 3.5 m bgs. 3. Borehole backfilled with bentonite upon completion.											7 -
ENVIRONM	_	AECOM	RE					COMPLETION DEPTH: 6.10 m COMPLETION DATE: 24-1-31 Page 1 of					

Image: Comparison of the second of the se			CLIENT: City of Winnipeg				-	OLE NO: TP24-08			
SAMPLE TYPE GRAB SPLIT SPOON BULK No RECOVERY CORE Image: Second Secon							-				
Image: Solution of the second seco				JLK			-				
0 CLAY and GRAVEL - some silt, light brown, moist, soft, low plasticity, fine to coarse grained gravel. 01 01 02 -1 02 03 Sample TP24-08-03 submitted for analysis of Dioxins/Furans and metals 1 -2 CLAY - trace gravel, dark brown, moist, stiff, medium plasticity, fine grained gravel. 04 04 04 -3 - wet, stiff, debris (tree material, wood, metal, tires, plastic, rebar) below 3 m to 5.5 m. 05 06 Sample TP24-08-06 submitted for analysis of ploxing for plasticity for analysis of ploxing for plasticity for analysis of submitted fo	DEPTH (m) SOIL SYMBOL	SOIL DESCRIPT	ION	SAMPLE TYPE	SAMPLE #	(ppm)		COMMENTS	DEPTH (m)		
8 LOGGED BY: Jonathan Ota COMPLETION DEPTH: 6.10 m REVIEWED BY: Jen Murray COMPLETION DATE: 24-1-31 PROJECT ENGINEER: Kimber Osiowy Page 1 of 1		CLAY - trace gravel, dark brown, moist, stiff, medium plasticity, t - wet, stiff, debris (tree material, wood, metal, tires, plastic, rebar END OF TESTPIT @ 5.5 M BELOW GROUND SURFACE IN C Notes: 1. Soil description is primarily based on visual observation. 2. Groundwater encountered at 5.5 m bgs.	fine grained gravel.) below 3 m to 5.5 m.		02 03 04 05 06			submitted for analysis of Dioxins/Furans and metals Sample TP24-08-06 submitted for analysis of	3-4		
Conversion Reviewed bit. Jen Multay Conversion											

		Winnipeg North Transit Garage CLIENT: City of V	Vinnipeg					-		OLE NO: TP24-09	
		: 628025.0115 5532416.703 TOR: KBL Projects Ltd. METHOD: Excava	ator					_		CT NO.: 60721079 TION (m):	
SAMPLE				JLK				_	COVE		
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION		SAMPLE TYPE	SAMPLE #		Vapour Re (ppm	1)		COMMENTS	DEPTH (m)
		CLAY - some silt, some sand, some gravel, light brown, moist, soft, non-plastic, fine g - some fine gravel, dark brown/orange, moist, soft, low plasticity, debris (glass, roots, o 1m. - brown, stiff, medium plasticity, debris (wood, cobble, glass) below 2 m to 5 m.			01 02 03		J 100) 10			1- 2-
					04 05 06						3 - 4 -
ENVIRONMENTAL (AAPOUR ONLY) 60721079 TESTPIT LOGS.GPJ UMA.GDT 243-26		CLAY - light brown and grey, moist, firm, medium plasticity. END OF TESTPIT @ 6.1 M BELOW GROUND SURFACE IN CLAY Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material upon completion.			07					Sample TP24-09-07 submitted for analysis of metals	5 - 6 - 7 -
		AECOM	LOGGED BY: REVIEWED BY PROJECT ENG	′: Je	n Mu	rray	Osiow	C		ETION DEPTH: 6.10 m ETION DATE: 24-1-31 Page	1 of <i>'</i>

			CLIENT: City of V	/innipeg					_		OLE NO: TP24-10			
		: 628032.7363 5532348.058		tor					_		CT NO.: 60721079 TION (m):			
SAMP			METHOD: Excava		JLK				_					
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPT			SAMPLE TYPE	SAMPLE #	8	Vapour R (ppn	eading (8	COMMENTS	DEPTH (m)		
- 0 - - -		SILT and CLAY - brown, moist, stiff, medium plasticity.				01			<u>, i</u>					
- - - - - - 1 -		CLAY - trace gravel, dark brown, moist, stiff, medium plasticity, wood). - black, low plasticity, below 1 m.	fine gravel, debris (tree	e roots and		02		· · · · · · · · · · · · · · · · · · ·				1-		
- - - - - - - - - - 2						03						2 -		
- - - - - - - 2						04						3-		
		- brown and no gravel below 3 m.				05						3 -		
		CLAY - grey, moist, stiff, high plasticity, no debris.				06						5 -		
9 9						07					Sample TP24-10-07 submitted for analysis of metals	6 -		
		END OF TESTPIT @ 6.1 M BELOW GROUND SURFACE IN 0 Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material upon completion										7 -		
				LOGGED BY:	L Jona	than	: Ota	:	: C	i : Ompl	ETION DEPTH: 6.10 m			
		AECOM	REVIEWED BY: Jen Murray					COMPLETION DATE: 24-1-31						
			PROJECT ENGINEER: Kimber C					· Osiow	Disiowy Page 1 of					

		Winnipeg North Transit Garage	CLIENT: City of Winnipeg						_	TESTHOLE NO: TP24-11					
		I: 628003.0269 5532472.907							_	PROJECT NO.: 60721079 ELEVATION (m):					
SAMP		TOR: KBL Projects Ltd. /PE GRAB IIISHELBY TUB	METHOD: Excavato		IIK					ELEV RECOV					
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIF			SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm)					COMMENTS	DEPTH (m)		
		CLAY - some silt, light brown, moist, stiff, medium plasticity. - dark brown, debris (tires, concrete, metal, glass, wood) belo	w 0.5 m to 5 m.			01 02 03 04		0 1					1		
		CLAY - brown, moist, stiff, high plasticity. END OF TESTPIT @ 6.1 M BELOW GROUND SURFACE IN Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material upon completing	on.			06 07						mple TP24-11-07 omitted for analysis of tals.	5 - 6 - 7 -		
ENVIRON		AECOM	R	LOGGED BY: Jonathan Ota COMPLETION DEPTH: REVIEWED BY: Jen Murray COMPLETION DATE: 2 PROJECT ENGINEER: Kimber Osiowy						1 of 1					

			CLIENT: City of Winnipeg					_	TESTHOLE NO: TP24-12					
		: 628012.9499 5532442.059 TOR: KBL Projects Ltd. METHOD	HOD: Excavator					_	PROJECT NO.: 60721079 ELEVATION (m):					
	PLE T		PLIT SPOON	JLK				_	ECOVE	()				
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION		SAMPLE TYPE	SAMPLE #	⊗Vapour Reac (ppm) 10 100			1⊗	COMMENTS	DEPTH (m)			
- 0 - - - -		CLAY - some silt, some gravel, light brown, moist, stiff, medium plasticity, fi - trace fine to coarse gravels, brown below 0.5 m	ne to coarse gravel.		01									
- - - -1 -		-			02			· · · · · · · · · · · · · · · · · · ·			1-			
- - - -					03			· · · · · · · · · · · · · · · · · · ·						
-2 - - - - - - -		- some fine to coarse gravel, dark brown/orange, soft, low plasticityl, debris ceramic, bricks) below 2 m.	(metal, wood, glass,		04					Sample TP24-12-04 submitted for analysis of metals	2 -			
-3 - - - - - - -		- trace fine gravels, light brown, stiff, debris (wood, metal, glass) below 3 m t	o 5m.		05						3 -			
- - - - - - - - -					06						4			
5 - - - - - - - - - -		CLAY - light brown, moist, firm, high plasticity.			07					Sample TP-24-12-07 submitted for analysis of SAR, EC, pH, and metals	5 -			
		END OF TESTPIT @ 6.1 M BELOW GROUND SURFACE IN CLAY. Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated materials upon completion. 3. DUP-01 is associated with TP24-12-07.									6 - 7 -			
- 8			LOGGED BY:				:			ETION DEPTH: 6.10 m				
		AECOM		REVIEWED BY: Jen Murray					y COMPLETION DATE: 24-1-31 Page 1 of 1					
				PROJECT ENGINEER: Kimber Osiowy						Page	1 01			

		CLIENT: City of Winnipeg						TESTHOLE NO: TP24-13				
	N: 628086.3485 5532494.89 CTOR: KBL Projects Ltd. M	METHOD: Excavator						PROJECT NO.: 60721079 ELEVATION (m):				
SAMPLE			ILK			$\overline{\nabla}$		ECOVE	()			
DEPTH (m) SOIL SYMBOL	SOIL DESCRIPTIO	ON	SAMPLE TYPE	SAMPLE #		(p)	Reading om) 00 1		COMMENTS	DEPTH (m)		
	 CLAY - some silt, some sand and gravel, light brown, moist, soft, fine to coarse grained gravel. brown (some orange colouration), moist, stiff, medium plasticity brown (some orange colouration), moist, stiff, medium plasticity black, wet, debris (wood, metal, springs, plastic, glass) below 4 n black, wet, debris (wood, metal, springs, plastic, glass) below 4 n Notes: Soil description is primarily based on visual observation. Groundwater encountered at 3,0 m bgs. Borehole backfilled with excavated material upon completion. 	below 2 m.		01 02 03 04 05 06 07		0 1			Sample TP24-13-07 submitted for analysis of metals			
	AECOM	LOGGED BY: J REVIEWED BY: PROJECT ENG	: Je	en Murray COMPLETION DATE:				LETION DEPTH: 6.10 m LETION DATE: 24-1-31 Page	1 of 1			

		Winnipeg North Transit Garage	CLIENT: City of Win	CLIENT: City of Winnipeg							TESTHOLE NO: BH24-01				
		: 628201.9, 553256.9 TOR: Paddock Drilling Ltd.	METHOD: Salid Sta	METHOD: Solid Stem Auger							PROJECT NO.: 60721079 ELEVATION (m): 235.32				
	PLE TY														
0/ 11/1								<u> </u>	1						
DEPTH (m)	SOIL SYMBOL	SOIL DESC	CRIPTION		SAMPLE TYPE	SAMPLE #	⊗	(p	Readin pm)	g⊗ 1000	COMMENTS				
0		CONCRETE and ASPHALT				01 🔇									
-1		SAND and GRAVEL - some silt, brown, moist, comp	act, fine to coarse sand, fine graned	gravel.		02 🔇						23			
1	•					03		\otimes			Sample BH24-01-03	23			
		SILT - some clay, trace sand, light brown, moist, firm	, medium plasticity, fine to coarse sa	nd.		04 🔇		· · · · · · · · · · · · · · · · · · ·			submitted for analysis of BTEX F1-F4, VOCs, PAHs Sample BH24-01-04				
-2		CLAY and SILT - brown, moist, firm, medium plastici	iy.			05 🛇					submitted for analysis of BTEX F1-F4, VOCs, PAHs	2:			
3		CLAY - trace of silt, brown, moist, firm, high plasticity						· · · · · ·							
						06 🛠)	· · · · · · · · · · · · · · · · · · ·	- - - - - - - - - - - - - - - - - - -			2			
4						07 🛞)				··· Sample BH24-01-07	2			
5								· · · · · · · · · · · · · · · · · · ·	- - - - - - - - - - - - - - - - - - -		submitted for analysis of BTEX F1-F4, VOCs, PAHs				
						08 🛇)					2			
6		END OF BOREHOLE @ 6.1 M BELOW GROUND S	URFACE IN CLAY				· · · · · · · · · · · · · · · · · · ·					2			
7		 Soil description is primarily based on visual observ. Borehole backfilled with excavated material and be DUP-07 is associated with sample BH24-01-03. 	ation. ntonite upon completion.												
ſ												2			
8			1					*							
		AECOM									LETION DEPTH: 6.10 m LETION DATE: 24-2-13				
				ROJECT ENG				Osio			Page	1 0			

	JECT: Winnipeg North Transit	Garage	CLIENT: City of Winnipeg		TESTHOLE NO: BH24-02							
	ATION: 628208.6, 5532537	1				PROJECT NO.: 60721079						
				THOD: Solid Stem Auger					ELEVATION (m): 235.32			
SAIVIH	PLE TYPE GRAB		SPLIT SPOON				ECOVE	RY CORE				
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPT	PTION			⊗ Vapour Reading (ppm) 10 100 4	g⊗ 1000	COMMENTS				
0 -1		el, brown, moist, firm, high plasti own, moist, compact, fine to coa	city, fine grained gravel. se sand, fine to coarse grained gra	avel.	01 Ø				23			
-2	SILT and CLAY - grey, moist	firm, medium plasticity.			03 04 (\$	>		Sample BH24-02-03 submitted for analysis of BTEX F1-F4, PAHs, VOCs, metals, SAR, EC, pH. Sample BH24-02-04 submitted for analysis of	23			
-3		moist, firm, medium plasticity.			05 🛇)		BTEX F1-F4, PAHs, VOCs, metals.	23			
-3	CLAY - some silt, brown, mo	st, soft, high plasticity.			06 🛇			Sample BH24-02-06 submitted for analysis of BTEX F1-F4, PAHs, VOCs, metals.	23			
-4					07 🛇				23			
-5					08 🛇	j,			2			
-6	Notes: 1. Soil description is primarily	cavated material and bentonite u							2:			
7									2			
8				BY: Jona	than	: : : Ota(ETION DEPTH: 6.10 m				
	AECO	M	REVIEWE				COMPLETION DATE: 24-2-13					
		////			Kimber Osiowy		Page	1 ი				

		Winnipeg North Transit Garage	CLIENT: City of Winnipeg					OLE NO: BH24-03			
		l: 0628319, 5532464					PROJECT NO.: 60721079				
SAMP		TOR: Paddock Drilling Ltd. /PE GRAB SHELBY TUBI	METHOD: Solid Stem Auger	BULK			ELEVATION (m): 234.41				
OF NIVIE											
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIF	PTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Rea (ppm) 10 100	ıding⊗ 1000	COMMENTS			
0		SAND and GRAVEL - light brown, moist, compact, fine to cc (fill).			01 🛇						
-1		SILT and CLAY - trace of sand, brown, moist, firm, medium	plasticity.		02			Sample BH24-03-02 submitted for analysis of BTEX F1-F4, PAHs.	23		
I		CLAY - some silt, brown, moist, firm, medium plasticity.			03 🛇				23		
-2					04			Sample BH24-03-04 submitted for analysis of BTEX F1-F4, PAHs.			
					05				2		
-3		- soft, high plasticity below 3 m.			06			Sample BH24-03-06 submitted for analysis of BTEX F1-F4, PAHs.	2		
4					07 🛇				2		
-5					08 🛇)			2		
6		END OF BOREHOLE @ 6.1 M BELOW GROUND SURFAC	E IN CLAY								
7		Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material and bentonite 3. DUP-05 is associated with BH24-03-04.	upon completion.						2		
									2		
8											
		AECOM	LOGGED BY REVIEWED				COMPLETION DEPTH: 6.10 m COMPLETION DATE: 24-2-13				
		ALUM				ray Kimber Osiowy		ETION DATE: 24-2-13 Page	1 ~		

			CLIENT: City of Winnipeg						TESTHOLE NO: BH24-04				
		: 628344.1, 5532456						PROJECT NO.: 60721079					
SAMP			IETHOD: Solid Stem Auger	BULK				RECOVE	TION (m): 234.51 RY CORE				
DEPTH (m)	SOIL SYMBOL			SAMPLE TYPE	SAMPLE #	⊗ V; 10	apour Rea (ppm)		COMMENTS	ELEVATION (m)			
- 0 - - - - - - - - -		SAND and GRAVEL, light brown, moist, loose, fine to coarse san	d, fine to coarse grained gravel (fill).		01 02 Ø	×			Sample BH24-04-01 submitted for analysis of BTEX F1-F4, PAHs	234 -			
- - - - - - - - - - - - - - - - - - -		CLAY - brown, moist, stiff, medium plasticity.			03 Ø				Sample BH24-04-03 submitted for analysis of BTEX F1-F4, PAHs	233 -			
- - - - - - 3 -					05				Sample BH24-04-05 submitted for analysis of BTEX F1-F4, PAHs	232 -			
					06 Ø					231 - 230 -			
E LOGS.GPJ UMA.GD1 2					08 🔇	<u></u>				229 -			
		END OF BOREHOLE @ 6.1 M BELOW GROUND SURFACE IN Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material and bentonite upor								228 -			
			LOGGED BY	: Jon:	athan	Ota		СОМРІ	LETION DEPTH: 6.10 m	227 -			
		AECOM	REVIEWED B	3Y: Je	n Mu	ray		COMPLETION DATE: 24-2-12					
ž			PROJECT EN	PROJECT ENGINEER: Kimber Osiowy					/ Page 1				

PRO	JECT:	Winnipeg North Transit Garage	CLIENT: City of Winnipeg						-	TESTHOLE NO: BH24-05				
		: 627947.2, 5532410							-	PROJECT NO.: 60721079				
			METHOD: Solid Ste							ELEVATION (m): 238.19				
DEPTH (m)		(PE GRAB SHELBY TUBE			SAMPLE TYPE	SAMPLE #	& Vapour Read (ppm)					ELEVATION (m)		
- 0 		CLAY and SILT - some sand, brown, moist, firm, medium plasti -black and soft below 2 m	icity, fine to coarse sand (fill).		01 02 03 04 05	1	0 1	20 	1000	Sample BH24-05-02 submitted for analysis of metals. Sample BH24-05-05 submitted for analysis of dioxins and furans, and	238		
		CLAY - brown, moist, firm, medium plasticity. -some sand and soft, fine to coarse sand below 4 m				06					Sample BH24-05-07 submitted for analysis of metals.	235 - - - - - - - - - - - - - - - - - - -		
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BOREHOLE LOGS.GPJ UMA.GDT 24-3-15 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		END OF BOREHOLE @ 6.1 BELOW GROUND SURFACE IN Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material and bentonite up				08						233		
	1	AECOM	R	LOGGED BY: Jonathan Ota REVIEWED BY: Jen Murray PROJECT ENGINEER: Kimber Osiowy				COMPLETION DEPTH: 6.10 m COMPLETION DATE: 24-2-12 wy Page 1 of 1						

CONTRACTOR. Peddock Jolling Ld. METHOD: Solid Stem Auger ELEVATION (m): SAMPLE TYPE Gross Image: Solid Stem Auger Down RECOVERY Image: Contract Stem Auger Image: Solid Stem Auger SOLID ESCRIPTION Image: Solid Stem Auger Down RECOVERY Image: Contract Stem Auger Image: Solid Stem Auger Solid Stem Auger Solid Stem Auger Down RECOVERY Image: Contract Stem Auger Image: Solid Contract Stem Auger Solid Stem Auger Solid Stem Auger Contract Stem Auger Contract Stem Auger Image: Solid Stem Auger Solid Stem Auger Solid Stem Auger Contract Stem Auger Contract Stem Auger Image: Solid Stem Auger Solid Stem Auger Solid Stem Auger Contract Stem Auger Solid			Winnipeg North Transit Garage	CLIENT: City of Winnipeg						_	TESTHOLE NO: BH24-06					
SAMPLE TYPE GRAB SPILT SPOON BULK NO RECOVERY CORE Image: Solid DESCRIPTION Image: Solid DE					Stom Augor					-	PROJECT NO.: 60721079					
0 Uppen) 10 100 1						ILK				_						
0 SILT and CLAY - some gravel, brown, moist, stiff, medium plasticity, fine grained gravel. 01 01 1 CLAY and SILT - trace gravels, dark brown, some orange, moist, firm, non-plastic, fine grained gravel, debris (metals) to 1.5 m. 02 03 1 CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. 04 03 2 CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. 04 04 2 CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. 04 04 2 CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. 04 04 3 CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine grained gravel. 06 Sample BH24-06-05 submitted for analysis of metals. 3 CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine grained gravel. 06 Sample BH24-06-05 submitted for analysis of metals. 4 07 07 07 07	DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPT	TION		SAMPLE TYPE	(ppm)			n) ⁻		COMMENTS	DEPTH (m)			
gravel, debris (metals) to 1.5 m. 1 1 03 Sample BH24-06-03 submitted for analysis of dioxins and furans, metals, SAR, EC, pH. 2 CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. 04 3 CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine grained gravel. 05 4 06 Sample BH24-06-05 submitted for analysis of metals. 3 CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine grained gravel. 06 4 07 Sample BH24-06-06 submitted for analysis of metals.	- 0		SILT and CLAY - some gravel, brown, moist, stiff, medium plas	sticity, fine grained gra	vel.		01									
CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to coarse sand. CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine grained gravel. CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine of the submitted for analysis of metals. CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine of the submitted for analysis of metals. CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine of the submitted for analysis of metals. CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine of the submitted for analysis of metals. A - A	- - - - -		CLAY and SILT - trace gravels, dark brown, some orange, moi- gravel, debris (metals) to 1.5 m.	st, firm, non-plastic, fir	e grained		02									
-2 04 Interast, SAN, EC, ph. 2- -3 CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine grained gravel. 05 Sample BH24-06-05 submitted for analysis of metals. 3- -4 06 Sample BH24-06-06 submitted for analysis of metals. 4- 07 07 07 07			CLAY - trace of sand, brown, moist, stiff, high plasticity, fine to	coarse sand.			03	·····				submitted for analysis of dioxins and furans,				
CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine grained gravel. CLAY and SAND - trace gravels, light brown, moist, soft, medium plasticity, fine to coarse sand, fine of the submitted for analysis of metals. Sample BH24-06-06 submitted for analysis of metals. 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	- - 2 -						04					metais, σΑκ, ευ, ρΗ.	2-			
CLAY and SAND - trace gravels, light brown, moist, sort, medium plasticity, tine to coarse sand, tine grained gravel. 06 Sample BH24-06-06 submitted for analysis of metals. 07 07							05		· · · · · · · · · · · · · · · · · · ·			submitted for analysis of				
07	-3		CLAY and SAND - trace gravels, light brown, moist, soft, media grained gravel.	um plasticity, fine to co	varse sand, fine		06					submitted for analysis of				
3 08 08 08 6 6 END OF BOREHOLE @ 6.1 M BELOW GROUND SURFACE IN CLAY and SAND. Notes: 1. Soil description is primarily based on visual observation. 6 6 7 7 2. Borehole backfilled with excavated material and bentonite upon completion. 7 7 8 LOGGED BY: Jonathan Ota COMPLETION DEPTH: 6.10 m 7 REVIEWED BY: Jon Murray COMPLETION DATE: 24-212 PRO 16 CLINER: Kimber Osinaw Page 1 of 1							07									
B END OF BOREHOLE @ 6.1 M BELOW GROUND SURFACE IN CLAY and SAND. Notes: 1. Soil description is primarily based on visual observation. 0 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material and bentonite upon completion. 7 7 7 7 7 8 LOGGED BY: Jonathan Ota COMPLETION DEPTH: 6.10 m REVIEWED BY: Jen Murray COMPLETION DATE: 24-2-12 PRO JECT ENGINEER: Kimber Osinwy Page 1 of 1	0065.6PJ UMA.GUI 24						08									
8 LOGGED BY: Jonathan Ota COMPLETION DEPTH: 6.10 m REVIEWED BY: Jen Murray COMPLETION DATE: 24-2-12 PRO JECT ENGINEER: Kimber Osioway Page 1 of 1	60/210/9 BOKEHULE	Y JY JY JY	Notes: 1. Soil description is primarily based on visual observation.													
AECOM LOGGED BY: Jonathan Ota COMPLETION DEPTH: 6.10 m REVIEWED BY: Jen Murray COMPLETION DATE: 24-2-12 PRO JECT ENGINEER: Kimber Osiowa Page 1 of 1																
REVIEWED BY: Jen Murray COMPLETION DATE: 24-2-12																
	NVIK		A=COM						. Osiow		OMPL		1 of 1			
PRO	JECT:	Winnipeg North Transit Garage	CLIENT: City of W	nnipeg					Т	ESTH	OLE NO: BH24-07					
---	-------------	---	---------------------------	---------------	-------------	----------	----------	------	-----	-------	---	---------------				
		: 627923.2, 5532491							_		CT NO.: 60721079					
			METHOD: Solid St								TION (m): 237.12					
SAM	PLE T	PE GRAB SHELBY TUBE	SPLIT SPOOI					Z	NOR	ECOVE		1				
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPT	ION		SAMPLE TYPE	SAMPLE #	⊗		om)	3⊗	COMMENTS	ELEVATION (m)				
- 0	NN	SILT and GRAVEL - light brown, moist, firm, medium plasticity,	fine to coarse grained g	ravel (fill).		01						237 -				
- - - - - - - - - - - - - - - - - - -		SAND and GRAVEL - some silt, some day, brown, moist, com coarse grained gravel.	pact, fine to coarse sand	, fine to		02					Sample BH24-07-02 submitted for analysis of metals.	236 -				
F						03		•				200				
-		CLAY and SILT - black, moist, firm, medium plasticity.														
Ē						04		•			Sample BH24-07-04 submitted for analysis of					
2 		SAND - some silt, light brown, moist, compact, fine.									dioxins and furans, and metals.	235 -				
- - - - -						05										
3 		CLAY - some silt, trace of sand, brown, moist, stiff, high plastic	ity.									234 -				
- - - - - - - - - 4						06					Sample BH24-07-06 submitted for analysis of metals.					
GL-C		- some sand, fine to coarse below 4.5 m				07						233 -				
						08						232 -				
												231 -				
		END OF BOREHOLE @ 6.1 M BELOW GROUND SURFACE	IN CLAY					•								
		Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material and bentonite up 3. DUP-03 is associated with BH24-07-04	oon completion.													
												230 -				
8 - 8				OGGED BY: J	lona	than	: Ota	:			ETION DEPTH: 6.10 m					
NON		AECOM	F	REVIEWED BY:	: Je	n Mu	ray		(ETION DATE: 24-2-12					
Z]	PROJECT ENG	INE	ER: I	Kimber	Osio	мγ	_	Page	e 1 of 1				

PRO	JECT:	Winnipeg North Transit Garage	CLIENT: City of	Winnipeg					1	TESTH	OLE NO: BH24-08	
									_		CT NO.: 60721079	
			METHOD: Solid							ELEVA ⁻ RECOVEI	TION (m): 236.61 RY	
DEPTH (m)	 SAND and GRAVEL - some silt, moist, compact, brown, fine t gravel. CLAY - trace of sand, trace gravels, brown, moist, firm, mediu - some silt, light brown below 2 m. - black, organic odour below 2.3 m. - grey below 2.6 m. SILT - some sand, light brown, wet, soft, medium plasticity, fir CLAY - some silt, brown, moist, firm, high plasticity. CLAY - some silt, brown, moist, firm, high plasticity. 				SAMPLE TYPE	SAMPLE #		Vapour I (pp	Readin m)	g⊗	COMMENTS	ELEVATION (m)
- 0 - - - - - - - - - - - - - 1 -		SILT and CLAY - some gravel, brown, moist, stiff, medium plast SAND and GRAVEL - some silt, moist, compact, brown, fine to gravel.				01	1	<u>0 10</u>		1000		236 -
- - - - - - - - - - - - - - - - - -		CLAY - trace of sand, trace gravels, brown, moist, firm, medium - some silt, light brown below 2 m.	plasticity.			03					Sample BH24-08-03 submitted for analysis of dioxins and furans, and metals.	235 -
- - - - - - - 3 - -			to coarse sand.			05					Sample BH24-08-05 submitted for analysis of metals.	234 -
- - - - - - - - - - - - - - - - - - -		CLAY - some silt, brown, moist, firm, high plasticity.				06					Sample BH24-08-06 submitted for analysis of metals.	233 -
.GDT 24-3-15						07						232 -
HOLE LOGS.GPJ UMA		END OF BOREHOLE @ 6.1 M BELOW GROUND SURFACE I	N CLAY			08						231 -
			pon completion.									230 - 229 -
8 NMEN				LOGGED BY:							ETION DEPTH: 6.10 m	
IVIRC		AECOM		REVIEWED BY PROJECT ENG				Onion		COMPL	ETION DATE: 24-2-12	1 of 1
ـــــ ات				LI NOJECT ENG	NINC	∟n, I	vinnel	09100	vy		гауе	

			CLIENT: City of Winnipeg					_	DLE NO: BH24-09	
		I: 628305.5, 5532295						-	CT NO.: 60721079 FION (m): 236.88	
SAMP			IETHOD: Solid Stem Auger	BULK					()	
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTI		SAMPLE TYPE	SAMPLE #	⊗\ 10	/apour Re (ppm	eading⊗ 1)	COMMENTS	ELEVATION (m)
- 0 		SILT and CLAY - some gravel, dark brown, moist, stiff, medium p SILT - some day, trace gravels, dark brown, moist, stiff, medium			01 02 03 04 05				Sample BH24-09-02 submitted for analysis of metals. Sample BH24-09-04 submitted for analysis of dioxins and furans, and metals.	236
- - - - - - - - - - - - - - - - - - -		CLAY - some silt, brown, moist, firm, medium plasticity.			06 07				Sample BH24-09-06 submitted for analysis of metals.	233
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BOREHOLE LOGS.GPJ UMA.GDT 24-3-15 α 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		END OF BOREHOLE @ 6.1 M BELOW GROUND SURFACE IN Notes: 1. Soil description is primarily based on visual observation. 2. Borehole backfilled with excavated material and bentonite upo 3. DUP-04 is associated with BH24-09-04.	n completion.		08					231
ENVIRONM	_	AECOM	LOGGED BY REVIEWED PROJECT E	BY: Je	en Mu	rray	Osiow	CON	ETION DEPTH: 6.10 m ETION DATE: 24-2-12 Page	1 of 1

PRO	JECT:	Winr	ipeg North Transit Garage		CLIENT: City of	Winnipeg					OLE NO: MW24-01	
			8180, 5532558								CT NO.: 60721079	
SAMF			Paddock Drilling Ltd.		METHOD: Solid		II K			ELEVA IO RECOVE	TION (m): 236.35 RY CORE	
BACK			BENTONITE	GRAVEL						UTTINGS		
DEPTH (m)	WELL		S	SOIL DESCRI	PTION		SAMPLE TYPE	SAMPLE #	& Vapour Re (ppm	eading⊗))	COMMENTS	ELEVATION (m)
- 0 - - - - - - - - - - 1			SAND and GRAVEL - some sill grained gravel. - black, hydrocarbon odour belo - grey, loose below 1 m.		, fine to coarse sand, f	ine to coarse		01 02			Sample MW24-01-01 submitted for analysis of BTEX F1-F4, VOCs, PAHs	236
			SILT - some clay, black, moist,	soft, medium plasticity,	hydrocarbon odour.			03 04		8	Sample MW24-01-03 submitted for analysis of BTEX F1-F4, VOCs, PAHs	235
- - - - - - - - - - - - - - - - - - -			CLAY - brown, moist, soft, med	ium plasticity.			-	05				234
- - - - - - - - - - - - - - - - - - -								06				233
3DT 24-3-15								07			Sample MW24-01-07 submitted for analysis of BTEX F1-F4, VOCs, PAHs	232
HOLE LOGS.GPJ UMA.			END OF MONITORING WELL	@ 6.1 M BELOW GROU	JND SURFACE IN CL	٩Y		08	****			231 —
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BOREHOLE LOGS.GPJ UMA.GDT 24-3-15			Notes: 1. Soil description is primarily b 2. Monitoring well backfilled wit 3. Groundwater measured at 2.	h backfilled drill cuttings	, sand, and bentonite u	ipon completion. 024.						230
												-
8 NWEN	1					LOGGED BY:					ETION DEPTH: 6.10 m	
MIRC			AECOM			REVIEWED BY					ETION DATE: 24-2-13	4
<u>б</u>						PROJECT ENG	INE	ER: F	kimber Osiowy	y	Page	1 of 1

			ipeg North Transit Garage	Э	CLIENT: City of	Winnipeg				-	OLE NO: MW24-02	
			206.9, 5532556			<u></u>					CT NO.: 60721079	
SAMF			Paddock Drilling Ltd.		METHOD: Solid		II K			O RECOVE	TION (m): 236.35 RY CORE	
BACK			BENTONITE	GRAVEL				т				
DACT			BENTONITE			[•. 6]				0111103		
DEPTH (m)	WELL	SOIL SYMBOL		SOIL DESCRI	PTION		SAMPLE TYPE	SAMPLE #	& Vapour Re (ppm 10 100)	COMMENTS	ELEVATION (m)
- 0			CONCRETE					01				-
-			SAND and GRAVEL - some si to coarse grained gravel.	lt, some clay, dark brown	, moist, loose, fine to c	coarse sand, fine		02				236
1 - - - -		• • • • • •	- some clay, compact below 1 SILT - some clay, trace of same					03	 (€) () () () () () () () (Sample MW24-02-03 submitted for analysis of BTEX F1-F4, VOCs,	235 -
- - - 2			SILT - Some day, trace of sam	a, drown, moist, nnn, me	ulum prasucity.			04			PAHs Sample MW24-02-04 submitted for analysis of BTEX F1-F4, VOCs, PAHs	
								05				234
-3			CLAY - some silt, brown, mois	t, firm, high plasticity.				06 Q			Sample MW24-02-06 submitted for analysis of BTEX F1-F4, VOCs, PAHs	233
4								07				232
LOGS.GPJ UMA.GDT 2								08				231 -
60721079 BOREHOLE			END OF MONITORING WELL Notes: 1. Soil description is primarily 2. Monitoring well backfilled wi 3. DUP-08 is associated with N 4. Groundwater measured at 3	based on visual observat ith backfilled drill cuttings vW24-02-02.	ion. , sand, and bentonite u	pon completion.						230
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BORFHOLE LOGS.GPJ UMA.GDT 24-3-15 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				Noo motoro bolow ground	, sanace on march 9, 2				·····			229
NMEN NMEN	1	1		_		LOGGED BY:	Jona	athan	<u>ota</u>	COMPL	ETION DEPTH: 6.10 m	
VIRO			AECOM			REVIEWED BY	/: Je	en Mu	irray	COMPL	ETION DATE: 24-2-13	
л Ш						PROJECT ENC	GINE	ER:	Kimber Osiowy	/	Page	1 of 1

PRO	JECT:	Winr	nipeg North Transit Garage)	CLIENT: City of	Winnipeg				-		OLE NO: MW24-03	
	0 SILT and GRAVEL - light brown, moist, soft, fine to coarse grained gravel (fil). 01 -1 SAND and SILT - dark brown, moist, compact, fine to coarse sand. 03 -1 SILT - some sand, light brown, wet, soft, medium plasticity, fine to coarse sand. 04 -2 SILT - some sand, light brown, wet, soft, medium plasticity, fine to coarse sand. 04 -3 CLAY - brown, moist, high plasticity. 06 -4 SILT - brown, moist, high plasticity. 06 -6 END OF MONITORING WELL @ 6.1 M BELOW GROUND SURFACE IN CLAY 08 -7 Notes: 1. Soil description is primarily based on visual observation.			-		CT NO.: 60721079							
												TION (m): 236.35	
								-			RECOVE		
BACK			BENTONITE	[_]GRAVEL	IIIISLOUGH	. ⊾ GI				JCUI	TINGS	SAND	1
DEPTH (m)	WELL	SOIL SYMBOL	S	SOIL DESCRI	PTION		SAMPLE TYPE	SAMPLE #		r Readii opm) 100	ng⊗ 1000	COMMENTS	ELEVATION (m)
- 0 - - - -										8		Sample MW24-03-02 submitted for analysis of BTEX F1-F4, VOCs, PAHs, metals	236
- - 1 - -		00000000000000000000000000000000000000	SAND and SILT - dark brown,	moist, compact, fine to c	oarse sand.			03	*			Sample MW24-03-03	
- - - - - - - - - 2			SILT - some sand, light brown,	wet, soft, medium plasti	icity, fine to coarse san	d.		04	8			submitted for analysis of BTEX F1-F4, VOCs, PAHs, metals Sample MW24-03-04 submitted for analysis of BTEX F1-F4, VOCs,	
								05	····· 🛞 ···			PAHs, metals	234
			CLAY - brown, moist, high plas	ticity.				06					233
4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1								07	····· 🛞···				232
LOGS.GPJ UMA.GDT 2								08	····· ⊗···				231
60721079 BOREHOLE			Notes: 1. Soil description is primarily b 2. Monitoring well backfilled wi 3. DUP-08 is associated with N	based on visual observat th backfilled drill cuttings IW24-03-02.	ion. s, sand, and bentonite t	upon completion.							230
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BOREHOLE LOGS.GPJ UMA.GDT 24-3-15				j and									229
UNME NME				r		LOGGED BY:						LETION DEPTH: 6.10 m	
IVIRC			AECOM			REVIEWED BY					COMPI	LETION DATE: 24-2-13	1 -5 1
<u> </u>						PROJECT ENC	HNE	EK: I	<pre>\imper Usio</pre>	wy		Page	1 of 1

			ipeg North Transit Garage	9	CLIENT: City of \	Vinnipeg							OLE NO: MW24-04	
			256.5, 5532266			Otana A							CT NO.: 60721079	
SAMP			Paddock Drilling Ltd.		METHOD: Solid		JLK				_	ECOVE	TION (m): 237.82 RY CORE	
BACK			BENTONITE	GRAVEL		GF		Г				INGS	SAND	
DEPTH (m)	WELL	SOIL SYMBOL		SOIL DESCRI	PTION		SAMPLE TYPE	SAMPLE #	⊗		om)	g⊗ 1000	COMMENTS	ELEVATION (m)
- 0			SILT - some gravel, trace day, wood, doth, glass). CLAY - some silt, trace gravel, to 2 m. SILT - some sand, black, mois odour.	brown, moist, firm, medit	um plasticity, debris (w	ood material)	-	01 02 03 04		· · · · · · · · · · · · · · · · · · ·			Sample MW24-04-02 submitted for analysis of metals.	237
- - - - - - - - - - - - - - - - - -			CLAY - trace of silt, brown, mo	ist, firm, medium plastici	ty.		-	05					Sample MW24-04-05 submitted for analysis of dioxins and furans, and metals.	235
								06					Sample MW24-04-06 submitted for analysis of metals.	234
REHOLE LOGS GPJ UMA GDT			END OF MONITORING WELL	@ 6.1 M BELOW GROU	JND SURFACE IN CL/	Ąγ	-	08						232
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BOREHOLE LOGS.GPJ UMA.GDT 24-3-15 α 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Notes: 1. Soil description is primarily I 2. Monitoring well backfilled wi 3. Groundwater measured at 2	th backfilled drill cuttings	, sand, and bentonite u	pon completion, 024.								231
	1	<u> </u>		ľ									ETION DEPTH: 6.10 m	1
ENVIF			AECOM			REVIEWED BY				Osio		JOIVIPL	ETION DATE: 24-2-12 Page	1 of 1

		innipeg North Transit G	arage	CLIENT: City of Wir	nipeg						THOLE NO: MW24-05	
		27992.6, 5532503			•					-	JECT NO.: 60721079	
	PLE TYPE	R: Paddock Drilling Ltd	I. SHELBY TUBE	METHOD: Solid Ste		II K					/ATION (m): 238.78	
	KFILL TYF				GF		-			UTTINGS		
DEPTH (m)	WELL INSTALLATION SOIL SYMBOL		SOIL DESCRI			SAMPLE TYPE	SAMPLE #	⊗	Vapour Re (ppm) 0 100		COMMENTS	ELEVATION (m)
		grained gravel.	gravel, dark brown, moist, stiff, n, moist, firm, medium plasticity gravel, brown and orange, moi glass) to 3 m.				01 02 03 04 05				Sample MW24-05-03 submitted for analysis of metals. Sample MW24-05-05 submitted for analysis of	237
		CLAY - trace of silt, brow	wn, moist, stiff, high plasticity.				06 07				Sample MW24-05-06 submitted for analysis of metals, SAR, EC, pH.	236
ы UMA.GDT 24:3-15 Тттттттт А		Notes: 1. Soil description is prir 2. Monitoring well backf 3. DUP-10 associated w		ion. , sand, and bentonite upor	n completion.	_	08					233 -
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BOREHOLE LOGS.GPJ UMA.GDT 24-3-15		4. Groundwater measur	ed on March 5, 2024 and well v	vas dry.								231-
ENVIRONMENTAL (VA		AECO	M	R	DGGED BY: . EVIEWED BY ROJECT ENG	: Je	n Mu	ray	Osiowy	COM	PLETION DEPTH: 6.10 m PLETION DATE: 24-2-12 Pag	229 -

			nipeg North Transit Garag	e	CLIENT: City of V	Vinnipeg					_		OLE NO: MW24-06	
			<u>2937.1, 5532383</u>			<u> </u>					-		CT NO.: 60721079	
SAMF			Paddock Drilling Ltd.	SHELBY TUBE	METHOD: Solid S		IIК				_		TION (m): 239.04	
BACK				GRAVEL		GF		Г					SAND	
DEPTH (m)	WELL			SOIL DESCRI			SAMPLE TYPE	SAMPLE #		Vapour R (ppn 0 100	n)	⊗	COMMENTS	ELEVATION (m)
E 0			SILT - some clay, some sand,	trace gravels, light brown	n, moist, stiff, fine to coa	arse sand.		01			:			
- - - - - - - 1 -			SAND and SILT - light brown,	moist, loose, fine sand.				02						238 -
		00000						03 04					Sample MW24-06-03 submitted for analysis of dioxins and furans, metals, SAR, EC, pH.	
-2		0 40 4	SILT - some clay, some sand,	trace gravels, dark brow	n, moist, stiff, low plasti	city, fine sand.		05					Sample MW24-06-05	237 -
- - 3 -			CLAY - some silt, dark brown,	moist, stiff, medium plas	ticity.		-						submitted for analysis of metals.	236 -
- - - - - - - - - - - - - - - - - - -								06					Sample MW24-06-06 submitted for analysis of metals.	235
- - - 5 - - -			CLAY and SAND - light brown sand.	ı, light brown, wet, firm, n	nedium plasticity, fine to	coarse grained		07 08						234
A.GDT 24-3-15			END OF MONITORING WELI Notes: 1. Soil description is primarily	based on visual observat	ion.		-							233 -
			 Monitoring well backfilled w completion. Groundwater measured at \$ 	-										232
ENVIRONMENTAL (VAPOUR ONLY) 60721079 BOREHOLE LOGS.GPJ UMA.GDT 24-3-15														231
NMENTAL (VAP						LOGGED BY:	Jona	athan	Ota			OMPL	ETION DEPTH: 6.10 m	
ENVIRO			AECON			REVIEWED BY PROJECT ENG	′∶Je	n Mu	rray	r Osiow	С		ETION DATE: 24-2-12	1 of 1

Appendix B Historical Borehole Logs



 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold



Indicates sample submitted for analysis
 Indicates sample submitted for analysis on hold





Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca

Page	_1	of _	
i ugo	·	· _	

BH23-04

1

			ning:	5532		_ Eastii	<u> </u>		62820	12	
	City of Winnipeg	-			age Repla	acement -	Pha	se II E	ESA		
-	t No.: 23-5866-2002			<u>PEC 4</u>	Nine - t D	- l-					
	Co.: Maple Leaf Drilling		ng Meth		Direct Pus		•	-4 '	000	<u></u>	44
Superv	vised by: <u>SNG</u>	-	Starte	d: <u>202</u>	3-09-11	Date C	ompl			23-09	-11
Depth) gy	Depth				-	1	mple ≘	-	Dep
Scale (m)	Stratigraphic Description	Lithology	(m)			truction	Method	Number	Combustible Gases (ppm)	Rec %	Sca (m)
-	GRAVEL FILL - Grey, grass, sandy gravel, dry				Backfill to with bent 2" PVC ri bentonite from surf	onite. iser with			5	100	-
1.0	SANDY GRAVEL - Black, some silt, dry, non-cohesive		0.75		2" PVC ri silica sar 0.5 to 1.5	ndpack from			20	100	- 1.0 -
2.0-	SILT / CLAY - Grey, moist, soft to medium		2.3				\bigcirc				-2.0
- - 3.0-	stiff, medium plasticity					screen with		*	10	100	- - 3.0
-	CLAY - Brown, white silty pockets, moist, medium stiff, high plasticity		3		1.5 to 4.5				25	100	-
4.0	CLAY - Brown, moist, soft, high plasticity		3.8						20	100	4.C -
5.0-									10	100	- 5.0
-	CLAY - Brown, white silt pockets, orange streaks, moist, soft, high plasticity		5.3					*	15	100	
6.0	End of borehole at 6.0 mbgs.		6								└-6.0
	-										

mbgs - meters below ground surface Combustible gases (ppm) - parts per millon

* Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold

	LLON Phone: (204) 453-2301 ISULTING www.dillon.ca	N I a utili		 0500	F aatin		~		123-0	55
lianti	City of Winning	North		32538	Eastin	-		62819	2	
	<u>City of Winnipeg</u> t No.: 23-5866-2002		tion: A	rage Repla	cement -	Phas	se ii c	<u>-</u> 5A		
-	g Co.: Maple Leaf Drilling			Direct Pusl	h					
	/ised by: SNG		-	23-09-11	Date Co	ampl	eted:	202	3-09	-11
-				 				nple		
Depth Scale (m)	Stratigraphic Description	Lithology	Depth (m)	Well Constr	uction	Method	Number	Combustible Gases (ppm)	Rec %	De Sc (r
-	GRAVEL FILL - grass			Backfill to with bento 2" PVC ris bentonite l from surfa mbgs.	nite. er with backfill			0	25	-
- 1.0— -	SANDY GRAVEL - Black, dry, non-cohesive		0.75	2" PVC ris silica sanc	pack from			20	100	- 1
- - 2.0	SILT / CLAY - Grey, wet, soft		1.5					0	100	- 2
- - 3.0-				2" PVC sc	reen with lpack from			0	100	-3
-	CLAY - Brown, silt pockets, wet, medium stiff, high plasticity		3	1.5 to 4.5				15	100	-
4.0							*	25	100	-4
- 5.0—								5	100	- 5
-	CLAY - Brown, silt till pockets, orange streaks, moist, medium stiff, high plasticity		5.3					10	100	
6.0-	End of borehole at 6.0 mbgs.	<u> </u>	6							L_6

CON	SULTING	www.dillon.ca	North	ning:	553	<u>32548</u> Easti	ng:	6	52818	4	
Client:	City of Win	nipeg	-			rage Replacement	- Pha	se II E	ESA		
-	t No.: <u>23-58</u>			ition: <u>A</u>							
		e Leaf Drilling		ng Meth		Direct Push		- 41-			4.4
•	vised by: <u>Sl</u>	NG		Starte	d: <u>20</u> 2	23-09-11 Date C	ompi			:3-09-	-11
Depth Scale (m)		Stratigraphic Description	Lithology	Depth (m)		Well Construction	Method	Number	Combustible Gases (ppm)	Rec %	Dej Sca (n
_	GRAVEL F	FILL - grass				Backfill to surface with bentonite. 2" PVC riser with bentonite backfill from surface to 0.5 mbgs.			5	100	_
- 1.0— -	SANDY G concrete d	RAVEL - Dark grey, some ebris, dry		0.75		2" PVC riser with silica sandpack from 0.5 to 1.5 mbgs.			5	100	- 1.' -
- 2.0—							\bigcirc				- 2.
-	SANDY G	RAVEL - Dark grey, dry		2.3		2" PVC screen with			45	25	-
3.0		AY - Black, some gravel, wet, soft, asticity, strong odour		3		silica sandpack from			190	100	3. -
- 4.0—	CLAY - Bro stiff, high p	own, silt pockets, moist, medium plasticity		3.8				*	0	100	- 4. -
- - 5.0-	CLAY - Bro	own, moist, soft, high plasticity		4.5		1			5	100	5.
-									0	100	-

 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold



CON	SULTING www.dillon.ca	North	ning:	5532518	Easti	ng: _	6	62818	2	
lient:	City of Winnipeg	Proje	ect: <u>Nor</u>	th Garage Repla	cement -	Phas	se II E	ESA		
-	t No.: <u>23-5866-2002</u>	-		ortheast of APEC						
	Co.: Maple Leaf Drilling	-		od: Solid Stem						
uperv	ised by: <u>SNG</u>	Date	Started	: 2023-09-12	Date C	omple		-	23-09	-12
epth cale (m)	Stratigraphic Description	Lithology	Depth (m)	Well Constr	ruction	Method	Number	Combustible Gases (ppm)	Rec %	Dep Sca (m
	GRASS - Green, organics	$\frac{\sqrt{1}}{2} \frac{\sqrt{1}}{2} \frac{\sqrt{1}}{2}$								
_	SANDY GRAVEL - Grey, some white silty pockets, some clay, trace organics, dry		0.05	Bentonite the surfac mbgs Silica san 0.3 to 1.0	e to 0.3 dpack from		*	5	100	-
- 1.0-				Vapour pr	obe					
-				Bentonite from 1.0 to	backfill o 1.5 mbgs			ND	100	

DI	LLON	Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301						Page BH	<u>1</u> 123-0	
	ISULTING	www.dillon.ca	North	ning:	553	2512 East	ing:	62813	51	
Client:	: City of Wini	nipea			rth Gar	age Replacement	•	I ESA		
	t No.: 23-58					st of APEC 1				
-		e Leaf Drilling	_ Drillir	ng Meth	nod: S	Solid Stem Auger				
	vised by: S		Date	Starte	d: <u>202</u>	<u>3-09-12</u> Date (Completed	d: <u>202</u>	23-09	-12
Depth			λ6	– (1				ample		Dept
Scale (m)		Stratigraphic Description	Lithology	Depth (m)		Well Construction	Method	Combustible Gases (ppm)	Rec %	Scale (m)
		Green, organics		0.05		Flushmount Casing				
-	SILTY GR	AVEL - Grey, some clay, dry						ND	100	-
1.0-	SILT / CLA white strea	AY - Grey, trace gravel, some aks, dry		0.75		2" PVC riser with bentonite backfill from surface to 2.3 mbgs.		5	100	
2.0-	with orang	ack, some gravel, white streaks e pockets, dry, hard, high trace glass pieces		1.5	∇			25	100	- 2.0
-	SILT / CLA	λΥ - Light brown, moist, soft		2.3		2" PVC riser with silica sandpack fron 2.3 to 3.0 mbgs.		15	100	-
3.0-	CLAY - Gr plasticity	ey, moist, medium stiff, high		3				5	100	
4.0-	-					2" PVC screen with silica sandpack fron		5	100	- 4.0 -
- - 5.0-	CLAY - Gr moist, soft	ey, white and orange pockets,		4.5		3.0 to 6.0 mbgs.		10	100	- 5.0
5.0-	-							5	100	
6.0-	End of bor	ehole at 6 mbgs.		6						└-6.0
 ∑_ Water 1	found	LITHOLOGY SYMBOLS			₫ <u>₽₩</u> s	ilty Gravel	SAMPLE TYPE	Au	ıger	



Indicates sample submitted for analysis
 Indicates sample submitted for analysis on hold



^{*} Indicates sample submitted for analysis ** Indicates sample submitted for analysis on hold







	LLON	Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301						F		1 123-	of _1 15
CON	ISULTING	www.dillon.ca	North	ning:	55324	<u>10</u> East	ing:	6	62788	4	
	City of Win					e Replacement	- Pha	se II E	ESA		
-	t No.: <u>23-58</u>					e of APEC 1					
		e Leaf Drilling		-	noa: <u>Soi</u> d: 2023-(id Stem Auger 09-12 Date 0	`omol	otodi	201	2 00	10
	vised by: <u>S</u>	NG	_	Starte	u: <u>2023-</u>				<u></u> mple	23-09	
Depth Scale (m)		Stratigraphic Description	Lithology	Depth (m)		Well Construction	Method	Number	Combustible Gases (ppm)	Rec %	Dep ⁻ Scal (m)
		Green, organics		0.05		Backfill to surface vith bentonite.	Ь				
-	GRAVEL organics,	FILL - Grey, some sand and dry, loose				"PVC riser with bentonite backfill rom surface to 0.5 nbgs.			ND	100	-
- 1.0— -	CLAY - Gi plasticity	ey, some sand, hard, high		0.75		2" PVC riser with ilica sandpack from).5 to 1.5 mbgs.			15	100	-
- - 2.0-	medium s			1.5				*	30	100	- 2.0
-	plasticity	rey, some silt, moist, stiff, high	_						15	100	-
3.0-		ark grey, some white pockets and reaks, moist, soft		2.1		2" PVC screen with ilica sandpack from I.5 to 4.5 mbgs.		-	15	100	-3.0
- 4.0—								_	15	100	- 4.0 -
- - 5.0-								-	10	100	- 5.0
-		ey, wet, hard, high plasticity		5.3				*	30	100	-
6.0-		rown, wet, loose		5.8							$L_{6.0}$
0.0	End of bo	rehole at 6 mbgs.		6							0.0

* Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold

	LLON	Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca							B⊦	123-	16
CON	ISULTING	www.dilion.ca	Nor	thing:	5	532445 Eas	ting:	6	62795	3	
Client:	City of Win	nipeg	-			Barage Replacement	t - Pha	se II E	ESA		
-	t No.: <u>23-58</u>					west of APEC 1					
		e Leaf Drilling				Solid Stem Auger		. .		2 00	40
	/ised by: <u>S</u>	NG	-	e Starte	a: _∠	2023-09-12 Date	Comple		_ <u></u> mple	23-09	
Depth Scale (m)		Stratigraphic Description	Lithology	Depth (m)		Well Construction	Method	Number	Combustible Gases (ppm)	Rec %	Dej Sca (n
-	GRAVEL I dry, loose	FILL - Grey, some sand, trace silt,							ND	100	-
- 1.0— -	SILT / CLA stiff, mediu	AY - Brown, some sand, medium um plasticity		0.75					30	100	- 1.(
- - 2.0-		AY - Brown, some orange pockets, , medium plasticity, some black		1.5	<u> </u>			*	25	100	- 2.
- - 3.0-	CLAY - Br	own, trace gravel, moist, medium		3		Backfill to surface with bentonite			5	100	- 3.
- - 4.0	SILT / CLA plasticity	AY - Brown, moist, soft, medium		3.8					5	100	- 4. -
- - 5.0-	CLAY - Br	own, some silt, moist, soft		4.5					15	100	- 5.
-	CLAY - Br streaks, m	own, some silt, some black oist, soft		5.3					25	100	-
6.0-	End of bor	ehole at 6 mbgs.	<u>x//////</u>	6	1			1	J	I	└-6.

 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold



 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold



Client: City of Winnipeg Project: North Garage Replacement - Phase II ESA Project No.: 23-5866-2002 Double Leaf Drilling Drilling Co.: Maple Leaf Drilling Drilling Method: Solid Stem Auger Supervised by: SNG Description Scale (m) Stratigraphic Description Solid Stem Auger GRAVEL FILL - Brown CLAY - Grey, orange streaks, some sand, stiff 0.75 CLAY - Grey, some orange streaks, some glass and wire debris 1.5 33 SILT / CLAY - Dark grey, orange streaks, moist, soft, debris 2.3 V		LLON	1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca			_		_			B⊢	<u>1</u> 23-'								
Project No.: 23-5866-2002 Location: APEC 1 Drilling Co.: Maple Leaf Drilling Drilling Method: Solid Stem Auger Supervised by: SNG Date Started: 2023-09-12 Date Completed: 2 Depth Scale (m) Stratigraphic Description Depth (m) Well Construction Depth (m) GRAVEL FILL - Brown 0 0 0 0 Location: APEC 1 Drilling Method: Solid Stem Auger Date Completed: 2 CLAY - Grey, orange streaks, some sand, stiff 0.75 0 CLAY - Grey, some orange streaks, some glass and wire debris 1.5 0 SILT / CLAY - Dark grey, orange streaks, moist, soft, debris 2.3 V Backfill to surface 33											62802	9								
Drilling Co.: Maple Leaf Drilling Drilling Method: Solid Stem Auger Supervised by: SNG Date Started: 2023-09-12 Date Completed: 2 Depth Scale (m) Stratigraphic Description bo of the started: Depth (m) Well Construction Depth of the started: Sample Construction GRAVEL FILL - Brown 0 0 0 0 0 CLAY - Grey, orange streaks, some sand, stiff 0.75 0.75 0 0 CLAY - Grey, some orange streaks, some glass and wire debris 1.5 0 0 0 SILT / CLAY - Dark grey, orange streaks, moist, soft, debris 2.3 V Backfill to surface 33				-			age Repla	acement	- Pha	se II E	ESA									
Supervised by: SNG Date Started: 2023-09-12 Date Completed: 2 Depth (m) Stratigraphic Description Depth (m) Depth (m) Well Construction Depth (m) Well Construction Depth (m) 0 GRAVEL FILL - Brown Image: CLAY - Grey, orange streaks, some sand, stiff 0.75 Image: CLAY - Grey, some orange streaks, some glass and wire debris 0.75 Image: CLAY - Grey, some orange streaks, some glass and wire debris 1.5 Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Image: CLAY - Dark grey, orange streaks, some glass and wire debris Ima	-						Colid Stop	Augor												
Depth Scale (m) Stratigraphic Description Depth (m) Depth (m) Well Construction Sample (n) GRAVEL FILL - Brown 0 0 0 0 0 0 Loopting CLAY - Grey, orange streaks, some sand, stiff 0.75 0 0 0 Loopting CLAY - Grey, some orange streaks, some glass and wire debris 0.75 1.5 0 0 SILT / CLAY - Dark grey, orange streaks, some streaks, soft, debris 2.3 ¥ Backfill to surface 33	-				-	-			omnl	otod:	202	2-00								
Depth Scale (m) Stratigraphic Description Depth (m) Well Construction Depth (m) GRAVEL FILL - Brown 0 CLAY - Grey, orange streaks, some sand, stiff 0.75 CLAY - Grey, some orange streaks, some glass and wire debris 0.75 SILT / CLAY - Dark grey, orange streaks, moist, soft, debris 2.3 ✓	•		10	1		u. <u>202</u>	5-03-12	Date				.0-00								
GRAVEL FILL - Brown CLAY - Grey, orange streaks, some sand, tiff CLAY - Grey, some orange streaks, some glass and wire debris 2.0 SILT / CLAY - Dark grey, orange streaks, moist, soft, debris 2.0 Backfill to surface	Scale		Stratigraphic Description	Lithology				ruction	Method		Combustible Gases (ppm)	Rec %	De Sca (n							
1.0- stiff CLAY - Grey, some orange streaks, some glass and wire debris 2.0- SILT / CLAY - Dark grey, orange streaks, moist, soft, debris 2.0-	-	GRAVEL I	FILL - Brown								0	100	-							
2.0 - SILT / CLAY - Dark grey, orange streaks, moist, soft, debris 2.3 Backfill to surface Backfill to surface	- 1.0—		ey, orange streaks, some sand,		0.75							0	100	+ 1.						
SILT / CLAY - Dark grey, orange streaks, moist, soft, debris Backfill to surface	- - 2.0-	CLAY - Gr glass and	ey, some orange streaks, some wire debris		1.5						35	100	- - -2.							
3.0 CLAY - Dark grey, some sand, moist, stiff 3 Backfill to surface with bentonite	-	SILT / CLA moist, soft	AY - Dark grey, orange streaks, , debris		2.3	Ţ					35	100	-							
	3.0	CLAY - Da	irk grey, some sand, moist, stiff		3						20	100	3 -							
4.0- SILT / CLAY - Brown, some sand, wet, soft, medium plasticity 3.8	- 4.0—	- SILT / CLA - medium pl	AY - Brown, some sand, wet, soft, asticity		3.8													30	100	4 4
CLAY - Dark grey, some silt, wet, strong 4.5 PHC odour, black staining 4.5 5.0 *	- - 5.0-	CLAY - Da PHC odou	rk grey, some silt, wet, strong r, black staining		4.5						*	65	100	- 5.						
CLAY - Grey, wet, high plasticity, strong PHC odour, some black staining	-				5.3						40	100	+ -							
6.0 End of borehole at 6.0 mbgs.	6.0-	Find of bor	ehole at 6.0 mbas	X///////	6								L _{6.}							





Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca

Page	1	of	1

	City of Winnipeg	-			age Replac	ement-	Filas		<u>.5A</u>								
-	t No.: <u>23-5866-2002</u>		ition: <u>A</u>			A											
	Co.: Maple Leaf Drilling			_	Solid Stem						40						
Superv	rised by: <u>SNG</u>	Date	Starte	d: <u>202</u>	3-09-13	Date C				3-09-	.13						
Depth Scale (m)	Stratigraphic Description	Lithology	Depth (m)		Well Constru	ction	Method	Number	Combustible Gases (ppm)	Rec %	Dep Sca (m						
_	GRAVEL FILL - Brown, grass, some sand, dry, loose				Backfill to si with bentoni 2" PVC rise bentonite ba from surface mbgs.	ite. r with ackfill			0	100	_						
-	CLAY - Black, white streaks, some gravel, hard		0.75		2" PVC riser with silica sandpack from 0.5 to 1.5 mbgs.		. │		0.5 to 1.5 mbgs.		 silica sandpack from 0.5 to 1.5 mbgs. 				10	100	- 1.0 -
2.0-	CLAY - Dark grey, some organics, white silt pockets, damp, hard, some glass and wood debris		1.5												10	100	- 2.(
-	SILT / CLAY - Light brown, organics, black streaks, moist, soft		2.3						10	100	-						
3.0	SILT / CLAY - Light brown, some organics, moist, soft		3			2" PVC screen with silica sandpack from 1.5 to 4.5 mbgs.			20	100	-3.(- -						
4.0-	SILT / CLAY - Light brown, moist, soft		3.8						0	100	- 4.(-						
5.0-	CLAY - Brown, some beighe silt streaks, moist, medium stiff		4.5						20	100	- 5.(
-	CLAY - Brown, white silt pockets, moist, medium stiff		5.3					*	25	100	- - -						
6.0-	End of borehole at 6.0 mbgs.	_ <u>x///////</u>	6]]		└ <u>6.</u> 0						

	LLON	Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca		North	ning:		
Client:	Client: City of Winnipeg						
Projec	Project No.: <u>23-5866-2002</u>						
Drilling	Drilling Co.: Maple Leaf Drilling						
Superv	Supervised by: SNG						
Depth Scale (m)		Stratigraphic Description			Dep (m		
	SILT - Lig	ht beige, grass, some gravel, dry					
-							

CONSOLITING WWW.dilloll.ca			thing:	Ę	5532319	_ East	ing:	6	2807	8	
Client:	City of Winnipeg	Pro	ject: Noi	rth (Garage Rep	lacement	- Pha	ise II E	SA		
Project	No.: <u>23-5866-2002</u>		ation: <u>A</u>								
Drilling	Co.: Maple Leaf Drilling		-		Solid Ste						
Superv	ised by: <u>SNG</u>	Dat	e Starteo	d: <u>:</u>	2023-09-13	Date C	Comp			<u>23-09</u>	-13
Depth Scale (m)	Stratigraphic Description	Lithology	Depth (m)		Well Con	struction	Method	Sar Numper	Combustible <u>d</u> Gases (ppm) <u>a</u>	Rec %	Depth Scale (m)
-	SILT - Light beige, grass, some gravel, dry				with be 2" PVC bentoni	to surface ntonite. riser with te backfill rface to 0.5			0	100	-
- 1.0- -	CLAY - Dark grey, trace gravel, stiff		0.75		🗄 🗌 silica sa	riser with andpack from .5 mbgs.		_	15	100	-
2.0-	SILT / CLAY - Light beige, trace gravel, moist, soft		1.5						10	100	
	SILT / CLAY - Grey, orange streaks, trace gravel, organics, medium stiff, odour, black staining		2.3	· · · · ·		screen with andpack from		*	15	100	- 3.0
-	SILT / CLAY - Black, white silt pockets, trace gravel, moist, medium stiff, odour		3	· · · · ·		.5 mbgs.			10	100	-
4.0-	SILT / CLAY - Beige, moist, medium stiff		3.8						20	100	4.0
5.0-	CLAY - Grey, trace gravel, moist, stiff		4.5						0	100	- 5.0
6.0			6					*	5	100	6.0
	End of borehole at 6.0 mbgs.		0								
Water fo	LITHOLOGY IIII Silt	/ Clay			💋 Clay	<u>S</u>	SAMPL TYP] Au	ıger	

DILLON MW COW GINT.GPJ DILLON_MAY13_05.GDT 10-11-23

Page <u>1</u> of <u>1</u> BH23-22

 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold







Client: City of Winnipeg

Project No.: 23-5866-2002

Drilling Co.: Maple Leaf Drilling

Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca

			Page <u>1</u> of <u>1</u>							
			BH23-25							
Northing:	5532295	Easting:	628182							
Project: North Garage Replacement - Phase II ESA										

Location: APEC 2 Drilling Method: Solid Stem Auger





Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca

Р	age	1	of _	

1

CONSULTING www.dillon.ca		Nort	hing:	<u>5532298</u> Eas			ing: <u>628235</u>					
Client: City of Winnipeg			Project: North Garage Replacement - Phase II ESA									
-	ot No.: <u>23-5866-2002</u>			PEC 2								
	g Co.: <u>Maple Leaf Drilling</u>		-	-		m Auger						
Superv	vised by: <u>SNG</u>	Date	e Starte	d: <u>202</u>	3-09-13	Date C	ompl			23-09	-13	
Depth		δ	Donth						mple		Dep	
Scale (m)	Stratigraphic Description	Lithology	Depth (m)		Well Cons	struction	Method	Number	Combustible Gases (ppm)	Rec %	Sca (m	
	SILT - Brown, organics, some gravel and sand, dry				with ben 2" PVC bentonit	to surface tonite. riser with e backfill face to 0.5			0	100	-	
- 1.0	CLAY - Grey, some gravel, trace white silt pockets, stiff		0.75		2" PVC silica sa 0.5 to 1.	ndpack from			25	100	+ 1.1	
- 2.0—	CLAY - Grey, some silt pockets, damp, stiff							*	20	100	- 2.	
- 3.0— -						screen with indpack from			5	100		
					1.5 to 4.	5 mbgs.	ł		10	100	-	
4.0	SILT / CLAY - Light brown, black streaks, - moist, soft		3.8						15	100	-4.	
- - 5.0—	CLAY - Grey, some silt, moist, medium stiff, wood debris		4.5					-	0	100	- 5.	
-	SILT / CLAY - Brown, soft, moist		5.3					*	5	100		
6.0-	End of borehole at 6.0 mbgs.	XXXX	6								└-6.	
	End of boronole at 0.0 mbgs.											

Combustible gases (ppm) - parts per millon

* Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold


 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold



Indicates sample submitted for analysis
 Indicates sample submitted for analysis on hold



 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold



Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca

Page	1	of	1

Client:	: City of Winnipeg	Proje	ect: Norf	h Garage Replacement	- Phase II	ESA				
	t No.: 23-5866-2002	-	ation: AF							
-	g Co.: Maple Leaf Drilling	Drilli	Drilling Method: Solid Stem Auger							
Superv	vised by: SNG	Date	e Started	: <u>2023-09-13</u> Date C	Completed:	ompleted: 2023-09-				
Depth					Sa	ample		Dept		
Scale (m)	Stratigraphic Description	Lithology	Depth (m)	Well Construction	Method Number	Combustible Gases (ppm)	Rec %	Scal (m)		
_	GRAVEL FILL - Brown, some sand, dry, loose			Backfill to surface with bentonite. 2" PVC riser with bentonite backfill from surface to 0.5 mbgs.		15	100	-		
- 1.0—	SILT - Beige, some sand and clay, trace gravel, damp, black streaks		0.75	2" PVC riser with silica sandpack from 0.5 to 1.5 mbgs.	*	25	100			
- - 2.0-	CLAY - Dark grey, some sand, orange streaks, damp		1.5			0	100	- - 2.0		
_	SILT / CLAY - Beige, some sand, moist, soft, medium plasticity		2.3	2" PVC screen with		0	100	-		
3.0	SILT / CLAY - Beige, some sand, wet, soft to medium stiff		3	silica sandpack from		0	100	3.0 - -		
- 4.0— -	CLAY - Brown, wet, medium stiff, high plasticity		3.8			15	100	- 4.(
- 5.0-	CLAY - Brown, wet, soft, high plasticity		4.5			5	100	- 5.0		
-						20	100	-		
6.0-	End of borehole at 6.0 mbgs.		6					└ <u>6.0</u>		
	5									

 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold



	LLON	Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301						Pa		1_of_1 3-32		
	SULTING	www.dillon.ca	North	ning:	5532381	Easti	ng:	62	8282			
Projec	City of Winr t No.: <u>23-58</u> g Co.: Maple		_ Proje _ Loca	ect: <u>No</u> tion: <u>A</u>	rth Garage Rep PEC 2 nod: Solid Ste	lacement ·		e II ES	SA			
-	vised by: <u>SI</u>		Date	Starte	d: <u>2023-09-14</u>	_ Date C	comple	-		-09-14		
Depth Scale (m)	S	Stratigraphic Description	Lithology	Depth (m)	Well Cons	struction	Method	Number Sam	tible pm)	→ Depth % Scale ℃ (m)		
- - 1.0	FILL - Brov dry, loose,	wn, gravel mixed with silty sand, concrete debris						*	30	100 		
- 2.0-	CLAY - Bla medium st	ack, some silt, trace sand, moist, iff		1.5	Ţ				10	100 -2.0		
	SILT / CLA plasticity	∖Y - Light beige, wet, soft, mediun	n	2.3	Backfille				10	100 - 3.0		
-					Jontoni	bentonite			10	100		
4.0	CLAY - Bro plasticity	own, trace silt, wet, stiff, high		3.8							0	100 -4.0
5.0-									10	¹⁰⁰ -5.0		
-									10	- 100 -		
6.0-	End of bor	ehole at 6.0 mbgs.	<u>X//////</u>	6				I	<u> </u>	<u> </u> 6.0		

 ^{*} Indicates sample submitted for analysis
 ** Indicates sample submitted for analysis on hold





Dillon Consulting Ltd.
558 Willson Place
Vinnipeg, Manitoba, R3T 0Y4
Phone: (204) 453-2301
www.dillon.ca

Page	1	of	1

Loca Drillii	ation: <u>/</u> ng Me	AP thc ed:	PEC od:	2 Sc 023-	Well Const Backfill to with bent 2" PVC r bentonite from surf mbgs. 2" PVC r	iser with backfill face to 0.5 iser with ndpack from	Wethod	leted:		23-09 % 99 100	-14 Depth Scale (m)
Drilliı Date	Deptr 0.75	thc ed:	od:	<u>Sc</u> 023-	-09-14 Well Consi Backfill to with bent 2" PVC r bentonite from surf mbgs. 2" PVC r silica sar	Date C truction o surface conite. iser with a backfill face to 0.5	Method	Sar	Combustible Gases (ppm)	% Sec %	Deptl Scale (m)
Date	0.75	ed:			-09-14 Well Consi Backfill to with bent 2" PVC r bentonite from surf mbgs. 2" PVC r silica sar	Date C truction o surface conite. iser with a backfill face to 0.5	Method	Sar	Combustible Gases (ppm)	% Sec %	Depti Scale (m)
	Deptr (m)				Well Consi Backfill to with bent 2" PVC r bentonite from surf mbgs. 2" PVC r silica sar	truction o surface tonite. iser with backfill face to 0.5 iser with	Method	Sar	Combustible Gases (ppm)	% Sec %	Depti Scale (m)
Lithology	(m)				Consi Backfill to with bent 2" PVC r bentonite from surf mbgs. 2" PVC r silica sar	o surface tonite. iser with backfill face to 0.5 iser with			O Gases (ppm)	100	Scale (m) -
Litholo	(m)	_			Consi Backfill to with bent 2" PVC r bentonite from surf mbgs. 2" PVC r silica sar	o surface tonite. iser with backfill face to 0.5 iser with		Numbe	0	100	(m) - -
		_			with bent 2" PVC r bentonite from surf mbgs. 2" PVC r silica sar	tonite. iser with backfill face to 0.5 iser with ndpack from		-	0		- - 1.0 -
		_			silica sar	ndpack from			5	100	-
	1.5										t
IV IV N		∇	7					*	20	100	2.0
	2.3								0	100	
	3				1.5 to 4.5	5 mbgs.			10	100	
									5	100	-4.0
	4.5								10	100	
	5.3							*	10	100	
	6										⊷6.0
	de grou	4.5 5.3 6	2.3 3 4.5 5.3 6	4.5 5.3 6	2.3 4.5 5.3 6 de ground)	2.3 2" PVC s silica sar 1.5 to 4.3 4.5 5.3 6 de ground)	2.3 2" PVC screen with silica sandpack from 1.5 to 4.5 mbgs. 4.5 5.3 6 de ground)	2.3 -3- 3- 4.5 5.3 6 2" PVC screen with silica sandpack from 1.5 to 4.5 mbgs.	2.3 2." PVC screen with silica sandpack from 1.5 to 4.5 mbgs.	2.3 3 2" PVC screen with silica sandpack from 1.5 to 4.5 mbgs. 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.	2.3







Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca

Page _1	of
---------	----

1

-	t No.: <u>23-5866-2002</u>		ition: <u>A</u>		olid Stom Auror								
-	Co.: <u>Maple Leaf Drilling</u> ised by: SNG				olid Stem Auger -09-14 Date C	Comple	eted:	202	2023-09-14				
Depth Scale (m)	Stratigraphic Description						Stratigraphic Description		Method		Combustible Gases (ppm) <mark>Ə</mark>	Rec %	Dep Sca (m
-	GRAVEL FILL - Grey, some sand, dry, loose, some concrete debris				Backfill to surface with bentonite. 2" PVC riser with bentonite backfill from surface to 0.5 mbgs.		2	5	100	-			
1.0-	SILT / CLAY - Brown, trace gravel, moist, medium stiff, medium plasticity		0.75		2" PVC riser with silica sandpack from 0.5 to 1.5 mbgs.			5	100	- 1.(-			
2.0-	SILT / CLAY - Beige, some black streaks, wet, soft		1.5					5	100	- 2.(
			3		2" PVC screen with silica sandpack from		*	10	100	- - 3.(
-	CLAY - Brown, some white silt streaks, wet, medium stiff, high plasticity		5		1.5 to 4.5 mbgs.			5	100	-			
4.0-								10	100	-4.(
5.0-	CLAY - Brown, wet, medium stiff, high plasticity		4.5					5	100	- 5.0			
-								5	100				
6.0	End of borehole at 6.0 mbgs.		6				•].		└-6.(



Dillon Consulting Ltd. 1558 Willson Place Winnipeg, Manitoba, R3T 0Y4 Phone: (204) 453-2301 www.dillon.ca

Р	age _	1	_of _	
	BH	23-	38	

1

	SULTING www.union.ca	Nort	hing: _	5532452	Easti	ng: _	6	2825	0	
	City of Winnipeg	-		th Garage Repla	acement -	Phas	se II E	SA		
	t No.: <u>23-5866-2002</u>	Location: <u>APEC 2</u>								
	Co.: Maple Leaf Drilling			od: Solid Sten						
Superv	ised by: <u>SNG</u>			: <u>2023-09-14</u>	Date C	omple		d: <u>2023-09</u>		-14
Depth Scale (m)	Stratigraphic Description	Depth (m) Well Cons			ruction	Method	Sar Number	Combustible Gases (ppm)	Rec %	Dep Sca (m
_	SILT - Brown, some gravel, trace sand, dry, loose, some white silty clay			the surface mbgs	dpack from		*	80	100	-
1.0-	CLAY - Dark brown, some silt, trace gravel, damp, stiff, high plasticity		0.8	Vapour p	robe			0	100	
-	End of borobolo at 1.5 mbgs		1.5	Bentonite from 1.0 f	backfill o 1.5 mbgs					-
	End of borehole at 1.5 mbgs.		1.5							
					-					
	LITHOLOGY SYMBOLS			Clay	<u>S</u>	AMPLE TYPE		Au	ger	

wsp							Figure N	lo			
		LOG C	F TE	STHOLE THO)2						
Project No.	2	21-07203-00		<u></u>	<u> </u>						
Project:	F	Phase II ESA - 100 Oak Point Hwy									
Location:			Co-ordin	nates: 628337.7408E, 5532454.0	07N						
Date Drilled:		January 26, 2023		UTM NAD 83 Zone 14							
Drill Type:		Scout									
	-	Naple Leaf Drilling	Chaeleer	d By: A. Chan							
Dining Cont				By. <u>Al Ghan</u>		0.01		• vc	Cs (ppr	n)	
DEPTH (m bgs)	THOLOG	SOIL DESCRIPTION	WELL	INSTALLATION DETAILS	SAMPLE ID	SOIL SAMPLE			30 12		
(m bgs)	ÖGY			DETAILS	U	TEST	▲Co 2	ombust	ible Gas	ses (ppr 0	m) 0
_0.10	μ κ κ κ	_ TOPSOIL √- Surface covered by snow /							:		
F		- Organic rich, dark brown, frozen, with roots	$\hspace{-0.1cm} \swarrow \hspace{-0.1cm} \nearrow \hspace{-0.1cm} \searrow \hspace{-0.1cm} $:	:	
E		CLAY FILL - Brown-grey, some gravel, stiff, trace root-	\mathbb{K}								
\mathbf{F}		lets, frozen to the depth of 1.2 mbgs	$\hspace{-0.1cm} \bigcirc \hspace{-0.1cm} \odot{0.1cm} \sub{0.1cm} \rule{-0.1cm} \bigcirc{0.1cm} \sub{0.1cm} \rule{-0.1cm} \bigcirc{0.1cm} \sub{0.1cm} \rule{-0.1cm} \bigcirc{0.1cm} \rule{-0.1cm} \bigcirc{0.1cm} \rule{-0.1cm} \bigcirc{0.1cm} \rule{-0.1cm} \sub{0.1cm} \rule{-0.1cm} \sub{0.1cm} \rule{-0.1cm} \sub{0.1cm} \rule{-0.1cm} \sub{0.1cm} \rule{-0.1cm} \sub{0.1cm} \rule{-0.1cm} \r{-0.1cm} \rule{-0.1cm} \rule{-0.1cm} \r{-0.1cm} \r{-0.1cm} \r{-0.1cm} \rule{-0.1cm} \r{-0.1cm} \r{-0.1cm} \r{-0.1cm} \r{-0.1cm} -0.$	No monitoring well Installed. Borehole backfilled with					-		
F			\mathbb{K}	bentonite clay pellets to					:		
E_			$\hspace{-1.5cm} \swarrow \hspace{-1.5cm} \longrightarrow \hspace{-1.5cm} $	surface.	TH02-S1 (GRAB)		.				
E			\mathbb{K}		(====,				-		
F			\not						-		
F			\mathbb{K}						: 		
E			$\hspace{-1.5cm} \swarrow \hspace{-1.5cm} \nearrow \hspace{-1.5cm} \searrow \hspace{-1.5cm} $		TH02-S2				:		
-					(GRAB)			÷	:		
F			$\hspace{-1.5cm} \swarrow \hspace{-1.5cm} \nearrow \hspace{-1.5cm} \searrow \hspace{-1.5cm} $								
E			\mathbb{K}						-		
-			$\hspace{-0.1cm} \bigcirc \hspace{-0.1cm} \odot{0.1cm} \odot \{0.1cm} \odot{0.1cm} \odot \hspace{-0.1cm} \bigcirc \hspace{-0.1cm} \odot \hspace{-0.1cm} \bigcirc \hspace{-0.1cm} \odot{0.1cm} \odot{0.1cm} \odot{0.1cm} \odot{0.1cm} \odot{0.1cm} \odot{0.1cm} \rule{0.1cm} \odot{0.1cm} \rule{0.1cm} \odot{0.1cm} \rule{0.1cm} \odot{0.1cm} \rule{0.1cm} 0.$:		
F			\mathbb{K}		TH02-S3 (GRAB)			; ;	;		
E			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					-	-		
-			$\mathbb{K} \times \mathbb{K}$:		
3.05			$\hspace{-1.5cm} \swarrow \hspace{-1.5cm} \longrightarrow \hspace{-1.5cm} $!			
F		CLAY (CH) - Medium grey, damp, trace silt, trace			TH02-S4						
,E		oxidation, high plastic	\mathbb{Y}/\mathbb{W}		(GRAB)				:		
P											
×			\mathbb{X}						:		
		- Seepage encountered at the depth of			TH02-S5	BTEX, PHC F1-F4,			-		
		3.66 mbgs, wet, some silt	\mathbb{X}		(GRAB)	Metals, Mercury		; :	••••••••••••••••••••••••••••••••••••••		
									-		
			\mathbb{X}						-		
<u></u>											
			\mathbb{X}/\mathbb{X}		TH02-S6				:		
- -					(GRAB)				-		
9			\mathbb{X}								
									-		
±∟ ≿⊢			\mathbb{K}/\mathbb{K}		TH02-S7			; 	;		
× - H -					(GRAB)				-		
			K//X						:		
ĭ ≨ 6.10											
Ď		END OF TESTHOLE	~~~~	Water measured on	TH02-S8 (GRAB)		-	•	••		
00-502		End of borehole at 6.10 mbgs		masl							
2		Seepage observed, borehole open to 5.49		mbgs							
- 122		mbg and wet. No PHC odor or staining		Well Diameter: mm							
		observed.									
L L				Well Material:							
ž											
EPC											
P MW KEPOKI VEK.3 221-0.											
≥ 1											

M	sp						F	igure No.			
				ν	ORING WELL	MW03					
Р	roject No.	2	<u>21-07203-00</u>								
Р	roject:	Ē	hase II ESA - 100 Oak Point Hwy								
L	ocation:	_		_ Co-ordir	nates: 628360.511E, 5532441.7	1N					
	ate Drilled:		January 26, 2023	– Datum:	UTM NAD 83 Zone 14						
	rill Type:	-	icout	_ Logged	-						
	rilling Contr	actor: <u>"</u>	laple Leaf Drilling	_ Checked	d By: A. Chan			•	VOCs (p	pm)	
	DEPTH (m bgs)	THO LOG	SOIL DESCRIPTION	WELL	INSTALLATION DETAILS	SAMPLE ID	SOIL SAMPLE	40	80	120 16	60
	233.966		GRAVEL				TEST	▲ Coml 20	ustible G	ases (pp 608	om) 10
F		00	- Surface covered by snow		Top of Solid Pipe 0.134 m Below Top of Flushmount			÷	-	:	
F		lo C	- Beige, frozen to 1.2 mbg		Casing						
F		60 (0 / 0			Bentonite Seal			:	:	:	:
-0.89	233.08	Porc									
F		6 Q (MW03-S1 (GRAB)	BTEX, PHC F1-F4, VOC		<u>;</u>		:
_1.22	232.746	\mathbb{O}	OLAY.								
F			CLAY - Medium grey, stiff, trace gravel								
F		\mathbb{N}	- Seepage encountered at the depth of			MW03-S2		A •	:	:	:
F		Ň	1.52 mbgs - Dark grey below the depth of 1.52 mbgs			(GRAB)					
F		\land						·····			
F			- Trace silt pockets, trace hematized silt		Slotted Pipe and Sand Pack						
F			pockets, and soft below the depth of 2.29			MW03-S3	BTEX, F1-F4		-	:	
F			mbgs			(GRAB)					<u>.</u>
F											
F											: :
F				日日		MW03-S4					
" –		\mathbb{N}				(GRAB)		÷	1	:	
		\mathbb{N}						•••••••			•••••• •
5-		\land							-	:	
9.4.						MW03-S5 (GRAB)		A			
						(0.0.2)		÷	-	:	
3-						MW00 00					
n 4.60	229.366		END OF TESTHOLE	:V·::		MW03-S6 (GRAB)					
<u>وا</u>			End of borehole at 4.60 mbgs		Water measured on 2022-02-01						
C L D			Seenege observed borehole open to 6.10		233.08 masl 0.886 mbgs						
PZEOA.GPJ			Seepage observed, borehole open to 6.10 mbg and wet. PHC odor observed on sample		Well Diameter:						
х Х Х			MW03-S1 and no staining observed.		50 mm						
					Well Material:						
					Schedule 40 PVC						
Ď											
203-00 OAK											
7/0-1.22											
VER.3											
KETOK -											
⊻ ≧											
≥ ר ח											
≥							1				

wsp						F	ïgure No			
				STHOLE THO	15					
Project No. Project:	Ē	221-07203-00 Phase II ESA - 100 Oak Point Hwy								
Location:	_			ates: 628355.8799E, 5532409.	34IN					
Date Drilled:		January 27, 2023	– Datum:	UTM NAD 83 Zone 14						
Drill Type:	-	Scout		By: J. Kevin						
Drilling Contra	actor:	Maple Leaf Drilling	_ Checked	By: A. Chan						
	Ť			INSTALLATION	SAMPLE	SOIL SAMPLE	40	VOCs 80		160
(m bgs)	THO LOGY	SOIL DESCRIPTION	WELL	DETAILS	ID	TEST	▲Con		Gases (
- - - - -		SAND FILL - Surface covered by snow - Frozen to the depth of 1.5 mbgs, beige		No monitoring well Installed. Borehole backfilled with						
				bentonite clay pellets to surface.	TH05-S1 (GRAB)					
_1.52 		CLAY - Medium brown, firm to stiff, damp, high plastic			TH05-S2 (GRAB)		•			
		- Firm and trace hematized silt pockets below the depth of 3.96 mbgs			TH05-S3 (GRAB)	BTEX F1-F4, Metals	•			
					TH05-S4 (GRAB)		•			
					TH05-S5 (GRAB)					
	\land				TH05-S6		.		;	;
		END OF TESTHOLE End of borehole at 4.60 mbgs No seepage observed, borehole open to 4.6 mbg and dry. No PHC odor or staining observed.		Water measured on masl mbgs Well Diameter: mm Well Material:	(GRAB)		i		į	

wsp						F	igure No	0			
				ESTHOLE <u>TH</u>	06						
Project No.	2	LUG		ESTRULE IN	00						
Project:	-	Phase II ESA - 100 Oak Point Hwy									
Location:			Co-ordin	ates: 628342.023E, 5532404.84	14N						
Date Drilled:	_	January 27, 2023		UTM NAD 83 Zone 14							
Drill Type:	5	Scout	Batann								
	actor:	Naple Leaf Drilling		By: A. Chan							
						SOIL			Cs (ppr		
DEPTH (m bgs)	-HO LOG	SOIL DESCRIPTION	WELL	INSTALLATION DETAILS	SAMPLE ID	SAMPLE TEST	40		30 12 ible Car		
	G Y	SAND FILL	×///XX			1201	2()4	ible Ga 06	08	0
F		- Surface covered by snow					÷		-		
F		- Frozen to the depth of 1.5 mbgs, beige									
E				No monitoring well Installed.			·····÷		:		
E				Borehole backfilled with bentonite clay pellets to			÷		-		
F				surface.	TH06-S1		A				
F	[(GRAB)		:		:		
F							į		-		
									<u>.</u>		
-		CLAY - Medium brown, firm to stiff, damp, high			TH06-S2		n :		-		
F	\triangleright	plastic			(GRAB)		÷		:		
F									: :		
F							÷		-		
E		- Firm and trace hematized silt pockets			TH06-S3	BTEX F1-F4, Metals			:		
E	N,	below the depth of 3.96 mbgs			(GRAB)	BIEX FI-F4, Metals					
F	\triangleright						į		-		
F							į		-		
F							••••••••••••••••••••••••••••••••••••••		••••••• :		
F					TH06-S4 (GRAB)		Ē		-		
2	Ň										
73.	\land								-		
ā -	\triangleright								-		
A Contraction of the second se					TH06-S5 (GRAB)						
					(0.0.2)		÷		:		
	\mathbb{N}						. :		-		
	\square				TH06-S6 (GRAB)		.				
		END OF TESTHOLE End of borehole at 4.60 mbgs		Water measured on							
7				masl mbgs							
۶ ۲		No seepage observed, borehole open to 4.6		-							
ZES		mbg and dry. No PHC odor or staining observed.		Well Diameter: mm							
				Well Material:							
Ś.											
ĭ ⊻											
N N N N N N N N N N N N N N N N N N N											
5											
07/0											
-1.77											
5											
2											
<u></u>											
WSP MW KEPOKI VEK.3 ZZI-0/Z03-00 OAK POINI HWY PZESA.GFU											
≥ 2											

wsp						F	Figure No	o			_
			TIINC	ORING WELL							
Project N											
Project N Project:		Phase II ESA - 100 Oak Point Hwy									
Location:			Co-ordin	nates: 628327.9122E, 5532430.3	336N						
Date Drill		January 27, 2023	Datum:	UTM NAD 83 Zone 14							
Drill Type		Scout	Logged I								
		Maple Leaf Drilling		d By: A. Chan							
	l				_	SOIL			s (ppm)		
DEPTH (m bgs)	HOLOG	SOIL DESCRIPTION	WELL	INSTALLATION DETAILS	SAMPLE ID	SAMPLE TEST	40				
	- XXX	CLAY FILL	×///XV			IEST	20	40	le Gase	15 (ppi) 8()
F		- Surface covered by snow					:	:	÷		
-		- Brown-grey, with gravel, stiff, some silt, frozen to 1.2 mbgs					:	÷	÷	÷	
				No monitoring well Installed.			÷		·····÷	:	
_			\mathbb{K}	Borehole backfilled with bentonite clay pellets to							
Ł				surface.	TH07-S1 (GRAB)		•		<u>.</u>		
E		- Seepage encountered at the depth of						÷	:	-	
F		1.83 mbgs	$\qquad \qquad $:	÷	÷	-	
F							÷		·····÷		
_					TH07-S2 (GRAB)		▲ :	÷	•	÷	
_					(GRAD)						
_									·····		
E								÷	÷	÷	
_					TH07-S3	BTEX F1-F4, Metals	▲			• :	
-					(GRAB)		:	÷	÷	i	
_								÷	-		
_			$\qquad \qquad $								
-					TH07-S4		▲ :	• :	÷	÷	
16					(GRAB)		:	÷	÷	i	
							÷	·····	·····•	·····	
3.81			KIX					-	-		
- B		CLAY - Medium brown-hrey, stiff, high plastic			TH07-S5		A	į)		
					(GRAB)			-	:	-	
- C		- Trace hematized silt pockets at the						÷	÷	÷	
ສີ ທີ 4.60		depth of 3.96 mbgs			TH07-S6 (GRAB)	BTEX, PHC F1-F4	.	·····			
		END OF TESTHOLE End of borehole at 4.60 mbgs		Water measured on							
2				masl mbgs							
A.G.		Seepage observed, borehole open to 4.6 mbg		Well Diameter:							
ZES		and wet. Strong PHC odour observed on sample TH07-S1 (0.61 mbgs), TH07-S2		mm							
± ≻		(1.52 mbgs), and TH07-S3 (2.29 mbgs) and no staining observed.		Well Material:							
A H											
Т Т											
2-20											
2/0-											
221											
х х.											
>											
Ś											
WSP MW REPORT VER.3 221-0/203-00 OAK POINT HWY PZESA.GPJ											
M											
N N											

wsp						F	Figure No.			
		LOG OF M	ONIT	ORING WELL	TH08					
Project No.	2	221-07203-00	•••••							
Project:	Ī	Phase II ESA - 100 Oak Point Hwy								
Location:	-		Co-ordin	nates: 628312.1077E, 5532419.	194N					
Date Drilled:	-	January 27, 2023	Datum:	UTM NAD 83 Zone 14						
Drill Type:	-	Scout	Logged	By: J. Kevin						
Drilling Cont	ractor:	Maple Leaf Drilling	Checked	d By: A. Chan			-			
DEDTU	L H		WELL	INSTALLATION	SAMPLE	SOIL		Cs (ppn 30 12		
DEPTH (m bgs)	-HO LOG	SOIL DESCRIPTION	WELL	DETAILS	ID	SAMPLE TEST	▲ Combust	ible Gas	ses (ppm)	
_		SAND FILL					20 4	406i	080	-
E		- Frozen to the depth of 1.2 mbgs, beige - Surface covered by snow						: :		
-							:	: :		
F				No monitoring well Installed. Borehole backfilled with			:	:		
-				bentonite clay pellets to				-		
-				surface.	TH08-S1 (GRAB)		.			
_					(0)			: :		
╞							:	:		
_1.52								: ::		
_		CLAY - Medium brown, firm to stiff, damp, high			TH08-S2	BTEX, PHC F1-F4,		: :		e ²
E	N	plastic			(GRAB)	PAH, Metals		:		
<u> </u>										
-								:	-	
_		- Silt inclusion from the depth of 1.83 to 2.13			TH08-S3	PSA	• 🗼	: :		
E	\mathbb{N}	mbgs			(GRAB)	1 OA				
-								: :		
F								:		
-								4		
		- At the depth of 3.81, trace oxidation, firm			TH08-S4 (GRAB)			:		
-	N	· · · · · · · · · · · · · · · · · · ·			(0.0.2)			:		
E							÷			
F								: :		
-					TH08-S5	BTEX, PHC F1-F4,	//			
					(GRAB)	PSA		:		
_										
_								;;		
F					TH08-S6			: :		
_					(GRAB)		Γ	:		
<u> </u>										
-								:		
-								:		
_					TH08-S7 (GRAB)			:		
E								:		
F								:		
6.10	\wedge	END OF TESTHOLE			TH08-S8					-
		End of borehole at 6.10 mbgs		Water measured on masl	(GRAB)					
				masi mbgs						
	1	No seepage observed, borehole open to 6.1 mbg and wet. PHC odor observed on sample		Well Diameter:						
	1	TH08-S2 and no staining observed.		mm						
				Well Material:						
	1									
	1									
	1									
L		1		1	1	1	I			

1	asp						I	Figure N	o			
					ORING WELL	тн10						
	Project No.	2	21-07203-00			<u>11110</u>						
	Project:	_	hase II ESA - 100 Oak Point Hwy									
	Location:	v	Vinnipeg, MB	_ Co-ordin	ates: 628290.9813E, 5532418.4	443N						
	Date Drilled:	-	January 27, 2023	_ Datum:	UTM NAD 83 Zone 14							
	Drill Type:	_	cout		By: J. Kevin							
	Drilling Contr	actor: <u>N</u>	laple Leaf Drilling	Checked	By: A. Chan							
		Т Н О	SOIL DESCRIPTION	WELL	INSTALLATION	SAMPLE	SOIL SAMPLE	4		DCs (pp 80 1:		60
	DEPTH (m bgs)	LOGY		WELL	DETAILS	ID	TEST	▲Co 2	mbus	tible Ga	ises (pp	om) 30
_0.	08	000	ASPHALT - Suface covered by snow /							÷	:	:
F		0	GRAVEL							:	:	:
Fo.	61	60	- Beige, frozen to the depth of 1.2 mbgs		No monitoring well Installed.						:	:
F	-		CLAY - Dark grey, stiff, damp, trace gravel, high		Borehole backfilled with bentonite clay pellets to					-		
F			plastic		surface.	TH10-S1		• 4	•	:	-	:
F						(GRAB)				Ì	:	
F										÷	:	:
F			- At the depth of 2.29 mbgs, color change to								:	:
F			brown-grey, firm			TH10-S2 (GRAB)		•		:	:	:
F						(0)				-	-	
F										÷	:	
F										-	i i	
F						TH10-S3 (GRAB)	BTEX, PHC F1-F4, Metals, Mercury				. :	
F										÷	:	:
F										-		
F						TH10-S4		•			•••••• •	
F						(GRAB)				-	-	
-7-											; ;	
23										÷	:	:
						TH10-S5		• •		÷	-	
						(GRAB)				÷	:	:
										-		
	60					TH10-S6		•	.			
			END OF TESTHOLE End of borehole at 4.60 mbgs		Water measured on	(GRAB)		<u> </u>				
2					masl mbgs							
rzeoa.ur.			No seepage observed, borehole open to 4.6 mbg and wet. PHC odor observed on sample		Well Diameter:							
			TH10-S3 and no staining observed.		mm							
					Well Material:							
P P												
1203												
0-12												
× C.7												
2												
Š												
Т Т												
MM												
202												

١	asp							F	igure	No.			
)N	ITC	ORING WELL	MW11						
	Project No.	2	221-07203-00										
	Project:	-	Phase II ESA - 100 Oak Point Hwy										
	Location:			_ C	o-ordii	nates: 628291.121E, 5532419.0	18N						
	Date Drilled		January 27, 2023		atum:	UTM NAD 83 Zone 14							
	Drill Type:	-	Scout Naple Leaf Drilling		ogged	By: <u>J. Kevin</u> d By: <u>A. Chan</u>							
-	Drilling Con	L			песке			SOIL			Cs (pp		
	DEPTH (m bgs)	HOL	SOIL DESCRIPTION	W	'ELL	INSTALLATION DETAILS	SAMPLE ID	SAMPLE					60
0.	235.188 08 235.11	Ğ 2		ka	K			IESI		20	406	ses (pp 308 :	30 :
E			- Surface covered by snow	Ň		Top of Solid Pipe 0.134 m Below Top of Flushmount					-		
F		Port	- Beige, frozen to 1.0	\mathbb{M}		Casing				÷	-		
F		60	mbgs	\bowtie		Bentonite Seal				į	ł	:	
Eo.	91 234.27			\mathbb{X}			MW11-S1		•	i.	:	:	:
F			CLAY - Medium grey, soft to firm, damp, high plastic	M	P.		(GRAB)			<u>.</u>	<u>.</u>	:	:
F										:	-		
F										-	-		-
F			- Silt lense at the depth of 1.52 to 1.72 mbgs		<u> </u>		MW11-S2	BTEX F1-F4, Metals,	•			÷	:
F					<u></u> ∃∵		(GRAB)	Mercury		-	-		-
F			- Light brown and soft below 2.29 mbgs			Clotted Dine and Cand Deals							
F					∃ ∵	Slotted Pipe and Sand Pack				÷	:	:	:
F							MW11-S3			į			
F					≣.		(GRAB)			į	÷	÷	:
F										÷	-		
F					≣∷								
E				ŀ	<u> </u>		MW11-S4 (GRAB)		• 4	Ň	-		-
γĒ					=		(GIVAD)			į	-		
23-2					Ē					-	-	÷	
ΞE					∃.						-		
					∃ ∵		MW11-S5 (GRAB)						
					<u></u> <u></u>					÷	:		:
ĒĿ.		\mathbb{N}		.	₹		MW11-S6		•				
0 4. Z	60 230.58	8	END OF TESTHOLE		·V· · .		(GRAB)			•	:	<u>. </u>	:
פ ר			End of borehole at 4.60 mbgs			Water measured on 2022-02-01							
PZEOA.GPJ			No seepage observed, borehole open to 4.6			masl mbgs							
ZEO			mbg and dry. No PHC odor or staining ob- served.			Well Diameter:							
			Monitoring well was observed to be dry			50 mm							
			during the groundwater monitoring event			Well Material: Schedule 40 PVC							
			on February 1, 2023										
203-00 UAK													
10-122													
VER.3													
Š													
л Ц Ц													
MM													
LON LON													

N	sp						F	igure N	lo			
			LOG OF M	ΟΝΙΤΟ	ORING WELL	MW12						
F	Project No.	2	21-07203-00			<u></u>						
F	Project:	Ē	hase II ESA - 100 Oak Point Hwy									
L	_ocation:	_		_ Co-ordin	ates: 628288.932E, 5532311.8	01N						
	Date Drilled:	_	January 27, 2023	Datum:	UTM NAD 83 Zone 14							
	Drill Type:	-	cout	_ Logged I	-							
	Drilling Cont	ractor:	laple Leaf Drilling	_ Checked	By: A. Chan		0.0"		• vc	Cs (ppr	m)	
	DEPTH (m bgs)	THOLOG	SOIL DESCRIPTION	WELL	INSTALLATION DETAILS	SAMPLE ID	SOIL SAMPLE	4	0 8	30 12	20 1	60
	236.959		TOPSOIL				TEST	▲Ca 2		tible Ga 406	ses (pp i0 8	om) 30
F0.30	0 236.65	, ZI	- Surface covered by snow - Organic rich, dark brown, frozen, with roots		Top of Solid Pipe 0.134 m Below Top of Flushmount				-	-		-
F			CLAY		Casing				:	:	:	-
F			 Dark brown-grey, stiff, trace rootlets, trace sand, trace silt, high plastic, frozen to 1.52 		Bentonite Seal			••••••	:	:	:	:
F			mbgs									
F			- Trace silt pockets at the depth of			MW12-S1 (GRAB)	BTEX, PHC F1-F4, Metals, Mercury		:	<u>.</u>	<u>;</u>	:
F			1.52 mbgs									-
F			- Light brown, some silt below the depth of									
F			3.35 mbgs,			MW12-S2			:	:	:	:
F						(GRAB)				-		-
F								••••••	; :		; ;	: :
F					Slotted Pipe and Sand Pack							
F						MW12-S3			:	-	:	:
F				1:目:		(GRAB)		••••••			••••••	•••••
_2.8	3 234.12	5										
F								••••••	: :		; ;	
F						MW12-S4		•				
						(GRAB)			:	:	:	:
								••••••	! !			••••••
5-									:	:	:	:
9.4 						MW12-S5 (GRAB)		••••••	: :		: ;	
				ŀ ⊟∙ I		(01010)						
				:目::					:	:	:	÷
ທ 4.6	0 232.35	9	END OF TESTHOLE	:V·::		MW12-S6 (GRAB)				<u></u>		
פוע			End of borehole at 4.60 mbgs		Water measured on							
GFJ					2022-02-01 234.042 masl 2.834 mbgs							
-SA.			No seepage observed, borehole open to 4.6 mbg and dry. No PHC odor or staining		-							
17.1			observed.		Well Diameter: 50 mm							
M					Well Material:							
					Schedule 40 PVC							
х Т												
A D U A												
03-00												
-072												
221												
Ч.												
WSP MW REPORT VER.3 221-07203-00 OAK POINT HWY P2ESA.GFJ												
5 L												
× RE												
≦ L												
20 A												

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					F	REF.	NO:	10-	5133	}				_			P-1		
	NT: Imperial Oil					_									_		RT DATE:		13/11/04	
SAM	PLE TYPE: G - Grab OS - Other					\vdash											PLETION DATE: E 1 of 1	20	13/11/04	1
	DESCRIPTION			SAMPLING							Т					7101				
Ē		1	-																.	(#
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED		F		SOIL	VAPO	JUR		+						COMMENTS	6	BACKFILL	Depth (ft)
De		MPLE	L H H	LAB SAMPLE N	AME/	CC	DNCE	ENTR opmv)	ATIC	N									BACI	ď
		SAI	ß	LAB ANALYS		100) 20	0 30	0 4	00										
	GROUND SURFACE ASPHALT. COBBLES AND SAND (Fill) - light brown, coarse to fine grained, gravelly, damp. CLAY (Fill) - dark brown, sandy, some silt, trace gravel, damp. CLAY - brown, sandy, some silt, trace gravel, damp. SILT - light gray, clayey, some sand, damp. CLAY - light brown, trace sand, trace silt, moist. - olive brown, some silt below 3.0 m.			TP-1-1.8 / Grain Size TP-1-2.4 / BTEX, PHC F1-F4, Lead, 1.2-DBA, 1.2-DCA, Gr Size TP-1-3.7 / Grain Size TP-1-4.9 / BTEX, PHC F1-F4, Lead, 1.2-DBA, 1.2-DCA) 20			00							Test Pit backfilled excavated materia which was replace its' original order a then nominally compacted with th excavator bucket.	l d in nd		
-5	END OF TEST PIT at 4.9 m					::				-		: :		: :	:					-
ARED	No Daylighting Performed					÷		• • • • •	••••				•••		• • • •	· · · · ·				-
										: : : : :										-
GLB									:	: :				: :						-
																				-
> _ 0						÷.;	·	• • • • •	· · ÷ · ·	: : : :			· · ÷ ·	÷;	· : · ·	: : : :				-20
G LIBR									· · · · ·	 					. <u>.</u>					-
						::	: :	: :	÷	: :		: :			÷					-
ш. Б.						::	: :	: :	÷	: :		: :	÷	: :	÷	: :				Ē
0. 92								• • • • •							• • • •	 				Ē
TEST						÷.;	·	• • • • •		: : : :				::	· :··					-
A V4										: : : : :										-25
- DAI									÷	: :			÷	: :	÷					20
8-																				-
20 - -								• • • •	· · ·						• • • •	: : : : : :				-
																 				-
									÷			: :	÷		÷					F
-9					. .										:					F
PE&						1				: :				: :	:					
STAR	T DATE START DEPTH EQUIPMENT			L	CONTR	RACT	OR										PE: RKI Eagle			<u> </u>
¥ 2013/11	1/04 0.0 m Caterpillar 336C Excavator				Tervita C	Corpora	ition							GGE			REVIEW: KAF	DR	AFTED:	MLM
5133.GPJ																	RSC			
513																				

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0:	10-5	133					_			P-2		
	NT: Imperial Oil																	RT DATE:		3/11/04	
SAME	PLE TYPE: G - Grab OS - Other																	PLETION DATE: E 1 of 1	201	3/11/04	1
	DESCRIPTION			SAMPLING													AGL				<u> </u>
Ê		<u>—</u> ш	_																		(H
Depth (m)		SAMPLE TYPE	ZONE TESTED				▲ S(DIL V/	ΔΡΟ	N IR								COMMENTS	6	BACKFILL	Depth (ft)
Det	STRATIGRAPHY	PLE	I I I I I I I I I I I I I I I I I I I	LAB SAMPLE N	ΔM⊑/		CON	ICEN	TRA	NTIO										3ACK	De
		SAN	20	LAB SAMPLE N	ES		100	(pp) 200	mv) 300) 40	00										
							-		: :	: :	÷	÷	: :	: :		÷					
											-					-					
											-										
						1		: :	: :	: :	÷	÷	: :	: :	: :	÷					
											ł					÷					
-0	GROUND SURFACE ASPHALT.	-								• • • •		. <u>.</u>				·				///	<u>+</u> 0
[COBBLES AND SAND (Fill) - light brown, coarse to fine grained,	+	\Box	TP-2-0.6 / BTEX,																	Ł
-	gravelly, damp.	G		TP-2-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA				: :	: :	: :	÷	Ë	: :	: :	: :	÷					ŧ
-	LIMESTONE (Fill) - light brown, sandy, some gravel, damp.		Ĺ	7												• • • •					ł
		G			4	k ∃		•••	: .	· : · :	· · .	. ÷	• • • •	•••	: .	· ÷· ·	: : · : ·				
['	CLAY - brown, silty, some gravel, trace sand, moist.	_	1	TP-2-15/BTEX																	Ł
-		G		TP-2-1.5 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	4	k ∃		: :		: :	÷			: :		÷					ŧ
-	- light brown, some sand below 1.5 m.		┦	1,2-00, 1,2-00,												• • • •					<u></u>
Ē			_	7																	ł
-2		G	/	/							-					÷					£
-	dark gray, some silt, trace sand, damp		1	_																	Ł
-	- dark gray, some sin, trace sand, damp.					· .:		••••••	: : : :	• • • •	:::	· ÷	· : · :	· · : · :	: :	· : · · ·					f f
Ē	- olive brown, trace silt, moist below 2.7 m.		1/	/														Test Pit backfilled v excavated material	1		F
-3		G			4			: :		: :	÷		: :	: :		÷		which was replaced	d in		ŧ.
Ē		-	$\left(\right)$	7														then nominally compacted with the	nu		1-10
-		G	/		4	k ∃		•••		• • • •			• • • • •	• • • • •		• • • •		excavator bucket.	Э		
Ē			\downarrow																		1
- 15				/				: :		: :	÷	÷	: :	: :		÷					ł
-4		G			4	Î															F
PRINTED: 01/26/2015			f	7				•••		• • • •		· ÷				• • • •					
LA L		G																			1 −15
02/17	- damp below 4.6 m.		V			:	÷	÷	: :		÷	÷	: :	÷		÷	: :				ł
-5	END OF TEST PIT at 4.9 m										-										Ē
ARED	No Daylighting Performed					· .:		•••	: : :		:	1		· · : · : : : :		· : :	::::				F
																					Ē
GLB										: :	-					÷					E
23-R07																					Ē
ZARY -						:		••••••					•••••			• • • •					- 20
										• • • •		. <u>.</u>									E
																					_
											÷					÷					-
0. 10. 10. 10. 10. 10. 10. 10. 10. 10. 1						:		•••		• • • •			•••••	• • • • •		• • • •					-
TEST										• • • •		. <u>.</u>									-
- 44																					-25
0 DAT							: :	: :		: :	÷	÷	: :	: :		÷					E 20
8-18						· ::		••••••		• • • • •		1		•••••		• • • • •					Ē
51 PE											···	. <u>.</u>				· ÷··					F
																					È
T T											-					:					Ē
P G																: : : :					Ē
											÷					÷					
STAR	L I DATE START DEPTH EQUIPMENT		<u> </u>	I	CON	TRÆ		. : R	. :	. :		1:	. :	GA	. : AS M	IETE	R TY	/ PE: RKI Eagle			L
2013/11					Tervita											ED:		REVIEW: KAF	DRA	FTED:	MLM
5133.GPJ																		RSC			
513:																					

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0:	10-5	133								P-3		
	NT: Imperial Oil						\square											T DATE:		3/11/12	
SAMF	PLE TYPE: G - Grab OS - Other						\vdash											PLETION DATE:	201	3/11/12	2
	DESCRIPTION			SAMPLING													AGE				
Ê																					£
Depth (m)		L	ZONE TESTED				S	DIL V	ΔΡΟ	IIR								COMMENTS	;	BACKFILL	Depth (ft)
Def	STRATIGRAPHY	APLE	ЦЩ ЩЩ	LAB SAMPLE N			CON	ICEN	ITRA	NOIT	١									3ACK	De
		SAN	Z		SES		100	(pp 200	mv) 300) 40	0										
	GROUND SURFACE ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp. SILT - dark brown, dayey, damp brown, moist below 1.1 m. CLAY - olive brown, silty, trace sand, damp some silt. END OF TEST PIT at 4.9 m			TP-3-1.8 / BTEX, PHC F1-F4, Lead, 1.2-DBA, 1.2-DCA TP-3-2.4 / BTEX, PHC F1-F4, Lead, 1.2-DBA, 1.2-DCA	JES		100	200	<u>300</u>) 40	0							Test Pit backfilled v excavated material which was replace its' original order ar then nominally compacted with the excavator bucket.	d in nd		
š ⊢ 5	END OF TEST PIT at 4.9 m															: :					-
	No Daylighting Performed																				Ē
															•••		·				Ē
																					-
-6															÷						-
																					- 20
						·		••••••		• • • • •	•••••••••••••••••••••••••••••••••••••••	·	: : : :	· · · · · · · · · · · · · · · · · · ·	•••	: : :	· : · · ·				-
																: : : :					-
						÷	: :	÷	: :	::	÷	÷	: :		÷	: :	÷				_
																: :					-
						. .				• • • • •					•••••••						Ē
~ - -						. <u>:</u> .	· · · · ·			·	•••••••••••••••••••••••••••••••••••••••	. <u>.</u> .	: : : :	· · · · · · · · · · · · · · · · · · ·	· · : ·	:: ::	· <u>:</u> · ·				- 25
1																					L
-8 						÷	: :	:		: :	÷	÷	: :	: :	÷	: :	÷				E
-						·		: : :		· : · :	:	· :	: :	·:·:	•••	:::	· : · ·				-
										•											-
						÷	: :	÷		: :	÷	÷	: :	: :	÷	: :	÷				-
-9																					F
л 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2											-										
STAR	I T DATE START DEPTH EQUIPMENT	1	1	1	CON	TRA		 R			•	· ·		GA	S Me	 Etef	• R TYF	PE: RKI Eagle			L
2013/11					Tervita									LO	GGE	D: G	SWC	REVIEW: KAF	DRA	AFTED:	MLM
0133.GPJ																		RSC			
20																					

TEST	EST PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba								NO	: 1()-51	33					1	EST	PIT NO: TP			
	NT: Imperial Oil																		RT DATE:		3/11/04	
SAM	PLE TYPE: G - Grab OS - Other																_		PLETION DATE:	2013	3/11/04	
																	F	PAGE	E 1 of 1			
	DESCRIPTION		-	SAMPLING																		
Depth (m)		SAMPLE TYPE	ZONE TESTED																COMMENTS		Ц	Depth (ft)
ept	STRATIGRAPHY		TES			4	S		VAF ENTF		R								COMMENTS		BACKFILL)ept
		AMP	Ne	LAB SAMPLE N	AME/		COI	NUE ()		και ν)	ION										BA	
		0 N	Ň	LAB ANALYS	ES		100	20	0 <u>3</u>	00	400	;	-:-	: :		: :	:	: :				
						÷	÷		÷	-		-		: :			-					
							÷	: :	÷	: :		÷	÷	: :	:		÷					
							÷	: :	÷	: :		÷	÷	: :	:		÷					
						÷	÷	: :	÷	: :		÷	÷	: :	÷		÷					
	GROUND SURFACE					-			÷	: :		-	-	: :			-					
-0	GRAVEL (Fill) - light brown, coarse to fine grained, sandy, damp.			7					• • • •		• • • •						• • • •				777	<u>-</u> 0
ł		G	/									:										£
Ł	CLAY (Fill) - dark brown, clayey, some silt, moist.	-	1	7		÷	÷	: :	÷	: :		÷	÷	: :	:	: :	÷					ŧ
-	CERT (TIII) - dark blown, dayey, some silt, moist.	G	/	(ŀ		· : · ·		• • • • •	: :	• • • •	÷	:		:		· :	: . : : : :				F
ŧ,			V		Ţ.							<u>.</u>										Ę
1 1	SILT - dark brown, sandy, some clay, moist.]			÷		÷	: :	÷	÷			÷		÷			ļ		F
E				7		:			:	-	:	:	:				:					F
F		G		TP-4-1.8 / Grain Size					·			÷					·			ł		5
-					T.																	£
-2	CLAY - dark brown, silty, trace sand, damp.	_	/	7		÷	÷	: :	÷	: :		÷	÷	: :	:		÷					ŧ
-	CLAT - dark brown, sing, trace sand, damp.	G	/	TP-4-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	k	÷	·:		·	: :	•	÷	·		::::		÷	: . : : : :				F
-			/	1,2-DBA, 1,2-DCA								÷					. <u>.</u>					Ē
E	- olive brown, trace silt.			/		÷	÷		÷	-		-					-		Test Pit backfilled wi	ith		£
E		G		TP-4-3.1 / Grain Size	^	÷													excavated material which was replaced	in		Ē
-3			/			÷	. <u>.</u>					÷					. <u>:</u>	: : : : : :	its' original order and	i i		<u>}</u> _10
-			/	TP-4-3.7 / BTEX,		÷	÷	: :	÷	: :	÷	÷	÷	: :	:	: :	÷		then nominally compacted with the			F
È.		G		7 TP-4-3.7 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	Ĩ				:				:		:				excavator bucket.	ł		F
-		-	/	7			•		•			÷					• • • •		•			F
012		G	/																			Ē
1/26/2		ľ			Ī		÷	: :	÷	: :		÷	÷	: :	:	: :	÷					ŧ
PRINTED: 01/26/2015				7		÷	· : · ·		·	: :	• • • •	: :	·				• ÷•••	: . <u>:</u> : : :	•			F
N N N		G										÷										-15
111			V			-	-															£
⁴¹⁰	END OF TEST PIT at 4.9 m					:			:				:									Ē
RED	No Daylighting Performed					÷	· · · ·		• • • •			÷					•					F
REPA												÷										E
87						÷	÷	: :	÷	: :		÷	÷	: :	:		÷					È
R07.G						÷	·:		·	: :	•	÷	:		::::		÷	: . : : : :				F
\$ ⊢ 6												<u>.</u>										-20
BRAF						÷	÷		÷	: :		÷	÷	: :	:		÷					Ē
GEG						:	:		:	: :		:	:		:		:					-
PE&							•		• • • •		• • •	÷					• • • •					F
																						-
USL /						÷	÷	: :	÷	: :		÷	÷	: :	:		÷					È
- TES						÷	·:		•		• • • •	: :	·		:		· ÷· ·	: . <u>:</u> : : :	•			F
TA V4												÷										25
0 DA						-	-		-	: :		-		: :								Ē
8-1-8							::::		:		:	:	:									Ē
EMICEG REPORT LOG 51 PERICEG DATA V4. TESTING.GDT PERICEG LIBRARY V3.R97.GL B PREPARED: 2014/02 					.				• • • •		• • • •	÷.,					÷					F
																						Ē
FOR					ľ					: :							÷					Ė
						÷	· : · ·		·	:	• • • •	÷	·		::::		· ÷· ·	: . : : : :				F
17 18 19							-		÷		-	÷		-			:					ſ
S						:	: 		:		:	:	:	: :		: :	:	: : 				
STAR	T DATE START DEPTH EQUIPMENT /04 0.0 m Caterpillar 336C Excavator				CONT Tervita C											AS M DGGE			PE: RKI Eagle REVIEW: KAF		FTED: I	MLM
2						~~i	. or att	511														
5133.6																	7	A	RSC			Э

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						R	EF.	NO:	10	513	3							t pit no				
	NT: Imperial Oil						-															/11/04	
SAMF	PLE TYPE: G - Grab OS - Other						-												IPLETIO		2013/	/11/04	
	DESCRIPTION			SAMPLING								Т						PAG		1			
-	DESCRIPTION	— ш																					(t)
Depth (m)		IγPI	ZONE TESTED		ŀ						<u> </u>	_							- 0	COMMENTS		BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	PLE		LAB SAMPLE N			CO	NCE	vap Ntr	RATIO	NC											ACK	Del
		SAN	N2	LAB SAMPLE N LAB ANALYS	ES		100	(F 20	0 30	') 00 -	400											8	
									:						÷		÷						
						÷	÷	: :	÷	: :	:		: :		÷	: :	÷	÷÷					
															-								
						÷	÷	: :	÷		:		: :		÷	: :	÷	: :					
						÷	÷		÷		-		-		:	: :	÷						
-0	GROUND SURFACE ASPHALT.				-	÷	· : · ·	:: ::	·÷··	: : : :					· : · ·	:: ::	· ÷··	÷ · ÷ ·					-0
E	GRAVEL (Fill) - light brown, coarse to fine grained, sandy, trace	╧	\Box	7																	ł		-
-	cobbles, damp.	G			1	Ì	÷	: :	÷		-		-		-	: :	÷				ľ		-
-			Ĺ	7	ł																ĺ		-
[G			 	÷،			• • • •												F		-
- '			/																				-
-	CLAY - dark brown, silty, trace sand, damp.						-		÷								÷				ľ		
E	- some silt, damp below 1.5 m.	G			ſ	• :					-		-								ł		-5
ł,		-			-	·			• • • •						·		•						-
1-2 1		G	/	TP-5-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		÷.			. <u>.</u>												ľ		_
-	- olive brown below 2.3 m.		\langle	1,2-DBA, 1,2-DCA		:		: :	÷				-		÷	: :	÷				ľ		_
F				/															Test Pi	it backfilled wit	h /		-
Ē		G	/		ł	÷.			• • • • •						•				· excava	ited material	.		-
-3		_	1		-														its' orig	inal order and	"		- 10
-		G	/	/ TP-5-3.7 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA															then no	inal order and ominally cted with the			-
Ē	- trace silt, moist below 3.4 m.			1,2-DBA, 1,2-DCA	Ī	ł	÷	: :	÷	: :	:		: :		÷	: :	÷	: :	excava	itor bucket.			-
-			Ĺ	7	ľ	·			· 														-
-4		G				۱.			• • • •												l		-
																: : : :							-
				TP-5-4.9 / BTEX,					:						:		÷				ľ		
4		G		TP-5-4.9 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	ſ	• :																	— 15
-	END OF TEST PIT at 4.9 m		1	-		: ::	·:	: :	· : · ·	: : : :	::::		: :		·:	: : :	· :	:::			Z	///	-
ĘD:Z	No Daylighting Performed				-					: : : : :						: : : :							_
HEPAI						:		: :	÷				:			: :	÷	: :					_
							-	: :	÷		:				:	: :	÷	: :					-
					ľ	·			· :														-
≊ ⊢ 6 ≩[-	·	· · · ·		·						·	:: ::	·						20
- LIBK									. <u>.</u>	: : : : : :						: ::	 						-
									:						:		:						-
					Î				:														-
					1	·	·:	: :	• ÷•••	: : : :	::::				·÷··	: : :	· :	÷ · ÷ ·					-
						:										· · · · ·		÷					-
44 -																							-25
																							_ 20
8					ľ	· :			· 										•				-
- -					ł				· .	: : : :					· : :	: : : : :		: : : :					-
										: : :													-
							-		:						:		÷						-
																			1				-
P E & F						:	÷						-		÷		÷						
	T DATE START DEPTH EQUIPMENT			1	CONT				•					•					YPE: RKI				
ž 2013/11	04 0.0 m Caterpillar 336C Excavator				Tervita	Cor	porati	on										JMB		EW: KAF	DRAF		
5133.GPJ																F	D)		R	50	N	JE	5
5					1										1	-		-				_	

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	. NO	: 10	-513	3					t pit no:	TP-6		
						-										RT DATE:		13/11/04	
SAMF	PLE TYPE: G - Grab OS - Other					╞										IPLETION DATE	:: 20	13/11/04	4
-	DESCRIPTION			SAMPLING											FAG				
Ê	DEGONFTION	— ш	_																(£
Depth (m)		SAMPLE TYPE	ZONE TESTED				50	IL VAF		<u>,</u>	_						NTS	BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	PLE		LAB SAMPLE N			CONC	FNTE	RAT	ON								ACK	
		SAN	ZOZ		awie/ ES	1	00 2	(ppm) 200 3	v) 300	400									
													: :						
						÷		: :	: :	: :		: :	: :	: :					
						÷		: :	: :	:::	:	: :	: :	: :					
<u>–</u> 0	GROUND SURFACE ASPHALT.	_						· • • • • •										777	10
	SAND (Fill) - light brown, coarse to fine grained, gravelly, some	+		7															Ł
Ŀ	cobbles, moist.	G						: :	: :			: :	: :						ł
-			Ĺ																ŧ
-1		G		/ TP-6-1.2 (DUP-6) / BT PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	EX,	. ÷.	i.	· · · · · ·		· · · · · ·									1
-			$\left \right $	1,2-DBA, 1,2-DCA															Ł
-	CLAY - dark brown, silty, trace sand, damp, gray staining.					÷		: :	: :			: :	: :						ŧ
F		G			4														<u></u>
Ē		_	1					· · · · · ·											1
-2		G	/	/ TP-6-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA					: :										Ł
-				1,2-DBA, 1,2-DCA	4	T		: :	: :	::		: :	: :						ŧ
Ē			Í,																ł
E	- trace silt, moist below 2.7 m.	G			4	k ≟ .		· · · · · ·					· · · · · · ·			Test Pit backfill excavated mate	erial		1
-3			\langle						: :							which was replative its' original orde	aced in er and		-10
-				/					: :							then nominally			£ 10
-		G			4	≜										compacted with excavator buck	i the et.		ŧ
-			1					· · · · · ·											1
£ .		G	/	/															£
-4					4	Ī		: :	: :			: :	::						ŧ
4			Ĺ	7															ł
		G			4	k ≞.	: : :	·····	·:·:	÷		·······	· · · · ÷ ·						-15
102/1/																			
5	END OF TEST PIT at 4.9 m											: :							-
	No Daylighting Performed					:													-
- -						. <u>.</u> .													-
																			-
≈ –6																			-
- -						1		: :	: :	: :		: :	: :						- 20
						·	: : :		· · · · ·			•••••••	· · ÷ · ÷·	•					-
																			-
						:		: :	: :			: :	: :						-
																			F
						:			·: · :		••••••	•••••••							Ē
								• • • • • •					· · · · · · ·						-25
5 2 2																			-
8						÷		: :	: :			: :	: :	: :					Ē
																			-
						·		·····	÷ ÷	÷		·······	· · · · · · · ·						-
																			Ē
												:;;							F
								: :	: :										
	T DATE START DEPTH EQUIPMENT				CON											YPE: RKI Eagle	- 1		N 41 N -
축 2013/11 고	/04 0.0 m Caterpillar 336C Excavator				Tervita	a Corpo	oration								D: JMB			RAFTED:	
5133.GPU														Ρ	/_	RS		NS	Ξ
۰ L					1								1						

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					REF. NO: 10-513	3			PIT NO: TP-		
	NT: Imperial Oil										2013/11/0	
SAM	PLE TYPE: G - Grab OS - Other									PLETION DATE: E 1 of 1	2013/11/0	4
	DESCRIPTION			SAMPLING								Τ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	_			▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400				COMMENTS	BACKFILL	Depth (ft)
	GROUND SURFACE ASPHALT. COBBLES AND GRAVEL (Fill) - coarse to fine grained, sandy, damp. SILT - brown, dayey, some sand, damp, gray staining. CLAY - brown, silty, trace sand, damp. - olive brown, trace silt, moist. - olive brown, trace silt, moist. END OF TEST PIT at 4.9 m No Daylighting Performed TDATE START DEPTH EQUIPMENT Charalle 2865 Executiv			LAB SAMPLE W LAB ANALYSE TP-7-12 (DUP-7) / BT PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA TP-7-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	ES EX,					Test Pit backfilled with excavated material which was replaced in its' original order and then nominally compacted with the excavator bucket.		20
2013/11					Tervita	a Corporation		LOGGED:	JMB	REVIEW: KAF	DRAFTED:	
								P	A	RSO	N	5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NO): 10	-5133	3							- 8		
	NT: Imperial Oil						<u> </u>								_		RT DATE:		3/11/08	
SAMF	PLE TYPE: G - Grab OS - Other						-										PLETION DATE: E 1 of 1	201	3/11/08	5
	DESCRIPTION			SAMPLING												AOL				
Ê		— ш																		(£
Depth (m)	STRATICRARUV	SAMPLE TYPE	ZONE TESTED				SO	IL VA		2	+						COMMENTS		BACKFILL	Depth (ft)
Der	STRATIGRAPHY	PLE	L H H H H	LAB SAMPLE		'	CON	CENT	RATI	NС									BACK	De
		SAN	ZON		SES		100	(ppm 200 3	iv) 300	400									Ш	
									: :				: :		÷					
									: :											
															-					
	GROUND SURFACE					:	÷÷	: :	: :	: :			: :	: :	÷	: :				
-0	GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.			7		: :		·····					: : :	• • • • •	· · · .	: : : :			///	-0
È		G	/										: : :							
-			$\left \right $			Ī			: :				: :		÷					ł
-				7			: :	::::			•••••		: :			::::				
[1		G				k ÷			· · · · · ·				÷	• • • •						Ļ
ţ'			/	_									: : :		<u>.</u>	: : : : : :				
-	SILT - gray, clayey, trace sand, damp.			TP-8-1.8 (DUP-26) /	BTEX,										÷					ŧ
E		G		TP-8-1.8 (DUP-26) / PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		:		: :	: :				: :	: :		: :				-5 -
ţ.	- moist below 1.8 m.		1			<u>.</u>			· · · · ·		• • • • •		÷	• • • • •						[_ {
-2	- gray staining from 1.8 m to 2.4 m.	G	/			L.										: : : : : :				ŧ.
-			V			:	:::	: :	: :	: :			: :	: :	÷	: :				F
-	CLAY - olive brown, silty, trace sand, damp.			TP-8-30/BTEX													Test Pit backfilled w	/ith		F
F		G		TP-8-3.0 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		≜ ∵	·:-::	·:·::	·: · :		• • • •		÷;	•	· · ÷ · ·	:::::::::::::::::::::::::::::::::::::::	excavated material which was replaced			[
-3			/	,									÷;	• • • • •	· · ÷ · ·		its' original order an	id in		[10
-		G	/	/				:::	: :	: :			: :	: :	÷	: :	its' original order an then nominally compacted with the			E
-		G			4												excavator bucket.			F
Ē						:. :	·:::::		·: · :	·: ·:	• • • •		÷ • • • • • • • • • • • • • • • • • • •	· : : :	· · ÷ · · :	:::::::::::::::::::::::::::::::::::::::	•			[
⊊4		G							· · · · · ·				÷.;	• • • • •						F
01/26			\langle			÷	÷÷	: :	: :	: :			: :	: :	÷	: :				F
PRINTED: 01/26/2015						:	:::	: :	: :	: :			: :	: :	÷	: :				ł
PR -		G			4	≜ ÷					• • • •			• • • • •						1—15 1
14/02/1	END OF TEST PIT at 4.9 m	_	1	-		. :-	· · · · ·	÷÷÷	· · · · · ·	$\cdot \cdot \cdot \cdot \cdot$:: :::::	•	· · ÷ · ·	: : : : : :				
≈ ⊢ 5																				È
EPAR	No Daylighting Performed									: :			: :	: :	÷					-
84 - 94													::::							Ē
407.GL														• • • • •						F
5 [−6																				20
- -															÷					
						:	: :	::::	::::	: :			:::	: :	:	: :				F
E E													÷	• • • • •	· · .					-
																				-
STING																				-
=																				F
														• • • •	· · · · · · · · · · · · · · · · · · ·					-25
																				-
						:	:::	: :	: :	: :		: :	: :	: :	÷	: :				-
1																	•			F
						· ÷					••••••		÷ :	· : · · :	· · ÷ · ·	:::::				F
									· · · · · ·				÷.;	• • • • •						-
																				ŀ
s)								: :	: :	: :			<u>:</u> :	: :						
STAR 2013/11	T DATE START DEPTH EQUIPMENT 1/08 0.0 m Caterpillar 336C Excavator				CON		CTOF									ER TY GWC	PE: RKI Eagle REVIEW: KAF	^סח	FTED:	MEM
_						a 00ľ	poratiOf						F				-			
5133.GP.															-/	A	RSC	J		Ξ

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						R	EF. N	NO :	10	-513	3						t pit no:	TP			
	NT: Imperial Oil																	RT DATE:		2013/		
SAMF	PLE TYPE: G - Grab OS - Other																	IPLETION	DATE:	2013/	11/08	i
	DECODIDITION					1											PAG	E 1 of 1		<u> </u>		<u> </u>
Ē	DESCRIPTION	-		SAMPLING		-																(f)
Depth (m)		SAMPLE TYPE	ZONE TESTED									_						co	MMENTS		:III	Depth (ft)
Dep	STRATIGRAPHY	Т Ш Ц				1	COI	OIL \ VCEI	vap Ntr	iuou Ntas	ЗN										BACKFILL	Dep
		SAM	ZON	LAB SAMPLE NA LAB ANALYSE	AME/ ES		100	(p) 200	pmv	/) 00	400										ß	
						1	:	200	:	: :	: :		:	: :	:	: :	: :					
									-				-		-							
						:	÷		÷	: :	: :		÷	: :	÷	: :	: :					
							÷		÷	: :			÷	: :	÷	: :						
									-				÷									
	GROUND SURFACE									: : : :						: : : :				Ļ		L0
-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.	G					÷		÷	: :	: :		-	: :	÷	: :	: :			ł		F
-		G			4	Î														ł		F
-						· .:.	·:		:	::::	·÷ · :	••••••	•••	 :	· · : · ·	: : : :	·÷·÷·	•		F		F
ŧ,		G																		F		F
[−1 [V			:	÷	: :	÷	: :	: :		÷	: :	÷	: :	: :			ł		F
-	SILT - dark brown, some clay, trace sand, damp.																			F		F
F		G			4	≜ ∷	·:		÷	::::	÷ :	• • • • •	•••	÷•••	· ::··	: : : :						-5
-		_	1						÷													F
-2	- brown, dayey, moist.	G					÷		÷	: :				: :	÷					l		£
-					4	Ĩ			-											ł		F
-	CLAY - olive brown, silty, trace sand, damp.					:.						•	•••							.		Ē
-		G				.				 								· excavate	oackfilled wit d material	ľ		F
-3			V			:	÷		÷	: :	:::		÷	: :	÷	: :	: :	which wa	is replaced i	n		Ē 10
Ţ			/	TP-9-37/BTEX														then nom	is replaced i al order and ninally ed with the	ł		1—10 F
F		G		TP-9-3.7 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA			·:	···· · · · · · · · · · · · · · · · · ·	÷	: : : :	·: · :	• • • •	•••	÷;	· · ÷ · ·	: : : :	·::-	excavato	ed with the r bucket.	K		F
Ē				,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						: : : :												F
2							÷	: :	÷	: :	::		÷	: :	÷	: :	: :			ł		F
¥ −4		G			4																	F
						· .:	·:		:	::::	÷ • ÷	•	•••	: : :	:	: : : :		•				F
-		G				.			÷	: : : :	÷.									ľ		- 15
-			/							: :				: :		: :						Ē
-5	END OF TEST PIT at 4.9 m					:	÷		:	: :	: :		÷	: :	÷	: :	: :					
-	No Daylighting Performed														· · · · · · · · · · · · · · · · · · ·							Ē
-									÷	: :					· ·	: : : :						F
									<u>.</u>													E
-6							÷		÷	: :			÷		÷	: :						Ē
-						:	:		:	::::	::::			: :	:	::::	: : : :					- 20
											÷		•••									F
										: : : :						: : :						Ē
- -							÷						÷			: :						Ē
-7																						Ē
3-									÷		·÷ · ;		•••				· · · · · ·	•				-
5										: : : :												-25
						:	÷	: :	÷	: :	::		÷	: :	÷	: :	: :					Ē
8																						F
									: :				· · : :				·····					E
Ē						. <u>.</u>			÷				· · · ·			: : : :						F
5 J																						Ē
-9									:													F
							÷		:				:		÷							1
	T DATE START DEPTH EQUIPMENT		1	1	CON					•			•					YPE: RKI E	agle	-		
2013/11	1/08 0.0 m Caterpillar 336C Excavator				Tervita	a Cor	porati	on						H			: GWC			DRAF		
0																			50	JN	JE	5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC): 1()-513	3							- 10		
	NT: Imperial Oil					[RT DATE:		3/11/08	
SAMF	PLE TYPE: G - Grab OS - Other																PLETION DATE: E 1 of 1	201	3/11/08	}
	DESCRIPTION			SAMPLING												PAG				<u> </u>
Ê	DESCRIPTION	<u> </u>																		f.
Depth (m)		SAMPLE TYPE	ZONE TESTED		-						_						COMMENTS		<u> </u>	Depth (ft)
Dep	STRATIGRAPHY	LE LE				(CON	IL VA	RAT	ON									BACKFILL	Dep
		SAM	ZON	LAB SAMPLE NA	AME/ ES	1	00	(ppm 200	1V) 300	400									E E	
						:		: :	: :			: :	:	: :	: :	: :				1
						÷										: :				
						÷	: :	: :	: :			: :				: :				
						÷	: :	: :	: :	-		:::	:			: :				
						÷	: :	: :	: :	-		: :	:		: :	: :				
-0	GROUND SURFACE																			L
5	GRAVEL (Fill) - brown, coarse to fine grained, sandy damp.					÷	: :	: :	:			: :	:			: :				ŧ
-		G			4	÷	: :		::::	• • • • •	• • •	· · · · · · · · · · · · · · · · · · ·	: :	 						1
-			/																	ŧ
-				/				: :												ł
-1		G				A	: :						:							Ŧ
1	SILT - dark brown, some clay, trace sand, damp.		1	/		·														Į.
-		G		r																15
-					ľ	-	: :	: :	: :			:::	:	: :	: :	: :				ŧ
F,	brown, clayey, moist		Ĺ			·					• • •									ŧ
<u>-</u> 2		G		TP-10-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		L.														ł
			V	1,2-DBA, 1,2-DCA		÷	: :	: :	: :	-		: :	:		: :	: :				ł
-	CLAY - olive brown, silty, trace sand, damp.					:	: :	: :	: :				:				Test Pit backfilled w	vith		F
-		G			4	÷.				• • • • •			• • • •				· excavated material			
-3			/														 which was replaced its' original order an 	in d		¢ −10
-						÷	: :	: :	: :	-		: :	:			: :	which was replaced its' original order an then nominally compacted with the	-		
Ē		G			1	۰÷۰۰ ز					•••						excavator bucket.			ŧ
-			1																	Ł
- 15				/		÷	: :	: :	: :			:::	÷	: :	: :	: :				ł
02/92/ -		G			1	:	: :	: :				: :	:							F
<u>а</u> -		-	1	7		·								 		· · · · ·				Į.
PRINTED: 01/26/2015		G		r																↓ ↓ 15
11			$\left \right $		Ī	-	-													ŧ
-5	END OF TEST PIT at 4.9 m		1			·					•••••									Ê
	No Daylighting Performed					· ÷ ·	: : :	· · · · ·				÷	•	: : : : · :	: : : : :	÷				E
REPA	No Dayighung renormed					÷	: :	: :	: :	-		: :	:	: :	: :	: :				F
9 9						÷														F
R07.G						·	:	·::-	·÷ · ;	•••••••••••••••••••••••••••••••••••••••	• • •	· · · · · · ·	·			· · · · ·				F
\$_6						. <u>.</u>	: : : :								 					-20
BRAF						÷			-											
						:	: :	:::::	: :		•••••		:							Ē
HE81						· ÷ ·	: · :	· · · · ·		• • • • •		÷ • •	• • • •	: : : : : :		÷				È.
																				E
Su⊢ ′						÷	: :	: :	: :	-		: :	÷		: :	: :				E
TES						· ÷ ·	: :			• • • • •	• • •	· · · · ·	:::							F
TA V4																				25
2 2 2						÷	: :	: :	: :			: :	:			: :				F
8						:	: :	: :				: :	:							F
51 B						·	 	· · · · ·		• • • • •										F
						. <u>.</u>	:							: : : :		::::::::::::::::::::::::::::::::::::::				Ē
POR						÷	: :									: :				Ē
						·					••••		:				1			Ē
						÷			: :				:			: :				
Ω Ω	L T DATE START DEPTH EQUIPMENT				CONT	: : :		: :	: :	: :		: :	: :	: : GAS			/PE: RKI Eagle			<u> </u>
2013/11					Tervita											GWC		DRA	FTED:	MLM
_													F							
5133.GPJ																4	RSC			Ð

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0: '	10-5	133								- 11		
							-											T DATE:		3/11/12	
SAMF	PLE TYPE: G - Grab OS - Other						⊢											PLETION DATE:	201	3/11/12	<u>'</u>
	DESCRIPTION			SAMPLING												F.	AOL				
Ê		<u>ل</u>																			æ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED				SC		APO	UR								COMMENTS		BACKFILL	Depth (ft)
ے ا		MPLE	L H	LAB SAMPLE N	IAME/		CON	ICEN	TRA mv)	TION	١									BACI	ď
		SA	R	LAB ANALYS	ES		100	200	300	40	0										
								-		: :	-		: :		÷	: :					
						:	: :	:	: :	: :	÷	:	: :	: :	÷	: :	÷				
											-				-		-				
								-		: :	-				÷	: :	-				
	GROUND SURFACE					:				: :	÷		: :	: :	:	: :					
	GRAVEL (Fill) - brown, coarse to fine grianed, some clay, damp.																				
-		G			4							·			•••						[_ [
Ē			1							• • • • •					· · ÷ ·						
-		G																			Ł
<u> </u> -1			V			T:		-			-				÷	: :	-				
Ē	SILT - dark brown, clayey, trace sand, damp.		/	TP-11-1 2 / RTEY									: :							V//.	ł
F	- brown, moist below 1.5 m.	G		TP-11-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	4			•••		•					•••						-5
E			1	,,						• • • • •											1
-2		G	/													: :					E
-					•	Ē		÷	: :	: :	÷	:	: :	: :	÷	: :	÷				
-	CLAY - olive brown, silty, trace sand, damp.											 			••••••			Test Pit backfilled w	uith		1-
-		G		TP-11-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	4	. :			· · · · ·	• • • • •					•••	::::		excavated material			
-3			/	1,2-DDA, 1,2-DOA														which was replaced its' original order an	i in nd		t 1−10
-			/												:			its' original order an then nominally compacted with the	•		
F		G			4													excavator bucket.			
-		-	Ĺ			: :	•					·			•••••••••••••••••••••••••••••••••••••••						ľ t
2- -4		G			4					• • • • •											1
				_																	Ł
PRINTED: 01/26/2015				1							-		: :		÷	: :	:				
5		G			4	Î															1—15 7
	END OF TEST PIT at 4.9 m	┥	1	-			•	•••••••••••••••••••••••••••••••••••••••					: : : :		•••••••••••••••••••••••••••••••••••••••	:::				V/L	-
	No Daylighting Performed								 	• • • • •					· · . ·						-
													: : :			: :					-
								-			-				÷	: :					-
						:	: :						: :	:::	:	: :	:				-
										•					•••						-20
										• • • • •											-
																: :					Ē
						:		÷		: :	÷	:	: :	::	÷	: :	÷				-
5 –7										· · · · ·					••••••						-
									· · · · ·	• • • •					· · · · ·	:: :::::					-
- H																					-25
EGUA						:	: :	÷		: :	÷	÷	: :	::	÷	: :	÷				-
8						:		:		: :	-	:	: :	::	÷	: :	:				-
																					-
2 - 2 -						: :			· · · · ·			<u>.</u> .			· · · . :						-
													: : :			: : :					-
											-				:						Ē
2						:		:		: :			: :	: :	÷	: :	:				
STAR 2013/11	F DATE START DEPTH EQUIPMENT /12 0.0 m Caterpillar 336C Excavator				CON ⁻ Tervita												R TY SWC	PE: RKI Eagle REVIEW: KAF	יפח	AFTED:	MIM
_						. 001	pordul	41													
5133.GP.																7		RSC	Jľ		Ð

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC	D: 1	0-5	133							-12		
	NT: Imperial Oil					_											T DATE:		3/11/12	
SAM	PLE TYPE: G - Grab OS - Other												 				PLETION DATE: 1 of 1	2013	8/11/12	
	DESCRIPTION			SAMPLING											117		1 01 1			
Ê			-																	æ
Depth (m)	STRATIGRAPHY	₹	ESTE		H	•	SC	IL VA	POI	IR			 				COMMENTS		BACKFILL	Depth (ft)
De	STRATIGRAFTI	APLE	F 単	LAB SAMPLE N		(CON	CENT	rra ⁻	TION	I								BACK	B
		SAN	Z	LAB ANALYS	ES	_ 1	00	(ppn 200	nv) 300	40	0		 						ш	
	GROUND SURFACE ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp. CLAY - olive brown, silty, trace sand, dampsome siltsome silt. END OF TEST PIT at 4.9 m No Daylighting Performed	SAMPLE TYPE		LAB SAMPLE NJ LAB ANALYSI TP-12-1.2 / BTEX, PHC F1-F4, Lead, 1.2-DBA, 1.2-DCA TP-12-1.8 / BTEX, PHC F1-F4, Lead, 1.2-DBA, 1.2-DCA	AME/ ES			CENT (ppn 200	TRA 300 3		l D						Test Pit backfilled wi excavated material which was replaced its' original order and then nominally compacted with the excavator bucket.	n	BAG	0 10
EPOR									÷	: :					÷					Ē F
-9						:														F
IS PE&													:			:				
	T DATE START DEPTH EQUIPMENT				CONT							•					PE: RKI Eagle			
2013/11	1/12 0.0 m Caterpillar 336C Excavator				Tervita	Corp	oratio	n						GGED			REVIEW: KAF		FTED: I	
5133.GP.														P	/	4	RSC			5

	FPIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0: 1	10-5	133							PIT NO: TP			
	NT: Imperial Oil																	T DATE:		/11/12	
SAM	PLE TYPE: G - Grab OS - Other																	PLETION DATE:	2013	/11/12	
	DESCRIPTION			SAMPLING												1.,	AOL				
Ê			Ē																		£
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONF TESTED		ŀ		SC	DIL VA		UR								COMMENTS		BACKFILL	Depth (ft)
De	STRATIORAFTT	APLE		LAB SAMPLE N	IAME/		CON	CEN.	TRA'	TION.	١									BACK	ď
		SAN	02				100	(ppr 200	mv) 300	40	0									ш	
						÷	: :	: :		: :	÷	:	: :	: :	÷	: :	:				
						-															
						÷	: :	: :		: :	÷	÷	: :	: :	÷	: :	÷				
						÷	: :	: :		: :	÷	÷	: :	: :	÷	: :	÷				
						÷									:		-				
-0	GROUND SURFACE GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.				-	÷	· · · · ·			: : :		. :	· · · · ·	· · · · · ·	· · : · ·	:: ::	· : · ·		F		<u> </u>
Ē		G		/		÷					÷								ł		Ē
-					Ī	÷	: :	: :		: :	÷	÷	: :	: :	÷	: :	÷				Ē
-			ſ	-	i i	:	· : · :	· · · · · ·		: :		· :			· · : · ·	: :	· : · · ·				 }
Ę,	SILT - brown, clayey, trace sand, moist.			_	-														ł		Ē
1 1	SILT - DIOWIT, Gayey, trace sand, moist.	G	,	/ TP-13-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		÷	: :	: :		: :	÷	÷	: :	: :	÷	: :	÷		E		ŀ
-		G		1,2-DBA, 1,2-DCA	Ī	*															Ē
-	CLAY - olive, silty, trace sand, damp.		ſ	-	-	· ÷	· : · :	•••		: :	· : · ·	· :	· ÷ · ÷	· ÷ · ÷	· · ÷ · ·	: : :	· :				-5
-				_															ľ		Ē
-2				/																	Ē
-		G			1	÷	: :					1	: :	: :			:		l		Ē
-			1	/	-	÷			• • • •				· · · · ·		••••		·				F
-		G		/		.												Test Pit backfilled wit excavated material	ľ		-
Ε,			\mathbb{V}			7	: :	: :		: :	÷	÷	: :	: :	÷	: :	÷	which was replaced i	n [-
-3			ſ												• • • • • •			which was replaced i its' original order and then nominally compacted with the	ĺ		- 10
-		G	/	/ TP-13-3.0 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		۱÷	· · · · · ·						· · · · ·	· · · · · ·	•••	:: :	· .	compacted with the excavator bucket.	ł		Ē
-			V	1,2-DBA, 1,2-DCA		÷	: :	: :		: :	÷	÷	÷÷	: :	÷	: :	÷		l		Ē
, F				7	Ī	÷															Ē
-4		G	/	, 	 	÷	• • • •		• • • •					· · · · ·	•••••••••••••••••••••••••••••••••••••••		• • • •				- F
01/2			1																		- F
RINTED: 01				/											:				ľ		F
17 PF		G	/		ſ	÷						:							ł		- 15
14/02/	END OF TEST PIT at 4.9 m		┦	-	-								· • • •		••••						- F
<u>9</u> _3																					- F-
EPAR	No Daylighting Performed					÷					÷				:						- F
н н н					Ì	-															- F
1 - 1 507.GL					-																-
š [−6																					-20
BRAR						÷	: :	: :		: :	÷	÷	: :	: :	÷	: :	:				_ 20
															• • • • • •						_ E
PE&L					-	· ÷	· · · · · ·			: : :			· · · · ·	· · · · · ·	•••	:: :	· .				-
																					Ē
USL (÷		: :		: :	÷	÷	: :	: :	÷	: :	÷				Ē
TES						÷	· : · :	· · · · · ·	•	: :	· · : · ·	· :			· · : · ·	: : :	· : :				F
TA V4																					-25
2 D						÷	: :	: :		: :	÷	÷	: :	: :	÷	: :	÷				Ē
8-8					Ĩ	-															Ē
BLCEG REPORT LOG 51 PERICEG DATA V4 - TESTING. GDT PERICEG LIBRARY V3-R07.GLB PREPARED: 2014/02 						:					• :	 :			•••		· : · ·				
100																					- F
EPOR						÷					÷				:						- F
ρ_G						:			÷								:				- F
PE&L						-				: :	-				:		:				
STAR	I RT DATE START DEPTH EQUIPMENT		<u> </u>	I		RA		<u>ः</u> २		. :		1:		GA	S Me	. : TEF	R TY	L PE: RKI Eagle			
2013/1					Tervita												SWC		DRAF	TED: I	√LM
(GPJ																		RSO		JC	
5133																1	-				

	FPIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NO): 10)-51	33								-14		
	NT: Imperial Oil																	T DATE:		8/11/12	
SAM	PLE TYPE: G - Grab OS - Other																	PLETION DATE:	2013	8/11/12	
	DECODIDITION															P#	AGE	: 1 Of 1			
	DESCRIPTION			SAMPLING																	Ŧ
Depth (m)		۲.	ZONE TESTED															COMMENTS		긜	Depth (ft)
)ept	STRATIGRAPHY	Ē	۱Ë			4	SO CON	IL VAI	POU	R ION										BACKFILL	Dept
		AMF	NO.	LAB SAMPLE N	AME/			(ppm 200 (BA	
		0			E0		100	200 (: :	300	400	:	:	: :	: :							
							÷÷	: :	: :	÷	÷	÷	: :	: :	: :		÷				
							÷ ÷	: :	: :	÷	:	÷	: :	: :	: :		÷				
							÷÷	: :	: :	÷	:	÷	: :	: : : :	: :		÷				1
										-		-		÷÷							
	GROUND SURFACE							: :		-		-		: :							
-0	GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.			7		•		•••••		•••••••••••••••••••••••••••••••••••••••	 :	•		· · · · ·		• • •	• • •		F	////	-0
-		G		()		▲					:		: : : :						ł		£
-			$\left \right $				÷ ÷	: :	: :	÷	:	÷	: :	: :	: :		÷		ĺ		E
-			1	7		•		· · · · ·	: :	·	:	·	::. : : :				· : · ·		Ĭ		F
F,		G	/		4	۱.		· · · · ·			÷								ł		F
[−1 [SILT - brown, clayey, trace sand, moist, black.	-	1	TP-14-1 2 / BTEX,			÷	: :	: :	÷	:	÷					÷		Ŕ		F
-		G	V	TP-14-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		• Å •	1		: :	: :::::::::::::::::::::::::::::::::::::		:	: :				::::		k	.	ŀ
F	CLAY - olive brown, silty, trace sand, moist.							· · · · ·		· · · ·	$\left \frac{1}{2} \right $	·	· · ·	· · · · ·		• • •			ł		5
-				TP-14-1.8 / BTEX,															ł		E
-2		G		/ TP-14-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	-	A :	÷÷	: :	: :	÷	:	÷	: :	: :	: :		÷		ł		F
-			1	_		·		· · · · · ·	·÷ · ;	·	: :	·	:	· · · · · ·		•	· : · ·		ł		F
-	L										÷	. <u>.</u>	 						ł		Ē
F	- some silt.			1			-	: :	: :	÷	-	÷	: :	: :			÷	Test Pit backfilled wi	th 🖡		f
E		G				Å				•••••••••••••••••••••••••••••••••••••••						••••		excavated material	in P		E
-3			V															which was replaced its' original order and then nominally compacted with the			-10
1				7			÷ ;	: :	: :	÷	:	÷	: :	: :	: :		÷	then nominally compacted with the	ł		Ē
-		G				*	: :	::::		:	:	:				:		excavator bucket.	E		Ē
-			1	1		•	· · · · ·	····		·	:	· ÷ ·	::·	·····		•••	· ÷ · ·		E		F
1012		G	/	7 TP-14-3.7 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA															ł		E
-4			$\left \right $	1,2-DBA, 1,2-DCA	1		: : :	: :	: :	÷	:	÷	: :	: :	: :		÷		ł		F
				7		·		• • • • • •	:::::	· .÷ ·	: :	· ÷ ·	: : : :	· · · · · ·		•	· : · · ·		ł		F
		G		, 							:								Í		-
2/12			V							÷		÷		: :					F		F
-5	END OF TEST PIT at 4.9 m			1		:	1	· · · · ·		:		:							Ľ		E
	No Daylighting Performed					·	÷÷÷	÷÷÷		· .÷ ·	÷	· ÷ ·	:	····		• • •	· ÷ · ·				F
PREPARED								: :		÷	-	÷		: :							Ē
								: :		-		-	: :	: :	: :		÷				F
						•	· : · :	· ÷ · ÷	·÷ · ;	• • • •	: :	·	: : :	· ÷ · ÷		• • •	· : · ·				F
\$ ⊢ 6											÷		: : : :								-20
PE&I-CEG LIBRAR)										-		-		: :							f
										•••••••		•									E
						·	· · · · ·	· · · · ·		· · ÷ ·	÷	· ÷ ·	:.:: ::::	· · · · ·			· ÷ · ·				F
								: :		÷	:	÷		÷÷	: :		÷				Ē
											-							-			F
LES-						•		• • • • •		• • • •	 :	•	· · ·	· · · · ·		• • •					Ē
A - 4											:		: : : :								-25
							÷ ÷	: :	: :	÷	÷	÷	: :	: :	: :		÷				Ē
8-18										• • • •		•									E
51 PE								· · · · ·			÷										F
							÷ :	: :	: :	÷	:	÷					÷				F
20RT						:	1		: :	: :::::::::::::::::::::::::::::::::::::		:				:	::::				F
GRE								· · · · ·		• • • •	÷	·	: : :			• • •	. <u>.</u>				Ē
Ŭ − 9												-									ſ
NS PE							: :	: :	: :	:	÷	:	: :	: :			:				
	IT DATE START DEPTH EQUIPMENT				CONT													PE: RKI Eagle			
철 2013/1 고	1/12 0.0 m Caterpillar 336C Excavator				Tervita	υoη	Joration	I							GGED			-		FTED: I	
133.GF																		RSC	JN	N S	5
ò.					1											_			_		

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF.	NO:	10	-5133	3			_			-15				
	NT: Imperial Oil																	3/11/12			
SAM	PLE TYPE: G - Grab OS - Other					┝										PLETION DATE: E 1 of 1	2013	3/11/12			
	DESCRIPTION			SAMPLING								 			AOL						
Depth (m)		ų L																_	(ff)		
)epth	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED				SOIL	. VAP ENTR								COMMENTS		BACKFILL	Depth (ft)		
		SAMP	ZONE	LAB SAMPLE NA LAB ANALYSE		10	0110	(ppmv	') ')	400								BA			
						10	20 20	<u>JU 3</u>		+00		: :		:	: :						
														:							
														÷							
	GROUND SURFACE													÷							
-0 -	GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.		1				:							:				\square	E E		
-		G					·	 					• • • • •	• • • • •		•			F		
-	SILT - brown, clayey, trace sand, moist.		/				·	 					· · · · · · · · · · · · · · · · · · ·	·	: : : :				F F		
-1		G	/	TP-15-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA			·		: : : : :	÷		 	• • • • •	·					Ē		
- '			/	1,2-DBA, 1,2-DCA															F		
-		G	/																Ē		
-			\langle		Ī									÷					Ę		
-2	CLAY - olive brown, silty, trace sand, damp.		/	TP-15-1.8 / BTEX,															F		
-		G		PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		•	·	· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·	· · · · ·					Ē		
-							·		: : : :				• • • • •	• • • •					F		
-		G	/	TP-15-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA				 	: : : : :	÷		 	• • • • •			Test Pit backfilled wi excavated material	ł		Ē		
-3				1,2-DBA, 1,2-DCA				 								which was replaced its' original order and then nominally	in i		} 10		
-		G	/													compacted with the			Ē		
-		G	V		Ī											excavator bucket.			Ē		
-			/													•			F		
-4		G					•	 			•		• • • • •	• • • •					Ē		
PRINTED: 01/26/2015		-	<u> </u>			•	· . :	: : : : : :	: : : :			 : : : : :	· · · · · · · · · · · · · · · · · · ·		: : : :	•			F		
- PRINT		G	/						: : : : :				·	·	: : : : : :				- 15		
4/02/17		_		-															F		
ig −5	END OF TEST PIT at 4.9 m																		Ē		
EPARE	No Daylighting Performed													-					Ē		
81 - 1																			F		
FR07.G							·	 					• • • • •	· · · · ·					Ē		
S −0							·		: : : :				• • • • •	• • • •					-20		
G LIBR						•		 	: : : : :	÷		 	• • • • •						Ē		
10 10 10 10																			F		
																			Ē		
STING										::			: :	÷					È		
1 - TE																•			F		
DATA							• • • •				• • • •			• • • • •	: · · · · · · · · · · · · · · · · · · ·	•			- 25		
							·	 					· · · · · · · · · · · · · · · · · · ·	· · · · ·	: : : :	•-			F		
51 PE						•	·		: : : : :	÷		 	• • • • •	·					ŀ		
RIFCEG REPORT LOG 51 PERICEG DATA V4 - TESTING GOT PERICEG LIBRARY V3R07.018 PREPARED: 2014/02 									 			 · · · · ·							F		
ZEPOR																			Ē		
-9																			F		
S							:			::		: :	: :	:	: :						
STAR 2013/1	T DATE START DEPTH EQUIPMENT 1/12 0.0 m Caterpillar 336C Excavator				CONT Tervita							 G	SAS N		ER TY GWC	PE: RKI Eagle REVIEW: KAF		FTED: I	MLM		
GPJ						рог															
5133.														-/	H	RSC			3		
	T PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC	D: 1	10-5	133							PIT NO: TP			
-------------------------	---	-------------	------------------	---	-----------	------------	------------------	---------------------------------------	---	------	---------	------------------	---------------	----	----------------	-------	------	---	-------	----------	------------
CLIE	ENT: Imperial Oil																	RT DATE:	2013/		
SAN	IPLE TYPE: G - Grab OS - Other					ŀ												PLETION DATE: E 1 of 1	2013/	11/12	
	DESCRIPTION			SAMPLING													AGE				
Ê			_	-																	ŧ
Depth (m)		SAMPLE TYPE	ZONE TESTED		-	•	SC	IL VA		UR								COMMENTS		BACKFILL	Depth (ft)
	STRATIGRAPHY	MPLE	IF IF	LAB SAMPLE NA		(CON	CENT	TRA'	TION	N									BACK	۵ ا
		SAN	Z	LAB ANALYSE		. 1	00	(ppr 200	nv) 300	40	00									ш	
						-			-	: :	-										
						÷	: :	: :	÷	: :	÷			:		-					
						-	: :		÷	: :	-					: :					
						-			÷		÷										
	GROUND SURFACE					÷	: :	: :	÷	: :	÷		: :	:		: :					
-0	GROUND SORFACE GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.	_		7		·			• • • •			·	• • • • •		· · · · ·					77	F-0
ŀ		G																			-
-			$\left \right $: :		-	: :											-
Ē	SILT - dark brown, dayey, some sand, damp.	G	1	TP-16-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA				::::	••••••												- F
-1		-	1	1,2-DBA, 1,2-DCA	Ţ				• • • •			. . <u>:</u>							ľ		- F
¦ '	- gray below 1.1 m. - brown, damp below 1.2 m.	G																			-
-	- brown, damp below 1.2 m.		\langle						÷		-										- F _
-	CLAY - olive brown, silty, trace sand, damp.		Ĺ	7		:													ł		—5 F
ŀ				TP-16-1.8 / BTEX,		· ÷ ·			•••			. <u>:</u>	• • • • •								F
-2		G		TP-16-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	↑	• : 	: : : :														Ē
F			V			÷	: :		÷	: :	-					-					-
-				7					•••••••									Test Pit backfilled wit	. /		- [
-		G							•••			. <u>.</u>	• • • • •					excavated material	Ľ		-
-3			$\left \right $															which was replaced in its' original order and	י		-
Ē				7		÷	: :	: :	÷	: :	÷		: :	:	: :	: :		then nominally compacted with the excavator bucket.			10
Ŀ		G			≜	· · · ·			• • • • •									excavator bucket.			_ E
ł.	- some silt.	·	1	7			: : :	$\cdot \frac{1}{2} \cdot \frac{1}{2}$	· · ÷ ·			. . <u>:</u> .	• • • • •				 		ł		Ē
015	- some sitt.	G	/	/																	- E
-4		ľ			Ī		: :	::	÷	: :	-	:	:::	:							Ē
				7		·			•••••••••••••••••••••••••••••••••••••••			. 									E
PRIN -		G				, <u>.</u>	: : :	· ÷ · ÷	· · ÷ ·			. . <u>:</u> .	• • • •		. .				ł		- 15
1 1			/																		Ē
⁴ -5	END OF TEST PIT at 4.9 m					÷	: :	: :	÷	: :	÷			:		: :					Ē
ARED	No Daylighting Performed					• • • •			•••••••						· · · · ·						E
- PREF						·	: : :	· · · · · · · · · · · · · · · · · · ·	· · ÷ ·	÷	· · ÷ ·	. ::-	· · · · · · ·		 						-
- CLB																					Ē
						÷	: :	: :	÷	: :	÷		-	:		-					Ē
ZARY						·			• • • • •												- 20
GLIB						• •	: : :	· · · · · · · · · · · · · · · · · · ·	· · ÷ ·	÷	÷	. <u>:</u>	· · · · · · ·		 						-
																					-
						-	: :		÷	: :	-			-		-					-
10.07 10.07 10.07						:			•••••••												_ [
TEST						• •	: · :·	$\cdot \frac{1}{2} \cdot \frac{1}{2}$	· · ÷ ·			· · ÷	· · · · · ·		: : · · : ·						-
A <4																					25
C DA						-			-	: :	-										
8									••••••												-
51 PE							:		• • • •				•								- F
2- 1-00																					-
- POR						-	: :		÷	: :	÷										-
					·	·															- F
PE&PC						-	-		÷	: :	-		-								
STA	 RT DATE START DEPTH EQUIPMENT			1		RAC		: : {	:	: :	:	1:	. :	GA	. : \S M	ETF	R TY	 'PE: RKI Eagle			
2013/					Tervita C									LO	GGE	ED: C	GWC	REVIEW: KAF	DRAF	TED: N	√LM
CPJ																	Δ	RSO		JC	
5133																-/					

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0: '	10-5	133							t pit no:	TP-1		
	NT: Imperial Oil																			013/11/1	
SAMF	PLE TYPE: G - Grab OS - Other																	IPLETION D E 1 of 1	AIE: 2	013/11/1	12
	DESCRIPTION			SAMPLING													FAG				
Ê		— ш																			(F)
Depth (m)		μ	ZONE TESTED		ŀ	_												- CON	IMENTS	BACKFILL	Depth (ft)
Def	STRATIGRAPHY	APLE	 日 日 日	LAB SAMPLE NA			SC CON	CEN	TRA		١									3ACK	D
		SAN	20Z	LAB SAMPLE N/	ES		100	(ppr 200	mv) 300) 40	0										
							: :														
						-					÷										
											-										
						÷	: :	: :		: :	÷	÷	: :		: :	÷	: :				
						÷					ł										
<u>–</u> 0	GROUND SURFACE ASPHALT.	_				· ÷				· ÷ · ÷	•••••••••••••••••••••••••••••••••••••••	. :	• • • •			· · ÷ · ·	: : : :			777	+0
-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.	-		7																	£
-		G			ł	▲ :	: :	: :		: :	÷	÷	: :		: :	÷	: :				1
-	CLAY - olive brown, silty, trace sand, damp.		Ĺ	7	ł	•				• • • • •											7
F,		G		TP-17-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		s÷.	· · · · ·			· ÷ · · ÷						·	÷ . ÷ .				1
<u>⊢</u> 1			V	1,2-DBA, 1,2-DCA		÷	: :	: :		: :	÷	÷	: :		: :	÷	: :				1
-				7		÷					-										Ŧ
-		G			ł	÷				·	· :	· :	· · · · ·			· · ÷ · ·	::::				-5
-			1	_																	7
-2		G	/	/			: :	: :		: :	÷	÷	: :		: :	÷	: :				7
-					ſ						-										Ŧ
-	i	-	Ĺ		ł	÷				• • • • •	· · . · ·	· :	•			•••••••••••••••••••••••••••••••••••••••					7
Ē		G		TP-17-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		<u>ا</u>												- excavated	ckfilled with material		
-3			V	1,2-DBA, 1,2-DCA							-							which was	replaced in		1
Ę				7	ľ	:	: :	: :		: :	:	:	::::			:	: :	then nomin	replaced in order and hally with the		<u>↓</u> 10
-		G			4	÷				• • • • •								. compacted excavator	l with the bucket.		1
F																			Suches		
<u>_</u>						-					÷				: :	÷					1
-4		G			1	• :						:									1
4			1	7	-		•			• • • •								•			7
		G								: : : :						<u>.</u>	: :				15
2			\langle								÷					:					1
-5	END OF TEST PIT at 4.9 m		ſ	-	i	:															1
HED:	No Daylighting Performed				-	· ÷	•					. <u>.</u> .									-
																	<u>.</u>				E
						-	: :				÷				-	÷					Ē
					ľ																Ē
≊ − 6 ≩[·	·				• • • • •											- 20
A A																<u>.</u>					Ē
						-					÷					:					Ē
					ľ																Ē
						·÷	· · · · ·			• • • • •		. <u>.</u>	• • • •		·	· · ÷ · ·	÷ · ÷ ·				È.
																					Ē
						÷	: :	: :		: :	÷	÷	: :		: :	÷	: :				Ē
					ľ	:															- 25
						·÷	· · · · ·		 	• • • • •	•••••••••••••••••••••••••••••••••••••••		• • • •			· · ÷ · ·	÷ · ÷ ·				-
																					Ē
						÷					÷					:					Ē
						·										· · · · · ·					Ē
						. <u>.</u>				• • • • •						· · ÷ · ·					F
9						÷					÷					:					†
<u>,</u>					00.00	:	: :	: :	: :	: :	÷	:	: :	: : 	: :	:	: :				
STAR 2013/11	T DATE START DEPTH EQUIPMENT 1/12 0.0 m Caterpillar 336C Excavator				CONT Tervita										IAS N		ER T GWC	YPE: RKI Eag REVIEW		RAFTED	: MI M
						- ~ +								F							
5133.GP.																-/	4				

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					F	REF.	NO:	10-	5133	}						PIT NO: TP-1		
	NT: Imperial Oil																	2013/11/	
SAMF	PLE TYPE: G - Grab OS - Other																	2013/11/	12
	DECODIDITION														ΙP	AGE	1 of 1		
	DESCRIPTION		1-	SAMPLING															
Depth (m)		ΥPE	ZONE TESTED														COMMENTS	13	Depth (ft)
Cept	STRATIGRAPHY	Ē	H۳ H					VAP ENTR		N								BACKFILL)ept
		AMF	NO	LAB SAMPLE NA		00	(ppmv 0 30)									BA	
		0			-5	100) 20	0 30	0 4	00	+ :				: :				
						÷ ;	: :	: :		: :	1	: :	: :	÷	: :	÷			
						÷ :	: :	: :		: :		: :	: :	÷	: :	÷			
						: :	: :	: :		: :		: :	: :	÷	: :	÷			
														-	-				
	GROUND SURFACE					-				: :				-	: :				
-0	GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.		\vdash			÷		• • • • •		·: · : : ·	· ·	· · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · : :	: :	· · : · ·		77	
-		G	/												: : : :				
-			/		T		-			: :				-	-				
-	SILT - brown, clayey, trace sand, moist.		1											•••••••••••••••••••••••••••••••••••••••					Æ
E,		G	/			÷.;									: : :	· · · · ·			1
			V			: :		:::							: :				
E .	CLAY - olive brown, silty, trace sand, damp.		/	TP-18-1 2 / RTEY															Æ
-		G	/	TP-18-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	•	÷				÷	-		· · · · · · · ·	•••					5
-			\backslash	1,2-00A, 1,2-00A	.														住
-2				TP-18-1.8 / BTEX.		÷ ;	: :	: :		: :	1	: :	: :	÷	: :	÷			注
-		G	/	TP-18-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	≜	÷;		: :: :		·: · : ·	1.			• • • • •	: :	· · · · · ·			1
-			/	,,															1
Ē			/			1				÷÷				÷		÷	Test Pit backfilled with		
-		G	/		↑							::::					excavated material		Æ
-3		_				$\frac{1}{2} \cdot \frac{1}{2}$				· · · · · · ·			· · ÷ · ÷		:: ::	<u>.</u>	which was replaced in its' original order and		10
		G	/			÷÷	: :	: :		: :	1	: :	: :	÷	: :	÷	then nominally compacted with the		
È		G	/		Ĩ												excavator bucket.		1
-			1								-		•••••••	•••					∕⊱
1012		G	/			<u>.</u>									<u>.</u>				
PRINTED: 01/26/2015		ľ	/		Ī	:::	: :	: :		: :	1	: :	: :	÷	: :	÷			⁄{
Ë			1			÷.;		• • • • •		·: ·:	1.	:::	· · : · :	• • = • •	: :	· · : · ·			1
- PR		G	/			÷.;													15
			V			:::	: :	: :		: :	1	: :	: :	÷	: :	÷			
-5	END OF TEST PIT at 4.9 m							: : :			1	: :		: : :	: :				Ŧ
- KED:	No Daylighting Performed										-			•••					F
REPA																			E
81						-	: :	: :		: :	1	: :	: :	÷	: :	÷			E
R07.0						÷;		• • • • •			1	· · · · ·		•••	: :	· · : · ·			F
\$ ⊢ 6															<u>.</u>				-20
														-					E
								: : :			1 :	: :		:::::::::::::::::::::::::::::::::::::::	: :	:			Ē
L BES						÷		·		÷·÷·	· · ÷	·:·:	· · ÷ · ÷	•••	:: ::	· · : · ·			F
																			-
						÷	:	: :				: :				÷			-
Ë					.	$\frac{1}{2}$		•			· ·.:			•••		· · : · ·			Ē
- TA V4					.														-25
						-	:	: :						÷		÷			Ē
8								: : :						:		:			-
5- -					.			•			-	•		· · · · ·	: : : :				-
					.										: :				-
POR						-	: :	: :				: :	: :	÷		÷			-
					·			•			· ·								E
9							-							÷					ſ
v,						: :	: :	: :	: :	: :	1	: :	: :	:	: :	:			
2013/11	F DATE START DEPTH EQUIPMENT /12 0.0 m Caterpillar 336C Excavator				CONTF Tervita C											R I YI GWC	PE: RKI Eagle REVIEW: KAF [DRAFTEI	D: MLM
_																			
5133.GP.															7		RSO		3

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						R	EF. N	10:	10-5	133								NO:	TP-1			
	NT: Imperial Oil																		ATE:			11/13	
SAMF	PLE TYPE: G - Grab OS - Other																		TION D	ATE: 2	2013/	11/13	
	DECODID TION											1					PAG	E 1	of 1				
	DESCRIPTION		_	SAMPLING																			
Depth (m)		SAMPLE TYPE	ZONE TESTED																COM	IMENTS		- L	Depth (ft)
beptl	STRATIGRAPHY	ЦЦ ЦЦ	TES			4	S)UR Atioi	a								001			BACKFILL	Jept
		AMP	ONE	LAB SAMPLE N	AME/			(p	pmv)													BA	
		0	Ň	LAB ANALYS	5		100	200	30	<u>) 40</u>	0	+ :						-			_		
	GROUND SURFACE ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp. SILT - olive brown, sandy, some clay, moist. - gray below 1.2 m. CLAY - olive brown, silty, trace sand, damp. - mottled gray below 3.0 m.			TP-19-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA TP-19-1.8 / Grain Size TP-19-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA TP-19-3.0 / Grain Size					301									· ex wh its the	cavated nich was ' original en nomir	d with the			-0-5
11		G			4										•								- 15
PERICEG REPORT LOG 51 PERICEG DATA V4TESTING.GDT PERICEG LIBRARY V3-R07.GLB PREPARED: 2014/02	END OF TEST PIT at 4.9 m		ſ	1						• • • •		1			· · · · ·						Z		-
LED:	No Daylighting Performed									• • • • •		. <u>.</u>		÷;	· ÷· ·	: : : : :	· · · · · ·					-	-
REPAI								: :	: :	: :	:		÷	: :	÷	: :	: :					-	-
а е						:			: :	: :		1:			:	: :	: :	1				Ē	-
02.61						. :			÷;	· ÷ · ·	<u>.</u>	. <u>:</u>		÷;	· ÷· ·	: : : : :						ŀ	-
5 −6							÷	: :	: :	: :	÷		÷	: :	÷	: :	: :						
RARY						1			: :	: :		1 :		: :	:			1					20
BL B									÷;	· ÷ · ·	••••	· · ÷	••••••••	÷;	÷	: : : ::	· · · · ·					ł	
äE							÷	: :	: :	: :			÷	: :	÷		: :						
Щ_ 															-								-
₿ _ 7										• • • •		-											-
STIN							÷		: :					÷÷	÷								
4 - T														: :	÷								-
ATA												-			• • • •							Ē	- 25
						:			: :		÷			: : :		: :	÷.;						-
8						:	:	: :	: :	: :	-		:	: :	:	: :	: :						
51 P												· ·			• • • •							Ē	-
							. : 	: :	: :	: :				: :	. <u>:</u>	: :	÷ ÷					E	
ORI							÷	-	: :	: :	÷	1	÷	: :	÷		: :						
В										• • • •		- <u>-</u> -	••••••••	÷	· : · ·			·					-
⊎ – 9													÷		:								
Ω								<u> </u>	: :							: :							
	T DATE START DEPTH EQUIPMENT				CON														RKI Eag				
섬 2013/11	/13 0.0 m Caterpillar 336C Excavator				Tervita	a Cor	porati	on						L			GWC		REVIEW			ted: N	
5133.GPJ																				50		IC	5
513.																_							

B STRATICRAPHY IJ E Assume In Mater Asund In Mater Assume In Mater		FPIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF.	NO:	10-	513	3							P-20		
PAGE 1 of 1 End DESCRIPTION SAMPLING STRATIGRAPHY Strate to be the second damage to be the second da							_													13/11/13	
DESCRIPTION SAMPLING E STRATIGRAPHY E E COMEN E STRATIGRAPHY E E COMEN COMEN E CROUND SUFFACE COMEN COMEN COMEN COMEN INTERME STRATIGRAPHY E E COMEN COMEN CROUND SUFFACE CROU	SAM	PLE TYPE: G - Grab OS - Other					┝												201	13/11/13	3
End STRATIGRAPHY End A SOL WATOR 0 CARCENTSICN Operation Operation Operation 0 CROUND SUPFACE Operation Operation Operation 0 Operation Operation Operation		DESCRIPTION															PAG				
GROUND SURFACE up group con -0 GROUND SURFACE -0 GROUN	Ê	DESCRIPTION		_																	£
GROUND SURFACE up group con -0 GROUND SURFACE -0 GROUN	th (n		LYPE	STEL		-						_						COMMENT	S	Ē	Depth (ft)
Image: Signal	Dep	STRATIGRAPHY	<u> </u>	Ē			A C	SOIL ONCI	. VAP ENTR	OUR	: DN									BACKFILL	Dep
GROUND SURFACE ABRAILT GROUND SURFACE ABRAILT GROUND SURFACE SULT (Fill) - Card gay, days, trace and, damp. CLAY - close brow, silly, trace and, dam			SAMI		LAB SAMPLE N	IAME/		(ppmv	r)										B	
1 ASPRAIT. ASPRAIT. ASPRAIT. 1 CARACTEL (Fill) - trans. coarse to fine grained, sandy, moil. a a 1 CLAY - dive brown, silly, table sand, damp. a a 0 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 CLAY - dive brown, silly, table sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a <					Li Di la centra		: :	JU 20	10 30		+00		: :	: :	:	: :	: :				
0 GRAPHALT. Approx. Ap											1		÷÷	: :	÷						
1 ASPRAIT. ASPRAIT. ASPRAIT. 1 CARACTEL (Fill) - trans. coarse to fine grained, sandy, moil. a a 1 CLAY - dive brown, silly, table sand, damp. a a 0 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 CLAY - dive brown, silly, table sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a <							-			: :	: :		: :	: :	÷	: :	: :				
1 ASPRAIT. ASPRAIT. ASPRAIT. 1 CARACTEL (Fill) - trans. coarse to fine grained, sandy, moil. a a 1 CLAY - dive brown, silly, table sand, damp. a a 0 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 CLAY - dive brown, silly, table sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a <							-			: :	: :		: :	: :	÷		: :				
1 ASPRAIT. ASPRAIT. ASPRAIT. 1 CARACTEL (Fill) - trans. coarse to fine grained, sandy, moil. a a 1 CLAY - dive brown, silly, table sand, damp. a a 0 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 CLAY - dive brown, silly, table sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a <										: :	: :		: :	: :	÷	: :	: :				
1 ASPRAIT. ASPRAIT. ASPRAIT. 1 CARACTEL (Fill) - trans. coarse to fine grained, sandy, moil. a a 1 CLAY - dive brown, silly, table sand, damp. a a 0 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 CLAY - dive brown, silly, table sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Caractel (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a 1 Trace (Fill) - dark gray, days, trace sand, damp. b 1 Trace (Fill) - dark gray, days, trace sand, damp. a <		GROUND SURFACE					-			: :	: :		: :	: :	÷		: :				
SILT IFID - dark gray, dayey, trace send, damp. 6 7 -1 CLAY - olve brown, silty, trace send, damp. 6 7 -2 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -4 -3 <td>F-0</td> <td>_ ASPHALT.</td> <td></td> <td>77</td> <td></td>	F-0	_ ASPHALT.																		77	
Image: 12 (Fill) - Gek gray, clayes, trace sand, damp. Image:	-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, moist.	_		1					: : · : ·	÷.;		÷.;	· : · :		: : : : :	· · · · · ·				}
The PLANE WAR AND THE STATT DEPTH EQUIPMENT CONTRACTOR CASAMETER THE RALE of the state of	F	SILT (Fill) - dark gray, clayey, trace sand, damp.	Ľ	\langle		Ī															Ł
The PLANE WAR AND THE STATT DEPTH EQUIPMENT CONTRACTOR CASAMETER THE RALE of the state of	Ŀ	CLAV alive brown aithe trace condidamp	_		/						: :			: :	÷						ł
	<u>-</u> 1	CLAT - Olive brown, silly, trace sand, damp.	G			•					÷.	• • • • •	÷ • • • •		· · . · ·	:::					1_ 1
	-			/	_																1
	Ē		-	/	TP-20-1 2 / BTEX,	l									÷		: :			V//	Į _
	E		G		PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	Î								: :	÷		: : :				1-5 7
	ŀ			1	7		-				÷	•		•							Ę.
	-2		G	1/	TP-20-1.8 / BTEX, PHC F1-F4, Lead,											: : : :					t L
-some silt	Ē			$\left \right $	1,2-DBA, 1,2-DCA								-		÷						ŧ
-some silt	F				7						::::				:		· · · · ·	Toot Bit bookfilled	with		1
CONTRACTOR START DATE START DEPTH EQUIPMENT CONTRACTOR	ł.	L	G							: : · : ·	÷.;		÷.;		· · ÷· ·	: : : :	·÷·÷·	· excavated materia	al		
CONTRACTOR START DATE START DEPTH EQUIPMENT CONTRACTOR	-3	- some silt.		/														which was replace	əd in ənd		} 10
START DATE START DEPTH EQUIPMENT CONTRACTOR	-				1					: :	: :		: :		÷		: :	then nominally			
Find of the start date Find of test pit at 4.9 m No Daylighting Performed No Daylighting Performed	Ē		G				•				-				• • • •			excavator bucket.	le		1_ 1
Find of the start date Find of test pit at 4.9 m No Daylighting Performed No Daylighting Performed	E			1	_					 											1
Find of the start date Find of test pit at 4.9 m No Daylighting Performed No Daylighting Performed	- 15				/						::		: :	: :	÷	: :	: :				Ŧ
Find of the start date Find of test pit at 4.9 m No Daylighting Performed No Daylighting Performed	1292/		G			ſ															F
Find of the start date Find of test pit at 4.9 m No Daylighting Performed No Daylighting Performed	0 			┢	7						÷.;				· · · · · · · · · · · · · · · · · · ·	· · ·	·····				1_ {
Find of the start date Find of test pit at 4.9 m No Daylighting Performed No Daylighting Performed			G	/																	t 1−15
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	12			\mathbf{V}											÷						Ŧ
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	-5	END OF TEST PIT at 4.9 m																		<u> </u>	Ē
Image: Start date Start date Start date Start date Gas meter type: RKI eagle		No Davlighting Performed										• • • • •		• • • •							-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	- L												<u>.</u>			: : : :					Ē
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	- - - -														÷						Ē
Image: Start date Start date Start date Start date Gas meter type: RKI eagle															:						Ē
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	≊ ⊢ 6 ≩[÷						· · · · · ·				- 20
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	LIBRY																				-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle							-			: :	: :		: :	: :	÷		: :				
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	80 - -																				-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	-7									: : · : ·	÷.;		÷.;	: :: :	· · ÷ · ·	: : : ::	· · · · · ·				-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle																					-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	14 - T										: :		: :	: :	÷		: :				E
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	DATA											• • • •						•			25
Image: Start date Start date Start date Start date Gas meter type: RKI eagle										: : · :	÷.;		÷			: : :	· · · · · ·				-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle																					Ł
Image: Start date Start date Start date Start date Gas meter type: RKI eagle											: :			: :	÷						-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle												•		·	•						-
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	L L																· · · · · ·				É
Image: Start date Start date Start date Start date Gas meter type: RKI eagle	ĕ ⊢ 9										: :		: :		÷		: :				F
Image: START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle Image: Start Date Start Date Start Date Start Date Start Date	Ω.									: :	÷ :		: :	:	÷	: :	::				
															GAS	MET		YPE: RKI Eagle			
		In Caterpliar 336C Excavator				rervita	oorpo	auon						H						AFTED:	
	133.GI																A	R50	J	NS	Ð

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					REF. NO: 10-5133			PIT No: TP-21		
	NT: Imperial Oil									14/07/2	
SAMF	PLE TYPE: G - Grab OS - Other								PLETION DATE: 20 E 1 of 1	14/07/29	9
	DESCRIPTION							PAGE			T
Ê	DESCRIPTION			SAMPLING							E .
Depth (m)		SAMPLE TYPE	ZONE TESTED		-				COMMENTS	BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	L L L				SOIL VAPOUR CONCENTRATION			COMMENTS	BAC	De
		SAM	ZON	LAB SAMPLE NA LAB ANALYSE	S	(ppmv) 100 200 300 400					
- 0								· · · · · · · · · · · · · · · · · · ·			+0
F	ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, trace silt,	1	/	TP-21-0.6 / BTEX,							ł
E	trace clay, damp.	G	//	TP-21-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	l l	• · · · · · · · · · · · · · · · · · · ·					Ŧ
	CLAY - brown, sandy, some silt, damp.		1	7							Į.
È,		G	/	TP-21-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA							ŧ
[−1 [V	1,2-DBA, 1,2-DCA							{
			/								Ŧ
F	- dark brown below 1.5 m.	G	/		+						1−5
F			1	_				· · · · · · · · · · · · · · · · · · ·			1
-2		G	/	(}
-	- olive brown, moist below 2.2 m.	G	/		Ĩ						Ŧ
-			1								Ŧ
Ē		G	/					· · · · · · · · · · · · · · · · · · ·			1
-3			V								Ŧ.
Ę	- trace silt below 3.0 m.		/								$\frac{1}{10}$
015		G	/		≜						ł
01/22/2			1					· · · · · ·			1
Ë			/								ł
≝ <u></u> –4		G	/		Ĩ						Ŧ
Winnipeg PRINTED: 01/22/2015			ľ,								ł
15 - Ki		G	/					· · · · · · · · ·			15
15/01/			V								ł
≣5	END OF TEST PIT at 4.9 m								Test Pit backfilled with ex	cavated	F
REPAR	No Daylighting Performed								material which was replace its' original order and ther	ı	Ē
щ —									nominally compacted with excavator bucket.	the	F
R07.G									excavator bucket.		E
											E
IBRAF								· · · · · · · · · · · ·			20
CEG								: : : : : : : : : : : : : : : : : : :			F
PE&I											Ē
1 CDT											Ē
7-180											E
DATA							• • • • • • • • • • • • •				F
											-25
E8-											20
⁸ −8											Ē
ORTL											-
L REP											Ē
SI-CE											Ē
9 - 0NS PE											F
PARSONS PERICEC REPORT LOG 60 PERICEC DATA V3-RVA.GDT PERICEG LIBRARY V3-RV7.GLB PREPARED: 201											
	 T DATE START DEPTH EQUIPMENT		<u> </u>		CONTR	RACTOR	GAS	METER TY	 ′PE: RKI Eagle		1
0						ne Industries Ltd.		GED: JMB		AFTED:	LLB
2014/07 5007 dL 8819									RSO		
5135											

CLUBET INFO OL SINCE DATE SIN		PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC	D: 1	0-510	33							PIT No: TP- 3			
DESCRIPTION SAMPLING Solution Conversion The Processor of the Conversion 0 STRATIGRAPHY 1 Stratic conversion 0 Stratic conversion 0 0 Stratic conversion 0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																						
End DESCRIPTION SAMPLING 9 STRATIGRAPHY If	SAM	PLE TYPE: G - Grab OS - Other																		2014/	07/29	
End STRATIGRAPHY End (Sec) COMBUTE COMBUT COMBUTE COMBUTE		DECODIDITION															PA	GE	1 of 1			
State Description Description <thdescription< th=""> <thdescription< th=""> <thde< th=""><th></th><th>DESCRIPTION</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Ŧ</th></thde<></thdescription<></thdescription<>		DESCRIPTION																				Ŧ
State Description Description <thdescription< th=""> <thdescription< th=""> <thde< th=""><th>L (L</th><th></th><th>۲P</th><th>ED</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>FILL</th><th>ц. Ш</th></thde<></thdescription<></thdescription<>	L (L		۲P	ED																	FILL	ц. Ш
State Description Description <thdescription< th=""> <thdescription< th=""> <thde< td=""><td>Dept</td><td>STRATIGRAPHY</td><td>핕</td><td>۱Щ Щ</td><td></td><td></td><td></td><td>SC</td><td>IL VA</td><td>POL RAT</td><td>IR 10N</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>COMMENTS</td><td></td><td>BACH</td><td>Dept</td></thde<></thdescription<></thdescription<>	Dept	STRATIGRAPHY	핕	۱Щ Щ				SC	IL VA	POL RAT	IR 10N								COMMENTS		BACH	Dept
-0			AMF	ONE		ME/			(ppm	1V)												
1						.5		00	200	300 :	400	:	: :	: :	:	: :	:	:				
1							:	: :	: :	÷		:	: :	: :	÷	: :	÷	:				
1							÷	: :	: :	÷		:	: :	: :	÷	: :	÷	:				
0 GSWCIC, Fill: book, conset to fine grand, sould, into a sit, take day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, some gravel, take day, comp, take gravel, take day, some gravel, take day, some gravel, take day, some gravel, take day, day, take day,								: :		÷						: :	-					
0 GSWCIC, Fill: book, conset to fine grand, sould, into a sit, take day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, some gravel, take day, comp, take gravel, take day, some gravel, take day, some gravel, take day, some gravel, take day, day, take day,										-			-			-	-					
0 GSWCIC, Fill: book, conset to fine grand, sould, into a sit, take day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, tak gray, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, well below 0.5 m. 0 The Case (Dr.); retry, a direct day, comp, take gravel, take day, some gravel, take day, some gravel, take day, comp, take gravel, take day, some gravel, take day, some gravel, take day, some gravel, take day, day, take day,		GROUND SURFACE					:	: :	: :	÷		:	: :	: :		: :	÷	:				
Inter clash, darra, - dak gray, some gravit, taoo day, wit below 0.5 m. Image: Clash parts, darra, - dak gray, some gravit, taoo day, wit below 0.5 m. Image: Clash parts, darra, - dak gray, some gravit, taoo day, wit below 0.5 m. -1 CLAY - brown, taody, some sit, mold, - dake trown, some send below 2.1 m. Image: Clash parts, darra, - dake trown, some send below 2.1 m. Image: Clash parts, darra, - dake trown, some send below 3.2 m. Image: Clash parts, darra, - dake trown, some send below 3.2 m. Image: Clash parts, darra, - dake trown, some send below 3.2 m. Image: Clash parts, darra, - dake trown, some send below 3.2 m. Image: Clash parts, darra, - dake trown, some send below 3.2 m. Image: Clash parts, darra, - dake trown, some send below 3.2 m. Image: Clash parts, darra, dar	-0	ASPHALT.	-																		///	E
	-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, trace silt,	G	/																ł		F
-1 -1<	F			V			÷	: :	÷Ē	-		:	: :	: :	÷	: :	÷	:		P		Ē
- 1 CLAY - brown, sandy, some sitt, mold. - 0	-	- dan gray, some graver, trace day, wet below 0.5 m.				TEV		: :				:					:			ł		Ē
- 1 CLAY - brown, sandy, some sitt, mold. - 0	F1		G	/	PHC F1-F4, Lead,	· LA,	. <u>.</u> .					÷. .				·	· · · ·			Ł		Ē
	ţ'			/	1,2-00A, 1,2-00A			:.:				÷						<u>:</u>		K		Ē
	ŀ	CLAY - brown, sandy, some silt, moist.		/	TP-22-1.2 / BTEX,		÷	: :		÷			::	: :	÷	: :	÷	:		K		E
	F		G	/	PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	4	•			:		$\left\ \cdot \right\ $					· · · · ·			F.		5
	E			<u> </u>														<u>:</u>		F		F
In trace sand below 3.2 m. a	-2	L			TP-22-1.8 / BTEX,			: :										-		ľ		E
-1 -1<	÷	- olive brown, some sand below 2.1 m.	ľ		1,2-DBA, 1,2-DCA	•	-	: :	: :	÷		:	: :	: :		: :	÷	:				Ē
-1 -1<	-			1			·	: :		:		: ·				÷	· · ÷ ·	:				F
In the second below 3.2 m.	E		G	/														<u>.</u>		ł		F
In the second below 3.2 m.	-3			\langle			÷	: :	: :	÷		:	: :	: :	÷	: :	÷	:		E		Ē 10
Image: A state of the stat	Ę																	-		ľ		- 10 F
Image: State Date Interview State Interview State Date Interview State Interview	- 15	- trace sand below 3.2 m.	G			4		: : : :	· · · · · ·	·÷••	• • • •	: .				· · · · · · · · · · · · · · · · · · ·	•••••••••	: :				Ē
Image: State Date Interview State Interview State Date Interview State Interview	11/22/2			/				: : :				: 						<u>:</u>				Ē
Image: State Date Interview State Interview State Date Interview State Interview	Ë			/				: :								: :	÷			ľ		f
Image: State Date Interview State Interview State Date Interview State Interview	^N 24		G			4		: :		:		: ·					::::			P		E
Image: State Date Interview State Interview State Date Interview State Interview	- -			\vdash			. <u>.</u>	::	· · · · ·	. <u>.</u>	• • • •	:				: ::::	· · ÷ ·	: :		ľ		F
END OF TEST PIT at 4.9 m No Daylighting Performed Test Pit backfilled with excavated material with was replaced in the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated material with was replaced in the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated material with was replaced in the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated material with was replaced in the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated material with was replaced in the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated the original order and then normally compacted with the encavator bucket Test Pit backfilled with excavated the original order and then normally compacted with the encavator bucket the original order and then the original order and then normally compacted with the encavator bucket the original order and then normally compacted with the encavator bucket the original order and then the original	- Mil		6	/																		L 15
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	5/01/1					•	T :	: :	: :	÷		:	: :	: :	÷	: :	÷	:				Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	ي م5	END OF TEST PIT at 4.9 m		ſ													•••••••		Test Pit backfilled with			Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	PARE	No Davlighting Performed					·	::	· · · · ·	÷						÷ . :		:	material which was rep	aced		F
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	BRI -																	-	nominally compacted v	nen with th	е	E
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	07.GLE						:	: :	: :	÷		:	: :	: :	÷	: :	÷	:	excavator bucket.			Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	23-R																••••••					E
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	FAR - 0							:.: :::	· · · · · ·	÷						÷ • ÷	· · ÷ ·	<u>.</u>				20
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	E LE																	-				Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	E8-0						÷	: :	: :	÷		-	: :	:	÷	: :	÷	-				È
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	- -						 			·		: ·					•••••••	:				Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	-7 -7 -7																					Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	5						÷	: :	: :	÷		:	: :	: :	÷	: :	÷	:				Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	- L																-					F
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	- E8I-CE						: :	:; : :		·:		:				· · · · · · · · · · · · · · · · · · ·	· · ÷ · :	:				25
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	09																					Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB							:	: :	: :	÷		:	: :	: :		: :	÷	:				Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	EPOR																	-				F
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	CEG R						 	: :		·:	· · · ·	; ·			:		· · : :	:				E
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	PE&L						. <u>.</u>			÷								<u>:</u>				Ē
G START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle g 2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB	9 govs							: :	: :	÷			: :		÷		÷	-				Ē
2014/07/29 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JMB REVIEW: KAF DRAFTED: LLB								: :	: :	÷		:	: :	:		: :		÷				
	0																					
	³⁶ ^{2014/0}	Hitachi 200LC Excavator				iviain L	ine Ind	Justri	es Ltd.					┝								
	133 TF																/-		H50		19	5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	. NO	: 10)-513	33							PIT No: TP-			
	NT: Imperial Oil																	T DATE:		/07/29	
SAM	PLE TYPE: G - Grab OS - Other					+												PLETION DATE:	2014	/07/29	
	DESCRIPTION			SAMPLING												1 - /	AGE		<u> </u>		
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	-		AME/	C	ONC	L VAF ENTF (ppm)	RAT	ON								COMMENTS		BACKFILL	Depth (ft)
0	GROUND SURFACE ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, trace clay,	G									· · · · · · · · · · · · · · · · · · ·										0
- - - - - - - - - - - - - - - - - - -	damp. CLAY - brown, sandy, some silt, trace gravel, damp. - damp below 1.1 m.	G		TP-23-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA TP-23-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA																	ي ب ل ب ب ا ب ب ب ا ب ب ا ب ب ا
-2 	- olive brown, trace silt, moist below 2.3 m.	G G G			•																
2015/01/15 Winnipeg PRINTED: 01/22/2015	END OF TEST PIT at 4.9 m	G																			
	No Daylighting Performed				••													Test Pit backfilled wit material which was re its' original order and nominally compacted excavator bucket.	eplaced then	d in	- 20
																					25
								: :	: :	÷	:	: :	:	: :	÷		:				
0	TOATE START DEPTH EQUIPMENT				CONT													PE: RKI Eagle			
2014/07	/29 0.0 m Hitachi 200LC Excavator				Main Lin	ie Ind	ustrie	s Ltd.					ł	LOG				REVIEW: KAF		FTED: I	
5133 TP (-	Y		RSO	I		5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	. NO	: 10)-513	33					TES	T PIT No			
	NT: Imperial Oil																RT DATE		14/07/2	
SAM	PLE TYPE: G - Grab OS - Other					╞													14/07/2	9
	DESCRIPTION															PAG	BE 1 of	1		
Ê	DESCRIPTION	-		SAMPLING																-F
Depth (m)		SAMPLE TYPE	ZONE TESTED		_	-											-	COMMENTS	BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	ЪГЕ				C	ON	L VAF CENTF	RAT	ON								COMMENTS	BAC	Dep
		SAM	ZON	LAB SAMPLE NA LAB ANALYSE		1	00 :	(ppm 200 3	V) 300	400										
						:			: :	:	:	::	: :	:	: :					
						÷								:						
						÷		: :	: :	÷	:	: :	: :	÷	: :	: :				
						-		: :		-				÷	: :					
						÷			: :					÷	: :					
	GROUND SURFACE										:				: : : :					-0
	ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, some silt,	\vdash	17			-								:	: :					1
-	trace clay, damp.	G			₩	÷				:	:			:	: :		• •			
-	SILT - light brown, sandy, some gravel, trace clay, damp.	_	$\left(\right)$			÷				• • • •				· ·						
		G		TP-24-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA																Ł
-1			\langle	1,2-DBA, 1,2-DCA		÷														1
-			/			÷				:	:			:	: :					
-		G		TP-24-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	•	, in the second				•••••••••••••••••••••••••••••••••••••••				· ·						5
-			/	1,2-00A, 1,2-00A							:				: : : :					ŧ
-2	CLAY - dark brown, silty, some sand, damp.		/			÷				-				÷						1
	- olive brown, some silt, moist below 2.1 m.	G			Ť	:		: :	: :	:	:	: :		:	: :	: :				
-		-				÷				• • • •	· · · ·									
F		G													: : : :					£
-3			\langle			÷				-				:	: :					
Ľ			1			:		: :	: :	:	:	: :	: :	:	: :		•••			$\frac{10}{10}$
015	- trace silt below 3.2 m.	G			∳	÷				• • • •	· · · · ·									
01/22/2					.						: 				: : : :					1
Ë			/			÷		: :	: :			: :	: :	:	: :	: :				}
₩ -4		G			Ť															Ŧ
Winnipeg PRINTED: 01/22/2015						÷		· · · · ·		· .: · :	:	÷	: :	· · : · ·	: : : :	· · · · · ·				
15 - -		G				÷.									: : : :					15
115/01/			\langle			÷		: :	: :	÷	:	÷÷	: :	÷	: :	: :				
ä –5	END OF TEST PIT at 4.9 m				[.													Pit backfi ll ed with ex	cavated	Ē
REPAR	No Daylighting Performed					 				••••••	: . :						 materi its' orio 	ial which was repla ginal order and the	ced in n	Ē
а -						÷.,									: : : :		nomin	ally compacted with ator bucket.	h the	-
R07.G									: :						: :		excav	alor Duckel.		Ł
5 2 −6						÷		: :	: :	÷	:	: :	: :	÷	: :	: :				-
IBRAI						 											• •			20
CEG						÷			÷ - :	• • • •					: :					È.
PE&																				_
4.GDT						÷		: :	: :				: :	÷	: :					-
73-R04						:		: :	::::	:	:	: :		:	::::		• •			-
DATA						÷				• • • •										-
E - CEG											: 									-25
8 - 8 -						÷				÷				÷						-
8-19																	• •			-
ORT I						÷				•••••••••••••••••••••••••••••••••••••••		÷								-
G REF						÷									: : : :					-
I I I I I I I I I I I I I I I I I I I						÷		: :	: :			: :			: :					-
BI −9					[F
PARSONS PEALCEG REPORT LOG 80 PEALCEG DATA V3-RUA GDT PEALCEG LIBRARY V3-R07 GLB PREPARED: 201										-		::			: :					
ਤੂ STAR	T DATE START DEPTH EQUIPMENT		·		CONTR				•		<u> </u>						YPE: RK	l Eagle		
g 2014/07	7/29 0.0 m Hitachi 200LC Excavator				Main Line	e Ind	ustrie	s Ltd.						LOG	GED	: JMB	8 REV	IEW: KAF DF	RAFTED:	
33 TP I																		50	N	5
5133 .																				

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					R	EF. NC	D: 10)-5133	3						PIT No: TP-25		
	NT: Imperial Oil					_											14/07/29	
SAM	PLE TYPE: G - Grab OS - Other					\vdash										PLETION DATE: 20 1 of 1	14/07/29)
	DESCRIPTION			SAMPLING										1.7				
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	T		ME/	CC	SOIL VA NCENT (ppn 200	FRAT nv)	ON							COMMENTS	BACKFILL	Depth (ft)
0 0	GROUND SURFACE ASPHALT. GRAVEL (Fill) - coarse to fine grained, sandy, trace silt, wet.																	0
- - - -	GRAVEL (Fill) - coalse to line grained, sandy, trace siit, wet.	G		TP-25-0.6 / BTEX,														┶ ┶ ┶ ┶
- 1 1	SILT - dark brown, sandy, trace clay, moist.	G	/	TP-25-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		A												د الم الم
-		G		TP-25-1.2 (DUP-5) / B1 PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	TEX,													5 5
-2	CLAY - olive brown, silty, moist.	G	/	TP-25-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA														┧┎┍╷┥┥┍
-	- some silt	G	/												· · · · · · · · · · · · · · · · · · ·			┙┓┶
		G	/												· · · ·			10 1 1 1 1 1 1
Winnipeg PRINTED: 01/22/2015		G	/		. 													┙┥┙┶
5/01/15 Winnipeg		G			. 													1 1 1 1 1 1 1 1 1
REPARED: 201	END OF TEST PIT at 4.9 m No Daylighting Performed														· · · · · · · · · · · · · · · · · · ·	Test Pit backfilled with exe material which was replac its' original order and ther	ed in	
. V3-R07.GLB P																nominally compacted with excavator bucket.	i the	
																		-20
3-R04.GDT PE8								· · · · · · · · · · · · · · · · · · ·							· · · · ·			- - - - - - -
E&LCEG DATA V								· · · · · · · · · · · · · · · · · · ·										- 25
								· · · · · · · · · · · · · · · · · · ·										
	T DATE START DEPTH EQUIPMENT				CONTR	RACTO	:::: DR	: :	::		: :	GA	: : S MF	TFR	: TYF	PE: RKI Eagle		
2014/07					Main Line							LOC	GGEL	D: JM	1B	REVIEW: KAF DR	AFTED:	
5133 TP L													-		4	RSO	Ng	5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF NO: 10-5	133		_	PIT No: TP-26		
	NT: Imperial Oil											14/07/2	
SAMF	PLE TYPE: G - Grab OS - Other					┝					PLETION DATE: 20 E 1 of 1	14/07/29	9
	DESCRIPTION			SAMPLING						PAGE			
Ê	DESCRIPTION		-										Ð
Depth (m)		SAMPLE TYPE	ZONE TESTED		-	•					COMMENTS	BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	PLE				C	SOIL VAPOUR ONCENTRATIO	v			COMMENTS	BAC	De l
		SAN	ZON	LAB SAMPLE N LAB ANALYS		10	(ppmv) 0 200 300 40	0					
								÷ ::					
								÷ ÷ ÷					
<u> </u>	GROUND SURFACE												+0
F	ORGANIC SILT - black, sandy, some clay, damp. CLAY - dark brown, sandy, some silt, dry.			7				÷ ÷ ÷					}
Ē		G		() 	•								Ŧ
E			$\left \right $	7						• • • • • • •			
-		G	/	/									ŧ
<u>⊢</u> 1	- light brown, damp below 0.9 m.				T								ŧ
Ē			Ĺ										Ŧ
F		G		/ TP-26-1.8 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	чн, 🛓	N				• • • • • • • • • •			-5
			/	PCB, metals									£
-2				TP-26-2.4 / BTEX,									ŧ
-	- black, some silt below 2.1 m.	G		/ TP-26-2.4 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	NH,								ŧ
E	SILT - light brown, sandy, trace clay, moist.		/							• • • • • • • • • •			1
		G	/	/ TP-26-3.1 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals									ł
÷.		6		PCB, Metals	vn, –								7
-3				7		•				• • • • • • • • • • •			10
2		G	/										1
22/201			V										1
- 10 -				7									Ŧ
≝-4		G			↑								
301/15 Winnipeg PRINTED: 01/22/2015			Ĺ	-									Ł
Ninnin Minnin	CLAY - olive brown, some silt, damp.			1				· · · · ·					ŧ
01/15		G	/		1								1-15
	END OF TEST PIT at 4.9 m		1	-						• • • • • • • • • • •			4
-5 											Test Pit backfilled with ex material which was replace		Ē
PREP	No Daylighting Performed										its' original order and the nominally compacted with	ı	È
ere GLB											excavator bucket.	i ule	Ē
3-R07										• • • • • • • • • •			È.
≥ F 6													-20
LIBR.													- 20
-CE						·		•••••••••••••••••••••••••••••••••••••••					F
E PE													-
504.GD													Ę
S-RC					1								-
DATA													-
E - CE													-25
8 													-
8-18													-
ORTL										• • • • • • •			-
C RE													-
SI-CE													Ē
SN -9													Ē
PARSONS FEALOEG REPORT LOG 60 PEALOEG DATA V3-RR4 GDT PEALOEG LIBRARY V3-RV7.GLB PEEPARED: 201													
	 T DATE START DEPTH EQUIPMENT			1	CONT	RAC	: : : : FOR	<u> </u>	GAS M	IETER TY	I PE: RKI Eagle		1
0 0044/07							istries Ltd.			ED: JMB		AFTED:	LLB
2014/07 5007 dL 8819					1						RSO		
5133													

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba							REF	. NO	: 1()-51	33					_		T PIT				
	NT: Imperial Oil																_				2014/0		
SAIM	PLE TYPE: G - Grab OS - Other						╞										_		APLE SE 1	OF 1	2014/0	17/29	
	DESCRIPTION			ç	SAMPLING													/ 10					
Ξ.		w	٦.	_		_																_	æ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED			┢		SO	L VAF	201	R									COMMENTS		BACKFILL	Depth (ft)
De	STRATIONAFTT	MPLE	H H N	빌	LAB SAMPLE NAME		С	ONC	ENT	RAT	ON										1	BA	ല്
		SAN	۲ ۲	2	LAB ANALYSES	_	10	0 2	(ppm) 003	v) 300	400)											
							: :	÷	: :	: :	÷	÷	÷	: :	: :	÷	÷	: :					
										-						-	-						
							: :	÷	: :	: :	:	÷	÷	: :	: :	÷	÷	: :					
								÷		: :	-	÷		: :		÷	÷	: :					
								÷		: :	÷	÷		: :		÷	÷						
-0	GROUND SURFACE ORGANIC SILT - black, sandy, some clay, damp.						÷	÷	: : : : :	· · · · ·		· .	·	: : :	· · · · · ·	•••	: : :	: . : : . :					-0
E	CLAY - dark brown, sandy, some silt, dry.			Λ																			E
-		G	V	/		Î	: :	÷	: :	: :	:	÷	÷	: :	: :	÷	÷	: :					Ē
-			ſ	7								• • • •				•••••••••••••••••••••••••••••••••••••••			• •				E
Ē,		G		/		_ ♠	÷	÷	: : : : :		•••	÷		: : :		· · ÷ ·	÷	: : : :				\square	F
[SILT - light brown, sandy, trace clay, moist.		┢	7				÷															Ē
ţ		G	,	/	TP-27-1.7 (DUP-7) / BTEX PHC F1-F4, VOC, PAH, PCB, Metals	ς 📘			: :												V		Ē
-			V	<i>'</i>	PCB, Metals		÷	:	::::	:	· .:-	· : · · ·	·	:::		· · ÷ ·	÷	:::					5
E	SAND - black, fine grained, silty, some clay, moist.			7	TP-27-2.2 / BTEX,							. <u>.</u>					÷						F
-2		G			TP-27-2.2 / BTEX, PHC F1-F4, VOC, PAH, PCB, Metals	≜	: :	÷	: :	: :	:	÷	÷	: :	: :	÷	÷	: :					Ē
-	CLAY - black, sandy, some silt, damp.		Ť	_		<u> </u>		ł								÷							F
-		G			TP-27-3.1 / BTEX, PHC F1-F4, VOC, PAH, PCB, Metals	•	÷;	•	:::::		: :	· : · ·	·	:::		•••	÷	::::					F
E	SILT - light brown, sandy, some clay, moist.		╀	_	· • • • • • • • • • • • • • • • • • • •												÷						Ē
-3								-			-	÷				-	-						Ē
Ę				7			:	:	: :		:	: : :	:		::::	::::	:	: :	• •				⊢10 F
-		G		/		•						• • • •				•••	÷						F
PRINTED: 01/22/2015			V						: : : :			 					: :						E
ED: 0							-	÷		: :	-	÷		: :		÷	÷	: :					E
	CLAY - olive brown, some silt, damp.	G	\uparrow	7		- L		:	: :				:			::::	:	: :	• •			\square	F
- -			Ł	_		Ţ	÷	÷	: : : : :	· · · · ·	•••	· .	·	: : :	· · · · · ·	· · ÷ ·	÷··	: . : : . :					F
		G		/																			L 15
			V	'		T	: :	÷	: :	: :	:	÷	÷	: :		÷	÷	: :					Ē
- ∏-5	END OF TEST PIT at 4.9 m		ſ									• • • •				· · · · ·				st Pit backfi ll ed wit		///	Ē
HAR	No Daylighting Performed						÷		: : : : :		•••	÷		: : :	· · · · · · ·	· · ÷ ·	÷··	: . : : · :	. ma	terial which was re	placed ir		F
ž.																			nor	original order and minally compacted	then with the		Ē
							: :	÷	: :	: :	÷	÷	÷	: :	: :	÷	÷	: :	exc	cavator bucket.			Ē
22												· · · · ·				· · · · · :	÷ :		• •				Ē
6 - 6							÷		: : : : :		•••	÷		: : :	· · · · · · ·	· · ÷ ·	÷··	: : : :					-20
								÷									:	: :					Ē
							:	÷	: :	: :	÷	÷	:	: :	: :	÷	÷	: :					È
											••••	• • • •				•••••••••••••••••••••••••••••••••••••••	÷		• •				Ē
∰7												·					÷						F
≦ 							:	÷	: :	: :	÷	÷	÷	: :		÷	÷	: :					Ē
								-															F
							÷	· ÷	: : :		· .:. :	· : · · ·	·	: : : :		• • • •	÷	: :					-25
												· .				· · · ·	÷						F
								:						: :									Ē
						. 																	Ē
								:			••••	· : · ·	. .			• • • •	: :		• •				Ē
1												. <u>.</u>				· · · · ·							È
-9							-	÷		: :	÷	-	÷	: :		÷	:	: :					t
AAY							: :	÷	: :	: :	:	:		: :	: :	÷	:	: :					
3 STAR	T DATE START DEPTH EQUIPMENT 7/29 0.0 m Hitachi 200LC Excavator					ONTR ain Line			144									er t Jmb		RKI Eagle			
2014/0i	7/29 0.0 m Hitachi 200LC Excavator				Ma	an LINE	e Indi	191168	LIU.											REVIEW: KAF	DRAFT		
5133 TI																	7	Α		250			D

	FPIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					REF. NO: 10-5133			PIT No: TP-28		
	NT: Imperial Oil									4/07/29	
SAM	PLE TYPE: G - Grab OS - Other								LETION DATE: 201 1 of 1	4/07/29)
	DESCRIPTION			SAMPLING							
Ê	DESCRIPTION	ш									(ff
Depth (m)	STRATICDADLIN	L	ZONE TESTED		ŀ	▲ SOIL VAPOUR			COMMENTS	BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	APLE	L L L L L L L	LAB SAMPLE N		CONCENTRATION				BA(De
		SAN	20Z	LAB SAMPLE N	ES	(ppmv) 100 200 300 400					
										-	
								::			
-0	GROUND SURFACE ORGANIC SILT - black, sandy, some clay, damp.						· · · · · · · ·			///	<u>+</u> 0
-	CLAY - dark brown, sandy, some silt, damp.	-/	/								£
-		G			1						F
-			1				· · · · · · · ·	·····			
F.	- trace sand below 0.8 m.	G									ł
			V				· · · · · ·	::			ł
È.											F
-	- some sand, trace silt, moist below 1.5 m.	- — — G			4		· · · · · · · ·				[-5
-			/								ŧ
-2			/	TP-28-1.8 / BTEX,				::			ļ
-		G		TP-28-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	лп, .						F
-	SILT - light brown, sandy, trace clay, moist.		1					· · · · · ·			
Ē		G		TP-28-2.4 / BTEX, PHC F1-F4, VOC, P/	чн, 🖌						ŧ
-3			V	PCB, Metals							ŧ.
Ę				TD 28 3 1 / BTEY			· · · · · · ·				10 F
		G		TP-28-3.1 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	NH,						
11/22/2											£
PRINTED: 01/22/2015											ŧ
^N 24	CLAY - olive brown, some silt, damp.	G	7	7			· · · · · ·				ļ
			Ł		Ī		· · · · · ·				Į.
5 Mil		G									1 1-15
15/01/1			V								7
РЕЯLCEG REPORT LOG 80 РЕ&LCEG DATA V3.R04.GDT РЕ&LCEG UBRARY V3.R07.GLB PREPARED 201	END OF TEST PIT at 4.9 m								Test Pit backfilled with exc		F
EPAR	No Daylighting Performed								material which was replace its' original order and then	ed in	F
8 - H								: :	nominally compacted with	the	Ē
107.GL									excavator bucket.		Ę
² 2 ² 2											F
BRAR								· · · · · ·			-20
CEGL											Ē
PE&L											Ē
GDT											F
75 - 7								····			F
ATA V											E
											Far
											- 25
8-00											F
RT LO											Ē
L L											Ē
S -											F
SPE&											F
-9											[
2014/0	RT DATE START DEPTH EQUIPMENT 7/29 0.0 m Hitachi 200LC Excavator					TRACTOR ine Industries Ltd.	LOGGED:		PE: RKI Eagle REVIEW: KAF DRA	AFTED:	LLB
LO(· · · · · ·		
5133 -								A	RSOM		J

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC): 1)-51	33								- 29		
	NT: Imperial Oil																	DATE:		/08/12	
SAMF	PLE TYPE: G - Grab OS - Other																	LETION DATE:	2014	/08/12	<u> </u>
	DESCRIPTION															PA	GE	1 of 1			
Ê	DESCRIPTION		-	SAMPLING																_	£
Depth (m)		SAMPLE TYPE	ZONE TESTED		-						_							COMMENTS		BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	ЫЦ			A. 45	-	CON	IL VA CENT	RAT	r Ion								COMMENTS		BAC	Dep
		SAM	ZON	LAB SAMPLE N LAB ANALYS	AME/ ES		100	(ppm 200	1V) 300	400											
							: :				:	: :	: :	÷	: :	÷	:		I		
						÷	: :	: :	:	÷	:	: :	: :	÷	: :	÷	:				
										-		-		÷							
														-							
						÷	: :	: :	:	÷	:	: :	: :	÷	: :	÷	:				
	GROUND SURFACE					÷	: :	: :		÷		: :	: :	÷	: :	÷					
F	ASPHALT.		\vdash																	\square	F
-	GRAVEL (Fill) - brown, coarse to fine grained, some sand, damp. CLAY - black, sandy, some silt, trace gravel, damp.	G	/			N÷			:::::	: :	:	÷ :	·	· · : · ·	:::	· · : :	:		ł		F
-	OLAT - black, sandy, some sill, trace gravel, damp.		1	-							<u>.</u>				:.:				ł		Ē
F			/											÷					ł		f
-1		G	/		ſ	÷		: :		:	-			:	:::				ł		F
-		-	$\left(- \right)$		-	·							• • • • •			•••••••••••••••••••••••••••••••••••••••			ł		F
-		G	/	TP-29-1.2 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	н														ł		5
È.			/	PCB, Metals			:::	: :	:	÷	:	: :	: :	÷	: :	÷	:		ł		Ē
F,			1		ľ					• • • •									ł		ŧ
<u>-2</u>		G	/	TP-29-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	,н,	÷.		· · · · ·							:.:				F		F
-			V	PCB, Metals		÷	::	: :	:	÷	-	: :	: :	÷	: :	÷	:		ł		ŧ.
-	- dark brown, silty, some sand, damp.		/	TP-29-2.4 / BTEX	ľ														ł		F
-		G	/	TP-29-2.4 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	,н,	۱÷				• • • •			• • • •			•••••••••••••••••••••••••••••••••••••••			ł		F
-3				T OD, MICIOIS											:::		:		ł		E - 10
Ē	SILT - light brown, sandy, some clay, moist.		/			-						-		-					ł		Ē
2015		G	/		1	÷				•••••						•••••••			ł		F
PRINTED: 01/22/2015	CLAY - olive brown, some silt, damp.		1		-	÷		· · · · ·		• .	:	÷	·		: :	•••	:		ł		F
		G	/			÷								÷	: :		-		ł		Ł
	- trace silt from 4.0 m to 4.9 m.		/		ſ		::	: :		÷		: :	: :	÷	: :	÷			ł		ŧ
Winnipeg			1			·			::::	: :	:	::::	·	· · <u>·</u> · · · :	:::	· · : · · :	:		ł		F
≅_ 8-		G	/			L.													ł		-15
14/11/			V			÷	: :	: :	:	÷	:	: :	: :	÷	: :	÷	:		ł		F
≊ ⊒ −5	END OF TEST PIT at 4.9 m				Ī													Test Pit backfilled w			Ē
EPAR	No Daylighting Performed				-	·		· ÷ · ÷	·:	• • • •	:	÷ :	·	·	:::	· · : · ·		material which was i its' original order and		d in	F
ž -											÷				: :		:	nominally compacte	d with th	he	Ē
																		excavator bucket.			Ē
					Î	:		:::::		÷				:	: :						Ē
1 0 1					-					• • • •			• • • • •			• • • • • •					- 20
																					Ē
						÷	::	: :	:	÷	:	: :	: :	÷	: :	÷	:				Ē
					ľ					• • • •						• • • • • •					Ē
§ 100 −7					-			· · · · · ·							: :		<u>.</u>				È
≦_						÷	÷÷	: :		÷		: :	: :	÷	: :	÷	-				Ē
5 - 2					Ī																F
						·			:::::::::::::::::::::::::::::::::::::::	: :	:	÷ :	·	· · : · ·	:::	· · : · · · :	:				- 25
					-																Ē.
						÷	: :	: :	:	÷	:	: :	: :	÷	: :	:	:				Ē
5-					Ī					-											Ē
2 1 1					ł	·		· : · :	·:	•	÷	÷	·	· :	:::	· · ÷ · ·	:				F
																					Ē
														÷		:					F
PARC							<u>:</u> :			÷	÷	<u> </u>		÷	: :	÷	:				L
() — — — — — — — — — — — — — — — — — — —	T DATE START DEPTH EQUIPMENT				CONT													E: RKI Eagle			
ห้อ 2014/08	12 0.0 m Hitachi 200LC Excavator				Main Li	ne In	dustrie	s Ltd.					H): JM		REVIEW: KAF		FTED: I	
33 TP																		RSC	JR		5
ri L					1																_

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	IO:	10-5	133					TE	EST	PIT No: TP-:			
CLIE	NT: Imperial Oil																		2014/08		
SAMF	PLE TYPE: G - Grab OS - Other																		2014/08	3/12	
	DEOODIDTION											<u> </u>				P/	AGE	1 of 1			
	DESCRIPTION		_	SAMPLING																.	÷
Depth (m)		SAMPLE TYPE	ZONE TESTED																		Depth (ft)
)ept	STRATIGRAPHY		LE L			4	SC CON	DIL V			d							COMMENTS			Dept
		AMF	ONE	LAB SAMPLE N			100	(pp	omv)										-		
		10			DEO		100	200	<u>300</u>) 40 : :	0	:	: :	::			:			_	
						÷		÷	: :	: :	÷	÷	: :	: :			÷				
						÷	: :	÷	: :	: :	÷		: :	: :			÷				
						÷		÷	: :	: :	÷		÷÷	: :	: :		÷				
						-							-	: :							
	GROUND SURFACE					-		-			-			: :							
-0						· ÷	· : · :	•••	÷;	· · · · ·	· · : . · ·	·	: : : :	· · · · · ·			· : :			7	-0
-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, damp.	G	/										: : :								-
-	CLAY - dark brown, sandy, some silt, trace gravel, damp.				ſ	Ì		÷	: :	: :	÷	÷	: :	: :	: :		÷				-
-			1																	Λ	-
-1		G		TP-30-1.2 (DUP-10) BTEX, PHC F1-F4, V PAH, PCB, Metals	/oc,	۱÷	· · · · · ·	· · ÷ ·	:: ::	·	<u>.</u>			· • • •			· <u>:</u> · ·			\land	-
E			V	PAH, PCB, Metals		÷		÷	: :	: :	÷	÷	: :	: :	: :		÷				
-				TP-30-1 8 / BTEX																	
-		G		TP-30-1.8 / BTEX, PHC F1-F4, VOC, P. PCB, Metals	AH, 🏼	۱÷		•••••••••••••••••••••••••••••••••••••••		• • • • •				• • • •							-5
-			/	FOD, Metals					: : : :				: :								•
-2	SILT - dark brown, clayey, some sand, damp.			TP-30-2.4 / BTEX,		÷		÷	: :	: :	÷	÷	: :	: :	: :		÷				
-		G	/	TP-30-2.4 / BTEX, PHC F1-F4, VOC, P. PCB, Metals	AH, 🏼	۱÷		• • • •													-
-	light brown, sandy, trace clay, moist.	_	/																		-
-	- light brown, sandy, trace clay, moist.		/					÷	: :	: :	÷	÷	: :	: :	: :		÷			\square	-
-		G			1	÷		:	: :	: :			: :	: :			:				-
-3	CLAY - olive brown, some silt, damp.		1					•••••••••••••••••••••••••••••••••••••••		•			: : : :	•			·				10
-		G		r																	-
2/2016		ľ			Ī	Ē	: :	÷	: :	: :	÷	÷	: :	: :	: :		÷				
01/2		-	1	7		• 🗄	· : · :	•••	÷;	· · · · ·	· · : . · ·	·	: : : :	· · · · · ·			· : :				-
	tores all helps: 4.0 m	G				, ÷															-
B-	- trace silt below 4.0 m.		V			-		-	: :		÷		: :	: :			-			\square	
Winnipeg PRINTED: 01/22/2015				7		:				: :			: :								-
7 - V		G			4	۱÷		•••	÷;			. .		· · · · ·							- 15
014/1			/						: : : :				: : :								
iii − 5	END OF TEST PIT at 4.9 m					÷		÷	: :	: :	÷	÷	: :	: :	: :		÷	Test Pit backfilled with			-
SEPAF	No Daylighting Performed							•••••••										material which was rep its' original order and t	hen	ł	-
а –							· · · · ·		÷;	·			÷÷	· · · · ·				nominally compacted v excavator bucket.	with the		-
207.G						÷		÷	: :	: :	÷	÷	: :	: :			÷				
₹ 2 2 2 2 3						÷		÷			÷						-				
BRAR						· ÷	• • • • •	•••	÷ .;	• • • • •	•••	·	÷÷	· ÷ · ÷			· : · ·				20
L L L									: : : :												-
181						į		÷			÷		: :	: :						Ē	-
101						:		::::	: :	: :			: :	::::			:				-
[™] [-7						·÷	· · · · ·	•••	:: ::	· ÷ · · ÷	· · ÷ · ·	. ÷ .	: . :·	· ÷ · ÷			· ÷ · ·				-
E A																					
						÷	: :	÷	: :	: :	÷	÷	: :	: :	: :		÷				-
						· ÷	· : · :	•••	÷ ;	· · · · ·	• • • • • •	·	::::				• • • •				- 25
8																					-
8-00						:	: :	÷	: :	: :	÷	÷	: :	: :	: :		÷				
POR						:						:								Ē	-
- EG R.						·	· · · · · · · · · · · · · · · · · · ·	•••		• • • •							· <u>.</u>			ŧ	-
									: : :				: : : :							ŧ	-
								:	: :		÷						÷			ļ	
PARS						-		÷			÷						÷				
ਤੂ STAR	T DATE START DEPTH EQUIPMENT			•	CONT							•						PE: RKI Eagle		1	
00 2014/08	V12 0.0 m Hitachi 200LC Excavator				Main Li	ne li	ndustri	es Lto	i.					-	GGEL				DRAFTE		
5133 TP LOG																		RSO	N	C	5
513																					

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NO): 1(0-51:	33				_			P-31		
	NT: Imperial Oil																RT DATE:		4/08/12	
SAMF	PLE TYPE: G - Grab OS - Other														_		PLETION DATE:	2014	4/08/12	2
	DECODIDITION															PAGE	E 1 of 1			1
	DESCRIPTION			SAMPLING	י															t)
Depth (m)		SAMPLE TYPE	ZONE TESTED																BACKFILL	Depth (ft)
Dept	STRATIGRAPHY	Ē	۱Ë				SC CON	IL VAI	POU RAT	IR 10N							COMMENTS	5	BAC)epi
		AMF	NO.	LAB SAMPLE	NAME/			(ppm	IV)										_	
		100			JEJ	:	100	200 3	300 : :	400	:	: :	: :	: :	:	: :				-
							÷ ;	: :	: :		:	: :	: :	: :	÷	÷÷				
							: : :	: :			-	: :	÷÷	: :	÷	: :				
							-								-					
							÷ ;						: :		-					
	GROUND SURFACE						: :	: :	: :		:	: :	: :	: :	÷	: :				
-0	ASPHALT.					.		$\begin{array}{c} \cdot \vdots \cdot \vdots \cdot \\ \vdots \end{array}$	·:	• • • •	: · · ·	÷ · :	÷•••;••	÷;	÷	·:·:	•		777	<u></u>
-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, some		/	1								<u>.</u>	<u>.</u>	: : :						£
-	Cobbles, damp.	G			4	È.	: :	: :	: :		:	: :	: :	: :	÷	: :				ŧ
-	CLAY - dark brown, sandy, some silt, trace gravel, damp.			7		. <u></u>		:::::	: :		:	:::::	÷•••••••••••••••••••••••••••••••••••••	:::	:					7
È,		G																		£
[−1 [\langle				: :	: :	: :		:	: :	: :	: :	÷	: :				ł
E	- silty, some sand, damp.	1	1			1		:::::			: ·	: : :	::::	: :	:	: :	1			Ŧ
F		G	/	TP-31-1.2 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH,	÷÷		· · · · ·			÷		÷		÷					1–5
ţ.			/	PCB, Metals											÷					Ł
-2				TP-31-1 8 / BTEX			: :	: :				: :	: :	: :	-	: :				7
-		G		TP-31-1.8 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH,	.			·÷· ;		:		÷	÷ .:	÷					F
-												<u>.</u>		: : : :						£
-	SILT - light brown, sandy, some clay, moist.			TP-31-2.4 / BTEX,		÷	1	: :	: :		-	: :	: :	: :	÷	: :				ł
Ē		G		TP-31-2.4 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH, 🖌															ŧ
-3	CLAV, aliva haava aama ailt dama		1										÷							£_10
	CLAY - olive brown, some silt, damp.		/				: :	: :	: :		:	: :	: :	: :	÷	÷÷				ł
/2015		G			4			::::			:		::::	: :	:					Ì
				7		. <u>.</u>	÷	· : · :·				÷	÷	: : :	÷	÷ • ÷ •	•			ł
	- trace silt from 3.8 m to 4.9 m.	G													÷					Ł
Winnipeg PRINTED: 01/22/2015		0			1		: :	: :					: :	: :	-	: :				F
- -						.		·:·:·:	·:	• • • •	:	÷ · ÷ ·	÷•••	÷ .:	÷	·:·:				
4 		G										<u>.</u>		: : : :						1 - 15
4/11/0															÷					7
	END OF TEST PIT at 4.9 m		ſ	-													Test Pit backfilled			Ē
PARE	No Daylighting Performed						÷÷÷	· · · · ·				÷	÷.;	: ::::	÷		material which was	s replace		E
H -							: :	: :	: :		-	: :	: :	: :	÷	: :	its' original order a nominally compact	nd then ed with t	he	-
												-					excavator bucket.			F
/3-R0						·		· · · · ·			:	÷ · ÷ ·	÷		÷	· · · · · ·				F
-6 ₩											. I.	<u>.</u>	÷	::::						-20
184						1	÷÷	: :	: :		:	: :	: :	: :	÷	÷÷				
																				Ē
- 5 						.÷		$\cdot \stackrel{:}{\underset{\to}{\overset{\circ}{\cdot}}} \cdot \stackrel{:}{\underset{\to}{\overset{\circ}{\cdot}}} \cdot$				÷	÷	:: :::::	÷					-
64.60							: :	: :	: :		:	: :	: :	: :	÷	÷÷				-
R L																				F
DATA																				F
9 - -												<u>.</u>	<u>.</u>	::::						-25
а -								: :				-	: :	: :	÷	: :				Ē
g g −8						1					: ·		÷•••••••••••••••••••••••••••••••••••••		•					Ē
													÷							-
- L							: :	: :	: :			: : :	:::	::	÷	: :				F
9 - -						1									÷					F
PE&													÷		·					F
							÷	: :	:		:	: :	: :	: :	÷	: :				Ī
						:	::	: :	: :	: :	÷	: :	::	: :	÷	: :				
0	T DATE START DEPTH EQUIPMENT //12 0.0 m Hitachi 200LC Excavator				CON Main L											ER TY JMB	/PE: RKI Eagle REVIEW: KAF		ETED	
S 2014/08					iviairi L	une IN	uustrie	55 LIU.					1				•		FTED:	
133 TF														F	-)	A	RSC	Jr	NS	D
ú					1															

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC): 1	10-51	133									P-32		
																_			DATE:		4/08/12	
SAMF	PLE TYPE: G - Grab OS - Other					┝													LETION DATE: 1 of 1	201	4/08/12	<u> </u>
	DESCRIPTION			SAMPLING													IA					
E.			_																		_	(£
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED		F		SC	IL VA	POI	JR								_	COMMENTS	6	BACKFILL	Depth (ft)
De	STRATIONAFITI	MPLE	L N H	LAB SAMPLE N	AMF/	0	ON	CENT	'RA'	TION											BA	۵
		SAI	ZOI	LAB ANALYS	ES	1	00	(ppn 200	1V) 300	400)											
						÷			÷					÷			÷	-				
						÷		: :	÷		-		-	÷	: :		÷					
									÷					÷								
						÷		: :	÷		÷	-	: :	÷	: :							
	GROUND SURFACE					÷			÷		-			÷	: :		:					
-0	ORGANIC SILT - black, sandy, some clay, trace gravel, damp.			7		·					· : :	•		•••			•••				777	
-		G												· · ÷ ·			••••••••					1
-			\langle			÷			÷		÷		-	÷	: :							£
-	CLAY - dark gray, some silt, trace sand, damp.			7		÷					-											Ŧ
– 1		G				•					• • • •	• • • •		•••								1- 1
Ē			/	-										· · ÷ ·								F
Ł		G	/	/ TP-32-1.2 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	н Т																///	Ł
-				PCB, Metals	", T	÷			÷		-	-		÷								ŧ
F,			1	7		·				::::	· · · · ·			•••••••••••••••••••••••••••••••••••••••			· · ·					ŧ
-2 1		G		/ TP-32-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	,н, 🔺			· · · · · ·						· · ÷ ·			•••					1
-			\langle	PCB, Metals		÷			÷													Ł
-				TP-32-2.4 / BTEX.		÷			÷		÷			÷								ŧ
Ē		G		/ TP-32-2.4 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	ин, 🔺	•				:: : : :	· : :	·		•••••••••••••••••••••••••••••••••••••••			· · ·					ł
-3	SILT - light brown, sandy, trace clay, moist.		1							:				· · ÷ ·			• • • •					<u>}</u> _10
ŀ	SILT - light brown, sandy, trace day, moist.	G	/	/		÷			÷	: :	÷				: :							£
-					Ī				-					÷								ŧ
	CLAY - olive brown, trace silt, damp.			7		÷				: : :	· : · ·	•		•••			•••					F
-4		G												· · · ·								1
			\backslash												: :							Ł
Badiiii				1		÷	: :	: :	÷	: :	÷	÷	: :	÷	: :		÷	:				ŧ
5		G				۰÷۰۰ ز					· · · · ·			•••			· · : ·					1-15 1
- ¹	END OF TEST PIT at 4.9 m		1	_		. <u>.</u>	: : :	· ÷ · ÷		:: ::	·	·	÷	· · : ·	::		· · ÷ ·	<u>.</u>				ł
5																			Test Pit backfilled material which was			Ē
	No Daylighting Performed					÷		: :	÷	: :	-		-	÷	: :				its' original order a nominally compact	nd then		Ē
						:													excavator bucket.		uie	Ē
						·								•••••••••••••••••••••••••••••••••••••••								-
6						. <u>.</u>				: : :	. <u>.</u>			<u>.</u> .	: : :		<u>:</u> .	<u>:</u>				-20
						÷			÷			-	: :	÷				-				-
													-	÷								Ē
						·								•••••••••••••••••••••••••••••••••••••••			• • • •					-
-7																						-
						÷		: :	÷	: :	-	-	-	÷	: :		:					Ē
5 - 2 -						÷																F
- -						·		· · · · · ·	· · : ·	: : :	· : :	·	: :	•••	:: : :		· · : · :	:				- 25
3																						E
																						Ł
5 - J -									:	: :	-		: :	:								ŀ
						·					· : :			• • • •			· · : · ·					F
						. <u>.</u>				:: ::		· ÷ ·		· · ÷ ·			· · ÷ ·					ŧ
-9									:		÷			:			:					ŀ
						:		<u> </u>	:	: :	:	:	: :	:	: :		:	<u>:</u>				
2014/08	T DATE START DEPTH EQUIPMENT //12 0.0 m Hitachi 200LC Excavator				CONT Main Lir												FER): JM		E: RKI Eagle REVIEW: KAF	DRA	FTED:	LLB
														Ē								
2010															P		/-		RSC			

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					F	REF.	NO:	10-5	5133						T PIT N			
	NT: Imperial Oil															RT DAT		14/08/12	
SAM	PLE TYPE: G - Grab OS - Other					+										MPLETIC GE 1 of		14/08/12	2
	DESCRIPTION			SAMPLING	Т						Γ				FAC				
Ê			_																£
Depth (m)		SAMPLE TYPE	ZONE TESTED		F		SOIL	VAP	JUR		-					_	COMMENTS	BACKFILL	Depth (ft)
Del	STRATIGRAPHY	APLE	I I I I I I I I I I I I I I I I I I I	LAB SAMPLE NA		C	ONCI	ENTR	ΑΤΙΟ	Ν								BA(B
		SAN	Z	LAB ANALYSE	ES	10	(0_20	ppmv) 10 30) 10_4	00									
								: :	÷			: :	: :	: :	: :				
									÷										
							: :	: :	÷		÷	: :	: :	: :	: :				
									-					: :					
									-										
-0	GROUND SURFACE ORGANIC SILT - black, sandy, some gravel, trace clay.			7		• • • • •			· · ÷ · ·		. <u>.</u>							V77	-0
-		G		/		,			<u>.</u>										
-			V									: :							ŧ
-	CLAY - dark gray, sandy, some silt, trace gravel, damp.			7												•••			
<u>⊢</u> 1		G			•	• · · · · ·	•		•••										<u>ل</u> ــــــــــــــــــــــــــــــــــــ
-			/						<u>.</u>										
E .		G		/ TP-33-1.2 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals		: :	: :	: :	÷	: :	÷	: :	: :	: :	: :				<u> </u>
ŀ		G		PCB, Metals	י, ד				÷										
F,			Ĺ	7		• • • • •													£
-2 1		G		/ TP-33-1.8 (DUP-13) / BTEX, PHC F1-F4, VC PAH, PCB, Metals	oc, 🔺	, <u>.</u>			· · ÷ · ·						÷.;				ŀ
-			/	PAH, PCB, Metals															Ł
F	SILT - light brown, sandy, some clay, moist.			TP-33-2.4 / BTEX,		: :	: :	: :	÷			: :	: :	: :	: :				
E		G		/ TP-33-2.4 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals	-1,											• •			1-
-3			/	7		• • • • •				 	.÷				÷.;				10
- -		G		/					<u>.</u>										
22/201			V						÷										ŧ
PRINTED: 01/22/2015	CLAY - olive brown, some silt, damp.			7								: :				•••			1
		G					•									• •			<u>ل</u> ــــــــــــــــــــــــــــــــــــ
Winnipeg F	- trace silt below 4.1 m.		/																1
Nin -		G	/	/		: :	: :	: :	÷			: :	: :	: :	::				 1−15
4/11/04					Ī				÷			: :		: :					Ŧ
io iii —5	END OF TEST PIT at 4.9 m		ſ	_					· · · · · · · · · · · · · · · · · · ·		1					 Test l	Pit backfilled with ex		1
PARE	No Daylighting Performed					• • • • •	•				. <u>.</u>					mater	rial which was replace	ed in	-
BR -																nomir	nally compacted with	the	-
02.GLI									÷							excav	vator bucket.		-
^R ∨3 - - -									ļ										Ē
BRAR						•	• • • •	• • • • •	· · ÷ · ·	 	1.		· · · · · ·		·÷· ;				- 20
CEGL									· · ÷ · ·										-
PE&I																			-
t CDT						: :	: :	: :	÷	: :	÷	: :	: :	: :	::				-
7-40 5									· · ÷ · ·										-
DATA						• • • • •					.÷								-
D - CEC																			25
Sec.									÷			: :	: :	: :	: :				-
8																			F
PORT							• • • •		· · ÷ · ·						· · · · · ·	• •			-
PERICEG REPORT LOG 60 PERICEG DATA VS-RU4GDT PERICEG LIBARAY VS-RU7 GLB PERARED: 201					-	•			·		.÷								-
10																			-
-9									÷										F
PARS									-				: :						
	T DATE START DEPTH EQUIPMENT				CONT											YPE: R		ACTCO	
2014/08	3/12 0.0 m Hitachi 200LC Excavator				Main Lir	ie Indu	sines	LIC.					LOG				I	AFTED:	
5133 TF														-			SOI	V S	Ξ

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC	D: 1	0-5	133							-34		
	NT: Imperial Oil																RT DATE:		1/08/12	
SAMF	PLE TYPE: G - Grab OS - Other					-											PLETION DATE: E 1 of 1	2014	1/08/12	
	DESCRIPTION			SAMPLING											1	AG				
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	_		AME/	C	ON	IL VA CENT (ppn 200	RA ⁻ אי	rion			 				COMMENTS		BACKFILL	Depth (ft)
-0	GROUND SURFACE ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, some cobbles, damp.	G	/	/																
- - - - - - - - -	CLAY - dark brown, sandy, some silt, damp.	G		TP-34-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	. . .															
- 2 	- olive brown, some sand, trace silt below 1.8 m.	G		TP-34-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	. •															ي
		G G	/	TP-34-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	• •															
4 Munipeg PKINIED: 01/2/2/19		G	/	7																L
	END OF TEST PIT at 4.9 m No Daylighting Performed			-													Test Pit backfilled w material which was i its' original order an nominally compacte excavator bucket.	ith exca replace	d in	
																				20
																				25
	I T DATE START DEPTH EQUIPMENT			I	CONTR	RAC	TOF					· ·	 GA	AS M	IETE	R T)	I ′PE: RKI Eagle			
2014/08					Main Lin											JMB	REVIEW: KAF	DRA	FTED:	LLB
0133 IP U														F)		RSC	DR		5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	IO:	10-5	133					TES	ST PIT No	D: TP-			
	NT: Imperial Oil																RT DAT		2014/		
SAM	PLE TYPE: G - Grab OS - Other																		2014/	08/12	2
	DESCRIPTION															PAC	GE 1 of	1			
Ê	DESCRIPTION			SAMPLING																_	£
Depth (m)		SAMPLE TYPE	ZONE TESTED					<u></u>										COMMENTS		BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	ЫШ					SC CON	ICEN	ITR/	NTION	٧									BAC	De
		SAM	ZON	LAB SAMPLE NA LAB ANALYS			100	(pp	0000) 300	0 40	0										
														: :							
						-	: :	÷	: :	: :	÷	÷	: :	: :	: :	: :					
								÷			-										
									: :		÷		: :	: :	: :						
								÷	: :	: :	÷	÷	: :	: :	: :	: :					
-0	GROUND SURFACE	-								• • • •				· · · · ·						77.	<u> </u>
Ē	GRAVEL (Fill) - brown, coarse to fine grained, sandy, some gravel,								: :		÷		: :						ľ		£
-	trace cobbles, damp.	G						÷	: :	: :	÷			: :		: :					E
-						- 		•••				. .	: : : :	•			•••				E
E.	CLAY - dark brown, sandy, some silt, damp.			,						•				· • • •							F
		G	\vee			A :		÷	: :		÷		: :	: :	::::				ľ		E
-	SILT - light brown, sandy, trace clay, moist.			TP-35-1.2 (DUP-15) /				÷	: :		-										E
-		G		BTEX, PHC F1-F4, Le 1,2-DBA, 1,2-DCA	ead,			•••••••••••••••••••••••••••••••••••••••													-5
Ē					1									· · · · ·							E
-2			/			-	-	÷	: :		÷	÷	: :	: :	: :	: :			ľ		F
-	CLAY - olive brown, some silt, trace sand, damp.	G		TP-35-2.1 / BTEX, PHC F1-F4, Lead,		N E		÷			÷										F
-		-		1,2-DBA, 1,2-DCA		•		•••	÷ .:	• • • •	••••	. . :	::::	· ÷ · ÷	·÷·;	· · : · :					-
-		G								• • • •			 	· · · · ·							-
-3			\langle					÷	: :	: :	ł			: :	::	: :			ľ		E 10
-																					E
2015		G			4	÷		•••		•	•••		: : : :	• • • •	·:·:		•••				Ē
Winnipeg PRINTED: 01/22/2015	- trace silt below 3.5 m.		/							• • • •				· • • • •							F
Ë -		G	/						: :		÷		: :						ľ		£
											÷										E
innipe								•••••••••••••••••••••••••••••••••••••••						•••••	•••••						E
40 ≥ −		G				, ÷	· · · · · ·	•••		• • • •		. <u>.</u> .	: : : :	· : · :	· : · :						- 15
014/11			/																		-
ä <u></u> _5	END OF TEST PIT at 4.9 m							÷	: :	: :	÷			: :				Pit backfilled with			
ZEPAF	No Daylighting Performed							•••••••									its' ori	ial which was re iginal order and	then		-
а- 9-								•••		•							nomir	nally compacted vator bucket.	with the	e	-
R07.G																					L
[∞] -6								÷	: :	: :	-		: :	: :							-
LIBRA																					- 20
- CEG								• • • •		• • • •		. .	: : : :	· · · · ·							-
PE&									: : : :				: : : :								-
4.GD1									: :		÷			: :							-
73-R04																	•••				Ē
DATA						•	• • • •	•••••••••••••••••••••••••••••••••••••••	÷;	• • • •	•••	·	: : : :	· · · · ·	· · · · · · · · · · · · · · · · · · ·		•••				-
- LCEG									: : : :				: : : :								-25
а -											÷										-
8																					F
ORT								•••	÷ .	• • • •	•••	·	: : : :				•••				F
EG RE										• • • •					· · · · · ·						È
E&LCE																					É
NO 9							: :		: :				: :	: :							F
PARSONS PEALCEG REPORT LOG 80 PEALCEG DATA V3-R04 GDT PEALCEG UBRARY V3-R07 GLB PREPARED 201								÷	: :		÷		: :								
ਤੂ STAR	T DATE START DEPTH EQUIPMENT			•	CON												YPE: RK				
3014/0	V12 0.0 m Hitachi 200LC Excavator				Main L	ine li	ndustri	es Lto	i.							: JME			DRAF		
5133 TP LOG															Ρ	/_		50			5
51.															-	-					

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	. NO	: 10	-513	3					PIT No: TP-3		
	NT: Imperial Oil													 			2014/08/	
SAM	PLE TYPE: G - Grab OS - Other															LETION DATE: 2 1 of 1	2014/08/	13
	DESCRIPTION			SAMPLING								 		. , .				
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	_			(CON	L VAF CENTI (ppm	RATI v)	ON		 		 		COMMENTS	BACKFILL	Depth (ft)
0 	GROUND SURFACE ASPHALT. GRAVEL (Fill) - brown, coarse to fine grained, sandy, trace cobbles, trace silt, trace clay, damp.	G		7														0
- - - 	- wet below 1.0 m.	G		TP-36-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA														
	CLAY - dark brown, silty, some sand, trace gravel.	G		TP-36-1.2 (DUP-16) / BTEX, PHC F1-F4, Le 1,2-DBA, 1,2-DCA	ad,													5
-2	- olive brown, some silt, moist below 2.4 m.	G		TP-36-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	▲													
-3	- trace silt, damp below 3.2 m.	G	/								••••			••••••	· · · · · · · · · · · · · · · · · · ·			10
		G													· · · · · · · · · · · · · · · · · · ·			
-	END OF TEST PIT at 4.9 m	G		-														
	No Daylighting Performed														· · · · · · · · · · · · · · · · · · ·	Test Pit backfilled with material which was rep its' original order and the nominally compacted we excavator bucket.	blaced in	d - - - -
															•			- 20
																		-
8																		25
																		-
STAR	I T DATE START DEPTH EQUIPMENT			I	CONTR											PE: RKI Eagle		
2014/08	8/13 0.0 m Hitachi 200LC Excavator				Main Lin	ie In	dustrie	s Ltd.				 F	LOG				DRAFTE	
2																RSO	N	5
5														-			_	

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0:	10-5	133					Г No: ТР-			
	NT: Imperial Oil					-												/08/13	
SAMF	PLE TYPE: G - Grab OS - Other					╞						 	 			TION DATE:	2014	/08/13	
	DESCRIPTION	Γ		SAMPLING									 	FAG					
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	-			0	CON	IL V/ CEN (ppi 200	TRA	TIO	N 00					COMMENTS		BACKFILL	Depth (ft)
-0	GROUND SURFACE ASPHALT.			Ā															-0
-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, some gravel, trace cobbles, damp.	G		7											•••				-
[−−1 -	- wet below 0.8 m.	G		TP-37-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA															- - -
-	CLAY - dark gray, gravelly, some silt, trace sand, moist.	G		TP-37-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		,													-5
2		G		TP-37-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA															-
-	- olive brown, moist below 2.4 m. - trace silt, damp below 2.6 m.	G				· · · · ·													
-3		G				·									•••				10
		G	/												• •				- - - -
		G	/			·		· · · · · · · · · · · · · · · · · · ·							•••				- 15
5	END OF TEST PIT at 4.9 m		1						•••			 		 	_T	est Pit backfi ll ed with		///	: :
	No Daylighting Performed														·· m its	star in backlined with aterial which was re s' original order and cominally compacted accavator bucket.	placed hen	in	- - - -
																			20
						· · · · ·									•••				
																			- 25
																			-
£														 					-
2 STAR	F DATE START DEPTH EQUIPMENT /13 0.0 m Hitachi 200LC Excavator				CONT Main Lir									ER T JMB		RKI Eagle REVIEW: KAF	DRAF	TED: I	LB
					ant Ell	111										RSO			

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0: 1	0-5	133								-38		
	NT: Imperial Oil																	T DATE:		1/08/13	
SAM	PLE TYPE: G - Grab OS - Other																	LETION DATE: 1 of 1	2014	1/08/13	;
<u> </u>	DESCRIPTION			SAMPLING												FA					
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	_		AME/ ES		CON	DIL V/ CEN (ppr 200	TRA nv)	TION				 		-		COMMENTS		BACKFILL	Depth (ft)
-0	GROUND SURFACE 								· · · · · · · · · · · · · · · · · · ·							•				177.	-0
-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, some gravel, trace cobbles, damp.	G				N								 	· · · · · · · · · · · · · · · · · · ·						┲ ┲ ┲ ┲ ┲ ┲ ┲ ┲
- - - 1	CLAY - dark gray, sandy, some silt, moist.	G		TP-38-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA																	ليتعاجبهم
-		G		TP-38-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA																	-
-2	- brown, some sand, damp below 1.8 m.	G		TP-38-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	•																
-3	- olive brown below 2.6 m.	G			•																[- - - - 10
-		G		7												····					
- - - - - - - - - - - - - - - - - - -		G																			
-	END OF TEST PIT at 4.9 m	G		-									•						_		15
—5 - - -	No Daylighting Performed																	Test Pit backfilled wit material which was re its' original order and nominally compacted excavator bucket.	eplaceo	d in	
- - 6																· · · · · · · · · · · · · · · · · · ·	•				- 20
- - - - - - 7																					
- ' - - - - -																					
																·····					
- - 9																					-
	I TDATE START DEPTH EQUIPMENT 3/13 0.0 m Hitachi 200LC Excavator Image: Constraint of the second sec		<u> </u>	1	CONT Main Lir				:	::	:	<u> :</u>		OGC	GED:	: JM	IB	PE: RKI Eagle REVIEW: KAF			

CLENT Provided START DYPE Comparison START DYPE Comparison Com		PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	10:	10-5	5133					_			-39		
DESCRIPTION SAMPLING Post 1 of 1 2 DESCRIPTION SAMPLING concentration concentration 3 STRATIGRAPHY Ext Bit Sector concentration concentration -1 CONCOLUMENCE concentration concentration concentration -1 concentration concentration concentration concentration -1 concentration concentration concentration concentration -1 concentration concentration concentration concentration																						
End DESCRIPTION SAMPLING STRATGRAPHY Image: strate in the part of the part o	SAIVIE	LE TYPE: G - Grab OS - Other															_			2014/	08/13	
State STRATIGRAPHY Big is a state		DESCRIPTION	Τ		SAMPLING												·					
-0 BPCUND SUFFACE	Ē		H الا	_	1																ī	(#
-0 BPCUND SUFFACE	epth	STRATIGRAPHY		TEST				S	DIL V	APC	DUR								COMMENTS		ACKF	epth
0 000 AD 308-XE - Inset Str. [Figh: - Upper, cores to line grained, same, some greed. 0 - Inset day takes 0.8 m. 0 - CLAY - dive tream, some sitt, loce sand, damp. 0 0 Provide 10 fm, grained, same, some sitt, loce sand, damp. 0 0 Provide 10 fm, grained, same, some sitt, loce sand, damp. 0 0 Provide 10 fm, grained, same, some sitt, loce sand, damp. 0 0 Provide 10 fm, grained, same, some sitt, loce sand, damp. 0 1 CLAY - dive tream, some sitt, loce sand, damp. 0 1 0 Provide 10 fm, grained, some, some sitt, loce sand, damp. 0 1 0 Provide 10 fm, grained, some, some sitt, loce sand, damp. 0 1 0 Provide 10 fm, grained, some, some sitt, loce sand, damp. 0 1 0 Provide 10 fm, grained, some, some sitt, loce sand, damp. 0 1 0 Provide 10 fm, grained, some, some sitt, loce sand, damp. 0 1 0 0 Provide 10 fm, grained, some, some sitt, loce sand, damp. 1 0 0 Provide 10 fm, grained, some, som	Ď		AMPL	UN N	LAB SAMPLE N			CON	VCEN (pr	NTR/ pmv)	ATIO	N									B	
U USAPRAT, Uncomplete, carp. 0 </td <td></td> <td></td> <td>12</td> <td>й</td> <td>LAB ANALYS</td> <td>SES</td> <td></td> <td>100</td> <td>200</td> <td>30</td> <td>0<u>4</u>0</td> <td>00</td> <td>+ :</td> <td></td> <td>-: -:</td> <td>-:-</td> <td>:</td> <td></td> <td></td> <td></td> <td></td> <td> </td>			12	й	LAB ANALYS	SES		100	200	30	0 <u>4</u> 0	00	+ :		-: -:	-:-	:					
U USAPRAT, Uncomplete, carp. 0 </td <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>																	-					
U USAPRAT, Uncomplete, carp. 0 </td <td></td> <td>:</td> <td></td> <td></td> <td></td> <td></td> <td>:</td> <td>:</td> <td></td> <td></td> <td></td> <td></td> <td></td>											:					:	:					
U USAPRAT, Uncomplete, carp. 0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>: :</td> <td></td> <td>: :</td> <td>÷</td> <td></td> <td></td> <td>: :</td> <td></td> <td>÷</td> <td>÷</td> <td></td> <td></td> <td></td> <td></td> <td></td>								: :		: :	÷			: :		÷	÷					
U USAPRAT, Uncomplete, carp. 0 </td <td></td> <td>÷</td> <td>÷</td> <td></td> <td></td> <td></td> <td></td> <td></td>																÷	÷					
Improved in the provide of the grained standy some gravit, to an obtaine, durp. Improved integration of the gravity some gravit, to an obtaine, durp. Improved integration of the gravity some gravit, to an obtaine of the gravity some gravit, to an obtaine, durp. Improved integration of the gravity some gravity, to an obtaine of the gravity some gravity some gravity some gravity some gravity some gravity some gravity, some gravity, to an obtaine of the gravity some gravity s	L																				· ·	Lo
Insec obbles, damp. 0 // Description 0 // - nace day below 18 m. 0 // Description Descripion Description <tdd< td=""><td>ŀ</td><td></td><td>╉</td><td></td><td>7</td><td></td><td></td><td>-</td><td></td><td>: :</td><td>÷</td><td></td><td></td><td>-</td><td>: :</td><td>÷</td><td>-</td><td></td><td></td><td>ľ</td><td></td><td>Ē</td></tdd<>	ŀ		╉		7			-		: :	÷			-	: :	÷	-			ľ		Ē
CLAY - olive brown, some sit, tase send, damp. 0 Prover 2101EX 120CA 0 Prover 2101EX 120CA 0 F <td>F</td> <td>trace cobbles, damp.</td> <td>G</td> <td> </td> <td></td> <td>4</td> <td>¥ ‡</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>•••••••••••••••••••••••••••••••••••••••</td> <td></td> <td></td> <td></td> <td>E</td> <td></td> <td>F</td>	F	trace cobbles, damp.	G			4	¥ ‡									•••••••••••••••••••••••••••••••••••••••				E		F
CLAY - olive brown, some sit, tase send, damp. 0 Prover 2101EX 120CA 0 Prover 2101EX 120CA 0 F <td>-</td> <td></td> <td>-</td> <td>1</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>·</td> <td></td> <td> .<u>:</u></td> <td></td> <td></td> <td>· · · · ·</td> <td>÷</td> <td></td> <td></td> <td>F</td> <td></td> <td>F</td>	-		-	1	7						·		. <u>:</u>			· · · · ·	÷			F		F
CLAY - olive brown, some sit, tase send, damp. 0 Prover 2101EX 120CA 0 Prover 2101EX 120CA 0 F <td>-</td> <td>- trace clay below 0.8 m.</td> <td>G</td> <td> </td> <td>TP-39-0.6 / BTEX, PHC F1-F4, 1.2-DBA</td> <td></td> <td></td> <td></td> <td></td> <td>: : : :</td> <td></td> <td>E</td>	-	- trace clay below 0.8 m.	G		TP-39-0.6 / BTEX, PHC F1-F4, 1.2-DBA					: : : :												E
- urace sit below 2.6 m. a - urace sit below 2.6 m.	[−1 [$\left \right $	1,2-DCA		-				:					÷	÷			E		f
- unce sit below 2.6 m. a - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below	-	CLAY - olive brown, some silt, trace sand, damp.			TP-39-1 2 / BTEX												-			F		F
- unce sit below 2.6 m. a - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below 2.6 m. - unce sit below	-		G		PHC F1-F4, 1,2-DBA	, 4	<u>ب</u>	· · · · ·		: : :	· : :	: . : . : : :	· · :: :	· · · · · · · · · · · · · · · · · · ·	· · : · :	· · ÷ ·	÷	: :		K		5
	-			1																E		Ē
	-2		G	/	TP-39-1.8 / BTEX, PHC F1-F4_1 2-DBA															F		E
-3 -3 -4 -10 -4 -3 -4 -10 -5 END OF TEST PIT at 4.9 m -15 -5 END OF TEST PIT at 4.9 m -15 No Daylighting Performed -16 -6 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -17 -8 -17 -9 -16 -7 -16 -7 -17 -8 -17 -9 -17 -9 -17 -9 -17 -17 -17 -18 -17 -19 -17 -10 -17 -10 -17 -10 -17 -17 -17 -10 -17 -10 -17	-		ľ		1,2-DCA	, –		-		: :	:					÷	-			ľ		Ē
-3 -3 -4 -10 -4 -3 -4 -10 -5 END OF TEST PIT at 4.9 m -15 -5 END OF TEST PIT at 4.9 m -15 No Daylighting Performed -16 -6 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -16 -7 -17 -8 -17 -9 -16 -7 -16 -7 -17 -8 -17 -9 -17 -9 -17 -9 -17 -17 -17 -18 -17 -19 -17 -10 -17 -10 -17 -10 -17 -17 -17 -10 -17 -10 -17	-			1			 				•					•••••••••••••••••••••••••••••••••••••••				E		F
-4 -	-	- trace silt below 2.6 m.	G			4	۱÷	•			·		. <u>.</u>	•	• • • • • •	• • • • •				F		F
-4 -	-3			\downarrow													÷			ľ		[
-4 -	-																-			E		Ē
-5 END OF TEST PIT at 4.9 m Test Pit backfilled with excavated -6 -6 -7 -7 -8 -9 2TART DATE START DEPTH EQUIPMENT CONTRACTOR CAS METER TYPE: RM Eagle 211/08/13 0.0 m Hisbit 200.02 Excession	-		G			1										:				F		F
-5 END OF TEST PIT at 4.9 m Test Pit backfilled with excavated -6 -6 -7 -7 -8 -9 2TART DATE START DEPTH EQUIPMENT CONTRACTOR CAS METER TYPE: RM Eagle 211/08/13 0.0 m Hisbit 200.02 Excession				Ĺ	7		·				• • • • •		· · .:. :		•••••••	•••••••••••••••••••••••••••••••••••••••				ľ		Ē
-5 END OF TEST PIT at 4.9 m Test Pit backfilled with excavated -6 -6 -7 -7 -8 -9 2TART DATE START DEPTH EQUIPMENT CONTRACTOR CAS METER TYPE: RM Eagle 211/08/13 0.0 m Hisbit 200.02 Excession	4		G				⊾÷									· · · · ·				E		F
-5 END OF TEST PIT at 4.9 m Test Pit backfilled with excavated -6 -6 -7 -7 -8 -9 2TART DATE START DEPTH EQUIPMENT CONTRACTOR CAS METER TYPE: RM Eagle 211/08/13 0.0 m Hisbit 200.02 Excession	- 									: : : :										F		Ē
-5 END OF TEST PIT at 4.9 m No Daylighting Performed Test Pit backfilled with excavated miss registed in this original order and then normally compated with the exavated							:	-		: :	:					÷	÷			ľ		F
-5 END OF TEST PIT at 4.9 m Test Pit backfilled with executed material which was replaced in executed which the excavator bucket. -6 -6 -20 -7 -7 -20 -8 -21 -22 -9 START DATE START DEPTH EQUIPMENT 2014/08/13 0.0 m Hada's 200.0 Excavator Main Line Industries Lul LOGGED: JMB Review IX AS DRAFTED: LLB	-		G			1	÷			: :						•••••			•	E		F 15
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle		END OF TEST PIT at 4.9 m	-	1	-		·	•			·		-			•••••••••••••••••••••••••••••••••••••••			Test Dit heelsfiled			F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle																			material which was r	eplaced	in	Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle							:			: :						÷	÷		nominally compacted	d then d with th	е	Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle							÷			: :						÷	-		excavator bucket.			Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle	-						 			÷; ; ;						· · · · ·	÷					Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle	-6 [·		. <u>.</u>	· · · · · ·			÷					- 20
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle										: : :							÷					F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle																	-					Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle	3									: :												Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle	[-7						·			÷;	• • • • •		· ·		· · • • • • •	•••••••						Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle										:: ::	· ÷· ·		. .: 	· · · · · ·	· · ÷ · ÷	· · ÷ ·						F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle																						- 25
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle							÷				÷					:	÷					F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle	8																					F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle	-						·				• • • •		- <u>-</u> -		••••••	· · : :						Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle													. . <u>.</u>			· · ÷ ·						F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle																						E
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle	-9							-			:					:	:					F
2014/08/13 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED; JMB REVIEW; KAF DRAFTED; LLB																	:					
																			PE: RKI Eagle			
PARSONS	2014/08					wan Li	ne li	iuustri	ies Lto	J.									•			
	200																7	4	HSC	JN	15	Э

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	NO:	10	-5133					-4 0		
	NT: Imperial Oil PLE TYPE: G - Grab OS - Other													RT DATE: PLETION DATE:	2014/ 2014/		
SAIVI	LE TIPE. G - Grab OS - Other													E 1 of 1	2014/	/00/13	
	DESCRIPTION			SAMPLING													
Depth (m)	STRATIGRAPHY	SAMPLE TYPE			.ME/ :S	(ONC	- VAP ENTR (ppmv	ATIO	NC			 	 COMMENTS		BACKFILL	Depth (ft)
-0	GROUND SURFACE																-0
-	ORGANIC SILT - black, sandy, some gravel, trace clay, damp.	G					· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·	 				
- - 1	CLAY - dark brown, silty, some sand, damp.	G		TP-40-0.6 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA		•							 				
-	SILT - light brown, sandy, some clay, moist.	G		TP-40-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA									 				
-2	CLAY - olive brown, silty, damp.	G		TP-40-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA													
3	- trace silt below 2.4 m.	G															
-		G															
-	END OF TEST PIT at 3.7 m		ſ			•					· ·			Test Pit backfilled w	⊿ ith exca	<u>///</u> vated	Ē
-4	No Daylighting Performed							· · · · · · · · · · · · · · · · · · ·						material which was i its' original order and nominally compacted excavator bucket.	replaced	lin	- - - -
-													 				15
—5 - - -																	-
- 6																	- 20
-																	
—7 - -							· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·									- - - -
																	25
																	- - - -
-9																	-
	 T DATE START DEPTH EQUIPMENT				CON			: :	: :	::	1:	: :		/PE: RKI Eagle			
2014/08	3/13 0.0 m Hitachi 200LC Excavator				Main L	ine Inc	ustries	Ltd.									

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	NO:	10-{	5133							PIT No: TP-4		
	NT: Imperial Oil																	2014/08/1	
SAIVI	PLE TYPE: G - Grab OS - Other					-								_			LETION DATE: 2 1 of 1	2014/08/1	ıJ
	DESCRIPTION			SAMPLING											170				
Ē		1	Ē			1													ŧ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONF TESTED				SOI	. VAP	OUR								COMMENTS	BACKFILL	Danth (ft)
ă ا		MPL	Ľ	LAB SAMPLE	IAME/		CONC	vmaa	n)									B	
		S	Ř		SES	1	00 2	0 30	0 <u>4</u>	00		:: :	: :		-:	:			
							: :			-		: :	: :	: :					
															:				
—0	GROUND SURFACE															-			10
-0	ASPHALT.	\overline{G}	+	7															Ŧ
	GRAVEL (Fill) - brown, coarse to fine grained, sandy, trace cobbles, damp.	r	┢	-		 :	: :		<u></u> 						••••••••				1
-	CLAY - brown, sandy, some silt, trace gravel, damp.	`		7			· · · ·								•••	:			1
		G		TP-41-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA															
-1			V	1,2-DBA, 1,2-DCA											:				
																			Æ
-	SILT - light brown, sandy, some clay.			7											· · · · · ·				∕_5
		G	1/	/ TP-41-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	4	. .			: : : : : :										1
-2			\backslash	1,2-DBA, 1,2-DCA								: :							Æ
	CLAY - olive brown, some silt, damp.	G		1	4	↓ E	: :		: :		÷	: :	: :	: :	÷	:			
-	END OF TEST PIT at 2.4 m		╀	-											••••••••		Test Pit backfilled with		
	No Daylighting Performed					. <u>.</u> .	: : : : :		: : : :						•••••••••••••••••••••••••••••••••••••••		material which was rep	aced in	-
-3																	its' original order and the nominally compacted w	vith the	-1
																	excavator bucket.		Ē
-						:	: :		: :	: :		: :	: :	:::	:				Ē
							· · · · ·								· · :				-
-4									 							: 			-
7											1	: :	: :	: :	:				-
																			Ē
												: : : :			•••••••••••••••••••••••••••••••••••••••				-1
-						. <u>.</u> .	: : : : :					:.::	· · · · ·	· ÷ · ÷	· · ÷ · ·	<u>.</u>			-
-5																			È
												: :				-			Ē
																			Ē
-5 -6 -7 -8											<u>.</u>			·:··:	•••••••••••••••••••••••••••••••••••••••	: :			F
-6									 										-2
												: :							Ē
						÷	: :		: :		÷	: :	: :	: :	÷				È
							: :		: . : : : :						••••••••				Ē
-7						. <u>.</u> .	: : : : :		: : : : : :						••••	<u>.</u>			-
							: : : : : :		· · · · ·			: : : :			: :	:			Ē
															:				Ē
																			-2
-8						· ÷ ·	: : : : :	: . : : : :	: : : : : : :	: · : · ·	· ·	: : : :		·:-::	· .: :	: :			-
															· · . · ·				E
																-			-
						÷	: :			: :	÷	: :	: :	: :	÷	:			-
-0															••••••••				Ē
J															:				
	 T DATE START DEPTH EQUIPMENT				CON	L : TRAC	. : TOR	. :	. :	. :	1:	: :	GAS	S ME	: TER	: TYP	E: RKI Eagle		
2014/08					Main L			Ltd.					LOC	GED): JM	В		ORAFTED	: LLB
																	RSO	N	5

CLIENT: Imperial Oil CAMPLE TYPE: G - Grab OS - Other DESCRIPTION SAMPLING E E STRATIGRAPHY E E E B STRATIGRAPHY		COM	PLETION DATE: 2014/08/13	
DESCRIPTION SAMPLING				<i>.</i>
DESCRIPTION SAMPLING				
ц (ш)				
· STRATIGRAPHY · 비번 · · · · · · · · · · · · · · · · ·	SOIL VAPOUR CONCENTRATION		COMMENTS COMMENTS	Danth (ft)
End STRATIGRAPHY End Interpretation 0 GROUND SURFACE ASPMALT G Therabel and the second sec	SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200 300 100 200	START DATE: 2014/08/13 COMPLETION DATE: 2014/08/13 PAGE 1 of 1 COMMENTS		
	RACTOR	METER TY	./DE: DKI Eagle	

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N0	D: ´	10-5	133								P-43		
	NT: Imperial Oil																	RT DATE:		4/10/16	
SAMF	PLE TYPE: G - Grab OS - Other																	PLETION DATE: E 1 of 1	201	4/10/16	6
	DESCRIPTION											<u> </u>				1	AGE				1
Ê	DESCRIPTION	-	-	SAMPLING																	F.
Depth (m)		SAMPLE TYPE	ZONE TESTED		Ļ															BACKFILL	Depth (ft)
Cep	STRATIGRAPHY	<u>"</u>	۱Ë			-	. SC CON	DIL VA	APO [RA]	ur Tion	1							COMMENTS	>	BAC	Dep
		SAMI	ZONE	LAB SAMPLE NA	AME/			(ppr 200	nv)												
				2.2710.210			00	200	300	40	:					:					
						÷	-		-	: :			-								
						÷	: :	: :	÷	: :	÷	÷	: :	÷	: :	÷	: :				
						÷	: :	: :	÷	: :	÷	÷	: :	:		÷	: :				
						÷	: :	: :	÷	: :	÷	÷	: :	:		÷	: :				
	GROUND SURFACE					÷	: :	: :	÷	: :	÷	Ë	: :	:		÷	: :				
-0	ORGANIC SILT - black, sandy, some clay, trace gravel, damp.					:	: :		• • • •	:::	· : · · · :	·				· ÷ · ·	:::::			777	<u></u>
-	CLAY - dark brown, silty, some sand, trace gravel, damp.	G	/																		ŧ.
-					Î				÷		÷					÷					ŧ
-	- brown, trace sand below 0.6 m.		1		ľ													•			
Ē,		G	/			÷	:: :.::	· · · · · ·	· · ÷ ·	÷.;	·	. <u>.</u> .			: .	· ÷· ·	: . : : . :				1
1 1			V			÷	: :	: :	÷	: :	÷	Ë	: :	:		÷	: :				
Ł			/		1		-		÷	1		:								///	Ŧ
F		G	/	TP-43-1.2 (DUP-10) / Metals	•	÷			· · ÷ ·		·					•	· · · · ·			///	1−5
-			/																		Ł
-2	SILT - light brown, clayey, some sand, damp.		/	TP-43-1.8 / BTEX.		÷	: :	: :	÷	: :	÷		: :			÷					7
-		G	/	TP-43-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	н, 🔺	÷	:		• • • •	: : :	· : · · ·		· · · · · ·		: <u>:</u>	• • • •	:::::				
-			/	1 OD, Moto 3			:			: : :						. <u>:</u>	: : : : : :				£
F			/	TP-43-2.4 / BTEX,		÷	: :	: :	÷	: :	÷	÷	: :	÷		÷	: :				ł
-		G	/	TP-43-2.4 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals	H, 🛉	÷			• • • •		· 					• • • •					ł
-3		_																			10
-	CLAY - dark brown, sandy, trace gravel, trace silt, damp.		/			÷			÷							-					
2015		G	/	TP-43-3.0 / Metals	†	•	: :		• • • •	:::	••••					:		•			
01/22	- light brown, silty, some sand, damp below 3.7 m.	_	1				: : :		· · ÷ ·	: : : :	·	. <u>.</u> .				· ÷ · ·	: : : :				1
Ë	- Ight brown, sity, some sand, damp below 5.7 m.	G	/	TP-43-3.7 / Metals		÷	: :	: :	÷	: :	÷	÷	: :	÷		÷	: :				
≝ <u></u> -4			/	1P-43-3.7 / Wetais	Î																Ŧ
Winnipeg PRINTED: 01/22/2015	- brown below 4.3 m.	\vdash	\vdash		. -				· · ÷ ·		·					·					
*		G	/																		/ 1−15
4/11/0			/		Т		: :	: :	÷	: :	÷	E	: :	:	: :	÷	: :				7
io iii —5	END OF TEST PIT at 4.9 m	┥	1	-	· ·	·	: :	:::	· · ÷ ·	:::	· : :					· : · ·	:::::	Test Pit backfilled		V//	4
AREI	Na Davijskima Davisnost																	material which was	s replace		E
PRE	No Daylighting Performed					÷	-		-	: :			-					its' original order a nominally compact	nd then ed with t	the	-
- GLB							: :		: : :	::::	:	1				: : : :	::::	excavator bucket.		u io	Ē
3-R07						·		· · · · · ·	· · ÷ ·	÷.÷	·	. <u>.</u>	÷÷			· ÷· ·	: : : : :				F
≩ F_6						÷	: :	: :	÷	: :	÷	÷	: :	:		÷	: :				-20
LIBR/					ľ	÷															F 20
- CEG									•••••••••••••••••••••••••••••••••••••••							• • • •	· · · ·				F
- PE&							:			: : :						. <u>:</u>	: :.:.				Ē
CDT						÷	: :	: :	÷	: :	÷	Ē	: :	:		÷	: :				Ē
ອີ⊉ −7 ອີ						:	:::		•••	::::	· : · · ·	·				· ÷ · ·	:::::				-
ATA					.																E
						÷	-		÷	: :	-		: :			:					-
181					1		: :			::::	:	:				:	: :				25
					. -		: : · :		· · ÷ ·	: : :	·	.÷.	· · · · · ·			· ÷ · ·	: : · : · ·				F
																					Ē
EPOF							: :				-						: :				È
EG F						·	: . :		•••	: : :	· : :				: ::	• ÷•••	: · : · ·				F
PE&L							: : :			<u>.</u>	. <u>.</u>						: 				E
sv –9						÷			÷		-					:					F
PARS						÷			:		-					:					
ਤੂ STAR	T DATE START DEPTH EQUIPMENT		<u> </u>		CONT													PE: RKI Eagle			
ທີ່ 2014/10	/16 0.0 m Hitachi 200LC Excavator				Main Lin	ne In	dustri	es Ltd.									JES	REVIEW: KAF		FTED:	
8507 dL 8819																		RSC			
513.																1					

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF. NO	D: 1	0-51	33					TES	ST P	PIT No: TP	-44		
	IT: Imperial Oil																DATE:	2014/10		
SAMF	PLE TYPE: G - Grab OS - Other																ETION DATE:	2014/10	/16	
															PAG	GE	1 of 1			
	DESCRIPTION			SAMPLING																
Depth (m)		ЩЩ	ZONE TESTED															RACKFILL	1	Depth (ft)
pth	STRATIGRAPHY		ESI		Ī		SOIL VA	POL	JR								COMMENTS			epth
		MPL	μ	LAB SAMPLE N	AME/		CONCEN	(RAT	ION									L A	5	ð
		SAI	Z	LAB ANALYSI	ES		(ppr 00 200	300	400											
						-		-		-	: :	: :		: :						
						÷		÷		:	÷ ;	÷		: :						
						÷		÷		-	: :	: :	÷	: :						
						÷		÷		-	: :	: :	÷	: :						
						÷		÷		-	: :		÷	: :						
	GROUND SURFACE					÷	: : : :	÷		÷	: :	: :		: :	: :					
-0	CROUND SORFACE					•		••••					• • • •		• • • • •				7	-0
-	CLAY - dark brown, silty, some sand, damp.	Τ	/			÷		÷		:	÷÷	: :		: :		-				
F		G	/		•	۱.				-										-
-	- brown below 0.6 m.		<u> </u>			·÷		· · ÷ · ·	: : : : : : :	÷	÷ • • •			: :						-
-			/			÷	: : : :	÷		÷	: :	÷		: :	: :				$\langle \rangle$	
-1		G	/		↑	۱. ۲				-									Æ	-
-			/							<u>.</u>										-
F	- light brown, trace sand, damp below 1.2 m.		/			÷		÷			: :	: :	÷		: :				/注	-
F		G	/	TP-44-1.2 / Metals	•	÷		•••	· · · · ·	:	÷	·			· · · · · ·					-5
È.			/							<u>:</u>				: :						
-2				TP-44-1 8 / BTEX		÷		÷	: :	:	: :	: :	÷	: :	: :					
1		G	/	TP-44-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	н, 🔺	÷	:·:·:·:	•••		÷	÷ • • •	·	• • • •	: :	••••••					-
1			V	PCB, Melais		÷		÷		:	÷÷	: :		: :		-				-
F	- brown, sandy, some silt, trace gravel below 2.4 m.		/			÷				-		: :								-
-		G	/	TP-44-2.4 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	н, 🔺	÷.				÷				: :						-
-3			V	PCB, Metals		÷		÷	: :	÷	: :	: :		: :	: :	:				
E	- dark gray below 3.0 m.		17			-													/	- 10
		G	/	TP-44-3.0 / Metals					 										\square	-
Winnipeg PRINTED: 01/22/2015			/		T	÷		÷		-	: :	: :	÷	: :					$/\lambda$	-
	SILT - light brown, clayey, trace sand, damp.		1	2		· ÷		•••	:	:										-
		G	/																	-
		ľ	/		T	ł		÷		:	: :	: :		: :	: :					
	CLAY - dark brown, silty, trace sand, damp.	_	\vdash			÷		•••		÷	÷		• • • •		• • • • •					-
		G	/					÷			: :	÷	÷	: :						- 15
11/04			/		ſ					-										- 15 :
2014	END OF TEST PIT at 4.9 m	-	<u> </u>	-		÷		•••			÷	• - • • •	• • • •	: :	••••••			\mathbb{Z}		-
5 ₩						÷		÷		:	: :	÷	÷	: :			Test Pit backfilled wit material which was re			
₹F	No Daylighting Performed																its' original order and	then	E	-
Ξ- ŋ-							· · · · · · · · · · · · · · · · · · ·		:: 	÷				:.:		:	nominally compacted	l with the	F	-
						÷		÷	: :	:	: :	: :	-	: :	: :		excavator bucket.			-
¥-22						:		•••••••		: 1	: :	: :	:	: :					F	-
							· · · · · · · · · · · · · · · · · · ·			÷									E	-
						÷		÷		:	: :	÷		: :	: :	:				
						÷		•••	· · · · ·	:	÷		• • • • •		••••••				F	-
2														: :					Ē	
3						÷		÷	: :	:	: :	: :	÷	: :	: :				þ	
₫_7						÷		•••	::. ::.		÷	·							Ē	-
2						÷		÷		:	÷ :	÷		: :	: :	:			F	
5																			E	-
							· · · · · · · · · · · · · · · · · · ·		:: ::	÷									þ	- 25
л - П -						÷		÷	: :	:	: :	: :	÷	: :	: :				E	-
8-18								· · · · · · · · · · · · · · · · · · ·		:	: :								F	-
										÷									E	_
- -						÷		÷		:	: :	: :		: :	: :	:			Ē	-
						÷		•••	:	:	÷	·							F	-
											: :								ļ	-
2 -9						÷										:1			F	
						÷														
					CONT	: 		:	: :	:	: :	: :	. : CV6	: : M⊑1			E: RKI Eagle			
2014/10							JUR Justries Ltd.								IER): JES		REVIEW: KAF	DRAFTE	D: I	LB
ğ												F								
5133 TP															/-		RSO	JN	-	2
6					1										-			_		

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0:	10-5	133						TES	ST P	IT No: TF	- 45		
	NT: Imperial Oil															_			DATE:	2014/		
SAMF	PLE TYPE: G - Grab OS - Other																		ETION DATE:	2014/	/10/16)
		-										<u> </u>					PAC	GE -	1 of 1			
	DESCRIPTION			SAMPLING																		
Depth (m)		H ط	ZONE TESTED																		BACKFILL	(ŧ
epth	STRATIGRAPHY		LES]		Ì	-	S	DIL V	APO	UR									COMMENTS		ACKF	Depth (ft)
ď		MPL	₩	LAB SAMPLE N	AME/		CON			TION	N										B/	Õ
		SA	R	LAB ANALYS	ES		100	200	mv) 300	40	0											
						÷	-	÷	: :	: :	÷				: :	÷	: :					
						÷	: :	÷	: :	: :	÷		:		: :	÷	: :					
						-	-	-		: :	-		-		: :	-	: :					
							-	-							: :	÷						
						÷		÷			÷		:		: :	÷	: :					
	GROUND SURFACE					÷	: :	÷	: :	: :	÷		÷		: :	÷	: :					
-0	GRGANIC SILT - black, sandy, some clay, trace cobbles, trace							•••		·	•••	· · .:.			÷;	· · ÷ · :	·: ·:				777	-0
	\ gravel, trace silt, damp.		/												: : :					ľ		Ē
Ŀ	CLAY - dark brown, silty, some sand, damp.	G	//		1	Ì	-	÷	: :	: :	÷		-		: :	÷	: :			ľ		F
-	- brown, some gravel below 0.6 m.		ť ,			· ÷		•••		·	· · :	· · .:.	•	. .	÷;	•••	·::::			F		F
-		G	/												: : :					Ľ		E
-1		ľ	/		Ī	•	: :	÷	: :	: :	÷		:		: :	÷	: :			Ľ		Ļ
ţ	- light brown below 1.2 m.	\vdash	<u> </u>			·	•	· · : :			••• • • •	1.	•			· · ÷·		• •		Ł		F
Ł		G	/	TP-45-1.2 (DUP-8) / N	Antole															Ł	[]]]	Ē
Ł			//	1P-40-1.2 (DOP-6) / N	netais 1			÷		: :	÷	1 :			: :	÷	: :			E		F 3
E.			1			÷	· · · · ·	•••		• • • • •	···	· .÷			÷;	· · ÷·	÷			ł		F
-2		G	/	TP-45-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals		÷		÷	: :	: :	÷		:		: :	÷	: :			ł		F
ł.		l G	/	PRC F1-F4, VOC, PA PCB, Metals	л, 4															E		F
-	- dark brown, trace sand below 2.4 m.		1			÷		•••		· ÷ · ÷	÷	· ·					· ÷ · ÷			E		F
-			/	TP-45-2.4 / BTEX,		÷	-	÷	: :	: :	÷		:		: :	÷	: :			P		-
E		G	/	TP-45-2.4 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	н, 🖌	Ì						1 :			::::			• •		F		Ē
-3	black staining from 0.0 m to 0.7 m		/												÷;					F		}
E	- black staining from 3.0 m to 3.7 m.		/													-	: :			F		Ē
910 -		G	/	TP-45-3.0 / Metals	4	۱÷		•••			•••	· · .:.				· · ÷ · :		• •		F		F
HKINIED: 01/22/2019			1												<u>.</u>					F		Ē
-	SILT - light brown, some sand, damp.		/			÷		÷	: :	: :	÷		÷		: :	÷	: :			F		ŧ
z ₽ -4		G	/		4	÷		•••		·	•••	· · .:.			÷;	· · ÷ · :	·: ·:			F		F
- Bed			/																	ľ		Ē
	CLAY - brown, some sand, damp.		/	1		÷	-	÷	: :	: :	÷		÷		: :	÷	: :			ľ		ŧ
žE		G	/		4	Ŷ÷	• • • •	•••		· · · · ·	••••	· · .:.	•		÷;	· · ÷·	·:	• •		F		- 15
014/1			/												: : : :					Ľ		E
∏_5	END OF TEST PIT at 4.9 m					1	-	÷	: :	: :	÷		-		: :	÷	: :		Test Pit backfi ll ed w			F
HAH -	No Daylighting Performed					•	• • • •	•••		·	· · ÷ ·	· · ÷	•		÷;	· · ÷·	· : · :	··· r	material which was its' original order an	replaced	l in	F
Ĭ						:			: :	: :					: :	:		l r	nominally compacte	d with th	е	-
5						:	: :	÷	: :	: :					: :	:	: :	e	excavator bucket.			-
12						÷		•••				· · ÷					÷ • •					F
≩⊢6						÷		÷	: :	: :	÷		:		: :	÷	: :					F
																						20
2 F 						÷		•••		· ÷ · · ÷	··· ÷·	· ·			÷•••	•••	·					E
- FR						÷	-	÷	: :	: :	÷		:		: :	÷	: :					-
a F												1 :										Ē
₹ - 7															÷;		· · · · · ·					-
						÷	: :	÷	: :	: :	÷		÷		: :	÷	: :					-
5								•••••				1			: :			• •				Ē
															÷;							-25
Ц -						-					-				: :	-						Ē
8–8								•••••••			•••	1:	:			· · ÷ · :		•				Ē
																						F
						ł										÷						Ē
						·	• • • •	•••	: :	: :	· · : :	1:	::::		:::	· · ÷ ·	·÷ · :					F
												1.			: :							Ē
-9							: :	÷	: :	: :	÷	1	÷		: :	÷	: :					F
							: :	÷	: :	: :	÷		÷		: :	÷	: :					1
	I T DATE START DEPTH EQUIPMENT	1	I	I		TRA		R			•	<u> </u>		G	AS N	MET	ER 1	TYPE	E: RKI Eagle			<u> </u>
2014/10					Main Li				•								JES		REVIEW: KAF	DRAF	TED:	LLB
0 L																			RSC			
5133																			NJL			

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC): 1()-51	33								- 46		
	NT: Imperial Oil																	T DATE:	2014/		
SAMF	PLE TYPE: G - Grab OS - Other																	PLETION DATE:	2014/	/10/16	_
				<u></u>												P	PAGE	1 of 1			
	DESCRIPTION			SAMPLING																	
Depth (m)		YPE	ZONE TESTED																	BACKFILL	Depth (ft)
epth	STRATIGRAPHY	 Ш	ES I				SO	L VA	POU	R								COMMENTS		ACK	eptl
		MPI	HN N	LAB SAMPLE N	AME/	(CON	CENT (ppm		ION										ß	
		٩S	R	LAB ANALYS	ES	1	00	200	300	400											
							÷÷	: :	: :					: :		: :					
						÷	÷ ÷	: :	÷	÷	:		÷	: :	:	: :					
							1	: :			-			÷ :		: :					
						÷	: :	: :	: :	÷	-		÷	: :	÷	: :	÷				1
						÷	: :	: :	: :	÷	-		÷	: :	÷	: :	÷				1
	GROUND SURFACE					÷	: :	: :	: :	÷	-		÷	: :	÷	: :	÷				
-0	 ORGANIC SILT - black, some sand, trace gravel, damp. 					:	: :	: :		:	:		:							77	U
-	CLAY - black, silty, some sand, damp.	G	/			. <u>.</u>	: : :	÷÷÷		•••	:	• - • •	· ÷	÷ - ÷	·	:	· · ÷ · ·		l		F
F			V				: :	: :	: :	÷	-		÷	: :	÷	: :	÷		E		F
-	- brown, trace gravel below 0.6 m.						: :	: :		:	-								E		Ē
[1		G	/			s ÷ ·	: · ÷	÷÷÷		•••	÷	• - • •	÷	÷ - ÷	·	: : :	•••		l		F
E			V			÷	: :	: :	: :	÷	-		÷	: :	÷	: :	÷		l		F
Ł	- light brown, trace sand below 1.2 m.		/																E		Ē
F		G		TP-46-1.2 / Metals		<u>،</u> ا		÷		••••••••		•		÷.;					ľ		5
-			V			÷	: :	: :	: :	÷	-	-	÷	: :	:	: :	÷		l		F
-2						:	: :	: : : :			-					: :			E		Ē
1		G	/	TP-46-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	,н, 🔺	<u>،</u>	: · ÷	÷÷÷		•••	÷	•	· ÷· ·	· · · ·	·	:; :;			E		F
È.			V	PCB, Metals		÷	÷ ÷	: :	: :	÷	-	-	÷	: : :	:	: :			l		F
F	- brown below 2.4 m.					:	: :	: :			-					: :			l		Ē
-		G	/	TP-46-2.4 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	, н,	÷.	:	÷÷÷		• • • • •	÷	• - • •	· ÷.	÷ . ÷.					E		F
-3			V	PCB, Metals		÷	÷÷	: :	÷	÷	:		÷	÷÷	÷	: :			E		F 10
ţ	SILT - brown, clayey, some sand, damp, black staining.					:	: :	::::	: :	:	:	: :	:	÷ ÷		: :	:		E		- 10 F
₽		G	/	TP-46-3.0 / Metals		<u>ب</u>	:	÷÷÷			÷			· · · · ·		÷;			E		F
			V			÷	÷÷	: :	: :	÷	:	-	÷	: :	:	: :			P		Ē
4	CLAY - gray, silty, some sand, damp.			7		:	: :	::::		:::::::::::::::::::::::::::::::::::::::	-		:						E		E
<u>-4</u>		G	/			÷.	: . :·	· : · : ·		· · ÷ ·	÷		· ÷	· · · · ·	·	<u>.</u>			P		F
τ			V			÷	: : :	: :	: :	÷	-	-	÷	: :	÷	: :	-		P		Ē
				7		:	: :	· · · · · ·		:	-								E		Ē
≶ ≸ -		G	/			<u>،</u>	: · :·	· · · ÷·		· · ÷ ·	÷	•		÷ • ÷ •					E		- 15
14-			V			÷	: : :	: :	: :	÷	:		÷	: :	÷	: :			l		F
≓ ≓_5	END OF TEST PIT at 4.9 m			-			: :				-							Test Pit backfilled w			Ē
	No Daylighting Performed					· ÷ ·	: · ÷	÷÷÷		•••	÷	• • • • •	· ÷· ·	· · · ·	·			material which was	replaced		F
<u></u>						÷	: :	: :	: :	÷	-		÷	: :	÷	: :		its' original order an nominally compacte	a then ed with the	е	F
						÷	: :	: :	: :	÷	-		÷		÷			excavator bucket.			Ē
						· ÷ ·	:.::	÷÷÷		•••	÷	• • • • •	· ÷· ·	· · · ·	·						F
≩ ⊢ 6						÷	: :	: :		÷	-		÷	: :	÷	: :	÷				F no
						:	: :	: :		÷	-					: :					20
2 F 						· ÷ ·	: · ÷	· · · · ·		• • •	÷	•	·	· · · · ·		:;					F
						÷	: :	: :	: :	÷	:		÷	: :	:	: :	÷				F
3							: :	: :		:	:			: :		: :	:				Ē
₫ — 7						• 🕂 •	: · :·	· · · · ·		•••	÷	• - • •	·	· · · · ·		:;					F
S [÷	÷ ÷	: :		÷	-		÷	÷÷	:	: :	÷				F
5						:	: :	: :		:	-		:			: :					Ē
						· ÷ ·	: : :	÷÷÷		•••	:	• - • •	· ÷.	÷ - ÷	· · . ·	<u>.</u>	· · ÷ · ·				-25
L -						÷	÷÷	: :	: :	÷	:		÷	: :	÷	: :					F
88							: :	: :		:	:					: :	:				Ē
						• 🕂 •	: · ÷	÷÷÷		•••		• • • •	·	· • • •		:	••••				F
																					E
																-					F
						·		• • • •		· · · ·	÷	•									Ē
						÷				-	:					: :					ſ
_							: :	: :	: :	:	÷			: :	:	: :					
0	TDATE START DEPTH EQUIPMENT				CONT													PE: RKI Eagle			
ğ 2014/10	/16 0.0 m Hitachi 200LC Excavator				Main Lir	ne Ind	Justrie	s Ltd.						LOC				REVIEW: KAF	DRAF		
13 TP 1																		RSC		J.C	5
5133														1		_					-

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	EF. N	0: ′	10-5	133							- 47		
	NT: Imperial Oil						_										RT DATE:	2014/		
SAM	PLE TYPE: G - Grab OS - Other						-										IPLETION DATE: E 1 of 1	2014/	10/15	
	DESCRIPTION			SAMPLIN	<u> </u>	Т										PAG				
Ê	DESCRIPTION	<u> </u>			G	-													_	(f
Depth (m)		LYPE	ZONE TESTED																BACKFILL	Depth (ft)
) eb	STRATIGRAPHY	<u> </u> щ	Ë				▲ SO CON	OIL VA	apo Tra	ur Tion	J						COMMENTS		BAC	Dep
		SAME	ONE	LAB SAMPL			400	(ppr 200	mv)	40	•									
							100	200	300	40	0 :	:	: :	::	: :	: :				
										: :	÷		: :		: :	÷÷				
										: :	÷		: :			: :				
										: :	÷		: :		: :	: :				
										: :	÷		÷÷		: :	÷÷				
										: :	÷		: :			: :				
-0	GROUND SURFACE CORGANIC SILT - black, sandy, some clay, trace gravel, damp.									÷;			: : : : :	: : : : :	: : : : :				77	<u> </u>
-	CLAY (Fill) - dark brown, silty, trace sand, damp.	\top		7						: :	÷		: :		: :	: :		P		Ē
-		G								: :		1						l		F F
Ē	GRAVEL AND SAND (Fill) - light brown, coarse to fine grained,	_	┦	_							·	. . .	: · · · ·	: : : : : :	: : : : :	· · · · ·		l		-
E	some silt, trace clay, damp.	G	1/	/						: :	÷		: :			: :		l		-
-1						Î				: :								l		Ē
Ł	CLAY - brown, silty, trace sand, damp.	_	1	1								. . .						ľ		F
Ŀ		G	/	/ TP-47-1.2 / Metal	6												.]	ľ		-
-				1F-4/-1.2 / Weld	5 .	Ī				-								ľ		Ē
-	- black below 1.8 m.	-	1	7					• • • •									Ľ		F
-2		G	/	TP-47-1.8 / BTE> PHC F1-F4, VOC	(, : РАН					: : :			: : : : :		: :			K		-
-				PCB, Metals	, i Aii, i i	Ī				: :	÷		: :	: :	: :	: :		Ľ		Ē
-		_	1				••••••		•••		• • • •	·	· · · ·			· · · · ·		Ľ		F
-		G		TP-47-2.4 (DUP- PHC F1-F4, VOC PCB, Metals	3) / BTEX, PAH					: :			: : : :					K		-
÷.		ľ		PCB, Metals	, i /ui, i	T				: :	÷		: :	: :	: :	: :		K		-
-3	SILT - brown, clayey, some sand, damp, black staining.	_		7			•••••		•••			·	 	 				Ľ		- 10
,F		G	/	TP-47-3.0 / Metal	s					: : :			: : : : :					K		-
		ľ		11 47 0.07 Moto		T				: :	÷		: :	: :	: :	: :		ľ		F
	CLAY - dark gray, silty, some sand, damp.	_	$\left(- \right)$	7			••••••		•••	÷	• • • •	·	: : : :	: . : : : :		· · · · ·		K		F
		G	/	(: : :			 					ľ		-
		ľ			•	T				: :	÷		: :	: :	: :	: :				Ē
6- -		-	1	7			•••			÷	• • • •	·	: : : :	· · · · ·		· · · · · ·				- -
₹_		G	/	(<u>.</u>					: : : :			K		-
0/1/4 -						T				: :	÷		: :		: :	: :		E E		
-5	END OF TEST PIT at 4.9 m		1	1						: :	:	 	: : : :	· · · · ·	: :	· · · · · ·	Test Pit backfilled w		·///	-
																	material which was	replaced	in	Ē.
	No Daylighting Performed									: :	÷		: :		: :	: :	its' original order an nominally compacte	id then	~	-
																	excavator bucket.		e	
										÷;					 					Ē
										: :										F
5 19 1										: :			: ::							- 20
															: : : : :					-
										: :	÷		: :		: :	÷÷				Ē
- -										: :			: ::							- [
-7										÷;	·	. <u>.</u> .	: : : · ·	: : : : : :	: : : : : :	· · · · · ·				-
										: :	÷		: :		÷÷	÷÷				Ē
									:	: :	:		: :	· · · · ·	: :		1			Ē
										::	· .	. .	: · · · ·	: : · : · ·		÷ • ÷ •				- 25
										: :	÷		: :			: :				F
8-8									:			:					1			Ē
											•	. <u>.</u> .								F
																				-
																				Ē
									•••••••••••••••••••••••••••••••••••••••		•		· · · ·	 	: · · ·	· · · · ·	·			F
9										: :	-		: :							-
							:		:	: :	:	:	: :	: :	: :	: :				
2	T DATE START DEPTH EQUIPMENT				CON												YPE: RKI Eagle		TED. 1	
g 2014/10	/15 0.0 m Hitachi 200LC Excavator				Main L	LINE	ndustr	ies Ltd.					ł	LOGO			REVIEW: KAF	DRAF		
22															-)		RSC	JN	5	5
5															-	-				_

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0: 1	10-51	133								P-48		
	NT: Imperial Oil																	RT DATE:		1/10/16	
SAMF	PLE TYPE: G - Grab OS - Other																	PLETION DATE:	2014	1/10/16	j
	DESCRIPTION															1	AG	E 1 of 1			
Ê	DESCRIPTION	<u> </u>	_	SAMPLING																_	£
Depth (m)		SAMPLE TYPE	ZONE TESTED		-													COMMENTS		BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	PLE				4	CON	DIL VA	TRA	UR TION								COMMENT	,	BAC	Dep
		SAM	ZON	LAB SAMPLE N	IAME/ SES		100	(ppr 200	mv) 300	400)										
						:	: :		:		:	:	: :	:	: :	:	: :				
													: :	:		÷					
							-	: :		: :		÷	: :	÷	: :	÷	: :				
							: :	: :		: :		÷	: :	÷	: :	÷	: :				
																-					
	GROUND SURFACE									: : :	: 		: : : :			. <u>.</u>	: : : : :				
-	ASPHALT. GRAVEL AND SAND (Fill) - light brown, coarse to fine grained,	个														÷			ł		ŧ
-	some silt, trace clay, damp.	G			À	N III				:::	••••	:	: :			:	: :		ł		F
E	CLAY - brown, sandy, silty, some gravel, damp.	_	$\left(\right)$		-	·		• • • • •			· · · · ·	·				·	· · ·		ĺ		È.
E .		G								: : :											Ę
-1 F			$\left \right $		T	1		-		: :			: :	÷		÷					Ł
Ē	- some silt, trace cobbles.		1								· · · · ·								ł		F
-		G		TP-48-1.2 / Metals	4	÷		•••		÷;	·	· :	: : :		:	· ÷ · ·			ł		-5
E .			/																		Ł
-2				TP-48-1.8 / BTEX,			-	: :		: :		÷	: :	÷	: :	÷	: :				Ł
-		G		TP-48-1.8 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	чн, ▲	÷										·					ŧ
Ē	SILT - light brown, clayey, some sand, damp.	_	1		-						. <u>.</u>					·	: · : ·		ł		Ł
E .	SILT - light brown, Gayey, some sand, damp.	G		TP-48-2.4 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals		-				: :			: :	÷		÷			ł		£
÷,				PCB, Metals	νı, 4											÷					F
-3	CLAY - dark brown, silty, some sand, damp.	_			-	·		· · : · :	•••	: : :	· : :	·	: : : :	· · : · ·	÷;	· ÷ · ·	: · : : :				- 10
_ ب		G		TP-48-3.0 / Metals		1															Ę
22/201			$\left \right $													÷			ł		ŧ
Winnipeg PRINTED: 01/22/2015				7	Î					:::	••••	:	: :			:	::::		ł		F
≝4		G				۱÷	•				• • • •					• • • •			ł		F
Bed -										: : :											Ę
Minni			/	1										:		-					Ł
11/04		G			1	È.										· · · · ·		•	ł		1—15 1
	END OF TEST PIT at 4.9 m		1	-							· · · ·								-		Ł
Sil-5										: : :								Test Pit backfilled material which was	with exca s replaced	ivated d in	-
- PREP	No Daylighting Performed							: :		: :		÷	: :	÷	: :	÷	: :	its' original order a nominally compact	nd then		-
- OLB					ľ											· · · · ·		excavator bucket.	eu wiur u		-
(3-R07					-						· · · ·					·	÷				F
≩[−6																					-20
LIBR							-	: :		: :		÷	: :	÷	: :	÷	: :				20
					1	· :					· · · · ·	·				·					Ē
<u>₩</u> - -					-		· · · · · ·			:: ::	· : · ·		: : :		:: ::	. <u>:</u>	: . : : · :				-
05[−7						:									: :						Ē
23-R						:		: :		: :		:	: :	÷	: :	÷	: :				E
TPAT/					ł	•				÷;			:			·					Ē
					-						. <u>.</u>										-25
Щ. П.						÷	-	: :		: :		÷	: :	÷	: :	÷	: :				Ē
88					Ī																F
- ORT						· :		· · · · · · · · · · · · · · · · · · ·		: : :	· : · · ·	·	::::	· · : · ·	:: : :	· : · ·	: : : :	•			F
					-																-
E& CE											:	i	: :	÷		÷					F
SNC -9					1																F
						:				: :			: :		: :	:					
ਤੂ STAR	T DATE START DEPTH EQUIPMENT			۱ <u>ــــــــــــــــــــــــــــــــــــ</u>	CONT													/PE: RKI Eagle			<u> </u>
vg 2014/10	0/16 0.0 m Hitachi 200LC Excavator				Main Li	ine Ir	dustri	es Ltd.							GGE			REVIEW: KAF		FTED: I	
13 TP L																		RSC	JN		5
5133																-					

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC	D: 1	0-51	33						T PIT N				
	NT: Imperial Oil																RT DAT		2014/1		
SAMF	PLE TYPE: G - Grab OS - Other																MPLETIO		2014/1	0/16	
	DESCRIPTION															PAG		1 1			
Ē	DESCRIPTION		_	SAMPLING																_	(f
Depth (m)		SAMPLE TYPE	ZONE TESTED		-						_						_			BACKFILL	Depth (ft)
Jep	STRATIGRAPHY	Ц Ц Ц	Ë			-	. SC CON	IL VA	POL RAT	JR TION								COMMENTS		BAC	Dep
		SAMI	ZONE	LAB SAMPLE N				(ppn 200	ıv)												
								200	:	400	:	: :	: :	:	: :	: :					
						÷	: :	: :	÷	: :	:	: :	: :	÷	: :	: :					
						÷	: :	: :	÷	÷÷	:	: :	: :	÷	: :	÷÷					
						÷	: :		÷	: :	:	: :		-	: :	: :					
						-			÷					÷							
	GROUND SURFACE					÷	: :	: :	÷	: :	:	: :	: :	÷	: :	: :					•
-0 F	ASPHALT.	7—		7		:	: :		:	: :	:			:		: :					-0
-	GRAVEL AND SAND (Fill) - light brown, coarse to fine grained, some silt, trace clay, damp.	G	/			<u>, i</u>															- -
-			/																		-
-	CLAY - gray, silty, some sand, trace gravel, damp.					÷	: :	: :	÷	: :	÷	: :	: :	÷	: :	: :					-
-1		G			ł	۱. T	:::	::::	÷	: : : : : : : :	:	· ÷ · ÷	·	· · ÷ · ·	÷ :	· · · · · · · · ·	• •				-
-	dade havene historie d. O. e.		/																	\square	-
E	- dark brown below 1.2 m.	-	//			÷	: :	: :	÷		:	: :	: :	÷	: :	: :			K		:
E		G		TP-49-1.2 / Metals	Î	÷			÷					:					V		-5
ŀ		-	1	7									•		· · · · ·						
-2		G	/	TP-49-1.8 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	АН		: :			÷. ÷.										\square	-
-		ľ		PCB, Metals	,	÷	: :	: :	÷	: :	:	: :		÷	: :	: :					-
-	SILT - brown, clayey, some sand, damp.		1				:														_
-		G		TP-49-2.4 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	AH,	÷.															-
-3			V	PCB, Metals		÷	: :	: :	÷	: :	:	: :	-	:	: :	: :				\square	
Ę	CLAY - dark brown, silty, some sand, damp.					:	: :		:	: :			: : :	:		: :					10
- 12		G		TP-49-3.0 / Metals	•	۱÷۰										••••••					
1/22/2			/				: :			: : : : : :											-
9: 						÷	: :	: :	÷	: :	:	: :	: :	÷	: :	: :				\square	-
<u>1</u> 24		G			1	۱÷۰	: :										•••				-
Winnipeg PRINTED: 01/22/2015	- slag and metal debris below 4.3 m.		/	7			:;			· · · · ·	÷	·		<u>.</u>	· · · · · ·	· · : · :				\square	-
- Min	- slag and metal debits below 4.5 m.	G	/	TP-49-4.3 (DUP-5) /	Matala	÷	: :	÷÷	÷	: :	:	: :	: :	÷	: :	÷÷					- 15
11/04				TP-49-4.5 (DOP-5) /	vietais 1				-												-
ia –5	END OF TEST PIT at 4.9 m		\uparrow	-	r	:	:::	::::	÷	: : :	: :	· ÷ · ;	· ÷ · ·	· · ÷ · ·	÷ :	· · : · :		Pit backfilled with			-
PARE	No Daylighting Performed																. mate	rial which was re	placed i		-
- FRE	No Daylighting Fehomed					÷	: :	: :	÷	: :	:	: :	: :	÷	: :	: :	its' or nomi	riginal order and t nally compacted	then with the		-
- 1 - 1 - 1						-											exca	vator bucket.			-
						-							•	· ·			• •				
84							: : :			<u>.</u>	÷										- 20
19 10 10						-			-												
8-0						:	: :		:	: : :	:		: :	:		: :					-
										· · · · ·		·	• • • •			••••••					
⊡ ⊉—7							: : :			· · · · ·											-
15 						÷	: :	: :	÷	: :	:	: :	: :	÷	: :	: :					-
											:						•••				-
&I-CE						·÷			÷	· · · · ·			• - • •	· · ÷ · ·		•••••••					25
H 2																					- -
8-100							: :														-
PORT						: ::	:		::	· · · · ·			•	· · ÷ · ·			• •				_
E C RE										:		•									-
						÷	: :	: :	÷		:		: :	÷	: :	: :					-
SZ - 9																	·				-
PARSONS FEELCEG REPORT LOG 60 PEELCEG DATA V3-R04.001 PEEALCEG IBRARY V3-R07.GLB PREPARED 201						-	: :		÷		:	: :	:								
	I T DATE START DEPTH EQUIPMENT			L	CONT	RAC		<u>،</u> .			·		 	GAS	ME	TER T	YPE: RI	KI Eagle			
vg 2014/10	/16 0.0 m Hitachi 200LC Excavator				Main Lir	ne In	dustri	es Ltd.						LOG	GED): JES	RE	VIEW: KAF	DRAFT		
S) 2014/10																/		150	N	C	5
513																					

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF. NO	D: 10-	5133						PIT No: TP-5		
	NT: Imperial Oil															014/10/1	
SAMF	PLE TYPE: G - Grab OS - Other					-									PLETION DATE: 2 1 of 1	014/10/1	5
	DESCRIPTION												1	AGE			
Ē	DESCRIPTION		-	SAMPLING	1												f.
Depth (m)		SAMPLE TYPE	ZONE TESTED		-											BACKFILL	Depth (ft)
Jep	STRATIGRAPHY	<u>"</u>	١Ë			A C	SOIL VA	POUR	: DN						COMMENTS	BAC	Dep
		SAME	ONE	LAB SAMPLE I			(ppr	nv)									
					520	10	0 200	300 2	100		: :	: :	: :	:	 		
								: :				: :					
											: :	: :					
								÷÷	÷÷		÷÷	: :	: :	÷			
								: :	: : :		: :	: :	: :	÷			
	GROUND SURFACE						: : :	: :	÷÷		: :	: :	: :	÷			
-0	ASPHALT.			7								• • • • •				1//	才0
-	GRAVEL AND SAND (Fill) - light brown, coarse to fine grained,	G	/														7
-	some silt, trace clay, damp.	ľ	V		Ī	•		: :	: : :		: :	: :	: :	÷			7
-	CLAY - dark brown, silty, some sand, trace gravel, damp.			7			· · · · · ·				: :						Ŧ
E ₁		G	/			N	· ÷ · ÷ · ÷	· · ÷ · ÷ ·	÷.	· · · · · ·	· ÷ · ÷	· ÷· · ÷	• • • • •				1
['			/														£.
ŀ			/														1
F		G	/	TP-50-1.2 / Metals	 	N					•	• • • • •					₽5
-			/	_													1
-2			/	TP-50-1.8 / BTEX,													7
E		G		TP-50-1.8 / BTEX, PHC F1-F4, VOC, P PCB, Metals	AH, 🔺												Æ
_			1					· · ÷ · ÷ ·			· ÷ · ÷	· ÷ · · ÷					7
ŀ		G	/	7 TP-50-2.4 / BTEX, PHC F1-F4, VOC, P PCB, Metals				: :	÷÷		: :	: :	: :				}
-		G		PHC F1-F4, VOC, P PCB, Metals	AH,				: :		: :	: :			Í		Ŧ
-3	SILT - brown, clayey, some sand, damp.	_									• • • • •	• • • • •	• • • • •				10
- -		G	/	TP-50-3.0 / Metals													Ł
		Ĭ	$\left \right $	11 00 0.07 Mictalo	T	•	: : :	: :	:::		: :	: :	: :	÷			\$
0:01/2	CLAY - dark brown, silty, some sand, damp.			7		: : :			÷ • • • •	· · · · · ·	•	· : · :	: ::				7
PRINTED: 01/22/2015		G															7
на – р-			V					: :			: :	: :					7
/11/04 Winnipeg	- gray below 4.3 m.			7			· · · · ·				: :						1
40 -		G				N	· ÷ · ÷ · ÷	•••	÷	· · · · · ·	• • • • •	• • • • • •	• • • • •				15
			/														ł
ä <u></u> −5	END OF TEST PIT at 4.9 m							: :	:::		: :	: :	: :	÷	Test Pit backfilled with e		Ę
	No Daylighting Performed					: : :				· ·	·	· ÷ · · ÷	: ::		material which was repla its' original order and the	aced in en	F
а –															nominally compacted wi	th the	Ē
															excavator bucket.		Ē
						: :	· · · · · · · · · · · · · · · · · · ·				: :						Ē
7akr 1							• • • • • • •					• • • • •					- 20
																	-
							: : :	: :	: :		: :	: :	: :				-
- -												• • • • •					-
-7												• • • • •					-
Z Z								: :	: :		: :	: :	: :				E
- DA											: :				i .		F
- CE								••••••			• • • • • •	• • • • • •	• • • • •				- 25
8-																	-
°° ⊢ 8												: :					Ē
POR												· · · · ·					Ē
						•		•••••••••••••••••••••••••••••••••••••••	÷		· ÷· · ÷	•			1		-
																	-
sz – 9												: :					-
								: :			: :	::	: :	÷			
	T DATE START DEPTH EQUIPMENT		1	·	CONT	RAC	TOR			<u> </u>		GAS N	 NETE	R TYF	I PE: RKI Eagle		
0 004444							ustries Ltd.					OGG				RAFTED	LLB
S) 2014/10															RSO		
513:																	

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	. NO:	10-	5133	}						PIT No:	TP-51				
	NT: Imperial Oil PLE TYPE: G - Grab OS - Other					-									_		RT DATE: PLETION DATE		14/10/18 14/10/18			
						ł											E 1 of 1	20	17/10/16			
	DESCRIPTION			SAMPLING																		
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED	LAB SAMPLE N LAB ANALYS	AME/ ES	C	CONC	L VAP ENTF (ppmv 00 3	ratic /)	N							COMME	ITS	BACKFILL	Danth /ft/		
-0 - -1 -2	GROUND SURFACE ORGANIC SILT - black, clayey, trace sand, damp. CLAY (Fill) - dark brown, silty, some sand, damp. GRAVEL AND SAND (Fill) - brown, coarse to fine grained, some silt, some clay, damp. CLAY - dark brown, silty, some sand, damp. - trace sand below 1.8 m.			TP-51-1.2 / Metals TP-51-1.8 / BTEX, PHC F1-F4, VOC, PA PHC P1-F4, VOC, PA		<u> 1</u>	00 2	<u>00 3</u>	00 4											0 5		
-3	SAND - brown, medium to fine grained, silty, clayey, some gravel, damp. CLAY - dark gray, silty, some sand, damp.	G		TP-51-2.4 / BTEX, PHC F1-F4, VOC, PA PCB, Metals TP-51-3.0 / Metals	H,															ן אין אילאילאילאילאילאילאיל		
-4 - -5	END OF TEST PIT at 4.9 m No Daylighting Performed	G	/	TP-51-3.7 (DUP-2) / N	vietais												Test Pit backfill material which its' original orde nominally comp	was replace r and ther	ed in			
-6 7																	excavator buck	atieu with	uie			
- 8 9																						
STAD	T DATE START DEPTH EQUIPMENT				CONT		: : TOP	: :	: :	: :	:	: :		: : 10 M		: : : : : : : : : : : : : : : : : : : :	/PE: RKI Eagle					
2014/10					Main Li			Ltd.						AS IM DGGE			REVIEW: KA	= DR	AFTED:	LLB		
																	RS					
					1								1									
	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	10:	10-3	5133	}							PIT No: TP-			
--------------------	---	-------------	---	---	---------	-------	-----------	---	------------------	------------	---------	------------------	---	------	--------------------	-----------------------	--	----------	--	----------	----------	------------
	NT: Imperial Oil																			2014/1		
SAMF	PLE TYPE: G - Grab OS - Other																			2014/1	10/15	
	DECODIDITION																PA	GE	1 of 1	<u> </u>		
- -	DESCRIPTION		_	SAMPLING																		Ŧ
Depth (m)		SAMPLE TYPE	ZONE TESTED																		BACKFILL	Depth (ft)
Dept	STRATIGRAPHY	Ē	١ <u>ــــــــــــــــــــــــــــــــــــ</u>			4	SI CON		APC	UR	N								COMMENTS		3ACI	Dept
		AMF	ONE	LAB SAMPLE	NAME/			(pr	رvmر												_	_
		0			553		100	200	30) 4 :	00	+ :		: :			:	:				
						÷	: :	÷	: :	-				: :	÷	: :	-					
						÷	: :	÷	: :	÷			:	: :	÷	: :	÷	:				1
						÷	: :	÷	: :	÷	: :		:	: :	÷	: :	÷	:				
						÷	: :	÷	: :	÷			:	: :	÷	: :	÷	-				
						÷		÷	: :					: :	÷	: :	-					
-0	GROUND SURFACE _ ORGANIC SILT - some clay, trace gravel, trace sand, damp.							•••••••••••••••••••••••••••••••••••••••					•••••••••••••••••••••••••••••••••••••••				· · ·				77	-0
E	CLAY - dark brown, silty, some sand, damp.	-7		7		÷									÷			-				E
Ł	· · · · · · · · · · · · · · · · · · ·	G			1	N II				-				-	-		-					F
ł	CLAY - brown, gravelly, silty, some sand, damp.		/	7		•		••••••••		•			•••••••••••••••••••••••••••••••••••••••				· · ·					Ē
-	· · · · · · · · · · · · · · · · · ·	G	/	·					: :							: : : :		: :				É
<u> </u> -1					Ī	÷	: :	÷	: :	÷			÷	: :	÷	: :	÷	:				E
-	- brown below 1.2 m.					• 🗄	::::	•••	:::	· : · ·			•••	::::	· · ÷ · ·	:::	:÷.	: :				F
È-		G	/	TP-52-1.2 / Metals					: : :	. <u>.</u>							÷.	<u>.</u>		E		-5
F			$\left \right $			÷		÷		÷			÷				÷					Ē
E,			Ĺ										•••••									E
<u>-</u> 2		G		TP-52-1.8 / BTEX, PHC F1-F4, VOC, P	AH,	÷.			: : : :	. <u>.</u>						: : : :	. <u>.</u>	<u>.</u>				F
[V	PCB, Metals		÷	: :	÷	: :	÷			:	: :	÷	: :	÷	:				Ē
F	- dark gray, trace sand below 2.4 m.					:	: :	::::	:::	::::				: :		::::	:	-				E
Ł		G		7 TP-52-2.4 / BTEX, PHC F1-F4, VOC, F PCB, Metals	AH,	÷.		· · ÷ ·	: :	· ÷ · ·			· · ÷ ·	÷;	•• •••••	: : ::		<u>.</u>				F
-3			V	PCB, Metals		÷	: :	÷	: :	÷			÷	: :	÷	: :	÷	:				F 10
ţ	SILT - gray, clayey, trace sand, damp.			7		:		:	: :	:				: :	:	: :	:					- 10 F
2		G		TP-52-3.0 / Metals	4	۱÷		· · ÷ ·	:: ::	· ÷ · ·			· · ÷ ·	:	· · ÷ · ·	: : : ::	·	<u>.</u>				F
4			\langle			÷		÷	: :	÷				: :	÷	: :	÷					F
- -	CLAY - dark gray, silty, trace sand, damp.			7		÷									:							Ē
₹ -4		G		TP-52-3.7 / Metals	4	۱.		•••		•			•••••••••••••••••••••••••••••••••••••••				· · ·					F
			\langle																			E
winnipeg				/		-			: :	:				: :	÷		-					F
		G			4	۱÷		•••	÷ .:	• : • •		· · · · :	•••		· · : · ·	::::	·÷ ·	÷				- 15
14/1			/						: :							: : : :		: :		Ľ		£
5	END OF TEST PIT at 4.9 m					÷	: :	÷	: :	÷			÷	: :	÷	: :	:	:	Test Pit backfilled with	n excava	ated	E
	No Daylighting Performed					•	::::	· · : ·	:::	· : · ·			•••	::::	· · · · ·	:::	:÷.	:	material which was re its' original order and	placed i	in	F
ž-									: : : :	. <u>.</u>						: : : :		:	nominally compacted	with the	9	Ē
						÷		÷						: :	÷				excavator bucket.			E
¥-													•••••									E
A¥¥ 1 − 6																 						-20
						÷	: :	÷	: :	÷			÷	: :	÷	: :	÷	:				F
								:::::	: :	:					÷	: :		-				Ē
						·÷		· · ÷ ·		· : · ·			· · ÷ ·			: : : :		<u>.</u>				F
₽ ₽ ₽						÷		÷	: :	÷				: :	÷	: :						Ē
						÷				-					-							F
						•	•	•••••••		• • • •			•••••••••••••••••••••••••••••••••••••••		• • • •		· .					Ē
																: : : : :		:				-25
л - 1 2 -						÷	: :	÷	: :	÷	: :		÷	: :	÷	: :	÷	:				F 20
-8						·	· : · :	•••	÷;	· : :	: · : ·	· · · · :	· · : . :	: :	• :	::::	::::::::::::::::::::::::::::::::::::::	: :				F
																						Ē
						÷		÷		÷			:		÷	: :						E
						:		•••		• • • •		· · · · : :	•••		· · <u>-</u> · · ·		÷					E
																						Ē
-9						÷		÷		:					÷							Ē
PAK						-							:	: :			÷	:				
	T DATE START DEPTH EQUIPMENT		•		CONT									(GAS	MET	ER	TYP	PE: RKI Eagle			
ທີ່ 2014/10	1/15 0.0 m Hitachi 200LC Excavator				Main Li	ne Ir	ndustr	es Lto	d.					ľ	LOG					DRAFT		
TPL																			RSO			
213:																						

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF. N	10:	10-51	133							P-53		
	NT: Imperial Oil															RT DATE:	2014/12		
SAMF	PLE TYPE: G - Grab OS - Other					╞										IPLETION DATE:	2014/12	2/11	
	DECODIDITION														PAG	E 1 of 1			
	DESCRIPTION		_	SAMPLING															
Depth (m)		SAMPLE TYPE	ZONE TESTED															BAUNFILL	Depth (ft)
beptl	STRATIGRAPHY	Ē	TES				SOIL \ ONCE									COMMENTS		SAUN	Dept
		AMP	ONE	LAB SAMPLE N	IAME/		(p	pmv)									'		
		0	Ñ	LAB ANALYS	ES .	10	0 200	300) <u>400</u>)	-: -:	-:		: :	: :				
						: :	: :	: :	: :	÷		÷		: :	: :				
								: :	÷÷			÷		-					
								: :	÷÷	÷		÷		: :	: :				
							: :	: :	÷ ÷	-		÷		: :	: :				
								: :	÷ ÷	-		÷		: :	: :				
	GROUND SURFACE							· · · ·					 					_	-0
	ASPHALT.							: :				-		: :					-
-	GRAVEL (Fill) - brown, coarse to fine grained, sandy, trace silt,	G		1														\square	-
-	trace clay, damp.		4		1													\square	-
-	CLAY - dark brown, sandy, silty, some gravel, damp.			1				: :				-		: :				\square	-
<u>-1</u>		G			1			: :	· • · · ·			:						\square	-
-	- brown, trace gravel below 1.2 m.		/					÷;	·	. <u>.</u>					· · ÷ · ÷ ·			\square	-
-	- brown, trace gravel below 1.2 m.			/			: :	: :	: :	÷		÷		: :	÷÷			\square	
E		G			1			: :	: : : :			:		: :					-5
			1	-			• • • • • •	÷÷	·÷·÷	·	· ÷ · ;	· ÷· ·	 	: :	· · ÷ · ÷ ·				-
-2		G		TP-53-1.8 / BTEX, PHC F1-F4, VOC, P/			: :	: :	: :	-		÷		: :	: :				-
-				PRC F1-F4, VOC, P/ PCB, Metals	чп, _			: :						: :					-
Ŀ	SILT - brownish gray, clayey, some sand, damp, gray staining.		1				• • • • •	÷;	·÷·÷		-								-
È.		G		TP-53-2.4 / BTEX, PHC F1-F4, VOC, P, PCB, Metals	<u>, н</u>														-
-				PCB, Metals	-1, .				-	-		-							-
-3			1	7					·			• • • •							- 10
ŀ		G		TP-53-3.0 (DUP-01) BTEX, PHC F1-F4, \ PAH, PCB, Metals				: : :											-
				PAH, PCB, Metals	.00, 2		: :	: :	: :			÷		: :	: :				
Winnipeg PRINTED: 01/22/2015	CLAY - brown, silty, some sand, damp.		┦	7					·										-
		G	1/	TP-53-3.7 / BTEX,	лн			: :	÷ ÷										-
₩ -4				PHC F1-F4, VOC, P/ PCB, Metals	ч, "		: :	: :	: :	÷		÷		: :	÷÷				-
-			+	7			• • • • • • •	÷ .;	· ÷ · ÷	· : · ·	•	•		:::					-
5		G	1/					: : : :						: :					
2/01/0					Ī		: :	: :	: :	÷	-	÷		: :	: :				-
5 10 10 10 10 10	END OF TEST PIT at 4.9 m		ſ	-												Test Pit backfilled v	∠∠ with overwat		-
	No Devilebiling Devicement															material which was	replaced in		-
	No Daylighting Performed							: :				-				its' original order an nominally compact	nd then		-
								: :	1	1	1	:		: :		excavator bucket.		Ē	-
3-R07								÷;		. <u>.</u>		·			· · ÷ · ÷ ·			ŀ	-
≩⊢6							: :	: :	: :	-		÷		: :	: :				- 00
								: :	: : :	1		: ::::		: :				Ē	- 20
U CEC						•	• • • • • •	÷;	· ÷ · ÷	· · · ·	•	·÷··	: : : : : :	: : :	· · ÷ · ÷ ·			Ē	-
- FEX																		ł	-
3							: :	: :	: :			÷		: :	: :			ł	-
≸ ⊢ 7						• • • •	• • • • • •	÷;	· ÷· ·÷	• • • •		•			· · ÷ · ÷ ·			Ē	-
Š.								: :				. <u>.</u>							-
ร้ - ถู						-	: :	: :	: : :	÷		÷		: :	: :				-
						• • • • •	• • • • • • •	: : :	· ÷ · · ÷	· : · · ·	•	·	 			•			25
								: : :		. <u>.</u>								Ē	-
8							: :	: :	: :	÷	-	÷		: :	: :			ł	-
ž -								: : :		: : :		·		: :				ł	-
н П													 						-
								: :	: :										-
2 – 9							• • • • • •			·		•							-
									: :	÷		:							
						: :		: :	: :	:	: :	:	: :	: : MITT	: :				
2014/12	T DATE START DEPTH EQUIPMENT //1 0.0 m Hitachi 200LC Excavator				CONT Main Li		IOR Istries Lt	d.							ER T	YPE: RKI Eagle REVIEW: KAF	DRAFT	-D· I	LB
												ł					- 1		
5133 TF															/_	RSC	JN	E	9

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					F	EF. NO	: 10-5	5133				_		PIT No: TP-		
	NT: Imperial Oil												_			2014/12/1	
SAM	PLE TYPE: G - Grab OS - Other														PLETION DATE: :	2014/12/1	11
	DESCRIPTION			SAMPLING										//OL			
(Ê			_													_	(ŧ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED		F		SOIL VAF	POUR							COMMENTS	BACKFILL	Depth (ft)
De	STRATIONAFTT	MPLE		LAB SAMPLE NA	ME/	CC	NCENTI	RATIO	Ν							BA	De
		SAI	ZOI	LAB ANALYSE	S	100	(ppm 200 3	v) 300 40	00								
						÷ ÷	: : :	: :		::	: :	: :	: :	÷			
														:			
						: :	: : :	: :			: :	: :	: :	÷			
												: :		:			
<u>–</u> 0	GROUND SURFACE ASPHALT.						÷	· · · · · ·			• • • • •	• • • • •					
Ē						÷÷	: : :	: :		: :	÷÷	: :	: :	÷			1
-	GRAVEL AND SAND (Fill) - brown, coarse to fine grained, silty,	G		1	▲												F
-	clayey, damp. CLAY - dark brown, sandy, silty, trace gravel, damp.	-	Ĺ	7		:::	:::::::::::::::::::::::::::::::::::::::	· · · · · · · · · · · · · · · · · · ·	: : :	·	·	·	• • • • •	· · : · ·			7
Ę,		G					÷	· · · · · · ·				• • • • •					7
<u>⊢</u> 1			V			: : :	: : :	:::		: :	: :	: :	: :	÷			7
-	- brown, some sand, damp.			TP-54-1 2 / BTEX	[Æ
-		G		TP-54-1.2 / BTEX, PHC F1-F4, VOC, PAH PCB, Metals	i, 🔺	::::	::::::::::::::::::::::::::::::::::::::	·:·:			· ÷ · ÷	· ÷ · · ÷	::::	· · : · ·			-5
-			1	1													7
-2		G		/ TP-54-1.2 (DUP-2) / B1 PHC F1-F4, VOC, PAH PCB, Metals	TEX,	: :	: : :				: :			÷			Æ
-				PCB, Metals	" T	-											7
-	SILT - brown, dayey, some sand, damp, gray staining.		Ĺ	7			: : : :	· · · · · · · · · · · · · · · · · · ·	: : :	·	· ÷ · ÷	·	• • • • •				
E		G						· · · · · · ·			• • • • •	• • • • •					7
-3			\langle			: :	: : :	:::			: :	: :		÷			10
	CLAY - brown, silty, some sand, damp.			7	[
- 107 -		G				÷.;	: : : :	· · · · · · · · · · · · · · · · · · ·	: : : :	·	·	·	• • • • •	· · : · ·			
			1	-			·····										7
		G		/		÷÷	: : :	: :		: :	÷÷	: :	: :	÷			1
≨ <u></u> —4					Ē												7
- -			Ĺ	7		÷.;	: : : :	· · · · · · · · · · · · · · · · · · ·	: . : : : :	·	·	·	• • • • •	· · : · ·			7
71/09 Winnipeg PRINTED: 01/22/2015		G						· · · · · · ·				• • • • •					15
			\langle				: : :							:			Æ
5	END OF TEST PIT at 4.9 m						: : :				: :				Test Pit backfilled with	excavated	L
	No Daylighting Performed											• • • • •			material which was rep its' original order and th	blaced in hen	-
1 n –											• • • • •	• • • • •			nominally compacted v excavator bucket.	with the	-
															excavator bucket.		-
2 -6						::	: : :	:::			: :	: :		÷			-
								·····					• • • •				- 20
					.	÷	$\frac{1}{2}\cdot \cdot \frac{1}{2}\cdot \frac{1}{2}\cdot$	· · · · · ·		·	•	· ÷· · ÷	• • • • •	· · .			-
L L R																	-
						:::	: : :	: :			: :	: :	: :	:			-
™-7																	-
						÷÷÷	÷	· · · · · ·		·	• 🗄 • 🗄	· ÷· · ÷	• • • • •				-
					.												-25
й - Ц -											: :	: :	: :	÷			
8						: :	: : :				: :	· · · · · ·					-
l l								· · · · · · ·			•	• • • • •	• • • • •				-
																	-
																	Ē
g -9					[.												Ē
								: :									
	I T DATE START DEPTH EQUIPMENT				CONTR	RACT	OR					AS N	IETE	R TY	I PE: RKI Eagle		
2014/12	2/11 0.0 m Hitachi 200LC Excavator				Main Line	e Indus	tries Ltd.					OGG	ED: J	IES	REVIEW: KAF	DRAFTED	
L L															RSO	N	5
5133																	

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba					F	REF. N	10: ´	10-51	33						PIT No: TP			
	NT: Imperial Oil																2014/1		
SAM	PLE TYPE: G - Grab OS - Other					-										PLETION DATE:	2014/1	2/11	
	DESCRIPTION			SAMPLING											AGE				
Ê	DESCRIPTION	— ш	_															_	(f
Depth (m)		SAMPLE TYPE	ZONE TESTED		-	•	SOIL V			_						COMMENTS		BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	PLE		LAB SAMPLE N		C	DNCEN	JTRA	TION									BAC	Del
		SAN	NOZ	LAB SAMPLE N	ES	10	(pr 200	omv) 300	400										
								: :	: :		: :	: :	: :						
						-	: :	: :	: :	:	: :	: :	: :	: :	:				
						-	: :	: :	: :	:	: :	: :	: :	: :	÷				
							: :	: :	: :	-	: :	: :	: : :	: :	÷				
L_0	GROUND SURFACE							· · ·											_0
Ē	ASPHALT.							: :	: :	:		: :	: : :	: :	:				-0
-	GRAVEL (Fill) - coarse to fine grained, sandy, trace silt, trace clay,	G	+			• 🗄 • 🗄	• ÷• • ÷ •	÷ · · ÷ ·	·	:	÷ · · · ·	÷•••	÷ · · ÷	• • • • •	· · : · ·				-
-	damp.	G	\square	_	1			::.		<u>.</u>	÷		:: ::						
-	CLAY - brown, sandy, silty, trace gravel, damp.			1					: :				: :	: :					-
<u>–</u> 1		G			A A A A A A A A A A A A A A A A A A A	•							1					\square	-
Ē	dark brown, some sand.	_	1				· ÷ · ÷ ·	÷;.		÷	÷.;.	÷	÷;	• • • • •	· · ÷ · ·			\square	-
Ŀ		G	/					: :	: :		: :	: :	: :				Ľ	\square	
Ł		G			ſ														-5
ŀ		\vdash	1	7		•	• • • • • • •	÷		:		÷	÷	• • • •			V		-
-2		G		/ TP-55-1.8 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	н.			÷			<u>.</u>	÷	: : :					\square	_
-				PCB, Metals	.,		: :	: :	: :	-		: :	: :	: :	÷				-
F	SILT - brown, clayey, some sand, damp.		Ĺ																-
Ł		G		/ TP-55-2.4 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	н, 🔺	, <u>.</u>	· ÷ · ÷ ·	÷;.	·	÷	÷	÷	÷;	• • • • •	.			\square	
-3			V	PCB, Metals			: :	: :	: :	-	: :	: :	: :	: :	÷				- 10
Ę	CLAY - dark brown, silty, some sand, damp.			7															<u> </u>
		G			•	•		÷				÷	÷	• • • • •	· · · · · ·				-
-								<u>.</u>		<u>.</u>	÷	<u>.</u>	: : :						-
ED:0							: :	: :	: :	:	: :	: :	: :	: :	÷				-
≝ <u>–</u> 4		G					• • • • •					÷							-
6-			1	_			• • • • •	÷			÷	÷	÷						-
				/			: :	: :	: :	:	: :	: :	: :	: :	÷				: - 45
4		G			ſ						-		: : :						- 15
	END OF TEST PIT at 4.9 m		1	_				: : : :				÷		• • • •				///	-
								<u>.</u>	<u>.</u>	÷	÷.;	<u>.</u>	: : :			Test Pit backfilled wit material which was re	h excava eplaced i	ited n	-
	No Daylighting Performed					-	: :	: :	: :	-	÷÷	: :	÷÷	: :	÷	its' original order and nominally compacted	then		-
																excavator bucket.	wiurule		-
							· ÷ · ÷ ·	÷;.		÷	÷.;.	÷	÷;	• • • • •	· · : · ·				
≩ –6						-	: :	: :	: :	-	: :	: :	: :	: :	÷				-
E E																			20
						• 🕂 • •	• • • • • •	÷		:	÷	÷	÷ · · ÷	• • • • •	· · : · ·				-
								÷	. <u>.</u>		<u>.</u>		<u>.</u>						- -
												: :	÷ ÷						-
-7							· · · · · ·						: : :						-
<u> </u>						•	• • • • • •	÷	·		÷	÷	÷÷	• • • • •	· · · · ·				-
й- Ц-							: :	: :	: :	:	: :	: :	: :	: :	÷				. 20
8-18							·	:	·	:	÷ • • • •	÷••• •	÷ · · ÷	• • • • •	· · : · ·				-
										<u>.</u>	÷	÷	÷						-
							: :	: :	: :	:	: :	: :	: :	: :	÷				-
						1													-
						-	•			÷	÷	÷		• • • • •					-
9								: :	: :	:	: :	: :	: :		÷				•
						: :	: :	: :	: :	:	: :	<u>:</u> :	::	: :	:				
9	T DATE START DEPTH EQUIPMENT 2/11 0.0 m Hitachi 200LC Excavator				CONT Main Lir			4					AS N DGGI			PE: RKI Eagle REVIEW: KAF	DRAFT	· . חב	
2014/12						ie Indu	anes Ll	4.											
5133 IF													F	7		RSO		E	2
0																			

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF.	NO:	: 10	-513	3							PIT No: TP-5		
CLIENT: Imperial Oil SAMPLE TYPE: G - Grab OS - Other																			2014/12/	
SAM	PLE TYPE: G - Grab OS - Other					-												PLETION DATE: 2	2014/12/	11
	DESCRIPTION			SAMPLING												FA				
Ê		<u> </u>	_																_	(£
Depth (m)		SAMPLE TYPE	ZONE TESTED		ŀ	•	SOII			<u>,</u>								COMMENTS	BACKFILL	Depth (ft)
Del	STRATIGRAPHY	JPLE	L L L L L	LAB SAMPLE N		C	ONC	ENTR	RAT	ÔN									BA(De
		SAN	20Z	LAB ANALYS	ES	10	0 2	(ppmv 003	/) 00	400										
													÷		: :	÷				
							÷		: :	:		: :	÷	: :	: :	÷	÷	1		
													÷			÷	-	1		
									: :						: :	-		1		
									: :			: :			: :	÷	:	1		
<u>–</u> 0														 						0
F	ASPHALT.						÷	: :	: :			: :	÷	: :	: :	÷	÷	1		
E	GRAVEL AND SAND (Fill) - light brown, coarse to fine grained,	G		1														1		1
-	clayey, some silt, damp. CLAY - brown, sandy, silty, damp.		Ĺ	7		· ÷ · · ;	·		:::			÷;	·	: : : · ·	:::	:	: :	1		1
ŧ,		G												 			÷	i i		1
[−1 [V				:		: :	:		: :	÷		: :	÷	÷	1		7
-				TP-56-1 2 / BTEX																1
F		G		/ TP-56-1.2 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	∖н, 🛉	•	·		:::			÷;	·	: : : : : : :	:::	:	: :	1		5
-			1														<u>.</u>	1		7
-2		G	1/	/ TP-56-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals			:		: :	:		: :	÷		: :	÷	:	1		
-				PCB, Metals	лп, 👖											÷		1		1
-		-		7		·	•					÷	·	: : : :		·÷••	÷			1
Ē		G		/ TP-56-2.4 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	чн, 🛓			 						: : : : : :			: :	í		7
-3			V	PCB, Metals												-				
Ē	SILT - brown, clayey, some sand, damp, gray staining.			TP-56-3.0 / BTEX,																/= 10
		G		BTEX, PHC F1-F4, V PAH, PCB, Metals	OC,	•	•	 					•	 			÷			1
11/22/2			\downarrow					 						 			<u>:</u>	1		
PRINTED: 01/22/2015			1/	/												÷				1
		G			Î															1
Winnipeg	CLAY - silty, some sand, damp.			7			·						·	 			: :			1
5 6		G													: : :		: 	i i		15
15/01/0			V				-		: :						: :			1		1
≋- ⊒5	END OF TEST PIT at 4.9 m																	Test Pit backfilled with e		L
EPAR	No Daylighting Performed					•	·						•					material which was repl its' original order and th	laced in	F
8 - H														: : : : : :			÷	nominally compacted w	ith the	Ē
- <u>-</u>							:		: :	:		: :	:	: :	: :	÷	:	excavator bucket.		F
₩ 																	-	1		F
BRAR						·	·					÷	• ÷•••	: : : :	::::	:::	÷			- 20
														: : : : : :	÷		<u>.</u>	í.		Ē
																-				Ē
100																	-	1		F
7-12 12 12							•					÷	•	: : : : : : :	: : :	·: ·	÷			-
ATA -								 						: : : : : :			:	í		E
																÷				F or
																		1		- 25
8-0						·	·		:::			÷;	·	: : : · ·	::::	:	: :	1		F
L LC								: : : : :						: : : : : :			<u>.</u>	i i		Ę
																	:			-
																				Ē
							·						·			:				Ē
-9													:			÷				
	L I DATE START DEPTH EQUIPMENT							: :	: :	: :	:	: :	:	: : G&9		: FR		PE: RKI Eagle		
2014/12					Main Lir			Ltd.						LOG					DRAFTED): LLB
TP LC					1								ſ					RSO		
5133																-		n JU		

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0:	10-51	133					_			-57		
																_		RT DATE:	2014/		
SAMF	PLE TYPE: G - Grab OS - Other						⊢											PLETION DATE: E 1 of 1	2014/	12/12	<u>:</u>
	DESCRIPTION			SAMPLING	<u>`</u>												AGE				
Ê	DESCRIPTION	— —	-	-	,																(F)
Depth (m)		SAMPLE TYPE	ZONE TESTED					DIL V										COMMENTS		BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	APLE	旧 山 山 山	LAB SAMPLE	NAME/	-	CON	ICEN	TRA	TION										BA(De
		SAN	2 Z	LAB SAMPLE LAB ANALY			100	(pp 200	mv) 300	400)										
													: :	: :							
							-					-		-							
										: :		-									
						÷	: :	÷	: :	: :	÷	÷	: :	: :		:	÷				
										: :		÷									
- 0	GROUND SURFACE ORGANIC CLAY - black, silty, trace sand, damp.									÷											<u>+</u> 0
Ē	CLAY - brown, sandy, silty, some gravel, damp.	-†-				:				:::			: :						E		Ł
-	· · · · · · · · · · · · · · · · · · ·	G			4						-	-							K		F
-			Ĺ	7		·	· : · :	· · : · ·	:	: : :	· : · · ·	: :: :	: :	· : · : : : :	· · · · ·	:	· · · · · ·				F
F,		G				.													E		F
[−1 [V			÷	: :	÷	: :	: :	÷	÷	: :	: :		:	÷		E		F
È.			/		100														E		F
-		G		BTEX, PHC F1-F4, PAH, PCB, Metals	VOC,	≜		•••••••				-									5
F			1										 						E		ŧ.
-2				TP-57-1.8 / BTEX,								-							E		ł
		G		TP-57-1.8 / BTEX, PHC F1-F4, VOC, I PCB, Metals	PAH,	•						-							E		F
Ŀ		-				·					• • • •								ľ		F
E .		G		7 TP-57-2.4 / BTEX, PHC F1-F4, VOC, I PCB, Metals	PAH.				: ::	: : :			: : :								Ł
-3			$\left \right $	PCB, Metals		T÷	: :	÷		: :	÷	÷	: :	: :		:	÷		ľ		ŧ
E	- some sand, some silt, trace gravel, damp below 3.0 m.																		E		1-10 1
		G		TP-57-3.0 / BTEX, PHC F1-F4, VOC, I PCB, Metals	PAH,	≜ ÷			: : : : : :	:: :	· :	· ÷ ·	: : ::		· · · ·				E		Ł
4			\langle	PCB, Metals		÷		÷		: : :	÷	÷	: :	: :		:	÷		E		£
	- gray below 3.7 m.			TP-57-37/BTEX						: :									E		F
-4		G		TP-57-3.7 / BTEX, PHC F1-F4, VOC, I PCB, Metals	PAH,	≜ ∷ E		• • • • •		: :	• • • •	• • • •	: : : :		· · · · ·		•••••••••••••••••••••••••••••••••••••••				F
			/							::			: : :						E		Ę
Badiuu -				1															E		ŧ
		G			4	1				: :		:	: :						E		1—15 F
-5	END OF TEST PIT at 4.9 m		┦	-									: : : :								ŧ
									: ::	: : :			: : :					Test Pit backfilled wi material which was r	replaced		Ē
	No Daylighting Performed										-	-						its' original order and nominally compacted	d then		Ē
						:				: :		:						excavator bucket.		C	Ē
											·	· ÷ ·	: : :								F
6																					-20
						-	: :			: :	-	÷	: :	: :		:	÷				Ē
																					Ē
-						. <u>:</u>			: : : : : :	÷.÷	·	· ÷ ·	:.:: :::::	· : · :		:					F
										: :			: :								E
						÷	: :	÷		: :	:	÷	: :	:		:	÷				E
						·		••••		: :	• • • •	:	:								F
																					-25
						÷															E
8																					Ē
						 :		· · : · ·	· · · · · ·	: : :	· : :	·	: : : :		· · · · · ·	:	<u>.</u>				F
									: 				: : :								Ę
							:	÷			÷	÷		:		:	÷				F
-9						1															F
												÷									
STAR	I I DATE START DEPTH EQUIPMENT		1	1	CON	TRA		R.				•		GA	 AS ME	ETE	R TY	I 'PE: RKI Eagle			L
2014/12					Main L				•						GGE			REVIEW: KAF	DRAF	TED:	LLB
															E			RSC		JC	
20																1					

	T PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NO	D: 1	0-51	33						FPIT No: TP-			
	NT: Imperial Oil																	2014/1		
SAM	PLE TYPE: G - Grab OS - Other											 					PLETION DATE: E 1 of 1	2014/1	2/12	
	DESCRIPTION			SAMPLING												/101				
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED	LAB SAMPLE N/ LAB ANALYSE			CON	OIL VA CENT (ppr 200	[RA] nv)	ION							COMMENTS		BAUKFILL	Depth (ft)
-0	GROUND SURFACE ORGANIC CLAY - black, silty, trace sand, damp. CLAY - dark brown, sandy, silty, some gravel, damp.			7																-0
- - - - - - -	- brown below 0.6 m.	G	/																	· · · · ·
- - - - -		G																		-5
-2		G		TP-58-1.8 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals	Η, .															
015 	SILT AND CLAY - brown, some sand, damp.	G	/	TP-58-3.0 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals	H, .						· · · · ·									
eg PRINTED: 01/22/2015	CLAY - brown, silty, some sand, damp.	G	/	TP-58-3.7 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals																· · · · ·
2015/01/14 Winnipeg		G		TP-58-4.3 (DUP-6) / B PHC F1-F4, VOC, PAI PCB, Metals	TEX, H, .															15
CILB PREPARED	END OF TEST PIT at 4.9 m No Daylighting Performed															· · · · · · · · · · · · · · · · · · ·	Test Pit backfilled with material which was re- its' original order and t nominally compacted excavator bucket.	laced ir hen	ied	· · · · ·
RSONS PERIOES REPORT LOG ON PERIOES DATA VERVAGOT PERIOES LIBRARY V3-RV/GLIB PEEPAREN 2014																			-	- 20
LCEG DATA V3-R04.GDT																			-	
EG REPORT LOG 60 PE8																				
PA	RT DATE START DEPTH EQUIPMENT				CON	TRA		2					64	SM			/PE: RKI Eagle			
2014/1					Main I								LO	GGE	ED: .	JES				

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC): 10	5133	}				_		PIT No: TP-5		
	NT: Imperial Oil																	014/12/1	
SAMF	PLE TYPE: G - Grab OS - Other																PLETION DATE: 20 E 1 of 1	014/12/1	2
	DESCRIPTION			SAMPLING												AGE			
Ê																		_	(F)
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED			\vdash	sc	IL VA	POUF	2							COMMENTS	BACKFILL	Depth (ft)
De	STRATIGRAFITI	MPLE		LAB SAMPLE	JAME/		CON	CENT	RATI	NC								BA	ے ا
		SAI	R	LAB ANALY			100	(ppm 200	1V) 300	400									
							: :	: :	: :	: : :	1	: :	:		: :	-			
																÷			
	GROUND SURFACE							: :	: :						: :	-			
-0	ORGANIC CLAY - black, silty, trace sand, damp.								::::	:					: :				才
-	CLAY - dark brown, sandy, silty, some gravel, damp.	G							· · · · · ·		-			 		•••			7
-			4												:				
-	- brown below 0.6 m.			/															1
-1		G			4														Ŧ
-		-	ſ	7					· ÷ · ÷		-	•	•••			•••			7
F		G	/	, 															1-5
			\langle					: :	: :	÷ ;					: :				Æ
-2				TP-59-1.8 / BTEX.															Ŧ
Ē		G	/	TP-59-1.8 / BTEX, PHC F1-F4, VOC, P PCB, Metals	AH, A						· ·			· · · · ·					1
-	SILT AND CLAY - brown, some sand, damp.		1						· · · · ·	÷					÷;				1
-		G	/	/															
-3			$\left \right $		•	T		: :	: :										
-3			Ĺ		DTEV							•••••							10
5		G	/	TP-59-3.0 (DUP-7) / PHC F1-F4, VOC, P PCB, Metals	AH, A				· · · · · ·		· ·	•		· · · · ·					1
			1	FCD, Weldis										: ::	: ::				
	CLAY - brown, silty, some sand, damp.			TP-59-3.7 / BTEX,															7
<u>₹</u> -4		G		⁷ TP-59-3.7 / BTEX, PHC F1-F4, VOC, P PCB, Metals	AH, A														Ŧ
4 4			ſ	7		· .:	· · : · :			·: ·:	· ·		· · : · ·	· · · · · ·	: :	· · · · ·			7
4L -		G	/	TP-59-4.3 / BTEX, PHC F1-F4, VOC, P PCB, Metals	AH, A				· · · · ·	÷				. .					15
110/01/04			/	PCB, Metals															ł
	END OF TEST PIT at 4.9 m								: :								Test Pit backfilled with e		Ē
KEPA	No Daylighting Performed									-							material which was replative its' original order and the	en	Ē
											· ·			 			nominally compacted with excavator bucket.	th the	F
																			Ē
≨ ⊑_6						1	: :	: :	: :	: :	1	: :	:		: :				F
																			- 20
						:					· ·								Ē
- Г П -									· · · · ·	÷					÷;				-
₽ ₽ ₽																			Ē
4-52 H								: :	: :										Ē
																			Ē
									· · · · ·	·····	· ·	•		 					-25
8 0																			E
8						:	: :	: :	: :	: :	:	:::	÷		: :	÷			Ē
																			Ē
									·····					· · · · ·					F
																			-
9																			-
					001			: :	: :	: :	:	: :	: :	: :	: :	:			
0 2014/12	T DATE START DEPTH EQUIPMENT 2/12 0.0 m Hitachi 200LC Excavator				CON Main L									AS MI IGGE			PE: RKI Eagle REVIEW: KAF D	RAFTED	: LLB
5133															7		RSO		

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF	. NO	: 10	-513	3						IT No: TP-6		
	NT: Imperial Oil																	014/12/1	
SAM	PLE TYPE: G - Grab OS - Other																	014/12/1	12
	DECODIDITION	1									—				PAG	jE T	1 of 1	-	<u> </u>
	DESCRIPTION			SAMPLING															E
Depth (m)		۲PE	ZONE TESTED															BACKFILL	Depth (ft)
)ept	STRATIGRAPHY	Ē	ШЩ.			A	SOI CONC	L VAF	POUF RATI	R NN							COMMENTS	BAC)epi
		AMF	NO	LAB SAMPLE NA				(ppm	V)										
		0			20	1	00 2	00 3	300 : :	400	+:	: :				_			
						÷	: :	: :	: :	-		: :	: :	: :	: :				
							: :	: :	: :	: :		: :	: :	: :	: :				
							: :	: :	: :	: :		: :	: :	: :	: :				
	GROUND SURFACE								: :			: :							
-0	ORGANIC CLAY - black, silty, trace sand, damp.	1				·	: : : ·	: : :	· · · · · ·	· · ÷ · ÷	· · · ·	• • • • •	· · · · · · · · · · · · · · · · · · ·	•••	•••••••••••••••••••••••••••••••••••••••	•••			70
-	SILT AND CLAY (Fill) - dark brown, sandy, damp.		17				: :	: :							: :				
-		G			1		: :	: :	: :	: :	1	: :	: :	: :	: :				
-	CLAY - brown, sandy, silty, damp.		17				 									• •			Æ
F.		G	/			÷.							· · · · · ·		· · ÷ · ÷				7
<u>⊢</u> 1			V			÷	: :	: :	: :	÷÷		: :	: :	: :	: :				7
E			/				: :												Æ
-		G	/			÷	: · · · ·		÷ • •	· · ÷ · ÷		÷÷	· · · · · ·	· · ÷ · ÷	· · ÷ · ÷				5
-			/																Æ
-2			/	TP-60-1.8 / BTEX.					: :	-		: :	: :						7
-		G	/	TP-60-1.8 / BTEX, PHC F1-F4, VOC, PA PCB, Metals	Н, 🖌	·	: : . :		÷÷÷	· · ÷ · ÷	· · · ·	• • • • •	· ÷ · ÷	•••	•••••••••••••••••••••••••••••••••••••••	• •			7
-			/	r ob, motalo			:	: : :											
-	- some sand below 2.4 m.		/	1		÷	: :	: :	: :	1		: :	: :	: :	: :				
Ē		G	/		1		: :									• •			Æ
-3			<u>/</u>																10
-	SILT - brown, clayey, some sand, damp.		/	TP-60-3.0 / BTEX,					: :	-		: :	: :						7
-		G	/	TP-60-3.0 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals	н, 4		: ::	: :	: :				::::	: : :					Æ
-			<u> </u>				: . : . : · : · ·	: : :	· · · · ·	·		• • • •	· · · · · ·	•••	· · ÷ · ÷				7
		G	/	TP-60-3.7 / BTEX, PHC F1-F4, VOC, PA PCB, Metals			: :	: :	: :			: :	: :	: :	: :				1
-4			/	PCB, Metals	Π, 4														7
n -		-	\vdash				· · · · ·			• • • • •				••••••	· · · · · ·	• •			
F		G	/	TP-60-4.3 / BTEX, PHC F1-F4, VOC, PA	H.	. ÷.	: : : : :	: :							: :				15
			/	PCB, Metals	,	[:	: :	: :	: :	÷÷		: :	: :	: :	: :				7
-5	END OF TEST PIT at 4.9 m		1				: :								•••••	·· _	Fest Pit backfilled with e		L
-	No Daylighting Performed															n	naterial which was repla	aced in	Ē
-	No Daylighung Penormed					÷	: :	: :	: :	: :	÷	: :	: :	: :	: :	lit	ts' original order and the nominally compacted wi	en ith the	F
F							: :	: :	: :					: :	: :	e	excavator bucket.		F
-										· · ÷ · ÷		• • • •			•••••	• •			F
-6																			- 20
						÷	: :	: :	: :	÷ :	÷	: :	: :	: :					- ²⁰
ŀ						·	:				· · ÷			•••••••	· · : · :	••			-
: -																			-
-																			Ē
-7 [:									· · - · · ·	•••			Ē
E						. <u>.</u> .	: : : : · :	: : :		·		· · · · ·	·:·:	•••	· · ÷ · ÷				È.
E						÷	: :	: :	: :			: :	: :	: :	: :				-25
-																			F ²⁵
-8							· · · · ·			· ·				••••••	· · · · · ·	• •			-
							: : : : : :												-
j - j -							: :		: :	-		: :		: :	: :				È
F						·	: :				· · ·				· · : · :	••			E
Ē							 							: : : : : : :	: : : :				F
-9																			F
						÷	: :			÷		: :							
	T DATE START DEPTH EQUIPMENT			•	CON												: RKI Eagle		
2014/12	2/12 0.0 m Hitachi 200LC Excavator				Main Li	ine In o	lustries	Ltd.					-	GGED				RAFTED	
)/_		RSO	N	5
1					1								1						

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	.F. N	IO:	10-5	5133					•	TEST	T PIT No: T	P-61		
	NT: Imperial Oil																	RT DATE:		4/12/12	
SAMF	PLE TYPE: G - Grab OS - Other						<u> </u>											IPLETION DATE: E 1 of 1	201	4/12/12	<u>:</u>
-	DESCRIPTION			SAMPLING								Т					AG				
Ê			<u>ا</u> د		,																ŧ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED		-		SC)II V		UR		-							3	BACKFILL	Depth (ft)
De	Sitteriorertit	MPLE	μ μ		NAME/		CON	ICEN	ITR/	ATIOI										BA	۵
		SAI	2				100	200	300) 40	00										
						-	: :	÷	: :				:		: :	:	: :				
						÷		÷	: :							:					
						-		÷	: :						: :	÷	: :				
						÷	: :	÷	: :	: :		1	÷	:	::	÷	: :				
	GROUND SURFACE					÷		÷	: :						: :	:					
	ORGANIC CLAY - black, silty, trace sand, damp.				ľ							1									<u></u> _0
-	SAND AND CLAY - dark brown, silty, some gravel, damp.	G		/		L ÷	· : · :	•••	: : :	· : · · ·		- -÷	•		: : :	· :	: : : :				Ê-
-	CLAY - brown, sandy, silty, trace gravel, damp.		1																		Ē
Ē	CLAT - brown, sandy, siny, trace graver, damp.	G	,	/		÷	: :	÷	: :						: :	÷					Ę
-1		G			1			÷													E
-			1	7		·		• • • • •				1									F
F		G		/		<u>ب</u>		• • • • •	: :			. . <u>.</u>					: : : :				-5
-			ľ																		Ę
-2			Ι,	TP-61-1.8 / BTEX,	[÷	: :							:					Ē
		G		PHC F1-F4, VOC, P PCB, Metals	AH,	•						1									F
-			/	7		÷		• • • • •		•		-	•	• • •							È.
		G		/		÷.			: : : :												Ę
-3			V			÷															Ē 10
ľ	SILT - brown, clayey, trace sand, damp.			7 TP-61-3.0 / BTEX.	ľ																7
		G		/ TP-61-3.0 / BTEX, PHC F1-F4, VOC, F PCB, Metals	AH,	÷		•••	: :			· ·	•	• • • •	:::	• • • •	:::				Ē
	CLAY - brown, silty, some sand, damp.		1														: : : :				F
	CLAT - brown, sity, some sand, damp.	G	,	/ TP-61-3.7 / BTEX, PHC F1-F4, VOC, F		÷		÷	: :						: :						Ł
				PCB, Metals	AI, 4		: :	÷	: :				:		: :	:	: :				Ł
fadiiiiiw			1			·		•••••••••••••••••••••••••••••••••••••••				1									F
4 -		G		/ TP-61-4.3 / BTEX, PHC F1-F4, VOC, P PCB, Metals	AH,	<u>ب</u>		• • • • •				-		• • • •							- 15
			ľ	PCB, Metals																	Ļ
	END OF TEST PIT at 4.9 m					÷		÷	: :							÷		Test Pit backfilled			-
	No Daylighting Performed					÷			: :			1			:::		::::	its' original order a	nd then		-
						· ÷	· · · · · · · · · · · · · · · · · · ·	· · : ·	: :	· : · · :		- -÷	::::		: : :	:	: : : :	nominally compact excavator bucket.	ed with	the	-
							· · · · ·					. <u>.</u>			÷;						Ē
≩ – 6									: :						: :		: :				-20
						÷	: :	÷	: :			1	÷	÷	: :	÷	: :				20
					ľ	·		•••••••													-
<u> </u>						· ÷	• • • •	• • • • •		•		-									-
5- -7									: ::						: ::		: : : : :				-
1-5> 4 4						÷	: :	÷	: :							:					-
5																					-
						÷	· : · :	•••	: : : :	· : · · ·		· · ÷	•	• • • •	÷;	· : · ·	: : : :				-25
8						. ÷		•••		• • • •											-
																					-
								:	: :				:		: :	÷					-
					ł	· :						1:						1			-
						. <u>.</u>		• • • • •	: :			. <u>.</u>					: : : :				-
9								-					:		: :	:					Ē
	 DATE START DEPTH EQUIPMENT				CONT	: 	: : 	:	: :	: :	:	1 :	:			:	: : 	YPE: RKI Eagle			
3 2014/12					Main Lir												JES	REVIEW: KAF	DRA	FTED:	LLB
0																		•			
2122																-/		RSC			

	EST PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba									-513	3				T PIT No: TP-		
																2014/12	
SAMF	PLE TYPE: G - Grab OS - Other					┝									IPLETION DATE: E 1 of 1	2014/12	12
	DESCRIPTION			SAMPLING								 		FAU			
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	-	1		C	ONC	L VAF ENTF (ppm)	RATI /)	ON		 	 		COMMENTS	BACKFILI	Depth (ft)
-0	GROUND SURFACE ORGANIC CLAY - black, silty, trace sand, damp. SAND AND CLAY - brown, silty, some gravel, damp.			7													0
- - - - - - - - - - - - -	CLAY - brown, silty, some sand, damp.	G															
- - - - - - - -	- dark brown below 2.4 m.	G	/	TP-62-1.8 / BTEX, PHC F1-F4, VOC, PAH PCB, Metals	1,						· · · · · ·						
4		G		TP-62-3.0 / BTEX, PHC F1-F4, VOC, PAł PCB, Metals TP-62-3.7 / BTEX, PHC F1-F4, VOC, PAł PCB, Metals							· · · · ·						
	- gray, some silt, damp.	G	/	PCB, Metals TP-62-4.3 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals													15
	No Daylighting Performed										· · · · · · · · · · · · · · · · · · ·				Test Pit backfilled with material which was re its' original order and nominally compacted excavator bucket.	blaced in hen	
Υ.																	- 25
2	T DATE START DEPTH EQUIPMENT				CONT										YPE: RKI Eagle		
g 2014/12	2/12 0.0 m Hitachi 200LC Excavator				Main Li	ne Ind	ustries	s Ltd.				μ		JES		DRAFTE	
141 551													D		RSO	N	5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						REF.	NO:	10-	5133						PIT No: TP-63		
	NT: Imperial Oil																14/12/1	
SAMF	PLE TYPE: G - Grab OS - Other																14/12/1	2
	DECODIDITION	-									1			PA	AGE	1 of 1	T	
	DESCRIPTION	_		SAMPLING													Ι.	
Depth (m)		7PE	ZONE TESTED														BACKFILL	Depth (ft)
bept	STRATIGRAPHY	빌	E				SOIL CONC			M						COMMENTS	3ACK)ept
		AMP	No.	LAB SAMPLE N			00 20	ppmv))								1	
				LAB ANALYS	-5	1	00 20	0 30	<u>004</u>	00	+ : :							
						-			: :	÷÷		: :	: :	: :				
						-			: :	: :		: :	: :	: :	÷			
						÷			: :	: : :		: :	: :	: :	÷			
						÷			: :	: :		: :	: :	: :	:			
						÷				: :		: :	: :	: :	:			
-0	GROUND SURFACE ORGANIC CLAY - black, silty, trace gravel, trace sand, damp.	-												· · · · ·			V77	+0
E	SAND AND CLAY - brown, silty, damp.	+	17															Ł
-		G				N :						: :		: :				7
-	CLAY - brown, silty, some sand, damp.	-	17			·		•				·	÷	· · · · · ·	· : · ·	ĺ		7
1		G	/			. <u>.</u>							: ::.	<u>.</u>				£
<u>⊢</u> 1			V							: :		: :	: :	: :	:			2
-		-	17															ŧ
-		G				<u>،</u> الم												7-5
E			V			-				: : :		: :	: :	: :	÷			1
-2			1			:	: : :							: :				Ŧ
1		G			•	٠÷۰		• • • •	: : : : :	÷		·	÷	÷	• • • •			ł
-			\langle			÷						: :	: :	: :				ł
-																		Ŧ
-		G			•	٠÷۰								· · · · ·	• • • •	1		F
-3			/										<u>.</u>					£10
-						:				: :		: :	: :	: :	:			£ "
-		G			-	٠÷۰		•			· · · · · · ·	·	÷	:	• • • •	ĺ		7
F			/											· · · ·				£
-	SILT - brown, clayey, some sand, damp, gray staining.		/						: :	÷÷		: :	: :	: :	÷			ŧ
-4		G		TP-63-4.3 / Metals		٠÷۰							÷	: : : : : : :	• • • •			7
n -		_	Υ															7
È.	CLAY - brown, silty, some sand, damp.											: :		: :				1.
-		G		TP-63-4.9 / Metals	Î													15 1
-	END OF TEST PIT at 4.9 m	_	1						: : : ::			·	:: ::	:	· <u>.</u>			
-5													: :	: :		Test Pit backfilled with exc material which was replace		Ł
-	No Daylighting Performed					-						: :				its' original order and then		F
F						·			· · · ·			·	÷;.	· · · · ·	· : · ·	nominally compacted with excavator bucket.	the	F
Ľ													: : : : : :	÷				Ē
6						÷			: :	: :		: :	: :	: :	:			E
Ę						· ÷ ·						·	: : :	: : : :	· · · · ·	ĺ		-20
-																		E
-															-			Ē
-															• • • •			-
-7					-				: : : : : :	÷ . ; .			:	:;.	. <u>.</u>			F
-						÷			: :	÷÷		÷÷	÷÷	: :	÷			-
E														: :				F
-														· · · · ·				- 25
-														: : : : : :				Ē
-8						-				: : :		: :	: :	: :	÷			E
F			1			·			: : : :			·	÷;.	:	· : · · ·	ĺ		F
F																		E
F						-												Ē
-9						·												Ē
ſ																		1
OT A D						:		:	: :	: :	::	: :		: : 	:			1
2014/12	T DATE START DEPTH EQUIPMENT 2/12 0.0 m Hitachi 200LC Excavator				CONT Main Lir			Ltd.					AS ME			PE: RKI Eagle REVIEW: KAF DRA	AFTED:	LLB
														-		RSO	V S	

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	10:	10-	5133	3							TPIT No: TP-6		
	NT: Imperial Oil					_														2014/12/	
SAMF	PLE TYPE: G - Grab OS - Other					╞													PLETION DATE: 2 E 1 of 1	2014/12/	12
	DESCRIPTION											Т						AGE			
Ê	DESCRIPTION	<u> </u>		SAMPLING) £
Depth (m)		SAMPLE TYPE	ZONE TESTED		F	•	00					_							COMMENTS	BACKFILL	Depth (ft)
Dep	STRATIGRAPHY	ЫЕ				0	CON	IL V CEN	ITR/	\TIO	N								COMMENTS	BAC	Dep
		SAM	ZON	LAB SAMPLE NA		1	00	(pp 200	(mv 30) 4	00										
														:						I	
						÷		÷	: :					÷							
						÷	: :	÷	: :	÷	: :		: :	÷		: :		÷			
						÷	: :	÷	: :	÷	: :		: :	÷		: :		÷			
						÷		÷						:							
	GROUND SURFACE				.				: : : :	. <u>.</u>				. <u>.</u>							
F	ORGANIC CLAY - black, silty, trace sand. SAND AND CLAY (Fill) - brown, silty, some gravel, damp.		+	7		÷		÷		:				÷				ł			<u>}</u>
-		G	/		- -	•	: :			: : :	: :			· · :							
Ē	CLAY - brown, silty, some sand, damp.		1	/		·				·											1
-		G																			
<u>⊢</u> 1					Τ		: :	÷	: :	÷			: :	÷		-					
-					· ·							• • • • •		·							1
F		G	/			÷				· ÷ · ·				• .	: : : :				.		∕_5
ŀ			1																		隹
-2						÷	: :	÷	: :	÷	: :		: :	÷		: :		÷			
-		G			≜					· · · · ·		• • • • •		·							Æ
-	- dark brown below 2.4 m.		/																		7
ŀ		G	1/	/		÷	: :	÷	: :	÷	: :		: :	÷		: :		÷			
È.		G			Î									÷							1
-3	SILT - brown, clayey, trace sand, damp.					·	:	·:		• • • •				•		·					10
<u>_</u>		G	/	TP-64-3.0 / BTEX, PHC F1-F4																	
4			V	PHC F I-F4		÷		÷						:							
- -	CLAY - brown, silty, trace sand, damp.			7	. 	:	: :	:		: : : :	: :			:							
≝ 4		G		TP-64-3.7 / BTEX, PHC F1-F4		÷	: · :		:: ::	· ÷ · ·	: : : :		:: ::	· ÷· ·	: : : :	• • • •					1
					.																
	- some silt.					÷	: :	÷	: :	÷	: :		: :	÷		: :		÷			
*		G			≜	÷				• • • •		• • • •		·							15
- 5019/	END OF TEST PIT at 4.9 m		1			. <u>.</u>	::			· ÷ · ·			: : · :	·			: :				4
						÷													Test Pit backfilled with e material which was repl	excavate laced in	đĘ
	No Daylighting Performed					÷		÷	: :	:				÷		-		÷	its' original order and th nominally compacted w	en	È
						·				• • • •				·					excavator bucket.	in the	E
									: : : :												F
≩ –6						÷	: :	÷	: :	÷	: :		: :	÷		: :		÷			-20
					ľ	÷		-													F
						·	: . :	·:	÷ · · :	· : · · ·	: : : :	• • • •	: : :	·	: : : :	· - ·		· · : · ·			F
																					E
7						÷		÷	: :					÷		:		÷			-
						:	: :	:	: :	: : : :	: :			:		: :					-
					. -	• •				·				•							F
2 - 									: : : :												-25
й- 11-						÷		÷	: :	÷				÷		-					-
8-1-8					ľ	:	: :	:		: : : :				· · :							Ē
					-	·				·				·							F
																					Ē
						÷	: :	-	: :	:	-		: :	÷							Ē
					ľ	·				· · · · ·		•• ••		·							Ē
000						÷		÷		÷				÷		-		÷			
	L DATE START DEPTH EQUIPMENT				CONTI		: : :TOI	: २	: :	:	: :		: :	:	GA9	: : MF	: : :TF	: R TV	 /PE: RKI Eagle		
2014/12					Main Lin				I.						LOG					RAFTE	D: LLB
14 FC														Ī				Λ	RSO		
5135																	1				=

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						R	EF. N	10:	10-5	5133								P-6 5		
	NT: Imperial Oil						-											RT DATE:	2014/1		
SAMF	PLE TYPE: G - Grab OS - Other						\vdash											IPLETION DATE: E 1 of 1	2014/1	12/15	
	DESCRIPTION			SAMPLING													7.0				
<u>ع</u>		щ	٦.																	⊒	ŧ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONF TESTED				▲ S		/APC	DUR		+						COMMENTS		BACKFILL	Depth (ft)
De		MPLE	L L L	LAB SAMPLE	NAME/		CO	ICEN	NTR/ omv)	ATIO	Ν									BA	ď
		SA	2	LAB ANALY			100	200	30	0 40	00										
										-				÷		÷					
							-								: :	÷					
										÷						÷					
							÷		: :	÷		1	: :	÷	: :	÷	: :				
	GROUND SURFACE						-									:					
-0	ORGANIC CLAY - black, silty, trace sand, damp.					 :	•••		÷ ÷	· : :	<u>.</u> . 			· · : ·	:: :	· ÷ · ·	: : : :			///	-0
ŀ	CLAY - dark brown, sandy, silty, trace gravel, damp.			7											: : : :					//	Ē
-		G	V		4	Î	-		: :						: :				ľ		Ē
-	- brown, silty, some sand.			7															E		F
<u>-</u> 1		G	/		4	k ⊡	••••	· · · ·	÷ ;	•		1.			:	• • • •			Ľ,		F
ţ.			1												: ::				Ľ		Ē
Ē				/			-									:			ľ		Ē.
ŀ		G	/		4	Î													Ľ		— 5 F
ŧ.		\vdash	1				••••		÷ ;	•		1.			:	• • • •			Ľ,		F
-2 E		G	/	/ TP-65-1.8 / BTEX, PHC F1-F4, VOC, F PCB, Metals	PAH,	.										. <u>.</u>			E		Ē
E			V	PCB, Metals											: :						Ē
-	- dark brown below 2.4 m.			7		:			:::	:		1:			: :	:	: :	•	E		F
-		G	/		4	∳ :	••••			·						• • • •					F
-3									: : : :						: :.::	. <u>:</u>					[- 10
-				TP-65-3.0 / BTEX,			-		: :	÷					: :	÷				//	Ē
		G		/ TP-65-3.0 / BTEX, PHC F1-F4, VOC, F PCB, Metals	PAH,	^	•••••••														F
	SILT - light brown, clayey, some sand, damp.		┦	7			•••		:: :	· ÷· ·	: : · : ·				:: ::	·÷··	: : : :		E		F
		G		/ TP-65-3.7 / BTEX, PHC F1-F4, VOC, F	АН										: : : :						Ē
				PCB, Metals	••••	Ti	÷		: :	÷		1	: :		: :	÷	: :				E
Badiuu	CLAY - brown, silty, some sand, damp.		ſ							· · · · · · · · · · · · · · · · · · ·					:: : :	·					Ē
		G	/	/ TP-65-4.3 / BTEX, PHC F1-F4, VOC, F	PAH,	k ÷	••••												Ľ		- 15
				PCB, Metals											: : : :				Ľ		E
-5	END OF TEST PIT at 4.9 m					1	÷		: :	÷		1	: :		: :	÷	: :	Test Pit backfilled w	ith excava	ated	Ē
	No Daylighting Performed														:; : :	· · · · ·		 material which was its' original order an 	d then		Ē
- 9						.: -:	••••		÷;	·				· · · · ·	: ::::	· ÷ · ·	: : : :	nominally compacte excavator bucket.	d with the		F
2									::::												E
						1	÷		: :	÷		1	: :		: :	÷					Ē
										• • • •						· · · · ·					- 20
									÷;	· :		. :			:: ::	. <u>:</u>	:.:: :::::::::::::::::::::::::::::::::				F
																					E
2						:	÷		: :	÷			: :	÷	: :	÷					È
[-7										• • • •						• • • •		•			Ē
									÷;												F
						:	÷		: :	÷			: :		: :	÷					-25
																÷					- 25 E
8-8						· :	•••		÷ ;	· : :		1			:: :	· : · ·	: : :	•			F
									÷ · · · · ·			-			:	·					F
ŀ									: :						: :						Ē
																					Ē
							· · : · ·			· : :		1		· · : ·	:: : :	· : · ·					Ē
-9							-			÷						÷					
	L DATE START DEPTH EQUIPMENT				CON			: : R	: :	:	: :	:	: :	:: [: : AS N	:	: : -R T	YPE: RKI Eagle			<u> </u>
g 2014/12					Main L				d.						AS IV			REVIEW: KAF	DRAFT	ED: I	LB
5510																-/		RSC			2

CLUENT INCLUENT STATUTATE		PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NO	D: 1	0-51	33					TES	ST P	PIT No: TP-			
DESCRIPTION SAMPLING CONDUCT 0 CONDUCT STRATIGRAPHY Image: strate st																						
O DESCRIPTION SAMPLING 0 STRATIGRAPHY If	SAM	PLE IYPE: G - Grab OS - Other																		2014	/12/1)
End STRATIGRAPHY End End STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY End STRATIGRAPHY STRATIGRAP		DESCRIPTION			SAMPLING												FAU					Γ
Image: series and darp. Image: series	Ē		w			,															Ц	(H)
Image: series and darp. Image: series	pth (STRATIGRAPHY	TTP	ESTE		F		S)IL VA	POL	JR	_					 		COMMENTS		CKFI	pth
-0 -000000000000000000000000000000000000	De		MPLE	NET	LAB SAMPLE	NAME/		CON	CENT	rra ⁻	ΓΙΟΝ										BA	۵
0 CROWECTOR Get AV- Heak, daye, hore send, darp. 0 <td></td> <td></td> <td>SA</td> <td>Z</td> <td>LAB ANALY</td> <td></td> <td></td> <td>00</td> <td>200</td> <td>300</td> <td>400</td> <td></td> <td></td> <td></td> <td>-:-</td> <td></td> <td> </td> <td>-</td> <td></td> <td></td> <td></td> <td></td>			SA	Z	LAB ANALY			00	200	300	400				-:-		 	-				
0 CROWE CLAY: Held, daye, tone send, darp. 0							÷	-	: :	ł	: :	-		-	:	-	: :					
0 CROWE CLAY: Held, daye, tone send, darp. 0							-			-												
0 CROWE CLAY: Held, daye, tone send, darp. 0							÷	-		÷	: :	-		: :	÷	: :						
0 CRCAVE block, depy, tone send, demp. 0							÷	: :	: :	÷	: :	:	÷	: :	÷	: :	: :	:				
UNANT CAT BANK Days, fails same and, damp. Image (still k, no.) Image (s	•	GROUND SURFACE					÷	-		÷		-		: :	:							
1	-0					t i															\square	₽0 ₽
		CLAY - brown, silty, some sand, damp.	G	/	1					· · · · ·			·	: : : :	•••							Į.
	-			/	_	-		-												ł		Ę.
				/	/				: :				-	: :		: :						ł
-2 0 Important DITX, Park ALL DITX, Par	-1		G	/		ſ				÷										E		Ŧ
-2 -2 -3 -4<				/	7	·	:		· · : · :	· · ÷ ·	: :	: :	·	::::	•••	÷ ;	::::	:				F
-3 -3 -4 -7<	-		G		, 		۱.	-				÷					 			ł		£_5
-3 -3 -4 -7<				/			÷	-	: :	÷	: :	÷		: :		: :						Ł
-3 -3 -4 -7<	-2			/	TP-66-1.8 / BTEX.		÷	-		÷		:				: :						Ł
-3 -3 -4<			G	/	PHC F1-F4, VOC, I PCB, Metals	PAH,	l iii i			• • • •	:: : :		·		· · ÷ ·							
-3 -4 -7 <td< td=""><td>_</td><td></td><td></td><td>/</td><td>-</td><td></td><td>÷</td><td></td><td>· · : · :</td><td>· · ÷ ·</td><td>::</td><td>÷</td><td>· ÷ ·</td><td>: : :</td><td>· · ÷ ·</td><td>:: :::::</td><td> </td><td></td><td></td><td>l</td><td></td><td></td></td<>	_			/	-		÷		· · : · :	· · ÷ ·	::	÷	· ÷ ·	: : :	· · ÷ ·	:: :::::	 			l		
-3 -4 -7 <td< td=""><td></td><td></td><td>G</td><td>/</td><td>TP-66-2.4 / BTEX,</td><td>АН</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Ł</td></td<>			G	/	TP-66-2.4 / BTEX,	АН																Ł
a / Impediation / <td< td=""><td></td><td></td><td></td><td>/</td><td>PCB, Metals</td><td>/ui,</td><td>÷</td><td>: :</td><td>: :</td><td>÷</td><td>: :</td><td>:</td><td>÷</td><td>: :</td><td>÷</td><td>: :</td><td>: :</td><td></td><td></td><td></td><td></td><td>ł</td></td<>				/	PCB, Metals	/ui,	÷	: :	: :	÷	: :	:	÷	: :	÷	: :	: :					ł
-4 SILT - light brown, dayey, some sand, damp. 0 Image 37 (EPEs Price FAR, OCC Park, PRI, Medicine Structure) -6 CLAY - brown, sity, some sand, damp. 0 Image 37 (EPEs Price FAR, OCC Park, PRI, Medicine Structure) 1 Test Prituadilied with eccavated in the second of	-3					ľ				•••••••					•••••••					ł		1-10
-4 SILT - light brown, dayey, some sand, damp. 0 Image 37 (EPEs Price FAR, OCC Park, PRI, Medicine Structure) -6 CLAY - brown, sity, some sand, damp. 0 Image 37 (EPEs Price FAR, OCC Park, PRI, Medicine Structure) 1 Test Prituadilied with eccavated in the second of			G	/	PHC F1-F4, VOC, I	РАН,	٠÷			· · ÷ ·		·	·	: : :			 			ł		ł
CLAY - brown, silty, some sand, damp. 6 PRO: FLAK, VOC, PAH, POS, Media No Daylighting Performed 	-				PCD, Metals	-																Ł
CLAY - brown, sily, some sand, damp. 6 Pro FLAK, VOC, PAH, PGR, Mode 5 END OF TEST PIT at 4.9 m No Daylighting Performed 		SILT - light brown, clayey, some sand, damp.		/	TP-66-3.7 / BTEX,		÷					-	÷	: :								ł
G / PPG-13/BTEX PPC FLK UCC PH, PCC Meals END OF TEST PIT at 4.9 m No Daylighting Performed 	-4		G	/	PHC F1-F4, VOC, I PCB, Metals	PAH, A				:			:	: :	•••••	: :				l		Ţ
Contractor START DEPTH EQUIPMENT EQUI		CLAY - brown, silty, some sand, damp,		/	7	·				· · · · ·			·	: : : :	•••							Į.
-5 END OF TEST PIT at 4.9 m Test Pit backfilled with executed in this original order and then nonally compacted with the excavated nucleater and then nonally compacted with the excavated nucleater at the nucleate	-		G	/	TP-66-4.3 / BTEX, PHC F1-F4, VOC, I	АН,	, i.	-												ł		1;
				/	PCB, Metals		÷	-	: :		: :	-		: :		: :				l		ł
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	-5	END OF TEST PIT at 4.9 m]															h excav	vated	Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB		No Daylighting Performed					·			•••			·		•••				material which was re its' original order and	eplaced then	l in	Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	-						-								· · ÷ ·		 	:	nominally compacted	with th	ne	E
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB																			excavator bucket.			E
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	-6						÷	-	: :	-	: :	-		-	÷							È.
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB							:			:			:	: :		: :	: :					F 20
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	-						·			•••			·		•••							F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB						-								: : :								Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	7						-			-												Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	- 1									÷												F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB							·		· · : · :	· · ÷ ·	: :	: :	·	::::	•••	÷;	::::	:				-
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	-											 			· · ÷ ·							-25
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB											: :					: :						E
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	-8						÷	: :	: :	÷	: :	:	:	: :	÷	: :	: :					E
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB										•••••••••••••••••••••••••••••••••••••••			·		••••							-
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED; JES REVIEW: KAF DRAFTED; LLB	-								••••	•••			·		· · : ·							F
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED; JES REVIEW: KAF DRAFTED; LLB																						Ē
START DATE START DEPTH EQUIPMENT CONTRACTOR GAS METER TYPE: RKI Eagle 2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB	-9						÷	-	: :	:				-	:	: :						F
2014/12/15 0.0 m Hitachi 200LC Excavator Main Line Industries Ltd. LOGGED: JES REVIEW: KAF DRAFTED: LLB							÷					-			:							
PARSONS	2014/12	115 0.0 m Hitachi 200LC Excavator				Main Lir	ne In	dustri	es Ltd.													
																	/-		R5 0	JN		5

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NC	D: 10	-513	3				_		PIT No: TP-		
															_			2014/12/1	
SAMF	PLE TYPE: G - Grab OS - Other						-										PLETION DATE: E 1 of 1	2014/12/1	15
	DESCRIPTION			SAMPLING		Γ										AOL			
Ê			-		,														£
Depth (m)	STRATICDARLIV	SAMPLE TYPE	ZONE TESTED				▲ SC	DIL VA		2							COMMENTS	BACKFILL	Depth (ft)
Del	STRATIGRAPHY	APLE	日 日 日 日	LAB SAMPLE			CON	CENT	RAT	ON								BA(ے ا
		SAN	Ś				100	(ppm 200	1V) 300	400									
								: :	: :					: :	÷				
						÷		: :	: :	:::		÷		: :	÷				
								: :	: :	: :		-		: :	÷				
												-			÷				
								: :	: :			-		: :	-				
	GROUND SURFACE												 	: : : : :		: 			
Ę	ORGANIC SILT - black, clayey, trace sand, damp. CLAY - brown, sandy, silty, some gravel, damp.		\vdash	7		1	: :	: :	: :	: :		÷	: :	: :	÷				Ĩ
-	CLAT - brown, sandy, sity, some graver, damp.	G	/	/		≜ ∃						••••							Æ
-			4	_															7
E	- some sand, trace gravel, damp.		1	/				: :	: :	::		÷		: :	÷	: :			7
-1		G	/			Î					· :				-				Æ
Ł			⊬	1							· · · ÷								1
Ł		G	/	/											<u>.</u>	: : : : : : :			£.
ŀ						Ī		::	: :			-			÷				
ŧ,	- gray staining below 1.8 m.	\vdash	ſ	7		·.:	· · : · :	· · : · :	·:::::	·: · :	· · ÷	· · : :	: <u>:</u> .	: : :	÷	: : : :			/
-2		G	/	TP-67-1.8 (DUP-15 BTEX, PHC F1-F4) / VOC, .	L.								÷	<u>.</u>				7
-			$\left \right $	PAH, PCB, Metals								÷			÷				7
F			Ĺ									•••••••••••••••••••••••••••••••••••••••							Æ
[G	/	TP-67-2.4 / BTEX, PHC F1-F4, VOC,	PAH, .										÷				7
-3			V	PCB, Metals		1		÷÷	: :	: :		÷	: :	: :	÷				
Ę						1		: :	: :	::::		: : : : :		: :					10
-		G	/	TP-67-3.0 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH, .	k ÷	· · : · :	· · : · :	·÷·÷	$\frac{1}{2}$	· · · ÷			÷;	÷	: : : : : :			7
-			\langle	PCB, Metals															Æ
	SILT - light brown, clayey, some sand, damp.			TP-67-37/BTEX		:		: :	: :			÷		: :	÷				
		G	/	TP-67-3.7 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH, .	≜ ÷	· · : · :	· · · · · · ·		·::	•••••••••••••••••••••••••••••••••••••••	•••	: <u>:</u>	÷;	:	: . : : : :			7
4 -			1											<u>.</u>					
	CLAY - brown, silty, some sand, damp.			/					: :			÷							7
*		G	/																15
/10/	END OF TEST PIT at 4.9 m		1	-			· · · · · ·	•••••••••••••••••••••••••••••••••••••••	· · · · · ·	$\cdot \frac{1}{2} \cdot \frac{1}{2}$		· · ÷ · ·	. .	÷;	÷	: : : : : :			L
														: :	-		Test Pit backfilled with material which was re		Ľ
	No Daylighting Performed											-			-		its' original order and t	hen	-
						. <u>.</u>		· · : · :	·: ·:	·::	· · · ::	•••	· · · · ·	÷;		: . : : : :	nominally compacted excavator bucket.	with the	-
														<u>.</u>	<u>.</u>				Ē
												-			÷				Ē
												•••••••••••••••••••••••••••••••••••••••			-				- 20
								· · : · :	· · · · · · ·	$\cdot \frac{1}{2} \cdot \frac{1}{2}$. .	÷;	÷	: : : : : :			-
						÷		: :	: :	: :		÷		: :	÷				Ē
3															-				-
₫ <u></u> -7										÷.		• • • • • •				 			F
š -														<u>.</u>					-
- 						E	: :	: :	: :	: :		÷		: :	÷				Ē
											· · · ÷	••••			÷	· · · · ·			25
												· · · · · ·	 						F
						:		: :	: :			÷			÷	: :			F
						1					· :				-				F
									· · · · · ·		· · · ÷								F
																			Ē
-9														: :	÷				F
10HA								: :	: :			÷	: :	: :	÷				
STAR	DATE START DEPTH EQUIPMENT		<u> </u>	1	CON	TRA		<u>.</u> २					 G	AS M	ETE	R TY	I PE: RKI Eagle		
2014/12							ndustri							OGGE	ED: 、	JES	REVIEW: KAF	DRAFTED	
																	RSO	NI	
2130															-/				

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. NO): 1()-513	33					-		PIT No: TP-			
	NT: Imperial Oil																		2014		
SAMF	PLE TYPE: G - Grab OS - Other																	PLETION DATE:	2014	/12/15)
	DESCRIPTION			SAMPLING	2											1-7					
Ê			٦.															1		Н	(H
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED				SC	IL VA	POU	R	+							COMMENTS		BACKFILL	Depth (ft)
De		MPLE	NE 1	LAB SAMPLE	NAME/		CON	CENT	RAT	ON										BA	۵
		SA	2	LAB ANAL		1	00	(ppm 200 (<u>300</u>	400			-:				;				
							: :					::	÷		:		:				
							: :	: :				::			:		-				
										-			-					1			
							-			-			÷		:		:				
0	GROUND SURFACE																				
-0	ORGANIC SILT - black, clayey, trace gravel, trace sand, damp.																			\square	<u></u> ↓
-	CLAY - brown, silty, some sand, trace gravel, damp.	G		/						•••••••••••••••••••••••••••••••••••••••			<u>.</u> .			· · · · ·	: :		k		Ē
-			4	_					· · · · · ·										F		F
-		G		/																	Ł
-1							: :	: :	: :	÷		::	÷		:		÷				ŧ
			Ĺ	7				::::											ł		F
-		G	/							• • • • •			·			 	· · · ·		ł		<u></u> _5
-			1	_														í	ł		ŧ.
-2		G		TP-68-1.8 / BTEX, PHC F1-F4, VOC, PCB, Metals		÷	: :	:::	: :	÷			÷		:		÷		F		£
-		G		PCB, Metals	РАП, 🔺								÷								E
-			ſ										·						ł		ŧ
		G	/	TP-68-2.4 / BTEX, PHC F1-F4, VOC,	PAH,	÷		· · · · ·		•••			. <u>.</u>						Ē		Ł
—3				PCB, Metals																	ן – ונ
-	- dark brown below 3.0 m.			TP-68-3.0 (DUP-16 BTEX, PHC F1-F4)/					:			÷				:		ł		ŧï
		G		BTEX, PHC F1-F4 PAH, PCB, Metals	VOC,			::::											F		F
	SILT - light brown, clayey, some sand, damp.		┢	7					· · · · · · · · · · · · · · · · · · ·	•••••••••••••••••••••••••••••••••••••••			·			· · · · ·					F
-4		G	/	TP-68-3.7 / BTEX, PHC F1-F4, VOC,	PAH,													Í	ł		Ē
			V	PCB, Metals		÷	: :	: :	: :	÷		::	÷		÷		÷		F		F
-	CLAY - brown, silty, some sand, damp.			7									÷								£
		G				÷				• • • • •			·			· · · · ·			ł		1—15 1
_	END OF TEST PIT at 4.9 m		┦	-				· · · · ·		•••						· · · · ·	. <u>.</u>				ŧ
—5																		Test Pit backfilled with material which was re	placed		Ē
	No Daylighting Performed																	its' original order and nominally compacted	then		Ē
-																		excavator bucket.			F
										•••••••			·			· · · · ·	· · · ·				Ē
-6								· · · · ·	· · · · · ·				·				· · · ·				-20
																					E
-										÷			÷								Ē
																					F
-7						·			·÷·÷	•••••••••••••••••••••••••••••••••••••••			•	· · ·		:	· · · ·				-
																 		Í			-
-							: :										÷				-
						÷	: :	: :	: :	÷	:	::	÷	: :	:	: :	÷				E 23
-8										•••••••								1			Ē
										•••••••••••••••••••••••••••••••••••••••			·			· · · · ·					-
_											. .						. <u>.</u>	i i			Ē
													:					1			Ē
-9																					Ē
							: :						:					l			
	T DATE START DEPTH EQUIPMENT	1	-		CONT													PE: RKI Eagle			
2014/12	/15 0.0 m Hitachi 200LC Excavator				Main Li	ine In	dustri	es Ltd.					╞			D: JE			DRAF		
															-		4	RSO	N	JS	5
					1										-	_					_

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N(О: ⁻	10-5	133					_		PIT No: TP-			
	NT: Imperial Oil																		2014/		
SAMF	PLE TYPE: G - Grab OS - Other																	PLETION DATE: E 1 of 1	2014/	12/15	
-	DESCRIPTION			SAMPLING													AGE				
Ē		щ	Ē																	Н	(£
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED		F		SC	DIL VA	٩PO	UR								COMMENTS		BACKFILL	Depth (ft)
D B		MPLE	L H N	LAB SAMPLE N			CON	CEN	TRA	TION										BA	Ľ
		SA	18		SES		100	(ppr 200	300	40	0		::								<u> </u>
						÷	: :	: :	÷	: :	÷	÷	: :	: :	÷	:					
						÷	: :	: :	÷	::	÷	÷	: :	:::	÷	:					
							: :		:		-				÷						
						-	: :		÷		-				÷	:					
	GROUND SURFACE					:	: :		:	: :											_0
F	ORGANIC CLAY - black, silty, trace sand, damp. CLAY - brown, sandy, some silt, trace gravel, damp.		_	7		÷									÷						U
-	CLAT - brown, sandy, some silt, trace gravel, damp.	G		/		N II	••••		• • • •						•••••••						-
Ē			1	/		<u>.</u> .			· · · · ·						· · · ·		<u>.</u>				- F
È,		G		/		L.				: : :											Ē
[−1 [V			÷			÷						÷				ľ		Ē
				7																	Ē
F		G			•	÷	· · · · · · · · · · · · · · · · · · ·		•••		•				•••						-5
Ē			1	/		<u>.</u> .	· · · · ·		· · ÷ ·						· · ÷ ·				ľ		-
-2		G		/ TP-69-1.8 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	AH,	<u>.</u>															-
			V	PCB, Metals		÷			÷		÷				:						Ē
F	- dark brown below 2.4 m.		Í.	TP-69-24/BTEX															ľ		Ē
-		G	/	/ TP-69-2.4 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	ан, 🛉	÷			•••••••••••••••••••••••••••••••••••••••	:::	•				•••••••••••••••••••••••••••••••••••••••						E
-3			1	7			• • • •								· · · ·						10
		G		/ TP-69-3.0 / BTEX, PHC F1-F4, VOC, P/ PCB, Metals	АН					: :									ľ		-
			$\left \right $	PCB, Metals	-ui, T		: :	: :	:	: :	÷	÷	: :	: :	:	:					-
	SILT - light brown, clayey, some sand, damp.		ſ	TP-69-3.7 / BTEX,		·			• • • •						•••••••				ľ		- F
4		G	/	PHC F1-F4, VOC, P/ PCB, Metals	ан, 🔺	÷	· · · · ·		· · · . :		• • • •				•••						F
			1	T OD, motors																	- F
fadiiiiin	CLAY - brown, silty, some sand, damp.	G		/		:	: :		:	: :	÷	÷			÷				ľ		- 15
					Ī		: :		÷	: :	-	1			÷	:					
-5	END OF TEST PIT at 4.9 m		ſ			·			· · · · ·						· · · · ·			Test Pit backfilled with		//// vated	- F
	No Daylighting Performed					·			•••		•				•••			material which was re its' original order and	placed	in	- F
																		nominally compacted	with the	е	Ē
						÷	: :		÷	: :				:::	÷	:		excavator bucket.			Ē
6										-											- E
						·			•••••••••••••••••••••••••••••••••••••••						••••••						- 20
						·	•••••		· · · · ·	:::	•				•••••••••••••••••••••••••••••••••••••••						F
1 																					÷
																					Ē
						÷	: :	: :	÷	: :	:	:	: :	: :	÷	:					Ē
						·	· · · · ·								••••••						-
						·	· · · · ·		· · · . :		• • • •				•••						- 25
																					Ē
						÷	:::	:::	÷	: :	÷	÷	: :	:::	÷	:					F
																					-
						· :	•••••		· · : - ·		•	:			•••••••••••••••••••••••••••••••••••••••						- F
						· ÷			· · · .		·				· · ÷ ·						- F
9										÷	-				:						-
	TDATE START DEPTH EQUIPMENT				CONT			: :	:	: :	:		: :		: S M	: ET F	: : рти	PE: RKI Eagle			
3 2014/12					Main Lir										GGE				DRAF	TED: I	LB
																		RSO			
8																-/					2

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						R	F. NC	D: 1	0-51	33					TE	ST	PIT No: TP-			
	NT: Imperial Oil																			/12/15	
SAMF	PLE TYPE: G - Grab OS - Other						┝											PLETION DATE: 1 of 1	2014	/12/15	5
	DESCRIPTION			SAMPLIN	-																
Ê			Ē		5															Н	(#
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED				S	DIL VA	POL	JR								COMMENTS		BACKFILL	Depth (ft)
De		MPLE	L H N	LAB SAMPLE	NAME/		CO	ICENT (ppr	rra ⁻	ION										BA	
		SA	N N	LAB ANAL	YSES	:	100	200	300	400		-: :	-:	: :		: :	;				<u> </u>
							-		÷				÷	: :	-		-				
							-		-								-				
							-		÷				÷				-				
							-		÷				÷	: :			-				
	GROUND SURFACE						-		-				-				-				L
-0 -	ORGANIC CLAY - black, silty, trace sand, damp.			7													-			\square	Ē
-	CLAY - brown, sandy, silty, some gravel, damp.	G		/			••••	••••••	•••	· · · · ·	:	• • • •	·	: : : :		· · · · ·	÷		F		ŧ
-			1	_							:	•		: : : :			÷		ł		ł
-		G		/															ł		Ł
−1 -			V				:		÷		-		:	: :			-		ł		ŧ
-				7															ł		F
-		G	/	/		÷	·:··	· · : · :	· · ÷ ·	::. : :	:	·	·	: : : :	::::	:	: :				5
Ē			/	-															f		F
-2		G		TP-70-1.8 / BTEX	PAH									: : : :					ł		ŧ
Ē			V	PHC F1-F4, VOC, PCB, Metals		Γ÷	:		÷				÷	: :	: :		-		F		
-	- dark brown below 2.4 m.		ſ						÷		-						-		ł		
-		G		/ TP-70-2.4 / BTEX PHC F1-F4, VOC, PCB, Metals	PAH,	÷	·	•••••••	•••	· · · · ·			·			· · · · ·	: :				Ę.
-3			1											: : : :			<u>.</u>		ł		£ −10
-		G	,		рлц	:	÷										:		ł		£
-		6		PHC F1-F4, VOC, PCB, Metals	ran, a				÷				÷						ł		ŧ
	SILT - brown, clayey, some sand, damp, black staining.		1			· :	•		•••	· · · · ·			·	: : : :		· · · · ·	:		F		ŧ
-4		G	/	PHC F1-F4, VOC, PCB, Metals	PAH,	÷		•••••••	· · ÷ ·	· · · ·		• • • •	·	: : : :		· · · · ·	<u>.</u>		ł		ł
				FCD, Wetais										: : : :			<u>.</u>		ł		Ł.
n -			,	Δ													-		ł		
-		G			1				÷								-		ł		15 2
-5	END OF TEST PIT at 4.9 m		ſ	-		·	· · · · ·	· · · · · · · · · · · · · · · · · · ·	•••••••••••••••••••••••••••••••••••••••	· · · · ·	:	• • • • •	·	: : : :		<u></u> . 	: :	Test Pit backfilled with		//// vated	Ē
-	No Daylighting Performed								· · ÷ ·		÷	•	·	: : : :		· · · · ·	÷	material which was re its' original order and	eplaced		F
																	<u>.</u>	nominally compacted	with th	ne	Ē
-							÷		-									excavator bucket.			Ē
6																					Ē
-						· :	· : · ·	· · · · · · · · · · · · · · · · · · ·	· · · · ·	· · · · ·	:		: :: :			· · · · ·	:				20
-						<u>.</u> .	· · · ·	••••••••	• • • • •	· · · · ·		•	·	: : : :		· · · · ·	÷				-
5 - -											<u>.</u>			 			<u>.</u>				-
L_7						:	÷	: :	÷			: :	÷	: :	: :		:				-
																					Ē
-						·	· : · ·	· · • • • • • • • • • • • • • • • • • •	•••••••••••••••••••••••••••••••••••••••	· · · · ·	:		• • • • •	· · · ·		· · · · ·	: :				Ē
									· · ÷ ·	· · · · ·		• • • •	·	: : : :		· · · · ·	<u>.</u>				-25
											:			 			:				Ē
8									÷				÷				-				Ē
																	:				E
Ē						:. :		••••••	•••	· · · · ·			•			· · · · ·	: :				É
E								•••	· · . ·							· · ·					F
- 9							:		:				:				:				f
OT A D						:	.: 	: :	÷	: :	:	: :	:	: : 	: : • MT	: : .TEP	: 				
2014/12	T DATE START DEPTH EQUIPMENT 1/15 0.0 m Hitachi 200LC Excavator				CON Main Li											D: JE		PE: RKI Eagle REVIEW: KAF	DRAF	FTED:	LLB
2																		RSO			
																	-	NOU			-

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba						RE	F. N	0: 1	10-5	133							PIT No: TP-7		
	NT: Imperial Oil										_		_						2014/12/	
SAMF	PLE TYPE: G - Grab OS - Other						-											PLETION DATE: :	2014/12/	15
	DESCRIPTION			SAMPLIN	2											P/	AGE			
Ê		Ψ	_		5															(£
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED			╞	▲ SC			UR								COMMENTS	BACKFILL	Depth (ft)
De	311/41/01/4111	MPLE	L N N	LAB SAMPLE	NAME/		CON	ICEN	TRA	TION									BA	ľ
		SAI	Ñ	LAB ANAL			100	200	300	40)									
							-	-	-	-			: :	: :						
							-	: :		: :		÷	: :	: :	: :		:			
	GROUND SURFACE																			
-0	ORGANIC SILT - black, clayey, some sand, trace gravel, damp.	-					•••••••••••••••••••••••••••••••••••••••	· · : · :	•••	: : :	· : :	·	: : : :		·:-::	· · ÷	· : :			★ 0
-	CLAY - black, silty, some sand, trace gravel, damp.	G		7							: 									7
F			V		4	Ĩ	-	: :		::	:	÷	: :	: :	: :		:			
-	- brown below 0.6 m.			7																Æ
-1		G			4	i i	•••••••••••••••••••••••••••••••••••••••	· · · · · · · · · · · · · · · · · · ·		: : :	· : · · ·	·	::::		::::	· · ·	· : · ·			1
-			/	_							 		: : :							7
E		G	1/	TP-71-1.2 / BTEX, PHC F1-F4, VOC, PCB, Metals					-				: :							Æ
-				PCB, Metals	ГАП,				-											F
F,			Ĺ	7		:					· · · · ·	 	:				· : :			1
-2 1		G		TP-71-1.8 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH,						. <u>.</u>			· · · · ·						1
-			\langle	PCB, Metals						: :			: :							Æ
-				TP-71-2.4 / BTEX,					-											Æ
Ē		G		TP-71-2.4 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH, 🖌							 	: :				·			1
-3		_	1								·			· · · · ·						10
		G	1/	/ TP-71-3.0 / BTEX, PHC F1-F4, VOC, PCB, Metals						: :			: :							Æ
-				PCB, Metals	гмп, и				÷											Æ
	SILT - light brown, clayey, some sand, damp.		Ĺ	7					••••		• • • •		:		•	• • •	· : :			1
4		G		TP-71-3.7 / BTEX, PHC F1-F4, VOC, PCB, Metals	PAH,					:: ::	· : · ·	. <u>.</u> .	: : ::	· · · · ·			. <u>:</u>			7
 R -			/	PCB, Metals																
	CLAY - brown, silty, some sand, damp.			1				: :		: :	:	1	: :	: :	: :		:			
		G			4			· · · · · ·			· · · · ·	 	· · · ·				· · · · ·			15
	END OF TEST PIT at 4.9 m		┦	-							· · · ·	. <u>.</u> .					. <u>.</u>			L
5										<u>.</u>								Test Pit backfilled with material which was rep	aced in	
	No Daylighting Performed																	its' original order and the nominally compacted v	nen	-
-									÷	:::			: :	::::	::::		:	excavator bucket.		Ē
								• • • • • •			·			· · · · ·			·			F
6													: : :							-20
																				-
																				-
- 5 -							•••••••••••••••••••••••••••••••••••••••	· · : · :	:::	: : :	· : :	·	::::			· · ÷	· : · ·			-
-7																				-
							-	: :		: :		÷	: :	: :	: :		:			-
- -																				E
-											· · · · ·		••••• ••••				· : :			25
8											·			· · · · ·						-
										:::			: :							-
5 - 1 -								: :	÷				: :							È
								• • • • •			•		::::				·			-
È								••••••				<u>.</u> .	: . :-	•			. <u>.</u>			-
-9											:						:			-
						:	: :	: :		: :	÷	÷	: :	: :	: :		:			
2014/12	T DATE START DEPTH EQUIPMENT //15 0.0 m Hitachi 200LC Excavator				CON Main L										S ME GGED			PE: RKI Eagle REVIEW: KAF	ORAFTE): LLB
200															۲	7	4	RSO		3

	PIT LOCATION: 100 Oak Point Highway, Winnipeg, Manitoba							REF	. NC): 1	0-51	133					_		T PIT No			
	NT: Imperial Oil						\square														14/12/1	
SAM	PLE TYPE: G - Grab OS - Other						┝												IPLETIO E 1 of		14/12/1	2
	DESCRIPTION			S۵	MPLING													AG		1		<u> </u>
(Ê																					=	(ŧ
Depth (m)	STRATIGRAPHY	SAMPLE TYPE	ZONE TESTED			_		SO	L VA	POL	JR								- (COMMENTS	BACKFILL	Depth (ft)
De l		MPLE		Ц Ц	AB SAMPLE NAM		С	ONC	ENT (ppm	'RA'	ION										BA	
		SA		3	LAB ANALYSES		10	0 2	200	<u>300</u>	400)										
							: :	÷	: :	÷	: :	÷	÷	: :	÷		÷	: :				
							-	÷				-		: :								
							-	÷		-				-	÷		-	: :				
							-	÷		÷	: :			-	÷		÷	: :				
	GROUND SURFACE							÷				-									_	
Ē	ORGANIC SILT - black, dayey, trace sand, damp.			_																		Ŧ
-	CLAY - brown, silty, some gravel, some sand, damp.	G				_ -		·		· - · ·	:; :	• • • •					· : · ·	:				1
Ē			/	_			÷	÷	: : :	· : · :	:: :.::	÷	. :	· • • • •			·	: : : : :				ł
ŀ		G																				Ł
1 -			V	′		T		÷		:					:		÷					
-				7															1			Ŧ
-		G		/		_ ≜		·			: :	· : · ·	:		.:		·					15
	- gray, black staining below 1.8 m.		/	_			÷					. <u>.</u>						: : · : ·				1
-2	gray, black stairing below 1.0 m.	G			72-1.8 / BTEX, C F1-F4, VOC, PAH,												 					Ł
ł			V	PCE	B, Metals	Τ	-	÷		÷	: :	÷		: :	÷		÷	: :				ł
-	- dark brown below 2.4 m.		ĺ	/ _{TP_}	72-2 4 (DI IP-20) /																	
-		G			72-2.4 (DUP-20) / EX, PHC F1-F4, VOC, H, PCB, Metals	•				· .		•					·	: : : :				ł
-3	hrours helew 2.0 m		/		i, i ob, motalo												. <u>.</u>	: : : : :				£_10
	- brown below 3.0 m.	G			72-3.0 / BTEX, C F1-F4, VOC, PAH,			÷			: :				÷			: :				£
		6			B, Metals	Ĩ		÷									÷					Ł
			ſ	7						: .		• • • • •					· 	:				ł
-4 -4		G		/ PH0	72-3.7 / BTEX, C F1-F4, VOC, PAH, B, Metals	•						• • • •						: :				ł
			/		d, metais																	Ł
e	- some silt.			Λ				÷		:					:		:					
1 1		G		/		Ĩ																15
5	END OF TEST PIT at 4.9 m		+					•		·:- ·		• • • •					· : · · ·		Toet P	it backfilled with exc	VZZ.	Ē
PARE	No Daylighting Performed							· ÷		·	: :	· .							materia	al which was replac	ed in	F
																			nomina	ginal order and then ally compacted with ator bucket.	the	Ē
								÷		÷				-	÷		÷	: :	excava	ator bucket.		-
																			1			-
								·		·: ·		• • • •					· · · · ·					-20
							÷		÷ . :	. <u>.</u> .	: :	· .		÷			·	: : : :				-
EX																						Ē.
								÷		÷		÷			:		÷					Ē
																						F
								•		·:		• • • •					· : · ·	: : : :				Ē
								·÷	: : :	.: .:	:: :.::	· .	. :				· ÷ · ·	: . : : · :				-25
2-																						Ē.
9 – 8							-	÷		:					:		:					-
							-															-
								·		·÷ ·		· : · ·	·		· · · · ·		· : · ·					Ē
												·										-
9								÷		÷				: :	:		÷	: :				ŀ
							: :	:	: :	:	: :	:	:	: :	:	: :	:	: :		F		
2014/12	T DATE START DEPTH EQUIPMENT 1/15 0.0 m Hitachi 200LC Excavator					ONTR ain Line												ER T JES	YPE: RKI REV		AFTED:	LLB
ТР ГО															-							
5133																	-/			501		Ð

BOF	REHOLE LC	CATION: 100 Oa	ak Point Highway, V	Winnipeg, Mar	itoba								RE	EF. N	NO:	10-	5133	3					BOF	REHC	DLE No: BH	-7		
	ENT: Imperi												GF	RAD	E El	EV	.:	9	9.83	m		_			DATE:		/04/08	
			it at the NE corner																						TION DATE:	2014	/04/08	
ASS			m (Refer to Drawi	ings for locatio	n)	<u> </u>			<u> </u>									_					PAG	JE 1	l of 1			
		DES	SCRIPTION						SA	MPLING																		-
Depth (m)						YPE	'N' VALUE	% ≿	ZONE TESTED																		BACKFILL	Depth (ft)
Dept		STRAT	FIGRAPHY		ğ	Ē	LUE	VER	ШЩ.				SCON		VAP(DUR	N								COMMENTS		BACH	Dept
					SYMBOL	SAMF	N' VA	ECC 2	ONE	LAB SAMPLE N LAB ANALYS	AME/			(pr	pmv)												_	
					0		-	<u>ш</u>			LU	:	100	200	<u>30</u>	0 4 :	00			: :	: :	:	::	-				
																÷	-					÷						
												÷	: :		: :	÷	: :			: :	: :	÷	: :					
												÷	: :		::	÷	: :			: :		÷	: :					
																÷						÷						
		D SURFACE										÷	: :		: :	÷	: :			: :	: :	÷	: :					-0
-0	CLAY (Fill) - olive brown,	, coarse grained sa	and, silty,		1																						-0
-	SAND	sand, damp. Fill) - light brown.	fine grained, silty,	some	1.1.1.	G	-		/						÷;	· : :				÷;		· · :	· · · · ·	• •				_
-	grave	, damp.		_					Κ,											÷								-
-	COBBL	.ES (Fill) - light br	own, some sand, o	lamp.	B				/			÷	: :		: :	÷	: :			: :	: :	÷	: :					-
-1					00	G	-	-	/			-																-
-	CLAY -	olive brown, siltv	, some sand, mois	t.														• • • •		÷								-
-	- black	staining from 1.2	m to 1.8 m.			G	-	100	/	BH-7-1.2-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA																		-5
-									V	1,2-DBA, 1,2-DCA						-												-
-2									/	BH-7-1 8-2 4 (DUP-7)	,											÷						-
-						ss	-	100	/	BH-7-1.8-2.4 (DUP-7) BTEX, PHC F1-F4, Le 1,2-DBA, 1,2-DCA	ead, 🖌	•		· · · · ·	÷;	· ÷· ·		•••••		÷ • • • •		· · ÷ ·	· · · · ·					-
-						1			Γ,	·,, ,																		-
-						ss		100	/			÷	: :		: :	÷	: :			: :	: :	÷	: :					-
÷.						1 55	-	100	/		4											÷						-
<u>_</u> _3		some silt.							/			· :			:::	· ÷· ·	÷ · ;			÷;	·	•• ÷•	·: · :	• •				- 10
PRINTED: 01/26/2015						ss	-	100	/	BH-7-3.1-3.7 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA																		_
10 									V	1,2-DBA, 1,2-DCA		÷	: :		: :	÷	: :			: :	: :	÷	: :					-
RINTE									7																			-
Ba -4						ss	-	100	/			÷			÷;	· : · ·	: :	•••••		÷;	· · · · · ·	· · ÷ · :	÷ :	• •				_
2014/06/03 Winnipeg						1			Κ.,																			-
06/03								400	/						: :	÷	: :			: :			: :					-
						SS	-	100	/		4																	- 15
-5						\vdash			/			· :			: :	· :		• • • •		÷ ;		÷	÷ ;	• •				-
PREF					$\langle / /$	ss	-	100	/																			-
1 - 1									\langle			÷	: :		: :	÷	: :			: :	: :	÷	: :					_
V3-R0												:			: :							-						
ZARY						ss	-	100	/		4	1						•••••						•••				-
8 − 6		F BOREHOLE at	61 m		///	1			/																			- 20
																									o Monitoring Well			_
	Boreho	le Daylighted to 1	.5 m									:	: :		: :	÷	: :			: :	: :	÷	: :					_
R04.G												·				• • • •								•••				-
≦7																· ÷··				:: ::::		<u>:</u> .	÷.;					-
EG DA																												_
E8-0												÷	: :		: :	÷	: :			: :	: :	÷	: :					
																						· · .		• •				25
8-150																·				:		· · ÷ ·						-
EPOR																												-
- CEG																÷				: :		:						
PARSONS PERICEG REPORT LOG 50 PERICEG DATA V3-R04.GDT PERICEG LIBRARY V3-R07.GLB PREPARED																												-
SONE																		• • • • •				· · ÷		• •				-
-9													: :			÷	-					:						[
4T2 98.GP	RT DATE	START DEPTH	HOLE SIZE	EQUIPMENT							CON		: 	R :	: :	:	: :		: :	: :	: : :		: : FR T		RKI Eagle			
o ^m 2014/	04/08	0.0 m	254 mm	Vacuum Excavato							Badger	r Day	ightir	ng Inc.									GW		RKI Eagle REVIEW: KAF	DRA	FTED: I	MLM
[2014/ 품	04/08	1.5 m	203 mm	Acker Track Rig;	Hollow \$	Stem /	Auger				Maple	Leaf I) Dril l in	ıg Lim	nited													
5133 BH-																						-			750			

			ak Point Highway, V	Winnipeg, Man	itoba				_	_	 REF. NO: 10-5133			EHOLE No: BH-		
	ENT: Imperia										TPC ELEV.:	99.94 m			2014/04/08	
			t at the NE corner m (Refer to Drawi		ı)						GRADE ELEV.:	99.97 m		IPLETION DATE: E 1 of 1	2014/04/08	5
7.00				ings for location	<u> </u>				201	MPLING			1170			
Depth (m)			FIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	RECOVERY %		LAB SAMPLE NA	▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400			COMMENTS AND MONITORING WEL NOTES Groundwater Potentiometric Surf on date noted	DNITOR	Depth (ft)
-0	CLAY (F silty, s GRAVE	ome sand, damp L (Fill) - light brov silt, damp Fill) - light brown,	, coarse to fine gra wn, coarse grained fine grained, som	I, sandy,		G	-	-						Surface Cover: Flush Mount, 152 mm		0
	- black	gray, silty, some staining from 1.2	sand, damp. m to 1.8 m. y, some sand, mois	at		G	-	-		BH-8-1.2-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA						5
-2_	<u>_</u>			51.		ss	-	100						. 2014/0	6/05 . 	
2014/06/03 Winnipeg PRINTED: 01/26/2015	CLAY -	olive brown, silty,	, damp.			SS SS SS	-	100 100 100	\square	BH-8-2.4-3.1 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA BH-8-3.1-3.7 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA						
	- gray, -	some silt, moist.				SS SS	-	100								15
		F BOREHOLE at e Daylighted to 1						,						Monitoring Well Install Well Depth Well Diameter Well Material Stai Screen Type Screened From Screened To	ed 4.6 m 51 mm nless Steel 10 Slot 1.2 m 4.6 m	20
GPJ											PACTOR					
STA 2014/	RT DATE	START DEPTH 0.0 m	HOLE SIZE 254 mm	EQUIPMENT Vacuum Excavato	r; Water	Lance)				RACTOR Daylighting Inc.		GAS METER T	YPE: RKI Eagle REVIEW: KAF	DRAFTED:	MLM
2014/ 2014/		1.5 m	203 mm	Acker Track Rig; H							eaf Drilling Limited			RSO		

			k Point Highway, ^v	Winnipeg, Man	itoba							-	RE)-51	33					_		REHOL		E	3H-9		
	NT: Imperia												TP						99.				_				A T E		14/04/0	
			t at the NE corner m (Refer to Drawi		1)								GR	AD	ΕĿ	:LE	V.:		99.	53 n	1		_		IPLEI E 1	ION D	AIE:	20	14/04/1	0
7001			SCRIPTION	rigs for location	<u> </u>	Γ			ς۵	MPLING																				
Depth (m)			IGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	۲ %				(SC CON	CEI	NTR	RAT	ON								 	Ground	RING DTES vater metric	WELL Surface	MONITORING	Depth (ft)
-0	- ASPHA GRAVE		vn, coarse to fine s		000000000000000000000000000000000000000	G	-	_																		ace Co h Mour		mm		0
- -1 <u>▼</u> - - -		gray, silty, some	sand, damp.			G	-	-	/	BH-9-1.2-1.8 / BTEX, PHC F1-F4, Lead, 1 2 DBA 1 2 DCA																	20)14/06/0	5	······································
-2		below 1.8 m. staining from 1.8	m to 3.7 m.			ss	-	100	/	1,2-DBA, 1,2-DCÁ BH-9-1.8-2.4 (DUP-9) BTEX, PHC F1-F4, L∉ 1,2-DBA, 1,2-DCA	/ ead, ▲																			
- - 3						ss	-	100		7		•																		·
Winnipeg PRINTED: 01/26/2015						ss ss	-	100		BH-9-3.1-3.7 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA																				
2014/06/03	- some	silt, trace gravel.				SS	-	100	/									•••••												
R07.GLB PREPARE						ss	-	100																						
	END OF	BOREHOLE at	6.1 m			ss	-	100																	Mo	nitoring	Well Ir	nstalled		
ATA V3-R04.GDT PE	Borehol	e Daylighted to 1	.8 m																						We Sc Sc	I Depti I Diam I Mate reen Ty reened reened	eter ria l pe From	Stainle	4.6 m 51 mm ss Steel 10 Slot 1.2 m 4.6 m	-
06 60 PE&I-CEG D.																		· · · · · · · · · · · · · · · · · · ·												- 25
	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT		<u> </u>	<u> </u>	<u> </u>				: RAC		ः २		. :	:	:	:	: :	: G	AS N	: NET	: : ER T	VPE: I	RKI Eag	e			
b 2014/0	4/09	0.0 m	254 mm	Vacuum Excavato							Badger D	Day	ghtin	g Inc										GW		EVIEW		DF	RAFTED	: MLM
2014/0	4/10	1.8 m	203 mm	Acker Track Rig; H	Hollow S	stem /	Auger				Maple Le	.eaf [Dril l ing) Lim	ited								D		١F	25	50		N	5

				k Point Highway, V	Winnipeg, Man	itoba								_				5133					_		EHOLE No:	BH-10		
		T: Imperia		t at the NE corner	of Sito											E EI				8.80 8.97					RT DATE: PLETION D		14/04/08 14/04/08	
				m (Refer to Drawi		า)								Gr	(AD				90	.97	11				E 1 of 1	ATE. 20	14/04/00	2
				SCRIPTION	0	,				SA	MPLING															ENTS AND		
Donth (m)				TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	%	-	LAB SAMPLE N			CON	ICEI	VAPC NTR/ pmv)	ATIC	N		i					MONITO NO	RING WELL DTES vater metric Surface	MONITORING WELL	Depth (ft)
-0	-	ASPHAI GRAVE sandy,	L (Fill) - light brov	vn, coarse to fine o	-		G		-		ВН-10-0.6-1.2 / ВТЕХ РН <u>С</u> F1-F4, Lead,	,													Surface Co Flush Moun			
-	-			, some sand, trace	sand,		G	-	-	/	1,2-DBA, 1,2-DCA																	····· ····· ····· ·····
-2							G	-	-		BH-10-1.8-2.4 / BTEX PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	3																
-10 3	⊻.	- gray, s	some silt.				ss	-	100		BH-10-2.4-3.0 (DUP-1 BTEX, PHC F1-F4, Le 1,2-DBA, 1,2-DCA	0) / ead,	•									· · · · · · · · · · · · · · · · · · ·				2014/06/0		:- : :- : : : :-
Winnipeg PRINTED: 01/26/2015							SS SS		100	/	7																	
2014/06/03							ss	-	100	/			•															
PE&LCEG LIBRARY V3-R07.GLB PREPARED:							ss	-	100		7																	
			BOREHOLE at				ss	-	100				•												Monitoring	Well Installed	4.3 m	- -
	,	Borehol	e Daylighted to 2	.4 m																					Well Diam Well Mate Screen Ty Screened Screened	eter ial Stainle: pe From	51 mm	
PARSONS PE&LCEC REPORT LOG 60 PE&LCEC DATA V3-R04.GDT																												25
PJ PARSONS PE&LCEG RE																												
9.0 1 ST	ART	DATE	START DEPTH	HOLE SIZE	EQUIPMENT		I		I	1	I	CONT													I (PE: RKI Eag	е		
	4/04/0		0.0 m 2.4 m	254 mm 203 mm	Vacuum Excavato Acker Track Rig; I							Badger Maple L									L	_		GWC			AFTED:	
5133 BH-					. o.o. mooring, I		5.011								- الل ا ال								D)	Δ	RS	50	NS	5

			ak Point Highway, '	Winnipeg, Man	itoba								F. N			133				_			LE No:	BH			
	ENT: Imperi			(0)														.44		-						1/04/08	
			nt at the NE corner) m (Refer to Draw		n)							GR	ADE	EL	.EV.		95	.62	m	 _		WPLE SE 1	TION DA	IE:	2014	1/04/09	
7.00			SCRIPTION	inge for locator	<u>.,</u>				SA	MPLING							Τ					<u> </u>					
Depth (m)	-		TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	%		LAB SAMPLE NA LAB ANALYSE		CON	OIL V CEN (pp 200	TRA	TIO	N 00				 		- ▼	COMME MONITOR NO Groundw Potention on date n	ING WEI TES ater netric Sur	face	MONITORING WELL	Depth (ft)
-0	ORGAN	(Fill) - light brown,	olack, silty, trace s coarse to fine gra	/		G	-	-	/														rface Cove sh Mount,				-0
- - 1	ORGAN damp	NIC CLAY (Fill) - I	plack, silty, trace s			G	-	-		7																	
2		•	some sand, damp			G	-	-		BH-11-1.2-1.8 / BTEX, PHC F1-F4, VOC, PAH Metals, Glycols	Η,														- - - - - - - - - - - - - - - - - - -		5
-						G	-	-	/	BH-11-2.4-3.1 / BTEX,															, , , , , ,		-
1/26/2015	Ľ					SS		100	/	BH-11-2.4-3.1 / BTEX, PHC F1-F4, VOC, PAH Metals, Glycols	1,											•••		2014/0	06/05		10
2014/06/03 Winnipeg PRINTED: 01/26/2015						ss	-	100	/													• • •			- - - - - - - - - - - 		-
						ss	-	100		7												•••					- - - - -
2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1						ss	-	100		7																	
		F BOREHOLE at				SS	-	100														W	onitoring V /ell Depth			4.6 m	20
	Boreno	le Daylighted to 2	.4 m																			W Si Si	/ell Diame /ell Materia creen Typ creened F creened T	al Sta e rom	ainless 1	1 mm Steel 0 Slot 1.2 m 4.6 m	
EEG REPORT LOG 60 PE																											- 25
SPJ_PARSONS PE&LCE																											-
÷ – –	RT DATE	START DEPTH	HOLE SIZE	EQUIPMENT		1					CONT						<u> </u>					YPE:	RKI Eagle	Э	_		
	/04/08 /04/09	0.0 m 2.4 m	254 mm 203 mm	Vacuum Excavato Acker Track Rig; I							Badger Maple L			ed					L	 	: GW		REVIEW: I			FTED: I	
5133 BH-							0													٦	^		25		I		5

			k Point Highway, V	Winnipeg, Man	itoba												-513					_		EHOLE No:	BH-12		
	NT: Imperia		t at the NE corner	of Sito											ELE\ DE E		1.	99.5 99.7						RT DATE: PLETION DATE		14/04/08 14/04/10	
			m (Refer to Drawi		ו)								Gr	VAL			/	99.1	+ 111			_		E 1 of 1	. 20	14/04/10	J
			SCRIPTION		- <u>/</u>	Γ			SA	MPLING														COMMENT			
Depth (m)			IGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE		-	LAB SAMPLE N/ LAB ANALYSI			CON	VCE (p	VAP NTR	ATI)	ON							MONITORIN NOTE Groundwate Potentiomet on date note	G WELL S r ric Surface	MONITORING	Depth (ft)
	ASPHA GRAVE sandy,	L (Fill) - light brov	wn, coarse to fine o				-	-																Surface Cover: Flush Mount, 15	52 mm 2014/06/05		
-			ome sand, moist.			G	-	-		BH-12-1.2-1.8 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	;																
- 2 -			/, some sand, moi	st.		ss	-	100	$\left \right $	BH-12-1.8-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	,																مر مر مر بر مر مر مر مر م
	CLAY -	gray, silty, some	sand, moist.			ss	-	100																			·
Winnipeg PRINTED: 01/26/2015						ss	-	100																			ين ال بر بر ال بر ال
14/06/03 Winnipeg						SS SS		100	/																		
SLB PREPARED: 20						ss	-	100	/																		
			0.1			ss	-	100																			
		BOREHOLE at																						Monitoring Wel Well Depth Well Diameter Well Material Screen Type Screened Fror Screened To	Stainles	4.6 m 51 mm ss Steel 10 Slot 1.2 m 4.6 m	
DARSONS PE&LCEG REPORTLOG 60 FE&LCEG DATA V3-R04.GDT																											- 25
STA	RT DATE	START DEPTH	HOLE SIZE	EQUIPMENT								: RAI	: : 	R :	: :		: :	: :	:	GA	: S MI	ETF	: : R TY	/ PE: RKI Eagle			<u> </u>
o 2014/	04/08	0.0 m	254 mm	Vacuum Excavato							Badger I	Day	ightin	ng I nc									GWC		F DR	AFTED:	MLM
2014/	л ч/ IU	1.8 m	203 mm	Acker Track Rig; H	NUIOW S	siem /	Huger				Maple Le	eat	JUIN	уun	UBUN)		RS		NS	5

			ak Point Highway, V	Winnipeg, Man	itoba									=. NC								_		EHOLE No:	BH-1		
	ENT: Imperia																	100						RT DATE:		014/04/	
			t at the NE corner m (Refer to Drawi		n)								GR	ADE	ELI	=v.:		100.	101	n				PLETION D/ E 1 of 1	ATE: Z	014/04/	09
7.00			SCRIPTION		,				SA	MPLING															NTS AND		
Depth (m)			TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	% /		LAB SAMPLE N			CON	IL VA CENT (ppn 200	'RA'	TION	N 0							MONITOF NC	RING WELL DTES vater metric Surfa	NITOR	Depth (ft)
0 	ASPHA	L (Fill) - light brov	wn, coarse to fine o	grained,	°00°	G	-	-																Surface Cov Flush Moun			
- - 1					00 00 00	G	-	-	$\left \right $																		
-	-	dark gray, silty, s staining from 1.5	ome sand, moist. m to 1.8 m.			G	-	-		BH-13-1.2-1.8 / BTEX PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	, 														2014/06/	05	-5
-2	olivo	brown down bold	24 m			G	-	-			. -																
-3	- onver	brown, damp belo	JW 2.4 III.			ss	-	100		BH-13-2.4-3.1 / BTEX PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	,																· · · - · · · - · · · - 10
Winnipeg PRINTED: 01/26/2015						ss	-	100	/																		· · · · · · · · · · · · · · · · · · ·
2014/06/03	- gray,	some silt, moist.				SS		100	/															•			· · · · · · · · · · · · · · · · · · ·
PE&LCEG LIBRARY V3-R07.GLB PREPARED:						ss	-	100																			
G LIBRARY V3-RC		F BOREHOLE at	0.4			SS	-	100																			
		e Daylighted to 2																						Monitoring ' Well Depth Well Diame Well Mater Screen Typ Screened I Screened	eter ial Stain ⁵ rom	d 4.6 n 51 mn ess Stee 10 Slo 1.5 n 4.6 n	n [9] <u>-</u> 9t - n -
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																											- 25
PARSONS PE&LCEC REPORT LOG 60 PE&LCEC DATA V3-R04.GDT																											
GPJ												-	: :						: :								
*	RT DATE	START DEPTH	HOLE SIZE 254 mm	EQUIPMENT Vacuum Excavato	ve Mater	1.0-1	~				CONTR Badger [ER TY GWC	/PE: RKI Eag	e		
	04/09	2.4 m	254 mm 203 mm	Acker Track Rig;							Maple Le				d					1						RAFTE	
5133 Bi																					F		A	RE			5

	EHOLE LO NT: Imperia		k Point Highway, ^v	Winnipeg, Man	itoba										NO: ELEV		-51		01.0	07 r	<u></u>					HOLE No: T DATE:	BH-14	4/04/09	
			t at the NE corner	of Site											E E		V.:		01.				_			PLETION DATE		4/04/08	
			m (Refer to Draw		n)									_		_										1 of 1			
		DES	SCRIPTION							MPLING																COMMENT	S AND	0	
Depth (m)		STRAT	TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	RECOVERY %	ZONE TESTED	LAB SAMPLE N. LAB ANALYS			SI CON	ICE	NTR	RAT										MONITORING NOTE: Coundwate Potentiometr on date note	G WELL S ic Surface	MONITORING	Depth (ft)
-0	ORGAN	damp.	silty, some gravel ravelly, some sand	Γ		G	-	-																		Surface Cover: Flush Mount, 15	2 mm		- 0
- 1 - - -		II) - mottled black some clay, damp	and light brown, s	some		G	-	-	/	BH-14-1,2-1,8 / BTEX							• • • • •				· · · · ·								
-2	CLAY -	olive brown, silty	, some sand, damį	D.		G	-	-	/	BH-14-1.2-1.8 / BTEX PHC F1-F4, VOC, PA Metals, Glycols	H, 4															2	2014/06/05		5 <u>5</u>
	- blacki	sh brown, some s	silt			ss	-	100	/	BH-14-2.4-3.1 / BTEX PHC F1-F4, VOC, PA Metals, Glycols	, ,Н,														· · · · ·				
Winnipeg PRINTED: 01/26/2015	- olive t	prown below 3.7 i	n.			SS SS		100 100	/																				
	- gray, :	some silt, moist t	elow 4.9 m.			SS SS		100	/																· · · · · · · · · · · · · · · · · · ·				- - -
-ceg LIBRARY V3	END OF	BOREHOLE at	6.1 m			ss	-	100																		Monitoring We ll	Installed		- -
PE&I-CEG DATA V3-R04.GDT PE&I	Borehol	e Daylighted to 2	.4 m																							Well Depth Well Diameter Well Material Screen Type Screened Fron Screened To	Stainles	4.6 m 51 mm s Steel 10 Slot 0.9 m 4.6 m	
PARSONS PEALCEC REPORT LOG 80 PEALCEC DATA V3-R04.GDT PEALCEC LIBRARY V3-R07.GLB PREPARED																													- 25
74 Fd														•	:		:	:	:		:	:		÷	:				
	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT	I		<u> </u>	<u> </u>	1	I	CON	TRA	СТО	: R		. :		·		. :	G	AS	MET	FER	· TYF	PE: RKI Eagle			<u> </u>
2014/0		0.0 m 2.4 m	305 mm 203 mm	Vacuum Excavato Acker Track Rig;							Badger Maple	r Day	lightir	ig Inc										: GV		REVIEW: KA	DR	AFTED: I	MLM
2014/0		2.7 111		HUNGE FLOCK FUG;	JUILOW 2	Join	, wyer				wapie	⊾odi	nn n f	சபா	ateu									/-		RS	Dľ	NS	5

	EHOLE LO NT: Imperia		k Point Highway, ^v	Winnipeg, Mar	nitoba							REF. NO: 10-5133 TPC ELEV.:	101.23 m		EHOLE No: BH-15 RT DATE: 20) 4/04/09	
			t at the NE corner	of Site									101.42 m			14/04/09	
			m (Refer to Draw		n)										E 1 of 1		
		DES	SCRIPTION							MPLING					COMMENTS AND	(1)	
Depth (m)		STRAT	TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	RECOVERY %	ZONE TESTED	LAB SAMPLE N		▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400			MONITORING WELL NOTES Groundwater Potentiometric Surface on date noted	MONITORING	Depth (ft)
	GROUNI) SURFACE													Surface Cover: Flush Mount, 152 mm		
-0			black, silty, some s	and, trace	333:	8					.) Def	-0
-		, moist.				G	-	-	V								-
	CLAY -	gray, silty, some	sand, moist.			G	-	-	/	BH-15-0.6-1.2 (DUP-1 BTEX, PHC F1-F4, V(PAH, PCB, Metals	5) / CC,					· _ · .	
-						G	-	-	/	,							-5
2 ⊻	-					G		_	/	BH-15-1.8-2.4 / BTEX PHC F1-F4, VOC, PA PCB, Metals	,				. 2014/06/05		
-	SILT AN	JD CLAY - liaht b	rown, some sand,	damp.					/	PCB, Metals							-
-3			· · · · · , • • · · • • • • · · · · ,			ss	-	100									- 10
2014/06/03 Winnipeg PRINTED: 01/26/2015	CLAY -	dark gray, silty, s	ome sand, moist.			ss	-	100		BH-15-3.1-3.7 / BTEX PHC F1-F4, VOC, PA PCB, Metals	, н,						
PRINTI	SILT - li	ght brown, some	sand, moist.			ss	-	100									-
014/06/03 Wii	CLAY -	light brown, silty,	some sand, moist			ss	-	100	/								- 15
	- some	silt, damp				ss	_	100	/							· · · · ·	.
3-R07.GLB									/								-
G LIBRARY V			0.4			ss	-	100									
T PE&I-CE	-	BOREHOLE at e Daylighted to 2													Monitoring Well Installed Well Depth Well Diameter	4.6 m 51 mm	-
A V3-R04.GD															Well Material Stainles Screen Type Screened From Screened To	10 Slot 0.9 m	-
																4.6 m	-
																	- 25
E&LCEG REPU																	- - - - -
BARSONS PI																	-
STAR	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT								: : : : : : : : : : : : : : : : : : :		: : : : : : : GAS METER T	 /PE: RKI Eagle		
2014/04	4/09	0.0 m	254 mm	Vacuum Excavato							Badger I	Daylighting Inc.		LOGGED: GWC		AFTED: I	MLM
2014/04 2014/04	4/10	2.4 m	203 mm	Acker Track Rig;	Hollow	Stem	Auger				Maple L	eaf Drilling Limited		PA	RSO	NS	5

			ak Point Highway, V	Winnipeg, Mar	nitoba				7 1 '					. NO)-51						_		BH-16		
	NT: Imperia											_		ELE				00.2					T DATE:		14/04/09	
			nt at the NE corner m (Refer to Drawi		n)							┝	GR/	ADE I	ELE	V.:	1	00.4	3 m			-	PLETION DATE	201	14/04/09	<u>,</u>
			SCRIPTION	ingo ior iocailo	••7				SA	MPLING							Т					10				
Depth (m)			TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	% /		LAB SAMPLE NA LAB ANALYSI		C	ONC	L VAI ENT (ppm	RAT	ON							COMMENTS MONITORINO NOTES Groundwater Potentiometr on date note	G WELL S ic Surface	MONITORING WELL	Depth (ft)
-0	ASPHA		L (Fill) - light brown		٥ ر												-		-				 Surface Cover: Flush Mount, 15	2 mm		0
-		grained, sandy, o		i, coarse		G	-	-		BH-16-0.6-1.2 / BTEX						••••••										
-1⊻ - - - -		gray, coarse to fi sand, moist.	ne grained gravel,	silty,		G	-	-	/	PHC F1-F4, VOC, PA PCB, Metals	H,												 2	2014/06/05		<u> </u>
-2			y, some sand, mois			G	-	-		BH-16-1.8-2.4 / BTEX, PHC F1-F4, VOC, PAI PCB, Metals	, н ,															
-3	CLAY -	olive drown, siity	, some sand, damp).		SS	-	100												· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				
2014/06/03 Winnipeg PRINTED: 01/26/2015						ss ss	-	100 100	/																	
RED: 2014/06/03 Winni	- gray b	elow 4.6 m.				ss	-	100																		-
V3-R07.GLB PREPAI						ss	-	100																		
		BOREHOLE at				SS	-	100															 Monitoring Well Well Depth		4.6 m	- - - - - - -
	Dorentin	e Dayiigined to z															· · · · · · · · · · · · · · · · · · ·						 Well Diameter Well Material Screen Type Screened From Screened To	Stainles	51 mm ss Steel 10 Slot 0.9 m 4.6 m	
PARSONS PERICEG REPORT LOG 60 PERICEG DATA V2RUADOT PERICEG LIBRARY V2-R07.GLB PREPARED:																										- 25
NS PE&LCEG REPC																										
GPJ	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT								RAC	TOR							GA	S MF	TFF	PE: RKI Eagle			-
2014/04	1/09	0.0 m	254 mm	Vacuum Excavato							Badger I	Dayliq	hting	nc.							GGE		REVIEW: KAP	DR	AFTED:	MLM
2014/04 품	109	2.4 m	203 mm	Acker Track Rig;	HOLOW	stem /	huger				Maple Lo	eat Di	lling	Limited	L								RS			
5135																										

			k Point Highway, ^v	Winnipeg, Man	itoba							_			NO:		513		0.00)						BH-17	4/04/09	
	ENT: Imperia		t at the NE corner	of Site									_		ELE\ DE E		· .		9.23 9.33				_		T DATE: PLETION DATE:		4/04/05 4/04/11	
			m (Refer to Drawi		n)														0.00	,					E 1 of 1	201		
			SCRIPTION		,				SA	MPLING															COMMENTS			
Depth (m)			TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	RECOVERY %		LAB SAMPLE N	AME/ ES		CO	VCE (p	VAP NTR	ATIC)	N								MONITORING NOTES Groundwater Potentiometri on date noted	WELL	MONITORING WELL	Depth (ft)
	CLAY (I GRAVE sandy CLAY - damp.	L (Fill) - light brov moist.	silty, some sand, wn, coarse to fine g sandy, silty, some g n.	grained,		G	-	-		BH-17-0.6-1.2 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA															Surface Cover: Flush Mount, 152	! mm		0
-2						G	-	-		BH-17-1.8-2.4 / BTEX, PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	,	•																
Winnipeg PRINTED: 01/26/2015	 - gray, -	some sand, mois	t.——————			SS	-	100 100 100										· · · · · · · · · · · · · · · · · · ·							2	014/06/05		↓ ↓ ↓ ↓ 10
2014/06/03						SS	-	100 100 100	/																			
		BOREHOLE at																							Monitoring Well Well Depth Well Diameter Well Material Screen Type Screened From Screened To	Stainles	4.6 m 51 mm s Steel 10 Slot 1.2 m 4.6 m	20
*	RT DATE	START DEPTH	HOLE SIZE	EQUIPMENT			1	ı		1	CONT					•									PE: RKI Eagle	1.		
2014/		0.0 m 2.4 m	254 mm 203 mm	Vacuum Excavato Acker Track Rig; I							Badger Maple L									╞	_		_	SWC			AFTED:	
5133 BH														ہت ن								F			RS	Dr	NS	5

		OCATION: 100 Oa	ak Point Highway, V	Winnipeg, Mar	nitoba							REF. NO: 10-5133				-18		
	ENT: Impe	rial Oil :: Top of fire hydrar	t at the NE corpor	of Sito								GRADE ELEV.:	99.55 m		T DATE: PLETION DATE:	2014/0 2014/0		
		LEVATION: 100.00			n)										E 1 of 1	2014/0	4/11	
			SCRIPTION	<u> </u>					SA	MPLING								
Depth (m)			TIGRAPHY		SYMBOL	SAMPLE TYPE	'N' VALUE	RECOVERY %		LAB SAMPLE N. LAB ANALYS	AME/ ES	▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400			COMMENTS		BACKFILL	Depth (ft)
-0	CLAY GRAV	ND SURFACE (Fill) - olive brown, /EL (Fill) - light brown /y, moist.	silty, some sand, wn, coarse to fine g	grained,		G	-	-										-0
- - - - - - -	CLAY - blac	- blackish brown, s k staining from 1.2	silty, some sand, m m to 1.8 m.	noist.	0.0.0	96	-	-	/	BH-18-0.6-1.2 / BTEX PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA	, •	N						- - -5
-2	- som	ne silt, damp				G	-	-				•						-
3	- moi - son	st below 2.4 m. ne sand, black stair	ing from 2.4 m to 4	4.6 m.		ss	-	100				•						- - - 10
2014/06/03 Winnipeg PRINTED: 01/26/2015						ss ss		100 100	Ľ	BH-18-3.7-4.3 / BTEX PHC F1-F4, Lead, 1,2-DBA, 1,2-DCA								-
	- trac	e gravel below 4.6	m.			SS		100				\						- 15 -
EG LIBRARY V3-R07.GLB	END	OF BOREHOLE at	6 1 m			ss	-	100				•						- - - 20
		ole Daylighted to 2													No Monitoring Well Installed			-
PARSONS PEALCEG REPORT LOG 60 PEALCEG DATA V2.R04.GDT PEALCEG LIBRARY V2.R07.GLB PREPARED:																		- 25 - -
PAR -0																	Ī	
° ₽ STA	RT DATE	START DEPTH	HOLE SIZE	EQUIPMENT	1	<u> </u>	<u> </u>	1			CONT	RACTOR	G/	AS METER TY	PE: RKI Eagle			
*	/04/09	0.0 m 2.4 m	254 mm 203 mm	Vacuum Excavato Acker Track Rig;							Badger	Daylighting Inc. .eaf Drilling Limited		DGGED: GWC		DRAFT	ED: N	LM
2014/	0-7/	2.7 11	200 mm	nonei Haut ruy;		JIGI /	nuyel				iviaµie L			PA	RSO	DN	E	5

			k Point Highway, \	Winnipeg, Man	itoba							REF. NO: 10-5133				EHOLE No: BH-1		
	NT: Imperia												01.35 m				016/04/28	
			nt at NE corner of									GRADE ELEV .: 1	01.46 m				016/04/26	6
ASSIC	GNED ELE		m (Refer to Draw	ings for locatio	n)										PAGE	= 1 of 1		
		DES	SCRIPTION						SA	MPLING						COMMENTS AND		
Depth (m)						Ш	SAMPLE RUN	%								MONITORING WELL	& Monitoring Well	Depth (ft)
pth		страт	GRAPHY			1	RU	Ľ.	ZONE TESTED			SOIL VAPOUR				NOTES		pth
De		SIRAI	IGRAFIT		SYMBOL	PLE	PLE	No.		LAB SAMPLE N		CONCENTRATION				Groundwater Potentiometric Surface		ے
					SYN	SAN	SAN	REC R	NZ N	LAB SAMPLE N		(ppmv) 100 200 300 400				on date noted		
													:::					
													÷ ÷ ÷	: : : :	: : :			
													÷ ÷ ÷			Surface Cover:		
-0		D SURFACE									.					Flush Mount, 152 mm		
F		IC CLAY - black,	some sand, some	e silt, trace		ş	$\Lambda /$		/	1								ŧ
-		ID CLAX - gravis	h brown, some gra		Ŵ	G	IV			BH-19-0.0-0.6 / Metals,	лн 🔺		: : : 	: : : : : ;				Ł
-	some	sand, damp.	in brown, some gre	avei,	XX		$ \Lambda $		/	bir io dio dio motalo,	Γ							8- 8-
		, i			X		$\langle \rangle$		/		.							Ł
-					X		$\Lambda /$			1								-
F					X	16	IV.	_		BH-19-0.6-1.2 / Metals,	рН							i.
-1					X	1	$ \wedge $		/	/ IN 0.0 1.2 / WOLDIN,	P11		::::				· :	ŧ
F					W)	1_	()		1		.						. <u> </u>].	Ł
-					XX	1	$\Lambda /$			1			::::				I.E.	ł
F						1	IV						 	: : : : 				÷_5
ŀ _					XX	1	$ \Lambda $		/		T		÷ ÷ ÷			0040/05/	, E	÷ ~_
ŢŢ					XX	1	$\langle \rangle$		/		.					2016/05/1	¹⁶ : <u> =</u> ··	Łł
-2						1	$\Lambda /$			1								<u>.</u>
F ²					XX	1	IV						. <u>.</u>					÷
-					X	1	IA	-	/		Ī							ł
-					XX	1	$\langle \rangle$		/		.							£
F	SILT - d	ark grayish brow	n, some clay, trace	e gravel,			$\Lambda /$	1		1			÷ ÷ ÷				.E.	ł
F	trace s	and, moist.				G	IV		/	BH-19-2.4-3.0 / Metals,								Ł
E						ľ	$ \Lambda $	-	/	DH-19-2.4-5.07 Wetab,			:::::				I.E.	ł
₹_3							$\langle \rangle$		/				. : : : : : : : : : : : : : : : : : : :					.⊢10
2016/7	SILT - li	ght yellowish bro	wn, sandy, some o	clay, trace			$\Lambda /$				[ŀ.⊟.	÷
	gravel,	moist.				G	IV		/	BH-19-3.0-3.7 / Metals,							I.E.	÷
- LA						, G	$ \Lambda $	-	/	DH-19-3.0-3.7 / Metals,	pn –						: =]:	÷
Bed-	CLAY -	olive brown, silty	, trace sand, damp).	XX	1	/		/								I E	£
Min					X		Λ /				[I.E.	E
13					XX		IV		/	BH-19-3.7-4.3 / Metals,							:E :	÷
4					W		IA	-	/	DI-18-5.7-4.57 Welds,	pri T							t
- See					X		$\langle \rangle$		/		.		. <u>.</u>					L
-					X		$\Lambda /$											ł
					X		IV											- 15
12.GLB					X	G	ľŇ	-		BH-19-4.3-5.0 / Metals,	pH	• • • • • • • • • • •	÷ ÷ ÷					10
V3-K12					XX	1	$ \rangle \rangle$		/									L
5	END OF	BOREHOLE at	50 m		21/	1	(1	-								1
- 18											.		. <u>.</u>			Monitoring Well Installed	4.0 m	Ł
	Borehol	e Daylighted to 1	.5 m										::::			Well Diameter	51 mm	Ł
- E8											.					Well Material	PVC 10 Slot	Ł
																Screened From	1.0 m	Ł
-404 -																Screened To	4.0 m	Ł
N -											ľ							E
-6												: : : : : : : : : :						-20
											1.							F 20
1-																		E
											1.							F
												:::::::::	::::					F
- F											1.		•••••					F
- -																		F
SONS				1									<u> </u>					
*		START DEPTH	HOLE SIZE		10/-/	Le:						RACTOR		GAS ME		YPE: RKI Eagle REVIEW: KAF DI	RAFTED:	TES
2016/04/		0.0 m 1.5 m	254 mm 152 mm	Vacuum Excavator; Acker Renegade; S								Daylighting Inc. xaf Drilling Limited	ŀ					
33 60.												-		-		RSO		
á I			1	1							1			-	_			

			ık Point Highway, ∖	Winnipeg, Mani	itoba								RE	F. N	10:	10-	5133						В	ORE	EHOLE No:	3H-20		
	VT: Imperia												ΤP	C El	LEV			10	1.47	'n			S	STAR	RT DATE:		6/04/25	
BENC	HMARK:	Top of fire hydrar	nt at NE corner of	Site									GR	ADE	E EL	.EV		10	1.62	2 m			C	COM	PLETION DATE:	201	6/04/26	6
ASSI	GNED ELE	VATION: 100.00) m (Refer to Draw	ings for locatior	ר)																		P	PAGE	E 1 of 1			_
		DES	SCRIPTION					ç	SA	MPLING															COMMENTS			
Ê.						ш	7	%	-	_															MONITORING	WELL	MONITORING WELL	ŧ
Depth (m)						ĽĽ	SAMPLE RUN	Ϋ́	ZONE TESTED									+							NOTES		le la	Depth (ft)
)ep		STRAT	TIGRAPHY		SYMBOL	Щ	Щ	M	Ë				SC CON	UL V)UR	DNI								Groundwater		S ≥	Å
					ΥM	AMF	AMF	ы Ш	NO	LAB SAMPLE NA				(pp	omv)										Potentiometric on date noted	: Surface	ž	_
					S	S	S	ц	N	LAB ANALYSE	-5		100	200	300) 4	00	_	: :	:		:	: :		on date noted			
													: :	÷	÷÷	÷	÷ ÷		÷÷	÷		÷						
												÷	: :	÷	: :	÷	: :		: :	÷		:	: :					
													: :	÷	÷÷	÷	÷÷		: : :	÷								
												1	: :	÷	: :	÷	: :		: :	÷	:	:	: :					
													: :	÷	÷÷	÷	÷ ÷		÷ ÷	÷		÷	: :					
		D SURFACE											: :	÷	: :	÷	: :		: :	÷		:	: :		Surface Cover: Flush Mount, 152	mm		
-0			, some sand, some	silt trace	2223				_				· : · :	•••••••	÷÷	•	÷÷÷	•••••	÷	÷	• •			•••••••	Tidori Noditi, 102		<u>8 – 8</u>	-0
Ē.		, damp.	, some sand, some				$\mathbb{N}/$		/				: :	÷	÷÷	÷	÷ ÷		÷÷	÷		÷						F
-	SILTAN	D CLAY - gravis	h brown, some gra	avel.	XX	G	X	-		BH-20-0.0-0.6 (DUP-1) Metals, pH	/				÷;		÷.;	•••••					;;					F
Ł	some	sand, damp.			XX	1	$ \rangle$		/	wetals, pri			: :	÷	÷÷		: :		: :	:		:	: :					÷
F						1	()								÷;		÷											-
ł					X	1	$\Lambda /$: :	÷	: :	÷	: :		: :	÷		÷	: :					-
F			<u>.</u>			G	IV.			BH-20-0.6-1.2 / Metals,	ы																	÷.
<u> </u> 1			some sand, trace	gravel,	111		$ \Lambda $	-		/ IVICID,	r" '		::	÷	: :	÷	: :		: :	÷		÷	: :	:			:片:	ł
Ę	damp.) i		$\lfloor \$: E ·	£
F					.HH		Λ7		7	1	I		: :		: :			1	: :				: :				目	÷
Ł				ł	111	1.	IV						: :	÷	: :	÷	: :		: :	÷		:	: :				: =]``	÷
F	- dark b	prown below 1.5 r	m.		Жł	G	Ň	-		BH-20-1.2-1.8 / Metals,	pH				: : :	•									1		<u> </u>	₽°_
⊦ Ţ					łH	ł	$ \rangle \setminus$		/				: :	÷	÷÷	÷	÷÷		÷÷	÷		÷	: :		20	16/05/16	E.	<u>†</u> 1
				ŕ	111	┢	()							•••••••	÷ :	•	÷ :	•••••	÷ • •	•	• •	••••	: :					÷
-2	GRAVE	L - gravish brown	n, coarse to fine gr	ained.		ſ	\mathbb{N}						: :	÷	÷÷	÷	÷ ÷		÷ ÷	÷		÷					L E	1
Ē.	sandy	, clayey, some sil	t, wet.		0.e	G	X	-		BH-20-1.8-2.4 / Metals,	pН			•••••••••••••••••••••••••••••••••••••••	÷÷	•	÷.;	•••••		·	· .	·:	:; :		•		∶E ·∶	÷
-					0 e		$ \rangle$		/				: :	÷	÷÷		: :		: :	:		:	: :				ŀE.	ł
-					00	1	$\left(\rightarrow \right)$		/						÷÷	•	÷	••••••	÷			·••••					I:EI:	ŀ
F							$\mathbb{N}/$: :	:	: :	÷	: :		: :	:		:	: :				: El· :	ļ.
-					A A	G	I X	-		BH-20-2.4-3.0 / Metals,	pН	.			÷,	 		•••					: :;				: <u> </u> :	<u>;</u>
t i	CLAY -	black, silty, trace	gravel, trace sand	l, damp.	Ŵ					,	···]	1	: :	÷	: :	÷	: :		: :	:		:	: :				ŀΕ.	÷
≝ –3					X		$\langle \rangle$		/						<u>.</u>					. <u>.</u>							= = : :	.⊢10
7/1/07	SILT - v	ellowish brown, s	some clay, trace sa	and,	ΠŤ	1	$\Lambda /$			1			: :	÷	: :	÷	: :		: :	÷		÷	: :				I.E.	÷
	damp.						IV						: :	÷	÷÷	÷	÷÷		: : :	÷		:	: :				I E	÷
	CLAY -	olive brown, som	ne silt, trace sand, o	damp.		G	$ \Lambda $	-		BH-20-3.0-3.7 / Metals,	рн 4				Ì												.E	F
Ê.				ŕ		1	$/ \setminus$		/				: :	:	: :	÷	: :		: :	:		:	: :				I.E.	-
							$\left[\right]$							••••••	:; : : :	• • • •		•••••				••••	(•••) :		1		:E.	÷
2						1	$ \rangle$: :	÷	: :	÷	: :		: :	÷		÷	: :					1
EL/90/91/07						G	ΙX	-		BH-20-3.7-4.3 / Metals,	pН			••••••	::	•		•••••		•	•		:::	•••••••				÷–
						1	$ \rangle \rangle$		/				: :	÷	÷÷	÷	÷ ÷		: :	÷		÷						-
AKE						╞	()							•••••••••••••••••••••••••••••••••••••••	÷	•	÷	•••••		·	· .	·:	••••					-
PKEPAKED			, trace sand, damp		XX	1	$\mathbb{N}/$: :	:	: :	:	: :		: :	:		:	: :					-
		onve brown, sity	, trace sand, damp	у.	XX	G	IV	_		BH-20-4.3-5.0 / Metals,	рН				÷÷	•	÷	••••••	÷.;	÷		·••••	÷					- 15
3-K12.GLB					11	1	$ \Lambda $				p	F :	: :	÷	: :	÷	: :		: :	÷	: :	:	: :					F
2						1	$ \rangle$		/		-				÷;		÷÷	•••••					;;					F
₹_5	END OF	BOREHOLE at	5.0 m		<u> </u>	1							: :	÷	: :	÷	: :		: :	÷		÷	: :		Manitaring Wall	natallad		-
			_											:	<u></u>	.:				. <u>.</u>		.:	:.:		Monitoring Well I Well Depth	Islaneu	4.0 m	È.
	Borehol	e Daylighted to 1	.5 m										: :	÷	: :	÷	÷ ÷		: : :	÷					Well Diameter		51 mm	Ł
Ĩ-												÷	: :	÷	: : :	.:	: :		: :	÷		:	: :		Well Material		PVC 10 Slot	Ł
											1							1							Screen Type Screened From		10 Slot 1.0 m	E
404-													: :	÷	: :	÷	: :		: :	÷		÷	: :		Screened To		4.0 m	F
- A3											İ			:	: :								: :					F
6_6													: :	÷	: :	÷	: :		: :	÷		÷	: :					È.
											ł		:::	•••••••••••••••••••••••••••••••••••••••	:: ::	• • •	: ::::::::::::::::::::::::::::::::::::	•••••	::::	• • • •	: :	:::	:::					20
- LE&													: :	÷	: :	÷	: :		: :	÷		:	: :					ţ
											ł		• • • •		÷÷	·		••••••	÷	÷	• •	÷	••••	•••••••••••••••••••••••••••••••••••••••	ł			F
												:	: :	÷		÷				:		÷						Ł
Ě-															÷÷	· .	÷		÷	·					-			F
20														÷		÷				:		:						F
-7													: :	÷	: :	÷	: :		: :	÷		÷	: :					ſ
IS PE													::	÷	: :	÷	: :		: :	÷		:	: :					
STAP	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT		<u> </u>	1			I	CONT		. : 	R	. :	•	. :		. :	÷	<u>. :</u>	. ME	. : =тс		/ PE: RKI Eagle			I
2016/04/		0.0 m	254 mm	Vacuum Excavator;	Water	Lance					Badger													JMB	REVIEW: KAF	DR	AFTED:	TFS
2010/04/		1.5 m	152 mm	Acker Renegade; S							Maple I				əd					ŀ								
33.60																						-	1		RSC		N	
5			1	1																								

2016/7/18

ASSIGNED ELEVATION DESCRIPTION SAMPLING 0 DESCRIPTION SAMPLING 0 GROUND SUPPACE UB SAMPLING 0 GROUND SUPPACE DESCRIPTION 0 - PREADUCEMENT 0 <t< th=""><th></th><th></th><th></th><th>ak Point Highway, \</th><th>Winnipeg, Mani</th><th>itoba</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>RE</th><th>F. N</th><th>10:</th><th>10-</th><th>513</th><th></th><th></th><th></th><th></th><th></th><th>_</th><th></th><th>EHOLE No:</th><th>BH-21</th><th></th><th></th></t<>				ak Point Highway, \	Winnipeg, Mani	itoba								RE	F. N	10:	10-	513						_		EHOLE No:	BH-21		
ASSAMED ELEVATION 1000 r,Refer to Dawing for loadient PAGE 10 Image: Strattige of the Description SAMPLING Image: Strattige of the Description SAMPLING Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image: Strattige of the Description Strattige of the Description Image:														TΡ	C El	LEV	.:		10	1.37	′m			5	STAI	RT DATE:		16/04/25	
DESCRIPTION SAMPLING STRATIGRAPHY g			•											GR	ADE	EEL	.EV	:	10	1.50) m					IPLETION DAT	E: 201	16/04/26	6
End STRATIORAPHY B End A SULVPOR DONENTATION or point Strate A 0 GROIND SUPACE DORANCIES STRATIORAPHY B B A SULVPOR DONENTATION or point Strate B A SULVPOR DONENTATION or point Strate B B A SULVPOR DONENTATION or point Strate B B B B A SULVPOR DONENTATION or point Strate B	ASS	GNED ELE			ings for locatior	ר)																		F	PAG	E 1 of 1			
End STRATIORAPHY B End A SULVPOR DONENTATION or point Strate A 0 GROIND SUPACE DORANCIES STRATIORAPHY B B A SULVPOR DONENTATION or point Strate B A SULVPOR DONENTATION or point Strate B B A SULVPOR DONENTATION or point Strate B B B B A SULVPOR DONENTATION or point Strate B			DES	SCRIPTION						SA	MPLING															COMMEN	TS AND		
Bit Status Bit Status Distance	Ξ						ш	z																		MONITORI	NG WELL	MONITORING	ŧ
Bit Status Bit Status Distance	Ę						E	R	Ϋ́	STE		ŀ		0			םו וו		-							NOT		[É]	Depth (ft)
Bit State Bit State Contract Description	۱ A		SIRAI	IGRAPHY		BOL		ЧШ	No.				-			ITR/		N								Groundwa	ter	No	E
O OROUND SURFACE Surface OROUND SURFACE ORGANIC SUIT - block, some sand, some day, trace gravel, damp. 0 - BH2150/02/Math, pi - - BH2150/02/Math, pi - - - - - BH2150/02/Math, pi - - - - - - BH2150/02/Math, pi -						ΥM	AM	AM	СЩ.	NO.					(pp	omv)										on date no	etric Surface	Σ	
O ORCUND SUFFACE Flat ORGAND SUFFACE Image of the second some day, trace		-				0,	0,	0,			E (E / W / L O		:	00	200	300) 4 :	00	-	: :	:	: :	÷	÷	: :				
D DROWND SUFFACE Plat 0 DRGANDLS IT-black, some sand, some day, trace 3 1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - dive brown, trace sand, moist. 0 - 9H250612/Wesk pH -5 END OF BOREHOLE at 5.0 m 0 - 9H250612/Wesk pH - -6 FND OF BOREHOLE at 5.0 m 0 - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>÷</td><td>: :</td><td></td><td>: :</td><td></td><td>: :</td><td></td><td>: :</td><td>÷</td><td></td><td>÷</td><td>-</td><td></td><td></td><td></td><td></td><td></td></t<>													÷	: :		: :		: :		: :	÷		÷	-					
D DROWND SUFFACE Plat 0 DRGANDLS IT-black, some sand, some day, trace 3 1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - dive brown, trace sand, moist. 0 - 9H250612/Wesk pH -5 END OF BOREHOLE at 5.0 m 0 - 9H250612/Wesk pH - -6 FND OF BOREHOLE at 5.0 m 0 - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>÷</td><td>: :</td><td>÷</td><td>÷÷</td><td>÷</td><td>÷÷</td><td></td><td>÷÷</td><td>÷</td><td>: :</td><td>÷</td><td>÷</td><td>÷÷</td><td></td><td></td><td></td><td></td></t<>													÷	: :	÷	÷÷	÷	÷÷		÷÷	÷	: :	÷	÷	÷÷				
D DROWND SUFFACE Plat 0 DRGANDLS IT-black, some sand, some day, trace 3 1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - dive brown, trace sand, moist. 0 - 9H250612/Wesk pH -5 END OF BOREHOLE at 5.0 m 0 - 9H250612/Wesk pH - -6 FND OF BOREHOLE at 5.0 m 0 - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>÷</td><td>: :</td><td>÷</td><td>: :</td><td>÷</td><td>: :</td><td></td><td>: :</td><td>÷</td><td>: :</td><td>÷</td><td>÷</td><td>: :</td><td></td><td></td><td></td><td></td></t<>													÷	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :				
D DROWND SUFFACE Plat 0 DRGANDLS IT-black, some sand, some day, trace 3 1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - dive brown, trace sand, moist. 0 - 9H250612/Wesk pH -5 END OF BOREHOLE at 5.0 m 0 - 9H250612/Wesk pH - -6 FND OF BOREHOLE at 5.0 m 0 - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>÷</td><td>: :</td><td>:</td><td>: :</td><td></td><td>: :</td><td></td><td>: :</td><td>÷</td><td>: :</td><td>:</td><td>:</td><td>: :</td><td></td><td></td><td></td><td></td></t<>													÷	: :	:	: :		: :		: :	÷	: :	:	:	: :				
D DROWND SUFFACE Plat 0 DRGANDLS IT-black, some sand, some day, trace 3 1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -1 - trace gravel, trace sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -2 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - black, silly, some gravel, some sand, moist. 0 - 9H250612/Wesk pH -3 SET - pale brown, sandy, some day, moist. 0 - 9H250612/Wesk pH -4 CLAY - dive brown, trace sand, moist. 0 - 9H250612/Wesk pH -5 END OF BOREHOLE at 5.0 m 0 - 9H250612/Wesk pH - -6 FND OF BOREHOLE at 5.0 m 0 - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>÷</td><td>: :</td><td>÷</td><td>÷÷</td><td>÷</td><td>1</td><td></td><td>÷ ÷</td><td>÷</td><td>: :</td><td>÷</td><td>÷</td><td>: : :</td><td>Surface Cove</td><td>r.</td><td></td><td></td></t<>													÷	: :	÷	÷÷	÷	1		÷ ÷	÷	: :	÷	÷	: : :	Surface Cove	r.		
UCHANULS II. I. Lands. Some sand, some day, moe a		GROUN	D SURFACE										÷	: :	÷	÷÷	÷	: :		: : :	÷	: :	÷	÷	: :	Flush Mount,			
ShT-graysh brown, dayey, some gravel, some a a bit2-cloud./Muda, pit -1 - trace gravel, trace sand, moist. a bit2-cloud./Muda, pit a -2 CLAY - black, sity, some gravel, some sand, moist. a a bit2-til2-la/Muda, pit a -2 CLAY - black, sity, some gravel, some sand, moist. a a bit2-til2-la/Muda, pit a -2 CLAY - black, sity, some gravel, some sand, moist. a a bit2-til2-la/Muda, pit a -3 SLT - gray, sity, some gravel, some sand, moist. a a bit2-til2-la/Muda, pit a -3 SLT - pale brown, sandy, some dravel, moist. a a bit2-til2-la/Muda, pit a -4 CLAY - olize brown, trace sand, trace sill, drap. a a bit2-til2-la/Muda, pit a -4 CLAY - olize brown, trace sand, moist. a a bit2-til2-la/Muda, pit a a -6 CLAY - olize brown, trace sand, moist. a a bit2-til2-la/Muda, pit a a -6 CLAY - olize brown, trace sand, moist. <td>-0</td> <td>ORGAN</td> <td>IIC SILT - black, s</td> <td>some sand, some</td> <td>clay, trace</td> <td><u>}</u></td> <td>2</td> <td>1</td> <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td>: :</td> <td></td> <td></td> <td></td> <td>: :</td> <td>•••••</td> <td>: :</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>8 m Ø</td> <td>-0 -</td>	-0	ORGAN	IIC SILT - black, s	some sand, some	clay, trace	<u>}</u>	2	1		1		1		: :				: :	•••••	: :				-				8 m Ø	-0 -
-1 - race gravel, trace sand, moiet. -	-	_ grave	, damp.		K		>	IV		/			÷	: :	÷	÷÷	÷	÷÷		÷÷	÷	: :	÷	÷	: : :				-
- trace gravel, trace sand, moist. - trace gravel, trace sand, moist. - d	t			ayey, some gravel,	, some	111	G	IX	-		BH-21-0.0-0.6 / Metals,	pH 🛉	÷٠ ا	: : : :	••••	÷	• • • •	÷••• •••••	•••••	÷•• •	• • • •	;.; :	••••••	: :	÷••••	•			-
- Table grave, race sand, molst.	-	sand,	damp.			Ηł	1	$ \rangle \rangle$		/			÷	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :				-
- Table grave, race sand, molst.	t				ł	·M	<u> </u>	$\left(\right)$	}	1			• • •	: : :	•••••••	÷÷	• • •	÷ :	•••••	÷÷	• • • •	: : :	••••••••	÷··	: :·				-
- Table grave, made serie, molst.	-				ĺ	111	1	\mathbb{N}					÷	: :	÷	÷÷	÷	: :		÷÷	÷	: :	÷	÷	: : :				ŧ
-2 CLAY - black, silly, some gravel, some sand, moist. 0 - BH28-12.81/ Mask, pi • -2 CLAY - black, silly, some gravel, some sand, moist. 0 - BH28-12.82.4/ Mask, pi • -3 SILT - pale brown, cares of fine 0 - BH28-12.82.4/ Mask, pi • -3 SILT - pale brown, sandy, some gravel, some silt, damp. 0 - BH28-12.82.4/ Mask, pi • -3 SILT - pale brown, sandy, some clay, moist. 0 - BH28-12.82.4/ Mask, pi • -4 0 - BH28-12.82.4/ Mask, pi • • • -4 0 - BH28-12.82/ Mask, pi • • • -4 0 - BH28-12.82/ Mask, pi • • • -5 END OF BOREHOLE at 5.0 m BH28-12.82/ Mask, pi • • • • -6 END OF BOREHOLE at 5.0 m BH28-12.82/ Mask, pi • • • • -7 END OF BOREHOLE at 5.0 m BH28-12.82/ Mask, pi •	Ŀ,	- trace	gravel trace san	d. moist	ļ	111	G	X	-	/	BH-21-0.6-1.2 / Metals,	pH 🛉	÷÷،	:::	· • : • •	÷ :	•	÷ :	••• •	÷.;	• 🕂 •	: · :	•••••••••••••••••••••••••••••••••••••••	÷	÷÷			۳Ľ.	¥-
CLAY - black, silly, some gravel, some sand, moist. GRAVEL - dark gravish brown, coarse to fine GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace silt, dark gravite trace sand, trace silt, dark gravite trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace silt, dark gravite trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace sand, trace silt, dark gravite trace sand,	F		g. avoi, auto ouri			H	1	$ \rangle$		/			•	÷	:	: :	:	: :		: :	÷	: :		÷	: :			: <u> </u>].'	ł
CLAY - black, silly, some gravel, some sand, moist. GRAVEL - dark gravieh brown, coarse to fine GRAVEL - dark some sand, moist. CLAY - black, sandy, some gravel, some sand, moist. CLAY - black, sandy, some clay, moist. GRAVEL - dark gravel, some sand, moist. GRAVEL - dark gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some gravel, some gravel, some sand, moist. GRAVEL - dark gravel, some graver, some gr	F				ĺ	HH	1—	$\left(\right)$	}	1	,	-	• 🔆 •			÷÷	·÷··			÷	÷	÷	•••••••••	÷··	÷			I:EI:	÷
CLAY - black, silly, some gravel, some sand, moist. GRAVEL - dark gravish brown, coarse to fine GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravish brown, trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace silt, dark gravite trace sand, trace silt, dark gravite trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace silt, dark gravite trace sand, trace silt, moist. GRAVEL - dark gravite trace sand, trace sand, trace silt, dark gravite trace sand,	F					111	1	/		/			÷	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :				÷
-2 CLAY - black, silty, some gravel, some sand, moist. 9 - BH2F1-52.4/ Mash, pH -3 SLT - pale brown, coarse to fine 9 - BH2F1-52.4/ Mash, pH -3 SLT - pale brown, sandy, some day, moist. 10 - BH2F1-52.4/ Mash, pH -3 SLT - pale brown, sandy, some day, moist. 10 0 - BH2F1-52.4/ Mash, pH -4 -3 SLT - pale brown, trace sand, trace silt, moist. 0 - BH2F1-52.4/ Mash, pH - -4 -4 0 - BH2F1-52.4/ Mash, pH - - -5 END OF BOREHOLE at 5.0 m BH2F1-52.4/ Mash, pH - - - -6 -7 -7 END OF BOREHOLE at 5.0 m - - - -7 END OF BOREHOLE at 5.0 m - - - - - - -7 END OF BOREHOLE at 5.0 m - - - - - - - - -7 END OF BOREHOLE at 5.0 m - - - - - - - - - - - -	╞				l l	Шł	G	ΙX	-		BH-21-1.2-1.8 / Metals,	рН	٠÷۰	•••	•••••••	÷;	• • • •	÷.;		÷;				÷	÷.;.			∶E⊡	5
-2 CLAY - black, silty, some gravel, some sand, moist. 9 - BH2F1-52.4/ Mash, pH -3 SLT - pale brown, coarse to fine 9 - BH2F1-52.4/ Mash, pH -3 SLT - pale brown, sandy, some day, moist. 10 - BH2F1-52.4/ Mash, pH -3 SLT - pale brown, sandy, some day, moist. 10 0 - BH2F1-52.4/ Mash, pH -4 -3 SLT - pale brown, trace sand, trace silt, moist. 0 - BH2F1-52.4/ Mash, pH - -4 -4 0 - BH2F1-52.4/ Mash, pH - - -5 END OF BOREHOLE at 5.0 m BH2F1-52.4/ Mash, pH - - - -6 -7 -7 END OF BOREHOLE at 5.0 m - - - -7 END OF BOREHOLE at 5.0 m - - - - - - -7 END OF BOREHOLE at 5.0 m - - - - - - - - -7 END OF BOREHOLE at 5.0 m - - - - - - - - - - - -	Ē _				[.	łĤ	}	$ \rangle$		//			÷	: :	÷	÷÷	÷	÷ ;		÷÷	÷	: :	÷	÷	÷÷			I EI.	F _
CLAY - black, silly, some gravel, some sand, moist. GRAVEL - dark (grav)sh brown, coarse to fine GRAVEL - dark (grav)sh brown, coarse to fine CLAY - black, sandy, some gravel, some sill, damp. CLAY - black, sandy, some day, moist. CLAY - olive brown, trace sand, trace sill, moist. CLAY - olive brown, trace sand, moist. CLAY - gray, silly, trace-sand, moist.	- ⊻	<u>'</u>			ł	11	1	$\left(\right)$		1						÷;		÷.;		÷;	. <u>.</u>			÷	÷.;.		2016/05/16	I:E	Ł
CLAY - black, silty, some gravel, some sand, moist. GRAVEL - dark (grav)sh brown, coarse to fine GRAVEL - dark (grav)sh brown, coarse to fine CLAY - black, sandy, some gravel, some silt, damp. CLAY - black, sandy, some day, moist. CLAY - olive brown, trace sand, trace silt, moist. CLAY - olive brown, trace sand, trace silt, moist. CLAY - olive brown, trace sand, moist. CLAY - gray, silty, trace	L,				ĺ	XH	j	$\Lambda /$	1		(÷	: :	:	: :	•	: :		: :	÷	: :	÷	:	: :				ł
CLAY - black, sandy, some gravel, some sal, moist. GRAVEL - dark gravita hown, coarse to fine grained, some sand, moist. CLAY - black, sandy, some day, moist. CLAY - olive brown, trace sand, trace silt, moist. CLAY - olive brown, trace sand, trace silt, moist. CLAY - olive brown, trace sand, trace silt, moist. CLAY - gray, silty, trace sand, moist. CLAY -	²					111	G	IV			BH-21-1 8-2 4 / Metals	nH		: : :		<u>.</u>	. <u>.</u>			<u>.</u>	. <u>.</u>	: : :		<u>.</u>	<u>.</u>			[:]E	÷
grained, some sand, moist. CLAY - black, sandy, some gravel, some silt, damp. BH2H244.0/Medb, pH -3 SILT - pale brown, sandy, some day, moist. BH2H24.30.7/DUP-5/ CLAY - olive brown, trace sand, trace silt, moist. BH2H24.30.7/DUP-5/ -4 G - -4 G - -5 END OF BOREHOLE at 5.0 m Moist. Borehole Daylighted to 1.5 m Moist Moist -7 CART DATE START DATE START DATE START DATE	E				V	W		$ \Lambda $		/	DIT 21 1.0 2.47 Micials,	T		: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :			[:]E]:	.t
CLAY - black, sandy, some gravel, some silt, damp. SILT - pale brown, sandy, some clay, moist. CLAY - olive brown, trace sand, trace silt, moist. CLAY - gray, silty, trace sand, moist. CLAY - gray, silt	F	GRAVE	L - dark grayish l	brown, coarse to fi	ine _	°0 =	-	/		/					÷	i i			. .	÷÷				÷					÷
SILT - pale brown, sandy, some clay, moist.	┢		d, some sand, m	oist.	ilt. damm			Λ /	1							: : :	÷			•			÷	÷				ŀ.⊟∵	÷
SILT - pale brown, sandy, some clay, moist. III III IIII IIII IIIII IIIII IIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Ē.	CLAY -	black, sandy, sor	me gravel, some si	iit, damp.			IV					:	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :			: <u> </u>].:	÷
CLAY - olive brown, trace sand, trace silt, moist. G - BH3253032 (DUP-8)/ Media, pH -4 G - BH3253023 (DUP-8)/ Media, pH - -4 - - - - -5 END OF BOREHOLE at 5.0 m Borehole Daylighted to 1.5 m Mon Mon -6 - - - - -7 TART DATE START DATE START DATE START DATE START DATE EQUIPMENT	ŀ						G	$ \Lambda $	-	/	BH-21-2.4-3.0 / Metals,	рн 4		:::		: : :		÷ :		:::		: :	÷		: : :	1			F
CLAY - olive brown, trace sand, trace silt, moist.	₹_3	SILT - p	ale brown, sandy	y, some clay, moist	t		ſ	$\langle \rangle$		V			÷	: :	÷	÷÷	÷	: :		÷ ÷	÷	: :	÷	÷	: : :			∶E `∶	÷
G CLAY - gray, silty, trace sand, moist G C BH-21-3.3.7 (DUP-6)/ G C BH-21-3.7-4.3 / Meda, pH G CLAY - gray, silty, trace sand, moist G CLAY - gray, silty, trace sa	1910		olivo brown trac	o cond traco cilt r	moiet		4	1				1	:	:::		: : :		•	•••••	:::		:::				•		l El·	
-4 -4 <td< td=""><td>- 2</td><td>CLAI-</td><td>Unve brown, trac</td><td>e sanu, trace sit, i</td><td>noisi.</td><td></td><td>1</td><td>IV</td><td></td><td> /</td><td></td><td>,</td><td></td><td>: :</td><td>÷</td><td>÷ ÷</td><td>÷</td><td>: :</td><td></td><td>: :</td><td>÷</td><td>: :</td><td>÷</td><td></td><td>: :</td><td></td><td></td><td>ŀΕ</td><td>÷</td></td<>	- 2	CLAI-	Unve brown, trac	e sanu, trace sit, i	noisi.		1	IV		/		,		: :	÷	÷ ÷	÷	: :		: :	÷	: :	÷		: :			ŀΕ	÷
CLAY - gray, silty, trace sand, moist.	Z -				ł		G	IŇ	-		Metals, pH	′ †	÷	:::	•••••••••••••••••••••••••••••••••••••••	÷÷	÷		•••••	÷.;	÷	:::	•••••••••••••••••••••••••••••••••••••••	÷	÷••••	•		I:E	<u>.</u>
CLAY - gray, silty, trace sand, moist.	- 				E		1	$ \rangle \rangle$		/			÷	: :	÷	: :	÷	÷ ÷		: :	÷	: :	÷	÷	: :			1.E.	t
CLAY - gray, silty, trace sand, moist.					E		┢	$\left(\right)$	}	1			•••••	•••	•••••	÷÷	• • • •	÷••	••••••	÷••	• • • •	÷÷	••••••	•••	÷•••			I.E.	÷
CLAY - gray, silty, trace sand, moist.	≤				E		1	\mathbb{N}					÷	: :	÷	÷÷	÷	÷ ÷		÷÷	÷	: :	÷	÷	÷÷			1.E.	÷
CLAY - gray, silty, trace sand, moist.	-4				Ē		G	X	-	/	BH-21-3.7-4.3 / Metals,	pH	÷٠	<u>.</u>	•••••••••••••••••••••••••••••••••••••••	÷÷	• • • •		••••••	÷	• • • •	÷÷	•••••••••••••••••••••••••••••••••••••••	÷··	÷ • • •				ŀ
G - BH-21-4.3-5.0 / Metak, pH Mon -5 END OF BOREHOLE at 5.0 m Well Well Borehole Daylighted to 1.5 m - - -6 - - - -7 - CONTRACTOR GAS METER TYPE: F					Ē		1	$ \rangle$		/			÷	: :	÷	: :	•	: :		: :	÷	: :	:	:	: :				-
G - BH-21-4.3-5.0 / Metak, pH Mon -5 END OF BOREHOLE at 5.0 m Well Well Borehole Daylighted to 1.5 m - - -6 - - - -7 - CONTRACTOR GAS METER TYPE: F	AKE				F		1—	$\left(\right)$	}	1	/		• 🔆 •	:.:		÷.;	• • •	÷.;	•••	÷	• • • •	:.:	••••••••	÷					F
G - BH-21-4.3-5.0 / Metak, pH Mon -5 END OF BOREHOLE at 5.0 m Well Well Borehole Daylighted to 1.5 m - - -6 - - - -7 - CONTRACTOR GAS METER TYPE: F	Ť.		arov cilty traco	cand moist		<u></u>	1	$\Lambda /$					÷	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :				F
5 END OF BOREHOLE at 5.0 m Borehole Daylighted to 1.5 m -6 -7 START DATE START DATE START DATE START DATE		CLAI-	gray, sity, traces	sanu, moisi.	E	XX	1	IV	_		BH-21-4 3-5 0 / Motoks	-H		;.;		÷		÷.;	•••	÷.;	. <u>.</u>	;.;		÷					- 15
5 END OF BOREHOLE at 5.0 m Borehole Daylighted to 1.5 m -6 -7 START DATE START DATE START DATE START DATE	417.6				Ê	X	1	$ \Lambda $	-	/	Di 1-2 1-4.3-5.07 Micialis,	T		: :	÷	: : :	÷	: :		÷ ÷	÷	: :	÷	÷	: : :				ŀ
Borehole Daylighted to 1.5 m 	Ž.				Ê	XX	1	$ \rangle \rangle$		/				: :.:	<u>.</u>	÷;	 	÷.;		÷.;		;.; ;.;		÷					È.
Borehole Daylighted to 1.5 m 	§5	END OF	BOREHOLE at	5.0 m			1			1	-		÷	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :	Monitoring M	oll Installed		4
Borenole Daylighted to 1.5 m Well Well Well Well Well Well Well Well														: : :		<u>.</u>				<u>.</u>	. <u>.</u>		<u>.</u> .	<u>.</u>	<u>.</u>	Monitoring W	ell'Installed	4.0 m	F
	<u> </u>	Boreho	e Daylighted to 1	l.5 m									÷	: :	÷	÷÷	÷	÷ ÷		÷÷	÷	: :	÷	÷	: :	Well Diamete		51 mm	Ł
-6 -6 -7 -7 START DATE START DEPTH HOLE SIZE EQUIPMENT														: :		÷÷				:::	÷			÷		 Well Material Screen Type 		PVC 10 Slot	Ł
Sch - 6 - 6 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	3-													: :		÷ :	÷			÷ ;	÷		÷	-		Screened Fr		1.0 m	F
TART DATE START DEPTH HOLE SIZE EQUIPMENT CONTRACTOR GAS METER TYPE: F	- 104												÷	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :	Screened To		4.0 m	F
TART DATE START DEPTH HOLE SIZE EQUIPMENT CONTRACTOR GAS METER TYPE: F	≤-											1										: : : :				Τ			F
All Image: Contractor Image: Contracto	56												÷	: :	÷	÷÷	÷	÷ ÷		÷ ÷	÷	: :	÷	÷	: : :				F
All Image: Contractor Image: Contracto												1		1.1		: : :	•	1		÷ :	• • • •	: : :	•••••	: :	<u>.</u>	1			20
All Image: Contractor Image: Contracto	Ĩ-												÷	: :	÷	: :	÷	÷		: :	÷	: :	÷	÷	: :				F
B START DATE START DEPTH HOLE SIZE EQUIPMENT CONTRACTOR GAS METER TYPE: F												ł	·	:::	:	:::	· : · ·		•••••		•		•••	:	::::	1			F
All Image: Contractor Image: Contracto	Ĭ												÷	: :	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :				ţ
All Image: Contractor Image: Contracto	Ē											ł	•••••	<u>.</u>		÷	• • • •	÷	••• •	÷	• • • •	÷	••••••	<u>.</u>	÷				F
All Image: Contractor Image: Contracto													÷	: :	÷	: : :	÷	: :		: :	÷	: :	÷	÷	÷÷				Ł
	-7 												÷	: ;	÷	: :	÷	: :		: :	÷	: :	÷	÷	: :				
	ISN I												:	÷			•							÷					
	STAF	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT		I	1		1	1	CONT	RAC	<u>.</u> сто	R		•				÷	GA	S M	ETI	ER T	YPE: RKI Eadle)		
	2016/04	1/25	0.0 m	254 mm	Vacuum Excavator;							Badger	Dayliq	ghting	Inc.						1							AFTED:	TFS
2016/04/26 1.5 m 152 mm Actor Paragada: Salid Stam Augor	2016/04	1/26	1.5 m	152 mm	Acker Renegade; S	o l id Ste	m Au	ger								ed					Ī					DC			
	133.6																							7	4	143			

2016/7/18
			k Point Highway, \	Winnipeg, Mani	toba								REF	. NO	: 10)-51	33						BOR	EHOLE	No:	BH-22		
	VT: Imperia												TPC					101.4				_		RT DAT			16/04/2	
BENC	HMARK:	Top of fire hydrar	t at NE corner of	Site									GRA	DE I	ELE	V.:	1	101.0	61 n	I		_		IPLETIC		re: 20	16/04/20	6
ASSIC	GNED ELE		m (Refer to Draw	ings for locatior	1)				~ •														PAG	E 1 of	1			
		DES	SCRIPTION						_	MPLING																ITS AND	ы	
Depth (m)						ΥPE	SAMPLE RUN	Υ%	ZONE TESTED															МО	NITORI NOT	NG WELL ES	MONITORING	Depth (ft)
eptl		STRAT	IGRAPHY		Ы	Ш	LER	Ä	TES			A	SOII ONC			IR ION								V Gr	oundwa	ter	LN H)ept
					SYMBOL	AMP	AMP		BNC	LAB SAMPLE NA				(ppm	IV)									- Pc	tentiom	etric Surfac	e e	
					Ś	ŝ	S	22	й	LAB ANALYSE	ES	10	0 <u>2</u>	00 3	300	400):			:	: :	:		on	date no	oted		
												:	÷				:	÷	: :	÷	: :	÷	÷÷					
													÷						: :	÷		÷						
													-							÷		-						
													÷					÷	-	÷		÷						
													•						: :	-		÷			ce Cove			
-0		D SURFACE			: ? ? ?						ļ												÷.	Flush	Mount,	152 mm	8	<u>+</u> 0
t		, damp.	some sand, some	siit, trace	ħĤ		$\backslash /$						÷		: :		:	÷	: :	-		-	: :					ł
-	SILT AN	ID CLAY - dark g	ray, trace gravel, t	trace	111	G	X	-		BH-22-0.0-0.6 / Metals,	рН	* :··	•	÷÷	· · · · ·	•••	• • • •	•		· .	÷	•	÷·÷·	•				F
Ē.	sand,	damp.			HH	1	/					:	÷		: :		:	÷	: :	÷	: :	÷	÷÷					E
Ł				ł	11	\vdash	()		-		ł	•••••	•	÷÷		••••	÷	•	÷÷	÷	÷÷	·	÷÷÷					Ļ
-	- dark o	rayish brown, so	me gravel, some s	and,	HI]	$ \rangle $,								: :	÷								1
<u>⊢</u> 1	moist	pelow 0.8 m.	0		H	G	Ň	-		BH-22-0.6-1.2 (DUP-2). Metals, pH	′ †	*															÷∐:∶	1
£ .				F	III	}	$ \rangle$						÷				:			÷			: :				:]]:	;
-					111		$\langle \rangle$				t																	÷
					111	G	V			BH-22-1.2-1.8 / Metals,			÷				:	÷	::	÷	::	÷	÷÷					Ē
-		dark grayish brov	wn, some silt, trace	e sand,	\square	G	Λ	-		BH-22-1.2-1.8 / Metals,	рн и		÷										÷ ;				∶E]∶	<u>1</u> 5
[▼	moist.						/		/										:::							2016/05/1	하는	Ł 🗴
-2						N/			1		:	÷				:	÷	: :	÷	: :	÷	÷÷					÷ _	
F ²						G	ΙV	_		BH-22-1.8-2.4 / Metals,	он .	A							: : :	. <u>.</u> .			. <u>.</u>					t.
Ē.	GRAVE	L - dark grayish t d_clavev_some s	prown, coarse to fin sand, some silt, we	ne i							P		÷				:	÷	: :	÷	: :	÷	÷÷				∶Eŀ	+
+	graine	u, olayey, some s	sand, some sin, we		XX		()				ļ			;;.	.;.;	;			;.;	. <u>;</u> .	;;						ŀ∃·	
F					XX		$\backslash /$						÷				:	÷	: :	÷		÷						'- -
E				ĥ	\mathbf{v}	G	X	-		BH-22-2.4-3.0 / Metals,	рН	A		÷÷	•••••		• • • •		÷	·•••••••••••••••••••••••••••••••••••••			÷··					÷
<u> </u>		black, silty, some	sand damn		1XX		$ \rangle\rangle$		/				÷							÷		-					ŀ₿.	÷
			wn, sandy, trace c	lav moist			()		-		ł	•	• • • •			••••	•	•		•••••		•	· · · · ·	•				-10
- 20		gint yonowion bro	win, sailay, trace o	idy, molot.			$\backslash/$						÷		: :		:	÷	: :	-		-	: :				l:≣·	
				:		G	X	-		BH-22-3.0-3.7 / Metals,	рН 🖌	.	• • • •		· · · · ·	••••	•	• • •				•	÷					ŀ
6 -		olivo brown, com	e silt, trace sand, i	· moint	ļļļ	ļ	$/ \setminus$:	÷	: :	: :		:	÷	: :	÷	: :	÷	: : :				ŀ.⊟.	÷
dinniy -	CLAT-	Unve brown, som	ie siit, trace sanu, i	inuisi.		<u> </u>	()				t	••••	• • • •	•••• •••	••••	••••	· : · ·	•••••	: · · · : :	••••	: : :	• • • •	· · · · · ·				:=]:	÷
2/13							V						÷				:	÷	: :	÷	: :	÷	÷÷				ŀ.∃:	}
- 4 - 4						G		-		BH-22-3.7-4.3 / Metals,	рН ∦																	1
	L						/		/								÷		: : :	÷		÷	÷.					E
PREPARED	CLAY -	gray, silty, trace s	sand, moist.		X		Ν/			1			-				:	-										
- -					X		V							;.;.					; ;	. <u>;</u> .	;							
- 12.61					X	G		-		BH-22-4.3-5.0 / Metals,	pH 4	•	÷				:	÷	: :	÷	: :	÷	÷÷					
223				ł		1	$/ \setminus$				ł			: : : ::					; ; ; · ;	.;	: :;	. . .						ŀ
18 - 5	END OF	BOREHOLE at	5.0 m										÷		: :		:	÷	: :	÷	: :	÷	: :	Monit	orina W	ell Installed	<u></u>	-
- E0	Borehol	e Daylighted to 1	5 m								ł	• • • •			· · · · ·					· • •		•	÷	• Well	Depth		4.0 m	F
100	Doreno	e Daylighted to 1	.5 11										-					-							Diamete Materia		51 mm PVC	-
											ł	• • • •	• • • •	•	•••••	••••	•••••	•••••		•		•	÷	· Scre	en Type	;	10 Slot	-
- 304.G													:		: :		:	•	: :	-		-	: :		ened Fr ened To		1.0 m 4.0 m	-
- A 3-											ł	••••	• • • •	}· ↔ : :	•••••	••••	• • • •	•••••	}· ⊹ : :	• • •	•••• ••••	• • • •	· · · · · · · · · ·	•				-
6-6												:	÷		: :		:	÷	: :	÷	: :	÷	: : :					-
											t						1		::::		: : :							- 20
8																												E
900											İ									-				1				E
- -														;;;					; ;									F
G REF																	:			-		-						F
≝ 7													÷				:			÷	: :							ŀ
S PE												:	÷				:	÷		÷		÷	: :					
STAR	I T DATE	START DEPTH	HOLE SIZE	EQUIPMENT		<u> </u>	<u> </u>				CONT	RAC	TOR	<u>· ·</u>	<u>· ·</u>		·	·	• •	G	AS N	/ET	ER T	YPE: R	KI Eaqle	9		1
2016/04/	/25	0.0 m	254 mm	Vacuum Excavator;							Badger	Daylig	nting In										JME		/IEW: K		AFTED:	TFS
පි 2016/04/ ස්	/26	1.5 m	152 mm	Acker Renegade; So	olid Ste	m Aug	ger				Maple L	.eaf Dr	lling Li	mited														
5133																						-			E			

2016/7/18

BORE	EHOLE LO	CATION: 100 Oa	k Point Highway, V	Winnipeg, Mani	itoba								REF	F. NC	D: 1	0-51	33					B	ORE	HOLE No:	BH-23		
	VT: Imperia												TPC					01.50				_		T DATE:		6/04/26	
			t at NE corner of										GR/	ADE	ELE	V.:	1	01.70) m			-		PLETION DAT	E: 201	6/04/27	7
ASSIC	GNED ELE		m (Refer to Draw	ings for location	n)																	P/	AGE	1 of 1			
		DES	SCRIPTION						_	MPLING														COMMENT		ы	
Depth (m)						YPE	SAMPLE RUN	% ≻	ZONE TESTED															MONITORIN NOTE		MONITORING WELL	Depth (ft)
ept		STRAT	IGRAPHY		Ы	Г Щ	Щ	ĒŖ	TES'				SO	IL VA	POL	JR								Groundwat		NITON	ept
					SYMBOL	MPI	MPI	2	ONE	LAB SAMPLE NA		(CONC	JEN I (ppr		ION								 Potentiome 	tric Surface	MO	
					Ś	S	'S	2	Z	LAB ANALYSE	S	. 1	00 2	200	300	400						: :	;	on date not	ed		
												÷	: :	: :	÷		:	: :	÷		:	: :	:				
												÷	÷÷	÷÷	÷		:	÷÷	÷		:	: :	÷				
												÷	: : :	÷ :	÷		:	÷÷	÷		:	: :	÷				
												÷	: : :	1	÷		:	1	÷		:	: :	÷				
														: :	•				÷					Surface Cover			
-0		D SURFACE		114 4	2223			_	_															Flush Mount, 1		k 2	-0
t		, damp.	some sand, some	e silt, trace	TH		$\Lambda / $					÷	: :	: :	•		:				:		:				-
-	SILT - d	ark gravish brow	n, clayey, some co	obbles,	11	G	XI	-		BH-23A-0.0-0.6 / Metals	, pH	≜ ⊹∙	•	• • • •			· • •	·÷·i	÷		· · · ·	÷÷	• • • •				F
Ē.	some g	gravel, trace san	d, moist.	ĺ]	$ \rangle $		/			÷	: : :	: :	÷		:	÷ :	÷		: :	: :	:				E
Ł					111		$\left(\right)$		-			• 🔆 •	÷÷	····	••••••		÷	·÷·i	÷	÷÷		÷÷	• • • •				-
+					111		$ \rangle/ $: :	•				÷								-
È_1	- damp	below 0.9 m.			HI	G	۱X۱	-	/	BH-23A-0.6-1.2 / Metals	,pH ⊿	• ····							• • • •							[`∐.`]-
ŀ)]])		/ N	/	/										÷							E]_
F					111		$\left(\right)$		1										• • • •							: E :	F
Ł					111		IVI			BH-23A-1.2-1.8 (DUP-7)/		::	: :	÷		:	÷÷	÷		:	: :	÷				F _
-						G	$ \Lambda $	-	/	Metals, pH	· •															ŀ:∃::	
Į T			wn, some silt, trace	e sand,			/	/	/																2016/05/16	∶E⊡	Ŀv
-2	damp.						ΝΛ					÷	: : :	: :	÷		:	: :	÷		:	: :	:			[:]=]:	. <u> </u>
F	L				4	G	IVI	_		BH-23A-1.8-2.4 / Metals	DH 4	<u>.</u>	:.:.						. <u>.</u>	 		: : :					+
t i	CLAY - moist.	dark gray, silty, s	ome gravel, some	sand,	W		$ \Lambda $		/		, p	:	: : :	1	÷		:	1	÷		:	: :	÷			: =]:	ł
+					H	1	$\left(\right)$	_/	_				;	.;;	;	: :;		;		;.;.	.;;	;;				ŀ∃∵	
F			arse to fine graine	d, clayey,	\sum]	$\Lambda / $								÷				÷				÷				- -
Ł		sand, moist.	ilty, some sand, tra	/	XX	G	XI	-		BH-23A-2.4-3.0 / Metals	, pH 🖌	٠÷۰		• • • •		 		• • • •	• • • •	••••		;					ŀ,
<u> </u>	gravel	, damp.	nty, some sand, tra	ace	X		/		/						÷				÷							ŀ₿.∶	-
-3	-		andy, some clay,	traca		1	$\left(\right)$	{						•••••				• 🕂 •	• • • •	· ·						ŀĒ⊡	- 10
D: 20	gravel	ellowish brown, s . moist.	sandy, some clay,	trace		ŀ,	\mathbb{N}/\mathbb{I}								-				÷							ĽEĽ	·
	3	,				G	XI	-		BH-23A-3.0-3.7 / Metals	, pH 🔺	• ÷ ·		•••••				• 🕂 •	• • • •	· · ·							ŀ
60 _							/	/	/			÷	::	: :	÷		:	: :	÷		: :	: :	÷			ŀ.⊟∷	•
dinniy -					:[[]]		1	-	1			· · · ·	: :	••••	•••••	(•••) : :	·:	· : · · · ·	• • • •	• • • • • • •	••••	:; : ::	• • • •			•] <u> </u> .	ŀ
2/13	CLAY -	olive brown, silty	, trace sand, damp). 			IVI						: : :	÷ :	÷		:	1	÷		:	: :	÷			ĿEĿ	+
- 4 - 4					X	1 G	M	-	/	BH-23A-3.7-4.3 / Metals	,pH ⊿																-
					XX		$/ \rangle$	/	/			÷			÷				÷.				÷				E
PREPARED					XX.		ΝA					÷		: :	÷			: :	÷				:				
	SILT-o	live brown, claye	y, trace sand, moi	st.	111		IVI						;.;.	.;.;	;					; ; ; . ; .		; ;;					- 15
12.GLB					H	G	M	-	/	BH-23A-4.3-5.0 / Metals	,pH ⊿		::	: :	÷		:	: :	÷		: :	: :	÷				-
Š.				·		ł	/	/	/						<u>.</u>	: : :;				: : : :		: : :··?					-
бада.	END OF	BOREHOLE at	5.0 m									÷	÷÷	: :	÷		:	÷÷	÷		:	: :	÷	Monitoring We	Installed	<u></u>	-
- E0	Borehol	e Daylighted to 1	5 m											· · · · ·			· · · ·	•	• • • •					Well Depth		4.0 m	E
	Dorenor	e Daylighted to 1	.5 11												÷				÷					Well Diameter Well Material		51 mm PVC	E
												• • •		•••••				• • • •	• • • •	••••			•••••	Screen Type	-	10 Slot	F
- 304.G													: :		•						:		:	Screened Fro Screened To	m	1.0 m 4.0 m	È.
												• • • •	: :	••••	••••••	() : :	· • • •	• • • •	• • • • :	• • • • • • •	••••	•••• • • •	• • • •				-
6-6												÷	: :	: :	÷		:	: :	÷		:	: :	÷				-
													: : :	••••				• • • •	· · · ·	· · ·			••••				- 20
8												:		:::	÷		:	: :	÷		:		<u>:</u>				F
90																											E
- -													;			; ;;				; ; ;							F
- E																											È.
≝ 7												÷		: :	:		:	: :	÷		:		:				F
NS PE												:		: :	÷		:	::	÷		:						
STAR	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT		I					CON	· FRAC		<u>· ·</u> {			:		÷	GAS	S ME	<u>: :</u> ETER	· R TY	PE: RKI Eagle			1
2016/04/	/26	0.0 m	254 mm	Vacuum Excavator;							Badger	Daylig	ghting l i	nc.								D: J		REVIEW: KA	F DR/	AFTED:	TFS
පි 2016/04/ ෂ	/27	1.5 m	152 mm	Acker Renegade; S	olid Ste	em Aug	ger				Maple I	Leaf D	ri ll ing L	.imitec										RS			
5133																						1	-				

2016/7/18

			k Point Highway, V	Winnipeg, Mani	toba										NO:		-51						-		EHOLE		3H-23		
	NT: Imperia														ELE					56 m			_		RT DAT			6/04/2	
			t at NE corner of		,								G	RAI	DE E	ELE	V.:	1	01.	70 m	۱					ON DATE:	201	6/04/2	7
ASSI	GNED ELE		m (Refer to Draw	ings for locatior	ו)																			PAG	E 1 of	F 1			
		DES	SCRIPTION						-	MPLING															C	OMMENTS .	AND	U	
Depth (m)						ΎΡΕ	SAMPLE RUN	۲ %	ZONE TESTED																МО	NITORING NOTES	WELL	MONITORING WELL	Depth (ft)
epth		STRAT	GRAPHY		Ч	Г Щ	щ	RECOVERY %	TES-] _	oundwater		NITO	ept
۵ (SYMBOL	MPL	MPL	0	N	LAB SAMPLE N	AME/														- Pc	tentiometric	Surface	MO	
					Ś	¶ S	SA	R	Я	LAB ANALYS	ES														on	date noted			
												÷	÷		÷			:	÷	: :	÷		÷						
												÷	÷	: :	÷		÷	:	÷	÷÷	÷		÷	÷÷					
												÷	÷	: :	÷	: :	÷	:	÷	÷÷	÷	: :	÷	÷÷					
												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷	: :	÷	÷÷					
												÷	÷	: :	÷	: :	÷	:	÷	: : :	÷	: :	÷	::	Surfo	ce Cover:			
	GROUN	D SURFACE										-	-	: :	÷	: :	-	:	-	÷÷	-		-		Flush	Mount, 152	mm		
-0		to BH-23A.				1					1						••••											Nn (u − 0
-												÷	÷	•	÷	: :	÷	:	÷	÷÷	÷		÷	÷÷					8 <u>-</u>
Ē											İ	· .:-	••••	÷••• :	• • • •	: : : :	•••••••	:	• • • •	: : : :	::	:; : :	•	÷					8- 8-
F												÷	÷	: :	÷	: :	÷	:	÷	÷ ÷	÷		÷	÷÷					\$-
Ē											1					} · (· · · ·	1		:::					1				F
E												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷		÷	÷÷					ŧ
-1											1	:						1							1				E
ļ																:											16/05/16		Ł
ŀ												÷					÷	Ì					÷	÷÷	1				E
È												÷	÷.			:::	÷	:	ġ.	÷. ;			÷	÷.					-5
ŀ												÷		::	÷	: :		:	÷	: :	:		÷	•					
- I	<u>,</u>													<u>.</u>	<u>.</u>	:;;		<u>;</u>		÷						20	16/05/16		Ł I
-2												÷	÷	: :	÷	: :	÷	:	÷	÷÷	÷	: :	÷	÷÷					-
-2													. <u>.</u> .	<u>.</u>	. <u>.</u>	<u>.</u>	<u>.</u> .	<u>:</u>	. <u>.</u>					. <u>.</u>					8 -
E .												÷	÷	: :	÷	: :	÷	:	÷	÷ ÷	÷		÷	÷÷					£
-													.;.	;		;.;	;.	÷.,		;	.;	:;							÷
F												÷	÷	: :	÷	: :	÷	:	÷	÷÷	÷	: :	÷	÷÷				ŀ.⊟:	1
ŀ			0.7			4								: :;		;.; ;.;		;		;.;.	.;	: : (• • • •		÷.;.;.				ĿE.	<u> </u>
Ē		BOREHOLE at	2.7 m									÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷		÷	: :	Moni	toring Well Ir	nstalled	0.7	-
	Borehol	e Daylighted to 1	.5 m									· ÷		÷;			· · ÷ ·	÷	· ÷ ·					÷·÷·	• Well	Depth Diameter		2.7 m 51 mm	-10
-												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷		÷	: :	Well	Materia		PVC	t
-											-	·÷	· .	÷.;	· ÷··	: : :	· · ÷ ·	÷.,	· ÷··				· .	÷	Scre Scre	en Type ened From		10 Slot 2.4 m	F
<u> </u> -												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷	: :	÷	÷÷		ened To		2.7 m	F
-											ł	·÷	•••••	÷··	• • • •	÷	· · ÷ ·	÷	• 🔆 •	÷÷	· · · ·		·	÷··					F
ŀ												÷	÷	: :	÷	: :	÷	:	÷	÷÷	÷		÷	: :					-
-4											+	÷	÷	÷ • •	• • • •	: : :	•••••••••••••••••••••••••••••••••••••••	÷	•	÷÷			÷	÷÷	•				F
E												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷		÷	÷÷					Ł
ŀ											ł	÷	••••		• • • •		•••••••••••••••••••••••••••••••••••••••	:	·	::::	:		:						-
È.												÷	÷	: :	÷			:	÷	÷÷	÷		÷	÷÷					ţ.
-											İ	•	••••	÷;	• • • •	: : :	•••••••	:	• • • •		•••••	:; : :	•		1				- 15
-												÷	÷	: :	÷	: :	÷	:	÷	÷÷	÷		÷	÷÷					-
-5											1		:::		::::	? · · · · · · · · · · · · · · · · · · ·	· · · ·	:		:::::	::::				1				F
ŀ												÷	÷	: :	÷	: :	÷	:	÷	÷÷	÷		÷	÷÷					F
-											ĺ	:	:	: :			::::	:		: : :				: : :	1				-
ŀ												÷	÷	: :	÷	: :	÷		÷	÷ ÷	÷		÷	÷÷					F
F											Ī					-	÷	÷	1						1				E
ŀ																:;;													E
F												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷	: :	÷	÷÷					Ł
6														<u>.</u>		:;;		<u>;</u>		÷				<u>.</u>					-20
-												÷	÷	: :	÷	: :	÷	:	÷	: : :	÷		÷	÷÷					20
È.															. <u>.</u>	:.:		<u>.</u>	<u>.</u>	<u>.</u>				. <u>.</u>					Ł
╞												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷		÷	÷÷					È.
-													;;.	: :;		;.;	;.	÷		;.;.	.;	: : :;							Ł
-												÷	÷	: :	÷	: :	÷	:	÷	÷÷	÷	: :	÷	: : :					ţ.
-7												÷	÷	: :	÷	: :	÷	÷	÷	÷÷	÷		÷	: : :					F
												÷	÷	: :	÷		÷	:	÷	::	÷		÷	÷÷					
STAR		START DEPTH	HOLE SIZE	EQUIPMENT		I	L	I	1			RA	СТО	DR	:		:	·	·	: :	G/	<u>·</u> AS M	/ET	ER T	YPE: R	KI Eagle			
2016/02	1/26	0.0 m	254 mm	Vacuum Excavator;							Badger	Day	ightir	ng I nc										JMB	RE	VIEW: KAF	DR	AFTED:	TFS
2016/04	\$/27	1.5 m	152 mm	Acker Renegade; So	olid Ste	m Au	ger				Maple L	.eaf [Dri ll in	g Lin	nited														
																							-			150			

BORE	HOLE LO	CATION: 100 Oa	k Point Highway, \	Winnipeg, Mani	itoba								REF	. NC): 1	0-5	133						BOR	EHOLE No	BH-24	A	
	VT: Imperia												TPC	ELE	EV.:			101.	52 r	n			STA	RT DATE:	20	16/04/20	6
			nt at NE corner of										GR/	١DE	ELE	EV.:		101.	66 r	n		_		IPLETION [DATE: 20	16/04/2	7
ASSIC	GNED ELE) m (Refer to Draw	ings for locatior	ר)																		PAG	E 1 of 1			
		DES	SCRIPTION						SAI	MPLING														COMM	IENTS AND		
Depth (m)						Ш	SAMPLE RUN	%																MONITO	ORING WELL	MONITORING	(E)
bt		страт	IGRAPHY			12	R. R.	¥	ZONE TESTED				SO	L VA	POI	IR									IOTES		Depth (ft)
Del		SIRAI	IGRAPHT		IBOI	F	ЪГЕ	<u>S</u>	Ξ	LAB SAMPLE NA	N N 41-7		ONC	CENT	'RA'		N							Ground Detent	lwater ometric Surface	No >	ے
					SYMBOL	SAN	SAN	띮	2 Z	LAB SAMPLE NA		1	00 3	(ppn 200	1V) 300	40	n							on date		2	
															:		÷	1	:	÷	: :	÷	::				
													: :	: :	÷	: :	÷		: :	÷	: :	÷	: : :				
													: :	: : :	÷	: :	÷			÷	: :	÷	: : :				
													÷÷	÷ ;	÷	: :	÷		: :	÷	: :	÷	÷÷				
													: :	: : :	÷	: :	÷		: :	÷	: :	÷	::				
		D SURFACE											: :	: :	÷	: :	÷	÷	: :	÷	: :	÷	÷÷	Surface C	over: int, 152 mm		
-0			rayish brown, som	ne dravel	XX.			-									•			•••••••••••••••••••••••••••••••••••••••			÷	- Tiusi Tiiliou	in, 152 min	8 . 6	0
Ē		sand, damp.	jiayish brown, son	no gravor,	XX		$ \rangle/ $									-			: :	÷		÷					
-					X	G	XI	-		BH-24A-0.0-0.6 / Metals	s, pH	.	÷÷	÷÷	•••••	÷	· · · ·	·÷	• • • •	••••••	÷÷	••••	÷÷÷	•			ŀ
F					XX		$ \rangle $		/				÷÷	÷÷	÷	: :	÷		: :	÷	: :	÷	÷÷				
t					W		$\left(\right)$	- (·	÷÷	÷÷	•••••	÷ • • • •	÷	1.		••••••••	÷÷	÷	÷÷	•			L
\mathbf{F}					XX	1	/		/			:			÷	: :	÷	:		÷		÷					ł
Ļ₁				ŕ	X	G	XI	-		BH-24A-0.6-1.2 / Metals	s, pH 🖌	<u>ن</u>	: :		· : ·	:::	•	1		•••••••••••••••••••••••••••••••••••••••	:::	÷		+			1
+ '					1	1	$ / \rangle $	/	/			:	: :	::	÷	: :	÷	:	: :	÷	::	÷	::			;].:	1
ţ					XX	┣	$\left(\right)$	f						· · · · ·	· · : ·		·			•••		•••••	÷.;.	+		ŀ·II:	1
ŀ					XX]	/		/			:			÷	: :	÷		: :	÷	÷÷	÷	: :			:¦≣⊡	1
E.					X	G	XI	-		BH-24A-1.2-1.8 / Metals	s, pH	≜ ∵ ·	÷÷	÷÷÷	•••••	:··?	• • • •	l ÷	• • • •	••••••	\vdots	••••	÷	•		1.E	-5
ł _	CLAY -	dark gravish brov	wn, some sand, so	ome silt,	///		/		/					: :		: :	-		: :	-	: :	-	::		0010/05/11	.E.	1 _
ţĮ	trace g	gravel, damp.	,				$\left(\right)$	ť									•			•••••••••••••••••••••••••••••••••••••••	÷	•		•	2016/05/16	까.몸.	÷₹
-2						1	$ \rangle/ $							÷÷	÷	: :	÷		: :	÷	: :	÷	÷÷			∶ <u></u> ∃·	ŧ
ļ.						G	XI	-		BH-24A-1.8-2.4 / PAH, Metals, pH	4	÷÷·	: ÷	· · · · · ·	·	:: : :	• • • •			•••••••••••••••••••••••••••••••••••••••	÷ ::	· :	÷.;.	•		∶E]·	÷
F		automatich huser	n, clayey, some gr		ИЛ	1	/		/				: :	÷ ÷	÷	: :	÷		: :	÷	: :	÷	: : :				ł
F		ark grayish brow	n, clayey, some gr	ravei,	11	1	()	- (·		· · · · ·	•••••	:; :	• • • • •	l 🕆	• • • •	•••••••	: : :	••••		•			
ł	SILT d	ark gray, some g	ravel, some sand,		111		$ \rangle/ $			BH-24A-2.4-3.0 (DUP-8	N 4		: :	: :	÷	: :	÷	÷	: :	÷	: :	÷	÷÷			[:]E].	t.
F	¦, clay, d	amp, wood fragn	nents.	il	11	G	XI	-		PAH, Metals, pH	5)/ .	≜ :•• :	: :: :	· • • •		<u>.</u>	• • • •	1:		•••••	:::	•	÷:::	•			ļ-
≋3		moist below 2 5		/	·W	}	/		/				: :	÷÷			-		: :		::	-	÷ ÷				÷
		ark gray, clayey,	trace sand, moist sandy, some clay,			-	$\left(\right)$	ť									•			•••••				•		:=]:	10
- 3	SILT- y	ellowish brown, s	sanuy, some day, i	moist.			V			BH-24A-3.0-3.7 / PAH,									: :	÷		÷				ŀΕ]
						G	١Ň١	-		Metals, pH		≜ … :			÷		• • • •	1		•••••••••••••••••••••••••••••••••••••••	:::	÷				I:EI:	ļ.
68 -						ŀ	/ N		/				÷÷	÷÷	÷	: :	÷		: :	÷	: :	÷	÷÷				ļ.
iuu -		alive brown com	a ailt traaa aand u	maiat	ļļļ		$\left(\right)$:; : :	• • • •			•••••	:::					. ∃ .	ŀ
		olive brown, som	ne silt, trace sand, i	moist.		1	IVI							÷÷	÷	: :	÷		: :	÷	÷ ÷	÷	÷÷			:E:	-
4					G	M	-		BH-24A-3.7-4.3 / Metals	s, pH					: : :				··· ? ·	÷ ;						1	
]	/ N	/	/				: :	: : :	÷	: :	÷		: :	÷	::	÷	: : :				ł
PREPARED	SILT - o	live brown, claye	ist.	111		Λ														: : :		·				-	
				Ш	1	$ \rangle $						÷÷	÷ ;	÷	: :	÷		: :	÷	: :	÷	÷÷				1	
2.GLB					H	G	XI	-		BH-24A-4.3-5.0 / Metals	s, pH			· · · · ·		<u>.</u>		1		····	Ĩ		Ĩ	1			- 15 -
/3-R1				ł	111	1	/														; ;						F
5		BOREHOLE at	50 m		Włł	1	Y Y																				F
			0.0 m																					Monitoring	g Well Installed	4.0 m	E
	Boreho	e Daylighted to 1	.5 m															1		:				Well Diar	neter	51 mm	E
- FE&																: :								Well Mate	erial	PVC	E
															: :		1						Screen T Screened	d From	10 Slot 1.0 m	E	
-R04												÷÷	÷ ;	÷	: :	÷		: :	÷	: :	÷	÷÷	Screeneo		4.0 m	F	
S F																										E	
ĕ6																;;;					: :						-20
Se C															:											20	
12 - 20 -																				<u>.</u>		<u>.</u>				Ł	
ğ_																: :			: :			:					ŧ
													: : ; . :.		<u>.</u> .	: : ;;	: . :			;.	: :						F
- E																: :			:			:	: :				ŧ
																						-	: :				ŀ
IS PE																: :			: :	-		:					
STAR	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT		I		[CON			• ÷ !	·	. :	·	Ŀ		: 	. : AS M		ER T	YPE: RKIE	adle		1
2016/04/		0.0 m	254 mm	Vacuum Excavator;	Water I	Lance					Badger												: JME			AFTED:	TFS
2016/04/	127	1.5 m	152 mm	Acker Renegade; S							Maple																
1133 6																							4		5 0 1		

2016/7/18

				k Point Highway, \	Winnipeg, Mani	itoba												-513						_		EHOLE No:	BH-24		
		: Imperial														ELE				01.5						RT DATE:		16/04/26	
				t at NE corner of										G	RA	DE E	ELE'	V.:	1	01.6	65 n	۱		_		PLETION DA	TE: 20 ⁻	16/04/27	7
AS	SIGN	IED ELE		m (Refer to Draw	ings for locatior	n)	-												_						PAG	E 1 of 1			
			DES	SCRIPTION						SA	MPLING															COMMEN MONITOR NOT Coundwa Potention on date no	ITS AND	0	
Donth (m)	Ē						E	SAMPLE RUN	% /																	MONITOR	NG WELL	NA -	Depth (ft)
4			STRAT	IGRAPHY		F		ERI	(ER)	ZONE TESTED																	10		ept
	5					SYMBOL	MPL	MPL	CO	Щ	LAB SAMPLE N	IAME/														Groundwa Potentiom	etric Surface	NO N	
						S	SA	SA	R	R	LAB ANALYS	SES										_				on date n	oted		
													÷	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: :				
													÷	÷	: :	÷	: :	:		÷		÷	: :	÷	: :				
													i	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: :				
													÷	÷	: :	÷	: :	: :		÷	: :	÷	: :	÷	: :				
														-						-		-		÷		Surface Cove	-		
		GROUND	SURFACE										:	-	: :	-		:		-		•		-	: :	Flush Mount,	152 mm		
-0		- Refer t	o BH-24A.				1					İ												-				ÅпЙ	<u></u> +0 }
F													÷	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: :				ł
Ē												ĺ			Ì		÷						Ì		÷	1			-
E														÷.			::			÷.		÷.	į	÷	÷÷.				E
-													÷	÷	: : :	÷	: :	:		÷	: : :	÷	: :	÷	: : :				ł
Ē															<u>.</u>	. <u>.</u>	:::			. <u>.</u>			<u>.</u>						L
-1														÷	: :	÷		:		÷	:	÷	: :	÷	: :				ł
F																										.			Ļ
ţ														i		-				į		÷		÷					t.
┢												-			÷;		: :.:				••••		: :;						-5
Ē													-		-		:		-				-	: :			- 10003 - 10003	F	
Ł	Ţ														÷.;	• • • •		••••••		·	• •	·•••			÷···	•	2016/05/16		- ₹
-2														-		-		:		-		-		-	: :				£
Ē												ł	•	·:	÷.;	• • • •	: : :	•••		÷	: : : :	·: :	÷••÷	· : ·	÷÷	•			Ļ
F													:	÷	: :	÷	: :	: :		÷	: :	÷	: :	÷	: :				ł
F												1	•	• • •	÷••• •	÷	: : : :	•••••		÷		·:.	:; : :	• • • •	·:···				<u>_</u>
E													÷	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: : :				-
-												İ		••••	: : :	•	} · ;	•••••				••••	: : :	÷		1		E.E.	<u>}</u>
≋–3													÷	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: :				÷
2016/7/18		END OF	BOREHOLE at	3.0 m			1					ĺ			: :										: : : :	Monitoring V	/ell Installed		10
		Borehole	e Daylighted to 1	5 m																÷		÷		÷	÷÷.	Well Depth		3.0 m	E
		Doronoic	buyiighted to 1	.0 111											: :	-		-		÷						· Well Diamet Well Materia	1	51 mm PVC	L
-															: ,								: :;		÷ ; •; • ; •	Screen Type Screened F)	10 Slot	È.
Ň													:	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: :	Screened F	ONI D	2.7 m 3.0 m	-
- 4															: : :•••		: :				: :.::	. <u>;</u> .	: :;	. <u>.</u> .					F
2016													÷	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: : :				F
ARED														•		· ÷· ·				÷		· .	÷;	÷	÷	-			F
PREPARED													:	÷	: :	÷	: :	:		÷	÷	÷	: :	÷	: :				Ē
12.GLB												+	• •	·	÷÷	·÷·	÷÷	••••••		····	÷	÷	÷÷	÷	÷÷÷				- 15
V3-R12.0													÷	÷	: :	÷	: :	:		÷	÷	÷	: :	÷	: :				E
<.⊢														•••••	÷	•	÷	•••••		÷	••••	••••	÷	•		+			-
														÷		÷				÷		÷		÷					F
CEG												1														1			-
PE&													÷	÷	: :	÷	: :	:		÷	: :	÷	: :	÷	: :				F
191												1			Ĩ		: : :			÷			Ĩ		····	1			F
DATA V3-R04.GDT													÷				:::	÷		÷			÷	÷					-
ZA V												Ī														1			E
à⊢6															<u>.</u>		: :				: 	÷.	<u>;</u> ;						-20
PE&LCEG														÷		÷	: :	÷		ł		÷		÷	: :				1
															<u>.</u>					. <u>.</u>			<u>.</u>						Ł
														i	: :	-				÷		÷	: :	÷	: :				F
												-			: :;		: :.:						: :;						Ļ
I I I														-	: :	-				÷		•	: :	÷	: :				F
⁸														-	: :	ł				-		÷		į	: :				ſ
NS PE														÷		÷				-		-		-					
ST AR	ART D	DATE	START DEPTH	HOLE SIZE	EQUIPMENT					·	·	CONT	rr/	CTO	DR .											YPE: RKI Eagl			
	6/04/26		0.0 m	254 mm	Vacuum Excavator;							Badger													JMB			AFTED:	TFS
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6/04/27		1.5 m	152 mm	Acker Renegade; S	olid Ste	em Aug	ger				Maple L	Leaf	Urillin	g Lin	nited										RS			
5133																								1					

			ık Point Highway, ∖	Winnipeg, Mani	toba							_	REF				513							BO	REI	HOLE No:	BH-25		
	NT: Imperia												TPC						01.5				_			FDATE:		6/04/26	
BEN	CHMARK:	Top of fire hydrar	nt at NE corner of	Site									GR/	٩DE	EL	EV	′.:	1(01.6	2 m	۱		_			LETION DATE	201	6/04/26	6
ASS	GNED ELE) m (Refer to Draw	ings for locatior	ו)	1												_						PA	GE	1 of 1		1	
		DES	SCRIPTION							MPLING																COMMENTS		ы	
Depth (m)						ĥ	SAMPLE RUN	۲%	ZONE TESTED																	MONITORING NOTES		MONITORING WELL	Depth (ft)
ept		STRAT	IGRAPHY		Ч	ц Ш	щ	١ E	ES.				SO	LV	٩PC	UR	2								_,	Groundwater		NIT	epti
۵ ا					SYMBOL	MPL	MPI	0	R	LAB SAMPLE NA		С	ONC	CEN (ppi		TIC	NC								-	 Potentiometri 	c Surface	MO	
					Ś	S	S	R	Я	LAB ANALYSE	ES	10	0 2	200	300) 4	100								.	on date noted	1		
															ł	÷				÷	÷		÷						
														:	÷	-	:		:	-	÷		÷	: :					
												:		: :	÷	÷	:		: :	÷	÷	: :	÷	: :	:				
														: :	ł	-				-	-		-	: :					
														:	÷	÷				÷	-		-			Surface Cover:			
L_0		D SURFACE									.															Flush Mount, 15	2 mm		Lo
F		IIC CLAY - black,	, silty, some sand,	trace	333		$\Lambda /$	1	/	1		:		: :	÷	÷	÷		: :	÷	÷	: :	÷	: :	:			ÎPÍ	ŀ
Ē.		, damp. JD CLAY - gravis	h brown, sandy, so	ome	W	G	IV		/	BH-25-0.0-0.6 / Metals,	он			.;.;	;	 	.;	:	÷;		.;.	: : ;;	. <u>.</u>	::: ::::					-
Ł	gravel	, moist.	in protini, canay, c		X				/	,				: :	÷	÷	÷		: :	÷	÷	: :	÷	: :	:				-
F				ł	X	1	$\left(\right)$)	1	,	.						·÷•		÷.,		. <u>.</u> .	;;	· .						-
È.					Ŵ	1	$\mathbb{N}/$		/					: :	÷	÷	-		: :	÷	÷		÷						-
F,				ł		G	X	-	/	BH-25-0.6-1.2 / Metals,	рН 🔺		• •	••••		•	••••			•	•••••		•						i-
F1							$ \rangle$		/					:	÷	÷				÷	÷		÷					ŀ∃∶	-
È.					X		$\left(\right)$	}	ſ,	1	·		•		••••	•	•			•	•	÷;	•					ĽEĽ	<u> </u>
ŀ					X		\mathbb{N}		/			:		: :	÷	÷	÷		: :	÷	÷	: :	÷	: :	:			· = · ·	ł
F	CLAY -	dark grayish brov	wn, silty, trace san	d, damp.	X	G	IX	-	/	BH-25-1.2-1.8 / Metals,	pH 1	* ··	•	• • • •	••••	÷	••••	: · · ·	:::	• •	• • •	:••? : :	• • • •	·:··				ŀĒ⊡	<u>;</u> —5
Ł		• •			W	1	$ \rangle \rangle$		V			:		: :	÷	÷	÷		: :	÷	÷	: :	÷	: :	:			ŀ.⊟.∶	-
▼	<u>'</u>			ł		\square	1		1		·			••••	:::	:	::::		: :	:::	:::	: : :	:::	::::		2	016/05/16	ŀĖ	Ӻ⊻
-2						1	IV		/			:		: :	÷	÷	:		: :	÷	÷	: :	÷	: :	:			ŀ∃:	-
ŀ				W	G		-	/	BH-25-1.8-2.4 / Metals,	рн 🖷					:	:		-	:								E	F	
Ē					X		$\langle \rangle$		/							÷					÷.							ŀ.⊟.∶	Ē
F					W		Λ /	1			ľ			: :		÷	÷			:								∶E .∶	
-	GRAVE	L - grayish browr , some silt, some	n, coarse to fine gr		0 e	G	IV		/	BH-25-2.4-3.0 / Metals,	nH																	E	
ţ.			-						/		T			:	÷	÷				÷	÷		÷					[:]E[:	
-3			e sand, trace grave		Ж,	1				,	.																		10
2016	sand,		ne silt, trace gravel	, trace		1	$\Lambda /$	1	/	1				:	-	-					-		-					ŀ.⊟:	-
	julia,	dump.			G	ΙX	-	/	BH-25-3.0-3.7 / Metals,	рН																	I:E	-	
B _]	$ \rangle$		/			:		: :	÷	÷	÷		: :	÷	÷	: :	÷	: :	:			[::⊟::	÷	
ed -						_	$\left(\right)$	}	ť,		·		• •	• • • •	···	• • • •	• • • •		÷·	·÷	÷		٠÷	\cdot				[:]E] :	E
£							\mathbb{N}		/			:		: :	÷	÷	:		: :	÷	÷	: :	÷	: :	:				-
- 4						G	X	-	/	BH-25-3.7-4.3 / Metals,	рН 🔺		•		••••	÷		: ·	-	·	÷	÷÷	÷						·
						1	$ \rangle \rangle$		/					: :	÷	÷	÷		:	÷	÷	: :	÷	: :	:				Ļ
PREPARED							$\overline{(}$		1		·					•				•			•						-
	CLAY-	gray, silty, trace g	gravel, trace sand,	moist.	X		\mathbb{N}		/					:	÷	÷	-			÷	÷		÷						-
2.GLB					Ŵ	G	ΙX	-	/	BH-25-4.3-5.0 / Metals,	pH 🛓											••••• ••••							- 15 -
							$ \rangle \rangle$		/					: :		;	:				÷	;;;	÷	:::					E
5	END OF	BOREHOLE at	50 m		1XX		()	-	1	-	[E
											.							<u>.</u> .			. <u>.</u> .	<u>.</u>	. <u>.</u> .		.	Monitoring Well Well Depth	nstalled	4.0 m	_
E CE	Borehol	e Daylighted to 1	.5 m									:		: :	÷	÷	:		: :	÷	÷	: :	÷	: :	:	Well Diameter		51 mm PVC	-
ш́-											.										. <u>.</u> .					Well Material Screen Type		PVC 10 Slot	F
- CD												:		: :	÷	÷	:			÷	÷		÷	: :		Screened From		1.0 m	ŧ
- <3-RC										.								÷.,	•	. <u>.</u> .	,				Screened To		4.0 m	F	
														÷	÷	-			÷	÷		-						F	
										.		• • •	••••		÷	••••	· · ·		• •	· • •		•						-20	
- FE&F															į	÷		:		į			÷		:				E
0 0											·				••••	•	·:	: ·	÷	•	•		•		:				F
Ē														:			÷		:		÷		÷	:	:				F
- C											·	•••••	•	••••		• • •	·: · ·	÷	÷	•	• • •	:	• • •	÷.	: · ·				F
												:		: :	÷	÷	÷	:	: :	÷	÷	: :	÷	: :	:				È
												:			÷	÷	:			÷	÷		÷	: :					
SONS														: :	÷	÷	÷		: :	:	:	: :	:	: :					
2016/04	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT Vacuum Excavator;	Water	0000					CONTF Badger D													FER I: JM		PE: RKI Eagle REVIEW: KAF	יסח	FTED:	TES
2016/04		1.5 m	152 mm	Acker Renegade; So							Maple Le				b														
133 60																						F		/-		RS		NS	
o L			1	1																	1								

2016/7/18

BORE	HOLE LO	CATION: 100 Oa	k Point Highway, \	Winnipeg, Mani	toba							REF NO: 10-5133			BORE	HOLE No: BH-26	Α	
	VT: Imperia												01.95 m				16/04/26	ô
			nt at NE corner of		_	_		_				GRADE ELEV.: 10	02.09 m				16/04/27	7
ASSI	GNED ELE		m (Refer to Draw	ings for locatior	ו)										PAGE	1 of 1		
		DES	SCRIPTION							MPLING						COMMENTS AND		
Depth (m)						Ш	SAMPLE RUN	%								MONITORING WELL	MONITORING	Depth (ft)
bt		страт	GRAPHY			1	LR.	ΠY	ZONE TESTED		ŀ	▲ SOIL VAPOUR				NOTES		pth
De		SIRAI	IGRAFIT		SYMBOL	PLE	PLE	NO		LAB SAMPLE N		CONCENTRATION				Groundwater Potentiometric Surface	lõ vo	ے
					SYN	SAN	SAN	R	NZ N	LAB SAMPLE N		(ppmv) 100 200 300 400				on date noted	2	
														:::	11			
														::::	::			
														:::	::			
															÷÷			
															÷÷			
														:::	::	Surface Cover:		
L-0		D SURFACE			<i></i>					-						Flush Mount, 152 mm	8	-0
-	damp	ID CLAY - black,	some sand, trace	gravel,	XX	1	$\Lambda /$		/	/								-
F		h brown, some g	ravel, moist below	.0.1 m.	XX	G	ΙX	-	/	BH-26A-0.0-0.6 / Metal	s, pH							Ļ
-									1/		.,			÷ ÷ ÷	÷÷			-
F					X	1	()		/	_	ļ							L
Ł				ŕ	Ŵ]	Λ			/					::			ţ
ŀ					Ħ	G	IV.	_	/	BH-26A-0.6-1.2 (DUP- Metals, pH	4)/			· • • • • • •		ļ		È.
-1					X]			/	Ivietais, pH	T							ļ:
F					Ŵ]	()		1		ļ					ļ		ŀ
E					XX]	$\Lambda /$		/					::::	÷÷		: <u> </u> ∃.:	1
F					W	G	IV.	_		BH-26A-1.2-1.8 / Metal	s, pH			 		ļ		5
È		<u></u>			<u>XX</u>				/		-,			::::	÷ ÷		ŀ∃:	-
-	CLAY -	grayish brown, se	ome silt, trace san	d, moist.			/ \		/		ļ						I.E.	Ŀ
-2							$\Lambda /$			1				÷ ÷ ÷	÷÷			ł
-2						G	IV	_		BH-26A-1.8-2.4 / Metal	s nH							+
Į						Ĭ	IΛ		/	DIT ZON 1.0 Z.+ / Motu	3, pri			÷ ÷ ÷	÷÷	2016/05/16	sl:E:	t y
-							$\langle \rangle$		/	_								-
F			clayey, trace sand,		[]]]		$\Lambda /$		/	1				: : :			:E.	
-	GRAVE	L - light olive bro	wn, coarse to fine		°0 -	G	IV	_	/	BH-26A-2.4-3.0 / Metal	e nH	· · · · · · · · · · · · · · · · · · ·					ŀ.∃∵	ŀ
Ł	sandy,	silty, moist. ish yellow, damp	below 2.7 m		0 1		IΛ	-	/	DI 1-20A-2.4-3.07 Metal	s, pri						I:E:	÷
≝ –3	GRAVE	L - verv dark grav	y, coarse to fine gr		0		/		/					. <u>.</u>			:E:	-
2016/	∖ sandy,	some silt, wet.		/ t	XX		N/							:::	::		ŀ.⊟∵	. 10 .[
Ë-		dark grayish bro∖	wn, silty, some san	nd, moist.		G	IV		/	BH-26A-3.0-3.7 / Metal							ŀ.⊟.∶	Ł
L L	SILT - lig	SILT - light yellowish brown, sandy, trace clay, moi CLAY - olive brown, some silt, trace sand, damp.					IΛ	-	/	BH-20A-3.0-3.7 / Wetai	s, pri l			÷ ÷ ÷	::		∶E⊡	÷
-							/		/								ŀE:	
- Nin							N/			/				::::	÷ ÷		:⊟:	Ŀ
- 4 - 4	CLAY -	olive brown, som	e silt, trace sand, o	damp.			IV							. <u>.</u>			[:E]:	÷
8914 102 -					G	ΙŇ	-		BH-26A-3.7-4.4 / Metal	s, pH				÷÷				
						$ \rangle$		/									L	
PREPARED					1	$\left(\right)$		1	_				:::	::				
							$\Lambda /$			/								- 15
V3-K12.GLB	SILT-a	ray, clayey, trace	sand damp		hП		IV							::::	÷÷			10
22 22		ay, dayoy, adoo	ound, dump.	ſ	łH	G	$ \Lambda $	-	/	BH-26A-4.4-5.1 / Metal	s, pH							L
₩ -5					11	1	$ \rangle \rangle$		V						÷÷			
					Нł		\vdash		1	1				. <u>.</u>				Ł
<u> </u>	END OF	BOREHOLE at	5.2 m								I					Monitoring Well Installed		Ł
- E8	Borehol	e Daylighted to 1	5 m													Well Depth	4.0 m	Ł
3	Boronon	e Dayngriced to 1	.0 111											÷ ÷ ÷	÷ ÷	Well Diameter Well Material	51 mm PVC	Ł
404 F																Screen Type	10 Slot	-
× -															Screened From Screened To	1.0 m 4.0 m	E	
^b ₂ ⊢6																		-20
											I							20
																		F
-										I							F	
З																		F
Ξ.											1							E
-7														::::	÷÷			ŀ
, PE&														÷ : :	: :			
				FOUR									<u> </u>	: : :	: :			
2016/04	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT	Motor	0000								GAS MET		/PE: RKI Eagle REVIEW: KAF DR.	AFTED:	TES
2016/04		0.0 m 1.5 m	254 mm 152 mm	Vacuum Excavator; Acker Renegade; S								Daylighting Inc. Leaf Drilling Limited	F			1		
23 60.							-					-		Р		RSO		5
ξ ι			1	1							1		1					

2016/7/18

			k Point Highway, \	Winnipeg, Mani	itoba								RE				513									OLE No:	BH-26		
	NT: Imperia												TPO							97 I						DATE:		16/04/20	
			nt at NE corner of										GR	AD	ΕE	LE\	/.:	1	02.	07 I	n		_			ETION DA	TE: 20	16/04/2	7
ASS	IGNED ELE		m (Refer to Draw	ings for locatior	ר)				<u>.</u> .									-						۲AG	_	1 of 1			
		DES	SCRIPTION						SA	MPLING																COMME	NTS AND RING WELL TES ater netric Surface noted	Q	
Depth (m)						YPE	SAMPLE RUN	Υ%	E																	MONITOF NO	TES	L NN	Depth (ft)
ept		STRAT	IGRAPHY		Ы	ЦЩ.	ЧU	VER	ES																	Groundw	ater	NTN N	eptl
					SYMBOL	MPI	MPI	ECO.	NR	LAB SAMPLE N	AME/														-	Potentior	netric Surface	e e	
					Ś	S	S	R	й	LAB ANALYS	ES	:	: :	:				. –	:				:			on date r	noted		<u> </u>
															:				÷	:									
												÷	: :	÷	: :		:	:	÷	: :		: :	÷	÷ ÷					
												÷		-			:		÷	:		: :	÷						
												÷		÷	÷		:		÷	:		: :	÷	: :					
												-		÷	:				-	:					S	urface Cov	er:		
-0		D SURFACE				4																			Fl	ush Mount	, 152 mm	8. d	÷0
-	- Refer	to BH-26A.										-		-	:					:			-	: :				P	ŧ
-												•	÷÷	· .	÷	· ·	· · · ·		•			÷	••••	÷	•••				F
-												÷	: :	÷	: :		:	:	÷	: :		: :	÷	÷÷					E
-											·	•••••		••••		• • •	••••		•		•••		••••		•••				ł
ŀ												÷		÷				:	÷				÷						ł
-1											·	·		•••••				:					· · .		•••				F
Ŀ												÷			:		:	:		:			÷						F
ŀ											ļ.	÷	: :				÷							÷ :					E
F											.																		-5
Ł											ľ			÷			:												ŧ
-																													ţ.
-2												÷	: :	÷	: :		:	:	÷	: :			÷	::					ŧ.
	<u> </u>											·÷.	:.: ::::	·÷•			÷.		· ÷ ·				· · ÷ ·	÷.;.	•••		2016/05/16	38 8	F Ţ
-	⊻											÷	: :	÷	: :		÷		÷	: :			÷	÷ ÷				5 	{ -
-	-											• • • •		••••	÷··		••••		•				••••	·····	••				i-
Ł																												ŀ.⊟.	ł
-											·	•••••	: : : :	••••	:::		••••	:	•			·	•••	****	• •				÷
≝3	END OF BOREHOLE at 3.0 m											÷	: :	÷	: :		:	:	÷	: :			÷	÷÷					ŧ.
	END OF	BOREHOLE at	3.0 m			1					.														N	/onitorina \	Nell Installed		+ 10 E
PRINTED:	Borehol	e Daylighted to 1	5 m								.														1	Well Depth Well Diame		3.0 m	E
	Boronoi	o Daylighted to 1	.0 111									:		-	: :				:	:				: :	1	Well Materi	a	51 mm PVC	L.
nipeg -											.	: 	: : ;	.;.	; ;;		;;;;	;			,			÷.;.;.		Screen Typ Screened F	e From	10 Slot 2.6 m	È.
- K												÷		÷	:				÷	:			÷	: :		Screened 1	Го	3.0 m	F
											·	•••••••					•••••		•		•••				•••				F
D: 201												÷	: :	÷	: :		:		÷	:			÷	÷ ÷					E
PREPARED:											·	· ÷ ·	:	·÷·			::::	:	:				•••		•••				F
														÷	:				÷	:									ŧ
/3-R12.GLB											1.	•••••																	- 15
V3-R1																													E
≿∦≸5												÷	: :	÷	: :		÷	:	÷	: :		: :	÷	÷ ÷					Ł
											.																		È.
18 FCE												:		-	: :					:				: :					F
											.	•		·÷.	÷		÷.		•				· · ÷·	÷··	•••				F
04.GDT												÷	: :	÷	: :		:	:	÷	: :		: :	÷	÷÷					E
PE&LCEG DATA V3-R04											·	•		· • ·	÷		·•••		•	•	••••	•	••••		••				F
1 6												÷		÷	:				÷	:			÷						L.
											·	••••••		••••	•••	• •	••••		• • • •		••••		•••••	•••••	•••				20
												÷		÷	: :		÷	:	÷	: :				:::					F
											.	:	: :	:	-		:	1	:					·····					E
ORT											.																		É
C REP											[Ī											ŧ
임- 												÷		÷					÷				÷						ŀ
IS PE														:		:	:	:	: :			:	: :						
STAF	RT DATE	START DEPTH	HOLE SIZE	EQUIPMENT		I					CONTI	RAC	· · TOF	२			•	: [·		10	AS I	MET	ER T	TYPE	E: RKI Eag	e		<u> </u>
2016/0	4/26	0.0 m	Vacuum Excavator;							Badger D	Daylig	hting	nc.										: JME	3	REVIEW:	KAF DR	AFTED:	TFS	
ີ 2016/0	4/27	1.5 m	152 mm	Acker Renegade; S	o l id Ste	em Aug	ger				Maple Le	.eaf D	ri ll ing I	Limit	ted												601		
5133 (]

BORE	EHOLE LO	CATION: 100 Oa	ik Point Highway, '	Winnipeg, Mar	nitoba								REF	. NO): 1	0-5 ⁻	133						BOR	EHOLE No:	BH-27	Α	
	VT: Imperia													ELE				101				_		RT DATE:		16/04/26	
			nt at NE corner of										GR/	DE	ELE	EV.:		101.	87 r	n		_		PLETION D	ATE: 207	16/04/28	3
ASSIC	GNED ELE) m (Refer to Draw	ings for locatio	n)				~ •														PAG	E 1 of 1			
		DES	SCRIPTION							MPLING															INTS AND	ŋ	
Depth (m)						ΥPE	SAMPLE RUN	RECOVERY %	ZONE TESTED																RING WELL DTES	MONITORING	Depth (ft)
beptl		STRAT	[IGRAPHY		Ы	Ē	ГE	VER	TES				SO	L VA	PO									Groundv	vater	LN N)ept
					SYMBOL	AMP	AMP	ECC	ONE	LAB SAMPLE N				(ppm	ıv)									Potentio on date	metric Surface	Ξ	
					ίΩ.	S	S	R	Ñ	LAB ANALYS	ES	10	0 2	200	300	400) :	:	: :	:	::	:	::	on date	notea		
												: :	÷	: :	÷	: :	÷		: :	÷	: :	÷	÷÷				
												1	÷	: :	÷	: :	÷			÷	: : :	÷	÷÷				
												1	÷	: :	÷	: :	÷	÷		÷	: :	÷	÷÷				
												: :	÷	: : :	÷	: :	÷	i	: :	÷	: : : :	÷	÷÷				
		D SURFACE											÷		÷	::	÷		: :	÷	: :	÷		Surface Co Flush Moun			
-0				_		-					ŀ		•		· · ·	÷;	•			•••••••••••••••••••••••••••••••••••••••	÷;	•		. Tidari Wodil	, 1 52 mm	N – K	<u>+</u> 0
F	GRAVE	L (Fill) - pale bro	wn, sandy, some s	silt, some	000		V		/			: :	÷	: :	÷	: :	÷	i	: :	÷	: :	÷	÷÷				-
-	clay, tr	ace cobbles, dar	np.		00	G	Ň	-	/	BH-27A-0.0-0.6 / Meta	is, pH 🎽		••••			:; : :	•		• • • •	•••••••	:; : :	•		1			-
F					°0.e		$\langle \rangle$		V				÷		÷	: :	÷			÷	: :	÷					ŀ
-					0.e		\mathbb{N}														: :						£
F	SILT - b	lack, some clay,	trace sand, damp.		Π	G	V		/	BH-27A-0.6-1.2 / Meta	ls, pH									<u>;</u> .	: : :						Ł
<u> </u> -1	┝╓┯	abt brownin	y, sandy, trace cla		ЩЦ	ľ			/		···· [÷		÷	: :	÷			į		÷					<u>;</u>
-	SILT-II	gnt brownish gra	y, sandy, trace cla	iy, damp.		·	()		Υ		. -					÷;					÷;		÷				ŀ
F							$\left \right\rangle /$		/			: :	÷		÷		÷	:	: :	÷		÷					E
F	CLAY -	light grav, some	silt, trace gravel, tr	race sand.		G	X	-	/	BH-27A-1.2-1.8 (DUP- PAH, Metals, pH	9)/	N	•		•••••	÷;	•		•	••••••••	÷;	•		•			<u>-</u> 5
-	damp.		,,	,			$/ \setminus$		V				÷		-		÷					-				E.	<u>.</u>
⊻	- dark g	rayish brown bel	low 1.8 m.				()				·		•				•••••			••••••	: : : :	•			2016/05/16	sl∶E[∶:	Ξ.
-2-							V		/	BH-27A-1.8-2.4 / PAH			÷	: :	÷	: :	÷	÷	: :	÷	: :	÷	: :				÷ -
-	SILT - dark gray, sandy, some clay, trace gravel, moist, wood fragments. SILT - dark grayish brown, gravelly, sandy, trace clay, moist. - some cobbles below 2.7 m.					G	$ \Lambda $	-	/	Metals, pH										ļ				1			E
-	moist,	wood tragments.				·	$\langle \rangle$		/		.									;.	;						E
-	SILT-d	ark grayish brow	n, gravelly, sandy,	, trace		ĺ	NA					: :	÷	::	÷	: :	÷	÷	: :	÷	: :	÷	÷÷			I:E:	ŀ
-	clay, m	noist.				G	X	-	/	BH-27A-2.4-3.0 / PAH, Metals, pH	, 			÷	.÷.	;; ;;		ļ			;; ;;		÷.;.	•		: <u> </u> :':	÷
"F.	- some	CODDIES DEIOW 2.	./ m.		111		$ \rangle\rangle$			ivietais, pri			÷		-					-		÷					÷
^{12/91}	lighty	ollowich brown b	olow 2.1 m				()				·		•		· · ·		• • • •			•••••••••••••••••••••••••••••••••••••••		•	÷	·		.∃:	-10
ED: 20	- light y		elow 3.1 m.		HII		\mathbb{N}						÷	:::	÷	: :	÷	÷	: :	÷	: :	÷	: : :			l:∃:	!
ENNE					lłl	G	X	-	/	BH-27A-3.0-3.7 / Meta	ls, pH 🤞		÷	÷	:::	: : : :	• • • •			•••	:; : :	•		+			F
mipeg_PRINTED: 2016/7/18	CLAY -	olive brown, som	ne silt, trace sand,	moist.			$/ \setminus$		V				÷		÷		÷			-		÷]
							\backslash		/															1			E
105/13						G	V	_	/	BH-27A-3.7-4.3 / Meta	ls nH					<u>;</u> ;;					<u>;</u> ;;		<u>.</u>			: ∃::	÷
-4 102									//	BH 21/(0.1 4.07 Moto	13, pr 1		÷		÷		÷			-		÷					\$
ARED]	()		Ι,		- -		÷		÷.	÷;	· .		· · · · ·		÷;	•	÷				F
PREP.							$\backslash /$: :	÷	: :	÷	: :	÷		: :	÷		÷	: :				£
GLB		olive brown, siltv	, trace sand, moist	<u> </u>	W	G	X	-	/	BH-27A-4.3-5.0 / Meta	ls, pH		•		·	÷÷	• • • •		•	· · · · ·	÷	•	÷				- 15
3-R12		····,	, , ,				$ \rangle$: :	÷	: :	÷	: :	÷	÷	: :	÷	: :	÷	÷÷				-
^ ₩₹		BOREHOLE at	5.0 m		Γ££	1	/ \		/		·		:::		::	:::	::::			···}·	: : :		÷ ::				ł
																								Monitoring Well Depth	Well Installed	4.0 m	E
SFCE	Borehol	e Daylighted to 1	.5 m									: :	÷	: :	÷	: :	÷	÷	: :	÷	: :	÷	: : :	Well Diame	eter	51 mm	Ł
																							÷	Well Mater		PVC 10 Slot	È.
													÷		÷		÷			-	: :	÷		Screened Screened	From	1.0 m 4.0 m	F
V V3-R											ŀ	·	•		÷	÷	· ···	-÷	• • • •	•••••••	÷	• • • •	÷ • • •		10	ч. v III	F
4IMG													-			: :		:		÷	: :						F
SFCE											ļ.		••••		•••••		••••			••••••		•		1			-20
- FE													÷	:::	÷	: :	÷	÷	: :	÷	: :	÷	: : :				F
00 00											1					Ĩ		11						1			E
ORT											.					÷;		. <u>.</u>		;.	: :;		: : : :				F
G REF												: :	÷	:::	÷	: :	÷	÷	: :	÷	: :	÷	÷÷				È.
												į	÷	÷÷		÷÷	-	:		÷	: :	i					f
AMESONS PERICEG REPORT LOG 60 PERICEG DATA V3-PRUGOT PERICEG UBRARY V3-RT2.LIB PEEPARED: 2016/06/13 W													÷				÷			-							
STAR	T DATE	START DEPTH	HOLE SIZE	EQUIPMENT	•				•	•	CONT													YPE: RKI Ea			
2016/04/		0.0 m 1.5 m	254 mm 152 mm	Vacuum Excavato Acker Renegade; \$							Badger E Maple Le									F			JMB			AFTED:	
G 2016/04/							-						. j =								F	D)			5 0 1	NS	5
51.											1										-						_

			k Point Highway, \	Winnipeg, Mani	itoba								RE				513								EHOLE N		BH-27		
	NT: Imperia												TP							′9 n					RT DATE			16/04/2	
			t at NE corner of										GR	AD	ΕE	LE\	/.:	1(01.9	91 n	1		_		PLETION		20	16/04/2	8
ASS	IGNED ELE		m (Refer to Drawi	ings for locatior	n)	-			<u>.</u>									-						PAG	E 1 of				
		DES	SCRIPTION						SA	MPLING															CON	MENTS	S AND S WELL ic Surface	U	
Depth (m)						Щ	SAMPLE RUN	۲ %	E																MON	NOTES	WELL	L NIN	Depth (ft)
ept		STRAT	IGRAPHY		Ы	ц ЦЩ	ĒR	/ER	TES.																Grou	indwater		NTO	ept
۵ ا					SYMBOL	MPI	MPI	S.	NE	LAB SAMPLE N	AME/														Pote	ntiometri	ic Surface	WO	
					Ś	3	S/	22	й	LAB ANALYS	ES		: :	:				-	:		:		:		on d	ate note	d		<u> </u>
												÷	: :	÷	: :		:		÷	: :	÷	: :	÷	÷÷					
												÷	: :	÷	: :		:		÷		÷	: : :	÷	÷÷					
												÷	: :	÷	: :		:		÷	: :	÷	: : :	÷	÷÷					
												÷	: :	÷	: :		:		÷		÷	: : :	÷	÷÷					
												÷	: :	÷	: :		: :		÷		÷	: : :	÷	÷÷	Surface	Cover:			
		D SURFACE									.	. <u>.</u>	: : : :		<u>.</u>				<u>.</u>			<u>.</u>		<u>.</u>	Flush M	ount, 15	2 mm	и	
F	- Refer	to BH-27B.										÷	: :	÷	: :		:		÷	: :	÷	: : :	÷	÷÷				I	ŧ
-											.		;;																<u>+</u>
-														-	:				-		-								
-											ŀ	• 🔆 •	÷	•••••••••••••••••••••••••••••••••••••••	÷	•••	· · · ·		÷	÷	· • ·	÷÷	• • • •	÷÷	·				F
-												÷	: :	÷	: :		:		÷	: :	÷	: : :	÷	÷÷					
-1											ŀ	• 🕂 •	:::	÷		• •		• • •			÷	÷÷	÷	÷	+				÷
+ '												÷			-				÷		÷		÷						ŧ
F											ļ.	·						•••••					•		1				ł
Ł																													£.
ŀ											[1				
																													£
2 _	<u>/</u>											÷		÷	:				÷		÷	÷÷	•			2	016/05/16		ţ Ţ
- 1											ļ.								<u>.</u>										1
-														-							-								\$
E											·	•			÷	• •	· · · ·		÷		÷	÷÷	• • • •	÷·÷·					<u></u>
-												÷	: :	÷	: :		:		÷	: :	÷	: : :	÷	÷÷					÷
-											ŀ	• • •	÷÷	• • •	÷	• • •	••••		÷	÷÷	÷	÷÷	÷	÷÷	·			ŀ ₿.	ł
≝3	END OF BOREHOLE at 3.0 m											÷		÷					-		÷	÷÷	-					E	
5016/7/18	END OF BOREHOLE at 3.0 m										·	: :::::::::::::::::::::::::::::::::::::	: :				:		:			: : : :	:		Monitor	ring Well	Installed	فاكلعا	10
	Barahal	o Douliabted to 1	E m									÷	: :	÷	: :		:		÷	: :	÷	: : :	÷	÷÷	Well D	epth		3.0 m	
	Doreno	e Daylighted to 1	.5 11										: :		-				-			Ĩ		÷ ;	' Well D Well M	iameter aterial		51 mm PVC	Ē
-											↓.		: :								. <u>.</u> .				Screer	n Type		10 Slot	F
Nin-														-	:				-		-	÷ ÷			Screen	ned From ned To	1	2.7 m 3.0 m	
											.		: : :·:		: ::		÷.;		÷	: : :	. <u>.</u> .	;;							F
												÷	: :	÷	: :		:		÷	: :	÷	: : :	÷	÷÷					F
PREPARED:											ŀ	•							÷.				•		·				F
- PREF												÷	÷÷	÷					÷		÷	÷÷	-						Ł
GLB											ŀ	••••••		••••	÷	•••••	· · · ·	• • •	÷		•••••		•		•				- 15
/3-R12.GLB												÷	: :	÷	: :		:		÷	: :	÷	::	÷	: : :					-
< F											·		: : : :				••••						•		1				F
												÷		÷					÷		÷	÷÷	÷						Ē
												-		-					-		-								Ē
											.		: :.:		:				÷		. <u>.</u> .	: ::	. <u>.</u>						Ł
4.GDT												÷	: :	÷	: :		:		÷	÷	÷	: : :	÷	÷÷					-
Pe&LCEG DATA V3-R04											. -								÷				• • •						-
- - - - 6												÷		÷							÷	÷÷	-						F
E F											ŀ	• 🔆 •	÷÷	•••••	÷	• • •			÷.	• •	· • •	÷ - ;	•	÷÷	·				- 20
												÷		÷	:		:		÷		÷		÷						Ł
											ŀ	·		:		•		• • •	÷		· :		•		1				F
RT LC												÷	: :	÷	-	÷	-		÷			: :	•						F
L L											ļ.	•••••	: : :	••••			••••	••••	÷	••••	••••	:; :	• • • •		1				F
- 												÷		÷					-		÷		÷						F
SPE&I											÷		÷					÷		-									
Si OTAF	RT DATE	START DEPTH	EQUIPMENT								:		:	: :		:		:	: :	:		:	: : EP T		Fools				
2016/0		0.0 m	EQUIPIVIEN I Vacuum Excavator;	Water	Lance					CONT Badger [JMB	YPE: RKI REVI	Eagle EW: KAF		AFTED:	TFS	
2010/0		1.5 m	Acker Renegade; S							Maple Le				ted															
5133.6																								A	R	3			D

