Combined Phase I/II Environmental Site Assessment
61 Princess Street
Winnipeg, Manitoba
FINAL

KGS Group 16-0107-001
July 2016

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File No. 16-0107-001

City of Winnipeg
4th Floor – 185 King Street
Winnipeg, Manitoba
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ATTENTION: Mr. Greg Kucel
Project Officer

RE: Combined Phase I and Phase II Environmental Site Assessment
61 Princess Street, Winnipeg, Manitoba,
Final Report

Dear Mr. Kucel:

Please find enclosed three hard copies and one electronic copy of the Final Report for the Phase I/II Environmental Site Assessment (ESA) for the property located at 61 Princess Street in Winnipeg, Manitoba.

KGS Group sincerely appreciates the opportunity to have been of service on this project. If you have any questions regarding this report please contact Ms. Bonnie Hoffensetz or the undersigned.

Yours truly,

Robert D. Sinclair, P.Eng.,
Manager of Environmental Services

AB/BMH/jr
Enclosure

EXECUTIVE SUMMARY

Kontzamanis Graumann Smith MacMillan Inc. (KGS Group) was contracted by the City of Winnipeg to conduct a Combined Phase I/II Environmental Site Assessment (ESA) at the property located at 61 Princess Street in Winnipeg, Manitoba. The subject property, currently owned by the City of Winnipeg, consisted of a paved surface parking lot. The purpose of the assessment was to identify areas of actual and potential environmental concern at the property and identify probable parties responsible for any contamination.

The Phase I ESA consisted of a review of the available historical and current records, a site reconnaissance and interviews. Based on the findings of the Phase I ESA portion of the project, a geophysical survey was conducted at the property to help identify potential underground storage tanks (USTs) and other buried anomalies, and assist with testhole placement prior to Phase II ESA subsurface investigations. The Phase II ESA consisted of testhole drilling and monitoring well installation, and collection of soil and groundwater samples to confirm the presence or absence of potential contamination at the property.

Phase I Environmental Site Assessment

A review of historical records for the subject property, including aerial photographs, land title documents, historical fire insurance plans, and Henderson Directories, indicated that the subject property has been occupied since the very early 1900s for commercial and/or industrial use. Prior to 1933, the subject property appeared to be associated with the municipal address 59 Princess Street. A service station was situated on the site from the early 1930s to the early 1960s. However, within the Henderson directories the service station was listed at 59 Princess Street prior to 1933, at 61 Princess Street from 1933 onward. Three buildings were visible in the northwest corner of the site in the 1950 aerial photograph. The subject property became a surface parking lot in 1962 under the name Wilaco Parking Lot, and then became Kodiak Parking from 1978 to 1983. According to the Henderson Directories, the subject property has been owned by the City of Winnipeg since 1984; however, a review of the historical Land Titles for the property indicated that the subject property has been owned by the City of Winnipeg since 1981.

At the time of the 2016 site reconnaissance conducted on January 14, 2016, there were no buildings located on the subject property. As such, no hazardous materials were observed, stored, or used on the subject property. There was no evidence or records of any ASTs. However, interviews with persons familiar with the subject property indicated that there are possibly two historical USTs still present at the site. The possible tank locations were identified in the southwest side of the subject property, and the northwest side of the subject property. KGS Group was not able to obtain any historical information relating to the USTs, and neither the Manitoba Sustainable Development File Search nor the Manitoba Sustainable Development Contaminated Sites Registry information request returned records of USTs at the subject property. Additionally, there was no visible evidence of spills and/or leaks on site and no record of reported spills. The potential historical/current presence of USTs on site represents an issue of potentially significant environmental concern at the subject property.

A review of historical records pertaining to the surrounding properties, including aerial photographs, historical fire insurance plans, Henderson Directories and interviews with persons familiar with the subject property indicated that the adjacent properties have been developed for

commercial/industrial activities since the very early 1900s. No concerns were identified on the adjacent properties immediately to the west, north and east of the site.

At the time of the site investigation, the property immediately to the south of the subject property (55 Princess Street) consisted of the Winnipeg Police Vehicle Services Unit (Garage) and Police Division 30. Potential concerns exist relating to historical motor oil spillage onto the ground at the south adjacent property. However, the building floor was made of concrete, thus decreasing the chance of motor oil seeping into the soil and migrating to the subject property. The Ecolog ERIS Report also identified an UST on the property immediately south of the subject property (55 Princess Street, registered to the City of Winnipeg); however, interviews with persons familiar with the subject property indicated that there are currently no USTs at 55 Princess Street. In addition, a review of the Manitoba Conservation Contaminated Sites Registry did not indicate any USTs on the property. The Ecolog ERIS Report also identified two contaminated/impacted sites on the west and southwest adjacent properties; however these sites are located more than 100 m away from the subject property, which would decrease the chance of hydrocarbons migrating to the subject property. Furthermore, Winnipeg soils are naturally cohesive with low conductivity properties, which would also decrease the chance of hydrocarbons migration.

Geophysical Survey

In support of the Phase II ESA, KGS Group field personnel were on-site on February 3, 2016 to conduct a ground penetrating radar (GPR) survey at the subject property. The GPR data collected on site was surveyed to the site conditions and with a grid pattern over the areas of interest and parallel lines throughout the rest of the site to help identify any potentially buried objects, such as USTs. The data collected from the GPR survey identified several anomalies within the subsurface at the site, including two potential UST locations. The first potential UST location was identified in the northwest corner of the property at approximately 0.8 – 1.0 m below ground. The second potential UST location was also identified in the northwest corner of the property, east of the first potential UST location and adjacent to the former service station building location, at approximately 0.4 – 0.5 m below ground. Other anomalies at the site identified by the GPR survey appeared to consist of concrete foundations and/or rubble associated with former buildings at the site. It should be noted that exploratory investigations (i.e. test pit excavation) are required to confirm the exact nature of the buried objects and anomalies identified by the GPR survey.

Phase II Environmental Site Assessment

KGS Group field personnel were on site on February 10, 2016 to conduct a subsurface investigation and collect soil samples for laboratory analysis of petroleum hydrocarbons and metals at the subject property. A total of six testholes were advanced across the subject site, including adjacent to both potential UST locations in the northwest corner of the site. Three testholes (TH-02, TH-03, and TH-06) were converted to monitoring wells (MW-01, MW-02 and MW-03, respectively). Groundwater levels were measured on February 25, 2016 and March 4, 2016, and groundwater samples were collected on March 4, 2016.

During the testhole drilling program, visual and/or olfactory evidence of hydrocarbon impacts were observed in five of the six testholes. Hydrocarbon vapour concentrations measured during field headspace analyses ranged from a low of 1.0 ppm at testhole TH-01 to a high of 1814 ppm

at Testhole TH-06. The limited number of monitoring wells and highly variable water elevations in the wells did not provide accurate groundwater flow direction, and as such, flow direction could not be determined for the site.

The laboratory analytical results for soils confirmed the field observations, with soil samples collected from testholes TH-02 (MW-01), TH-04 and TH-06 (MW-03) exceeding the applicable soil quality guidelines for benzene. The soil sample from TH-06 also exceeded the applicable soil quality guidelines for petroleum hydrocarbon (PHC) Fraction F1. Testholes TH-02 and TH-04 are located near the northern property boundary and testhole TH-06 is located on the west end of the property near the first potential UST location. All metals parameters were measured at concentrations below applicable guidelines. However, concentrations of copper and lead measured in the upper 1 m of soil (fill) at testhole TH-03 appeared to be elevated as compared to typical background concentrations.

Evidence of hydrocarbon impacts were also observed in each of the three groundwater monitoring wells. Concentrations of benzene and PHC Fractions F1 and F4 exceeded the applicable guideline criteria in the sample collected from MW-03 (TH-06) located on the west end of the property near the first potential UST location. Measurable concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX) and PHCs were present at MW-01 (TH-02) and MW-02 (TH-03); however, these concentrations were below the applicable criteria. Metals concentrations measured in groundwater were below the applicable criteria.

The extents of the hydrocarbon impacts on this site have not yet been delineated. Based on the field observations and laboratory analytical data, the hydrocarbon impacts appear to occur from approximately 1 m below grade down to 4 m below grade. The impacts may extend deeper at some locations, but this cannot be determined with the limited amount of data currently available. It is also very possible that the lateral extent of the hydrocarbon impacts may extend beyond the property boundaries.

Conclusions

Based upon site conditions at the time of the site inspection, historical information reviewed, persons interviewed, and the field and laboratory results of the Phase II ESA completed at the subject property located at 61 Princess Street in Winnipeg, it is the conclusion of KGS Group that the site has hydrocarbon impacts that exceed the applicable guidelines in soil and groundwater. Elevated PHC and BTEX concentrations appear to be associated with the historical operations of a service station on this site. Additionally, data from the GPR survey indicated that two potential underground storage tanks may be present at this site.

Recommendations

As impacts above applicable guidelines are present on site, KGS Group recommends that in order to comply with the provisions of the Contaminated Site Remediation Act (CSRA), the City of Winnipeg, as the owner of the subject property of this investigation, should submit a copy of this report to Manitoba Sustainable Development. KGS Group also recommends that the vertical and lateral extents of hydrocarbon impacts be ascertained by completing a Phase III ESA at the site. Prior to completing any delineation activities at the site, exploratory investigations, such as test pit excavations, should be conducted to confirm the nature of the buried objects and anomalies at site. Any USTs, if confirmed to be present at the site, will require decommissioning and removal in accordance with Provincial guidelines.

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1.0 INTRODUCTION

Kontzamanis Graumann Smith MacMillan Inc. (KGS Group) was contracted by the City of Winnipeg to conduct a Combined Phase I/II Environmental Site Assessment (ESA) at the property located at 61 Princess Street in Winnipeg, Manitoba (Figure 1). The property, currently owned by the City of Winnipeg, is a paved surface parking lot. The purpose of the assessment was to identify areas of actual and potential environmental concern, conduct exploratory investigations to assess the potential, degree, and nature of any subsurface impacts that may be present, and identify probable parties responsible for any contamination at the subject property.

This report summarizes the findings of the environmental conditions of the property based upon information obtained during a site reconnaissance, interviews and records review, and the results of a Phase II ESA field investigation completed by KGS Group between February 3 and March 4, 2016. Figure 2 illustrates the current features of the site. Photographs of the subject property taken at the time of the site investigation are included in Appendix A. Historical aerial photographs of the site are included in Appendix B.

1.1 OBJECTIVES

The objectives of the Combined Phase I/II ESA at the property, as outlined in the KGS Group proposal dated October 9, 2015 (File No. 15-000-1196), included the following:

- Establish the current environmental condition of the site and the existence or probability of existence of environmental problems at the site (historical review);
- Investigate and characterize the soil and groundwater at the subject property to determine the presence and/or absence of impacts;
- Identify all underground infrastructures, which could act as migration pathways on or adjacent to the subject property; and
- Provide a Class D cost estimate for remedial measures, if required.

1.2 SCOPE OF WORK

The Phase I Environmental Site Assessment has been performed following the principles and guidelines established by the Canadian Standards Association (CSA) Standard Z768-01 ("Phase I Environmental Site Assessment") and the American Society for Testing and Materials (ASTM) Standard E1527. According to the CSA Standard Z768-01, the term "contamination" means "the presence of a substance of concern, or a condition in concentrations above pre-established criteria in soil, sediment, surface water, groundwater, air or structures".

The major components of the Phase I ESA included the following:

- A review of readily available regional information including topographic maps and geology maps;
- A review of the history of the site and surrounding properties through a review of historical records including air photos, land title documents, Ecolog Environmental Risk Information Services (ERIS), fire insurance maps, Winnipeg Water and Waste records, Henderson Directories, and Manitoba Department of Sustainable Development records;
- A site reconnaissance to obtain information on current site uses and conditions;
- Interviews with persons familiar with the site; and
- Completion of a summary assessment report which discusses the activities on the site and identifies areas of potential environmental concern and regulatory issues associated with the property.

The scope of work for the Phase II ESA at the subject property was to investigate the subject property on a screening basis to determine the degree and nature of any potential subsurface impacts. All utility locates were arranged and overseen by KGS Group personnel prior to subsurface investigation. The Phase II ESA was conducted in accordance with the Canadian Standards Association (CSA) Standard Z769-00 entitled "Phase II Environmental Site Assessment", March 2000. Specifically, KGS Group completed the following:

- Reviewed all pertinent data and background information from the Phase I ESA to finalize the field program;
- Advanced six testholes (boreholes) at the subject property. Installed monitoring wells in three of the testholes;

- Collected soil samples directly from auger flights at regular intervals at all testholes and completed field screening for the presence of hydrocarbon vapours. Select soil samples were submitted for laboratory analysis of metals and petroleum hydrocarbons;

- Described the soil profile encountered in all testholes. The soil type, texture, and any olfactory or visual evidence of contaminants was recorded on borehole logs;

- Conducted a groundwater monitoring and sampling program including; headspace measurements at each well, measuring the thickness of any liquid petroleum hydrocarbons (if present), collecting representative samples from each well and submitting them for analysis of metals and petroleum hydrocarbons; and

- Prepared a report detailing the results of the investigation, complete with a site plan of the property showing the locations of all testhole and monitoring well locations, testhole logs and laboratory certificates of analyses.

1.3 ADDITIONAL SCOPE OF WORK

Based on the findings of the Phase I ESA which identified the potential presence of Underground Storage Tanks (USTs) on the subject property, a Geophysical Survey using Ground Penetrating Radar (GPR) was conducted prior to the Phase II ESA subsurface investigations as per Engineering Scope Change Authorization (ESCA) No. 1 dated January 19th, 2016. The GPR survey was conducted in order to help confirm the possible presence of buried objects, such as potential USTs, and assist in the placement of boreholes and monitoring wells during the Phase II ESA field investigations.

2.0 METHODOLOGY

2.1 PHASE I ENVIRONMENTAL SITE ASSESSMENT

The details of the tasks required to meet the project objectives and complete the scope of work for the Phase I ESA for the property located at 61 Princess in Winnipeg, Manitoba are described below.

Records Review

In order to thoroughly understand historical and current conditions at the subject property and adjacent properties, KGS Group reviewed all available sources of information listed in the CSA document under Sections 7.1.6, 7.1.7 and 7.1.8. Available sources of information included aerial photographs, title searches, Henderson Directories, Manitoba Department of Sustainable Development records, Ecolog ERIS, and topographic and geologic maps.

Site Visit

A site visit was conducted at the property to directly observe the subject property. The site inspection was conducted at 61 Princess Street on January 14th, 2016 by Ms. Phuong Nguyen of KGS Group. The purpose of the site inspection was to note the types and conditions of any existing structures, current usage of the property, local topography, stressed vegetation, and to determine areas of actual and potential environmental concerns. Observations at the property were recorded using digital photographic documentation and prepared checklists. Site photographs were taken of the subject property and are included in Appendix A. A Site Reconnaissance Checklist was completed for the property and is included in Appendix C.

The requested information documented in Section 7.2 of the CSA document was adhered to. Any deviation from the CSA requirements was documented and any limitations (i.e. physical obstructions, paved areas, etc.) or limiting conditions (i.e. snow cover, inaccessible areas, safety concerns, etc.), at the subject property were reported. All adjoining properties were observed from publicly accessible areas or the boundaries of the subject property. Photographs taken at the time of the site visit are included in Appendix A.

Interviews

Interviews were conducted with persons familiar with the subject property to augment or confirm the information gathered from the Records Review, and to corroborate information collected during the site visit.

All persons interviewed were documented by name and title. Written records of all questions asked, including all questions asked in writing, in person, by telephone or electronic mail, have been retained by KGS Group. A prepared interview questionnaire was used to ensure that all pertinent information was collected and all interviews appropriately documented. The interview questionnaire is included in Appendix D.

2.2 GEOPHYSICAL SURVEY

KGS Group conducted a Geophysical Survey using Ground Penetrating Radar (GPR) at 61 Princess Street on February 3rd, 2016. The equipment used to complete the GPR survey was a Noggin radar system using the 250 MHZ frequency antennae. There are two essential components to the Noggin GPR system: the Digital Video Logger (DVL) and the 250 MHz Noggin transducer. All components were assembled onto a Smartcart System to allow rapid data acquisition. All GPR equipment was rented from Sensors & Software and calibrated to manufacturer's specifications, which was tested and confirmed by KGS Group prior to conducting the survey.

GPR is an impulse radar system that has been designed to penetrate earthen materials which provides us with continuous real-time profiles of subsurface features in soil. The GPR transmits high-frequency electromagnetic waves (UHF/VHF frequencies) that are transmitted into the ground and are used as radar like frequencies allowing us to determine if there are potential buried objects by imaging the subsurface from reflected signals. When the transmitting wave hits a potential object the receiving antennae records these reflected return signals in the DVL. After the signal has been reflected back this allows the DVL to calculate how long it took the signal to make the trip there and back, calculating the depth of the buried object.

GPR data collected on site was surveyed in a grid pattern of approximately 0.5 x 0.5 metres for the first 30 metres on the western portion of the property in the areas potentially containing buried USTs (as identified in the Phase I ESA), and then parallel lines for the rest of the site at a 0.5 m offset for each line to help identify any other buried anomalies or areas of interest. Each GPR trace line was measured and recorded to aid in analysis of the data in the GPR software. The GPR signals during the survey dissipated between 3 to 4 metres due to clay soil conditions.

The GPR data collected was downloaded from the equipment and then loaded into the GPR software, which was then processed and analyzed after completion of the survey. A specific velocity was selected using hyperbolas in the data to determine the correct depth to identify any subsurface anomalies, such as possible buried USTs. The data was than reviewed for quality assurance and quality control and used to assist with the placement of boreholes and monitoring wells during the Phase II ESA.

2.3 PHASE II ENVIRONMENTAL SITE ASSESSMENT

2.3.1 Testhole Drilling and Sampling

Testhole Drilling

Testhole drilling and soil sampling were conducted on February 10th, 2016 under the supervision of Ms. Loni Andres, Geo-environmental Scientist, of KGS Group. Underground utility locates were completed prior to the commencement of drilling. A total of six testholes were advanced at the subject site using a Geoprobe truck mounted rig with 150 mm diameter solid stem augers, owned and operated by Maple Leaf Drilling of Winnipeg, Manitoba. Three of the testholes were completed as monitoring wells. Stratigraphic logs of testhole conditions were recorded at the time of drilling and are included in Appendix K.

Testhole and monitoring well locations were chosen in areas with the greatest potential for identifying impacts including petroleum hydrocarbons and metals (Figure 3) based on the findings of the GPR survey which identified possible buried UST locations, as well as the presence of confirmed underground utilities.

Soil Sampling

Soil samples were recovered directly from auger flights at approximately 0.75 m intervals. The cohesive nature of the soils and adequate soil recovery justified the use of solid stem augers. Soil samples were placed into heavy polyethylene bags, and tested for volatile hydrocarbon vapour concentrations, using a MiniRae Photo-Ionization Detector (PID), calibrated at the start of the field day with a 100 ppm isobutylene standard. Select soil samples, one from each testhole (with the exception of testhole TH-06 (MW-03) where two soil samples were obtained), were placed in CCME approved sample containers, and stored at approximately 4°C in a cooler chest. The cooler chest was transported to Maxxam Analytics in Winnipeg, Manitoba, a *Canadian Association of Laboratory Accreditation (CALA)* certified laboratory, for analysis of BTEX, PHC Fractions F1-F4 and metals.

Monitoring Well Installation

Groundwater monitoring wells were installed in three testholes (TH-02, TH03 and TH-06) advanced at the subject site. Monitoring well locations were selected to provide information on groundwater levels, flow direction and rates, as well as potential impacts from off-site migration.

The monitoring wells installed within testholes consisted of threaded, 50 mm diameter, No. 20 slotted screen and solid threaded Schedule 40 PVC pipe. End plugs and top caps were friction-fit to the ends of each monitoring well. The annulus of each monitoring well was filled with silica sand to approximately 300 mm above the slotted screen. The remainder of the annulus was backfilled with bentonite. Each monitoring well was fitted with a steel protective cover which was installed flush with the ground surface. All monitoring well materials and installation techniques conform to ASTM Standard D 5092-90. Details of the monitoring well construction are shown on the logs in Appendix K.

Groundwater Monitoring and Sampling

Groundwater monitoring and sampling was performed by KGS Group on February 25, 2016 and again on March 4, 2016. The depth to groundwater at each monitoring well was measured using an oil/water interface probe with an accuracy of +/- 1 mm.

Groundwater samples were obtained from all groundwater monitoring wells not containing LNAPL using a dedicated polyethylene disposable bailer. Prior to collecting the groundwater sample, the monitoring well was purged a minimum of three well volumes or until dry. This procedure was used to ensure the water sample collected was representative of the natural groundwater conditions. Each groundwater sample collected was immediately placed into an appropriate sample container and stored in a cooler at approximately 7^{o}C. The cooler was transported to Maxxam Analytics in Winnipeg, Manitoba for analysis of BTEX, PHC Fractions F1-F4, VOCs, PAHs, and metals.

2.3.2 Laboratory Analyses

Soil Samples

A total of seven soil samples were submitted to the laboratory for analysis of benzene, toluene, ethylbenzene and xylenes (BTEX), petroleum hydrocarbon (PHC) fractions F1 to F4, and three selected soil samples were submitted for metals analysis. Samples exhibiting the highest field vapour concentrations from each testhole were selected for laboratory analysis of BTEX, PHC fractions F1-F4, whereas metals samples were submitted from the upper (<1.0 m) layer of soil where metals impacts would most likely be encountered.

Groundwater Samples

Two groundwater samples, one from monitoring well MW-02 and one from MW-03, were collected and submitted for laboratory analyses of BTEX, PHC fractions F1 to F4 and metals concentrations. A groundwater sample was also collected from monitoring well MW-01 which was submitted for laboratory analyses of BTEX only due to insufficient volume of water in the well.

3.0 PHYSICAL SETTING

3.1 DESCRIPTION OF SUBJECT PROPERTY

Property Description – The subject property currently consists of a paved surface parking lot. The subject property is located at 61 Princess Street in Winnipeg, Manitoba (Photo 1; Figure 1). At the time of the 2016 site investigation the subject property was owned by the City of Winnipeg.

At the time of the site investigation, no overhead utilities were observed. However, the following underground services were identified, by utility providers, to be present at the site:

- Teraspan along Princess Avenue, on the east side of the road, adjacent the subject property;
- MTS along the western side of the site (within approximately 5 m of the property boundary). The line begins outside the wall in the northwest corner of the site, and snakes onto the property in a southerly direction, running to the adjacent building;
- Manitoba Hydro enters the site from King Street, and runs parallel the property boundary before turning south to the adjacent building; and
- A historical private water pipe was reportedly present entering the site from Princess Street, terminating at the centre of the subject property. It is uncertain whether this pipe is still present or has been removed.

At the time of the site investigation, the subject property was not connected to the City of Winnipeg's water and sewer connections.

Legal Description – The subject property, currently owned by the City of Winnipeg, is legally described as: Lot 2 Block "A" Plan 16 WLTO (W Div) in RL 6 parish of St John

Surrounding Land Use – The surrounding land use at the time of the site inspection was as follows:

North — Back lane followed by Jose & Markham (73 Princess Street), Metamorphosis Custom Tattoo & Body Piercing (290 McDermot Ave), Urban Shaman (290 McDermot Ave), Clinic One Pharmacy (286 McDermot Ave), Kayjet Promotions (286 McDermot Ave).

East King Street followed by a commercial building (54-70 Arthur Street).

South Police Station Division 30 (55 Princess Street), Sub Station No. 1 – City Electric Power Supply (54 King Street).

West Princess Street, Del's Electric Motor Supply (54 Princess Street), 58-62 Princess Street (appeared vacant), Goodwill Industries (70 Princess Street).

3.2 PHYSIOGRAPHIC SETTING AND CLIMATE

The City of Winnipeg is located at the confluence of the Red and Assiniboine Rivers in the broad plain of the Red River Valley. The subject property is located in the Exchange District of Winnipeg (Figure 1). The subject area is located within the Lake Manitoba Plain Ecoregion within the Prairies Ecozone [(1)]. The mean monthly air temperature in the Winnipeg area ranges from approximately 19.7°C in July to –16.4°C in January [(2)]. The average annual precipitation is approximately 521 mm, with 247 mm falling as rain in the months of June, July and August [(2)].

3.3 GEOLOGY

The soil profile in the Winnipeg area consists of an upper complex zone approximately 3 m in thickness [(3)]. The complex zone consists mainly of stratified silty clay and silt, with varying amounts of alluvial silts and sands and man-made fill [(3)]. The upper zone is underlain by approximately 10 to 12 m of silty clay, followed by approximately 8 m of glacial till [(4)]. The underlying bedrock is generally encountered at approximately 18 to 20 m below the ground surface and consists of Red River Formation limestone and dolomite [(5,6)]. The Red River Formation is approximately 100 m thick and is underlain by shale and sandstone deposits of the Winnipeg Formation [(3)].

3.4 HYDROGEOLOGY

The regional hydrogeology of the Winnipeg area consists of two main hydrostratigraphic units: the bedrock aquifers and the overlying unconsolidated sediments. The silty clay and glacial till deposits overlying the bedrock in the Winnipeg area tend to have low hydraulic conductivities and thus act as an aquitard, restricting groundwater flow [(3)]. The low hydraulic conductivity of the aquitard can also retard the migration of contaminants dissolved in groundwater, thus providing

a measure of natural protection to the underlying aquifers. However, the presence of natural fractures and man-made features, such as the sand backfill used for underground water and sewer pipelines, can facilitate the migration of contaminants.

The bedrock beneath Winnipeg has three defined aquifers. The deepest is the Winnipeg Formation Aquifer, also called the Sandstone Aquifer. The Winnipeg Formation Aquifer is generally not used in the Winnipeg region because the water is generally too saline. The Red River formation contains two aquifers, generally designated as Upper and Lower Carbonate Aquifers. The Lower Carbonate Aquifer, located in a fractured zone within the lower part of the Red River Formation, has limited use in the Winnipeg area. The water quality in the Lower Carbonate Aquifer is generally poor and the quantity of water available is not as great as in the Upper Carbonate Aquifer. The Upper Carbonate Aquifer is located within the upper fractured limestone and dolomite bedrock of the Red River Formation and is considered a source of potable water. However, on the west side of the Red River, where the subject property is located, the upper carbonate aquifer is often very high in total dissolved solids and is not considered potable. The City of Winnipeg does not use groundwater as a potable water source. The City of Winnipeg obtains potable water from Shoal Lake, located at the Manitoba-Ontario Border, via the Winnipeg Aqueduct.

3.5 HYDROLOGY

Local overland drainage at the subject property is directed towards the streets to the east and west of the subject property. The closest major surface water body is the Red River located approximately 700 m to the east.

3.6 TOPOGRAPHY

The topography of the Winnipeg area is relatively flat with localized relief from creeks and lakes. Topography at the subject property is generally flat with less than 0.5 m variance.

3.7 VEGETATION

At the time of the site investigation, the subject property was in use as a concrete surfaced parking lot. No vegetation was observed at the subject property.

4.0 PHASE I ESA FINDINGS

4.1 HISTORY OF SUBJECT PROPERTY

4.1.1 Background

A review of historical records of the subject property, including aerial photographs, fire insurance maps, land title documents and Henderson Directories indicated that the subject property has been occupied since the very early 1900s by a variety of commercial and industrial land use. According to the Henderson Directories, prior to 1933, the subject property appeared to be associated with the municipal address 59 Princess Street. A service station was situated on the site from the early 1930s to the early 1960s. The service station was listed at 59 Princess Street prior to 1933, at 61 Princess Street from 1933 onward within the Henderson Directories. Three buildings are visible in the northwest corner of the site in the 1950 aerial photograph. The Henderson Directories indicated that the subject property was operated by Wilaco Parking from 1962 to 1978, then by Kodiak Parking from 1979 to 1983, and finally by the City of Winnipeg from 1984 to present time. However, the Winnipeg Land Titles indicated that the subject property has been owned by the City of Winnipeg since 1981, and the property was previously owned by Mossdale Investments Ltd.

4.1.2 Summary of Previous Studies

No previous environmental studies are known to exist for the subject property.

4.1.3 Aerial Photographs

Aerial photographs obtained from the Manitoba Sustainable Development Land Information Division for 1950, 1968, 1979, 1993, and 2009 and were reviewed. The findings were as follows:

1950 – The subject property appears to have three buildings at the northwest corner, and the rest of the subject property appears to be a surface parking lot. Commercial buildings are visible on the adjacent properties to the north, east, south and west. Princess Street to the west and King Street to the east are also visible in the aerial photograph.

1968 – The subject property appears to be a surface parking lot. No buildings are visible on site in the aerial photograph; however, the image resolution and shadowing from adjacent buildings limit the quality of observations that can be made. The adjacent properties appear unchanged since 1950.
1979 – The subject property appears to be a surface parking lot, with no visible buildings on site. No changes appear on the adjacent properties.

1993 – The subject property appears unchanged from 1979 photo. No changes appear on the adjacent properties.

2009 – The subject property appears unchanged from 1993 photo. No changes appear on the adjacent properties.

2014 – The subject property appears unchanged from 2009 photo. No changes appear on the adjacent properties.

Aerial photographs are included in Appendix B.

4.1.4 Henderson Directories

A review of the City of Winnipeg Henderson Directories was completed for the subject property from 1930 to 2000 (Table 1). The subject property appeared to be associated with two municipal addresses; 59 Princess Street prior to 1933, and 61 Princess Street from 1933 onward.

TABLE 1
HENDERSON DIRECTORIES SEARCH

YEAR	TENANT
61 Princess Street	
1984-2016	City of Winnipeg
1978-1983	Kodiak Parking Lot
1962-1978	Wilaco Parking Lot
1950-1960	Princess Service Station & Bogdonov's Messenger Service
1930-1950	Princess Service Station(Note 1)

Note 1: The Princess Service Station was listed under 59 Princess Street from 1930-1932. From 1933 onward, the Services Station was listed under 61 Princess Street. This was a result of the reassignment of the municipal address associated with the site.

A review of the City of Winnipeg Henderson Directories was also completed for adjacent properties in 5 year intervals from 1955 to 2000 and is summarized in Appendix E.

4.1.5 Land Registry Documents

The current registered owner of the subject property is the City of Winnipeg, under Title Number 1796294. Land title documents indicated that the City of Winnipeg has been in possession of the property since February 27, 1981. A description of the historical land titles is summarized below in Table 2. Copies of land title certificates are included in Appendix F.

TABLE 2
HISTORICAL TITLE SEARCH

TITLE NUMBER	LEGAL DESCRIPTION	DATE	OWNER
1796294	Lot 2 Block "A" Plan 16 WLTO (W Div) in RL 6 Parish of St. John	1981-Current	City of Winnipeg
G76320			
C20772		1973-1981	Mossdale Investments Inc.
971015		1961-1973	Princess Parking Systems Ltd.
870397		1957-1961	Princess Motors Service Ltd.
779833		1953 - 1957	John Bogdonov, Mechanic, Harry Bogdonov, Clerk, and Edward Bogdonov, Mechanic

4.1.6 Historical Fire Insurance Maps

Historical fire insurance maps were reviewed at the Provincial Archives in Winnipeg, Manitoba and from the ERIS Ecolog Fire Insurance map for the years 1906 and 1917 [(9)]. A copy of the 1906 and 1917 Fire Insurance maps are included in Appendix G.

The series 2 H7 614.41 Volume 1, Sheet No. 14 (1906) map shows several non-residential buildings on the subject property.

The series 2 H7 614.41 Volume II, Sheet No. 201 (1917) map, viewed at the Provincial Archives, shows four non-residential buildings on the east and the west sides of the subject property. The map does not show any tanks on the property. Sub Station No. 1 is visible on the adjacent property to the southeast and several commercial buildings are also visible on adjacent properties to the north and east of the subject property.

4.1.7 Environmental Records

Manitoba Sustainable Development File Search

A search of Manitoba Sustainable Development files did not identify any outstanding work orders, permits or incidents pertaining to the property described as 61 Princess Street, Winnipeg. The formal letter of reply from Manitoba Sustainable Development is included in Appendix H.

Manitoba Sustainable Development Contaminated Sites Registry

A review of the Manitoba Sustainable Development Contaminated Sites Registry indicated that the subject property and the adjacent properties were not listed as contaminated sites.

Ecolog Environmental Risk Information Services (ERIS) Search

An Ecolog ERIS search was conducted for the subject property and included a search radius of 250 m. The search included various Federal and Provincial databases that pertained to the subject property. The following environmental records were identified within the 250 m radius of the site:

- **Contaminated/ Impacted Sites (CS)** – Two sites located within a 250 m radius of the subject property have been identified under the Manitoba Conservation list of contaminated/impacted sites which is based on the Contaminated Sites Remediation Act (CSRA). The sites are as follows:
    - **Lower Elevation**
        - 44 Adelaide Street – Manitoba Hydro, approx. 126 m W of subject property)
        - 283 Ellice Avenue –National Tilden, approx. 194 m SSW of subject property)

- **ERIS Historical Searches (EHS)** - Ten sites located within a 250 m radius of the subject property have been subject to ERIS Historical Searches within the time period of 1999 to August 2014. The sites are as follows:
    - **Equal/Higher Elevation**
        - 309 Mcdermot Avenue, 78, 86 and 88 Princess Street – approx. 100 m N of subject property
        - 92 Princess Street – approx. 130 m N of subject property
    - **Lower Elevation**
        - 54 Princess Street – approx. 66 m W of subject property

- 33 Princess Street – approx. 77 SW of subject property
- 54 Arthur Street – approx. 82 m ESE of subject property
- 52 Adelaide Street – approx. 148 m WNW of subject property
- Notre Dame Ave & Hargrave Street – approx. 168 m W of subject property
- 63 Albert Street – approx. 190 m ESE of subject property
- 228 Notre Dame Ave – approx. 203 SSE of subject property
- 110 Princess Street – approx. 216 m NNE of subject property

- **Fuel Storage Tanks (FST)** – Two properties within a 250 m radius of the subject property were identified as having fuel tanks stored on site. This database is maintained by Manitoba's Petroleum Storage Program and was active between 1905 and 2003. The locations identified as having fuel storage tanks are as follows:
  - **Lower Elevation**
    - 55 Princess Street – City of Winnipeg, approximately 34 m SSW of subject property
    - 283 Ellice Street – National Car Rental (Canada), approximately 194 m SSW of subject property.

- **Bulk Fuel Distributors (FUEL)** – Two sites within a 250 m radius of the subject property have been identified as bulk fuel distributors. This database is maintained by the Manitoba Petroleum Storage Program and was active from 2006 to February 2015. The locations identified as bulk fuel distributors are as follows:
  - **Lower Elevation**
    - 55 Princess Street – City of Winnipeg, Vehicle Service Unit, approximately 34 m SSW of subject property
    - 283 Ellice Street – National Car Rental (Canada), approximately 194 m SSW of subject property.

- **Waste Generators Summary (GEN)** – Twenty sites within a 250 m radius of the subject property have been identified as generators of regulated waste under the Manitoba's Hazardous Waste Program which was in effect from 1985 to 2012. Select identified properties are listed below:
  - **Equal/Higher Elevation**
    - 290 McDermot Ave – Trim Services 1980 Ltd., approx. 31 m NNE of subject property
  - **Lower Elevation**
    - 48 King Street – Manitoba Hydro, approx. 54 m south of subject property
    - 74 Princess Street, Home of Instant Printing/Avenue 4 Print, approx. 70 m NNW of subject property
    - 44 Princess Street – Bishop Printing Co. Ltd., approx. 82 m WSW of subject property
    - 318 Notre Dame Avenue – Luke's Machinery Co. Ltd., approx. 157 m WSW

The remaining properties listed in the database can be found in Appendix I.

- **National PCB Inventory (NPCB)** – One property located within a 250 m radius of the subject property was identified within the PCB Inventory, which was active from 1988 to 2014. The property identified in the database is listed below:
  - **Lower Elevation**

- 334 McDermot – Thomas J. Lipton Inc., approx. 163 m NW of subject property

- **Scott's Manufacturing Directory (SCT)** – 102 properties within the 250 m radius of the subject property were identified. Select proximal properties identified in the database, within 50 m of the site, include:
  - **Equal/Higher Elevation**
    - 290 McDermot – listing for Kaplan's MFG. Co. Ltd., Canadian Garment Company, Valley Fashion, and BI Work, approx. 31 m NNW of subject property
    - 288 McDermot Ave – R.B. Environmental Aquatic, approx. 33 m NE of subject property
    - 296 McDermot Ave – Nelson's Club Wear, approx. 37 m NNW of subject property
    - 66 King Street – listings for Dimension Display Inc., Kayjet Promotions Ltd., Renate's T-Shirt Shop Ltd., Compu-Stitch Embroidery Design Inc., and Renates Printworx Ltd., approx. 51 m ENE of subject property

The remaining properties listed in the database can be found in Appendix I.

- **Water Well Inventory (WWIS)** – Two properties within the 250 m radius of the subject property were identified within the Water Well Inventory database:
  - **Equal/Higher Elevation**
    - Winnipeg Electric/WRB, 202 m SE of subject property
  - **Lower Elevation**
    - Silverwood's Dairies/SRB, 136 m SSE of subject property.

Adjacent properties to the west and southwest that have contaminated sites files identified in the Ecolog ERIS search are over 100 m away from the subject property, which would decrease the chance of hydrocarbons migrating onto the subject property. Furthermore, Winnipeg soils are naturally cohesive with low conductivity properties that also decrease the chances of hydrocarbons migrating from a site. The adjacent property immediately south of the subject property consisted of a Winnipeg Police Vehicle Services Unit (Garage) and Winnipeg Police Division 30. Concerns exist relating to the potential motor oil spillage onto the ground; however, the ground of the garage was made of concrete, thus decreasing the chance of motor oil seeping into the soil and migrating to the subject property. Therefore, the historical/ current presence of contaminated sites to the south, west and southwest of the subject property represents a low environmental risk to the subject property.

The formal search response from Ecolog ERIS is included in Appendix I.

4.1.8 History of Adjacent Properties

A review of historical fire insurance maps, Henderson Directories, aerial photographs, interviews with persons familiar with the subject property and reports in Manitoba Sustainable Development Contaminated Sites Files, indicated that the surrounding land use was originally developed as commercial and/or industrial properties to the north, south, east and west as early as the 1900s.

A summary of the history of the adjacent land use as listed in the Henderson Directories is located in Appendix E.

North Adjacent Property

- The north adjacent properties have been developed as commercial and/or industrial properties since at least the early 1900s. These properties are currently commercial properties.

West Adjacent Property

- The west adjacent properties have been developed as commercial and industrial properties since at least the early 1900s. These properties are currently commercial properties.

South Adjacent Property

- The south adjacent properties have been developed as commercial since at least the early 1900s. These properties are currently commercial properties.

East Adjacent Property

- The east adjacent properties have been developed as commercial and industrial properties since at least the early 1900s. These properties are currently commercial properties.

4.2 INTERVIEWS

A summary of individuals contacted is presented in Table 3 below.

TABLE 3
LIST OF CONTACTS

INDIVIDUAL	AGENCY AND ADDRESS	COMMENTS
Mr. Greg Kucel Project Officer	City of Winnipeg 185 King Street, Main Floor Winnipeg, Manitoba R3B 1J1	Mr. Kucel has indicated as far as he knows, the subject property has always been a surface parking lot. A formal interview questionnaire completed by Mr. Kucel is included in Appendix D.
Mr. Lawrence	Winnipeg Police Service Division 30 P.O. Box 1680 Winnipeg, MB. R3C 2Z7	During the 2016 Site Investigation, Mr. Lawrence indicated that two USTs may remain on the subject property. Historically, one tank was located on the southwest side and the second tank was location on the northwest side of the subject property.
Ms. Lorie Saflor	Manitoba Sustainable Development #42 – 200 Saulteaux Cres. Winnipeg, MB. R3J 3W3	A search of Manitoba Sustainable Development files was conducted for 61 Princess Street. There are no records of any outstanding work orders, complains, or violations relating to the property. Ms. Saflor also indicated that the property is not identified as an impacted site. A formal reply from Ms. Saflor is included in Appendix H.
Mr. Neil Einarson Manager	Heritage Building Conservation Services 213 Notre Dame Avenue Winnipeg, MB. R3B 1N3	Mr. Einarson indicated that the property previously had four buildings on site; however, there is no evidence to suggest that any significant archaeological resources are present at the site. His email response is included in Appendix J.
Mr. Raymond Reichelt Contaminated Sites Coordinator	Manitoba Sustainable Development 1007 Century Street Winnipeg, MB.	Mr. Reichelt indicated that the subject property is not a designated contaminated or impacted site, no previous orders have been issued, no prosecutions have been made, and there are no outstanding actions or claims. A reply from Mr. Reichelt is included in Appendix H.
Ms. Shandra	Winnipeg Police Service Division 30 P.O. Box 1680 Winnipeg, MB. R3C 2Z7	During the 2016 site investigation, Ms. Shandra indicated that there was an historical UST on the southwest side of the subject property.

Summary of Items of Concern Identified in Interviews

The interviews identified the potential for two historical USTs at the site, and indicated that they may remain in place under the pavement. This represents an issue of potentially significant environmental concern at the subject property.

4.3 PHASE I ESA SITE INSPECTION

On January 14, 2016, Ms. Phuong Nguyen of KGS Group conducted an inspection of the subject property. Site photographs of the subject property are included in Appendix A. A Site Reconnaissance Checklist was completed for the property and is included in Appendix C.

At the time of the site investigation the subject property consisted of a paved surface parking lot. Areas of staining were not observed at the time of the site investigation; however, observations of the ground were limited to the presence of snow cover.

4.3.1 On-Site Underground and Aboveground Storage Tanks

There was no fuel storage or usage on the subject property at the time of the site investigation, and there was no evidence of any aboveground storage tanks (ASTs). However, interviews with persons familiar with the subject property indicated that there are possibly two historical USTs still present at the site. The probable tank locations were identified as the southwest side of the subject property, and the northwest side of the subject property.

4.3.2 Polychlorinated Biphenyls (PCBs)

The *Canadian Environmental Protection Act* prohibits the use of PCBs in the operation of any products, machinery, or equipment other than electrical capacitors, electrical transformers and associated electrical equipment that were manufactured in or imported into Canada before July 1, 1980 [(8)].

The subject property is currently a paved surface parking lot. No PCB containing equipment was present on the subject property at the time of the site investigation.

4.3.3 Asbestos Containing Materials (ACMs)

The subject property is currently a paved surface parking lot. No potential ACMs were present at the subject property at the time of the site investigation.

4.3.4 Lead Paint

As of 1976, the *Hazardous Products Act* restricted the level of lead in consumer paint to 5,000 mg/kg [(9)]. As of 2011, the allowable level of lead in consumer paint as per the *Surface Coating Materials Regulations* of the *Canada Consumer Product Safety Act* (replaces Part 1 and Schedule 1 of the *Hazardous Products Act*) was further reduced to 90 mg/kg.

The subject property is currently a paved surface parking lot. Lead paint or other lead containing materials were not present on the subject property at the time of the site investigation.

4.3.5 Mercury

The subject property is currently a paved surface parking lot. No mercury containing materials werepresent on the subject property at the time of the site investigation.

4.3.6 Hazardous Substances Storage/Usage

The subject property is currently a paved surface parking lot. No hazardous substances were observed to be stored or used on site at the time of the site investigation.

4.3.7 Ozone-Depleting Substances (ODSs)

The subject property is currently a paved surface parking lot. No ODS containing equipment was present on the subject property at the time of the site investigation.

4.3.8 Pesticides/Herbicides

The subject property is currently a paved surface parking lot. No pesticides or herbicides were used or present at the subject property at the time of the site investigation.

4.3.9 Microbiological Contaminants

The subject property is currently a paved surface parking lot and there are no buildings or structures on site. As such, microbiological contaminants, such as indoor mould, are not a concern at the subject property.

4.3.10 Waste Disposal Sites

There was no indication that the subject property was used as a waste disposal site at the time of the site investigation.

5.0 GROUND PENETRATING RADAR SURVEY

KGS Group performed a Geophysical Survey using Ground Penetrating Radar (GPR) at 61 Princess Street on February 3rd, 2016 in order to help identify any buried objects or anomalies, such as potential underground storage tanks (USTs). Possible UST locations as identified in the Phase I ESA interviews included the northwest and southwest corners of the parking lot which were likely associated with a former service station on site.

5.1 SITE CONDITIONS AND FIELD OBSERVATIONS

Jonathan McInnis of KGS Group completed the GPR survey on February 3rd, 2016. The weather condition for the survey consisted of a temperature of -19°C cloudy and snowing. The City of Winnipeg parking lot surveyed was approximately 65 metres long by 22 metres wide. The surface of the parking lot was snow packed with no vehicles present at the time. The snow cover on the parking surface had no interference with the GPR Survey results.

5.2 RESULTS AND INTERPRETATION

The GPR survey data collected identified a number of areas on the subject property with buried object and anomalies including two potential UST locations, old building foundations, an underground pipe and scattered unknown anomalies throughout the site. The areas are described below with the locations identified on Figure 3. Figures 3A to 3E display the GPR log data (hyperbolas) of the specific transect lines which correspond to the identified areas of buried objects and anomalies in the areas of interest (A, B, C and D).

Areas A and B – Potential USTs

Two possible UST locations were identified on site. The two potential UST locations are labeled Area A and Area B in Figure 3 (yellow). The areas are situated in the northwest corner of the site near Princess Street. The potential UST (Area A) closest to Princess Street is approximately 0.8 to 1.0 metres below grade and approximately 2 metres wide as displayed in Figure 3A. The second potential UST (Area B) is located northeast of the first UST (Area A) and is approximately 0.4 to 0.5 metres below grade and 1.5 metres wide as displayed in Figure 3B.

Due to the dimensions of these targets, there is strong indication that these buried objects may be USTs.

Areas C and D – Possible Building Foundations

The completion of the GPR survey identified at least two old building footprints labeled Area C in Figure 3 (yellow). The foundations of the two old buildings were identified at approximately 0.5 metres below grade. The GPR logs of transect lines in this area display a distinct edge of the foundations with rubble inside it and the footprint of the foundations are continuous (Figures 3D and 3E). The locations of these two foundations roughly correspond to the historical buildings identified in the 1950 aerial photograph (Appendix B). A third potential building foundation was identified east of these two foundations displayed in Figure 3 and labeled as Area D. No distinct foundation footprint was identified, but a hard surface at 0.5 metres below grade was visible in the GPR log for the transect line in this area with rubble below it (Figure 3C). The close proximity of this area to the foundation footprints (Area C) indicates that it may a possible third foundation, or remnants from the adjacent foundations or former buildings on site.

Area E - Underground Pipe

At a depth of approximately 0.5 metres, a Manitoba Hydro underground pipe labeled Area E in Figure 3 (yellow) was identified in the middle of the site entering into the southern building. This pipe is identifiable from its distinct target shape and hyperbolas displayed in the GPR log data.

Area F - Anomalies

A number of unknown anomalies were identified across the site and are labeled as Area F in Figure 3 (brown color). These anomalies shown in the figure do not resemble buried tanks, but are most likely buried concrete, rubble or boulders.

6.0 PHASE II ESA FIELD AND LABORATORY RESULTS

6.1 ASSESSMENT GUIDELINES

Useful tools to assess the significance of laboratory results are comparative criteria published by regulatory agencies and organizations such as the Canadian Council of Ministers of the Environment (CCME) and Manitoba Sustainable Development (formerly Manitoba Conservation and Water Stewardship). Contaminated sites within Manitoba are managed under the Contaminated Sites Remediation Act (CSRA) and the Contaminated Site Remediation Regulation (CSRR). On April 1, 2014, Manitoba Sustainable Development announced amendments to the CSRA and CSRR. These amendments mainly refer to the risk assessment of a site rather than site management.

The new standards for reporting that have been adopted by the CSRR are divided into primary, secondary and tertiary regulations. If a standard for a contaminant is listed in the primary standard and deemed to be applicable to site conditions, the primary standard is to be used when assessing a site. If a standard for a contaminant is not listed in the primary standard, or not applicable to the site conditions, the secondary standard is to be used for assessing the site. If a contaminant is not listed in the primary or secondary standards, the tertiary standards addressing the particular contaminant or specific site conditions shall be used for assessing the site.

For the purposes of this investigation, the primary standards are the following:

- CCME Canadian Environmental Quality Guidelines, 1999 [(10)];
- CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, 2008 [(11)]; and,
- Health Canada Guidelines for Canadian Drinking Water Quality, 2012 [(12)].

The secondary standard is the Ontario Ministry of the Environment Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, 2011 [(13)]. The tertiary standard is the Government of Alberta document titled Alberta Tier 1 Soil and Groundwater Remediation Guidelines, 2010 [(14)].

Soil

The specified CCME guidelines were established to protect various receptors (human and environment) based on potential pathways and typical land use scenarios that include agricultural, residential/parkland, commercial, and industrial. Based on the current land use at the site, along with surrounding land designation, Commercial Land Use criteria were used to assess the BTEX, PHC and metals concentrations in soil. Guidelines are further divided into soil type (coarse and fine grained) and depth (surface <1.5 m and subsurface >1.5 m). The site soil samples were taken at various depths, all below 1.5 m, and consisted of fine grained materials.

The results of petroleum hydrocarbons in soil were assessed using Tier I guidelines outlined in the CCME Canada Wide Standards for Petroleum Hydrocarbons in Soil. The CCME Canadian Environmental Quality Guidelines, Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, were used to assess the BTEX concentrations and metal concentrations in soil. An initial reference to the Tier 1 Generic Criteria was applied, and if an exceedance for a criterion was identified, a Tier I site specific approach was taken. Under the current land use (and considering adjacent property uses), the applicable Tier I Site Specific Criteria include Inhalation of Indoor Air Check values (slab on grade), Soil Contact Guideline, Offsite Migration and the Management Limit. The Groundwater Check (drinking water) is not applicable to this site as groundwater beneath the site and within the City of Winnipeg is not potable.

Groundwater

For groundwater, the Health Canada Guidelines for Canadian Drinking Water Quality (2012) is the primary regulation that applies. However, as groundwater at the subject site is non-potable, the primary guidelines are not appropriate. Therefore, the applicable guidelines default to the secondary regulations, which include Ontario Ministry of Environment; Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act. For the subject site, Table 3 – Full Depth Condition Standards in Non-Potable Ground Water Condition have been applied as they are the most applicable to the site conditions. For reference purposes, results have also been compared to Health Canada Guidelines for Canadian Drinking Water Quality.

Regulatory Reporting Requirements

Section 3.1 of the CSRA of the Province of Manitoba states that, “The owner or occupier of a site must notify the director in writing when her or she becomes aware of information that indicates that the site has been contaminated at a level that exceeds a standard established or adopted by regulation” as well as “provide the director with all reports and any other documentation in his or her possession respecting the contamination at the site”. This portion of the CSRA was adopted effective April 1, 2014, and is applicable regardless of when the contamination occurred and/or was identified.

It should be noted that, once the documentation has been submitted to Manitoba Sustainable Development, it will be up to Manitoba Sustainable Development to determine whether the site should be designated as “Contaminated” or “Impacted”, or not be designated at all. If the site is designated as “Contaminated” or “Impacted”, the owner of the site will be notified of this designation, and will be required to “file with the director a plan for the remediation of the site within 90 days after the site was designated”.

6.2 FIELD OBSERVATIONS

Site Geology

The entire site is surfaced with a reinforced concrete slab of varying thickness. Based on the testhole locations, the concrete is commonly between 17 and 20 cm thick, with the thickest concrete observed at testhole TH-06 where it was 27 cm thick. Below the concrete, isolated areas of fill were identified at testholes TH-03 and TH-04. Native materials encountered beneath the fill, and beneath the concrete at the remaining testhole locations, generally consisted of silty clay to the full depth of investigation (6.1 m). Within the silty clay, there was a narrow silt unit (15 cm to 75 cm thick). The silt seam was generally observed near the 1.5 m depth and serves as a possible migration pathway for contaminants as the silt is more permeable than the silty clay. The one exception to this stratigraphic profile was at testhole TH-03 where backfill was observed to a depth of 1.5 m below grade. The soil profiles at the testhole/monitoring well locations are summarized in the borehole logs (Appendix K).

Field Observations

During the testhole drilling program, five of the six testholes contained olfactory indicators of hydrocarbon impacts. Testhole TH-01 was the only testhole that did not contain any observable hydrocarbon impacts. Hydrocarbon vapour concentrations from soil samples collected from testhole TH-01 ranged from 1.0 ppm to 7.4 ppm. Testhole TH-02 contained elevated hydrocarbon vapour concentrations, with the highest measured value (820 ppm) encountered between 2 and 3 m below grade. Elevated vapour concentrations were also encountered in testhole TH-03 (85.2 ppm to 243 ppm) between 1.5 and 3 m below grade (within silt), testhole TH-04 (273 ppm) between 2.3 and 3 m below grade, testhole TH-05 (345 ppm to 658 ppm) between 1.5 and 2.3 m below grade and testhole TH-06 (215 ppm to 1814 ppm) between 1 and 4 m below grade. Visual observations and the results of headspace hydrocarbon vapour testing conducted on soil samples during testhole drilling are summarized on the testhole logs in Appendix K.

Site Hydrogeology

Monitoring wells were installed at testhole locations TH-02 (MW-01), TH-03 (MW-02) and TH-06 (MW-03). Groundwater levels at the site were monitored on February 25, 2016 (MW-01 and MW-03) and March 4, 2016 (MW-02). Monitoring well MW-02 could not be accessed on February 25, 2016 because there was a vehicle parked over top the well and the vehicle owner could not be reached. Monitoring well MW-02 was accessible on March 4, 2016, with groundwater level measurement taken on that day. The measured groundwater level at MW-01 was 5.695 m below the top of the well pipe. There was not enough water within the well on February 25, 2016 to bail; however, enough water was present on March 4, 2016 to obtain a small sample volume. Due to the minimal volume of water in the well, only BTEX were analysed at well MW-01. The measured groundwater level at MW-02 was 5.585 m below the top of casing, with 2 L of water bailed from the well until dry. The measured groundwater level at well MW-03 was 2.315 m below the top of casing, with 21 L of water bailed from the well until dry. The wells were allowed to recover before sampling. On March 4, 2016, monitoring wells MW-02 and MW-03 were sampled for petroleum hydrocarbons and metals.

Groundwater flow direction was not been determined for this site. The limited number of monitoring wells and the highly variable water elevations in the wells did not provide accurate groundwater flow direction data. This is most often the case in low permeable clay soils.

6.3 RESULTS OF LABORATORY SOIL ANALYSES

The analytical results for PHC Fractions F1 to F4 and BTEX concentrations are summarized in Table 4. The following Guideline exceedances of BTEX and PHC parameters were measured:

- PHC Fraction F1 exceeded the Management Limit guideline within the silty clay at 1.83 m depth at testhole TH-06 (1400 mg/kg vs. 800 mg/kg); and
- Benzene exceeded the Inhalation of Indoor Air Check (slab on grade) at TH-02 (silty clay at 3.05 m depth), TH-04 (silt at 3.05 m depth) and TH-06 (silty clay at 1.83 m depth). Benzene concentrations were 2.20 mg/kg, 2.40 mg/kg and 5.40 mg/kg, respectively, as compared to the guideline value of 0.29 mg/kg.

All remaining BTEX and PHC parameters were measured at concentrations below applicable guidelines.

The analytical results for metals parameters are summarized in Table 5. All metals parameters were measured at concentrations below applicable guidelines. However, concentrations of copper and lead measured in the upper meter of soil (fill) at testhole TH-03 appear to be elevated as compared to typical background concentrations.

6.4 RESULTS OF LABORATORY GROUNDWATER ANALYSES

Groundwater results were compared to the Ontario MOE criteria for Full Depth Generic Site Condition in a Non-Potable Ground Water Condition. The analytical results for PHC Fraction F1 to F4 and BTEX concentrations are shown in Table 6, and metals are shown in Table 7. For reference purposes, the HC-CDWQ guidelines are also included.

Results from monitoring well MW-03 (TH-06) demonstrated exceedances of the Ontario MOE criteria for benzene (3200 µg/L, criterion 430 µg/L), PHC fraction F1 (7600 µg/L, criterion 750 µg/L) and PHC fraction F2 (1100 µg/L, criterion 150 µg/L). Results from monitoring well MW-01

(TH-02) and MW-02 (TH-03) also demonstrated impacts at levels below the applicable criteria, including benzene (MW-01 and MW-02), toluene (MW-01), ethylbenzene (MW-01), and xylenes (MW-01). It should be noted that PHC fractions F1 to F4 were not sampled at MW-01 due to insufficient volume of water at the time of sample collection.

Dissolved metal concentrations in groundwater were non-detectable or below the applicable MOE non-potable groundwater criteria for parameters in all samples collected.

6.5 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

Standardized sampling procedures and protocols, as described in the previous sections, were used during all sampling events to ensure that representative samples were collected in a controlled manner and that scientifically defendable comparisons could be made. Disposable latex gloves were used for every soil and groundwater sample retrieved. Chain-of-Custody (COC) procedures were properly undertaken and holding times were not exceeded. All samples were collected in sterile containers (supplied by the lab) and were stored at the appropriate temperatures (4° C) using the proper preservatives.

Quality control of the chemical assessment process is provided by the laboratory in adhering to recognized analytical standards and methods. Part of the laboratory QC process includes the running of laboratory duplicates, blanks and spiked samples. Quality assurance of the chemical assessment process is provided by field personnel through adherence to good field sampling practices including recognized standard protocols.

7.0 DISCUSSION AND CONCLUSIONS

At the time of the 2016 site investigation, the subject property consisted of a paved surface parking lot, which is owned by the City of Winnipeg. The Phase I ESA consisted of a review of the available historical and current records, a site reconnaissance and interviews. Based on the findings of the Phase I ESA portion of the project, a geophysical survey was conducted at the property to help identify potential underground storage tanks (USTs) and other buried anomalies, and assist with testhole placement prior to Phase II ESA subsurface investigations. The Phase II ESA consisted of testhole drilling and monitoring well installation, and collection of soil and groundwater samples to confirm the presence or absence of potential contamination at the property.

Phase I Environmental Site Assessment

A review of historical records for the subject property, including aerial photographs, land title documents, historical fire insurance plans, and Henderson Directories, indicated that the subject property has been occupied since the very early 1900s for commercial and/or industrial use. Prior to 1933, the subject property appeared to be associated with the municipal address 59 Princess Street. A service station was situated on the site from the early 1930s to the early 1960s. However, within the Henderson directories the service station was listed at 59 Princess Street prior to 1933, at 61 Princess Street from 1933 onward. Three buildings were visible in the northwest corner of the site in the 1950 aerial photograph. The subject property became a surface parking lot in 1962 under the name Wilaco Parking Lot, and then became Kodiak Parking from 1978 to 1983. According to the Henderson Directories, the subject property has been owned by the City of Winnipeg since 1984; however, a review of the historical Land Titles for the property indicated that the subject property has been owned by the City of Winnipeg since 1981.

At the time of the 2016 site reconnaissance conducted on January 14, 2016, there were no buildings located on the subject property. As such, no hazardous materials were observed, stored, or used on the subject property. There was no evidence or records of any ASTs. However, interviews with persons familiar with the subject property indicated that there are possibly two historical USTs still present at the site. The possible tank locations were identified

in the southwest side of the subject property, and the northwest side of the subject property. KGS Group was not able to obtain any historical information relating to the USTs, and neither the Manitoba Sustainable Development File Search nor the Manitoba Sustainable Development Contaminated Sites Registry information request returned records of USTs at the subject property. Additionally, there was no visible evidence of spills and/or leaks on site and no record of reported spills. The potential historical/current presence of USTs on site represents an issue of potentially significant environmental concern at the subject property.

A review of historical records pertaining to the surrounding properties, including aerial photographs, historical fire insurance plans, Henderson Directories and interviews with persons familiar with the subject property indicated that the adjacent properties have been developed for commercial/industrial activities since the very early 1900s. No concerns were identified on the adjacent properties immediately to the west, north and east of the site.

At the time of the site investigation, the property immediately to the south of the subject property (55 Princess Street) consisted of the Winnipeg Police Vehicle Services Unit (Garage) and Police Division 30. Potential concerns exist relating to historical motor oil spillage onto the ground at the south adjacent property. However, the building floor was made of concrete, thus decreasing the chance of motor oil seeping into the soil and migrating to the subject property. The Ecolog ERIS Report also identified an UST on the property immediately south of the subject property (55 Princess Street, registered to the City of Winnipeg); however, interviews with persons familiar with the subject property indicated that there are currently no USTs at 55 Princess Street. In addition, a review of the Manitoba Sustainable Development Contaminated Sites Registry did not indicate any USTs on the property. The Ecolog ERIS Report also identified two contaminated/impacted sites on the west and southwest adjacent properties; however, these sites are located more than 100 m away from the subject property, which would decrease the chance of hydrocarbons migrating to the subject property. Furthermore, Winnipeg soils are naturally cohesive with low conductivity properties, which would also decrease the chance of hydrocarbons migration.

Geophysical Survey

In support of the Phase II ESA, KGS Group field personnel were on-site on February 3, 2016 to conduct a ground penetrating radar (GPR) survey at the subject property. The GPR data collected on site was surveyed to the site conditions and with a grid pattern over the areas of interest and parallel lines throughout the rest of the site to help identify any potentially buried objects, such as USTs. The data collected from the GPR survey identified several anomalies within the subsurface at the site, including two potential UST locations. The first potential UST location was identified in the northwest corner of the property at approximately 0.8 – 1.0 m below ground. The second potential UST location was also identified in the northwest corner of the property, east of the first potential UST location and adjacent to the former service station building location, at approximately 0.4 – 0.5 m below ground. Other anomalies at the site identified by the GPR survey appeared to consist of concrete foundations and/or rubble associated with former buildings at the site. It should be noted that exploratory investigations (i.e. test pit excavation) are required to confirm the exact nature of the buried objects and anomalies identified by the GPR survey.

Phase II Environmental Site Assessment

KGS Group field personnel were on site on February 10, 2016 to conduct a subsurface investigation and collect soil samples for laboratory analysis of petroleum hydrocarbons and metals at the subject property. A total of six testholes were advanced across the subject site, including adjacent to both potential UST locations in the northwest corner of the site. Three testholes (TH-02, TH-03, and TH-06) were converted to monitoring wells (MW-01, MW-02 and MW-03, respectively). Groundwater levels were measured on February 25, 2016 and March 4, 2016, and groundwater samples were collected on March 4, 2016.

During the testhole drilling program, visual and/or olfactory evidence of hydrocarbon impacts were observed in five of the six testholes. Elevated hydrocarbon vapour concentrations were measured during field headspace analyses at all testholes except for testhole TH-01. Testhole. Elevated hydrocarbon vapour concentrations measured within testholes TH-02 and TH-06 ranged from 85.2 ppm to 1814 ppm between 1 m and 4 m depth below grade, with the highest measured value encountered at testhole TH-06 in the silt layer between 1.5 and 2.3 m below

grade. The limited number of monitoring wells and highly variable water elevations in the wells did not provide accurate groundwater flow direction, and as such, flow direction could not be determined for the site.

The laboratory analytical results for soils confirmed the field observations, with soil samples collected from testholes TH-02 (MW-01), TH-04 and TH-06 (MW-03) exceeding the applicable soil quality guidelines for benzene (Figure 4). The soil sample from testhole TH-06 also exceeded the applicable soil quality guidelines for petroleum hydrocarbon (PHC) Fraction F1. Testholes TH-02 and TH-04 are located near the northern property boundary and testhole TH-06 is located on the west end of the property near the first potential UST location (Area A). All metals parameters were measured at concentrations below applicable guidelines. However, concentrations of copper and lead measured in the upper 1 m of soil (fill) at testhole TH-03 appeared to be elevated as compared to typical background concentrations.

Evidence of hydrocarbon impacts were also observed in each of the three groundwater monitoring wells. Concentrations of benzene and PHC Fractions F1 and F4 exceeded the applicable guideline criteria in the sample collected from MW-03 (TH-06) located on the west end of the property near the first potential UST location (Area A; Figure 5). Measurable concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX) and PHCs were present at monitoring wells MW-01 (TH-02) and MW-02 (TH-03); however, these concentrations were below the applicable criteria. Metals concentrations measured in groundwater were below the applicable criteria.

Based on the identified historical use of the site and the parameters measured in soil and groundwater, the impacts on the site appear to be caused by gasoline leaks/spills from the historical operation of a service station at this site from approximately 1930 to 1960. The analytical results indicate that the source of the impacts is likely gasoline (not diesel fuel) and the slightly elevated lead concentration found in testhole TH-03 suggests that the contaminant may be older gasoline.

The extents of the hydrocarbon impacts on this site have not yet been delineated. Based on the field observations and laboratory analytical data, the hydrocarbon impacts appear to occur from approximately 1 m below grade down to 4 m below grade. The impacts may extend deeper at

some locations, but this cannot be determined with the limited amount of data currently available. It is also very possible that the lateral extent of the hydrocarbon impacts may extend beyond the property boundaries.

Conclusions

Based upon site conditions at the time of the site inspection, historical information reviewed, persons interviewed, and the field and laboratory results of the Phase II ESA completed at the subject property located at 61 Princess Street in Winnipeg, it is the conclusion of KGS Group that the site has hydrocarbon impacts that exceed the applicable guidelines in soil and groundwater. Elevated PHC and BTEX concentrations appear to be associated with the historical operations of a service station on this site. Additionally, data from the GPR survey indicated that two potential underground storage tanks may be present at this site.

8.0 RECOMMENDATIONS

Based upon the findings and the results of the 2016 Phase I/II ESA at the subject property, KGS Group makes the following recommendations:

- In order to comply with the provisions of the Contaminated Sites Remediation Act, the City of Winnipeg, as the owner of the subject property of this investigation, should submit a copy of this Phase I/II ESA report to Manitoba Sustainable Development.

- Exploratory investigations are required to confirm the exact nature of the buried objects and anomalies identified by the GPR survey. A test pit investigation is recommended to confirm or refute the presence of USTs on site, and determine the nature of the identified anomalies.

- Any USTs, if confirmed to be present at the site, will require decommissioning and removal in accordance with Provincial guidelines.

- KGS recommends that the vertical and lateral extent of hydrocarbon impacts be ascertained by completing a Phase III ESA at the site.

- Once the above noted intrusive investigations have been conducted, a Remediation/Risk Management Plan should be developed for the subject property.

9.0 STATEMENT OF LIMITATIONS

9.1 THIRD PARTY USE OF REPORT

This report has been prepared for the City of Winnipeg to whom this report has been addressed, and any use a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. KGS Group accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions undertaken based on this report.

9.2 ENVIRONMENTAL STATEMENT OF LIMITATIONS

KGS Group prepared this report in a professional manner using the degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. The information contained in this report, including its conclusions, is based on the information that was made available to KGS Group during the investigation and upon the services described, which was performed within the time and budgetary requirements of the City of Winnipeg. As the report is based on available information, some of its conclusions could be different if the information upon which it is based is determined to be false, inaccurate or contradicted by additional information. KGS Group makes no representation concerning the legal significance of its findings or the value of the property investigated.

10.0 REFERENCES

1. *Environment Canada A National Ecological Framework for Canada website, found at http://sis.agr.gc.ca/cansis/nsdb/ecostrat/index.html*

2. *Environment Canada Canadian Climate Normals website, found at http://climate.weather.gc.ca/climate_normals/index_e.html*

3. *University of Manitoba Department of Engineering. February 1983. Geological Engineering Report for Urban Development of Winnipeg.*

4. *University of Manitoba Department of Engineering. 1983. Geological Engineering Report for Urban Development of Winnipeg. Plate 2, Depth to Till. Scale 1:50,000.*

5. Manitoba Energy and Mines. 1990. Bedrock Compilation Map Series. Winnipeg, NTS 62 H. Scale 1:50,000.

6. *University of Manitoba Department of Engineering. 1983. Geological Engineering Report for Urban Development of Winnipeg. Plate 4, Depth to Bedrock. Scale 1:50,000.*

7. *Western Canada Fire Underwriters Association. Historical Fire Insurance Plans H7 614.42 edc. Series 2 (1917). Winnipeg, MB.*

8. *Environmental Contaminants Act PCB Board of review. Report of PCBs (polychlorinated biphenyls). Environment Canada, Health and Welfare Canada. 133p.*

9. *Health Canada. Lead Information Package. Website accessed February 2016 at* http://laws-lois.justice.gc.ca/eng/regulations/SOR-2005-109/20110620/P1TT3xt3.html

10. Canadian Council of Ministers of the Environment, Canadian Environmental Quality Guidelines, 1999.

11. Canadian Council of Ministers of the Environment, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, 2008.

12. Health Canada Guidelines for Canadian Drinking Water Quality, 2012.

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

14. Alberta Tier 1 Soil and Groundwater Remediation Guidelines, 2010.

TABLES

TABLE 4
PETROLEUM HYDROCARBONS IN SOIL
61 PRINCESS STREET, WINNIPEG, MB

Sample No. [1]	Depth (m)	Soil Type	Moisture Content (%)	Field Vapour Reading (ppm)	Parameter [1,2]							
					Benzene	Toluene	Ethylbenzene	Xylenes (o,-m,-p)	F1 (C_6 - C_{10})	F2 (C_{10} - C_{16})	F3 (C_{16} - C_{34})	F4 (C_{34} - C_{50})
TH-01 S4	3.05	Silty Clay	35	7.4	**0.025**	<0.020	<0.010	<0.040	<10	<20	62	<20
TH-02 S4	3.05	Silty Clay	33	820	**2.20**	0.033	**2.70**	2.90	**250**	27	39	<20
TH-03 S3	1.83	Silt	21	243	**0.073**	<0.020	**0.054**	<0.040	160	**270**	200	27
TH-04 S4	3.05	Silt	32	273	**2.40**	0.037	**2.90**	0.42	68	<20	29	<20
TH-05 S3	1.83	Silt	20	658	<0.077 [5]	0.040	**0.83**	1.10	**460**	**300**	<20	<20
TH-06 S3	1.83	Silty Clay	24	1814	**5.40**	**1.000**	**46**	53	**1400**	**530**	79	<20
TH-06 S7	5.49	Silty Clay	35	45.5	**0.01**	<0.020	**0.021**	<0.040	<10	<20	58	<20
Laboratory Detection Limits			*0.03*	*-*	*0.01*	*0.02*	*0.01*	*0.04*	*10*	*20*	*20*	*20*
CCME Guidelines [3,4] - Commercial Land Use Criteria for Subsurface Soil (>1.5 m) Soil Type: Fine Grained Soil.												
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA					**0.0068**	**0.08**	**0.018**	**2.4**	**170**	**230**	**5,000**	**10,000**
TIER I SITE SPECIFIC CRITERIA (For Pathways Applicable to Site)												
Inhalation of Indoor Air Check (slab on grade)					0.29	13,000	6,700	1,600	-	-	-	-
Soil Contact Guideline [a]					620	660	860	460	NA	NA	NA	NA
Off-Site Migration Check					NC	NC	NC	NC	NA	NA	19,000	NA
Management Limit [b]					-	-	-	-	800	1,000	5,000	10,000

Notes:

"-" = No Data

NA = Not Applicable. Calculated value exceeds 1,000,000 kg/mg or pathway excluded.

1. All values are expressed in milligrams per kilogram (mg/kg).
2. Soil samples obtained on February 10, 2016.
3. CCME - Canadian Council of Ministers of the Environment - Canadian Environmental Quality Guidelines, 1999. Update 7.0 - 2007.
   - Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health.
4. CCME - Canadian Council of Ministers of the Environment. Canada-Wide Standards for Petroleum Hydrocarbons (PHCs) in Soil, May 2001 - revised January 2008. Updated July 2012.

a. For depths between 0 and 1.5 meters below ground level, the terrestrial ecological pathway must be applied.
   A management limit has been developed for PHC that must be applied at all depths if the ecological pathway is removed.
   CCME does not specify for depths between 1.5 and 3 meters bgl.

b. Includes additional considerations such as free phase formation, explosive hazards, and buried infrastructure effects.

5. Detection limits raised due to matrix interference.

BOLD - Exceedances of Tier I Generic Criteria
- Exceedance of Tier I Site Specific Criteria

TABLE 5
METALS IN SOIL
61 PRINCESS STREET, WINNIPEG, MB

Sample No. [1]	Parameter (mg/kg)																														
	Aluminum	Antimony[4]	Arsenic	Barium[4]	Beryllium[4]	Bismuth	Cadmium	Calcium	Chromium (Total)	Cobalt[4]	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum[4]	Nickel	Phosphorus	Potassium	Selenium	Silver[4]	Sodium	Strontium	Thallium	Tin[4]	Titanium	Uranium	Vanadium	Zinc	Zirconium
TH-03 S1	12400	6.82	8.21	310	0.62	0.30	0.63	47100	27.1	8.09	90.8	21300	228	18.7	18400	366	0.449	1.88	22.4	888	3140	<0.50	0.446	696	153	0.201	40	373	0.947	38.9	172	6.11
TH-06 S1	12900	1.29	4.67	175	0.65	0.19	0.489	73600	26.8	7.58	33.1	17900	67.5	23.1	34800	310	0.102	0.72	23.2	514	3070	<0.50	0.174	394	96.2	0.222	8.96	404	1.32	43.9	72.4	9.23
TH-05 S1	18800	0.38	5.05	175	0.79	0.19	0.535	64700	34.6	9.45	33.9	21500	36.8	25.6	24100	410	0.623	0.41	26.7	568	3490	<0.50	0.144	377	120	0.233	2.86	347	1.08	58.9	77.1	6.96
CCME - Canadian Soil Quality Guidelines [2] - Commercial Land Use																															
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA	-	40	12	2,000	8	-	22	-	87	300	91	-	260		-	-	24	40	50	-	-	2.9	40	-	-	1 [3]	300	-	33	130	360	-
Tier I Site Specific Criteria (For Pathways Applicable to Site)																															
Human Health Guidelines																															
Direct contact guideline	-	-	-	10,000	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soil Ingestion Guideline [5]	-	-	12	NC	-	-	49	-	630	-	4000	-	260		-	-	24	-	NC	-	-	125	-	-	-	NC	-	-	33	NC	NC	-
Inhalation of Indoor Air Check[5]	-	-	NC	NC	-	-	NC	-	NC	-	NC	-	NC		-	-	NC	-	NC	-	-	NC	-	-	-	NC	-	-	NC	NC	NC	-
Environmental Health Guidelines																															
Soil Contact Guideline	-	-	26	NC	-	-	22	-	87	-	91	-	600		-	-	50	-	50	-	-	2.9	-	-	-	3.6	-	-	2000	130	360	-

Notes:
EQL = Estimated Quantitation Limit = The lowest level of the parameter that can be quantified with confidence.
"-" = No Data
NC = Not Calculated

1. Soil samples obtained on February 10, 2016.
2. CCME - Canadian Council of Ministers of the Environment - Canadian Environmental Quality Guidelines, 1999, Updated 7.0 - 2007. Updated July 2013
3. Provisional guideline. (Hexavalent Chromium and Thallium)
4. Interim remediation criteria for soil (mg/kg) that have not yet been replaced by Canadian Soil Quality Guidelines.
5. Selenium pathway names are from the new protocol (derived in 2006), however, some of the pathway names from the old guideline and the new guideline are interchangeable. Use old pathway names instead of the new ones because all of the inorganics with the exception of Selenium use the old guideline pathway names. The interchangeable pathway names are as follow:

Old Guideline	New Guideline
Soil Ingestion Guideline	Direct contact (SQG_{DH})
Inhalation of Indoor Air Check	Protection of Indoor Air Quality (Basement)
	Protection of Indoor Air Quality (Slab-on-Grade)
Groundwater Check (Drinking Water)	Protection of Potable Water
Groundwater Check (Aquatic Life)	Protection of Freshwater Life

BOLD	- Exceedances of Tier I Generic Criteria
	- Exceedance of Tier I Site Specific Criteria

TABLE 6
PETROLEUM HYDROCARBONS IN GROUNDWATER
61 PRINCESS STREET, WINNIPEG, MB

Sample No.	Date	Parameter [1]							
		Benzene	Toluene [4a, 4b]	Ethyl-benzene [5a, 5b]	Xylenes (-o,-m,-p) [6a, 6b]	F1 (C6 - C10)	F2 (C10 - C16)	F3 (C16 - C34)	F4 (C34 - C50)
MW-01	4/Mar/16	2.6	0.64	2.9	3.8	-	-	-	-
MW-02	4/Mar/16	1.1	<0.40	<0.40	<0.80	<300	<150	<150	<150
MW-02 - Lab Dup.	4/Mar/16	-	-	-	-	-	<150	<150	<150
MW-03	4/Mar/16	**3200**	**170**	**950**	**1200**	7600	1100	<150	<150
EQL		*0.4*	*0.4*	*0.4*	*0.8*	*300*	*150*	*150*	*150*
HC-CDWQ [2]									
Drinking Water Quality		5 (MAC)	60 (MAC) 24 (AO)	140 (MAC) 1.6 (AO)	90 (MAC) 20 (AO)	-	-	-	-
MOE Standards[7,8]									
Table 3		430	18 000	2300	4200	750	150	500	500

Notes:
EQL = Estimated Quantitation Limit = Lowest level of the parameter that can be quantified with confidence.
"-" = No Data
MAC - Maximum Acceptable Concentration
AO - Aesthetic Objective

1. All concentrations in micrograms per litre (µg/L).
2. Health Canada - Canadian Drinking Water Quality Guidelines (HC-CDWQ). Updated October 2014.
4. Toluene
   a. Health basis of MAC: Adverse neurological effects, including vibration thresholds, colour discrimination, auditory thresholds, attention, memory and psychomotor functions.
   b. Other Health Considerations: Insufficient information to determine whether toluene is carcinogenic to humans.
5. Ethylbenzene
   a. Health basis of MAC: Effects on the liver and pituitary gland.
   b. Other Health Considerations: Tumour formation at various sites in animals, including kidney, lung, liver and testes.
6. Xylenes
   a. Health basis of MAC: Adverse neuromuscular effects.
   b. Other Health Considerations: Insufficient information to determine whether xylenes are carcinogenic to humans.
7. MOE 2011 - Ontario Ministry of Environment. Soil, Ground Water and Sediment Standards for Use
   Under Part XV.1 of the Environmental Protection Act (All Types of Property)
   Table 3 - Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition
8. MOE - Ministry of the Environment - Ontario Drinking Water Standards, Objectives and Guidelines, June 2003. Revised 2006.

Bold	- Exceedance of HC - CDWQ
	- Exceedance of MOE Criteria

TABLE 7
METALS IN GROUNDWATER
61 PRINCESS STREET, WINNIPEG, MB

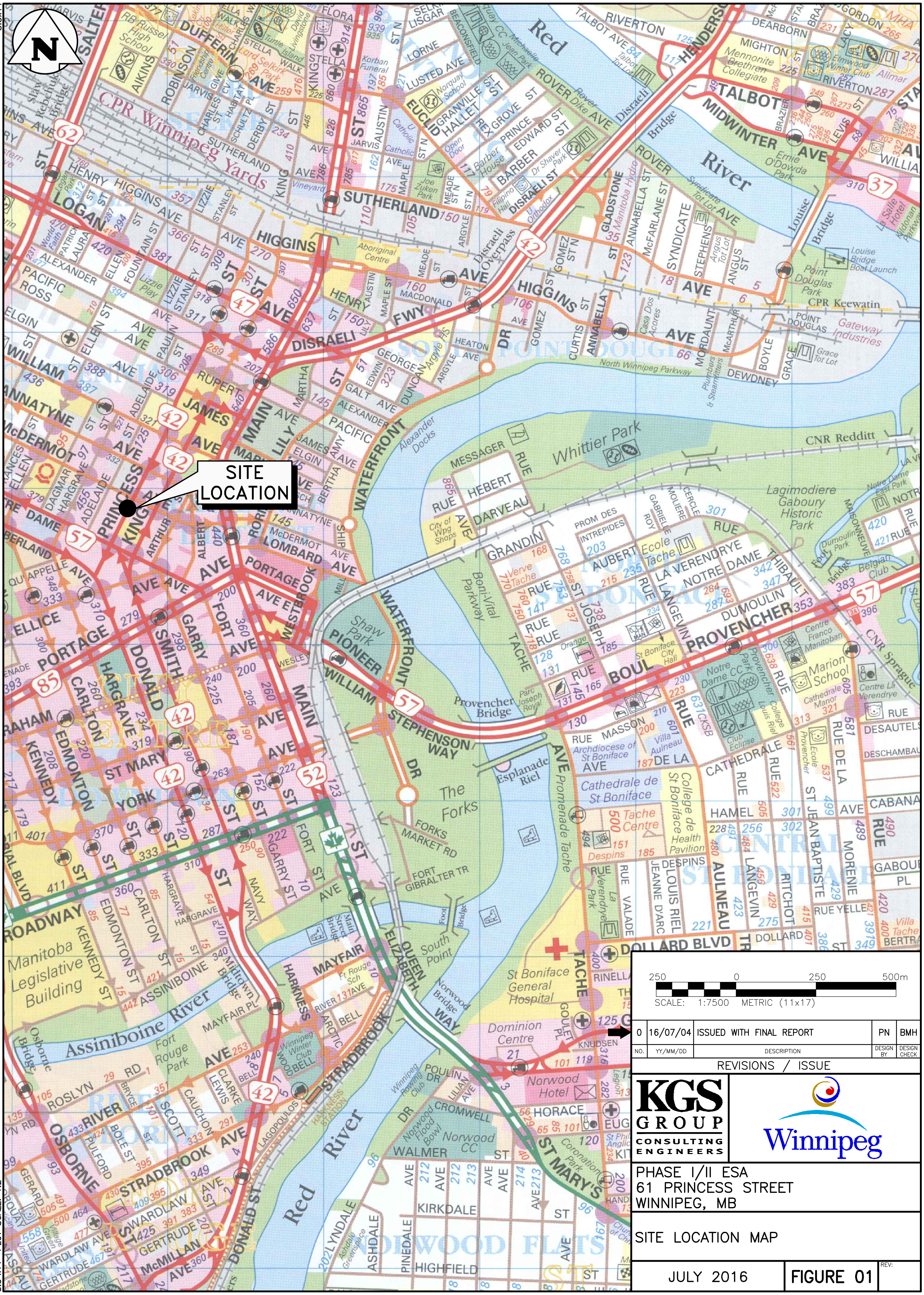
Well No.	Date	Parameter [1]																																		
		Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silicon	Silver	Sodium	Strontium	Sulphur	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Zirconium
MW-02	04-Mar-16	0.0102	<0.00050	0.00155	0.0472	<0.00010	<0.0010	0.226	0.000507	785	0.0022	0.00627	0.0100	**0.0364**	0.00060	1.04	577	**3.04**	<0.000010	0.0033	0.0342	17.5	0.00630	10.0	<0.000020	**867**	6.35	959	<0.000050	<0.0050	<0.0050	**0.133**	<0.0050	0.124	0.00114
MW-03	04-Mar-16	0.0074	0.00125	0.00271	0.0923	<0.00010	<0.0010	0.245	<0.000010	166	<0.0010	0.00166	0.00049	**9.24**	0.00171	0.257	222	**0.922**	<0.000010	0.0071	0.0101	15.5	0.00075	6.84	<0.000020	**406**	1.20	289	<0.000050	<0.0050	<0.0050	**0.0484**	<0.0050	<0.0050	<0.00050
EQL		*0.0030*	*0.00050*	*0.00010*	*0.0010*	*0.00010*	*0.0010*	*0.050*	*0.000010*	*0.050*	*0.0010*	*0.00050*	*0.00020*	*0.0050*	*0.00020*	*0.0050*	*0.050*	*0.0010*		*0.0010*	*0.0010*	*0.050*	*0.00010*	*0.10*	*0.000020*	*0.050*	*0.0010*	*3.0*	*0.000050*	*0.0050*	*0.0050*	*0.00010*	*0.0050*	*0.0050*	*0.00050*
HC-CDWQ [2]																																				
Drinking Water		0.1- 0.2 [3] (OG)	0.006 (MAC)	0.010 (MAC)	1.0 (MAC)	-	-	5.0 (MAC)	0.005 (MAC)	-	0.05 (MAC)	-	1.0 (AO)	0.3 (AO)	0.010 (MAC)	-	-	0.05 (AO)	0.001 (MAC)	-	-	-	0.05 (MAC)	-	-	200 (AO)	-	-	-	-	-	0.02 (MAC)	-	5 (AO)	-
MOE Standards[4] - All Types of Property Use																																				
Table 3		-	20	1.9	29	0.067	-	45	0.0027	-	0.81 (Total), 0.14 (IV)	0.066	0.087	-	0.025	-	-	-	(0.0028) 0.00029	9.2	0.49	-	0.063	-	0.0015	2300	-	-	0.51	-	-	0.42	0.25	1.1	-

Notes:
EQL = Estimated Quantitation Limit = Lowest level of the parameter that can be quantified with confidence

1. All values are expressed in milligrams per litre (mg/L).
2. Health Canada - Canadian Drinking Water Quality Guidelines (HC-CDWQ). Updated October 2014.
   MAC - Maximum Acceptable Concentration
   AO - Aesthetic Objectives
   OG - Operational Guideline
3. This is an operational guidance value, designed to apply only to drinking water treatment plants using aluminum-based coagulants.
The operational guidance value of 0.1 mg/L applies to conventional treatment plants, and 0.2 mg/L applies to other types of treatment systems.
4. MOE 2011 - Ontario Ministry of Environment. 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

Bold - Exceedance of HC - CDWQ
- Exceedance of MOE Criteria

FIGURES



250 0 250 500m

SCALE: 1:7500 METRIC (11x17)

NO.	YY/MM/DD	DESCRIPTION	DESIGN BY	DESIGN CHECK
0	16/07/04	ISSUED WITH FINAL REPORT	PN	BMH

REVISIONS / ISSUE

KGS GROUP CONSULTING ENGINEERS

Winnipeg

PHASE I/II ESA
61 PRINCESS STREET
WINNIPEG, MB

SITE LOCATION MAP

JULY 2016

FIGURE 01

REV:

8.5x11

FileName: \\k-file-4\p-data\Projects\2016\16-0107-001\Dwg\Env\16-0107-001_Fig01.dwg – Tab: F01 Plotted By: rmeilleur 16/07/04 [Mon 10:46am]
8.5"x11" PLOT SCALE: 1:2

LEGEND:

01 PHOTO LOCATION

10 0 10 20 30 40m

SCALE: 1:1000 METRIC (11x17)

NO.	YY/MM/DD	DESCRIPTION	DESIGN BY	DESIGN CHECK
0	16/07/04	ISSUED WITH FINAL REPORT	PN	BMH

REVISIONS / ISSUE

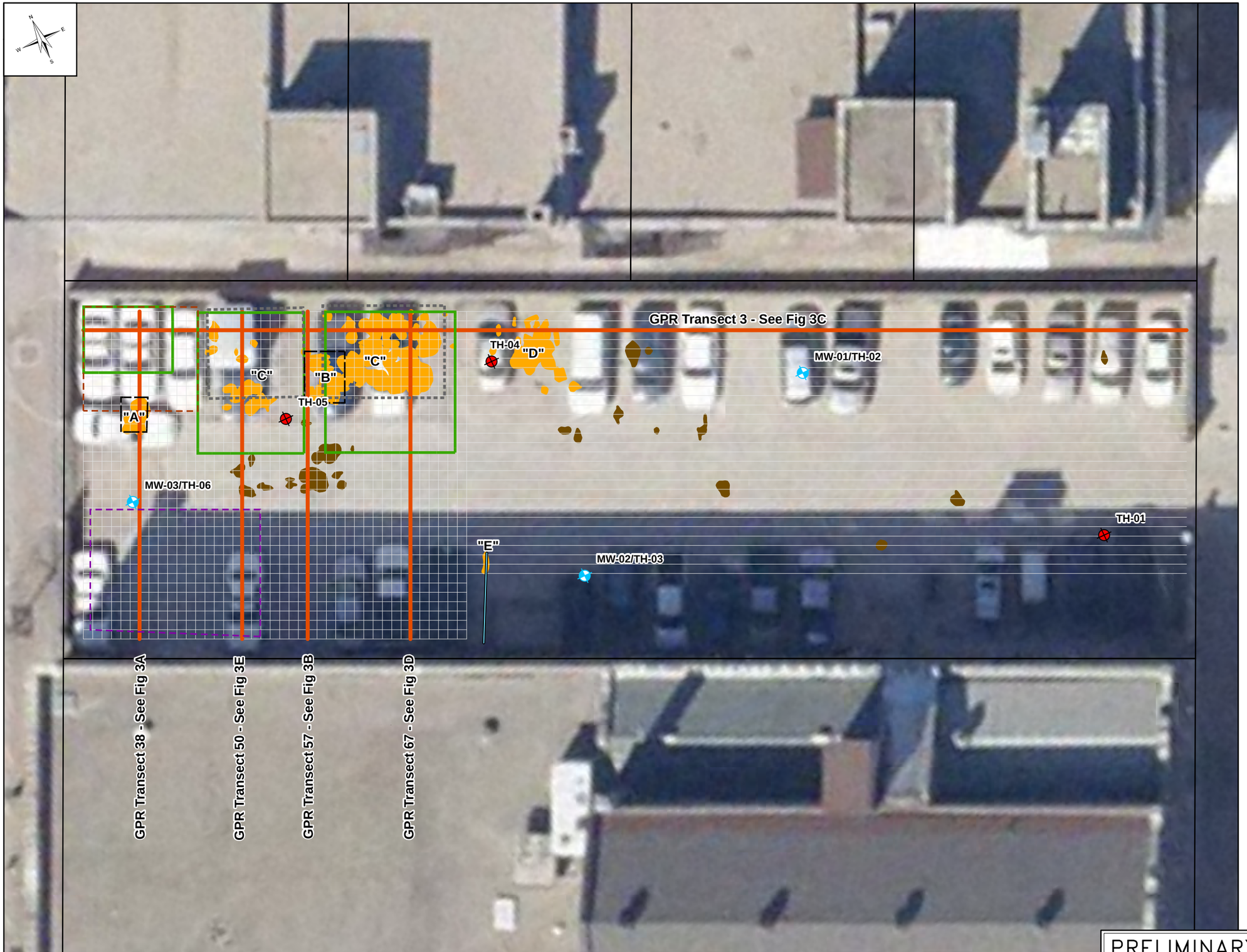
KGS GROUP CONSULTING ENGINEERS

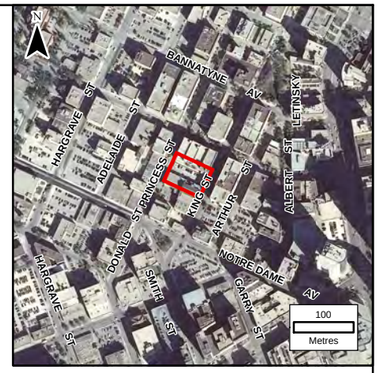
Winnipeg

PHASE I/II ESA
61 PRINCESS STREET
WINNIPEG, MB

DETAILED SITE MAP
AND PHOTOGRAPH LOCATIONS

JULY 2016 | FIGURE 02 | REV: 0





LEGEND:

- Monitoring Well (KGS Group)
- Testhole (KGS Group)
- MB Hydro Gas
- Potential Location UST's
- Historic 1950 Building Foundation Limits (GPR Survey)
- 1950 Building Footprint (Image)
- Rebar Limits
- Concrete Pad
- Property Lines (Approximate)
- GPR Transect
- GPR Anomalies
- GPR Anomalies "F"

NOTES:

1. GPR survey conducted by KGS Group Feb 3, 2016.
2. Image: City of Winnipeg, 2009.
3. Property Limit shown has been provided by City of Winnipeg.
4. All units are metric and in metres unless otherwise specified. Transverse Mercator Projection, NAD 1983, Zone 14. Elevations are in metres above sea level (MSL).

2 0 2 4 6 8
Metres

SCALE: 1:200 METRIC 11"x17"

NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

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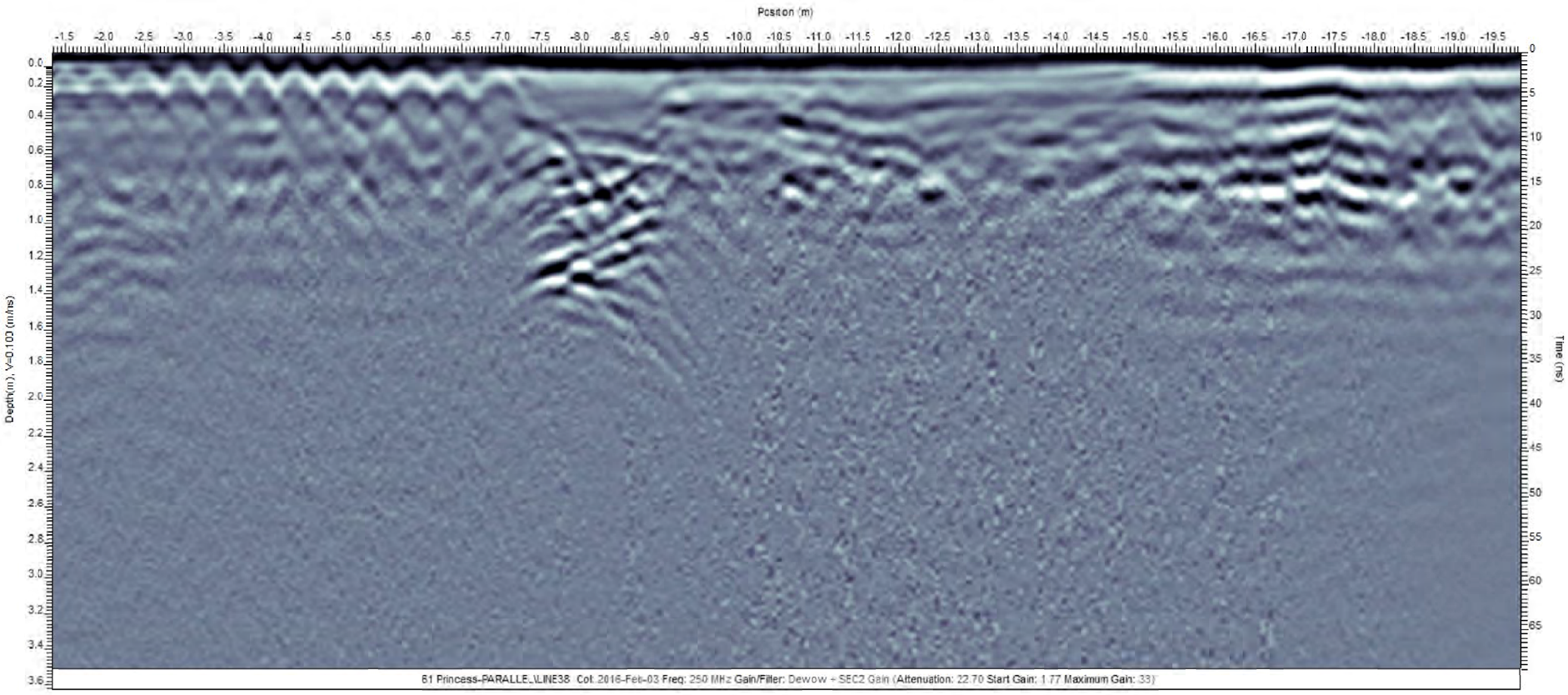
COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

GPR SURVEY RESULTS

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 03 | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig03_Rev0.mxd
11"x17" PLOT SCALE 1:1



NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

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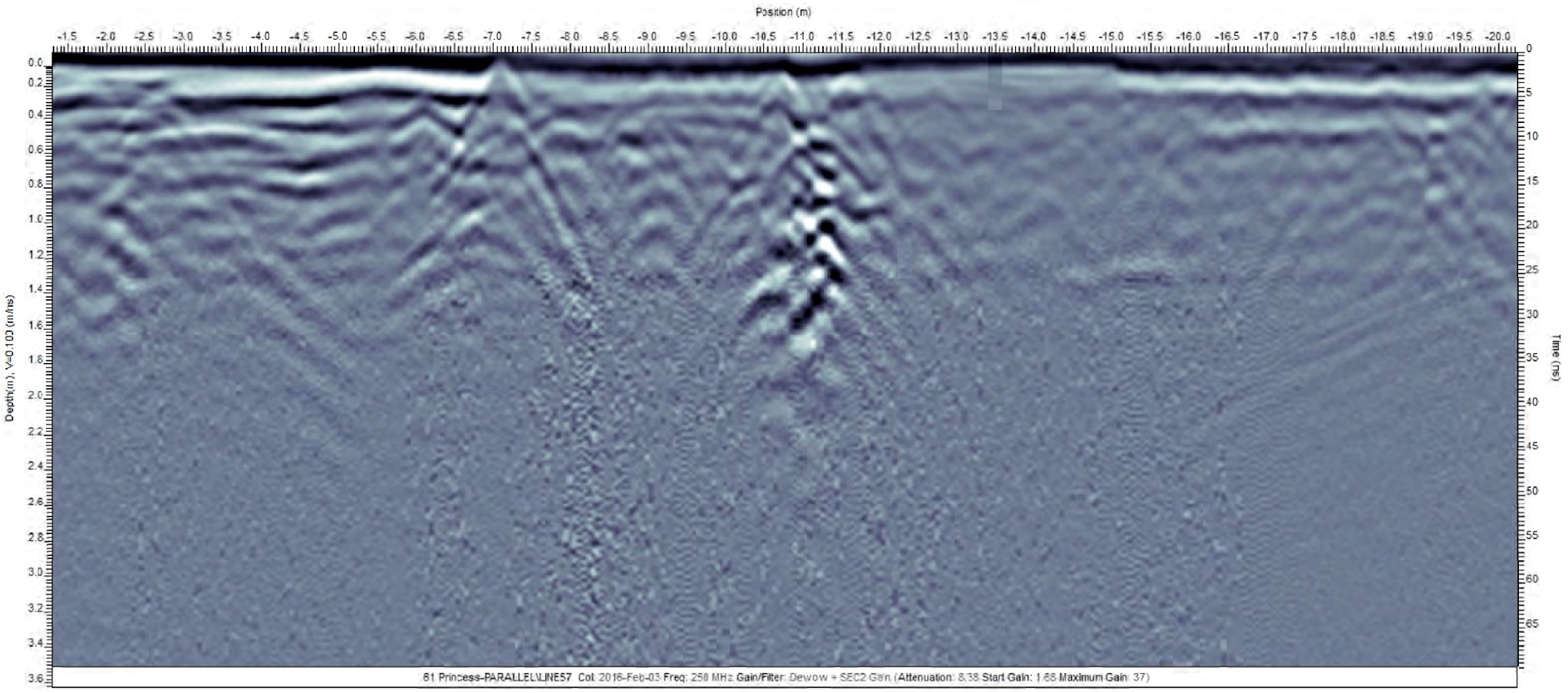
COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

GPR TRANSECT 38

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 03A | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig03A_Rev0.mxd
11"x17" PLOT SCALE 1:1



NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

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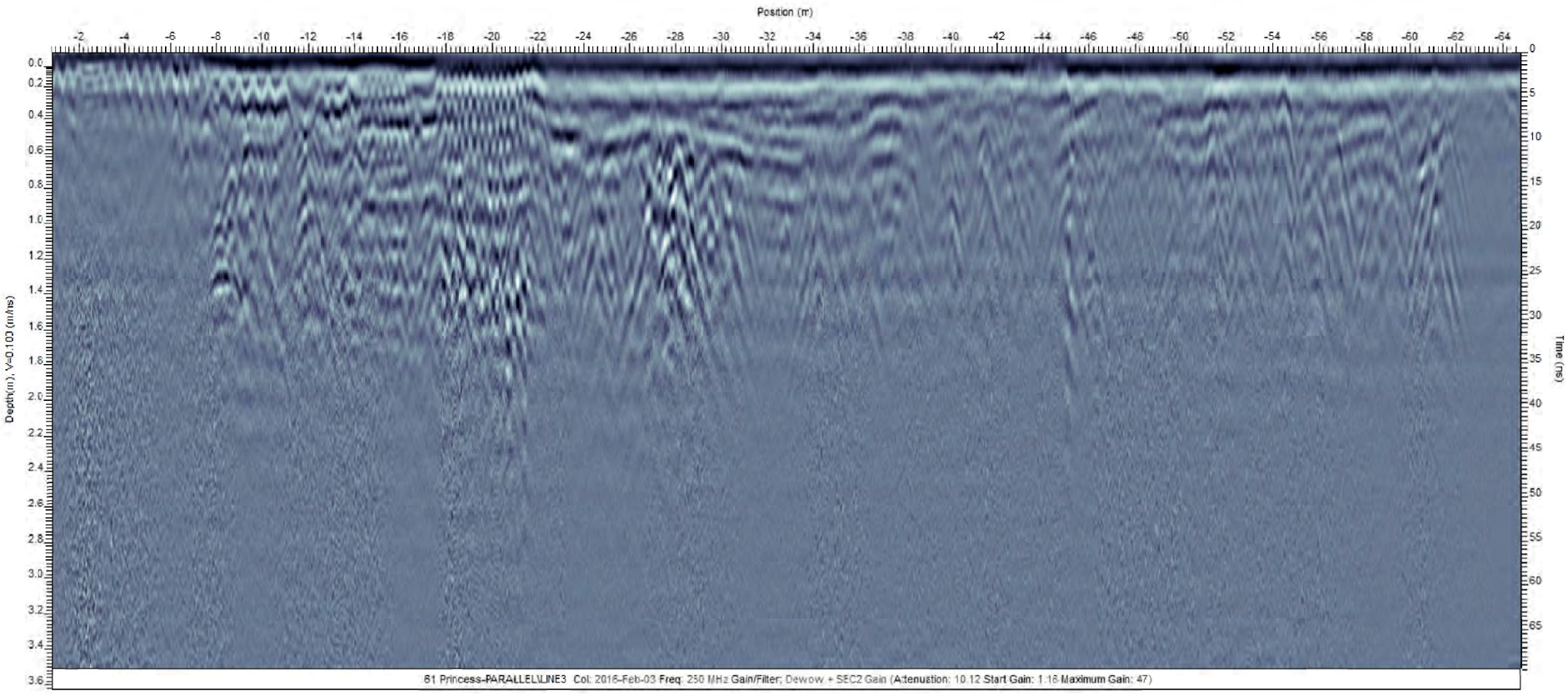
COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

GPR TRANSECT 57

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 03B | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig03B_Rev0.mxd
11"x17" PLOT SCALE 1:1



NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

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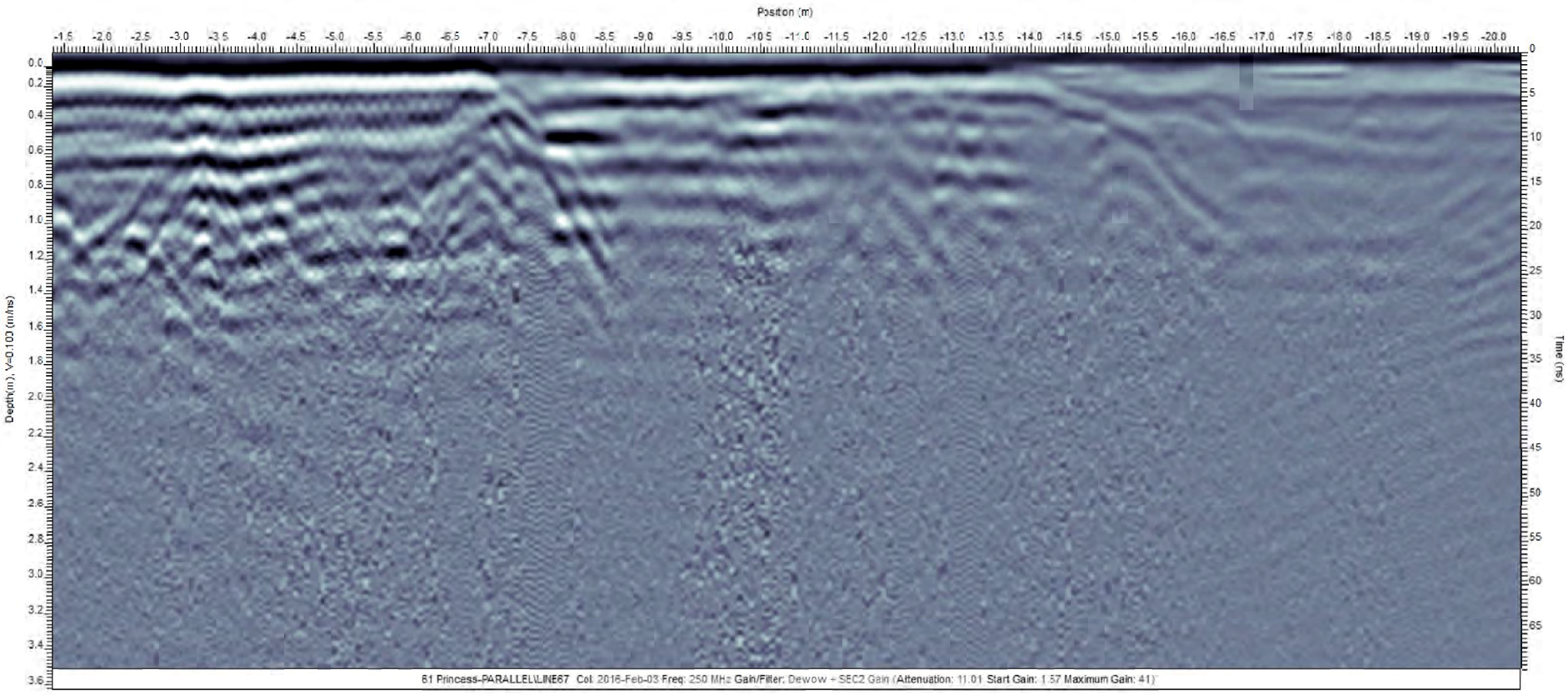
COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

GPR TRANSECT 3

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 03C | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig03C_Rev0.mxd
11"x17" PLOT SCALE 1:1



NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

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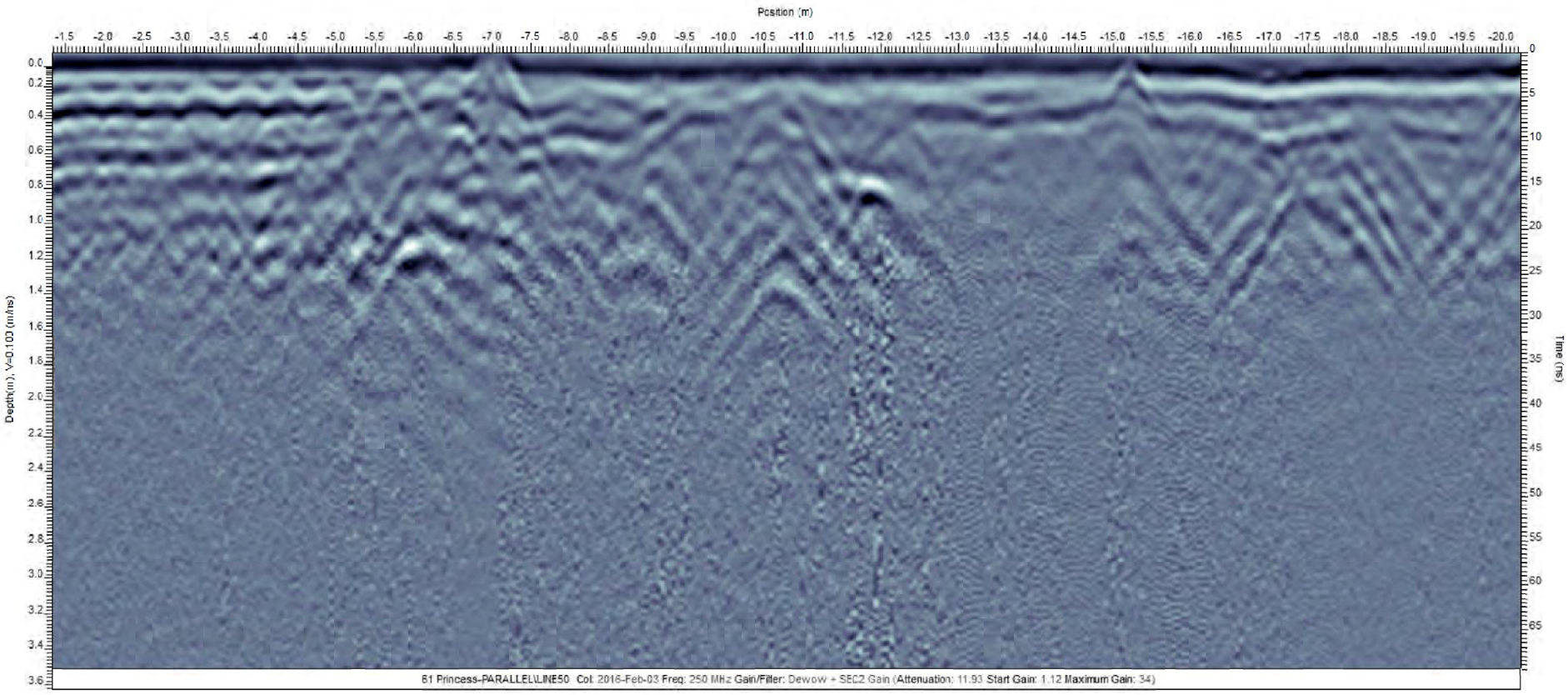
COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

GPR TRANSECT 67

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 03D | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig03D_Rev0.mxd
11"x17" PLOT SCALE 1:1



NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

REVISIONS / ISSUE

KGS GROUP CONSULTING ENGINEERS

Winnipeg
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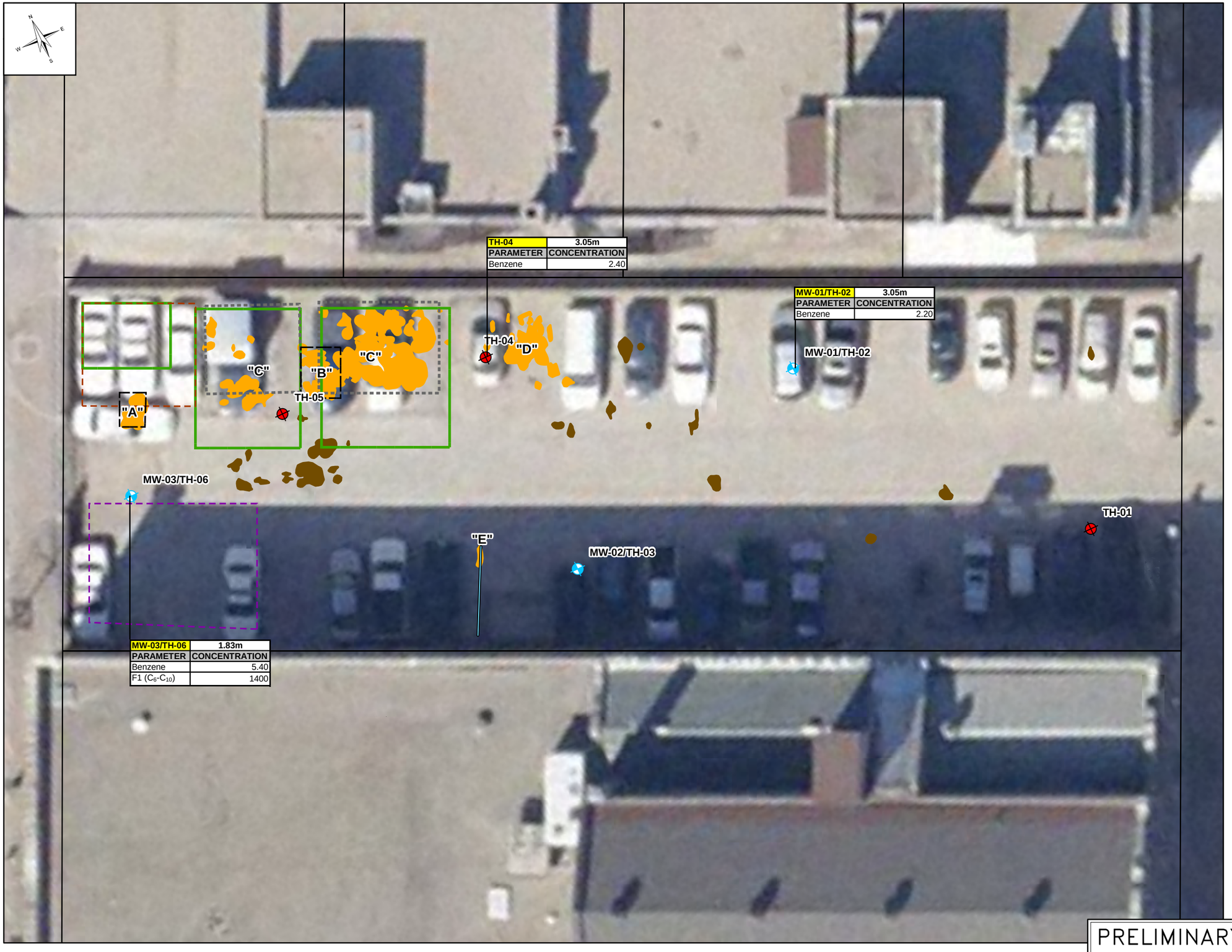
COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

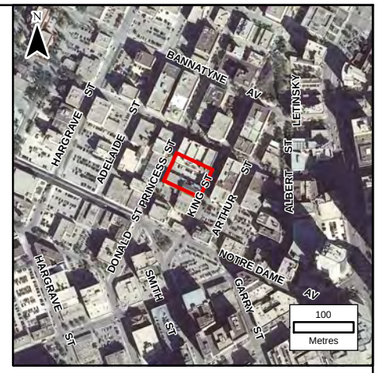
GPR TRANSECT 50

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 03E | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig03E_Rev0.mxd
11"x17" PLOT SCALE 1:1





LEGEND:

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- Rebar Limits
- Concrete Pad
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- GPR Anomalies
- GPR Anomalies "F"

MW-01/TH-02	DEPTH
PARAMETER	CONCENTRATION
Benzene	2.20

Parameters above Criteria

NOTES:

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2 0 2 4 6 8
Metres

SCALE: 1:200 METRIC 11"x17"

NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

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COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

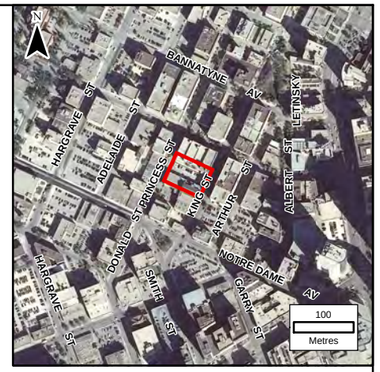
HYDROCARBON IMPACTS IN SOIL

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 04 | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig04_Rev0.mxd
11"x17" PLOT SCALE 1:1

MW-03/TH-06	1.83m
PARAMETER	CONCENTRATION
Benzene	3200.00
F1 (C_6-C_{10})	7600
F2 (C_{10}-C_{16})	1100



LEGEND:

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- MB Hydro Gas
- Potential Location UST's
- Historic 1950 Building Foundation Limits (GPR Survey)
- 1950 Building Footprint (Image)
- Rebar Limits
- Concrete Pad
- Property Lines (Approximate)
- GPR Anomalies
- GPR Anomalies "F"

MW-03/TH-06	DEPTH
PARAMETER	CONCENTRATION
Benzene	3200.00
F1 (C_6-C_{10})	7600
F2 (C_{10}-C_{16})	1100

Parameters above Criteria

NOTES:

1. GPR survey conducted by KGS Group Feb 3, 2016.
2. Image: City of Winnipeg, 2009.
3. Property Limit shown has been provided by City of Winnipeg.
4. All units are metric and in metres unless otherwise specified. Transverse Mercator Projection, NAD 1983, Zone 14. Elevations are in metres above sea level (MSL).

2 0 2 4 6 8
Metres

SCALE: 1:200 METRIC 11"x17"

NO.	YY/MM/DD	DESCRIPTION	ISSUED BY	CHECK BY
0	16/07/04	ISSUED FOR FINAL REPORT	MSW	BMH

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KGS GROUP CONSULTING ENGINEERS

Winnipeg
Embrace the Spirit + Vivid Footprint

COMBINED PHASE I/II ENVIRONMENT SITE ASSESSMENT (ESA)
61 PRINCESS STREET, WINNIPEG, MB

HYDROCARBON IMPACTS IN GROUNDWATER

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

JULY 2016 | FIGURE 05 | REV: 0

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\GPR_Survey\Rev0\16-0107-001_Fig05_Rev0.mxd
11"x17" PLOT SCALE 1:1

APPENDIX A

SITE PHOTOGRAPHIC LOG

SITE PHOTOGRAPHIC LOG
61 PRINCESS STREET, WINNIPEG, MANITOBA

Photo 1. East view of subject property: 61 Princess Street

Photo 2. East view of south adjacent property: 73 Princess Street

Photo 3. Southwest view of south adjacent properties: commercial buildings (286-296 McDermot Avenue)

Photo 4. West view of west adjacent properties: commercial (54-68 Princess Street).

Photo 5. Northwest view of west adjacent property: commercial (70 Princess Street).

Photo 6. East view of south adjacent property: 55 Princess Street.

SITE PHOTOGRAPHIC LOG
61 PRINCESS STREET, WINNIPEG, MANITOBA

Photo 7. West view of south adjacent property: 54 King Street

Photo 8. East view of east adjacent property: 54 & 70 Arthur Street.

Photo 9. Southwest view of possible location of 1st UST – southwest corner of the subject property.

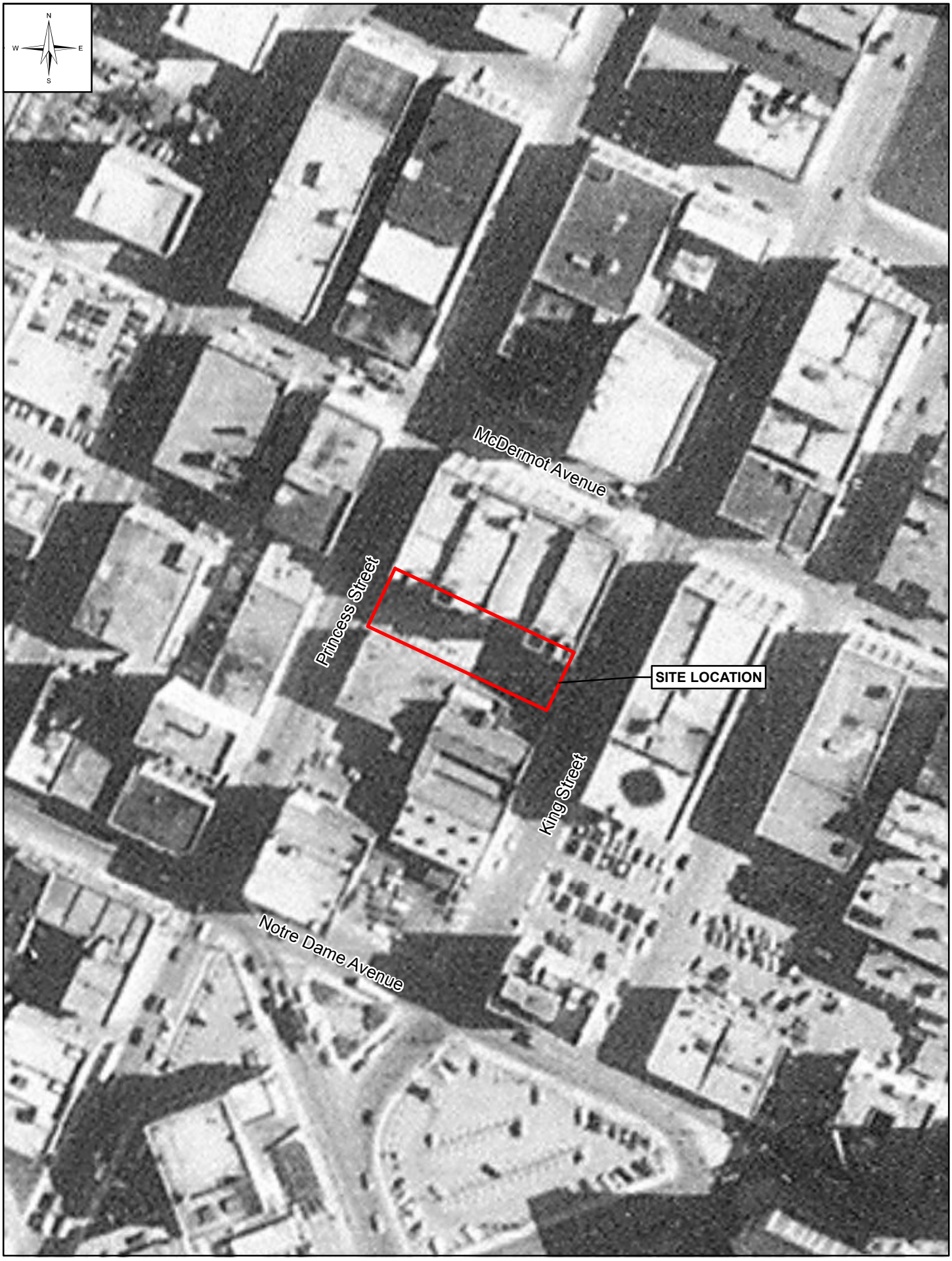
Photo 10. North view of possible location of 2nd UST – northwest corner of the subject property.

APPENDIX B

AERIAL PHOTOGRAPHS

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\RevA\16-0107-001_F01_RevA.mxd
11"x17" PLOT SCALE 1:1

1950 AERIAL PHOTO	61 PRINCESS STREET	SCALE 1:1,000



1968 AERIAL PHOTO	61 PRINCESS STREET	SCALE 1:1,500

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\RevA\16-0107-001_F01_RevA.mxd
11"x17" PLOT SCALE 1:1

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\RevA\16-0107-001_F01_RevA.mxd
11"x17" PLOT SCALE 1:1

1979 AERIAL PHOTO	61 PRINCESS STREET	SCALE 1:1,500

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\RevA\16-0107-001_F01_RevA.mxd
11"x17" PLOT SCALE 1:1

1993 AERIAL PHOTO	61 PRINCESS STREET	SCALE 1:1,000

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\RevA\16-0107-001_F01_RevA.mxd
11"x17" PLOT SCALE 1:1

2009 AERIAL PHOTO	61 PRINCESS STREET	SCALE 1:1,000

2014 AERIAL PHOTO	61 PRINCESS STREET	SCALE 1:1,000

FileName: P:\Projects\2016\16-0107-001\Dwg\GIS\MXDs\RevA\16-0107-001_F01_RevA.mxd
11"x17" PLOT SCALE 1:1

APPENDIX C

SITE RECONNAISSANCE CHECKLIST

SITE RECONNAISSANCE CHECKLIST

Client: City of Winnipeg

Site Location: 61 Princess Street

Date of Visit: January 14, 2015

Climatic Conditions: -18^{o}C overcast NW17 km/hr

1.0 PRESENT SITE DEVELOPMENT

Site Description (occupant, activities): Paved parking area

Buildings/structures (type of construction): None

Roads/parking areas: Project site is a parking area

Dwellings: None

Underground utilities: Not available

Power lines: None

Right-of-ways: None

Aboveground storage tanks (material of construction, volume, contents, tag/ID no.): Not observed

Underground storage tanks (pipes, vents, etc.): One possibly two USTs.

Septic tanks/field: None

Groundwater wells: None

Accessibility of drilling equipment: Yes

2.0 SURFACE CONDITIONS

Topography: Flat

Direction of run-off: onto the streets (Princess Street to the west and King Street to the east

Vegetation: None

Surface erosion: None

Bedrock outcrops: None

Lagoons/swamps/marsh areas: None

Streams: None

Ponded areas: None

Evidence of flooding: None

Diversion ditches: None

Sink holes: None

Excavations: None

3.0 OUTDOOR WASTE EVIDENCE

Surface staining: Not observed

Vegetation damage: No vegetation on site

Oily sheens or discoloration of surface water: No surface water on or close to project site.

Odours: None

Construction material: None

Drums, barrels, containers: None

Waste materials/piles: None

Hazardous substances/wastes (waste oil, solvents, batteries, etc): None

Chemical/petroleum storage: None

Transformers/electrical equipment (potential PCBs – label/tag, volume, name of manufacturer): None

Are all substances/fuel stored neatly in properly labeled containers (drums, barrels, etc.)? Not Applicable

Do any containers or ASTs or transformers/electrical equipment appear to be leaking or damaged? Not Applicable

4.0 INSIDE BUILDINGS INSPECTIONS

No Buildings on the subject property.

Are Potential Asbestos Containing Materials (ACMs) suspected?

Ceiling tile:
Floor tile:
Pipe/boiler/duct insulation:
Wallboard:
Roofing materials:
Sprayed on materials (ceiling, walls):

Do any potential ACMs appear to be crumbling, flaking, damaged or broken?

NOTE: If friable ACMs (poor condition) are suspected, collect small sample in heavy polyethylene bag for laboratory analysis. CONFIRM WITH CLIENT.

Are Polychlorinated Biphenyls (PCBs) suspected?

Fluorescent light fixtures ballasts (label/tag, volume, name of manufacturer):

Transformers/electrical equipment (label/tag, volume, name of manufacturer):

Any evidence of leaks or spills from any potential PCB containing equipment?

Is Potential Lead-Based Paint Suspected?

Walls:
Floor:
Ceiling:

Does any potential lead-based paint present inside or outside appear to be peeling, cracking or flaking?

NOTE: **If suspected lead based paint is peeling or flaking (rubbery, peels cleanly), collect small sample and perform lead-paint test.**

Any other possible sources of lead present on-site (old pipes, solder, batteries, etc.)?

Are Ozone-Depleting Substances (ODSs) Suspected?

Air conditioning (wall, rooftop, etc.):

Coolers/freezers:

Refrigerant (label/tag):

Do any air conditioning units, freezers or coolers appear to be leaking or damaged?

Petroleum storage (propane, gasoline, diesel, fuel oil, etc.):

Hazardous substance/waste storage (waste oil, paints, solvents, batteries, pesticides, acids, etc.):

Floor drains/sumps/pits (where do they drain to):

Odours/air emissions:

Molds/dampness:

5.0 ADJACENT LAND USE

North: Commercial buildings

South: Police station Division 30

East: King Street followed by Commercial buildings

West: Princess Street followed by Commercial buildings

Surface water bodies: None

Dwellings: None

Roads: Princess Street to the west and King Street to the east

Utilities: Street lights

Right-of-ways/railyards: Princess Street to the west and King Street to the east

Groundwater wells: None

Aboveground/underground storage tanks: None

Waste disposal sites/landfills: None

Gas or service stations/autobody or machine shops/bulk fuel or chemical plants: Electric Motor Supplies Shop located at 54 Princess Street (southwest of the subject property).

Direction of groundwater flow on adjacent properties: onto the adjacent streets (Princess Street or King Street)

APPENDIX D

OWNER/MANAGER INTERVIEW QUESTIONNAIRE

KGS GROUP OWNER/MANAGER INTERVIEW QUESTIONNAIRE
PHASE I ENVIRONMENTAL SITE ASSESSMENT

Client: City of Winnipeg

Site Location: 61 Princess Street

Site Personnel: Phuong Nguyen

Date of Interview: FEB 5, 2016 GREG KUCEK

1. **What is the nature of the current business on-site? Previous businesses? Any buildings/structures currently on-site? Any previous buildings/structures? If so, how old are the buildings? Type of construction? Any renovations?**

   Current business – Parking area

2. **Do any on-site buildings have air conditioning? If so, who is the maintenance contractor, how often are the units serviced and what refrigerant(s) is used? Quantities of refrigerant?**

   No buildings on site

3. **Any substances currently/historically stored or used or processed on-site (gasoline, fuel oil, lubricants, degreasers, etc.)? Volumes? Inventory?**

   None that I am aware of

4. **Have there been any spills on-site? If so, what were the substances spilled and how were the cleaned up?**

   None that I am aware of

5. **Any ASTs/USTs currently/historically present on-site? If so, are all ASTs/USTs registered with the proper regulatory authorities?** Made aware of potential UST based on historical information provided by KGS Group
   Contents?
   Volume?
   Material of construction?
   Date installed/removed? (age)
   History of leaks/spills?
   Pressure tests?
   Inventory records?
   Any discrepancies or loss product?
   Leak detection system?
   Secondary containment system?
   Location on-site?

6. **Any hazardous waste currently/historically generated on-site (waste oil, batteries, PCBs, etc.)? If so, is all hazardous waste registered with the proper regulatory authorities (waste generator number)? How is waste stored and disposed of?**

   None that I am aware of

7. **Any fluid-filled transformers or electrical equipment currently/historically stored on-site? If so, have they been tested for PCB content?**

   None that I am aware of

8. **Any radioactive materials used or stored on-site?**

   None that I am aware of

9. **Any pesticides/herbicides used on-site for vegetation control? If so, which ones, how much and how often are they applied?**

   None that I am aware of

10. **Any landfills or dumpsites present on-site or on adjacent properties? If so, what was disposed of and where?**

    None that I am aware of

11. **What is the source of potable water on-site (town/city supply, on-site groundwater wells, etc.)?**

    No water service on site

12. **Any known problems with drinking water, surface water or groundwater quality on-site?**

    Not Applicable

13. **What sanitary sewer system is used on-site (city, septic tank/field)?**

    Not Applicable

14. **How is wastewater handled/stored/disposed?**

    Not Applicable

15. **Any known problems with indoor air quality due to activities on-site (air emissions, chemical odours, fumes or mists)?**

Not Applicable

16. **What is the source of heat for on-site buildings (gas, fuel oil, electric, etc.)?**

Not Applicable

17. **Any fires on-site?**

N/A

18. **Have there been any previous environmental studies, surveys, audits or appraisals conducted on the subject property? If so, are any reports available for review?**

None that I am aware of

19. **Has the subject property ever received a notice of violation or other similar claim from a regulatory authority for improper hazardous materials/waste storage or disposal on site?**

None that I am aware of

20. **Any known problems or concerns with activities on adjacent properties?**

None that I am aware of

If older buildings are present on-site (pre-1980):

21. **Has there been an asbestos survey or site inspection for any potential ACMs (vinyl floor tiles, ceiling tiles, wallboard, pipe/boiler/duct insulation, etc.)?**

N/A

22. **If potential ACMs were found on-site, was the presence of asbestos confirmed by laboratory analysis?**

N/A

23. **Are fluorescent light fixtures present on-site?**

N/A

24. **Have any of the ballasts been replaced since 1980? If so, when and were they replaced with non-PCB containing ballasts?**

N/A

25. **Is there any evidence of leaks or spills from any light fixtures not replaced since 1980 (potentially containing PCB ballasts)? Name of the light fixture ballast manufacturer?**

N/A

26. **Is there any evidence of flaking or peeling paint on the walls, floor or ceiling of on-site buildings? If so, has the paint been tested for the presence of lead?**

N/A

APPENDIX E

HENDERSON DIRECTORIES – ADJACENT PROPERTIES

HENDERSON DIRECTORIES SEARCH
61 PRINCESS STREET
ADJACENT PROPERTIES

Note: Due to time constraints, the Henderson Directories were only reviewed from the hard copies available from 1955 to 2000 for all adjacent properties.

North

YEAR	TENANT
66 King Street	
1955-2000	Maltese Cross Building – Various commercial services
286 McDermot Avenue	
1955-1960	No Listing
1960-1965	Regal Clothing
1965-1975	Pollock Import Co.
1975	Vacant
1980	Aoco Limited Optical Supplies Wholesale
1990-1995	Kays Ltd Footwear
2000	Plug in Contemporary Art
288 McDermot Avenue	
1955-1965	Allan Building – Various commercial services
1970-1975	Allan Building – Canadian Shirt & Overall, Canadian Sportswear
1975	No Listing
1980-1990	Altman Sheps & Co Dry Goods Wholesale
1995-2000	Nolan's Furniture Warehousing
290 McDermot Avenue	
1955-2000	Glengarry Building – Various commercial services
296 McDermot Avenue	
1955-2000	Daylite Building – Various commercial services
73 Princess Street	
1955 - 1965	No Listing
1970	Indian & Metis Friendship Centre Clubs
1975 - 1985	No Listing
1995-2000	Neon Factory

South

YEAR	TENANT
55 Princess Street	
1955-1965	Manitoba Hydro Electric
1970-2000	City Winnipeg Signals Department Garage
48 King Street	
1970-2000	Winnipeg Hydro Substation
54 King Street	
1955-1965	Winnipeg Sub Station No. 1 Winnipeg Hydro Electric System

HENDERSON DIRECTORIES SEARCH
61 PRINCESS STREET
ADJACENT PROPERTIES

1970-1975	City of Winnipeg Signals Department Garage
1980	Vacant
1985-2000	City of Winnipeg Hydro

West

YEAR	TENANT
54 Princess Street	
1955 - 2016	Del's Electric Motor Supply
58 Princess Street	
1955-1965	Winnipeg Sewing Mechanics Supply Co.
60 Princess Street	
1955-1960	Del Building
1960-1965	Electric Centre Appliance Service
62 Princess Street	
2000	Digger's Delight Antiques
62-70 Princess Street	
1955 - 2016	Goodwill Industries

East

YEAR	TENANT
54 Arthur Street	
1955-1965	Robinson Little & Co.
1970-1975	Rainbow Rug Co Ltd.
1975	Vacant
1980-1985	Plug In Inc. (Arthur Street Gallery)
1985-2000	Toad Hall Toys
70 Arthur Street	
1955-1960	Whitla Building - Princess Messenger Service and various commercial services
1960-2000	Whitla Building - Various commercial and industrial services

APPENDIX F

LAND TITLES

STATUS OF TITLE

Title Number **1796294/1**
Title Status **Accepted**
Client File K. Cole

The Property Registry
A Service Provider for the Province of Manitoba

1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON
IN THE FOLLOWING DESCRIBED LAND:

LOT 2 BLOCK "A" PLAN 16 WLTO (W DIV)
IN RL 6 PARISH OF ST JOHN

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act.*

2. ACTIVE INSTRUMENTS

No active instruments

3. ADDRESSES FOR SERVICE

CITY OF WINNIPEG (LAW)
3RD FLOOR
185 KING ST.
WINNIPEG MB
R3B 1J1

4. TITLE NOTES

No title notes

5. LAND TITLES DISTRICT

Winnipeg

6. DUPLICATE TITLE INFORMATION

Duplicate not produced

7. FROM TITLE NUMBERS

G76320/1 All

8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS

No real property application or grant information

9. ORIGINATING INSTRUMENTS

Instrument Type:	**Request Electronic Title Conversion**
Registration Number:	**2585908/1**
Registration Date:	2001-04-09
From/By:	WINNIPEG LAND TITLES OFFICE - CONVERSIONS
To:	
Amount:	

10. LAND INDEX

Lot 2 Block A Plan 16
RL 6 JO (W DIV)

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE SYSTEM OF TITLE NUMBER 1796294/1

Cert. No. G 76320

W

MANITOBA

Certificate of Title

UNDER "THE REAL PROPERTY ACT."

The land mentioned in a certificate of title shall by implication and without special mention in the certificate, unless the contrary be expressly declared, be deemed to be subject to:

(a) Any subsisting reservation contained in the original grant of the land from the Crown.

(b) Any municipal charge, rate, or assessment, existing at the date of the certificate, or subsequently imposed on the land;

(c) Any right-of-way or other easement, howsoever created, upon, over or in respect of the land;

(d) Any subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of the land thereunder;

(e) Any drainage levy or mechanics' lien affecting the land.

(f) Any order of attachment, judgment, or order for the payment of money, against the registered owner of the land, registered since the date of the certificate of title, and which has been maintained in force under the provisions of any Act of the province relating thereto;

(g) Any certificate of lis pendens issued out of a court in the province and registered since the date of the certificate of title.

(h) Any right of expropriation by statute.

(i) The title of a person adversely in actual occupation, of and rightly entitled, to the land at the time it was brought under the Act, and who continues in such occupation;

(j) Caveats affecting the land registered since the date of the certificate, and

(k) Any town planning scheme or by-law authorized under The Town Planning Act or under the provisions of the charter of any city and any by-law passed by any municipal corporation under "The Municipal Act" or the charter of any city relating to residential areas or zoning.

(l) Any zoning regulation as that expression is defined in the Aeronautics Act (CANADA) made under that act and deposited in the Land Titles Office.

(m) Any limitation or restriction under The Highways Protection Act or a permit issued under The Highways Protection Act.

Public highways embraced in the description of the land included in a certificate shall be deemed to be excluded unless the certificate is to the Crown or a municipality.

THE CITY OF WINNIPEG,

is now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all that piece or parcel of land known and described as follows, in the City of Winnipeg, in the Province of Manitoba, being in accordance with the Special Survey of said City, and being

Lot Two, in Block Lettered "A", which lot is shown on a Plan of Survey of part of Lot Six of the Parish of Saint John, registered in the Winnipeg Land Titles Office, Winnipeg Division, as No. 16.

...hereby certifies ... record ... records of ... of Manitoba

INST TYPE: E.REG. NO: 2585908
FOR: All
April 9, 2001
NEW TITLE: 1796294

&&&&

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this Twenty-seventh day of February One thousand nine hundred and eighty - one

Signed in the presence of

~~Deputy or~~ Assistant District Registrar
for Winnipeg

Cert. No. C20772

MANITOBA

Certificate of Title

UNDER "THE REAL PROPERTY ACT"

MOSSDALE INVESTMENTS LTD.

is now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all that piece or parcel of land known and described as follows, in the City of Winnipeg, in the Province of Manitoba, being in accordance with the Special Survey of said City, and being Lot Two, in Block Lettered "A" which lot is shewn on a plan of survey of part of Lot Six of the Parish of Saint John, registered in the Winnipeg Land Titles Office, Winnipeg Division, as No. 16.

No. 812674 TRANSFER OF ALL
TO THE CITY OF WPG.
REG. FEB. 27/81
VIDE CERT. G76330 DEPT. DIST REGISTRAR
REST

JAN 11 2016

The Land Hereinbefore Described Is Subject To:

be expressly declared, be deemed to be subject to:
- (a) Any subsisting reservation contained in the original grant of the land from the Crown.
- (b) Any municipal charge, rate, or assessment, existing at the date of the certificate, or subsequently imposed on the land;
- (c) Any right-of-way or other easement, howsoever created, upon, over or in respect of the land;
- (d) Any subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of the land thereunder;
- (e) Any drainage levy or mechanics' lien affecting the land.
- (f) Any order of attachment, judgment, or order for the payment of money, against the registered owner of the land, registered since the date of the certificate of title, and which has been maintained in force under the provisions of any Act of the province relating thereto;
- (g) Any certificate of lis pendens issued out of a court in the province and registered since the date of the certificate of title.
- (h) Any right of expropriation by statute.
- (i) The title of a person in actual occupation, of and rightly entitled, to the land at the time it was brought under the Act, and who continues in such occupation;
- (j) Caveats affecting the land registered since the date of the certificate, and
- (k) Any town planning scheme or by-law authorized under The Town Planning Act or under the provisions of the charter of any city and any by-law passed by any municipal corporation under "The Municipal Act" or the charter of any city relating to residential areas or zoning.
- (l) Any zoning regulation as that expression is defined in the Aeronautics Act (CANADA) made under that act and deposited in the Land Titles Office.
- (m) Any limitation or restriction under The Highways Protection Act or a permit issued under The Highways Protection Act.

Public highways embraced in the description of the land included in a certificate shall be deemed to be excluded unless the certificate is to the Crown or a municipality.

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this Sixth day of March One thousand nine hundred and seventy-three

Signed in the presence of

Deputy District Registrar for Winnipeg,

The land mentioned in a certificate of title shall by implication and without special mention in the certificate, unless the contrary be expressly declared, be deemed to be subject to:

(a) Any subsisting reservation contained in the original grant of the land from the Crown.
(b) Any municipal charge, rate, or assessment, existing at the date of the certificate, or subsequently imposed on the land;
(c) Any right-of-way or other easement, howsoever created, upon, over or in respect of the land;
(d) Any subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of the land thereunder;
(e) Any drainage levy or mechanics' lien affecting the land.
(f) Any order of attachment, judgment, or order for the payment of money, against the registered owner of the land, registered since the date of the certificate of title, and which has been maintained in force under the provisions of any Act of the province relating thereto;
(g) Any certificate of lis pendens issued out of a court in the province and registered since the date of the certificate of title.
(h) Any right of expropriation by statute.
(i) The title of a person adversely in actual occupation, of and rightly entitled, to the land at the time it was brought under the Act, and who continues in such occupation;
(j) Caveats affecting the land registered since the date of the certificate, and
(k) Any town planning scheme or by-law authorized under The Town Planning Act or under the provisions of the charter of any city and any by-law passed by any municipal corporation under "The Municipal Act" or the charter of any city relating to residential areas or zoning.
(l) Any zoning regulation as that expression is defined in the Aeronautics Act (CANADA) made under that act and deposited in the Land Titles Office.
(m) Any limitation or restriction under The Highways Protection Act or a permit issued under The Highways Protection Act.

Public highways embraced in the description of the land included in a certificate shall be deemed to be excluded unless the certificate is to the Crown or a municipality.

Cert. No. G 76320

W

MANITOBA

Certificate of Title

UNDER "THE REAL PROPERTY ACT."

THE CITY OF WINNIPEG,

is now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all that piece or parcel of land known and described as follows, in the City of Winnipeg, in the Province of Manitoba, being in accordance with the Special Survey of said City, and being

Lot Two, in Block Lettered "A", which lot is shown on a Plan of Survey of part of Lot Six of the Parish of Saint John, registered in the Winnipeg Land Titles Office, Winnipeg Division, as No. 16.

INST TYPE: E.REG. NO: 2585908
FOR: All

April 9, 2001
NEW TITLE: 1796294

&&&&

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this Twenty-seventh day of February One thousand nine hundred and eighty - one

Signed in the presence of

~~Deputy or~~ Assistant District Registrar
for Winnipeg

Form No. MG-1300

From No. C 20772 Transfer 81-12674 Application

The City of Winnipeg

Box 29	REGISTERED		
Mortgage for $	The day of 19 at	TO Deputy or Assistant District Registrar	No.
Mortgage for $	The day of 19 at	TO Deputy or Assistant District Registrar	No.
Mortgage for $	The day of 19 at	TO Deputy or Assistant District Registrar	No.
Mortgage for $	The day of 19 at	TO Deputy or Assistant District Registrar	No.
Mortgage for $	The day of 19 at	TO Deputy or Assistant District Registrar	No.

Cert. No. C20772

MANITOBA

Certificate of Title

UNDER "THE REAL PROPERTY ACT."

MOSSDALE INVESTMENTS LTD.

is now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all that piece or parcel of land known and described as follows, in the City of Winnipeg, in the Province of Manitoba, being in accordance with the Special Survey of said City, and being Lot Two, in Block lettered "A" which lot is shewn on a plan of survey of part of Lot Six of the Parish of Saint John, registered in the Winnipeg Land Titles Office, Winnipeg Division, as No. 16.

No. 812674 TRANSFER OF ALL
TO THE CITY OF WPG.
REG. FEB 27/81
VIDE CERT. G76330 DEPT. DIST REGISTRAR
TEST

JAN 11 2016

The land mentioned in a certificate of title shall by implication and without special mention in the certificate, unless the contrary be expressly declared, be deemed to be subject to:
(a) Any subsisting reservation contained in the original grant of the land from the Crown.
(b) Any municipal charge, rate, or assessment, existing at the date of the certificate, or subsequently imposed on the land;
(c) Any right-of-way or other easement, howsoever created, upon, over or in respect of the land;
(d) Any subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of the land thereunder;
(e) Any drainage levy or mechanics' lien affecting the land.
(f) Any order of attachment, judgment, or order for the payment of money, against the registered owner of the land, registered since the date of the certificate of title, and which has been maintained in force under the provisions of any Act of the province relating thereto;
(g) Any certificate of lis pendens issued out of a court in the province and registered since the date of the certificate of title.
(h) Any right of expropriation by statute.
(i) The title of a person adversely in actual occupation, of and rightly entitled, to the land at the time it was brought under the Act, and who continues in such occupation;
(j) Caveats affecting the land registered since the date of the certificate, and
(k) Any town planning scheme or by-law authorized under The Town Planning Act or under the provisions of the charter of any city and any by-law passed by any municipal corporation under "The Municipal Act" or the charter of any city relating to residential areas or zoning.
(l) Any zoning regulation as that expression is defined in the Aeronautics Act (CANADA) made under that act and deposited in the Land Titles Office.
(m) Any limitation or restriction under The Highways Protection Act or a permit issued under The Highways Protection Act.
Public highways embraced in the description of the land included in a certificate shall be deemed to be excluded unless the certificate is to the Crown or a municipality.

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this Sixth day of March One thousand nine hundred and seventy-three

Signed in the presence of

Deputy District Registrar
for Winnipeg.

Form No. AG-Y-2

From No. 971015 | Transfer L 23651 | Application

File

Discharge of No. E 83970 REGISTERED Oct 10 1973

	REGISTERED			
Mortgage for $ 10,000	The 16th day of Nov. 19 61 at 2.45	Princess Parking Systems Ltd. TO Standard Mtge. Co. Ltd. Deputy District Registrar	No. E 83970
Mortgage for $	The day of 19 at	TO Deputy District Registrar	No.
Mortgage for $	The day of 19 at	TO Deputy District Registrar	No.
Mortgage for $	The day of 19 at	TO Deputy District Registrar	No.
Mortgage for $	The day of 19 at	TO Deputy District Registrar	No.

The land mentioned in a certificate of title shall by implication and without special mention in the certificate, unless the contrary be expressly declared, be deemed to be subject to:
(a) Any subsisting reservation contained in the original grant of the land from the Crown.
(b) Any municipal charge, rate or assessment existing at the date of the certificate, or subsequently imposed on the land.
(c) Any right-of-way or other easement, howsoever created, upon, over or in respect of the land.
(d) Any subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of the land thereunder.
(e) Any drainage levy or mechanics' lien affecting the land.
(f) Any order of attachment, judgment or order for the payment of money against the registered owner of the land, registered since the date of the certificate of title, and which has been maintained in force under the provisions of any Act of the Province relating thereto.
(g) Any certificate of lis pendens issued out of a court in the province and registered since the date of the certificate of title.
(h) Any right of expropriation by statute.
(i) The title of a person adversely in actual occupation of and rightly entitled to the land at the time it was brought under the Act, and who continues in such occupation:
(j) Caveats affecting the land registered since the date of the certificate, and
(k) Any town planning scheme or by-law authorized under "The Town Planning Act" or under the provisions of the charter of any city and any by-law passed by any municipal corporation under "The Municipal Act" or the charter of any city relating to residential areas or zoning.
(l) Public highways embraced in the description of the land included in a certificate shall be deemed to be excluded unless the certificate is to the Crown or a municipality
(m) Any zoning regulation as that expression is defined in the Aeronautics Act (CANADA) made under that act and deposited in the Land Titles Office.

Cert. No. 971015

MANITOBA

Certificate of Title

UNDER "THE REAL PROPERTY ACT."

PRINCESS PARKING SYSTEMS LTD.

is now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all that piece or parcel of land known and described as follows, in the City of Winnipeg, in the Province of Manitoba, being in accordance with the Special Survey of said City, and being Lot Two, in Block lettered "A" which lot is shewn on a plan of survey of part of Lot Six of the Parish of Saint John, registered in the Winnipeg Land Titles Office, Winnipeg Division, as No.16.

223651
Acc.
Mossdale Investments ...
Mar 6/73
NE. 120774

JAN 11 2016

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this Sixteenth day of November One thousand nine hundred and sixty -one

Signed in the presence of

Deputy District Registrar
for Winnipeg,

Form No. AG-Y-2

File From No. 870397 Transfer E83968 Application

Nature of Instrument	Day and Hour of its Production	Names of the Parties	Registration Number
Mortgage for $ 20,600.00	The 19th day of Feb. 1960 at 12.14 o'clock in the after noon	Princess Motors Service Ltd. to Jack Bogdonov Deputy District Registrar	E96391
Mortgage for $ 40,000.00	The 16th day of Nov. 19 61 at 2.45 o'clock in the after noon	Princess Parking Systems Ltd. to Standard Mtge. Co. Ltd. Deputy District Registrar	E83970
Mortgage for $ 30,000.00	The 16th day of Nov. 1961 at 2.46 o'clock in the after noon	Princess Parking Systems Ltd. to Harry Bogdonov Deputy District Registrar	E83971
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	

Cert. No. 870397

MANITOBA

Certificate of Title

UNDER "THE REAL PROPERTY ACT."

PRINCESS MOTORS SERVICE LTD.

IS *now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all th* AT *piece or parcel of land known and described as follows.* IN THE CITY OF WINNIPEG, IN THE PROVINCE OF MANITOBA, BEING IN ACCORDANCE WITH THE SPECIAL SURVEY OF SAID CITY, AND BEING LOT TWO, IN BLOCK LETTERED "A", WHICH LOT IS SHEWN ON A PLAN OF SURVEY OF PART OF LOT SIX OF THE PARISH OF SAINT JOHN, REGISTERED IN THE WINNIPEG LAND TITLES OFFICE, WINNIPEG DIVISION, AS NO 16.

(a) Any subsisting reservation contained in the original grant of the land from the Crown.
(b) Any municipal charge, rate or assessment existing at the date of the certificate, or subsequently imposed on the land.
(c) Any right-of-way or other easement, howsoever created, upon, over or in respect of the land.
(d) Any subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of the land thereunder.
(e) Any drainage levy or mechanics' lien affecting the land.
(f) Any order of attachment, judgment or order for the payment of money against the registered owner of the land, registered since the date of the certificate of title, and which has been maintained in force under the provisions of any Act of the province relating thereto.
(g) Any certificate of lis pendens issued out of a court in the province and registered since the date of the certificate of title.
(h) Any right of expropriation by statute.
(i) The title of a person adversely in actual occupation of and rightly entitled to the land at the time it was brought under the Act, and who continues in such occupation.
(j) Caveats affecting the land registered since the date of the certificate, and
(k) Any town planning scheme or by-law authorized under "The Town Planning Act" or under the provisions of the charter of any city and any by-law passed by any municipal corporation under "The Municipal Act" or the charter of any city relating to residential areas or zoning.

Public highways embraced in the description of the land included in a certificate shall be deemed to be excluded unless the certificate is to the Crown or a municipality.

JAN 11 2016

No. E 53965 TRANSFER of [illegible]
To Princess Motors Service Ltd.
Registered Dec 16/61
Vide Cert No 971015
Deputy District Registrar

IN WITNESS WHEREOF *I have hereunto signed my name and affixed my Seal of office this* THIRD *day of* JULY *One thousand nine hundred and* FIFTY-SEVEN

Signed in the presence of

[illegible]

Deputy District Registrar for Winnipeg.

From No. 779833 Transfer C 76706 Application

Nature of Instrument	Day and Hour of its Production	Names of the Parties	Registration Number
Mortgage for $ 24,000.00/100	The 19th day of Feb 1960 at 12.14 o'clock in the afternoon	Princess Motors Service Ltd. Etc Jack Bogdenov w. a. Finch Deputy District Registrar	D96391
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	

No. 159847 CAVEAT filed May 7/53
At 1-38 by Nat'l Oil Refineries Ltd.
Affecting
DISPOSED OF BY WITHDRAWAL
Nov 2/61

No. 182 ... Filed Oct 26/61
1236 ... Refineries Ltd.
DISPOSED OF BY WITHDRAWAL
Nov 20/61

Cert. No. 779833

MANITOBA

Certificate of Title

UNDER "THE REAL PROPERTY ACT"

JOHN BOGDONOV, MECHANIC ~~AT~~ HARRY BOGDONOV, CLERK AND EDWARD BOGDONOV, MECHANIC, ALL OF THE CITY OF WINNIPEG, IN MANITOBA.

~~AS JOINT TENANTS AND NOT AS TENANTS IN COMMON~~

ARE *now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all th* AT *piece or parcel of land known and described as follows,* IN THE CITY OF WINNIPEG, IN THE PROVINCE OF MANITOBA, BEING IN ACCORDANCE WITH THE SPECIAL SURVEY OF SAID CITY, AND BEING: LOT TWO IN BLOCK LETTERED "A" WHICH LOT IS SHEWN ON A PLAN OF SURVEY OF PART OF LOT SIX OF THE PARISH OF SAINT JOHN, REGISTERED IN THE WINNIPEG LAND TITLES OFFICE, WINNIPEG DIVISION AS NO. 16.

be expressly declared, to be subject to:
(a) Any subsisting reservation contained in the original grant of the land from the Crown.
(b) Any municipal charge, rate or assessment existing at the date of the certificate, or subsequently imposed on the land.
(c) Any right-of-way or other easement, howsoever created, upon, over or in respect of the land.
(d) Any subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of the land thereunder.
(e) Any drainage levy or mechanics' lien affecting the land.
(f) Any order of attachment, judgment or order for the payment of money against the registered owner of the land, registered since the date of the certificate of title, and which has been maintained in force under the provisions of any Act of the province relating thereto.
(g) Any certificate of lis pendens issued out of a court in the province and registered since the date of the certificate of title.
(h) Any right of expropriation by statute.
(i) The title of a person adversely in actual occupation of and rightly entitled to the land at the time it was brought under the Act, and who continues in such occupation;
(j) Caveats affecting the land registered since the date of the certificate, and
(k) Any town planning scheme or by-law authorized under "The Town Planning Act" or under the provisions of the charter of any city and any by-law passed by any municipal corporation under "The Municipal Act" or the charter of any city relating to residential areas or zoning.
Public highways embraced in the description of the land included in a certificate shall be deemed to be excluded unless the certificate is to the Crown or a municipality.

JAN 11 2016

No. C76706 TRANSFER of ael
To Pinawa Motor Supplies Ltd.
Registered Jan. 3, 1958
Vide Cert. No. 270397
Deputy District Registrar

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this TWELFTH day of MAY One thousand nine hundred and FIFTY-THREE

Signed in the presence of

Deputy District Registrar for Winnipeg

From No. 680883 | Transfer B.5894 | Application

Nature of Instrument	Day and Hour of its Production	Names of the Parties	Registration Number
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	
Mortgage for $	The day of 19 at o'clock in the noon	Deputy District Registrar	

No. 152002 CAVEAT filed [illegible] 13/46 At 2.10 by [illegible] Affecting [illegible]

DISPOSED OF BY WITHDRAWAL June 10 1947 [illegible]

No. 159947 CAVEAT filed May 7/53 At 1.32 by [illegible] Affecting

APPENDIX G

FIRE INSURANCE MAPS

Winnipeg, Manitoba, 1906, Volume 1

Fire Insurance Map

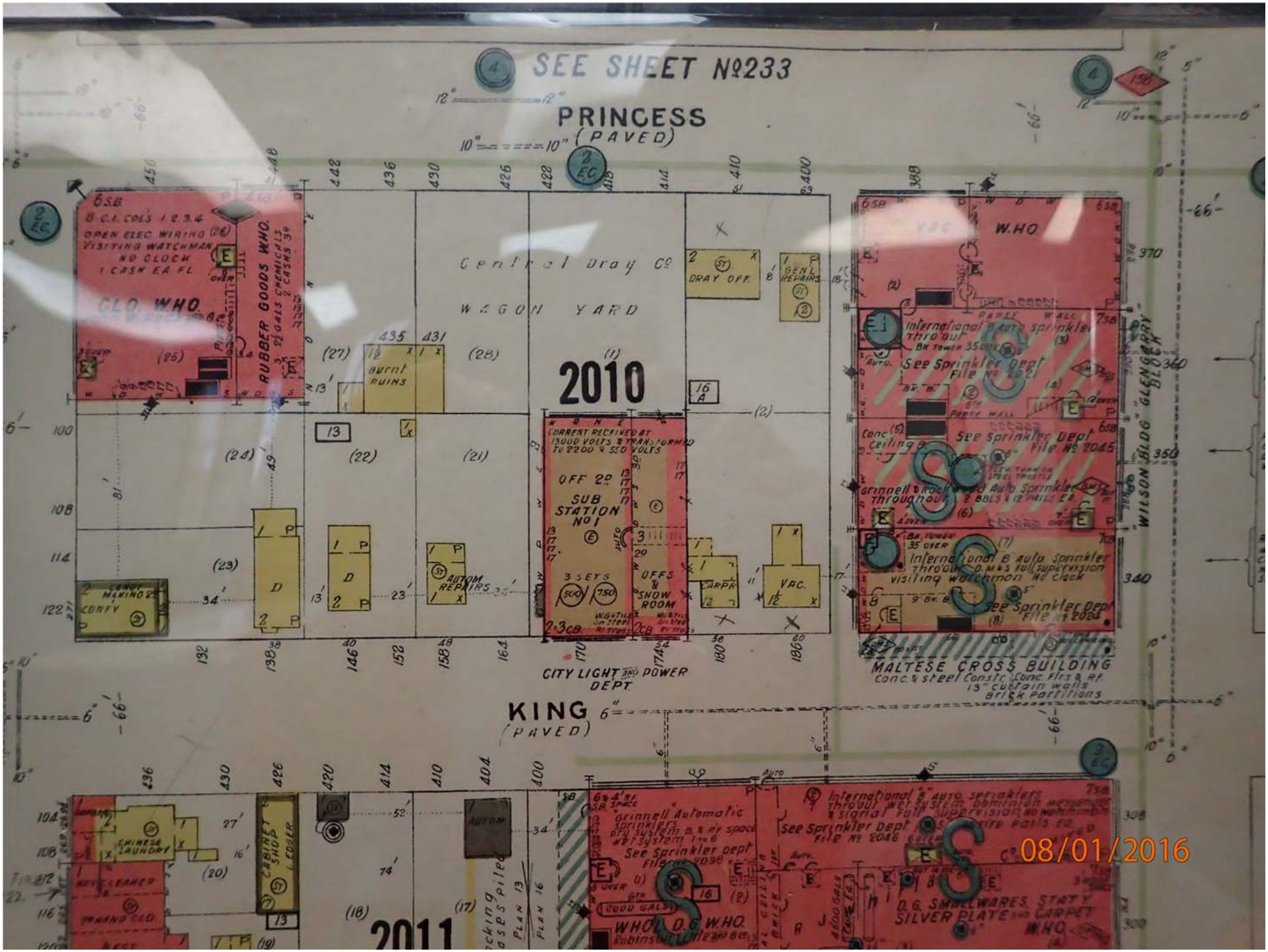
Address: 61 Princess St, Winnipeg, MB, R3B1K1

Map sheet(s): 14,15,44,5,50,51,6

The dashed line indicates the search radius around the site: 250 m

Order Number 20160106012

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICE



SEE SHEET №233
PRINCESS
(PAVED)
Central Dray Co
WAGON YARD
2010
CLO. WHO.
RUBBER GOODS WHO.
OPEN ELEC WIRING
VISITING WATCHMAN
NO CLOCK
DRAY OFF.
GENL REPAIRS
Burnt RUINS
W. HO
International B auto sprinkler Thro'out
See Sprinkler Dept File № 2045
OFF 2ND
SUB STATION No 1
CURRENT RECEIVED AT 13000 VOLTS & TRANSFORMED TO 2200 & 550 VOLTS
OFFS & SHOW ROOM
AUTOM REPAIRS
CONFY
VAC.
CITY LIGHT AND POWER DEPT
MALTESE CROSS BUILDING
Conc & steel Constr. Conc Flrs & Rf.
13" curtain walls
Brick Partitions
WILSON BLDG
GLENGERRY BLOCK
KING
(PAVED)
CHINESE LAUNDRY
CABINET SHOP
Grinnell Automatic Sprinklers
See Sprinkler Dept File № 2038
International B auto sprinklers
See Sprinkler Dept File № 2046
D.G. SMALLWARES, STAT'Y SILVER PLATE AND CARPET WHO.
WHOL D.G. WHO.
2011
08/01/2016

APPENDIX H

MANITOBA CONSERVATION LETTER OF REPLY

Manitoba
Conservation and Water Stewardship
Administration and Finance
200 Saulteaux Crescent, Box 85
Winnipeg, MB R3J 3W3
T 204-945-7098 **F** 204-945-2385
www.manitoba.ca

January 21, 2016
File # 15963

Ms. Phuong Nguyen
KGS Group
3rd Floor, 865 Waverley Street
Winnipeg, MB R3T 5P4

Dear Ms. Nguyen:

Re: 61 Princess Street, Winnipeg, MB

The Department has no records of any outstanding work orders, complaints, violations, licenses or permits relating to this property respect to the Acts listed on the file search request form. This site is not identified as an impacted or contaminated site in our files.

Yours truly,

Lorie Saflor-Yazon
Administrative Services Clerk

Disclaimer attached
(GST registration # R107863847)

DISCLAIMER

Enclosed is the information requested with respect to your recent File Search Request. This response summarizes the information found in current records maintained by Manitoba Conservation and is for informational purposes only. No representation or responsibility is assumed whatsoever as to the completeness of this information as it related to the environmental condition or prior incidents associated with the property in question. In order to obtain more complete information on the property, persons may wish to retain the services of a qualified consultant for the purpose of conducting an environmental audit.

FILE SEARCH REPORT

DATE RECEIVED: January 6, 2016
COMPANY NAME: Parking lot
ADDRESS: 61 Princess St, Winnipeg

Search requested by: KGS Group

Data Base Area	YES	NO	COMMENTS	Initials
Contaminated/Impacted Site -provide file number and contact name		X	Contaminated/Impacted Sites This site is not a designated *contaminated* or *impacted* site pursuant to *The Contaminated Sites Remediation Act* as of January 6, 2016	RR
Previous Orders Issued		X		RR
Prosecutions		X	No file in the Winnipeg Office of Manitoba Conservation and Water Stewardship as of January 6, 2016	RR
Outstanding Actions/Claims		X	No file in the Winnipeg Office of Manitoba Conservation and Water Stewardship as of January 6, 2016	RR

Additional Comments:

Nothing in our database on this address

This report summarizes the information found in the current records maintained by the Department and is for informational purposes only. No representation or responsibility is assumed whatsoever as to the completeness of this information as it relates to the environmental condition or prior incidents associated with the property in question. In order to obtain more complete information on the property, persons may wish to retain the services of a qualified consultant for the purposes of conducting an environmental audit.

APPENDIX I

ERIS SEARCH RESULTS

ENVIRONMENTAL RISK INFORMATION SERVICE

DATABASE REPORT

Project Property:	*Phase I ESA - 61 Princess Street, Winnipeg, MB* *61 Princess St* *Winnipeg MB R3B1K1*
P.O. Number:	*16-0107-001*
Report Type:	*Standard Report*
Order #:	*20160106012*
Requested by:	*KGS Group Consulting Engineers*
Date:	*January 8, 2016*

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Executive Summary

Property Information:

Project Property:		*Phase I ESA - 61 Princess Street, Winnipeg, MB* *61 Princess St Winnipeg MB R3B1K1*
P.O. Number:		*16-0107-001*
Coordinates:		
	Latitude:	*49.897136*
	Longitude:	*-97.142577*
	UTM Northing:	*5,528,848.02*
	UTM Easting:	*633,395.94*
	UTM Zone:	*UTM Zone 14U*
Elevation:		*762 FT* *232.37 M*

Order Information:

Order No.:	*20160106012*
Date Requested:	*12/01/2016*
Requested by:	*KGS Group Consulting Engineers*
Report Type:	*Standard Report*

Additional Products:

Fire Insurance Maps	*Canadian Fire Insurance Maps*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Within 0.25 km	Total
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
CA	Certificates of Approval	Y	0	0	0
CHEM	Chemical Register	Y	0	0	0
CONV	Enforcement Actions	Y	0	0	0
CS	Contaminated/Impacted Sites	Y	0	3	3
DRL	Drill Holes	Y	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	0	10	10
EIIS	Environmental Issues Inventory System	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FST	Fuel Storage Tanks	Y	0	2	2
FUEL	Bulk Fuel Distributors	Y	0	3	3
GEN	Waste Generators Summary	Y	0	23	23
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
MAST	Manure Storage Facilities	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
MOGW	Manitoba Oil and Gas Wells	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NDFT	National Defence & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	2	2
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGW	Oil and Gas Wells	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCB	Inventory of PCB Storage Sites	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PITS	Manitoba Pits and Quarries	Y	0	0	0
REC	Waste Receivers Summary	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	102	102
SPL	Manitoba Spills	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
WDS	Waste Disposal Site Inventory	Y	0	0	0

Database	Name	Searched	Project Property	Within 0.25 km	Total
WWIS	**Water Well Inventory**	Y	0	2	2
	Total:		0	147	147

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist m	Elev diff m	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding *Properties*

Map Key	DB	Company/Site Name	Address	Dir/Dist m	Elev Diff m	Page Number
1	GEN	TRIM SERVICES 1980 LTD.	MCDERMOT AVE., 290 WINNIPEG MB	NNE/31.1	0.47	22
1	GEN	TRIM SERVICES 19080	290 MCDERMOT AVE Winnipeg MB R3B 0T2	NNE/31.1	0.47	22
1	SCT	KAPLAN'S MFG. CO. LTD.	290 McDermot Ave Floor 3 Winnipeg MB R3B 0T2	NNE/31.1	0.47	22
1	SCT	CANADIAN GARMENT COMPANY	290 McDermot Ave Floor 7 Winnipeg MB R3B 0T2	NNE/31.1	0.47	22
1	SCT	VALLEY FASHION	290 McDermot Ave Floor 3 Winnipeg MB R3B 0T2	NNE/31.1	0.47	23
1	SCT	BI WORX	290 McDermot Ave Floor 2 Winnipeg MB R3B 0T2	NNE/31.1	0.47	23
1	SCT	The Canadian Garment Company	290 McDermot Ave Floor 7 Winnipeg MB R3B 0T2	NNE/31.1	0.47	23
2	SCT	R B Environmental Aquatic	288 McDermot Ave Winnipeg MB R3B 0T2	NE/32.9	0.29	24
3	FST	Winnipeg, City of	55 Princess St. Winnipeg MB R3B 1K1	SSW/34.1	-0.28	24
3	FUEL	CITY OF WINNIPEG POLICE SERVICE - VEHICLE SERVICE UNIT	55 PRINCESS ST Winnipeg MB R3B 1K1	SSW/34.1	-0.28	25
4	SCT	NELSON'S CLUB WEAR	296 McDermot Ave Main Floor Winnipeg MB R3B 0T2	NNW/37.2	0.44	25
5	SCT	DIMENSION DISPLAY INC.	300-66 King St Winnipeg MB R3B 1H6	ENE/50.8	0.01	25
5	SCT	Kayjet Promotions Ltd.	700-66 King St Winnipeg MB R3B 1H6	ENE/50.8	0.01	25
5	SCT	RENATE'S T-SHIRT SHOP LTD.	4-66 King St Winnipeg MB R3B 1H6	ENE/50.8	0.01	26
5	SCT	Renate's T-Shirt Shop Ltd.	66 King St Floor 4 Winnipeg MB R3B 1H6	ENE/50.8	0.01	26
5	SCT	Compu-Stitch Embroidery Design Inc.	66 King St Floor 4 Winnipeg MB R3B 1H6	ENE/50.8	0.01	26
5	SCT	Renates Printworx Ltd.	400-66 King St Winnipeg MB R3B 1H6	ENE/50.8	0.01	27
5	SCT	Compu-Stitch Embroidery Design	66 King St Floor 4 Winnipeg MB R3B 1H6	ENE/50.8	0.01	27
6	SCT	The Neon Factory Ltd.	73 Princess St Winnipeg MB R3B 1K1	N/51.2	0.33	27
7	GEN	MANITOBA HYDRO-KING ST.	KING ST., 48 WINNIPEG MB R3B 1H5	S/54.6	-0.35	27
8	EHS		54 Princess St WINNIPEG MB R3B 1K2	W/65.9	-0.43	27
8	SCT	Del'S Electric Motor Supply	54 Princess St Winnipeg MB R3B 1K2	W/65.9	-0.43	28

Map Key	DB	Company/Site Name	Address	Dir/Dist m	Elev Diff m	Page Number
8	SCT	Industrial Agencies	54 Princess St Winnipeg MB R3B 1K2	W/65.9	-0.43	28
9	SCT	Sydney Gitterman Furs Ltd.	46 Princess St Winnipeg MB R3B 1K2	WSW/65.9	-0.40	28
10	GEN	HOME OF INSTANT PRINTING	PRINCESS ST., 74 WINNIPEG MB	NNW/70.3	-0.09	28
10	GEN	AVENUE 4 PRINT	74 PRINCESS ST Winnipeg MB R3B 1K2	NNW/70.3	-0.09	28
10	SCT	Home of Instant Printing	74 Princess St Winnipeg MB R3B 1K2	NNW/70.3	-0.09	29
10	SCT	Avenue 4 Print	74 Princess St Winnipeg MB R3B 1K2	NNW/70.3	-0.09	29
11	SCT	NICE & SIMPLE	600-281 McDermot Ave Winnipeg MB R3B 0S9	NE/74.5	0.07	29
12	SCT	GRABNER FUR COMPANY LTD.	305-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	30
12	SCT	Art Bookbindery	550-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	30
12	SCT	JAZZ GOLF EQUIPMENT INC.	300-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	30
12	SCT	BORDER CROSSINGS MAGAZINE	500-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	30
12	SCT	MIKISIW PRINTERS LTD.	205-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	31
12	SCT	Buffalo Gal Pictures Inc.	70 Arthur St suite 777 Winnipeg MB R3B 1G7	E/76.1	-0.15	31
12	SCT	Border Crossings Magazine Inc.	500-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	31
12	SCT	Great Plains Publications	420-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	31
12	SCT	Taiga Communications Inc.	554-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	31
12	SCT	Taiga Communications Inc.	650-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	32
12	SCT	Kate & Birdie Paper Co.	708-70 Arthur St Winnipeg MB R3B 1G7	E/76.1	-0.15	32
13	EHS		33 Princess Street Winnipeg MB R3B 1K1	SW/77.3	-0.28	33
14	SCT	INTRINSIX CANADA INC.	264 McDermot Ave Winnipeg MB R3B 0S8	E/78.4	-0.04	33
15	EHS		54 Arthur Street Winnipeg MB R3B 1G7	ESE/81.6	-0.36	33
16	GEN	BISHOP PRINTING CO. LTD.	PRINCESS ST., 44 WINNIPEG MB	WSW/82.3	-0.52	33
16	SCT	Bishop Printing Company Ltd.	44 Princess St Winnipeg MB R3B 1K2	WSW/82.3	-0.52	33
16	SCT	Sherlock Publishing Ltd.	200-44 Princess St Winnipeg MB R3B 1K2	WSW/82.3	-0.52	34
17	GEN	DEFEHR FURNITURE AND APPLIANCES	PRINCESS ST., 78 WINNIPEG MB	NNW/94.9	-0.03	34
18	SCT	Bonwitt Manufacturing Ltd.	49 Adelaide St Winnipeg MB R3A 0V8	W/99.5	-0.75	34

Map Key	DB	Company/Site Name	Address	Dir/Dist m	Elev Diff m	Page Number
18	SCT	FLOOREVERY	49 Adelaide St Winnipeg MB R3A 0V8	W/99.5	-0.75	34
18	SCT	CRESTING UNLIMITED	49 Adelaide St Winnipeg MB R3A 0V8	W/99.5	-0.75	34
19	EHS		309 Mcdermot Avenue, 78, 86 And 88 Princess Street Winnipeg, Manitoba MB	N/99.8	0.01	35
20	SCT	PEGUIS PUBLISHERS LIMITED	100-318 McDermot Ave Winnipeg MB R3A 0A2	NW/112.8	-0.33	35
20	SCT	Portage & Main Press	100-318 McDermot Ave Winnipeg MB R3A 0A2	NW/112.8	-0.33	35
20	SCT	Lintex Products Limited	103-318 McDermot Ave Winnipeg MB R3A 0A2	NW/112.8	-0.33	35
21	SCT	SHAGAL JEANS LTD.	87 King St Winnipeg MB R3B 1H7	NE/119.3	-0.16	36
22	CS	MANITOBA HYDRO - CS	44 ADELAIDE STREET WINNIPEG MB	W/126.3	-1.05	36
23	SCT	AUGUST COMMUNICATIONS LTD.	200-388 Donald St Winnipeg MB R3B 2J4	SW/127.1	-0.45	36
23	SCT	College Publications	114-388 Donald St Winnipeg MB R3B 2J4	SW/127.1	-0.45	36
24	EHS		92 Princess St Winnipeg MB	N/130.2	0.00	37
25	SCT	Child Creations	103 Princess St Floor 4 Winnipeg MB R3B 1K6	NNE/134.2	-0.05	37
26	WWIS	SILVERWOOD'S DAIRIES/WRB	MB	SSE/135.7	-0.31	37
27	SCT	KENDRICK QUALITY PRINTING LTD.	386 Donald St Winnipeg MB R3B 2J2	SW/137.1	-0.45	37
28	EHS		52 Adelaide Street Winnipeg MB R3A 0V7	WNW/147.9	-0.08	38
28	SCT	OPUS COMPUTER SYSTEMS INC	52 Adelaide St Winnipeg MB R3A 0V7	WNW/147.9	-0.08	38
28	SCT	Opus Computer Solution Inc.	52 Adelaide St Winnipeg MB R3A 0V7	WNW/147.9	-0.08	38
29	SCT	GOODWEAR GLOVE COMPANY LTD.	85 Adelaide St Winnipeg MB R3A 0V9	NNW/148.7	0.12	38
29	SCT	GROUP 5 LEATHERS	85 Adelaide St Suite 103 Winnipeg MB R3A 0V9	NNW/148.7	0.12	39
29	SCT	Group 5 Leathers	103-85 Adelaide St Winnipeg MB R3A 0V9	NNW/148.7	0.12	39
29	SCT	Winnipeg Pants & Sportswear	85 Adelaide St Floor 4 Winnipeg MB R3A 0V9	NNW/148.7	0.12	39
29	SCT	Richlu Manufacturing	85 Adelaide St Winnipeg MB R3A 0V9	NNW/148.7	0.12	39
30	SCT	B.K. FASHIONS INC.	250 McDermot Ave Floor 3 Winnipeg MB R3B 0S5	E/150.4	0.15	40
30	SCT	Dimension Display Inc.	250 McDermot Ave Floor 2 Winnipeg MB R3B 0S5	E/150.4	0.15	41
30	SCT	Grabner Fur Company Ltd.	301-250 McDermot Ave Winnipeg MB R3B 0S5	E/150.4	0.15	41
30	SCT	Cdn Urethane Foam Assoc	410-250 McDermot Ave Winnipeg MB R3B 0S5	E/150.4	0.15	41

Map Key	DB	Company/Site Name	Address	Dir/Dist m	Elev Diff m	Page Number
30	SCT	Time Line Newsletter	304-250 McDermot Ave Winnipeg MB R3B 0S5	E/150.4	0.15	42
30	SCT	Manitoba Historical Society	304-250 McDermot Ave Winnipeg MB R3B 0S5	E/150.4	0.15	42
31	SCT	O.I.C. Ent Inc.	70 Albert St Winnipeg MB R3B 1E7	E/151.3	0.06	42
31	SCT	Studio Publications	70 Albert St Floor 2 Winnipeg MB R3B 1E7	E/151.3	0.06	42
32	SCT	INTREPID DEZINE	62 Albert St Floor 2 Winnipeg MB R3B 1E7	ESE/152.8	0.06	42
32	SCT	Intrepid Dezine	2-62 Albert St Winnipeg MB R3B 1E7	ESE/152.8	0.06	43
33	GEN	LUKES MACHINERY CO. LTD	NOTRE DAME AVE., 318 WINNIPEG MB	WSW/157.2	-1.13	43
33	GEN	LUDES MACHINERY	318 NOTRE DAME AVE Winnipeg MB R3B 1P5	WSW/157.2	-1.13	43
34	GEN	A PLUS RESTAURANT EQUIPMENT & SUPPLIES INC	334 MCDERMOT AV Winnipeg MB R3A 0A5	NW/163.2	-0.24	43
34	NPCB	Thomas J. Lipton Inc.	334 McDermot Ave 3RD FLOOR STORAGE AREA Winnipeg MB R3A 0A5	NW/163.2	-0.24	43
34	NPCB	THOMAS J.LIPTON INC.	3RD FLOOR STORAGE AREA 334 MCDERMOT AVE WINNIPEG MB R3A 0A5	NW/163.2	-0.24	44
35	GEN	VIDEO POOL INC	300-100 ARTHUR ST Winnipeg MB R3B 1H3	ENE/163.6	-0.19	44
35	SCT	PERRY DARYL	500-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	44
35	SCT	Turnstone Press Ltd.	607-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	44
35	SCT	Prairie Fire Press, Inc.	423-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	44
35	SCT	Daryl Perry	500-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	45
35	SCT	Contemporary Verse 2 Inc.	207-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	45
35	SCT	Associated Manitoba Arts	424-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	45
35	SCT	Manitoba Association of	503-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	45
35	SCT	The Manitoba Writer's Guild	206-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	45
35	SCT	Turnstone Press Ltd.	206-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	46
35	SCT	Contemporary Verse 2 Inc.	502-100 Arthur St Winnipeg MB R3B 1H3	ENE/163.6	-0.19	46
36	EHS		Notre Dame Avenue & Hargrave Street Winnipeg MB	W/168.2	-1.08	46
37	SCT	GC CLOTHING	376 Donald St Winnipeg MB R3B 2J2	SW/171.2	-0.35	46
38	GEN	CUSTOM IMAGES LTD	DONALD ST., 374 WINNIPEG MB	SW/181.2	-0.31	47

Map Key	DB	Company/Site Name	Address	Dir/Dist m	Elev Diff m	Page Number
38	SCT	UNDERGROUND SCREEN PRINTING	374 Donald St Lower Level Winnipeg MB R3B 2J2	SW/181.2	-0.31	47
38	SCT	DPD Software Ltd.	374 Donald St Floor 2 Winnipeg MB R3B 2J2	SW/181.2	-0.31	47
39	SCT	ART UPHOLSTERING/DRAPERIES LTD	309 Cumberland Ave Winnipeg MB R3B 1T2	SW/189.2	-0.40	47
39	SCT	ART UPHOLSTERING & DRAPERIES	309 Cumberland Ave Winnipeg MB R3B 1T2	SW/189.2	-0.40	48
40	SCT	Underground Screen Printing	27-221 McDermot Ave Winnipeg MB R3B 0S2	E/189.7	-0.01	48
41	EHS		63 Albert Street Winnipeg MB	ESE/190.4	-0.01	48
41	GEN	NORTHERN BIOIDENTIFICATION SERVICE LTD	ALBERT ST., 63 RM 403 WINNIPEG MB	ESE/190.4	-0.01	49
41	GEN	NORTHERN BIOIDENTIFICATION SERVICE	403-63 ALBERT ST Winnipeg MB	ESE/190.4	-0.01	49
41	SCT	SWERVE	200-63 Albert St Winnipeg MB R3B 1G4	ESE/190.4	-0.01	49
41	SCT	Outwords Inc.	200-63 Albert St Winnipeg MB R3B 1G4	ESE/190.4	-0.01	49
41	SCT	Rosebud Publications Ltd.	202-63 Albert St Winnipeg MB R3B 1G4	ESE/190.4	-0.01	49
41	SCT	Chasing Plastic Magazine	208-63 Albert St Winnipeg MB R3B 1G4	ESE/190.4	-0.01	49
42	SCT	SURGICAL ELASTIC COMPANY INC.	61 Albert St Winnipeg MB R3B 1G3	ESE/192.0	0.02	50
43	CS	NATIONAL TILDEN	283 ELLICE AVE. WINNIPEG MB R3B 1X6	SSW/194.1	-0.14	50
43	CS	NATIONAL TILDEN	283 ELLICE AVE Winnipeg MB R3B 1X6	SSW/194.1	-0.14	50
43	FST	National Car Rental (Canada)	283 Ellice Ave. Winnipeg MB R3B 1X6	SSW/194.1	-0.14	50
43	FUEL	NATIONAL CAR RENTAL	283 ELLICE AVE Winnipeg MB R3B 1X6	SSW/194.1	-0.14	51
43	FUEL	NATIONAL CAR RENTAL - 283 ELLICE	283 ELLICE Winnipeg MB R3B 1X6	SSW/194.1	-0.14	51
44	SCT	CANADIAN DIMENSION INC.	2B-91 Albert St Winnipeg MB R3B 1G5	ENE/194.5	0.22	51
44	SCT	Dimension Publications Inc.	2B-91 Albert St Winnipeg MB R3B 1G5	ENE/194.5	0.22	52
44	SCT	Canadian Dimension	2E-91 Albert St Winnipeg MB R3B 1G5	ENE/194.5	0.22	52
45	SCT	FLEET GALLERIES (1983) LTD.	65 Albert St Winnipeg MB R3B 1G3	ESE/201.5	-0.07	52
45	SCT	Galleries Framers Wholesale	65 Albert St Winnipeg MB R3B 1G3	ESE/201.5	-0.07	52
46	WWIS	WINNIPEG ELECTRIC/WRB	MB	SE/202.1	0.27	52
47	EHS		228 Notre Dame Ave Winnipeg MB R3B 1N7	SSE/203.2	-0.27	53
48	SCT	AZON CANADA INC.	492 Hargrave St Winnipeg MB R3A 0X7	NW/212.9	-0.18	53

Map Key	DB	Company/Site Name	Address	Dir/Dist m	Elev Diff m	Page Number
49	SCT	I D FASHIONS LTD	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW/214.8	-0.20	53
49	SCT	I.D. Fashions Ltd	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW/214.8	-0.20	54
49	SCT	I.D. Fashions Ltd.	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW/214.8	-0.20	54
49	SCT	L.A. Direction Knitting Mills	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW/214.8	-0.20	54
50	EHS		110 Princess Winnipeg MB R3B 1K7	NNE/216.1	-0.05	54
51	GEN	INTER-PRO OFFICE SYSTEMS	HARGRAVE ST., 490-#103 WINNIPEG MB	NW/219.1	-0.18	55
51	GEN	WINNIPEG REGIONAL HEALTH AUTHORITY	490 HARGRAVE PL Winnipeg MB	NW/219.1	-0.18	55
52	SCT	Botanical Paperworks Inc.	329 Cumberland Ave Winnipeg MB R3B 1T2	WSW/219.4	-0.05	55
53	GEN	EXCHANGE LOFTS INC	PRINCESS ST., 123 WINNIPEG MB R3B 1K8	NNE/220.1	-0.09	55
53	SCT	A M L & T	2-123 Princess St Winnipeg MB R3B 1K8	NNE/220.1	-0.09	55
54	SCT	LOVEABLE CREATIONS	110 Princess St Floor 6 Winnipeg MB R3B 1K7	N/223.6	-0.05	55
54	SCT	LOVEABLE CREATIONS INC.	110 Princess St Floor 6 Winnipeg MB R3B 1K7	N/223.6	-0.05	56
55	GEN	DAYS INN WINNIPEG (MARLBOROUGH)	SMITH ST., 331 WINNIPEG MB	S/227.5	-0.51	56
55	GEN	RAMADA MARLBOROUGH HOTEL	331 SMITH ST Winnipeg MB	S/227.5	-0.51	56
56	SCT	INTRINSIX CANADA INC.	124 King St Winnipeg MB R3B 1H9	NNE/228.7	-0.17	56
57	GEN	HEARTLAND FLEXO-GRAPHICS LTD.	HARGRAVE ST., 448 WINNIPEG MB	WNW/233.9	-0.56	56
57	GEN	WALTER DEVELOPMENT CORPORATION	448 HARGRAVE ST Winnipeg MB R3A 0X5	WNW/233.9	-0.56	57
57	SCT	HEARTLAND FLEXO-GRAPHICS LTD.	448 Hargrave St Winnipeg MB R3A 0X5	WNW/233.9	-0.56	57
58	SCT	Mondrian Canada Inc.	498 Hargrave St Winnipeg MB R3A 0X7	NNW/241.6	-0.12	57
59	GEN	THE LAB WORKS	464 HARGRAVE ST Winnipeg MB R3A 0X5	WNW/244.3	-0.34	57
59	GEN	THE LAB WORKS	464 HARGRAVE ST Winnipeg MB R3A 0X5	WNW/244.3	-0.34	57
59	SCT	Special T Shirt Company	464 Hargrave St Winnipeg MB R3A 0X5	WNW/244.3	-0.34	58

Executive Summary: Summary By Data Source

CS - Contaminated/Impacted Sites

A search of the CS database, dated 1980-Apr 2015 has found that there are 3 CS site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key

Lower Elevation	Address	Direction	Distance m	Map Key
MANITOBA HYDRO - CS	44 ADELAIDE STREET WINNIPEG MB	W	126.26	22
NATIONAL TILDEN	283 ELLICE AVE. WINNIPEG MB R3B 1X6	SSW	194.13	43
NATIONAL TILDEN	283 ELLICE AVE Winnipeg MB R3B 1X6	SSW	194.13	43

EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Aug 2014 has found that there are 10 EHS site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key
	309 Mcdermot Avenue, 78, 86 And 88 Princess Street Winnipeg, Manitoba MB	N	99.83	19
	92 Princess St Winnipeg MB	N	130.15	24

Lower Elevation	Address	Direction	Distance m	Map Key
	54 Princess St WINNIPEG MB R3B 1K2	W	65.92	8
	33 Princess Street Winnipeg MB R3B 1K1	SW	77.25	13
	54 Arthur Street Winnipeg MB R3B 1G7	ESE	81.60	15
	52 Adelaide Street Winnipeg MB R3A 0V7	WNW	147.86	28
	Notre Dame Avenue & Hargrave Street Winnipeg MB	W	168.23	36
	63 Albert Street Winnipeg MB	ESE	190.41	41
	228 Notre Dame Ave Winnipeg MB R3B 1N7	SSE	203.22	47

	110 Princess Winnipeg MB R3B 1K7	NNE	216.10	50

FST - Fuel Storage Tanks

A search of the FST database, dated 1905-Feb 2003* has found that there are 2 FST site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key

Lower Elevation	Address	Direction	Distance m	Map Key
Winnipeg, City of	55 Princess St. Winnipeg MB R3B 1K1	SSW	34.08	3
National Car Rental (Canada)	283 Ellice Ave. Winnipeg MB R3B 1X6	SSW	194.13	43

FUEL - Bulk Fuel Distributors

A search of the FUEL database, dated 2006-Feb 2015 has found that there are 3 FUEL site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key

Lower Elevation	Address	Direction	Distance m	Map Key
CITY OF WINNIPEG POLICE SERVICE - VEHICLE SERVICE UNIT	55 PRINCESS ST Winnipeg MB R3B 1K1	SSW	34.08	3
NATIONAL CAR RENTAL - 283 ELLICE	283 ELLICE Winnipeg MB R3B 1X6	SSW	194.13	43
NATIONAL CAR RENTAL	283 ELLICE AVE Winnipeg MB R3B 1X6	SSW	194.13	43

GEN - Waste Generators Summary

A search of the GEN database, dated 1985-Sep 2012 has found that there are 23 GEN site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key
TRIM SERVICES 1980 LTD.	MCDERMOT AVE., 290 WINNIPEG MB	NNE	31.08	1
TRIM SERVICES 19080	290 MCDERMOT AVE Winnipeg MB R3B 0T2	NNE	31.08	1

Lower Elevation	Address	Direction	Distance m	Map Key
MANITOBA HYDRO-KING ST.	KING ST., 48 WINNIPEG MB R3B 1H5	S	54.57	7
HOME OF INSTANT PRINTING	PRINCESS ST., 74 WINNIPEG MB	NNW	70.34	10

AVENUE 4 PRINT	74 PRINCESS ST Winnipeg MB R3B 1K2	NNW	70.34	10
BISHOP PRINTING CO. LTD.	PRINCESS ST., 44 WINNIPEG MB	WSW	82.31	16
DEFEHR FURNITURE AND APPLIANCES	PRINCESS ST., 78 WINNIPEG MB	NNW	94.89	17
LUKES MACHINERY CO. LTD	NOTRE DAME AVE., 318 WINNIPEG MB	WSW	157.24	33
LUDES MACHINERY	318 NOTRE DAME AVE Winnipeg MB R3B 1P5	WSW	157.24	33
A PLUS RESTAURANT EQUIPMENT & SUPPLIES INC	334 MCDERMOT AV Winnipeg MB R3A 0A5	NW	163.23	34
VIDEO POOL INC	300-100 ARTHUR ST Winnipeg MB R3B 1H3	ENE	163.56	35
CUSTOM IMAGES LTD	DONALD ST., 374 WINNIPEG MB	SW	181.24	38
NORTHERN BIOIDENTIFICATION SERVICE LTD	ALBERT ST., 63 RM 403 WINNIPEG MB	ESE	190.41	41
NORTHERN BIOIDENTIFICATION SERVICE	403-63 ALBERT ST Winnipeg MB	ESE	190.41	41
INTER-PRO OFFICE SYSTEMS	HARGRAVE ST., 490-#103 WINNIPEG MB	NW	219.12	51
WINNIPEG REGIONAL HEALTH AUTHORITY	490 HARGRAVE PL Winnipeg MB	NW	219.12	51
EXCHANGE LOFTS INC	PRINCESS ST., 123 WINNIPEG MB R3B 1K8	NNE	220.11	53
DAYS INN WINNIPEG (MARLBOROUGH)	SMITH ST., 331 WINNIPEG MB	S	227.47	55
RAMADA MARLBOROUGH HOTEL	331 SMITH ST Winnipeg MB	S	227.47	55
HEARTLAND FLEXO-GRAPHICS LTD.	HARGRAVE ST., 448 WINNIPEG MB	WNW	233.92	57
WALTER DEVELOPMENT CORPORATION	448 HARGRAVE ST Winnipeg MB R3A 0X5	WNW	233.92	57
THE LAB WORKS	464 HARGRAVE ST Winnipeg MB R3A 0X5	WNW	244.25	59
THE LAB WORKS	464 HARGRAVE ST Winnipeg MB R3A 0X5	WNW	244.25	59

NPCB - National PCB Inventory

A search of the NPCB database, dated 1988-2008* has found that there are 2 NPCB site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key

Lower Elevation	Address	Direction	Distance m	Map Key

THOMAS J.LIPTON INC.	3RD FLOOR STORAGE AREA 334 MCDERMOT AVE WINNIPEG MB R3A 0A5	NW	163.23	34
Thomas J. Lipton Inc.	334 McDermot Ave 3RD FLOOR STORAGE AREA Winnipeg MB R3A 0A5	NW	163.23	34

SCT - Scott's Manufacturing Directory

A search of the SCT database, dated 1992-Mar 2011* has found that there are 102 SCT site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key
KAPLAN'S MFG. CO. LTD.	290 McDermot Ave Floor 3 Winnipeg MB R3B 0T2	NNE	31.08	1
CANADIAN GARMENT COMPANY	290 McDermot Ave Floor 7 Winnipeg MB R3B 0T2	NNE	31.08	1
VALLEY FASHION	290 McDermot Ave Floor 3 Winnipeg MB R3B 0T2	NNE	31.08	1
BI WORX	290 McDermot Ave Floor 2 Winnipeg MB R3B 0T2	NNE	31.08	1
The Canadian Garment Company	290 McDermot Ave Floor 7 Winnipeg MB R3B 0T2	NNE	31.08	1
R B Environmental Aquatic	288 McDermot Ave Winnipeg MB R3B 0T2	NE	32.93	2
NELSON'S CLUB WEAR	296 McDermot Ave Main Floor Winnipeg MB R3B 0T2	NNW	37.19	4
DIMENSION DISPLAY INC.	300-66 King St Winnipeg MB R3B 1H6	ENE	50.83	5
Kayjet Promotions Ltd.	700-66 King St Winnipeg MB R3B 1H6	ENE	50.83	5
RENATE'S T-SHIRT SHOP LTD.	4-66 King St Winnipeg MB R3B 1H6	ENE	50.83	5
Renate's T-Shirt Shop Ltd.	66 King St Floor 4 Winnipeg MB R3B 1H6	ENE	50.83	5
Compu-Stitch Embroidery Design Inc.	66 King St Floor 4 Winnipeg MB R3B 1H6	ENE	50.83	5
Renates Printworx Ltd.	400-66 King St Winnipeg MB R3B 1H6	ENE	50.83	5
Compu-Stitch Embroidery Design	66 King St Floor 4 Winnipeg MB R3B 1H6	ENE	50.83	5
The Neon Factory Ltd.	73 Princess St Winnipeg MB R3B 1K1	N	51.20	6
NICE & SIMPLE	600-281 McDermot Ave Winnipeg MB R3B 0S9	NE	74.55	11
Group 5 Leathers	103-85 Adelaide St Winnipeg MB R3A 0V9	NNW	148.70	29
Winnipeg Pants & Sportswear	85 Adelaide St Floor 4 Winnipeg MB R3A 0V9	NNW	148.70	29

Equal/Higher Elevation	Address	Direction	Distance m	Map Key
Richlu Manufacturing	85 Adelaide St Winnipeg MB R3A 0V9	NNW	148.70	29
GOODWEAR GLOVE COMPANY LTD.	85 Adelaide St Winnipeg MB R3A 0V9	NNW	148.70	29
GROUP 5 LEATHERS	85 Adelaide St Suite 103 Winnipeg MB R3A 0V9	NNW	148.70	29
B.K. FASHIONS INC.	250 McDermot Ave Floor 3 Winnipeg MB R3B 0S5	E	150.37	30
Dimension Display Inc.	250 McDermot Ave Floor 2 Winnipeg MB R3B 0S5	E	150.37	30
Grabner Fur Company Ltd.	301-250 McDermot Ave Winnipeg MB R3B 0S5	E	150.37	30
Cdn Urethane Foam Assoc	410-250 McDermot Ave Winnipeg MB R3B 0S5	E	150.37	30
Time Line Newsletter	304-250 McDermot Ave Winnipeg MB R3B 0S5	E	150.37	30
Manitoba Historical Society	304-250 McDermot Ave Winnipeg MB R3B 0S5	E	150.37	30
O.I.C. Ent Inc.	70 Albert St Winnipeg MB R3B 1E7	E	151.35	31
Studio Publications	70 Albert St Floor 2 Winnipeg MB R3B 1E7	E	151.35	31
INTREPID DEZINE	62 Albert St Floor 2 Winnipeg MB R3B 1E7	ESE	152.78	32
Intrepid Dezine	2-62 Albert St Winnipeg MB R3B 1E7	ESE	152.78	32
SURGICAL ELASTIC COMPANY INC.	61 Albert St Winnipeg MB R3B 1G3	ESE	191.98	42
CANADIAN DIMENSION INC.	2B-91 Albert St Winnipeg MB R3B 1G5	ENE	194.50	44
Dimension Publications Inc.	2B-91 Albert St Winnipeg MB R3B 1G5	ENE	194.50	44
Canadian Dimension	2E-91 Albert St Winnipeg MB R3B 1G5	ENE	194.50	44

Lower Elevation	Address	Direction	Distance m	Map Key
Del'S Electric Motor Supply	54 Princess St Winnipeg MB R3B 1K2	W	65.92	8
Industrial Agencies	54 Princess St Winnipeg MB R3B 1K2	W	65.92	8
Sydney Gitterman Furs Ltd.	46 Princess St Winnipeg MB R3B 1K2	WSW	65.93	9
Home of Instant Printing	74 Princess St Winnipeg MB R3B 1K2	NNW	70.34	10
Avenue 4 Print	74 Princess St Winnipeg MB R3B 1K2	NNW	70.34	10

GRABNER FUR COMPANY LTD.	305-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
Art Bookbindery	550-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
JAZZ GOLF EQUIPMENT INC.	300-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
BORDER CROSSINGS MAGAZINE	500-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
MIKISIW PRINTERS LTD.	205-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
Buffalo Gal Pictures Inc.	70 Arthur St suite 777 Winnipeg MB R3B 1G7	E	76.06	12
Border Crossings Magazine Inc.	500-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
Great Plains Publications	420-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
Taiga Communications Inc.	554-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
Taiga Communications Inc.	650-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
Kate & Birdie Paper Co.	708-70 Arthur St Winnipeg MB R3B 1G7	E	76.06	12
INTRINSIX CANADA INC.	264 McDermot Ave Winnipeg MB R3B 0S8	E	78.41	14
Bishop Printing Company Ltd.	44 Princess St Winnipeg MB R3B 1K2	WSW	82.31	16
Sherlock Publishing Ltd.	200-44 Princess St Winnipeg MB R3B 1K2	WSW	82.31	16
Bonwitt Manufacturing Ltd.	49 Adelaide St Winnipeg MB R3A 0V8	W	99.47	18
FLOOREVERY	49 Adelaide St Winnipeg MB R3A 0V8	W	99.47	18
CRESTING UNLIMITED	49 Adelaide St Winnipeg MB R3A 0V8	W	99.47	18
PEGUIS PUBLISHERS LIMITED	100-318 McDermot Ave Winnipeg MB R3A 0A2	NW	112.81	20
Portage & Main Press	100-318 McDermot Ave Winnipeg MB R3A 0A2	NW	112.81	20
Lintex Products Limited	103-318 McDermot Ave Winnipeg MB R3A 0A2	NW	112.81	20
SHAGAL JEANS LTD.	87 King St Winnipeg MB R3B 1H7	NE	119.33	21
AUGUST COMMUNICATIONS LTD.	200-388 Donald St Winnipeg MB R3B 2J4	SW	127.12	23
College Publications	114-388 Donald St Winnipeg MB R3B 2J4	SW	127.12	23
Child Creations	103 Princess St Floor 4 Winnipeg MB R3B 1K6	NNE	134.19	25
KENDRICK QUALITY PRINTING LTD.	386 Donald St Winnipeg MB R3B 2J2	SW	137.07	27

OPUS COMPUTER SYSTEMS INC	52 Adelaide St Winnipeg MB R3A 0V7	WNW	147.86	28
Opus Computer Solution Inc.	52 Adelaide St Winnipeg MB R3A 0V7	WNW	147.86	28
PERRY DARYL	500-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Turnstone Press Ltd.	607-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Prairie Fire Press, Inc.	423-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Daryl Perry	500-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Contemporary Verse 2 Inc.	207-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Associated Manitoba Arts	424-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Manitoba Association of	503-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
The Manitoba Writer's Guild	206-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Turnstone Press Ltd.	206-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
Contemporary Verse 2 Inc.	502-100 Arthur St Winnipeg MB R3B 1H3	ENE	163.56	35
GC CLOTHING	376 Donald St Winnipeg MB R3B 2J2	SW	171.19	37
UNDERGROUND SCREEN PRINTING	374 Donald St Lower Level Winnipeg MB R3B 2J2	SW	181.24	38
DPD Software Ltd.	374 Donald St Floor 2 Winnipeg MB R3B 2J2	SW	181.24	38
ART UPHOLSTERING/DRAPERIES LTD	309 Cumberland Ave Winnipeg MB R3B 1T2	SW	189.16	39
ART UPHOLSTERING & DRAPERIES	309 Cumberland Ave Winnipeg MB R3B 1T2	SW	189.16	39
Underground Screen Printing	27-221 McDermot Ave Winnipeg MB R3B 0S2	E	189.71	40
SWERVE	200-63 Albert St Winnipeg MB R3B 1G4	ESE	190.41	41
Outwords Inc.	200-63 Albert St Winnipeg MB R3B 1G4	ESE	190.41	41
Rosebud Publications Ltd.	202-63 Albert St Winnipeg MB R3B 1G4	ESE	190.41	41
Chasing Plastic Magazine	208-63 Albert St Winnipeg MB R3B 1G4	ESE	190.41	41
Galleries Framers Wholesale	65 Albert St Winnipeg MB R3B 1G3	ESE	201.54	45
FLEET GALLERIES (1983) LTD.	65 Albert St Winnipeg MB R3B 1G3	ESE	201.54	45
AZON CANADA INC.	492 Hargrave St Winnipeg MB R3A 0X7	NW	212.93	48

I D FASHIONS LTD	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW	214.77	49
I.D. Fashions Ltd	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW	214.77	49
I.D. Fashions Ltd.	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW	214.77	49
L.A. Direction Knitting Mills	332 Bannatyne Ave Winnipeg MB R3A 0E2	NNW	214.77	49
Botanical Paperworks Inc.	329 Cumberland Ave Winnipeg MB R3B 1T2	WSW	219.36	52
A M L & T	2-123 Princess St Winnipeg MB R3B 1K8	NNE	220.11	53
LOVEABLE CREATIONS	110 Princess St Floor 6 Winnipeg MB R3B 1K7	N	223.58	54
LOVEABLE CREATIONS INC.	110 Princess St Floor 6 Winnipeg MB R3B 1K7	N	223.58	54
INTRINSIX CANADA INC.	124 King St Winnipeg MB R3B 1H9	NNE	228.67	56
HEARTLAND FLEXO-GRAPHICS LTD.	448 Hargrave St Winnipeg MB R3A 0X5	WNW	233.92	57
Mondrian Canada Inc.	498 Hargrave St Winnipeg MB R3A 0X7	NNW	241.56	58
Special T Shirt Company	464 Hargrave St Winnipeg MB R3A 0X5	WNW	244.25	59

WWIS - Water Well Inventory

A search of the WWIS database, dated 1880-Jul 2012 has found that there are 2 WWIS site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance m	Map Key
WINNIPEG ELECTRIC/WRB	MB	SE	202.05	46

Lower Elevation	Address	Direction	Distance m	Map Key
SILVERWOOD'S DAIRIES/WRB	MB	SSE	135.67	26

Map

Order No: 20160106012

Address: 61 Princess St, Winnipeg, MB, R3B1K1

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation

- Expressway
- Principal Highway
- Secondary Highway
- Major Road
- Local road
- Trail
- Proposed Road
- Ferry Route/Ice Road

- Industrial and Resource - Regions
- Main Line
- Sidetrack
- Transit Line
- Abandoned Line
- Pipelines and Transmission

- National Park
- Provincial or Territorial Park
- Other Park
- Golf Course or Driving Range
- Park or Sports Field
- Other Recreation Area

Aerial

Order No: 20160106012

Address: 61 Princess St, Winnipeg, MB, R3B1K1

Source: ESRI World Imagery, Updated October 2014

Detail Report

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
1	1 of 7	NNE/31.1	232.8	TRIM SERVICES 1980 LTD. MCDERMOT AVE., 290 WINNIPEG MB	GEN

Registration NO: MBG001314

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
1	2 of 7	NNE/31.1	232.8	TRIM SERVICES 19080 290 MCDERMOT AVE Winnipeg MB R3B 0T2	GEN

Registration NO: MBG01314

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
1	3 of 7	NNE/31.1	232.8	KAPLAN'S MFG. CO. LTD. 290 McDermot Ave Floor 3 Winnipeg MB R3B 0T2	SCT

Established: 1927
Plant Size (ft²): 30000
Employment: 55

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Men's and Boys' Cut and Sew Trouser, Slack and Jean Manufacturing
SIC/NAICS Code: 315227
+
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
1	4 of 7	NNE/31.1	232.8	CANADIAN GARMENT COMPANY 290 McDermot Ave Floor 7 Winnipeg MB R3B 0T2	SCT

Established: 1990
Plant Size (ft²): 15000
Employment: 30

--- Details ---
Description: Men's and Boys' Cut and Sew Suit, Coat and Overcoat Manufacturing
SIC/NAICS Code: 315222
+
Description: Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315229
+
Description: Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket and Skirt Manufacturing
SIC/NAICS Code: 315234
+

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239
+
Description: Infants' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315291
+
Description: All Other Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315299
+
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210

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1 | **5 of 7** | **NNE/31.1** | **232.8** | **VALLEY FASHION**
290 McDermot Ave Floor 3
Winnipeg MB R3B 0T2 | **SCT**

Established: 1995
Plant Size (ft²): 0
Employment: 30

--- Details ---
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239
+
Description: All Other Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315299
+
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Men's and Boys' Cut and Sew Shirt Manufacturing
SIC/NAICS Code: 315226
+
Description: Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315229
+
Description: Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing
SIC/NAICS Code: 315232

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1 | **6 of 7** | **NNE/31.1** | **232.8** | **BI WORX**
290 McDermot Ave Floor 2
Winnipeg MB R3B 0T2 | **SCT**

Established: 1992
Plant Size (ft²): 0
Employment: 5

--- Details ---
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239

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1 | **7 of 7** | **NNE/31.1** | **232.8** | **The Canadian Garment Company**
290 McDermot Ave Floor 7
Winnipeg MB R3B 0T2 | **SCT**

Established: 01-JAN-90
Plant Size (ft²): 6500
Employment:

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

--- Details ---

Description:	Cut and Sew Clothing Contracting
SIC/NAICS Code:	315210
+	
Description:	Infants' Cut and Sew Clothing Manufacturing
SIC/NAICS Code:	315291
+	
Description:	Men's and Boys' Cut and Sew Suit, Coat and Overcoat Manufacturing
SIC/NAICS Code:	315222
+	
Description:	Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code:	315239
+	
Description:	Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code:	315229
+	
Description:	All Other Cut and Sew Clothing Manufacturing
SIC/NAICS Code:	315299
+	
Description:	Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code:	315229
+	
Description:	Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket and Skirt Manufacturing
SIC/NAICS Code:	315234

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
2	1 of 1	NE/32.9	232.7	**R B Environmental Aquatic** **288 McDermot Ave** **Winnipeg MB R3B 0T2**	SCT

Established:	01-FEB-95
Plant Size (ft²):	4000
Employment:	

--- Details ---

Description:	Glass Product Manufacturing from Purchased Glass
SIC/NAICS Code:	327215
+	
Description:	Industrial Machinery, Equipment and Supplies Wholesaler-Distributors
SIC/NAICS Code:	417230
+	
Description:	All Other Wholesaler-Distributors
SIC/NAICS Code:	418990
+	
Description:	All Other Support Services
SIC/NAICS Code:	561990
+	
Description:	Live Animal Wholesaler-Distributors
SIC/NAICS Code:	411110
+	
Description:	Metal Tank (Heavy Gauge) Manufacturing
SIC/NAICS Code:	332420
+	
Description:	All Other Plastic Product Manufacturing
SIC/NAICS Code:	326198

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
3	1 of 2	SSW/34.1	232.1	**Winnipeg, City of** **55 Princess St.** **Winnipeg MB R3B 1K1**	FST

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Site ID: 12642
Owner: Winnipeg, City of
Operator:
Mailing City: Winnipeg MB
Mailing Address: 55 Princess Street

Owner Category: Municipal
Site Status: Active
Outlet Type: Used Oil
Inventory: Exempt

--- Details ---

Status: Installed
Position: Underground
Spill Protect: Impressed Current

NO Of Tanks: 1
Status Date: 01-Jan-83
Capacity(L): 2270.00

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3 | **2 of 2** | **SSW/34.1** | **232.1** | **CITY OF WINNIPEG POLICE SERVICE - VEHICLE SERVICE UNIT**
55 PRINCESS ST
Winnipeg MB R3B 1K1 | **FUEL**

Permit NO: 21594
Expiry Date: 12/31/2008
Facility Type: U/G

Lat/Long:
Comment: Not storing used oil

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4 | **1 of 1** | **NNW/37.2** | **232.8** | **NELSON'S CLUB WEAR**
296 McDermot Ave Main Floor
Winnipeg MB R3B 0T2 | **SCT**

Established: 1977
Plant Size (ft²): 3000
Employment: 9

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: All Other Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315299

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5 | **1 of 7** | **ENE/50.8** | **232.4** | **DIMENSION DISPLAY INC.**
300-66 King St
Winnipeg MB R3B 1H6 | **SCT**

Established: 1988
Plant Size (ft²): 5000
Employment: 4

--- Details ---
Description: Showcase, Partition, Shelving and Locker Manufacturing
SIC/NAICS Code: 337215
+
Description: Sign Manufacturing
SIC/NAICS Code: 339950

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5 | **2 of 7** | **ENE/50.8** | **232.4** | **Kayjet Promotions Ltd.**
700-66 King St
Winnipeg MB R3B 1H6 | **SCT**

Established: 01-JAN-80

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Plant Size (ft²): 40000
Employment:

--- Details ---
Description: Linen, Drapery and Other Textile Furnishings Wholesaler-Distributors
SIC/NAICS Code: 414330
+
Description: All Other Textile Product Mills
SIC/NAICS Code: 314990
+
Description: Clothing and Clothing Accessories Wholesaler-Distributors
SIC/NAICS Code: 414110
+
Description: Commercial Screen Printing
SIC/NAICS Code: 323113
+
Description: Textile and Fabric Finishing
SIC/NAICS Code: 313310

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
5	3 of 7	ENE/50.8	232.4	RENATE'S T-SHIRT SHOP LTD. 4-66 King St Winnipeg MB R3B 1H6	SCT

Established: 1980
Plant Size (ft²): 6000
Employment: 10

--- Details ---
Description: Quick Printing
SIC/NAICS Code: 323114
+
Description: Digital Printing
SIC/NAICS Code: 323115
+
Description: Other Printing
SIC/NAICS Code: 323119
+
Description: Clothing and Clothing Accessories Wholesaler-Distributors
SIC/NAICS Code: 414110

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
5	4 of 7	ENE/50.8	232.4	Renate's T-Shirt Shop Ltd. 66 King St Floor 4 Winnipeg MB R3B 1H6	SCT

Established: 1980
Plant Size (ft²): 6000
Employment: 10

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
5	5 of 7	ENE/50.8	232.4	Compu-Stitch Embroidery Design Inc. 66 King St Floor 4 Winnipeg MB R3B 1H6	SCT

Established: 1996
Plant Size (ft²):
Employment: 3

--- Details ---

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
Description:		All Other Textile Product Mills			
SIC/NAICS Code:		314990			

5	6 of 7	ENE/50.8	232.4	Renates Printworx Ltd. 400-66 King St Winnipeg MB R3B 1H6	SCT

Established: 1/1/1980
Plant Size (ft²): 6000
Employment:

--- Details ---
Description: Clothing and Clothing Accessories Wholesaler-Distributors
SIC/NAICS Code: 414110
+
Description: Other Printing
SIC/NAICS Code: 323119

5	7 of 7	ENE/50.8	232.4	Compu-Stitch Embroidery Design 66 King St Floor 4 Winnipeg MB R3B 1H6	SCT

Established: 1996
Plant Size (ft²):
Employment: 3

--- Details ---
Description: All Other Textile Product Mills
SIC/NAICS Code: 314990

6	1 of 1	N/51.2	232.7	The Neon Factory Ltd. 73 Princess St Winnipeg MB R3B 1K1	SCT

Established: 1986
Plant Size (ft²):
Employment: 2

--- Details ---
Description: Sign Manufacturing
SIC/NAICS Code: 339950

7	1 of 1	S/54.6	232.0	MANITOBA HYDRO-KING ST. KING ST., 48 WINNIPEG MB R3B 1H5	GEN

Registration NO: MBG006881

8	1 of 3	W/65.9	231.9	54 Princess St WINNIPEG MB R3B 1K2	EHS

Addit. Info Ordered:
Order No.: 20100112021w
Report Date: 1/12/2010
Report Type: Self Serve Instant Report
Search Radius (km): 0.25

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
8	2 of 3	W/65.9	231.9	Del'S Electric Motor Supply 54 Princess St Winnipeg MB R3B 1K2	SCT

Established: 01-JAN-27
Plant Size (ft²): 14000
Employment:

--- Details ---
Description: Electrical Wiring and Construction Supplies Wholesaler-Distributors
SIC/NAICS Code: 416110
+
Description: Industrial Machinery, Equipment and Supplies Wholesaler-Distributors
SIC/NAICS Code: 417230

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
8	3 of 3	W/65.9	231.9	Industrial Agencies 54 Princess St Winnipeg MB R3B 1K2	SCT

Established: 01-JAN-27
Plant Size (ft²):
Employment:

--- Details ---
Description: Electrical Wiring and Construction Supplies Wholesaler-Distributors
SIC/NAICS Code: 416110
+
Description: Industrial Machinery, Equipment and Supplies Wholesaler-Distributors
SIC/NAICS Code: 417230

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
9	1 of 1	WSW/65.9	232.0	Sydney Gitterman Furs Ltd. 46 Princess St Winnipeg MB R3B 1K2	SCT

Established: 01-FEB-32
Plant Size (ft²): 2200
Employment:

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Fur and Leather Clothing Manufacturing
SIC/NAICS Code: 315292

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
10	1 of 4	NNW/70.3	232.3	HOME OF INSTANT PRINTING PRINCESS ST., 74 WINNIPEG MB	GEN

Registration NO: MBG003834

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
10	2 of 4	NNW/70.3	232.3	AVENUE 4 PRINT 74 PRINCESS ST Winnipeg MB R3B 1K2	GEN

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
Registration NO:		MBG11563			
10	3 of 4	NNW/70.3	232.3	**Home of Instant Printing** **74 Princess St** **Winnipeg MB R3B 1K2**	SCT
Established:		1957			
Plant Size (ft²):					
Employment:		10			
--- Details ---					
Description:		Other Printing			
SIC/NAICS Code:		323119			
+					
Description:		Support Activities for Printing			
SIC/NAICS Code:		323120			
+					
Description:		Sign Manufacturing			
SIC/NAICS Code:		339950			
10	4 of 4	NNW/70.3	232.3	**Avenue 4 Print** **74 Princess St** **Winnipeg MB R3B 1K2**	SCT
Established:		1957			
Plant Size (ft²):					
Employment:					
--- Details ---					
Description:		Other Printing			
SIC/NAICS Code:		323119			
+					
Description:		Support Activities for Printing			
SIC/NAICS Code:		323120			
+					
Description:		Sign Manufacturing			
SIC/NAICS Code:		339950			
11	1 of 1	NE/74.5	232.4	**NICE & SIMPLE** **600-281 McDermot Ave** **Winnipeg MB R3B 0S9**	SCT
Established:		1994			
Plant Size (ft²):		0			
Employment:		8			
--- Details ---					
Description:		Cut and Sew Clothing Contracting			
SIC/NAICS Code:		315210			
+					
Description:		Men's and Boys' Cut and Sew Trouser, Slack and Jean Manufacturing			
SIC/NAICS Code:		315227			
+					
Description:		Other Men's and Boys' Cut and Sew Clothing Manufacturing			
SIC/NAICS Code:		315229			
+					
Description:		Other Women's and Girls' Cut and Sew Clothing Manufacturing			

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
SIC/NAICS Code:		315239			

12	1 of 11	E/76.1	232.2	GRABNER FUR COMPANY LTD. 305-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 1966
Plant Size (ft²): 3600
Employment: 6

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Fur and Leather Clothing Manufacturing
SIC/NAICS Code: 315292

12	2 of 11	E/76.1	232.2	Art Bookbindery 550-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 01-FEB-96
Plant Size (ft²):
Employment:

--- Details ---
Description: Other Publishers
SIC/NAICS Code: 511190
+
Description: Support Activities for Printing
SIC/NAICS Code: 323120

12	3 of 11	E/76.1	232.2	JAZZ GOLF EQUIPMENT INC. 300-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 0000
Plant Size (ft²): 0
Employment: 25

--- Details ---
Description: Sporting and Athletic Goods Manufacturing
SIC/NAICS Code: 339920

12	4 of 11	E/76.1	232.2	BORDER CROSSINGS MAGAZINE 500-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 1982
Plant Size (ft²): 0
Employment: 2

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
12	5 of 11	E/76.1	232.2	MIKISIW PRINTERS LTD. 205-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 1989
Plant Size (ft²): 0
Employment: 5

--- Details ---
Description: Quick Printing
SIC/NAICS Code: 323114
+
Description: Digital Printing
SIC/NAICS Code: 323115
+
Description: Other Printing
SIC/NAICS Code: 323119

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
12	6 of 11	E/76.1	232.2	Buffalo Gal Pictures Inc. 70 Arthur St suite 777 Winnipeg MB R3B 1G7	SCT

Established:
Plant Size (ft²):
Employment: 14

--- Details ---
Description: Motion Picture and Video Production
SIC/NAICS Code: 512110

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
12	7 of 11	E/76.1	232.2	Border Crossings Magazine Inc. 500-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 01-JAN-82
Plant Size (ft²):
Employment:

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
12	8 of 11	E/76.1	232.2	Great Plains Publications 420-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 1993
Plant Size (ft²):
Employment: 3

--- Details ---
Description: Book Publishers
SIC/NAICS Code: 511130

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
12	9 of 11	E/76.1	232.2	Taiga Communications Inc. 554-70 Arthur St Winnipeg MB R3B 1G7	SCT

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Established: 1992
Plant Size (ft²):
Employment: 12

--- Details ---
Description: Newspaper Publishers
SIC/NAICS Code: 511110
+
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
12	10 of 11	E/76.1	232.2	Taiga Communications Inc. 650-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 01-FEB-92
Plant Size (ft²): 1000
Employment:

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120
+
Description: Newspaper Publishers
SIC/NAICS Code: 511110

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
12	11 of 11	E/76.1	232.2	Kate & Birdie Paper Co. 708-70 Arthur St Winnipeg MB R3B 1G7	SCT

Established: 01-FEB-04
Plant Size (ft²):
Employment:

--- Details ---
Description: Stationery Product Manufacturing
SIC/NAICS Code: 322230
+
Description: Paper Bag and Coated and Treated Paper Manufacturing
SIC/NAICS Code: 322220
+
Description: All Other Miscellaneous Manufacturing
SIC/NAICS Code: 339990
+
Description: Hardware Wholesaler-Distributors
SIC/NAICS Code: 416330
+
Description: Stationery and Office Supplies Wholesaler-Distributors
SIC/NAICS Code: 418210
+
Description: Other Printing
SIC/NAICS Code: 323119
+
Description: All Other Miscellaneous Manufacturing
SIC/NAICS Code: 339990
+
Description: Toy and Hobby Goods Wholesaler-Distributors
SIC/NAICS Code: 414460

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
13	1 of 1	SW/77.3	232.1	33 Princess Street Winnipeg MB R3B 1K1	EHS

Addit. Info Ordered: Fire Insur. Maps And /or Site Plans; Aerials Photos
Order No.: 20070309026
Report Date: 3/20/2007
Report Type: CAN - Basic Report
Search Radius (km): 0.25

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
14	1 of 1	E/78.4	232.3	INTRINSIX CANADA INC. 264 McDermot Ave Winnipeg MB R3B 0S8	SCT

Established: 1991
Plant Size (ft²): 5000
Employment: 20

--- Details ---
Description: Software Publishers
SIC/NAICS Code: 511210

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
15	1 of 1	ESE/81.6	232.0	54 Arthur Street Winnipeg MB R3B 1G7	EHS

Addit. Info Ordered:
Order No.: 20120405011
Report Date: 4/12/2012 11:24:50 AM
Report Type: Custom Report
Search Radius (km): 0.25

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
16	1 of 3	WSW/82.3	231.8	BISHOP PRINTING CO. LTD. PRINCESS ST., 44 WINNIPEG MB	GEN

Registration NO: MBG000890

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
16	2 of 3	WSW/82.3	231.8	Bishop Printing Company Ltd. 44 Princess St Winnipeg MB R3B 1K2	SCT

Established: 01-JAN-16
Plant Size (ft²): 3000
Employment:

--- Details ---
Description: Other Printing
SIC/NAICS Code: 323119
+
Description: Other Printing
SIC/NAICS Code: 323119
+
Description: Quick Printing
SIC/NAICS Code: 323114
+

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
Description:		Digital Printing			
SIC/NAICS Code:		323115			
16	3 of 3	WSW/82.3	231.8	Sherlock Publishing Ltd. 200-44 Princess St Winnipeg MB R3B 1K2	SCT
Established:		01-JAN-89			
Plant Size (ft²):		1000			
Employment:					
--- Details ---					
Description:		Other Publishers			
SIC/NAICS Code:		511190			
17	1 of 1	NNW/94.9	232.3	DEFEHR FURNITURE AND APPLIANCES PRINCESS ST., 78 WINNIPEG MB	GEN
Registration NO:		MBG003711			
18	1 of 3	W/99.5	231.6	Bonwitt Manufacturing Ltd. 49 Adelaide St Winnipeg MB R3A 0V8	SCT
Established:		1957			
Plant Size (ft²):		55000			
Employment:					
--- Details ---					
Description:		Other Men's and Boys' Cut and Sew Clothing Manufacturing			
SIC/NAICS Code:		315229			
+					
Description:		Other Women's and Girls' Cut and Sew Clothing Manufacturing			
SIC/NAICS Code:		315239			
+					
Description:		All Other Cut and Sew Clothing Manufacturing			
SIC/NAICS Code:		315299			
18	2 of 3	W/99.5	231.6	FLOOREVERY 49 Adelaide St Winnipeg MB R3A 0V8	SCT
Established:		1991			
Plant Size (ft²):		2500			
Employment:		5			
--- Details ---					
Description:		All Other Miscellaneous Wood Product Manufacturing			
SIC/NAICS Code:		321999			
18	3 of 3	W/99.5	231.6	CRESTING UNLIMITED 49 Adelaide St Winnipeg MB R3A 0V8	SCT
Established:		1994			

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
Plant Size (ft²):		1800			
Employment:		4			
--- Details ---					
Description:		All Other Textile Product Mills			
SIC/NAICS Code:		314990			
19	1 of 1	N/99.8	232.4	309 Mcdermot Avenue, 78, 86 And 88 Princess Street Winnipeg, Manitoba MB	EHS
Addit. Info Ordered:					
Order No.:		20120102012			
Report Date:		1/9/2012 5:27:08 PM			
Report Type:		Custom Report			
Search Radius (km):		0.25			
20	1 of 3	NW/112.8	232.0	PEGUIS PUBLISHERS LIMITED 100-318 McDermot Ave Winnipeg MB R3A 0A2	SCT
Established:		1967			
Plant Size (ft²):		0			
Employment:		10			
--- Details ---					
Description:		Book Publishers			
SIC/NAICS Code:		511130			
20	2 of 3	NW/112.8	232.0	Portage & Main Press 100-318 McDermot Ave Winnipeg MB R3A 0A2	SCT
Established:					
Plant Size (ft²):					
Employment:					
--- Details ---					
Description:		Book Publishers			
SIC/NAICS Code:		511130			
+					
Description:		Other Publishers			
SIC/NAICS Code:		511190			
20	3 of 3	NW/112.8	232.0	Lintex Products Limited 103-318 McDermot Ave Winnipeg MB R3A 0A2	SCT
Established:		01-FEB-85			
Plant Size (ft²):		650			
Employment:					
--- Details ---					
Description:		Service Establishment Machinery, Equipment and Supplies Wholesaler-Distributors			
SIC/NAICS Code:		417920			
+					
Description:		Linen, Drapery and Other Textile Furnishings Wholesaler-Distributors			

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

SIC/NAICS Code:	414330
+	
Description:	Professional Machinery, Equipment and Supplies Wholesaler-Distributors
SIC/NAICS Code:	417930
+	
Description:	Wholesale Trade Agents and Brokers
SIC/NAICS Code:	419120
+	
Description:	Linen, Drapery and Other Textile Furnishings Wholesaler-Distributors
SIC/NAICS Code:	414330
+	
Description:	Clothing and Clothing Accessories Wholesaler-Distributors
SIC/NAICS Code:	414110

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
21	1 of 1	NE/119.3	232.2	SHAGAL JEANS LTD. 87 King St Winnipeg MB R3B 1H7	SCT

Established:	1976
Plant Size (ft²):	0
Employment:	35
--- Details ---	
Description:	Cut and Sew Clothing Contracting
SIC/NAICS Code:	315210
+	
Description:	Men's and Boys' Cut and Sew Trouser, Slack and Jean Manufacturing
SIC/NAICS Code:	315227
+	
Description:	Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code:	315239

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
22	1 of 1	W/126.3	231.3	MANITOBA HYDRO - CS 44 ADELAIDE STREET WINNIPEG MB	CS

File NO:	57508
File Name:	

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
23	1 of 2	SW/127.1	231.9	AUGUST COMMUNICATIONS LTD. 200-388 Donald St Winnipeg MB R3B 2J4	SCT

Established:	1990
Plant Size (ft²):	0
Employment:	4
--- Details ---	
Description:	Periodical Publishers
SIC/NAICS Code:	511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
23	2 of 2	SW/127.1	231.9	College Publications 114-388 Donald St Winnipeg MB R3B 2J4	SCT

Established:	
Plant Size (ft²):	

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Employment: 9

--- Details ---
Description: Book Publishers
SIC/NAICS Code: 511130
+
Description: Directory and Mailing List Publishers
SIC/NAICS Code: 511140
+
Description: Other Publishers
SIC/NAICS Code: 511190

---

24 | **1 of 1** | **N/130.2** | **232.4** | **92 Princess St**
Winnipeg MB | **EHS**

Addit. Info Ordered:
Order No.: 20121116015
Report Date: 22-NOV-12
Report Type: Custom Report
Search Radius (km): .25

---

25 | **1 of 1** | **NNE/134.2** | **232.3** | **Child Creations**
103 Princess St Floor 4
Winnipeg MB R3B 1K6 | **SCT**

Established:
Plant Size (ft²):
Employment:

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210

---

26 | **1 of 1** | **SSE/135.7** | **232.1** | **SILVERWOOD'S DAIRIES/WRB**
MB | **WWIS**

Water Use:
Well Use: PRODUCTION
Date Completed: 1964 Jul 31
Location: RIVER LOT 0005 IN PARISH OF St. John
Remarks: WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1964-1973). 313 NOTRE DAME, WELL LOG UNAVAILABLE

Well Name: GM38
Driller: UNKNOWN
Utm X: 633451
Utm Y: 5528724

---

27 | **1 of 1** | **SW/137.1** | **231.9** | **KENDRICK QUALITY PRINTING LTD.**
386 Donald St
Winnipeg MB R3B 2J2 | **SCT**

Established: 1987
Plant Size (ft²): 3000
Employment: 10

--- Details ---

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
Description:		Quick Printing			
SIC/NAICS Code:		323114			
+					
Description:		Digital Printing			
SIC/NAICS Code:		323115			
+					
Description:		Other Printing			
SIC/NAICS Code:		323119			
+					
Description:		All Other Wholesaler-Distributors			
SIC/NAICS Code:		418990			
28	1 of 3	WNW/147.9	232.3	52 Adelaide Street Winnipeg MB R3A 0V7	EHS
Addit. Info Ordered:					
Order No.:		20120502001			
Report Date:		5/8/2012 8:23:26 AM			
Report Type:		Custom Report			
Search Radius (km):		0.25			
28	2 of 3	WNW/147.9	232.3	OPUS COMPUTER SYSTEMS INC 52 Adelaide St Winnipeg MB R3A 0V7	SCT
Established:		1991			
Plant Size (ft²):		0			
Employment:		11			
--- Details ---					
Description:		Computer and Peripheral Equipment Manufacturing			
SIC/NAICS Code:		334110			
28	3 of 3	WNW/147.9	232.3	Opus Computer Solution Inc. 52 Adelaide St Winnipeg MB R3A 0V7	SCT
Established:		1991			
Plant Size (ft²):		8000			
Employment:		8			
--- Details ---					
Description:		Computer and Peripheral Equipment Manufacturing			
SIC/NAICS Code:		334110			
+					
Description:		Manufacturing and Reproducing Magnetic and Optical Media			
SIC/NAICS Code:		334610			
+					
Description:		Computer Systems Design and Related Services			
SIC/NAICS Code:		541510			
+					
Description:		Software Publishers			
SIC/NAICS Code:		511210			
29	1 of 5	NNW/148.7	232.5	GOODWEAR GLOVE COMPANY LTD. 85 Adelaide St Winnipeg MB R3A 0V9	SCT

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Established: 1946
Plant Size (ft²): 15000
Employment: 40

--- Details ---
Description: Clothing Accessories and Other Clothing Manufacturing
SIC/NAICS Code: 315990

29	*2 of 5*	*NNW/148.7*	*232.5*	***GROUP 5 LEATHERS*** ***85 Adelaide St Suite 103*** ***Winnipeg MB R3A 0V9***	*SCT*

Established: 1939
Plant Size (ft²): 0
Employment: 200

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Fur and Leather Clothing Manufacturing
SIC/NAICS Code: 315292

29	*3 of 5*	*NNW/148.7*	*232.5*	***Group 5 Leathers*** ***103-85 Adelaide St*** ***Winnipeg MB R3A 0V9***	*SCT*

Established: 1939
Plant Size (ft²):
Employment: 200

29	*4 of 5*	*NNW/148.7*	*232.5*	***Winnipeg Pants & Sportswear*** ***85 Adelaide St Floor 4*** ***Winnipeg MB R3A 0V9***	*SCT*

Established: 1939
Plant Size (ft²): 50000
Employment: 250

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315229
+
Description: Fur and Leather Clothing Manufacturing
SIC/NAICS Code: 315292
+
Description: All Other Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315299

29	*5 of 5*	*NNW/148.7*	*232.5*	***Richlu Manufacturing*** ***85 Adelaide St*** ***Winnipeg MB R3A 0V9***	*SCT*

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Established: 01-DEC-39
Plant Size (ft²): 420000
Employment:

--- Details ---
Description: Fur and Leather Clothing Manufacturing
SIC/NAICS Code: 315292
+
Description: Clothing Accessories and Other Clothing Manufacturing
SIC/NAICS Code: 315990
+
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315229
+
Description: Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315229
+
Description: All Other Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315299

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
30	1 of 6	E/150.4	232.5	**B.K. FASHIONS INC.** **250 McDermot Ave Floor 3** **Winnipeg MB R3B 0S5**	SCT

Established: 1993
Plant Size (ft²): 0
Employment: 40

--- Details ---
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Men's and Boys' Cut and Sew Shirt Manufacturing
SIC/NAICS Code: 315226
+
Description: Men's and Boys' Cut and Sew Trouser, Slack and Jean Manufacturing
SIC/NAICS Code: 315227
+
Description: Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315229
+
Description: Women's and Girls' Cut and Sew Lingerie, Loungewear and Nightwear Manufacturing
SIC/NAICS Code: 315231
+
Description: Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing
SIC/NAICS Code: 315232
+
Description: Women's and Girls' Cut and Sew Dress Manufacturing
SIC/NAICS Code: 315233
+
Description: Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket and Skirt Manufacturing
SIC/NAICS Code: 315234
+
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239
+

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
Description:		Infants' Cut and Sew Clothing Manufacturing			
SIC/NAICS Code:		315291			
+					
Description:		All Other Cut and Sew Clothing Manufacturing			
SIC/NAICS Code:		315299			
30	2 of 6	E/150.4	232.5	**Dimension Display Inc.** **250 McDermot Ave Floor 2** **Winnipeg MB R3B 0S5**	SCT
Established:		01-FEB-88			
Plant Size (ft²):		9000			
Employment:					
--- Details ---					
Description:		Graphic Design Services			
SIC/NAICS Code:		541430			
+					
Description:		Showcase, Partition, Shelving and Locker Manufacturing			
SIC/NAICS Code:		337215			
+					
Description:		Other Specialized Design Services			
SIC/NAICS Code:		541490			
+					
Description:		Office and Store Machinery and Equipment Wholesaler-Distributors			
SIC/NAICS Code:		417910			
+					
Description:		Showcase, Partition, Shelving and Locker Manufacturing			
SIC/NAICS Code:		337215			
30	3 of 6	E/150.4	232.5	**Grabner Fur Company Ltd.** **301-250 McDermot Ave** **Winnipeg MB R3B 0S5**	SCT
Established:		01-DEC-66			
Plant Size (ft²):		3600			
Employment:					
--- Details ---					
Description:		Fur and Leather Clothing Manufacturing			
SIC/NAICS Code:		315292			
+					
Description:		Cut and Sew Clothing Contracting			
SIC/NAICS Code:		315210			
30	4 of 6	E/150.4	232.5	**Cdn Urethane Foam Assoc** **410-250 McDermot Ave** **Winnipeg MB R3B 0S5**	SCT
Established:					
Plant Size (ft²):					
Employment:					
--- Details ---					
Description:		Business Associations			
SIC/NAICS Code:		813910			

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
30	5 of 6	E/150.4	232.5	Time Line Newsletter 304-250 McDermot Ave Winnipeg MB R3B 0S5	SCT

Established: 1879
Plant Size (ft²):
Employment: 3

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
30	6 of 6	E/150.4	232.5	Manitoba Historical Society 304-250 McDermot Ave Winnipeg MB R3B 0S5	SCT

Established: 1879
Plant Size (ft²):
Employment: 3

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
31	1 of 2	E/151.3	232.4	O.I.C. Ent Inc. 70 Albert St Winnipeg MB R3B 1E7	SCT

Established: 1995
Plant Size (ft²): 10000
Employment: 7

--- Details ---
Description: Mattress Manufacturing
SIC/NAICS Code: 337910

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
31	2 of 2	E/151.3	232.4	Studio Publications 70 Albert St Floor 2 Winnipeg MB R3B 1E7	SCT

Established:
Plant Size (ft²):
Employment: 9

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
32	1 of 2	ESE/152.8	232.4	INTREPID DEZINE 62 Albert St Floor 2 Winnipeg MB R3B 1E7	SCT

Established: 1990
Plant Size (ft²): 0
Employment: 6

--- Details ---
Description: Other Clothing Knitting Mills

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
SIC/NAICS Code:		315190			
32	2 of 2	ESE/152.8	232.4	Intrepid Dezine 2-62 Albert St Winnipeg MB R3B 1E7	SCT
Established:		1990			
Plant Size (ft²):					
Employment:		6			
--- Details ---					
Description:		Other Clothing Knitting Mills			
SIC/NAICS Code:		315190			
33	1 of 2	WSW/157.2	231.2	LUKES MACHINERY CO. LTD NOTRE DAME AVE., 318 WINNIPEG MB	GEN
Registration NO:		MBG007024			
33	2 of 2	WSW/157.2	231.2	LUDES MACHINERY 318 NOTRE DAME AVE Winnipeg MB R3B 1P5	GEN
Registration NO:		MBG07024			
34	1 of 3	NW/163.2	232.1	A PLUS RESTAURANT EQUIPMENT & SUPPLIES INC 334 MCDERMOT AV Winnipeg MB R3A 0A5	GEN
Registration NO:		MBG12150			
34	2 of 3	NW/163.2	232.1	Thomas J. Lipton Inc. 334 McDermot Ave 3RD FLOOR STORAGE AREA Winnipeg MB R3A 0A5	NPCB
Company Code:		V0115			
Industry:		Food/Beverage/Water			
Site Status:		In- Use			
Transaction Date:		5/15/1990			
Inspection Date:					
--- Details ---					
Label:					
Serial No.:					
PCB Type/Code:		Askarel/Inerteen			
Location:		3rd Flr Storage Area 334 McDe*			
Item/State:					
No. of Items:					
Manufacturer:					
Status:		In-Use			
Contents:					

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
34	3 of 3	NW/163.2	232.1	THOMAS J.LIPTON INC. 3RD FLOOR STORAGE AREA 334 MCDERMOT AVE WINNIPEG MB R3A 0A5	NPCB

Company Code: V0115
Industry: FOOD/BEVERAGE/WATER
Site Status:
Transaction Date: 6/26/1990
Inspection Date:

--- Details ---
Label: NR74093
Serial No.: WH2081721H01
PCB Type/Code: ASKAREL/INERTEEN
Location: 3RD FIR STORAGE AREA 334 MCDE*
Item/State: CAPACITOR/FULL
No. of Items: 1
Manufacturer: WESTINGHOUSE
Status: IN-USE
Contents: 3.7 L

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
35	1 of 11	ENE/163.6	232.2	VIDEO POOL INC 300-100 ARTHUR ST Winnipeg MB R3B 1H3	GEN

Registration NO: MBG12484

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
35	2 of 11	ENE/163.6	232.2	PERRY DARYL 500-100 Arthur St Winnipeg MB R3B 1H3	SCT

Established: 1982
Plant Size (ft²): 0
Employment: 1

--- Details ---
Description: All Other Miscellaneous Manufacturing
SIC/NAICS Code: 339990

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
35	3 of 11	ENE/163.6	232.2	Turnstone Press Ltd. 607-100 Arthur St Winnipeg MB R3B 1H3	SCT

Established: 1976
Plant Size (ft²): 1200
Employment: 5

--- Details ---
Description: Book Publishers
SIC/NAICS Code: 511130

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
35	4 of 11	ENE/163.6	232.2	Prairie Fire Press, Inc. 423-100 Arthur St Winnipeg MB R3B 1H3	SCT

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
Established:		01-MAY-89			
Plant Size (ft²):					
Employment:					
--- Details ---					
Description:		Periodical Publishers			
SIC/NAICS Code:		511120			
35	5 of 11	ENE/163.6	232.2	Daryl Perry 500-100 Arthur St Winnipeg MB R3B 1H3	SCT
Established:		01-JAN-82			
Plant Size (ft²):		700			
Employment:					
--- Details ---					
Description:		All Other Miscellaneous Manufacturing			
SIC/NAICS Code:		339990			
35	6 of 11	ENE/163.6	232.2	Contemporary Verse 2 Inc. 207-100 Arthur St Winnipeg MB R3B 1H3	SCT
Established:		1975			
Plant Size (ft²):		500			
Employment:		2			
--- Details ---					
Description:		Periodical Publishers			
SIC/NAICS Code:		511120			
35	7 of 11	ENE/163.6	232.2	Associated Manitoba Arts 424-100 Arthur St Winnipeg MB R3B 1H3	SCT
Established:		1977			
Plant Size (ft²):					
Employment:		1			
--- Details ---					
Description:		Periodical Publishers			
SIC/NAICS Code:		511120			
35	8 of 11	ENE/163.6	232.2	Manitoba Association of 503-100 Arthur St Winnipeg MB R3B 1H3	SCT
Established:		1984			
Plant Size (ft²):					
Employment:		2			
--- Details ---					
Description:		Periodical Publishers			
SIC/NAICS Code:		511120			
35	9 of 11	ENE/163.6	232.2	The Manitoba Writer's Guild	SCT

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
				206-100 Arthur St **Winnipeg MB R3B 1H3**	

Established: 1981
Plant Size (ft²):
Employment: 3

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
35	10 of 11	ENE/163.6	232.2	**Turnstone Press Ltd.** **206-100 Arthur St** **Winnipeg MB R3B 1H3**	SCT

Established: 01-JAN-76
Plant Size (ft²): 1200
Employment:

--- Details ---
Description: Book Publishers
SIC/NAICS Code: 511130

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
35	11 of 11	ENE/163.6	232.2	**Contemporary Verse 2 Inc.** **502-100 Arthur St** **Winnipeg MB R3B 1H3**	SCT

Established: 01-FEB-75
Plant Size (ft²): 500
Employment:

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120
+
Description: Book Publishers
SIC/NAICS Code: 511130

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
36	1 of 1	W/168.2	231.3	**Notre Dame Avenue & Hargrave Street** **Winnipeg MB**	EHS

Addit. Info Ordered: Fire Insur. Maps and/or Site Plans
Order No.: 20140527057
Report Date: 05-JUN-14
Report Type: Standard Report
Search Radius (km): .25

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
37	1 of 1	SW/171.2	232.0	**GC CLOTHING** **376 Donald St** **Winnipeg MB R3B 2J2**	SCT

Established: 1996
Plant Size (ft²): 0
Employment: 4

--- Details ---
Description: Cut and Sew Clothing Contracting

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

SIC/NAICS Code: 315210
+
Description: Other Men's and Boys' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315229
+
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239
+
Description: All Other Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315299

---

38 | **1 of 3** | **SW/181.2** | **232.1** | **CUSTOM IMAGES LTD**
DONALD ST., 374
WINNIPEG MB | **GEN**

Registration NO: MBG001971

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38 | **2 of 3** | **SW/181.2** | **232.1** | **UNDERGROUND SCREEN PRINTING**
374 Donald St Lower Level
Winnipeg MB R3B 2J2 | **SCT**

Established: 1990
Plant Size (ft²): 1200
Employment: 2

--- Details ---
Description: Textile and Fabric Finishing
SIC/NAICS Code: 313310
+
Description: Quick Printing
SIC/NAICS Code: 323114
+
Description: Digital Printing
SIC/NAICS Code: 323115
+
Description: Other Printing
SIC/NAICS Code: 323119
+
Description: Clothing and Clothing Accessories Wholesaler-Distributors
SIC/NAICS Code: 414110

---

38 | **3 of 3** | **SW/181.2** | **232.1** | **DPD Software Ltd.**
374 Donald St Floor 2
Winnipeg MB R3B 2J2 | **SCT**

Established: 1991
Plant Size (ft²): 1880
Employment: 5

--- Details ---
Description: Software Publishers
SIC/NAICS Code: 511210

---

39 | **1 of 2** | **SW/189.2** | **232.0** | **ART UPHOLSTERING/DRAPERIES LTD**
309 Cumberland Ave
Winnipeg MB R3B 1T2 | **SCT**

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Established: 1948
Plant Size (ft²): 8000
Employment: 20

--- Details ---
Description: Curtain and Linen Mills
SIC/NAICS Code: 314120
+
Description: Upholstered Household Furniture Manufacturing
SIC/NAICS Code: 337121

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
39	2 of 2	SW/189.2	232.0	ART UPHOLSTERING & DRAPERIES 309 Cumberland Ave Winnipeg MB R3B 1T2	SCT

Established: 1948
Plant Size (ft²): 8000
Employment: 20

--- Details ---
Description: Upholstered Household Furniture Manufacturing
SIC/NAICS Code: 337121
+
Description: Curtain and Linen Mills
SIC/NAICS Code: 314120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
40	1 of 1	E/189.7	232.4	Underground Screen Printing 27-221 McDermot Ave Winnipeg MB R3B 0S2	SCT

Established: 1990
Plant Size (ft²): 900
Employment: 1

--- Details ---
Description: Commercial Screen Printing
SIC/NAICS Code: 323113
+
Description: Quick Printing
SIC/NAICS Code: 323114
+
Description: Digital Printing
SIC/NAICS Code: 323115
+
Description: Other Printing
SIC/NAICS Code: 323119
+
Description: Clothing and Clothing Accessories Wholesaler-Distributors
SIC/NAICS Code: 414110

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
41	1 of 7	ESE/190.4	232.4	63 Albert Street Winnipeg MB	EHS

Addit. Info Ordered:
Order No.: 20120607043
Report Date: 14-JUN-12
Report Type: Custom Report
Search Radius (km): .25

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
41	2 of 7	ESE/190.4	232.4	NORTHERN BIOIDENTIFICATION SERVICE LTD ALBERT ST., 63 RM 403 WINNIPEG MB	GEN

Registration NO: MBG007032

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
41	3 of 7	ESE/190.4	232.4	NORTHERN BIOIDENTIFICATION SERVICE 403-63 ALBERT ST Winnipeg MB	GEN

Registration NO: MBG07032

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
41	4 of 7	ESE/190.4	232.4	SWERVE 200-63 Albert St Winnipeg MB R3B 1G4	SCT

Established: 1994
Plant Size (ft²): 360
Employment: 0

--- Details ---
Description: Newspaper Publishers
SIC/NAICS Code: 511110

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
41	5 of 7	ESE/190.4	232.4	Outwords Inc. 200-63 Albert St Winnipeg MB R3B 1G4	SCT

Established: 01-DEC-94
Plant Size (ft²): 320
Employment:

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
41	6 of 7	ESE/190.4	232.4	Rosebud Publications Ltd. 202-63 Albert St Winnipeg MB R3B 1G4	SCT

Established:
Plant Size (ft²):
Employment:

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
41	7 of 7	ESE/190.4	232.4	Chasing Plastic Magazine 208-63 Albert St Winnipeg MB R3B 1G4	SCT

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Established: 2001
Plant Size (ft²):
Employment: 15

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

---

42 | ***1 of 1*** | ***ESE/192.0*** | ***232.4*** | ***SURGICAL ELASTIC COMPANY INC.***
61 Albert St
Winnipeg MB R3B 1G3 | ***SCT***

Established: 1934
Plant Size (ft²): 0
Employment: 3

--- Details ---
Description: Medical Equipment and Supplies Manufacturing
SIC/NAICS Code: 339110

---

43 | ***1 of 5*** | ***SSW/194.1*** | ***232.2*** | ***NATIONAL TILDEN***
283 ELLICE AVE.
WINNIPEG MB R3B 1X6 | ***CS***

File NO: 0646
File Name: NATIONAL TILDEN CAR RENTAL - ELLICE AVE

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43 | ***2 of 5*** | ***SSW/194.1*** | ***232.2*** | ***NATIONAL TILDEN***
283 ELLICE AVE
Winnipeg MB R3B 1X6 | ***CS***

File NO: 20699
File Name: NATIONAL TILDEN CAR RENTAL - ELLICE AVE - CS

---

43 | ***3 of 5*** | ***SSW/194.1*** | ***232.2*** | ***National Car Rental (Canada)***
283 Ellice Ave.
Winnipeg MB R3B 1X6 | ***FST***

Site ID:	12109	***Owner Category:***	Independent
Owner:	National Car Rental (Canada)	***Site Status:***	Active
Operator:	Johal, Don	***Outlet Type:***	Fleet
Mailing City:	Winnipeg MB	***Inventory:***	Daily
Mailing Address:	283 Ellice Ave.		

--- Details ---

Status:	Installed	***NO Of Tanks:***	1
Position:	Underground	***Status Date:***	01-Jul-76
Spill Protect:	Unprotected	***Capacity(L):***	22730.00
+			
Status:	Installed	***NO Of Tanks:***	2
Position:	Underground	***Status Date:***	01-Jul-76
Spill Protect:	Unprotected	***Capacity(L):***	9090.00
+			
Status:	Installed	***NO Of Tanks:***	2

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Position:	Underground	**Status Date:**	01-Jul-76
Spill Protect:	Unprotected	**Capacity(L):**	2270.00
+			
Status:	Removed	**NO Of Tanks:**	1
Position:	Underground	**Status Date:**	15-Aug-94
Spill Protect:	Unprotected	**Capacity(L):**	22730.00
+			
Status:	Removed	**NO Of Tanks:**	2
Position:	Underground	**Status Date:**	15-Aug-94
Spill Protect:	Unprotected	**Capacity(L):**	9090.00
+			
Status:	Removed	**NO Of Tanks:**	2
Position:	Underground	**Status Date:**	15-Aug-94
Spill Protect:	Unprotected	**Capacity(L):**	2270.00
+			
Status:	Installed	**NO Of Tanks:**	1
Position:	Underground	**Status Date:**	15-Aug-94
Spill Protect:	Fiberglass	**Capacity(L):**	10000.00
+			
Status:	Tested	**NO Of Tanks:**	1
Position:	Underground	**Status Date:**	17-Aug-94
Spill Protect:	Fiberglass	**Capacity(L):**	10000.00

43	***4 of 5***	***SSW/194.1***	***232.2***	***NATIONAL CAR RENTAL*** ***283 ELLICE AVE*** ***Winnipeg MB R3B 1X6***	***FUEL***

Permit NO:	21992	***Lat/Long:***	
Expiry Date:		***Comment:***	Not storing used oil
Facility Type:	U/G		

43	***5 of 5***	***SSW/194.1***	***232.2***	***NATIONAL CAR RENTAL - 283 ELLICE*** ***283 ELLICE*** ***Winnipeg MB R3B 1X6***	***FUEL***

Permit NO:	21992	***Lat/Long:***	
Expiry Date:	31-Dec-15	***Comment:***	
Facility Type:	U/G		

44	***1 of 3***	***ENE/194.5***	***232.6***	***CANADIAN DIMENSION INC.*** ***2B-91 Albert St*** ***Winnipeg MB R3B 1G5***	***SCT***

Established:	1964
Plant Size (ft²):	0
Employment:	2

--- Details ---

Description:	Periodical Publishers
SIC/NAICS Code:	511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
44	2 of 3	ENE/194.5	232.6	Dimension Publications Inc. 2B-91 Albert St Winnipeg MB R3B 1G5	SCT

Established: 1964
Plant Size (ft²):
Employment: 1

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
44	3 of 3	ENE/194.5	232.6	Canadian Dimension 2E-91 Albert St Winnipeg MB R3B 1G5	SCT

Established: 01-JAN-64
Plant Size (ft²):
Employment:

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
45	1 of 2	ESE/201.5	232.3	FLEET GALLERIES (1983) LTD. 65 Albert St Winnipeg MB R3B 1G3	SCT

Established: 1983
Plant Size (ft²): 0
Employment: 2

--- Details ---
Description: Other Home Furnishings Wholesaler-Distributors
SIC/NAICS Code: 414390
+
Description: All Other Miscellaneous Manufacturing
SIC/NAICS Code: 339990

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
45	2 of 2	ESE/201.5	232.3	Galleries Framers Wholesale 65 Albert St Winnipeg MB R3B 1G3	SCT

Established: 01-NOV-83
Plant Size (ft²):
Employment:

--- Details ---
Description: All Other Miscellaneous Manufacturing
SIC/NAICS Code: 339990
+
Description: Other Home Furnishings Wholesaler-Distributors
SIC/NAICS Code: 414390

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
46	1 of 1	SE/202.1	232.6	WINNIPEG ELECTRIC/WRB MB	WWIS

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Water Use:		**Well Name:**	GM35
Well Use:	PRODUCTION	**Driller:**	UNKNOWN
Date Completed:	1939 Feb 01	**Utm X:**	633518
Location:	RIVER LOT 0005 IN PARISH OF St. John	**Utm Y:**	5528687
Remarks:	WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1939). NOTRE DAME & ALBERT, NO WELL LOG AVAILABLE.		

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47 | **1 of 1** | **SSE/203.2** | **232.1** | **228 Notre Dame Ave, Winnipeg MB R3B 1N7** | **EHS**

Addit. Info Ordered:	
Order No.:	20131107043
Report Date:	14-NOV-13
Report Type:	Custom Report
Search Radius (km):	.25

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48 | **1 of 1** | **NW/212.9** | **232.2** | **AZON CANADA INC., 492 Hargrave St, Winnipeg MB R3A 0X7** | **SCT**

Established:	1971
Plant Size (ft²):	4500
Employment:	25
--- Details ---	
Description:	Quick Printing
SIC/NAICS Code:	323114
+	
Description:	Digital Printing
SIC/NAICS Code:	323115
+	
Description:	Other Printing
SIC/NAICS Code:	323119
+	
Description:	Printing Ink Manufacturing
SIC/NAICS Code:	325910
+	
Description:	Computer, Computer Peripheral and Pre-Packaged Software Wholesaler-Distributors
SIC/NAICS Code:	417310

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49 | **1 of 4** | **NNW/214.8** | **232.2** | **I D FASHIONS LTD, 332 Bannatyne Ave, Winnipeg MB R3A 0E2** | **SCT**

Established:	1979
Plant Size (ft²):	24000
Employment:	60
--- Details ---	
Description:	Cut and Sew Clothing Contracting
SIC/NAICS Code:	315210
+	
Description:	Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code:	315239

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
+					
Description:	Clothing and Clothing Accessories Wholesaler-Distributors				
SIC/NAICS Code:	414110				

49	2 of 4	NNW/214.8	232.2	**I.D. Fashions Ltd** **332 Bannatyne Ave** **Winnipeg MB R3A 0E2**	SCT

Established: 1/1/1979
Plant Size (ft²): 24000
Employment:

--- Details ---
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239
+
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239
+
Description: Cut and Sew Clothing Contracting
SIC/NAICS Code: 315210
+
Description: Clothing and Clothing Accessories Wholesaler-Distributors
SIC/NAICS Code: 414110

49	3 of 4	NNW/214.8	232.2	**I.D. Fashions Ltd.** **332 Bannatyne Ave** **Winnipeg MB R3A 0E2**	SCT

Established: 1979
Plant Size (ft²): 24000
Employment: 60

--- Details ---
Description: Other Women's and Girls' Cut and Sew Clothing Manufacturing
SIC/NAICS Code: 315239

49	4 of 4	NNW/214.8	232.2	**L.A. Direction Knitting Mills** **332 Bannatyne Ave** **Winnipeg MB R3A 0E2**	SCT

Established: 1988
Plant Size (ft²): 6300
Employment: 1

--- Details ---
Description: Knit Fabric Mills
SIC/NAICS Code: 313240

50	1 of 1	NNE/216.1	232.3	**110 Princess** **Winnipeg MB R3B 1K7**	EHS

Addit. Info Ordered:
Order No.: 20050314043
Report Date: 3/16/2005
Report Type:
Search Radius (km): 0.25

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
51	1 of 2	NW/219.1	232.2	INTER-PRO OFFICE SYSTEMS HARGRAVE ST., 490-#103 WINNIPEG MB	GEN

Registration NO: MBG000206

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
51	2 of 2	NW/219.1	232.2	WINNIPEG REGIONAL HEALTH AUTHORITY 490 HARGRAVE PL Winnipeg MB	GEN

Registration NO: MBG11184

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
52	1 of 1	WSW/219.4	232.3	Botanical Paperworks Inc. 329 Cumberland Ave Winnipeg MB R3B 1T2	SCT

Established: 1997
Plant Size (ft²):
Employment:

--- Details ---
Description: Stationery Product Manufacturing
SIC/NAICS Code: 322230

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
53	1 of 2	NNE/220.1	232.3	EXCHANGE LOFTS INC PRINCESS ST., 123 WINNIPEG MB R3B 1K8	GEN

Registration NO: MBG006940

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
53	2 of 2	NNE/220.1	232.3	A M L & T 2-123 Princess St Winnipeg MB R3B 1K8	SCT

Established: 1995
Plant Size (ft²): 0
Employment: 2

--- Details ---
Description: Wood Window and Door Manufacturing
SIC/NAICS Code: 321911
+
Description: Other Millwork
SIC/NAICS Code: 321919
+
Description: Showcase, Partition, Shelving and Locker Manufacturing
SIC/NAICS Code: 337215

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
54	1 of 2	N/223.6	232.3	LOVEABLE CREATIONS 110 Princess St Floor 6 Winnipeg MB R3B 1K7	SCT

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB

Established: 1988
Plant Size (ft²): 0
Employment: 6

--- Details ---
Description: All Other Miscellaneous Manufacturing
SIC/NAICS Code: 339990

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
54	2 of 2	N/223.6	232.3	LOVEABLE CREATIONS INC. 110 Princess St Floor 6 Winnipeg MB R3B 1K7	SCT

Established: 1988
Plant Size (ft²): 0
Employment: 6

--- Details ---
Description: All Other Textile Product Mills
SIC/NAICS Code: 314990
+
Description: All Other Miscellaneous Manufacturing
SIC/NAICS Code: 339990

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
55	1 of 2	S/227.5	231.9	DAYS INN WINNIPEG (MARLBOROUGH) SMITH ST., 331 WINNIPEG MB	GEN

Registration NO: MBG002444

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
55	2 of 2	S/227.5	231.9	RAMADA MARLBOROUGH HOTEL 331 SMITH ST Winnipeg MB	GEN

Registration NO: MBG02444

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
56	1 of 1	NNE/228.7	232.2	INTRINSIX CANADA INC. 124 King St Winnipeg MB R3B 1H9	SCT

Established: 1991
Plant Size (ft²): 0
Employment: 20

--- Details ---
Description: Manufacturing and Reproducing Magnetic and Optical Media
SIC/NAICS Code: 334610

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
57	1 of 3	WNW/233.9	231.8	HEARTLAND FLEXO-GRAPHICS LTD. HARGRAVE ST., 448 WINNIPEG MB	GEN

Registration NO: MBG004298

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
57	2 of 3	WNW/233.9	231.8	WALTER DEVELOPMENT CORPORATION 448 HARGRAVE ST Winnipeg MB R3A 0X5	GEN

Registration NO: MBG11436

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
57	3 of 3	WNW/233.9	231.8	HEARTLAND FLEXO-GRAPHICS LTD. 448 Hargrave St Winnipeg MB R3A 0X5	SCT

Established: 1996
Plant Size (ft²): 4000
Employment: 6

--- Details ---
Description: Support Activities for Printing
SIC/NAICS Code: 323120

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
58	1 of 1	NNW/241.6	232.3	Mondrian Canada Inc. 498 Hargrave St Winnipeg MB R3A 0X7	SCT

Established:
Plant Size (ft²):
Employment: 145

--- Details ---
Description: Commercial and Service Industry Machinery Manufacturing
SIC/NAICS Code: 333310
+
Description: Computer and Peripheral Equipment Manufacturing
SIC/NAICS Code: 334110
+
Description: Computer, Computer Peripheral and Pre-Packaged Software Wholesaler-Distributors
SIC/NAICS Code: 417310
+
Description: Office and Store Machinery and Equipment Wholesaler-Distributors
SIC/NAICS Code: 417910
+
Description: Professional Machinery, Equipment and Supplies Wholesaler-Distributors
SIC/NAICS Code: 417930
+
Description: Stationery and Office Supplies Wholesaler-Distributors
SIC/NAICS Code: 418210

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
59	1 of 3	WNW/244.3	232.0	THE LAB WORKS 464 HARGRAVE ST Winnipeg MB R3A 0X5	GEN

Registration NO: MBG03104

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
59	2 of 3	WNW/244.3	232.0	THE LAB WORKS 464 HARGRAVE ST Winnipeg MB R3A 0X5	GEN

Registration NO: MBG11898

Map Key	Number of Records	Direction/ Distance m	Elevation m	Site	DB
59	3 of 3	WNW/244.3	232.0	Special T Shirt Company 464 Hargrave St Winnipeg MB R3A 0X5	SCT

Established: 1995
Plant Size (ft²): 9000
Employment:

--- Details ---
Description: Commercial Screen Printing
SIC/NAICS Code: 323113

Unplottable Summary

Total: 11 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	DEFEHR FURNITURE LTD.		Winnipeg MB	
CA	DEFEHR FURNITURE (2009) LTD. - MANUFACTURING		Winnipeg MB	
CA	WPG., CITY OF - PORTAGE AVE AT OMANDS CREEK		Winnipeg MB	
CA	DEFEHR FURNITURE LTD.		Winnipeg MB	
CA	WPG., CITY OF - MAIN ST./NORWOOD BRIDGES		Winnipeg MB	
CS	WINNIPEG HARVEST - CS	MCDERMOT AVE PLAN 45935 LOTS 1 & 2	Winnipeg MB	
CS	DOMO GASOLINE CORPORATION LTD	PORTAGE AVE	WINNIPEG MB	
EHS		Locations between Carlton St & Donald St	Winnipeg MB	
FUEL	CITY OF WINNIPEG POLICE SERVICES		Winnipeg MB	
SCT	Contemporary Verse 2 Inc.		Winnipeg MB	R3C
SCT	CONTEMPORARY VERSE 2 INC.		Winnipeg MB	R3C

Unplottable Report

Site: ***DEFEHR FURNITURE LTD.***
Winnipeg MB

Database: ***CA***

Licence NO:	2638	***Class:***	5000+ ppl
Operation Type:	Manufacturing/Industrial	***Act:***	
Date Received:	2003.10.03	***Proposal N:***	
Date Issued:	2004.02.25	***Overview:***	

Site: ***DEFEHR FURNITURE (2009) LTD. - MANUFACTURING***
Winnipeg MB

Database: ***CA***

Licence NO:	2638 RRR	***Class:***	5000+ ppl
Operation Type:	Manufacturing/Industrial	***Act:***	
Date Received:	2003.10.03	***Proposal N:***	
Date Issued:	2012.03.30	***Overview:***	

Site: ***WPG., CITY OF - PORTAGE AVE AT OMANDS CREEK***
Winnipeg MB

Database: ***CA***

Licence NO:	1941	***Class:***	
Operation Type:		***Act:***	
Date Received:	94.09.02	***Proposal N:***	
Date Issued:	94.10.20	***Overview:***	

Site: ***DEFEHR FURNITURE LTD.***
Winnipeg MB

Database: ***CA***

Licence NO:	2638 R	***Class:***	5000+ ppl
Operation Type:	Manufacturing/Industrial	***Act:***	
Date Received:	2003.10.03	***Proposal N:***	
Date Issued:	2006.08.04	***Overview:***	

Site: ***WPG., CITY OF - MAIN ST./NORWOOD BRIDGES***
Winnipeg MB

Database: ***CA***

Licence NO:	1888 R	***Class:***	1000-5000 ppl
Operation Type:	Four Lane Roads & Related -2	***Act:***	
Date Received:	93.09.28	***Proposal N:***	
Date Issued:	95.03.29	***Overview:***	

Site: ***WINNIPEG HARVEST - CS***
MCDERMOT AVE PLAN 45935 LOTS 1 & 2 Winnipeg MB

Database: ***CS***

File NO: 51048
File Name:

Site: ***DOMO GASOLINE CORPORATION LTD***
PORTAGE AVE WINNIPEG MB

Database: ***CS***

File NO: 0613
File Name: DOMO GAS BAR - 140 PORTAGE AVE

Site:
Locations between Carlton St & Donald St Winnipeg MB

Database: ***EHS***

Addit. Info Ordered:
Order No.: 20021211004
Report Date: 12/19/02
Report Type: Custom Report
Search Radius (km): 0.45

Site: ***CITY OF WINNIPEG POLICE SERVICES***
Winnipeg MB

Database: ***FUEL***

Permit NO: 37429
Expiry Date: 31-Dec-15
Facility Type: A/G
Lat/Long:
Comment:

Site: ***Contemporary Verse 2 Inc.***
Winnipeg MB R3C

Database: ***SCT***

Established: 1975
Plant Size (ft²):
Employment: 2

Site: ***CONTEMPORARY VERSE 2 INC.***
Winnipeg MB R3C

Database: ***SCT***

Established: 1975
Plant Size (ft²): 0
Employment: 2

--- Details ---
Description: Periodical Publishers
SIC/NAICS Code: 511120

Appendix: Database Descriptions

Ecolog Environmental Risk Information Services Ltd (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ***Note:*** *Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Automobile Wrecking & Supplies: Private AUWR

This database provides an inventory of all known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Government Publication Date: 2001-Jul 2014

Certificates of Approval: Provincial CA

This database contains all approvals issued since July 1988 within the following categories: Approvals for Air or Effluent and Orders, Permits and/or Regulated Sites designations for Air, Effluent, Refuse or Storage. The information available within this database pertains to client information, general location, class type, operation type, license # and the issue date of the CA. Please note that no specific site address information is available.

Government Publication Date: 1988-Jun 2013*

Chemical Register: Private CHEM

The Manitoba Industry, Trade and Tourism department maintains a chemical register of all known 'active' manufacturers of chemicals, fertilizers and pesticides within the province. Inactive chemical manufacturers are not required to remain in the database. Information available within this register pertains to company name, location and the 'product line'. Information from a private source regarding the locations of chemical manufacturers and distributors is also included in this database.

Government Publication Date: 1997-Jul 2014

Enforcement Actions: Provincial CONV

This database summarizes enforcement activities (Convictions, Warnings, Director's Order's, EO Order's, MOH Order's, Offence Notice's, and Permit Suspensions) where companies/individual have been found guilty of environmental offenses under Manitoba's Environmental Protection Legislation. Please note that enforcement actions resulting from activities regulated under the Livestock Manure & Mortalities Mgmt Regulation MR 42/98 are also included.

Government Publication Date: Apr 1994-Mar 2008

Contaminated/Impacted Sites: Provincial CS

Manitoba's Contaminated Sites Remediation Act (CSRA) defines a site as contaminated if, "having regard to any current, permitted or foreseeable use of a site, that the site is contaminated at a level which poses or may pose a threat to human health or safety or to the environment". Manitoba's Conservation department collects information on sites that have been investigated by the ministry due to environmental concerns.

Government Publication Date: 1980-Apr 2015

Drill Holes: Provincial DRL

The "Open File Drill Holes" database contains information on more than 10,000 drill holes in the province of Manitoba. The database provides information in regard to drill hole location (place, latitude and longitude), depth and overburden of hole, exploration company and assessment report year.

Government Publication Date: 1900-Jan 2015

Environmental Effects Monitoring: Federal EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007*

ERIS Historical Searches: Private EHS

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Aug 2014

Environmental Issues Inventory System: Federal EIIS

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Government Publication Date: 1992-2001*

Federal Convictions: Federal FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: Federal FCS

The Federal Contaminated Sites Inventory includes information on all known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

Government Publication Date: June 2000-Oct 2015

Fuel Storage Tanks: Provincial FST

The Petroleum Storage Tank database, which is maintained by Manitoba's Petroleum Storage Program, contains information in regard to company name, location, status, outlet type (retail, used oil, bulk/used'), number of tanks, tank capacity and tank status. This database will not be updated as this information is no longer collected in this format. For current information regarding bulk fuel distributors, please see the FUEL database.

Government Publication Date: 1905-Feb 2003*

Bulk Fuel Distributors: Provincial FUEL

The Manitoba Petroleum Storage Program maintains an inventory of Bulk Fuel Distributors. This inventory contains valid operating permit numbers within the Province of Manitoba. Fields such as name, location, expiry date, type of facility and permit Number are included.

Government Publication Date: 2006-Feb 2015

Waste Generators Summary: Provincial GEN

Within Manitoba, a waste generator is defined as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled or stored at the site. This database contains the licensing/registration number (MB1 #), company name and address of registered generators. At present, access to the type of hazardous waste generated and the form of treatment used in the handling of the waste is only available by directly calling Manitoba's Hazardous Waste Program.

Government Publication Date: 1985-Sep 2012

Indian & Northern Affairs Fuel Tanks: Federal IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003*

Manure Storage Facilities: Provincial MAST

Under the Livestock Manure and Mortalities Management Regulation (MR 42/98), permits are issued for the construction, modification or expansion of manure storage facilities. Once issued, the Environmental Livestock Program is responsible for the enforcement of regulations on the management of manure and mortalities. Please note that the MAST database only provides information on permit number, operation name, RM and permit issue date. All other information must be obtained from MB Conservation.

Government Publication Date: Jul 1994-May 2012

Canadian Mine Locations: Private MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

For over 25 years, Manitoba has been compiling Mineral Inventory Cards on mineral deposits in the province. This database was obtained from Manitoba Industry, Trade and Mines, and contains information on over 650 mineral occurrences in the province. Data is provided on the Mineral Inventory File No., Mineral Deposit Name, Product, Associated Minerals or Products of Value, NTS area, Name of Property Owner or Operator and Address, location, and geographical coordinates.

Government Publication Date: 1961-May 2015

Manitoba Oil and Gas Wells: Provincial MOGW

The Manitoba Oil and Gas Wells database was collected through the assistance of The Land Systems Company. Information is provided regarding license number and location for over 4,800 wells. Please note that this database will not be updated, information on wells drilled after May 2002 can be found in the Oil and Gas Wells (OGW) database under the `Private Source Database' section.

Government Publication Date: 1951-May 2002*

National Analysis of Trends in Emergencies System (NATES): Federal NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

National Defence & Canadian Forces Fuel Tanks: Federal NDFT

The Department of National Defence and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

National Defence & Canadian Forces Spills: Federal NDSP

The Department of National Defence and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Aug 2010

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007*

National Environmental Emergencies System (NEES): Federal NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for all previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

Government Publication Date: 1974-2003*

National PCB Inventory: Federal NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Federal NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Government Publication Date: 1993-2013

Oil and Gas Wells: Private OGW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Government Publication Date: 1988-Sep 2015

Canadian Pulp and Paper: Private PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009

Inventory of PCB Storage Sites: Provincial PCB

Manitoba's Hazardous Waste Program maintains a listing of all "active" PCB storage facilities. Inactive PCB storage equipment and/or disposal sites are not required to remain as part of the PCB inventory database for the province. Please note that some of the sites have no wastes in storage at present, but are retained should they be required for future acceptance of PCB equipment as it comes out of service. The records within this database only provide information on facility name and location. Information pertaining to the inventory of stored wastes and waste quantities at a designated site is only available by directly contacting the Hazardous Waste Program. Please note that this database will not be updated, information after 1999 can be found in the National PCB Inventory (NPCB) database.

Government Publication Date: 1998-1999*

Parks Canada Fuel Storage Tanks: Federal PCFT

Canadian Heritage maintains an inventory of all known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Government Publication Date: 1920-Jan 2005*

Manitoba Pits and Quarries: Provincial PITS

The Manitoba Pits and Quarries database is comprised of 3 different types of permits. 1.Quarry Lease and Exploration Permits, which have a ten year term with exclusive rights for crown minerals. Quarry Exploration permits have a three year term with exclusive rights. 2. Private Pits and Quarry Permits require annual registration of private aggregate operations in the province and 3. Casual Permits which are for annual permits of Crown materials.

Government Publication Date: 1994-May 2015

Waste Receivers Summary: Provincial REC

Disposal of regulated waste is maintained through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. A waste receiving location is any site or facility to which waste is transferred through a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by company name and address.

Government Publication Date: 1998-Jul 2012

Retail Fuel Storage Tanks: Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-Jul 2014

Scott's Manufacturing Directory: Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Government Publication Date: 1992-Mar 2011*

Manitoba Spills: Provincial SPL

The Manitoba Conservation Environmental Management System (EMS) records spills from across the province. Information from this database includes incident type, substance type, reason, location of spill, contaminate info and responsible party.

Government Publication Date: Apr 2009-2012

Transport Canada Fuel Storage Tanks: Federal TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

Government Publication Date: 1970-Mar 2007

Waste Disposal Site Inventory: Provincial WDS

Manitoba Conservation retains a separate inventory of all known active and inactive regulated waste disposal grounds and waste transfer facilities for each of the five regions in the province. Registered companies may hold a permit or certificate for release of the following waste types: Effluent, Refuse, Air and Special Waste Storage.

Government Publication Date: 1998*

Water Well Inventory: Provincial WWIS

The GW Drill database compiled by the Manitoba Water Stewardship and Groundwater Management Section provides information on water wells across the province. Information such as location, owner, driller, well name, well use, water use and date completed are reported on. Most wells within the inventory are georeferenced by DLS coordinates.

Government Publication Date: 1880-Jul 2012

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries". All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and were included as reference.

APPENDIX J

HERITAGE BUILDING CONSERVATION SERVICES

From:	Einarson, Neil G (TCHSCP)
To:	"pnguyen@kgsgroup.com"
Cc:	Dul, Donna (TCHSCP)
Subject:	FW: 61 Princess
Date:	January-13-16 3:23:25 PM
Attachments:	image001.jpg Princess 61_1917_copy.jpg Princess 61-Goads_copy.jpg

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Hello Phuong Nguyen

Further to your enquiry regarding 61 Princess, I checked with my colleague at the City of Winnipeg and in his email below and the two Fire Atlas pages attached, it would appear that the property had at one time four houses constructed on it, which have all since been demolished. There is no available information to suggest that there are any significant archaeological resources at the site. Therefore we do not have any heritage concerns about drilling and installing monitoring wells at the site.

Best of luck.

Neil Einarson
Manager, Heritage Building Conservation Services
Historic Resources Branch
Manitoba Tourism, Culture, Heritage, Sport and Consumer Protection
Main Floor
213 Notre Dame Avenue
Winnipeg, Manitoba
R3B 1N3

telephone -- (204) 945-4390
fax -- (204) 948-2384;

visit our web site at
http://www.gov.mb.ca/chc/hrb

From: Peterson, Murray [mailto:MPeterson@winnipeg.ca]
Sent: January-13-16 11:34 AM
To: Einarson, Neil G (TCHSCP)
Subject: 61 Princess

Attached are two Fire Atlas maps: Charles Goad, Fire Atlas of the City of Winnipeg, 1895 (revised 1905); and 1917 version.

Goad's shows four, modest single family detached homes, numbered 61 (2-storey) and 63 (1-storey) Princess and 56 and 60 King Street (both 1½-storey).

1917 shows only 60 King remains. The rectangle marked with a red "X" was hand drawn on the atlas sheet in the office here, not really sure if was a temporary structure or something more permanent.

If you need dates of construction for the houses, I'd have to run out to the City Archives and check Tax Rolls, take a couple of days…

Murray Peterson
Historical Buildings Officer
City of Winnipeg
15 – 30 Fort Street
Winnipeg, Manitoba R3C 4X5
(204) 986-4264

Thank you for your enquiry. I have asked HRB staff familiar with this site and who work closely with city officials given city ownership of the property to respond directly to you this week.

Donna Dul
Director
Historic Resources Branch
Tourism,Culture, Heritage, Sport and Consumer Protection
Main Floor, 213 Notre Dame Avenue
Winnipeg MB R3B 1N3
(204) 945-4389
(204) 948-2384
Toll Free # 1-800-282-8069 + extension
Donna.Dul@gov.mb.ca

From: Phuong Nguyen [mailto:pnguyen@kgsgroup.com]
Sent: January-12-16 3:34 PM
To: Dul, Donna (TCHSCP)
Subject: RE: Request for Archaeological information for a property located at 61 Princess Street

Dear Ms. Dul,

Ms. Flett of the Manitoba Archaeological Society recommended that I contact you to see if the Manitoba's Historic Resources Branch have any heritage concerns regarding the property at 61 Princess Street, Winnipeg. The City of Winnipeg has hired KGS Group to conduct a Phase 1 and 2 Environmental Site Assessment at the property. Basically, a Phase 1 is a visual inspection of the property; however, a Phase 2 ESA requires KGS Group to conduct a more in-depth assessment of the site, which includes drilling through the soil and installing monitoring wells at the property. If you have any heritage information and/or concerns regarding the property please contact me as soon as possible. You can reach me at the number below or email me.

Thank you so much for your time.

Sincerely,

Phuong Nguyen.

Ms. Phuong Nguyen, B.Sc., C.E.T.

Environmental Scientist

KGS Group Consulting Engineers & Project Managers
3rd Flr – 865 Waverley Street
Winnipeg, Manitoba
R3T 5P4
Tel: (204) 896-1209 Ext. 294
Fax: (204) 896-0754
Email: pnguyen@kgsgroup.com

From: mbarch@mymts.net [mailto:mbarch@mymts.net]
Sent: January-07-16 10:02 PM
To: Phuong Nguyen
Cc: donna.dul@gov.mb.ca
Subject: Re: Request for Archaeological information for a property located at 61 Princess Street

Hello Phuong Nguyen,

Thank you for contacting the MAS. With regards to your inquiry, I would advise you to touch base with Manitoba's Historic Resources Branch and discuss the property with them. They will determine if there is a heritage concern, and if you require a heritage assessment, they will provide you with a list of consultants.

I have cc'd Donna Dul (Director of the HRB) on this email.

Cheers,

Amber Flett - MAS President

Manitoba Archaeological Society
PO Box 1171
Winnipeg, Manitoba
R3C 2Y4
Tel: (204) 942-7243
http://www.manitobaarchaeologicalsociety.ca/

Please join the Manitoba Archaeological Society group on Facebook and follow us on Twitter @MBArchSociety

---

From: "Phuong Nguyen" <pnguyen@kgsgroup.com>
To: mbarch@mts.net
Sent: Thursday, January 7, 2016 7:37:54 AM
Subject: Request for Archaeological information for a property located at 61 Princess Street

Hi There,

I was wondering if The Manitoba Archaeological Society has any concerns or know if the property at 61 Princess Street is archaeologically sensitive? The property is currently a paved parking lot and is owned by the City of Winnipeg. KGS Group was hired to conduct a Phase 1 and 2 Environmental Site Assessment at the property. I have attached a map of the area for you to review. Your reply by Tuesday, January 12 is much appreciated.

If you have questions please do not hesitate to contact me.

Thank you for your time.

Sincerely,

Phuong Nguyen.

Ms. Phuong Nguyen, B.Sc., C.E.T.
Environmental Scientist

KGS Group Consulting Engineers & Project Managers
3rd Flr – 865 Waverley Street
Winnipeg, Manitoba
R3T 5P4
Tel: (204) 896-1209 Ext. 294
Fax: (204) 896-0754
Email: pnguyen@kgsgroup.com

APPENDIX K

TESTHOLE LOGS

KGS GROUP

SUMMARY LOG

HOLE NO. **TH-01**

CLIENT CITY OF WINNIPEG - WATER AND WASTE DEPARTMENT

PROJECT 61 Princess Street

SITE Stall 1

LOCATION Approximately 4.6 m from the east wall and 6.5 m from the south wall

DRILLING METHOD Geoprobe 5" Solid Stem Auger

JOB NO. **16-0107-001**
GROUND ELEV.
TOP OF CASING ELEV.
WATER ELEV.
DATE DRILLED **10/02/2016**
UTMs (NAD83) N **5,528,848** E **633,417**

ELEV. (m)	DEPTH (m)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	SAMPLE TYPE NUMBER
	0.0		**CONCRETE**	
	0.5		**SILTY CLAY** - Dark brown to black, frozen, trace organics.	S1 1.4
	1.0		**SILT** - Beige, soft, moist, low plasticity.	S2 1.4
	1.5		**SILTY CLAY** - Brown, moist, stiff, trace gypsum.	S3 1.0
	2.0			
	2.5		- Soft below 2.3 m.	S4 7.4
	3.0		- Soft to firm, trace gypsum inclusions, trace oxidation below 3.1 m.	S5 3.9
	3.5			
	4.0			S6 1.0
	4.5		- Moist to wet, no gypsum inclusions, no oxidation below 4.6 m.	S7 0.9
	5.0			
	5.5			S8 3.2
	6.0		**END OF HOLE AT 6.1 m.**	
	6.5			
	7.0			
	7.5			
	8.0			
	8.5			
	9.0			
	9.5			

Cu TORVANE (kPa) ◆
SPT (N) blows/0.15 m ▲
20 40 60 80
FIELD HEADSPACE TEST
Photoionizable Vapours (ppm) ●
100 200 300 400

SAMPLE TYPE Auger Grab

CONTRACTOR	INSPECTOR	APPROVED	DATE
Maple Leaf Enterprises	L. Andres	RDS	4/7/16

ENVIRO & GEO U:\FMS\16-0107-001\16-0107-001.GPJ

Prepared By: L. Andres

KGS GROUP

SUMMARY LOG

HOLE NO.
TH-02 (MW-01)

SHEET 1 of 1

CLIENT	CITY OF WINNIPEG - WATER AND WASTE DEPARTMENT	JOB NO.	16-0107-001
PROJECT	61 Princess Street	GROUND ELEV.	
		TOP OF CASING ELEV.	
SITE	Stall 22	WATER ELEV.	
LOCATION	Approximately 20.8 m from the east wall and 15.2 m from the south wall	DATE DRILLED	10/02/2016
DRILLING METHOD	Geoprobe 5" Solid Stem Auger	UTMs (NAD83)	N 5,528,847 E 633,411

ELEV. (m)	DEPTH (m)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG/ BACKFILL	DEPTH (m)	SAMPLE TYPE NUMBER
	0.5		**CONCRETE**			
			TOPSOIL - Dark brown, frozen, trace wood chips.			
	1.0		**SILTY CLAY** - Dark brown to grey, moist, firm, intermediate plasticity. Wood chips in the top 0.3 m.		0.91	
	1.5		**SILT** - Beige, wet, soft, low plasticity, no odour.		1.22	
	2.0		**SILTY CLAY** - Brown, moist, stiff, high plasticity, no odour.			
	2.5		- Soft at 2.7 m.			
	3.0		- Soft to firm, trace gypsum minerals, hydrocarbon odour and trace staining at 3.0 m.			
	3.5		- No odour at 3.8 m.			
	4.0		- Grey to brown below 4.6 m.			
	4.5					
	5.0					
	5.5				5.79	
	6.0		**END OF HOLE AT 6.1 m.**		6.10	
	6.5		Note: 1. Installed a flushmount well at TH-02.			
	7.0					
	7.5					
	8.0					
	8.5					
	9.0					
	9.5					

Cu TORVANE (kPa) ◆
SPT (N) blows/0.15 m ▲
20 40 60 80
FIELD HEADSPACE TEST
Photoionizable Vapours (ppm) ●
100 200 300 400

S1 0.6
S2 1.0
S3 47.0
S4 820.0
S5 26.1
S6 11.5
S7 5.6
S8 2.8

SAMPLE TYPE Auger Grab

CONTRACTOR	INSPECTOR	APPROVED	DATE
Maple Leaf Enterprises	L. Andres	RDS	4/7/16

ENVIRO & GEO U:\FMS\16-0107-001\16-0107-001.GPJ

Prepared By: L. Andres

KGS GROUP

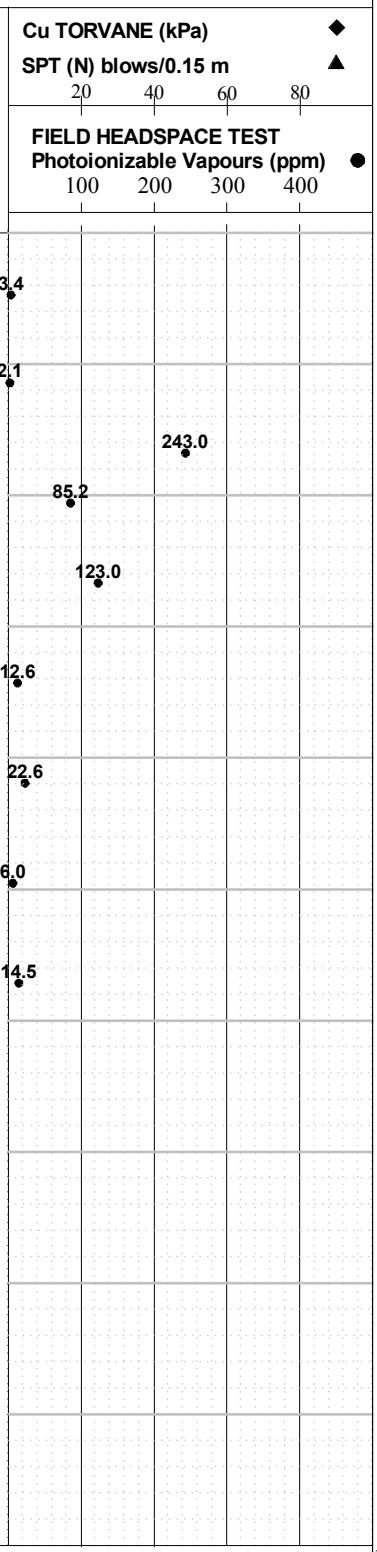
SUMMARY LOG

HOLE NO.
TH-03 (MW-02)

SHEET 1 of 1

CLIENT	CITY OF WINNIPEG - WATER AND WASTE DEPARTMENT	JOB NO.	16-0107-001
PROJECT	61 Princess Street	GROUND ELEV.	
		TOP OF CASING ELEV.	
SITE	Stall 12	WATER ELEV.	
LOCATION	Approximately 32.3 m from the east wall and 4.4 m from the south wall	DATE DRILLED	10/02/2016
DRILLING METHOD	Geoprobe 5" Solid Stem Auger	UTMs (NAD83)	N 5,528,872 E 633,397

ELEV. (m)	DEPTH (m)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG/ BACKFILL	DEPTH (m)	SAMPLE TYPE NUMBER
	0.5		**CONCRETE**			
			FILL - Black to brown, damp to moist, clay, sand, silt, some metal debris, no plasticity, trace hydrocarbon odour.		0.91	
	1.0				1.22	
	1.5		**SILT** - Beige, moist, high plasticity, grey staining, very strong hydrocarbon odour.			
	2.0		**SILTY CLAY** - Grey to brown, moist to wet, firm, high plasticity, strong hydrocarbon odour.			
	2.5					
	3.0		- Mottled grey to brown below 3.1 m.			
	3.5					
	4.0		- Trace hydrocarbon odour at 3.8 m.			
	4.5					
			- Firm to stiff, moist to wet, no odour below 4.6 m.			
	5.0					
	5.5				5.79	
	6.0		**END OF HOLE AT 6.1 m.**		6.10	
	6.5		Note: 1. Installed a flushmount well at TH-03.			
	7.0					
	7.5					
	8.0					
	8.5					
	9.0					
	9.5					



SAMPLE TYPE Auger Grab

CONTRACTOR	INSPECTOR	APPROVED	DATE
Maple Leaf Enterprises	L. Andres	RDS	4/7/16

ENVIRO & GEO U:\FMS\16-0107-001\16-0107-001.GPJ

Prepared By: L. Andres

KGS GROUP

SUMMARY LOG

HOLE NO. **TH-04**

CLIENT CITY OF WINNIPEG - WATER AND WASTE DEPARTMENT

PROJECT 61 Princess Street

SITE Stall 28

LOCATION Approximately 3.6 m from the north wall and 22.7 m from the west wall

DRILLING METHOD Geoprobe 5" Solid Stem Auger

JOB NO. 16-0107-001
GROUND ELEV.
TOP OF CASING ELEV.
WATER ELEV.
DATE DRILLED 10/02/2016
UTMs (NAD83) N 5,528,854 E 633,384

ELEV. (m)	DEPTH (m)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	SAMPLE TYPE NUMBER
	0.0		**CONCRETE**	
	0.5		**FILL** - Sand and gravel, frozen to 0.9 m.	S1
	1.0		- Grey to brown, moist, intermediate plasticity below 0.09 m.	S2
	1.5		**SILT** - Beige, moist, soft, intermediate plasticity, some oxidation, no odour.	S3
	2.0			
	2.5		**SILTY CLAY** - Grey to brown, moist, soft to firm, high plasticity, trace gypsum minerals, no odour.	S4
	3.0		- Trace hydrocarbon odour below 3.1 m.	S5
	3.5			
	4.0		- No odour detected below 3.8 m.	S6
	4.5			
	5.0			S7
	5.5			S8
	6.0		**END OF HOLE AT 6.1 m.**	
	6.5			
	7.0			
	7.5			
	8.0			
	8.5			
	9.0			
	9.5			

Cu TORVANE (kPa) ◆
SPT (N) blows/0.15 m ▲
20 40 60 80
FIELD HEADSPACE TEST
Photoionizable Vapours (ppm) ●
100 200 300 400

S1 7.4
S2 4.6
S3 2.7
S4 273.0
S5 31.6
S6 12.8
S7 4.0
S8 3.7

SAMPLE TYPE Auger Grab

CONTRACTOR	INSPECTOR	APPROVED	DATE
Maple Leaf Enterprises	L. Andres	RDS	4/7/16

ENVIRO & GEO U:\FMS\16-0107-001\16-0107-001.GPJ

Prepared By: L. Andres

KGS GROUP

SUMMARY LOG

HOLE NO. **TH-05**

CLIENT CITY OF WINNIPEG - WATER AND WASTE DEPARTMENT

PROJECT 61 Princess Street

SITE Stall 32

LOCATION Approximately 6.7 m from the north wall and 11.7 m from the west wall

DRILLING METHOD Geoprobe 5" Solid Stem Auger

JOB NO. **16-0107-001**
GROUND ELEV.
TOP OF CASING ELEV.
WATER ELEV.
DATE DRILLED **10/02/2016**
UTMs (NAD83) N **5,528,855** E **633,397**

ELEV. (m)	DEPTH (m)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	SAMPLE TYPE NUMBER
	0.0		**CONCRETE**	
	0.5		**SILTY CLAY** - Black, dry, firm, frozen to 0.9 m, with organics.	S1
	1.0		**SILT** - Beige, moist, soft to firm, intermediate plasticity, no odour.	S2
	1.5		- Soft below 1.2 m.	S3
	2.0		- Wet below 1.7 m. - Strong hydrocarbon odour and staining at 1.8 m.	S4
	2.5		**SILTY CLAY** - Grey to brown, moist, firm, high plasticity, trace hydrocarbon odour.	S5
	3.0		- Dark brown to grey, trace hydrocarbon odour below 3.1 m.	S6
	3.5			
	4.0			S7
	4.5			
	5.0			S8
	5.5			
	6.0		**END OF HOLE AT 6.1 m.**	S9
	6.5			
	7.0			
	7.5			
	8.0			
	8.5			
	9.0			
	9.5			

Cu TORVANE (kPa) ◆
SPT (N) blows/0.15 m ▲
20 40 60 80
FIELD HEADSPACE TEST
Photoionizable Vapours (ppm) ●
100 200 300 400

S1 0.9
S2 0.5
S3 658.0
S4 345.0
S5 38.8
S6 39.1
S7 55.0
S8 22.4
S9 23.6

SAMPLE TYPE Auger Grab

CONTRACTOR	INSPECTOR	APPROVED	DATE
Maple Leaf Enterprises	L. Andres	RDS	4/7/16

ENVIRO & GEO U:\FMS\16-0107-001\16-0107-001.GPJ

Prepared By: L. Andres

KGS GROUP

SUMMARY LOG

HOLE NO.
TH-06 (MW-03)

SHEET 1 of 1

CLIENT CITY OF WINNIPEG - WATER AND WASTE DEPARTMENT
PROJECT 61 Princess Street
SITE Off centre near the entrance gate
LOCATION Approximately 8.2 m from the south wall and 3.6 m from the west wall
DRILLING METHOD Geoprobe 5" Solid Stem Auger

JOB NO. 16-0107-001
GROUND ELEV.
TOP OF CASING ELEV.
WATER ELEV.
DATE DRILLED 10/02/2016
UTMs (NAD83) N 5,528,870 E 633,369

ELEV. (m)	DEPTH (m)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG/ BACKFILL	DEPTH (m)	SAMPLE TYPE NUMBER
	0.0		**CONCRETE**			
	0.5		**SILTY CLAY** - Dark grey and beige, frozen to 0.9 m, stiff, low plasticity, with pieces of coal, trace hydrocarbon odour.		0.91	S1
	1.0				1.22	S2
	1.5		**SILT** - Beige, moist, low plasticity, black pieces of coal. dark grey staining visible, very strong hydrocarbon odour.			S3
	2.0					
	2.5		- Beige, intermediate plasticity, black staining visible below 2.3 m.			S4
	3.0		**SILTY CLAY** - Dark grey to brown, moist, stiff, high plasticity, some oxidation, some gypsum minerals, very strong hydrocarbon odour.			S5
	3.5					
	4.0					S6
	4.5		- Firm, trace hydrocarbon odour below 4.6 m.		4.57	S7
	5.0					
	5.5		Soft to firm below 5.3 m.			S8
	6.0		**END OF HOLE AT 6.1 m.**		6.10	
	6.5		Note: 1. Installed a flushmount well at TH-06.			
	7.0					
	7.5					
	8.0					
	8.5					
	9.0					
	9.5					

Cu TORVANE (kPa) ◆
SPT (N) blows/0.15 m ▲
20 40 60 80
FIELD HEADSPACE TEST
Photoionizable Vapours (ppm) ●
100 200 300 400

18.4 (S1)
486.0 (S2)
1814.0 (S3)
456.0 (S4)
215.0 (S5)
85.9 (S6)
45.5 (S7)
36.0 (S8)

SAMPLE TYPE Auger Grab

CONTRACTOR	INSPECTOR	APPROVED	DATE
Maple Leaf Enterprises	L. Andres	RDS	4/7/16

ENVIRO & GEO U:\FMS\16-0107-001\16-0107-001.GPJ

Prepared By: L. Andres

APPENDIX L

LABORATORY CERTIFICATES OF ANALYSES

Your C.O.C. #: C#487474-01-01

Attention:Loni Andres

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Report Date: 2016/02/17
Report #: R2131088
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B610413
Received: 2016/02/11, 13:50

Sample Matrix: Soil
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 by HS GC-MS/FID (MeOH extract) (2)	2	2016/02/11	2016/02/12	WINSOP-00054 WINSOP-00055	EPA8260C/CCME PHCCWS
BTEX/F1 by HS GC-MS/FID (MeOH extract) (2)	5	2016/02/11	2016/02/16	WINSOP-00054 WINSOP-00055	EPA8260C/CCME PHCCWS
CCME Hydrocarbons (F2-F4 in soil) (3)	7	2016/02/12	2016/02/12	WINSOP-00056	CCME PHC-CWS
Elements by ICPMS (total) (1)	3	2016/02/16	2016/02/16	BBY7SOP-00001	EPA 6020a R1 m
Moisture	7	N/A	2016/02/12	WIN SOP-00060	Carter Method 51.2
pH (2:1 DI Water Extract) (1)	3	2016/02/16	2016/02/16	BBY6SOP-00028	BCMOE BCLM Mar2005 m

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

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

(1) This test was performed by Maxxam Vancouver

(2) This method complies with the reference method for the CWS PHC and is validated for use in the laboratory.
Applicable only to F1 and/or LH - nC6 and nC10 response factors are within 30% of the toluene response factor.
The hydrocarbon results are expressed as a dry weight basis.

(3) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following the 'Alberta Environment Draft Addenda to the CWS-PHC, Appendix 6, Validation of Alternate Methods'. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Amanda Hung, B.Sc., Project Manager
Email: AHung@maxxam.ca
Phone# (204)772-7276 Ext:2215

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B610413
Report Date: 2016/02/17

KGS Group

BTEX/F1-F4 IN SOIL (SOIL)

Maxxam ID		OC4664	OC4665	OC4666	OC4668		
Sampling Date		2016/02/10 10:00	2016/02/10 11:00	2016/02/10 12:15	2016/02/10 13:00		
COC Number		C#487474-01-01	C#487474-01-01	C#487474-01-01	C#487474-01-01		
	UNITS	TH-01 S4	TH-02 S4	TH-03 S3	TH-04 S4	RDL	QC Batch
Physical Properties							
Moisture	%	35	33	21	32	0.3	8188851
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<20	27	270	<20	20	8189985
F3 (C16-C34 Hydrocarbons)	mg/kg	62	39	200	29	20	8189985
F4 (C34-C50 Hydrocarbons)	mg/kg	<20	<20	27	<20	20	8189985
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	N/A	8189985
Volatiles							
Benzene	mg/kg	0.025	2.2	0.073	2.4	0.0050	8188799
Toluene	mg/kg	<0.020	0.033	<0.020	0.037	0.020	8188799
Ethylbenzene	mg/kg	<0.010	2.7	0.054	2.9	0.010	8188799
Xylenes (Total)	mg/kg	<0.040	2.9	<0.040	0.42	0.040	8188799
m & p-Xylene	mg/kg	<0.040	2.8	<0.040 (1)	0.39	0.040	8188799
o-Xylene	mg/kg	<0.020	0.10	<0.020	0.030	0.020	8188799
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	<0.10	<0.10	0.10	8188799
F1 (C6-C10) - BTEX	mg/kg	<10	250	160	68	10	8188799
F1 (C6-C10)	mg/kg	<10	260	160	74	10	8188799
Surrogate Recovery (%)							
4-Bromofluorobenzene (sur.)	%	103	101	99	104		8188799
D10-ETHYLBENZENE (sur.)	%	95	97	94	97		8188799
D4-1,2-Dichloroethane (sur.)	%	99	102	97	100		8188799
D8-TOLUENE (sur.)	%	101	100	98	99		8188799
O-TERPHENYL (sur.)	%	87	87	88	87		8189985

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Maxxam Job #: B610413
Report Date: 2016/02/17

KGS Group

BTEX/F1-F4 IN SOIL (SOIL)

Maxxam ID		OC4669		OC4670		OC4671		
Sampling Date		2016/02/10 14:15		2016/02/10 18:00		2016/02/10 18:30		
COC Number		C#487474-01-01		C#487474-01-01		C#487474-01-01		
	UNITS	TH-05 S3	RDL	TH-06 S3	RDL	TH-06 S7	RDL	QC Batch
Physical Properties								
Moisture	%	20	0.3	24	0.3	35	0.3	8188851
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	300	20	530	20	<20	20	8189985
F3 (C16-C34 Hydrocarbons)	mg/kg	<20	20	79	20	58	20	8189985
F4 (C34-C50 Hydrocarbons)	mg/kg	<20	20	<20	20	<20	20	8189985
Reached Baseline at C50	mg/kg	Yes	N/A	Yes	N/A	Yes	N/A	8189985
Volatiles								
Benzene	mg/kg	<0.077 (1)	0.077	5.4	0.0050	0.012	0.0050	8188799
Toluene	mg/kg	0.040	0.020	1.0	0.020	<0.020	0.020	8188799
Ethylbenzene	mg/kg	0.83	0.010	46	0.010	0.021	0.010	8188799
Xylenes (Total)	mg/kg	1.1	0.040	53	0.040	<0.040	0.040	8188799
m & p-Xylene	mg/kg	0.96	0.040	52	0.040	<0.040	0.040	8188799
o-Xylene	mg/kg	0.12	0.020	1.0	0.020	<0.020	0.020	8188799
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	0.10	<0.10	0.10	<0.10	0.10	8188799
F1 (C6-C10) - BTEX	mg/kg	460	10	1400	50	<10	10	8188799
F1 (C6-C10)	mg/kg	460	10	1500 (2)	50	<10	10	8188799
Surrogate Recovery (%)								
4-Bromofluorobenzene (sur.)	%	104		113		101		8188799
D10-ETHYLBENZENE (sur.)	%	91		91		97		8188799
D4-1,2-Dichloroethane (sur.)	%	104		107		98		8188799
D8-TOLUENE (sur.)	%	101		101		100		8188799
O-TERPHENYL (sur.)	%	87		85		86		8189985

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to matrix interference.
(2) Detection limits raised due to dilution to bring analyte within the calibrated range.

Maxxam Analytics International Corporation o/a Maxxam Analytics Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Maxxam Job #: B610413
Report Date: 2016/02/17

KGS Group

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		OC4667	OC4672	OC4673		
Sampling Date		2016/02/10 12:00	2016/02/10 18:15	2016/02/10 14:00		
COC Number		C#487474-01-01	C#487474-01-01	C#487474-01-01		
	UNITS	TH-03 S1	TH-06 S1	TH-05 S1	RDL	QC Batch
Physical Properties						
Soluble (2:1) pH	pH	8.43	8.63	8.55	N/A	8192188
Total Metals by ICPMS						
Total Aluminum (Al)	mg/kg	12400	12900	18800	100	8192183
Total Antimony (Sb)	mg/kg	6.82	1.29	0.38	0.10	8192183
Total Arsenic (As)	mg/kg	8.21	4.67	5.05	0.50	8192183
Total Barium (Ba)	mg/kg	310	175	175	0.10	8192183
Total Beryllium (Be)	mg/kg	0.62	0.65	0.79	0.40	8192183
Total Bismuth (Bi)	mg/kg	0.30	0.19	0.19	0.10	8192183
Total Cadmium (Cd)	mg/kg	0.630	0.489	0.535	0.050	8192183
Total Calcium (Ca)	mg/kg	47100	73600	64700	100	8192183
Total Chromium (Cr)	mg/kg	27.1	26.8	34.6	1.0	8192183
Total Cobalt (Co)	mg/kg	8.09	7.58	9.45	0.30	8192183
Total Copper (Cu)	mg/kg	90.8	33.1	33.9	0.50	8192183
Total Iron (Fe)	mg/kg	21300	17900	21500	100	8192183
Total Lead (Pb)	mg/kg	228	67.5	36.8	0.10	8192183
Total Lithium (Li)	mg/kg	18.7	23.1	25.6	5.0	8192183
Total Magnesium (Mg)	mg/kg	18400	34800	24100	100	8192183
Total Manganese (Mn)	mg/kg	366	310	410	0.20	8192183
Total Mercury (Hg)	mg/kg	0.449	0.102	0.623	0.050	8192183
Total Molybdenum (Mo)	mg/kg	1.88	0.72	0.41	0.10	8192183
Total Nickel (Ni)	mg/kg	22.4	23.2	26.7	0.80	8192183
Total Phosphorus (P)	mg/kg	888	514	568	10	8192183
Total Potassium (K)	mg/kg	3140	3070	3490	100	8192183
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	0.50	8192183
Total Silver (Ag)	mg/kg	0.446	0.174	0.144	0.050	8192183
Total Sodium (Na)	mg/kg	696	394	377	100	8192183
Total Strontium (Sr)	mg/kg	153	96.2	120	0.10	8192183
Total Thallium (Tl)	mg/kg	0.201	0.222	0.233	0.050	8192183
Total Tin (Sn)	mg/kg	40.0	8.96	2.86	0.10	8192183
Total Titanium (Ti)	mg/kg	373	404	347	1.0	8192183
Total Uranium (U)	mg/kg	0.947	1.32	1.08	0.050	8192183
Total Vanadium (V)	mg/kg	38.9	43.9	58.9	2.0	8192183
Total Zinc (Zn)	mg/kg	172	72.4	77.1	1.0	8192183
Total Zirconium (Zr)	mg/kg	6.11	9.23	6.96	0.50	8192183

RDL = Reportable Detection Limit
N/A = Not Applicable

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Maxxam Job #: B610413
Report Date: 2016/02/17

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	16.9°C

Results relate only to the items tested.

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Maxxam Job #: B610413
Report Date: 2016/02/17

QUALITY ASSURANCE REPORT

KGS Group

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8188799	4-Bromofluorobenzene (sur.)	2016/02/12	104	60 - 140	100	60 - 140	102	%				
8188799	D10-ETHYLBENZENE (sur.)	2016/02/12	94	50 - 130	91	50 - 130	92	%				
8188799	D4-1,2-Dichloroethane (sur.)	2016/02/12	93	60 - 140	97	60 - 140	103	%				
8188799	D8-TOLUENE (sur.)	2016/02/12	100	60 - 140	100	60 - 140	99	%				
8189985	O-TERPHENYL (sur.)	2016/02/12	79	50 - 130	74	50 - 130	89	%				
8188799	Benzene	2016/02/16	95	60 - 140	95	60 - 140	<0.0050	mg/kg	NC	50		
8188799	Ethylbenzene	2016/02/16	104	60 - 140	99	60 - 140	<0.010	mg/kg	NC	50		
8188799	F1 (C6-C10) - BTEX	2016/02/16					<10	mg/kg	NC	50		
8188799	F1 (C6-C10)	2016/02/16	90	60 - 140	69	60 - 140	<10	mg/kg	NC	50		
8188799	m & p-Xylene	2016/02/16	103	60 - 140	100	60 - 140	<0.040	mg/kg	NC	50		
8188799	Methyl-tert-butylether (MTBE)	2016/02/16	91	60 - 140	92	60 - 140	<0.10	mg/kg	NC	50		
8188799	o-Xylene	2016/02/16	NC	60 - 140	99	60 - 140	<0.020	mg/kg	NC	50		
8188799	Toluene	2016/02/16	94	60 - 140	93	60 - 140	<0.020	mg/kg	NC	50		
8188799	Xylenes (Total)	2016/02/16					<0.040	mg/kg	NC	50		
8188851	Moisture	2016/02/12					<0.3	%	8.1	20		
8189985	F2 (C10-C16 Hydrocarbons)	2016/02/12	NC	50 - 130	87	70 - 130	<20	mg/kg	29	50		
8189985	F3 (C16-C34 Hydrocarbons)	2016/02/12	NC	50 - 130	88	70 - 130	<20	mg/kg	14	50		
8189985	F4 (C34-C50 Hydrocarbons)	2016/02/12	103	50 - 130	84	70 - 130	<20	mg/kg	NC	50		
8189985	Reached Baseline at C50	2016/02/12					YES	mg/kg	NC	50		
8192183	Total Aluminum (Al)	2016/02/16					<100	mg/kg	0.23	35	98	70 - 130
8192183	Total Antimony (Sb)	2016/02/16	91	75 - 125	97	75 - 125	<0.10	mg/kg	NC	30	107	70 - 130
8192183	Total Arsenic (As)	2016/02/16	94	75 - 125	99	75 - 125	<0.50	mg/kg	0.69	30	94	70 - 130
8192183	Total Barium (Ba)	2016/02/16	NC	75 - 125	102	75 - 125	<0.10	mg/kg	2.7	35	95	70 - 130
8192183	Total Beryllium (Be)	2016/02/16	99	75 - 125	100	75 - 125	<0.40	mg/kg	NC	30		
8192183	Total Bismuth (Bi)	2016/02/16					<0.10	mg/kg	NC	30		
8192183	Total Cadmium (Cd)	2016/02/16	101	75 - 125	104	75 - 125	<0.050	mg/kg	8.3	30	105	70 - 130
8192183	Total Calcium (Ca)	2016/02/16					<100	mg/kg	1.6	30	94	70 - 130
8192183	Total Chromium (Cr)	2016/02/16	NC	75 - 125	103	75 - 125	<1.0	mg/kg	0.43	30	103	70 - 130
8192183	Total Cobalt (Co)	2016/02/16	95	75 - 125	105	75 - 125	<0.30	mg/kg	2.5	30	92	70 - 130
8192183	Total Copper (Cu)	2016/02/16	NC	75 - 125	109	75 - 125	<0.50	mg/kg	1.3	30	93	70 - 130
8192183	Total Iron (Fe)	2016/02/16					<100	mg/kg	0.66	30	92	70 - 130
8192183	Total Lead (Pb)	2016/02/16	98	75 - 125	103	75 - 125	<0.10	mg/kg	1.0	35	97	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

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			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8192183	Total Lithium (Li)	2016/02/16	103	75 - 125	104	75 - 125	<5.0	mg/kg	NC	30		
8192183	Total Magnesium (Mg)	2016/02/16					<100	mg/kg	0.64	30	93	70 - 130
8192183	Total Manganese (Mn)	2016/02/16	NC	75 - 125	102	75 - 125	<0.20	mg/kg	0.22	30	90	70 - 130
8192183	Total Mercury (Hg)	2016/02/16	104	75 - 125	103	75 - 125	<0.050	mg/kg	NC	35	102	70 - 130
8192183	Total Molybdenum (Mo)	2016/02/16	108	75 - 125	100	75 - 125	<0.10	mg/kg	5.7	35	109	70 - 130
8192183	Total Nickel (Ni)	2016/02/16	105	75 - 125	103	75 - 125	<0.80	mg/kg	0.18	30	97	70 - 130
8192183	Total Phosphorus (P)	2016/02/16					<10	mg/kg	2.5	30	93	70 - 130
8192183	Total Potassium (K)	2016/02/16					<100	mg/kg	0.51	35		
8192183	Total Selenium (Se)	2016/02/16	95	75 - 125	103	75 - 125	<0.50	mg/kg	NC	30		
8192183	Total Silver (Ag)	2016/02/16	91	75 - 125	96	75 - 125	<0.050	mg/kg	NC	35	93	60 - 140
8192183	Total Sodium (Na)	2016/02/16					<100	mg/kg	NC	35		
8192183	Total Strontium (Sr)	2016/02/16	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.69	35	96	70 - 130
8192183	Total Thallium (Tl)	2016/02/16	99	75 - 125	104	75 - 125	<0.050	mg/kg	NC	30	94	70 - 130
8192183	Total Tin (Sn)	2016/02/16	94	75 - 125	92	75 - 125	<0.10	mg/kg	NC	35		
8192183	Total Titanium (Ti)	2016/02/16	NC	75 - 125	96	75 - 125	<1.0	mg/kg	1.5	35	107	70 - 130
8192183	Total Uranium (U)	2016/02/16	104	75 - 125	104	75 - 125	<0.050	mg/kg	2.4	30	113	70 - 130
8192183	Total Vanadium (V)	2016/02/16	NC	75 - 125	103	75 - 125	<2.0	mg/kg	3.2	30	105	70 - 130
8192183	Total Zinc (Zn)	2016/02/16	NC	75 - 125	105	75 - 125	<1.0	mg/kg	2.1	30	88	70 - 130
8192183	Total Zirconium (Zr)	2016/02/16					<0.50	mg/kg	8.4	30		
8192188	Soluble (2:1) pH	2016/02/16			100	97 - 103			0.51	N/A		

N/A = Not Applicable

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

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

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

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

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

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

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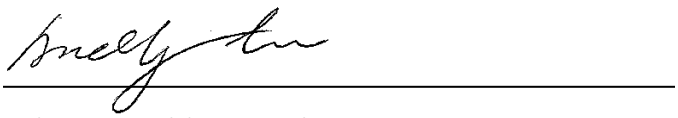
Maxxam Job #: B610413
Report Date: 2016/02/17

KGS Group

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Andy Lu, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-Free:800-563-6266 Fax:(204) 772-7276 www.maxxam.ca

Chain Of Custody Record

Page of

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #		Maxxam Job #	Bottle Order #:
Contact Name	Loni Andres	Contact Name		P.O. #		B610413	487474
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #		Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 x288 Fax:	Phone	Fax:	Project Name		C#487474-01-01	Amanda Hung
Email	landres@kgsgroup.com, pnguyen@kgsgroup.com	Email		Site #			
				Sampled By			

Regulatory Criteria

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to maxxam

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ☐
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	BTEX/F1-F4 in Soil	CSR/CCME Metals in Soil	BTEX/F1-F4 in Water	CCME Dissolved Metals in Water	# of Bottles	Comments
1	OC4664	TH-01 S4	Feb 10/16	10am	Soil			X	X			2	
2	OC4665	TH-02 S4		11am				X				2	
3	OC4666	TH-03 S3		12:15pm				X				2	
4	OC4667	TH-03 S1		12:00pm					X			1	
5	OC4668	TH-04 S4		1pm				X				2	
6	OC4669	TH-05 S3		2:15pm				X				2	
7	OC4670	TH-06 S3		6pm				X				2	
8	OC4671	TH-06 S7		6:30pm				X				2	
9	OC4672	TH-06 S1		6:15pm					X			1	
10	OC4673	TH-05 S1		2pm					X			1	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Loni Andres	Feb 11/16	1:48pm	Allen Shawn Robinson	16/02/11	1350	

Lab Use Only

Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
☐	16.6, 16.8, 17.2 no ice	☐ Yes ☐ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Success Through Science®

Your C.O.C. #: 487474-02-01

Attention:Loni Andres

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Report Date: 2016/03/10
Report #: R2141761
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B616619
Received: 2016/03/04, 12:45

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 in Water by HS GC/MS	3	N/A	2016/03/04	WINSOP-00054 WINSOP-00055	EPA8260C/CCME PHCCWS
CCME Hydrocarbons (F2-F4 in water)	2	2016/03/09	2016/03/09	WINSOP-00056	CCME PHC-CWS
Hardness (calculated as CaCO3) (1)	2	N/A	2016/03/08	BBY7SOP-00002	EPA 6020a R1 m
Mercury (Dissolved) by CVAF (1)	2	N/A	2016/03/10	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (1)	2	N/A	2016/03/08	BBY7SOP-00002	EPA 6020A R1 m
Elements by CRC ICPMS (dissolved) (1)	2	N/A	2016/03/07	BBY7SOP-00002	EPA 6020A R1 m
Filter and HNO3 Preserve for Metals (1)	1	N/A	2016/03/08	BBY7 WI-00004	BCMOE Reqs 08/14
Filter and HNO3 Preserve for Metals (1)	1	N/A	2016/03/10	BBY7 WI-00004	BCMOE Reqs 08/14

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Maxxam Vancouver

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Amanda Hung, B.Sc., Project Manager
Email: AHung@maxxam.ca
Phone# (204)772-7276 Ext:2215

==========

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Maxxam Job #: B616619
Report Date: 2016/03/10

KGS Group

BTEX/F1-F4 IN WATER (WATER)

Maxxam ID		OF6303	OF6303	OF6304		
Sampling Date		2016/03/04 11:30	2016/03/04 11:30	2016/03/04 12:00		
COC Number		487474-02-01	487474-02-01	487474-02-01		
	UNITS	MW-02	MW-02 Lab-Dup	MW-03	RDL	QC Batch
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/L	<0.15	<0.15	1.1	0.15	8212164
F3 (C16-C34 Hydrocarbons)	mg/L	<0.15	<0.15	<0.15	0.15	8212164
F4 (C34-C50 Hydrocarbons)	mg/L	<0.15	<0.15	<0.15	0.15	8212164
Volatiles						
Benzene	ug/L	1.1		3200	0.40	8207587
Toluene	ug/L	<0.40		170	0.40	8207587
Ethylbenzene	ug/L	<0.40		950	0.40	8207587
o-Xylene	ug/L	<0.40		42	0.40	8207587
m & p-Xylene	ug/L	<0.80		1100	0.80	8207587
Xylenes (Total)	ug/L	<0.80		1200	0.80	8207587
Methyl-tert-butylether (MTBE)	ug/L	<4.0		<4.0	4.0	8207587
F1 (C6-C10) - BTEX	ug/L	<300		2100	300	8207587
F1 (C6-C10)	ug/L	<300		7600	300	8207587
Surrogate Recovery (%)						
4-Bromofluorobenzene (sur.)	%	100		107		8207587
D4-1,2-Dichloroethane (sur.)	%	100		99		8207587
D8-TOLUENE (sur.)	%	97		97		8207587
O-TERPHENYL (sur.)	%	71	63	107		8212164

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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Maxxam Job #: B616619
Report Date: 2016/03/10

KGS Group

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		OF6303	OF6304	
Sampling Date		2016/03/04 11:30	2016/03/04 12:00	
COC Number		487474-02-01	487474-02-01	
	UNITS	**MW-02**	**MW-03**	**QC Batch**
Calculated Parameters				
Filter and HNO3 Preservation	N/A	FIELD	FIELD	ONSITE

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Maxxam Job #: B616619
Report Date: 2016/03/10

KGS Group

VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		OF6302		
Sampling Date		2016/03/04 12:15		
COC Number		487474-02-01		
	UNITS	**MW-01**	**RDL**	**QC Batch**
Volatiles				
Benzene	ug/L	2.6	0.40	8207587
Toluene	ug/L	0.64	0.40	8207587
Ethylbenzene	ug/L	2.9	0.40	8207587
o-Xylene	ug/L	2.7	0.40	8207587
m & p-Xylene	ug/L	1.0	0.80	8207587
Xylenes (Total)	ug/L	3.8	0.80	8207587
Methyl-tert-butylether (MTBE)	ug/L	<4.0	4.0	8207587
Surrogate Recovery (%)				
4-Bromofluorobenzene (sur.)	%	97		8207587
D4-1,2-Dichloroethane (sur.)	%	102		8207587
D8-TOLUENE (sur.)	%	99		8207587
RDL = Reportable Detection Limit				

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CCME DISSOLVED METALS IN WATER (WATER)

Maxxam ID		OF6303	OF6304		
Sampling Date		2016/03/04 11:30	2016/03/04 12:00		
COC Number		487474-02-01	487474-02-01		
	UNITS	MW-02	MW-03	RDL	QC Batch
Misc. Inorganics					
Dissolved Hardness (CaCO3)	mg/L	4340	1330	0.50	8207640
Elements					
Dissolved Mercury (Hg)	mg/L	<0.000010	<0.000010	0.000010	8213151
Dissolved Metals by ICPMS					
Dissolved Aluminum (Al)	mg/L	0.0102	0.0074	0.0030	8209519
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00125	0.00050	8209519
Dissolved Arsenic (As)	mg/L	0.00155	0.00271	0.00010	8209519
Dissolved Barium (Ba)	mg/L	0.0472	0.0923	0.0010	8209519
Dissolved Beryllium (Be)	mg/L	<0.00010	<0.00010	0.00010	8209519
Dissolved Bismuth (Bi)	mg/L	<0.0010	<0.0010	0.0010	8209519
Dissolved Boron (B)	mg/L	0.226	0.245	0.050	8209519
Dissolved Cadmium (Cd)	mg/L	0.000507	<0.000010	0.000010	8209519
Dissolved Chromium (Cr)	mg/L	0.0022	<0.0010	0.0010	8209519
Dissolved Cobalt (Co)	mg/L	0.00627	0.00166	0.00050	8209519
Dissolved Copper (Cu)	mg/L	0.0100	0.00049	0.00020	8209519
Dissolved Iron (Fe)	mg/L	0.0364	9.24	0.0050	8209519
Dissolved Lead (Pb)	mg/L	0.00060	0.00171	0.00020	8209519
Dissolved Lithium (Li)	mg/L	1.04	0.257	0.0050	8209519
Dissolved Manganese (Mn)	mg/L	3.04	0.922	0.0010	8209519
Dissolved Molybdenum (Mo)	mg/L	0.0033	0.0071	0.0010	8209519
Dissolved Nickel (Ni)	mg/L	0.0342	0.0101	0.0010	8209519
Dissolved Selenium (Se)	mg/L	0.00630	0.00075	0.00010	8209519
Dissolved Silicon (Si)	mg/L	10.0	6.84	0.10	8209519
Dissolved Silver (Ag)	mg/L	<0.000020	<0.000020	0.000020	8209519
Dissolved Strontium (Sr)	mg/L	6.35	1.20	0.0010	8209519
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	0.000050	8209519
Dissolved Tin (Sn)	mg/L	<0.0050	<0.0050	0.0050	8209519
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	0.0050	8209519
Dissolved Uranium (U)	mg/L	0.133	0.0484	0.00010	8209519
Dissolved Vanadium (V)	mg/L	<0.0050	<0.0050	0.0050	8209519
Dissolved Zinc (Zn)	mg/L	0.124	<0.0050	0.0050	8209519
Dissolved Zirconium (Zr)	mg/L	0.00114	<0.00050	0.00050	8209519
Dissolved Calcium (Ca)	mg/L	785	166	0.050	8207641
Dissolved Magnesium (Mg)	mg/L	577	222	0.050	8207641
Dissolved Potassium (K)	mg/L	17.5	15.5	0.050	8207641
Dissolved Sodium (Na)	mg/L	867	406	0.050	8207641
Dissolved Sulphur (S)	mg/L	959	289	3.0	8207641
RDL = Reportable Detection Limit					

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.6°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

KGS Group

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8207587	4-Bromofluorobenzene (sur.)	2016/03/04	101	60 - 140	101	60 - 140	100	%		
8207587	D4-1,2-Dichloroethane (sur.)	2016/03/04	93	60 - 140	93	60 - 140	93	%		
8207587	D8-TOLUENE (sur.)	2016/03/04	99	60 - 140	99	60 - 140	102	%		
8212164	O-TERPHENYL (sur.)	2016/03/09	109	50 - 130	103	50 - 130	109	%		
8207587	Benzene	2016/03/04	90	70 - 130	92	70 - 130	<0.40	ug/L	NC	40
8207587	Ethylbenzene	2016/03/04	94	70 - 130	98	70 - 130	<0.40	ug/L	NC	40
8207587	F1 (C6-C10) - BTEX	2016/03/04					<300	ug/L	NC	40
8207587	F1 (C6-C10)	2016/03/04	109	70 - 130	71	70 - 130	<300	ug/L	NC	40
8207587	m & p-Xylene	2016/03/04	97	70 - 130	100	70 - 130	<0.80	ug/L	NC	40
8207587	Methyl-tert-butylether (MTBE)	2016/03/04	88	70 - 130	89	70 - 130	<4.0	ug/L	NC	40
8207587	o-Xylene	2016/03/04	98	70 - 130	102	70 - 130	<0.40	ug/L	NC	40
8207587	Toluene	2016/03/04	90	70 - 130	92	70 - 130	<0.40	ug/L	0.55	40
8207587	Xylenes (Total)	2016/03/04					<0.80	ug/L	NC	40
8209519	Dissolved Aluminum (Al)	2016/03/07	91	80 - 120	102	80 - 120	<0.0030	mg/L	NC	20
8209519	Dissolved Antimony (Sb)	2016/03/07	101	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20
8209519	Dissolved Arsenic (As)	2016/03/07	94	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
8209519	Dissolved Barium (Ba)	2016/03/07	94	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
8209519	Dissolved Beryllium (Be)	2016/03/07	86	80 - 120	91	80 - 120	<0.00010	mg/L	NC	20
8209519	Dissolved Bismuth (Bi)	2016/03/07	94	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
8209519	Dissolved Boron (B)	2016/03/07	85	80 - 120	83	80 - 120	<0.050	mg/L	NC	20
8209519	Dissolved Cadmium (Cd)	2016/03/07	98	80 - 120	104	80 - 120	<0.000010	mg/L	NC	20
8209519	Dissolved Chromium (Cr)	2016/03/07	104	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
8209519	Dissolved Cobalt (Co)	2016/03/07	101	80 - 120	108	80 - 120	<0.00050	mg/L	NC	20
8209519	Dissolved Copper (Cu)	2016/03/07	107	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
8209519	Dissolved Iron (Fe)	2016/03/07	105	80 - 120	115	80 - 120	<0.0050	mg/L	NC	20
8209519	Dissolved Lead (Pb)	2016/03/07	101	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
8209519	Dissolved Lithium (Li)	2016/03/07	95	80 - 120	95	80 - 120	<0.0050	mg/L		
8209519	Dissolved Manganese (Mn)	2016/03/07	102	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
8209519	Dissolved Molybdenum (Mo)	2016/03/07	106	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
8209519	Dissolved Nickel (Ni)	2016/03/07	102	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
8209519	Dissolved Selenium (Se)	2016/03/07	102	80 - 120	108	80 - 120	<0.00010	mg/L	NC	20
8209519	Dissolved Silicon (Si)	2016/03/07					<0.10	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8209519	Dissolved Silver (Ag)	2016/03/07	96	80 - 120	106	80 - 120	<0.000020	mg/L	NC	20
8209519	Dissolved Strontium (Sr)	2016/03/07	99	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
8209519	Dissolved Thallium (Tl)	2016/03/07	98	80 - 120	105	80 - 120	<0.000050	mg/L	NC	20
8209519	Dissolved Tin (Sn)	2016/03/07	NC	80 - 120	109	80 - 120	<0.0050	mg/L	NC	20
8209519	Dissolved Titanium (Ti)	2016/03/07	94	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20
8209519	Dissolved Uranium (U)	2016/03/07	94	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
8209519	Dissolved Vanadium (V)	2016/03/07	102	80 - 120	109	80 - 120	<0.0050	mg/L	NC	20
8209519	Dissolved Zinc (Zn)	2016/03/07	NC	80 - 120	105	80 - 120	<0.0050	mg/L	NC	20
8209519	Dissolved Zirconium (Zr)	2016/03/07					<0.00050	mg/L	NC	20
8212164	F2 (C10-C16 Hydrocarbons)	2016/03/09	NC	50 - 130	97	70 - 130	<0.15	mg/L	NC	40
8212164	F3 (C16-C34 Hydrocarbons)	2016/03/09	126	50 - 130	115	70 - 130	<0.15	mg/L	NC	40
8212164	F4 (C34-C50 Hydrocarbons)	2016/03/09	103	50 - 130	96	70 - 130	<0.15	mg/L	NC	40
8213151	Dissolved Mercury (Hg)	2016/03/10	92	80 - 120	90	80 - 120	<0.000010	mg/L	NC	20

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

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

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

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

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Chain Of Custody Record

Page of

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #		Maxxam Job #	Bottle Order #:
Contact Name	Loni Andres	Contact Name		P.O. #		B616619	487474
Address	3rd Floor 865 Waverly St	Address		Project #		Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#487474-02-01	Amanda Hung
Phone	(204) 896-1209 x288 Fax:	Phone	Fax:	Site #			
Email	landres@kgsgroup.com, pnguyen@kgsgroup.com	Email		Sampled By			

Regulatory Criteria

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to maxxam

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ☐

(will be applied if Rush TAT is not specified)

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐

Date Required: Time Required:

Rush Confirmation Number *(call lab for #)*

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	BTEX/F1-F4 in Soil	CSR/CCME Metals in Soil	BTEX/F1-F4 in Water	CCME Dissolved Metals in Water						# of Bottles	Comments
1	0F6302	MW-01	March 4 2016	12:15	GW		[illegible]			X	~~X~~							2 bottles only BTEX F1
2	0F6303	MW-02	↓	11:30	↓		[illegible]			X	X							
3	0F6304	MW-03	↓	12pm	↓		[illegible]			X	X							
4																		
5																		
6																		
7																		
8																		
9																		
10																		

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[signature] Loni Andres	Mar 4/16	12:58pm	[signature] Seng Shun	16/03/04	13:45		☐	6,0, 7,8, 6,0 ice present	☐ Yes ☐ No

Lab Use Only

White: Maxxam Yellow: Client

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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