PHASE 2 INITIAL BOREHOLE DRILLING AND TESTING AT IG_BH04/05/06 -IGNACE AREA

WP01 Commissioning Report - Site Infrastructure Setup for IG_BH06

APM-REP-01332-0302

January 2022

Golder Associates Ltd.



NUCLEAR WASTE SOCIÉTÉ DE GESTION MANAGEMENT DES DÉCHETS ORGANIZATION NUCLÉAIRES

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REPORT

PHASE 2 INITIAL BOREHOLE DRILLING AND TESTING AT IG_BH04/05/06, IGNACE AREA

WP01 Commissioning Report - Site Infrastructure Setup for IG_BH06

Submitted to:

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WP01 COMMISSIONING REPORT SITE INFRASTRUCTURE SETUP FOR IG_BH06

CLIENT INFORMATION

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1.0 BACKGROUND

The Phase 2 Initial Borehole Drilling and Testing at IG_BH04/05/06, Ignace Area project is part of the Phase 2 Geoscientific Preliminary Field Investigations of the NWMO's Adaptive Phased Management Site Selection Phase.

This project involves testing of deep borehole IG_BH04 and the drilling and testing of deep boreholes IG_BH05 and IG_BH06 in the Ignace area within the identified Revell Potential Repository Area. The work comprises a total of eleven work packages and is being carried out by a team led by Golder Associates Ltd. (Golder) on behalf of the NWMO. The overall program at IG_BH06 is described in the Borehole Characterization Plan for IG_BH06 (Golder 2021a). The Ignace area is located a direct distance of approximately 21 km southeast of the Wabigoon Lake Ojibway Nation and a direct distance of 43 km northwest of the Town of Ignace. Access to the area is via Highway 17 and primary logging roads, as shown on Figure 1.



Figure 1: The Ignace area – access roads and drill sites for IG_BH04, IG_BH05 and IG_BH06.

2.0 OBJECTIVE

This report describes the site commissioning activities at borehole IG_BH06. Site commissioning activities included the setup of security fencing, office trailers, washrooms, fuel storage, light towers, shipping containers, drill rig, site communications, and electrical distribution systems.

As stated in WP01 Test Plan - Site Infrastructure for IG_BH04/05/06 (Document No. APM-PLAN-01332-0373) (Golder 2021b), a site commissioning technical report is to be submitted for each of the drill sites to document the preparation and setup of site infrastructure. Details regarding the site services, electrical configuration, and asbuilt data are provided within this report.

3.0 SITE HISTORY

Construction of the drill pad and access road for IG_BH06 including bunching, clearing and grubbing, the placement of silt fencing, ditching, placement of a granular base, grading and compaction of the site, was previously completed under separate contract to the NWMO in November 2019. The site remained vacant under third party care, custody and control from November 2019 until NWMO accepted the care, custody and control on March 31, 2021.

On April 1, 2021, a WP01 kickoff meeting and site inspection was conducted with representatives from the NWMO, Wabigoon Lake Ojibway Nation (WLON), Golder, and Rodren Drilling Ltd. (Rodren). The purpose of the site inspection was to identify current site conditions, and to allow for planning of the site setup. During the site inspection it was decided to move the borehole location to the current location. The initial site layout for IG_BH06 in the WP01 test plan was based on observations from this site inspection.

The site was used for a shallow monitoring well drilling program spanning from May 17, 2021 until August 9, 2021, after which the party responsible for the drilling program demobilized from the site.

On August 8, 2021 a site inspection was conducted with a representative from the NWMO and Golder's site supervisor. The purpose of the site inspection was to identify current site conditions, and to allow for planning of the site setup, which was scheduled to start the following week. During the site inspection, the following was determined:

- The drill pad base was constructed of material descripted to be Granular "A" and was noted to be solid and stable.
- No visible signs of staining or impacts to the granular material were observed anywhere on the site.
- The silt fence needs repair / replacement, particularly the north and south sides of the pad, which were the low spots for drainage off the site.

On August 9 and 12, 2021 Golder collected six environmental samples at six different locations to document baseline conditions of the site. The sample locations included the planned parking area, the fueling location used by the previous contractor, the three monitoring well locations, and the center of the drill pad. A Garmin eTrex® 20 (Unit ID 3879254005) device was used to measure the location coordinates which has an accuracy of ±1.0 metre. The samples were collected and stored in an ice-packed cooler for shipping to the lab. The samples were shipped via Purolator courier to Bureau Veritas Canada (2019) Inc. (BV Labs) in Mississauga, following Chain of Custody protocols. Chain of custody forms are provided in Appendix A.

The samples were analysed for the following:

- Benzene, toluene, ethylbenzene, and xylene (BTEX)
- Petroleum Hydrocarbons (PHCs) Fraction 1 (F1)
- Petroleum Hydrocarbons (PHCs) Fractions 2-4 (F2-4)
- Ontario Regulation (O.Reg.) 153/04 Metals (Province of Ontario, 2004)

The details of the IG_BH06 baseline samples are summarized in Table 1 below.

Table 1: IG_BH06 Baseline Samples Summary

Sample ID	Description of Area	Coordinates (UTM Zone 15N)	Analysis
IG_BH06_Baseline_Parking	Parking lot	555402 N, 5485270 E	
IG_BH06_Baseline_Drill	IG_BH06 drill location	555437 N, 5485314 E	BTEX/PHCs F1
IG_BH06_Baseline_Fueling	Location of fuelling area used by the previous contractor	555423 N, 5485311 E	PHCs F2-F4
IG_BH06_Baseline_MW1	MW1 drill location	555450 N, 5485334 E	O.Reg. 153/04 Metals
IG_BH06_Baseline_MW2	MW2 drill location	555420 N, 5485338 E	
IG_BH06_Baseline_MW3	MW3 drill location	555443 N, 5485292 E	

Analytical results for the six samples collected are provided in Appendix A. No BTEX or PHCs were detected in any of the six fill samples. The O.Reg. 153/04 metal results did not indicate the presence of contaminants, but all six samples were consistently elevated in arsenic, barium, chromium, lead, nickel, vanadium, zinc, copper and cobalt relative to the Ontario Ministry of the Environment, Conservation and Parks (MECP) Table 1 Background, which Golder interprets to be naturally occurring in the crushed rock fill material.

Golder accepted care, custody, and control of the site from the NWMO on Monday, August 9, 2021.

4.0 SITE PREPARATION AND SETUP

This section provides a summary of site infrastructure setup for IG_BH06. Photographs of the IG_BH06 site taken during site setup and commissioning are provided in Appendix B; an aerial view of the as-built site setup is provided in Appendix C; and the Site Commissioning Checklist for IG_BH06 is provided in Appendix D.

4.1 Security Fencing

Approximately 190 m (620 ft) of 2.5 m (8 ft) tall fencing was transferred from the IG_BH04 site to IG_BH06 for use as perimeter fencing around the site to define the work area in addition to 30 m (98 ft) of 3.0 m (10 ft), provide security and to discourage wildlife from entering the site. Installation of the perimeter fencing at IG_BH06 is shown in Appendix B, Photo 1.

An additional 43.9 m (144 ft) of 2.9 m (9.5 ft) tall fencing was required to be mobilized to site to complete the perimeter fencing as the site layout of IG_BH06 has a larger footprint than IG_BH04.



A lockable gate was installed on the south side of the site, to allow worker access to the site from the parking lot (Appendix B, Photo 2).

In addition to the perimeter fencing, approximately 70 m (230 ft) of 1.8 m (6 ft) tall fencing was transferred from IG BH04 and installed at IG BH06 around the drill rig area to define an exclusion zone (Appendix B, Photo 3).

Safety signage was installed at the entrance to site, and at defined areas such as the muster station, no-smoking areas, and designated smoking areas. The safety signage mounted at the entrance gate is shown in Appendix B, Photo 2.

4.2 Silt Fence Repair

On August 19, 2021, Ricci's Trucking repaired the silt fence around IG BH06 work site, which had been damaged prior to Golder taking care, control and custody of the site. The work was conducted as a scope change to the project, and was performed under Golder supervision.

4.3 **Temporary Site Infrastructure and Facilities**

An aerial image showing the as-built site layout, along with with a legend of the main site infrastructure elements, is provided in Appendix C.

4.3.1 **Office Trailers**

A 12 x 3 m (40 x 10 ft) mobile office trailer was set up on the east side of the site and two 7.3 x 3m (24 x 10 ft) mobile office trailers were set up on the southeast corner of the site. The office trailers functioned as field offices for Golder, NWMO/WLON, and Rodren, respectively. The office trailers were heated and air conditioned, had electrical power, and internet service via Starlink satellite internet service. Cellular service directly outside the trailers is available at a signal strength of 2 bars, however service inside the trailers is limited.

Photos of the office trailers at IG BH06 are included in Appendix B, Photo 4 & Photo 5.

4.3.2 Seacans for Technical Workers

Two 12 x 2.5 m (40 x 8 ft) modified shipping containers (seacans) were placed at the west side of site near the drill rig and functioned as a working space for all the work packages activities. The seacans were modified with doors, windows, insulation, electrical power, heating, and air conditioning Internet communication was provided to the seacans using Starlink satellite internet service, which was installed on September 16, 2021 which replaced the ZTE MF288 Turbo Hubs initially installed (see Section 4.5.3).

The seacans were used as working, office, and laboratory space, and for the storage of equipment and samples. One seacan was designated as the WP02 Core Storage Seacan (Core Storage Seacan) (Appendix B, Photo 6) and the other was designated as the WP03 Core Logging Seacan (Core Logging Seacan) (Appendix B, Photo 7).

Two custom built core photography systems were set up in the Core Logging Seacan and consist of aluminum frames with suspended cameras for taking core and core boxes photos (Appendix B, Photo 9). Refrigeration for water samples and select drill core samples was provided by two refrigerators located in the Core Storage Seacan. The refrigeration system was used for temporary sample storage until the samples could be shipped off site to the appropriate laboratories or archives (Appendix B, Photo 8).

An additional 6 x 2.5 m (20 x 8 ft) seacan was set up inside the interior drilling area fencing for general equipment storage, but was not equipped with power, heat, or air conditioning.



4.3.3 **Drilling Facilities**

Prior to arrival of the drill rig on site, the drill pad was set up with a secondary containment system which was constructed on site to capture any drill fluid spills that could potentially occur at the drill or drill fluid circulation system. The system was designed with a central sump and the drill pad was graded to slope into the central sump. The containment liner consisted of one rubber layer sealed to the outer casing of the borehole to prevent leaks through the liner (Appendix B, Photo 10).

The drill pad was designed so that any drill fluid spills that occurred would drain to the central sump, where it could be pumped into a wastewater storage tank, as required. The secondary containment system provided approximately 195 m² (~2,100 ft²) of lateral coverage, large enough to encompass the footprints of the drill rig, Australian Mud Company (AMC) Solids Removal Unit (SRU) centrifuge, wastewater tank, and fluorescein tank. The wastewater and fluorescein tanks were stored in a 6 x 2.5 m (20 x 8 ft) seacan located on the drilling rig secondary containment (Appendix B, Photo 11).

The secondary containment system was primarily for collecting spills of drill fluid or fluorescein traced water and was not intended to provide containment for potential spills of hazardous materials such as oils or fuels. Hazardous materials such as oil and fuel were placed within their own secondary containment and were protected from the elements using a portable car shelter or shipping container.

Upon the completion of surface casing installation, a steel drill water sump was welded to the outer casing of the borehole collar to capture drill fluid as it exited the borehole during drilling and testing.

The drill rig was a rotary EF-100 manufactured by Discovery Drill Manufacturer (DDM) Ltd. (Appendix B, Photo 12). The drill was oriented over the planned borehole location, at a dip of 70° from horizontal and azimuth of 360° degrees

Items inside the drill rig area included the drill rig, drill rods and tooling, the wastewater and fluorescein tanks seacan, centrifuge unit, and drill cuttings storage. The drill rig area was also used for storage of drilling supplies.

Drill water was stored in two 28,350 L Baker tanks located on the north side of the site (Appendix B, Photo 13). The Baker tanks were dedicated to receiving fresh water sourced from the Township of Ignace municipal water supply, with the water later transferred to the fluorescein tank and mixed with fluorescein tracer as needed.

4.3.4 Washrooms

During the setup of the site facilities, one temporary portable toilet was provided for use by site workers. A heated and self-contained washroom trailer was later delivered to site once the electrical distribution system was operational. The washroom trailer was divided into two units with separate entrances, each containing one toilet and one sink. The washrooms were serviced for fresh-water and wastewater once per week and cleaned twice per week (Appendix B, Photo 4).

4.3.5 Site Communications

4.3.5.1 Initial Setup

Two SureCall Fusion5X 2.0 Yagi/Panel Signal Boosters were installed on two 15 m (50 ft) masts attached to Golder's office trailer and the Core Logging Seacan respectively, to improve cellular reception to the site. Initially, internet services were provided on-site using two Bell Canada ZTE MF288 Turbo Hub cellular internet receivers, located in the Golder office trailer and the Core Logging Seacan, respectively. The Turbo Hub located in Golder's



office trailer was shared between the Golder, NWMO/WLON and Rodren workers through Wi-Fi repeater located in NWMO/WLON office trailer, while the second Turbo Hub was dedicated to the core logging activities.

4.3.5.2 Satellite Internet

The signal strength was generally good however, the internet speed was not sufficient for the daily tasks being performed by site workers. On September 16, 2021, Golder installed Starlink satellite internet service to improve the internet service on site.

Figure 2 below shows the configuration used to broadcast the internet signal across the IG BH06 site.



Figure 2: Configuration of devices used to broadcast internet signal at IG BH06

The main satellite signal receiver was installed on the southwest corner of the site and was wired to the Starlink internet router located in the Core Logging Seacan. The internet signal was then transmitted wirelessly by a TP-Link RE200 Wi-Fi extender (Wi-Fi extender) in the Core Storage Seacan and received and rebroadcasted by another Wi-Fi extender in the NWMO/WLON office trailer. The signal from the Wi-Fi extender in the NWMO/WLON office trailer was received and rebroadcasted by another Wi-Fi extender in the Golder office trailer.

The Starlink internet was significantly faster than the cellular internet, and so the two Bell Canada ZTE MF288 Turbo Hub cellular internet receivers were disconnected.

In the event of failure of cellular service, emergency communication was still possible using a Garmin In-Reach SE satellite messaging device, located in the Golder office trailer.



5.0 POWER SUPPLY AND DISTRIBUTION

5.1 **Power Generation**

5.1.1 Electrical Generator

From site set-up in August 2021, the site was powered by MQ WhisperWatt 70 diesel-electric generator, which supplied 56 kW (70 kVA) of 120 V single-phase output. It was used to power the site office trailers, core logging and storage seacans, washroom trailer, and a portable power system on the drill pad. The location of the generator was chosen to minimize the length of electrical distribution cables, to protect the generator from vehicular traffic, and to allow for access by truck if the generator required repairs or replacement. The generator was placed inside a secondary containment berm with a containment capacity of 4,800 L (1,265 US gallons), sufficient to contain approximately six times the amount of fuel and oil in the system.

The MQ WhisperWatt generator in secondary containment is shown in Appendix B, Photo 14.

On November 6, 2021 Fediuk Electric (Fediuk) was performing regular maintenance on the generator and noted that the antifreeze level was lower than expected from a suspected leak. Golder's site supervisors were advised to monitor and top-up the antifreeze level until the generator was replaced or repaired.

On the morning of November 17, 2021, the Golder site supervisor arrived at site and noticed that the generator was not operating. The generator was diagnosed by Fediuk who identified that the alternator was faulty and that a replacement generator was required at IG_BH06. As field work at IG_BH05 was compete and site decommissioning activities were in progress, the Cummins mobile diesel generator (model C60D6R) was transferred from IG_BH05 to IG_BH06 and the MQ WhisperWatt generator was demobilized from site.

The Cummins mobile diesel generator supplies 40.2 kW (50.25 kVa) of 120 V single-phase output.

5.1.2 Fuel Supply

One 4,500 L (1,190 US gallon) double-walled fuel storage tank was located adjacent to the generator, so that refueling of the generator could be performed directly from the fuel storage tank. Another 4,500 L double-walled fuel storage tank was placed near the drill rig area which was used to fuel the drill rig and centrifuge. The fuel tank was placed inside a secondary containment berm with a containment capacity of 5,460 L (1,440 US gallons), sufficient to contain the maximum amount of fuel and oil in the system plus a contingency factor of approximately 20%. The fuel tanks were surrounded by concrete barricades to protect them from vehicular traffic and heavy machinery.

The fuel storage tank in secondary containment is shown in Appendix B, Photo 14.

5.2 **Power Distribution**

Setup of the electrical distribution system from the generator to the site facilities was performed by Fediuk under the direction of Justin Fediuk, Master Electrician License #6002843. Power was distributed to the site facilities via double jacketed electrical cables. Most of the power lines were mounted to the site perimeter fencing. In areas where the electrical cables pass through a trafficable area, they were buried underground inside an ABS conduit at 1 m depth (3 ft)

A typical trench and conduit are shown in Appendix B, Photo 15.



5.3 Site Illumination

Three 4-kW - Wacker Neuson Metrolite LTV4 diesel powered light towers with LED lights were installed at the site to provide outside illumination during work at night. The light towers were positioned to allow for an even distribution of light. The light tower placement also considered: ground stability, level of activity in the area, and the ability to access the light towers by truck for refueling or repairs. The light towers were all placed within their own secondary spill containment. The containments were sized so that the entire light tower footprint would be within containment. The containment capacities of 2,800 L (740 US Gallons) and 1,150 L (304 US Gallons) exceeded the maximum volume of fuel and oil within the light towers of 180 L (47.5 US Gallons).

Light towers in secondary containment are shown in Appendix B, Photos 16 and 17.

5.4 **Ground Fault Protection**

Exterior power outlets on the office trailers, and outlets located inside the washrooms were outfitted with ground fault circuit interrupters (GFCI). Additional protection was also provided to workers by portable GFCI power bars, which were installed inside office trailers or seacans if testing activities created wet conditions inside the trailers.

5.5 Power Generation at the Rig Area

The drill rig and the centrifuge unit were both diesel-powered units, fueled, monitored, and maintained by Rodren. The main site electrical distribution system provided power at the drill rig area via six GFCI outlets, for use during testing activities.

Electrical Safety Authority (ESA) 5.6

The Electrical Safety Authority (ESA) inspected the electrical installation at IG BH06 on November 17, 2021 to ensure that the work was in accordance with the requirements of the Ontario Electrical Safety Code.

Items inspected by the ESA include the following:

- Five construction trailers (Golder office, NWMO/WLON office, Rodren office, WP02/03 Seacans and Washroom):
- Three outlet receptacles (receptacles at drill area, main fuel tank, Baker tanks); and
- One 200-amp electrical panel board.

The ESA certified that the electrical installation was acceptable and provided a Certificate of Acceptance (notification number 17245780) to Fediuk on November 25, 2021.

The ESA Certificate of Acceptance was provided to Golder on November 25, 2021 and is provided in Appendix E.

HEALTH AND SAFETY EQUIPMENT 6.0

6.1 Health And Safety Equipment

Health and safety equipment at site included signage posted at the entrance to site which identified restricted areas, the site muster point, non-smoking areas, designated smoking areas, and PPE requirements. Personal protective equipment such as hard hats, hearing and eye protection, gloves, and high visibility clothing were available from Golder for workers and visitors if they had not arrived with the required equipment.



Emergency response equipment was also provided around site. Eye wash stations were provided in site offices and work areas. First aid kits were provided in each of the site offices and work areas. Fire extinguishers were located at fuel storage tanks, washrooms, smoking area, main generator, core storage seacans, site offices, and proximal to light towers and other fuel burning equipment. Eye wash stations, first aid kits, and fire extinguishers were maintained and inspected as part of regular site operations.

6.2 COVID – 19 Prevention and Mitigation Measures

As per Golder's COVID-19 Safe Work Method Statement (Golder 2021c), the site was supplied with non-medical face masks, disinfecting spray, paper towels, and disposable gloves for all the site workers and vistors, and were distributed across site in all work areas.

Work stations in all the site trailers and core storages were equipped with hand sanitizer dispensers, disinfecting sprays and paper towels, and workers were required to disinfect their work areas at the begining and the end of their shift. Signs were posted on building entrances indicating the maximum occupancy for that area COVID-19 information and protocols were posted in site trailers and seacans to remind workers of requirements.

7.0 WASTE AND CHEMICAL STORAGE

7.1 Solid Waste (Non-Hazardous)

Non-hazardous solid waste was managed using one garbage bin and one recycling bin located near the front entrance to the site, for ease of access by the garbage and recycling truck. The bins were both located inside the fenced area and had lids which could be secured to prevent access by animals and covered with impermeable liner to prevent rainwater accumulation in them. The bins were sourced by B&M Deliveries of Dryden, Ontario, and waste material was transported by B&M Deliveries to the Dryden Landfill Site, located southwest of Dryden, Ontario (Appendix B, Photo 18).

7.2 Spill Response

Two petroleum hydrocarbons spill kits (359 L each) were placed beside the site fuel supply and generator, and a universal spill kit was set up near the drill rig area. Two bins full of sawdust were also placed by the washroom trailer for use in a spill response. Four additional portable spill kits were placed in Golder's site trailer and storage seacans for fast spill response, if required (Appendix B, Photos 14, 16 & 17). It is Golder's responsibility to dispose of contaminated material in accordance with the Ontario Environmental Protection Act (1990).

7.3 Hazardous Chemical Storage

Hazardous chemicals were primarily stored in two locations. All hazardous products associated with the operation of the drill rig including engine oil, hydraulic oil, and flocculants were stored in the drilling area, inside secondary containment. All products associated with water testing were stored in the Core Storage Seacan Minor consumer quantities of cleaning supplies were also stored in the site offices and washrooms. Copies of all Safety Data Sheets (SDS) for hazardous materials were kept on site in the Golder office trailer, and where applicable, copies also kept directly with the products for quick reference.

7.4 Hazardous Solid Waste Disposal

Hazardous solid wastes such as hydraulic oil, engine oil, and flocculants were stored in their own secondary containment as described in section 7.3. When equipment servicing was required, these hazardous wastes were



removed from site by the subcontracted mechanic and disposed of properly off-site. Hazardous cleaning products were either consumed at site or removed by the subcontracted cleaning staff.

8.0 SUMMARY

This report describes the site preparation and setup for IG_BH06 including field offices, power, utilities communications systems, health and safety equipment, and perimeter fencing.

The site setup for IG_BH06 was completed with a formal inspection and commissioning by Golder on September 07, 2021 respectively (Appendix D, IG_BH06 Site Commissioning Check List).

9.0 REFERENCES

- Golder (Golder Associates Ltd.), 2021a. Phase 2 Initial Borehole Drilling and Testing at IG_BH04/05/06, Ignace Area. Borehole Characterization Plan for IG_BH06. (NWMO Document: APM-PLAN-01332-0275), September 2021.
- Golder, 2021b. WP01 Test Plan Site Infrastructure for IG_BH04/05/06 (NWMO Document: APM-PLAN-01332-0373), March 2021.
- Golder, 2021c. COVID-19 Safe Work Method Statement Appendix G. Found in: Phase 2 Initial Borehole Drilling and Testing at IG_BH04/05/06, Ignace Area, Health, Safety, Security and Environment Plan, (NWMO Document: APM-PLAN-01332-0372), March 2021.

Province of Ontario, 1990. Environmental Protection Act, R.S.O. 1990, c E.19

Province of Ontario, 2004. O. Reg. 153/04: Records of Site Condition - Part XV.1 of the Act under Environmental Protection Act, R.S.O. 1990, as amended.



APPENDIX A

IG_BH06 Confirmatory Sample Results





Attention: George Schneider

Golder Associates Ltd 210 Sheldon Drive Cambridge, ON CANADA N1T 1A8 Your P.O. #: 20253946-6011-10 Your Project #: 20253946 Site#: IG_BH06 Site Location: IGNACE Your C.O.C. #: n/a

> Report Date: 2021/08/31 Report #: R6790615 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1N7710 Received: 2021/08/20, 08:42

Sample Matrix: Soil # Samples Received: 6

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Hot Water Extractable Boron	6	2021/08/30	2021/08/30	CAM SOP-00408	R153 Ana. Prot. 2011
Hexavalent Chromium in Soil by IC (1)	6	2021/08/30	2021/08/30	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2021/08/29	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	5	N/A	2021/08/30	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	6	2021/08/28	2021/08/29	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	6	2021/08/30	2021/08/30	CAM SOP-00447	EPA 6020B m
Moisture	6	N/A	2021/08/28	CAM SOP-00445	Carter 2nd ed 51.2 m

Remarks:

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

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

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

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

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

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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) Soils are reported on a dry weight basis unless otherwise specified.

(2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated. (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories 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 "Alberta

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Bureau Veritas Laboratories 6740 Campobello Road, Mississauga, Ontario, LSN 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com



Your P.O. #: 20253946-6011-10 Your Project #: 20253946 Site#: IG_BH06 Site Location: IGNACE Your C.O.C. #: n/a

Attention: George Schneider

Golder Associates Ltd 210 Sheldon Drive Cambridge, ON CANADA N1T 1A8

> Report Date: 2021/08/31 Report #: R6790615 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1N7710 Received: 2021/08/20. 08:42

Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". 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. Ema Gitej, Senior Project Manager Email: emese.gitej@bureauveritas.com Phone# (905)817-5829

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

Total Cover Pages : 2 Page 2 of 21 Bureau Veritas Laboratories 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com



O.REG 153 METALS PACKAGE (SOIL)

BV Labs ID		QKY989	QKY990	QKY991		
Sampling Date		2021/08/08 12:00	2021/08/08 12:30	2021/08/08 13:00		
COC Number		n/a	n/a	n/a		
	UNITS	IG_BH06_BASELINE_DRILL	IG_BH06_BASELINE_R EFUELING	IG_BH06_BASELINE_P ARKING	RDL	QC Batch
Inorganics						
Moisture	%	3.7	3.6	6.5	1.0	7547574
Chromium (VI)	ug/g	<0.18	<0.18	<0.18	0.18	7548342
Metals						
Hot Water Ext. Boron (B)	ug/g	0.093	0.076	0.10	0.050	7548424
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	<0.20	0.20	7548460
Acid Extractable Arsenic (As)	ug/g	9.7	6.7	5.0	1.0	7548460
Acid Extractable Barium (Ba)	ug/g	16	18	22	0.50	7548460
Acid Extractable Beryllium (Be)	ug/g	<0.20	<0.20	<0.20	0.20	7548460
Acid Extractable Boron (B)	ug/g	<5.0	<5.0	<5.0	5.0	7548460
Acid Extractable Cadmium (Cd)	ug/g	0.14	0.13	<0.10	0.10	7548460
Acid Extractable Chromium (Cr)	ug/g	37	36	25	1.0	7548460
Acid Extractable Cobalt (Co)	ug/g	24	23	14	0.10	7548460
Acid Extractable Copper (Cu)	ug/g	130	110	81	0.50	7548460
Acid Extractable Lead (Pb)	ug/g	<1.0	1.2	2.6	1.0	7548460
Acid Extractable Molybdenum (Mo)	ug/g	0.85	1.2	0.76	0.50	7548460
Acid Extractable Nickel (Ni)	ug/g	31	29	19	0.50	7548460
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	<0.50	0.50	7548460
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	<0.20	0.20	7548460
Acid Extractable Thallium (Tl)	ug/g	<0.050	<0.050	<0.050	0.050	7548460
Acid Extractable Uranium (U)	ug/g	0.12	0.21	0.48	0.050	7548460
Acid Extractable Vanadium (V)	ug/g	81	78	53	5.0	7548460
Acid Extractable Zinc (Zn)	ug/g	48	46	32	5.0	7548460
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	<0.050	0.050	7548460
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



O.REG 153 METALS PACKAGE (SOIL)

BV Labs ID		QKY992	QKY993	QKY994		
Sampling Date		2021/08/12	2021/08/12	2021/08/12		
		12:30	13:00	13:30		
COC Number		n/a	n/a	n/a		
	UNITS	IG_BH06_BASELINE_MW1	IG_BH06_BASELINE_MW2	IG_BH06_BASELINE_MW3	RDL	QC Batch
Inorganics						
Moisture	%	3.2	4.5	3.1	1.0	7547574
Chromium (VI)	ug/g	<0.18	<0.18	<0.18	0.18	7548342
Metals						
Hot Water Ext. Boron (B)	ug/g	0.12	0.11	0.053	0.050	7548424
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	<0.20	0.20	7548460
Acid Extractable Arsenic (As)	ug/g	6.8	9.1	1.9	1.0	7548460
Acid Extractable Barium (Ba)	ug/g	17	20	17	0.50	7548460
Acid Extractable Beryllium (Be)	ug/g	<0.20	<0.20	<0.20	0.20	7548460
Acid Extractable Boron (B)	ug/g	<5.0	<5.0	<5.0	5.0	7548460
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.13	<0.10	0.10	7548460
Acid Extractable Chromium (Cr)	ug/g	32	32	18	1.0	7548460
Acid Extractable Cobalt (Co)	ug/g	18	22	9.0	0.10	7548460
Acid Extractable Copper (Cu)	ug/g	130	120	53	0.50	7548460
Acid Extractable Lead (Pb)	ug/g	1.2	1.5	4.3	1.0	7548460
Acid Extractable Molybdenum (Mo)	ug/g	0.77	1.2	<0.50	0.50	7548460
Acid Extractable Nickel (Ni)	ug/g	25	27	14	0.50	7548460
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	<0.50	0.50	7548460
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	<0.20	0.20	7548460
Acid Extractable Thallium (Tl)	ug/g	<0.050	<0.050	<0.050	0.050	7548460
Acid Extractable Uranium (U)	ug/g	0.20	0.28	0.94	0.050	7548460
Acid Extractable Vanadium (V)	ug/g	61	70	40	5.0	7548460
Acid Extractable Zinc (Zn)	ug/g	38	42	25	5.0	7548460
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	<0.050	0.050	7548460
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

BV Labs ID		QKY989	QKY990	QKY991	QKY991		
Sampling Data		2021/08/08	2021/08/08	2021/08/08	2021/08/08		
Sampling Date		12:00	12:30	13:00	13:00		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	IG_BH06_BASELINE_DRILL	IG_BH06_BASELINE_R EFUELING	IG_BH06_BASELINE_P ARKING	IG_BH06_BASELINE_P ARKING Lab-Dup	RDL	QC Batch
BTEX & F1 Hydrocarbons							
Benzene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7547628
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7547628
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7547628
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7547628
p+m-Xylene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	7547628
Total Xylenes	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	7547628
F1 (C6-C10)	ug/g	<10	<10	<10	<10	10	7547628
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	10	7547628
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	<10	10	7547552
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	<50	<50	50	7547552
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	<50	50	7547552
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes		7547552
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	106	108	104	103		7547628
4-Bromofluorobenzene	%	80	77	87	90		7547628
D10-o-Xylene	%	98	99	98	93		7547628
D4-1,2-Dichloroethane	%	102	105	103	101		7547628
o-Terphenyl	%	84	80	72	80		7547552
RDL = Reportable Detection L QC Batch = Quality Control B Lab-Dup = Laboratory Initiate	_imit atch ed Duplic	cate					



O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

Sampling Date 2021/08/12 12:30 2021/08/12 13:00 COC Number n/a n/a UNITS IG_BH06_BASELINE_MW1 IG_BH06_BASELINE_MW2 IG_BH BTEX & F1 Hydrocarbons IG_gg <0.020 <0.020 IG_BH Benzene ug/g <0.020 <0.020 IG_BH Toluene ug/g <0.020 <0.020 IG_D Ethylbenzene ug/g <0.020 <0.020 IG_D o-Xylene ug/g <0.020 <0.020 IG_D p+m-Xylene ug/g <0.040 IG_D IG_E F1 (C6-C10) ug/g <10 <10 IG_E F2 (C10-C16 Hydrocarbons) ug/g <10 <10 IG_E F2 (C10-C16 Hydrocarbons) ug/g <10 <10 IG_E F3 (C16-C34 Hydrocarbons) ug/g <50 <50 IG_E F4 (C34-C50 Hydrocarbons) ug/g <50 <50 IG_E F4 (C34-C50 Hydrocarbons) ug/g Yes Yes Y	2021/08/12 13:30 n/a 3H06_BASELINE_MW3 <0.020 <0.020 <0.020 <0.020 <0.020	RDL	QC Batch
COC Number n/a n/a UNITS IG_BH06_BASELINE_MW1 IG_BH06_BASELINE_MW2 IG_BH BTEX & F1 Hydrocarbons IG_getting IG_getting	n/a 3H06_BASELINE_MW3 <0.020 <0.020 <0.020 <0.020 <0.020	RDL	QC Batch
UNITS IG_BH06_BASELINE_MW1 IG_BH06_BASELINE_MW2 IG_BH BTEX & F1 Hydrocarbons Benzene ug/g <0.020	3H06_BASELINE_MW3 <0.020 <0.020 <0.020 <0.020 <0.020	RDL 0.020	QC Batch
BTEX & F1 Hydrocarbons Benzene ug/g <0.020 <0.020 Toluene ug/g <0.020 <0.020 Ethylbenzene ug/g <0.020 <0.020 o-Xylene ug/g <0.020 <0.020 p+m-Xylene ug/g <0.040 <0.040 Total Xylenes ug/g <0.040 <0.040 F1 (C6-C10) ug/g <10 <10 F1 (C6-C10) - BTEX ug/g <10 <10 F2 (C10-C16 Hydrocarbons) ug/g <10 <10 F3 (C16-C34 Hydrocarbons) ug/g <50 <50 F4 (C34-C50 Hydrocarbons) ug/g <50 <50 F4 (C34-C50 Hydrocarbons) ug/g Yes Yes Surrogate Recovery (%) Yes Yes Yes	<0.020 <0.020 <0.020 <0.020 <0.020	0.020	
Benzene ug/g <0.020 <0.020 Toluene ug/g <0.020	<0.020 <0.020 <0.020 <0.020	0.020	
Toluene ug/g <0.020 <0.020 Ethylbenzene ug/g <0.020	<0.020 <0.020 <0.020		7547628
Ethylbenzene ug/g <0.020 <0.020 o-Xylene ug/g <0.020	<0.020 <0.020	0.020	7547628
o-Xylene ug/g <0.020 <0.020 p+m-Xylene ug/g <0.040	<0.020	0.020	7547628
p+m-Xylene ug/g <0.040 <0.040 Total Xylenes ug/g <0.040		0.020	7547628
Total Xylenes ug/g <0.040 <0.040 F1 (C6-C10) ug/g <10	<0.040	0.040	7547628
F1 (C6-C10) ug/g <10	<0.040	0.040	7547628
F1 (C6-C10) - BTEX ug/g <10	<10	10	7547628
F2-F4 Hydrocarbons F2 (C10-C16 Hydrocarbons) ug/g <10	<10	10	7547628
F2 (C10-C16 Hydrocarbons) ug/g <10			
F3 (C16-C34 Hydrocarbons) ug/g <50	<10	10	7547552
F4 (C34-C50 Hydrocarbons) ug/g <50	59	50	7547552
Reached Baseline at C50 ug/g Yes Yes Surrogate Recovery (%)	<50	50	7547552
Surrogate Recovery (%)	Yes		7547552
1,4-Difluorobenzene % 106 109	105		7547628
4-Bromofluorobenzene % 90 80	84		7547628
D10-o-Xylene % 93 97	93		7547628
D4-1,2-Dichloroethane % 105 103	102		7547628
o-Terphenyl % 90 79	80		7547552
RDL = Reportable Detection Limit			

QC Batch = Quality Control Batch



TEST SUMMARY

QKY989
IG_BH06_BASELINE_DRILL
Soil

Collected: 2021/08/08 Shipped: Received: 2021/08/20

Collected:

Shipped:

2021/08/08

Received: 2021/08/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7548424	2021/08/30	2021/08/30	Archana Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7548342	2021/08/30	2021/08/30	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7547628	N/A	2021/08/29	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7547552	2021/08/28	2021/08/29	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	7548460	2021/08/30	2021/08/30	Viviana Canzonieri
Moisture	BAL	7547574	N/A	2021/08/28	Prgya Panchal

BV Labs ID: QKY990 Sample ID: IG_BH06_BASELINE_REFUELING Matrix: Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7548424	2021/08/30	2021/08/30	Archana Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7548342	2021/08/30	2021/08/30	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7547628	N/A	2021/08/30	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7547552	2021/08/28	2021/08/29	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	7548460	2021/08/30	2021/08/30	Viviana Canzonieri
Moisture	BAL	7547574	N/A	2021/08/28	Prgya Panchal

BV Labs ID:	QKY991
Sample ID:	IG_BH06_BASELINE_PARKING
Matrix:	Soil

Collected: 2021/08/08 Shipped: Received: 2021/08/20

Collected: 2021/08/08

Received: 2021/08/20

Shipped:

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7548424	2021/08/30	2021/08/30	Archana Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7548342	2021/08/30	2021/08/30	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7547628	N/A	2021/08/30	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7547552	2021/08/28	2021/08/29	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	7548460	2021/08/30	2021/08/30	Viviana Canzonieri
Moisture	BAL	7547574	N/A	2021/08/28	Prgya Panchal

BV Labs ID:	QKY991 Dup
Sample ID:	IG_BH06_BASELINE_PARKING
Matrix:	Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7547628	N/A	2021/08/30	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7547552	2021/08/28	2021/08/29	Anna Stuglik-Rolland

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TEST SUMMARY

QKY992
IG_BH06_BASELINE_MW1
Soil

Collected: 2021/08/12 Shipped: Received: 2021/08/20

Collected: 2021/08/12

Received: 2021/08/20

Shipped:

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7548424	2021/08/30	2021/08/30	Archana Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7548342	2021/08/30	2021/08/30	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7547628	N/A	2021/08/30	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7547552	2021/08/28	2021/08/29	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	7548460	2021/08/30	2021/08/30	Viviana Canzonieri
Moisture	BAL	7547574	N/A	2021/08/28	Prgya Panchal

BV Labs ID: QKY993 Sample ID: IG_BH06_BASELINE_MW2 Matrix: Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7548424	2021/08/30	2021/08/30	Archana Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7548342	2021/08/30	2021/08/30	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7547628	N/A	2021/08/30	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7547552	2021/08/28	2021/08/29	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	7548460	2021/08/30	2021/08/30	Viviana Canzonieri
Moisture	BAL	7547574	N/A	2021/08/28	Prgya Panchal

BV Labs ID:	QKY994
Sample ID:	IG_BH06_BASELINE_MW3
Matrix:	Soil

Collected: 2021/08/12 Shipped: Received: 2021/08/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7548424	2021/08/30	2021/08/30	Archana Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7548342	2021/08/30	2021/08/30	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7547628	N/A	2021/08/30	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7547552	2021/08/28	2021/08/29	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	7548460	2021/08/30	2021/08/30	Viviana Canzonieri
Moisture	BAL	7547574	N/A	2021/08/28	Prgya Panchal

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GENERAL COMMENTS

Each temperature is t	he average of up to thr	ree cooler temperatures taken at receipt				
Package 1	24.7°C					
Sample QKY992 [IG_BH06_BASELINE_MW1] : F1 BTEX analysis : Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency						
Sample QKY993 [IG_F preserved vial. Addition	H06_BASELINE_MW2]	: F1 BTEX analysis : Soil weight exceeds the protocol specification of approximately 5g in the field ed to the vial to ensure extraction efficiency				
Sample QKY994 [IG_BH06_BASELINE_MW3] : F1 BTEX analysis : Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency						
Results relate only to	Results relate only to the items tested.					



QUALITY ASSURANCE REPORT

Golder Associates Ltd Client Project #: 20253946 Site Location: IGNACE Your P.O. #: 20253946-6011-10 Sampler Initials: FA

			Matrix	Spike	SPIKED BLANK		IK Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7547552	o-Terphenyl	2021/08/29	77	60 - 130	83	60 - 130	89	%		
7547628	1,4-Difluorobenzene	2021/08/29	97	60 - 140	100	60 - 140	108	%		
7547628	4-Bromofluorobenzene	2021/08/29	102	60 - 140	99	60 - 140	86	%		
7547628	D10-o-Xylene	2021/08/29	96	60 - 140	87	60 - 140	88	%		
7547628	D4-1,2-Dichloroethane	2021/08/29	96	60 - 140	96	60 - 140	99	%		
7547552	F2 (C10-C16 Hydrocarbons)	2021/08/29	83	50 - 130	86	80 - 120	<10	ug/g	NC	30
7547552	F3 (C16-C34 Hydrocarbons)	2021/08/29	91	50 - 130	85	80 - 120	<50	ug/g	NC	30
7547552	F4 (C34-C50 Hydrocarbons)	2021/08/29	81	50 - 130	86	80 - 120	<50	ug/g	NC	30
7547574	Moisture	2021/08/28							13	20
7547628	Benzene	2021/08/30	111	50 - 140	103	50 - 140	<0.020	ug/g	NC	50
7547628	Ethylbenzene	2021/08/30	125	50 - 140	115	50 - 140	<0.020	ug/g	NC	50
7547628	F1 (C6-C10) - BTEX	2021/08/30					<10	ug/g	NC	30
7547628	F1 (C6-C10)	2021/08/30	96	60 - 140	91	80 - 120	<10	ug/g	NC	30
7547628	o-Xylene	2021/08/30	121	50 - 140	110	50 - 140	<0.020	ug/g	NC	50
7547628	p+m-Xylene	2021/08/30	118	50 - 140	107	50 - 140	<0.040	ug/g	NC	50
7547628	Toluene	2021/08/30	106	50 - 140	98	50 - 140	<0.020	ug/g	NC	50
7547628	Total Xylenes	2021/08/30					<0.040	ug/g	NC	50
7548342	Chromium (VI)	2021/08/30	87	70 - 130	94	80 - 120	<0.18	ug/g	NC	35
7548424	Hot Water Ext. Boron (B)	2021/08/30	102	75 - 125	100	75 - 125	<0.050	ug/g	8.7	40
7548460	Acid Extractable Antimony (Sb)	2021/08/30	90	75 - 125	103	80 - 120	<0.20	ug/g	NC	30
7548460	Acid Extractable Arsenic (As)	2021/08/30	96	75 - 125	100	80 - 120	<1.0	ug/g	8.8	30
7548460	Acid Extractable Barium (Ba)	2021/08/30	NC	75 - 125	107	80 - 120	<0.50	ug/g	0.73	30
7548460	Acid Extractable Beryllium (Be)	2021/08/30	99	75 - 125	101	80 - 120	<0.20	ug/g	1.1	30
7548460	Acid Extractable Boron (B)	2021/08/30	86	75 - 125	97	80 - 120	<5.0	ug/g	5.3	30
7548460	Acid Extractable Cadmium (Cd)	2021/08/30	101	75 - 125	99	80 - 120	<0.10	ug/g	NC	30
7548460	Acid Extractable Chromium (Cr)	2021/08/30	NC	75 - 125	103	80 - 120	<1.0	ug/g	0.88	30
7548460	Acid Extractable Cobalt (Co)	2021/08/30	99	75 - 125	100	80 - 120	<0.10	ug/g	0.96	30
7548460	Acid Extractable Copper (Cu)	2021/08/30	96	75 - 125	101	80 - 120	<0.50	ug/g	0.081	30
7548460	Acid Extractable Lead (Pb)	2021/08/30	99	75 - 125	101	80 - 120	<1.0	ug/g	2.1	30
7548460	Acid Extractable Mercury (Hg)	2021/08/30	87	75 - 125	95	80 - 120	<0.050	ug/g	NC	30

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Bureau Veritas Laboratories 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com



QUALITY ASSURANCE REPORT(CONT'D)

Golder Associates Ltd Client Project #: 20253946 Site Location: IGNACE Your P.O. #: 20253946-6011-10 Sampler Initials: FA

			Matrix	Matrix Spike		BLANK	Method E	Blank	RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7548460	Acid Extractable Molybdenum (Mo)	2021/08/30	99	75 - 125	100	80 - 120	<0.50	ug/g	NC	30
7548460	Acid Extractable Nickel (Ni)	2021/08/30	98	75 - 125	100	80 - 120	<0.50	ug/g	2.4	30
7548460	Acid Extractable Selenium (Se)	2021/08/30	101	75 - 125	103	80 - 120	<0.50	ug/g	NC	30
7548460	Acid Extractable Silver (Ag)	2021/08/30	98	75 - 125	99	80 - 120	<0.20	ug/g	NC	30
7548460	Acid Extractable Thallium (TI)	2021/08/30	98	75 - 125	98	80 - 120	<0.050	ug/g	1.7	30
7548460	Acid Extractable Uranium (U)	2021/08/30	101	75 - 125	101	80 - 120	<0.050	ug/g	7.5	30
7548460	Acid Extractable Vanadium (V)	2021/08/30	NC	75 - 125	104	80 - 120	<5.0	ug/g	2.8	30
7548460	Acid Extractable Zinc (Zn)	2021/08/30	NC	75 - 125	96	80 - 120	<5.0	ug/g	0.62	30

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 spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

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



VALIDATION SIGNATURE PAGE

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



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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

	· ·		, , , , , , , , , , , , , , , , , , ,			
	67401 Phone CAM	Campobello Road, Mississauga, Ontario LSN 2L e: 905-817-5700 Fax: 905-817-5779 Toll F FCD-01191/6 Report Informat	8 ree: 800-563-6266 ree: 100-563-6266 ree: 100-563-6260 ree: 100-563-6266 ree: 100-566-5626 ree: 100-566-566-566-566-566-566-566-566-566-5	CHAIN OF CUSTODY REC	CORD Page 1	
	Company Name: Golder Associates	Company Name: Golder Ass	sociates	Quotation #: NA'	X Regular TAT (S-7-days) Most analyses	
	Contact Name: George Schneider	Contact Name; George Sci	nneider	P.O. #/ AFE#: 20253946-6011-10	PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS	
•	Address: 210 Sheldon Drive, Cambridge	Address: 210 Sheldo	on Drive, Cambridge	Project #: 20253946	- Rush TAT (Surcharges will be applied)	
	Ontario, Canada N1T 1A8	Ontario, Ca	anada N1T 1A8	Site Location: Ignace	1 Day 2 Days 3-4 Days	
	Phone: 519 620 1222 Fax:	Phone: 519 620 1222	Fax:	Site #: IG_BH06		A 81 11 1
	Email: <u>george_schneider@golder.com</u>	Email: george schneider@gol	dericom	Site Location Province: Ontario	Date Required:	
	MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUI	MAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU	I VERITAS DRINKING WATER CHAIN OF CUSTODY	Sampled By: Farid Ansari	Rush Confirmation #:	
	Table 1 X Res/Park Med/Fine	CCME Sanitary Sewer Bylaw	+ + + + + + + + + + + + + + + + + + + +	Analysis Requested	LABORATORY USE ONLY	
	I able 2 Ind/Lomm X Loarse	MISA Storm Sewer Bylaw			Y / N COOLER TEMPERATURES	
	Table ,	Other (Specify)			Present Intact	
	FOR RSC (PLEASE CIRCLE) O / N	REG 558 (MIN. 3 DAY TAT REQUIRED)	8		NN 24/25/25	
		REG 406 Table	dage dage		I I I I I I I I I I I I I I I I I I I	
	Include Criteria on Certificate of Analysis: Ves	Mar Constant Street Str	LERS Su tais Po		T ANA	
	SAMPLES MUST BE REPT COOL (< 10 °C) FROM TIME O	F SAMPLING UNTIL DELIVERY TO BUREAU VER	PHCs F PHCs F S3 Me		2 COOLING MEDIA PRESENT: (Y) / N	
	SAMPLE IDENTIFICATION	DATE SAMPLED SAMPLED MATRO (YYYY/MM/DD) COULARAL	OF OC OF A		COMMENTS	
	1 IG_BH06_Baseline_Drill	2021-08-08 12:00 Sand, so	me 4 X X X			
	2 IG_BH06_Baseline_Refueling	2021-08-08 12:30 Sand, so	me 4 X X X			
	3 IG_BH06_Baseline_Parking	2021-08-08 13:00 Sand, so	me 4 X X X			
	4 IG_BH06_Baseline_MW1	2021-08-12 12:30 Sand, so	me 3 X X X			- 1 A - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	5 IG_BH06 Baseline MW2	2021-08-12 13:00 Sand, so	me 3 X X X			· · · ·
	6 IG_BH06_Baseline_MW3	2021-08-12 13:30 Sand, soil	me 3 X X X	3		· ·
	7	gravel				· .
	8					
	9					4
	10				20-449-21-09-42	
	R /	DATE: (YYYY/MM/DD) TIME: (HH:MM)	RECEIVED BY: (Signature/Print)	DATE: (YYYY/MM/DD) TIME	E (HH-MM) Ema Gitai	
*	stats	2021-08-13 12:30	MANOD FOR KAUR	2021/08/20 0	9:42 C1N7710	R
	A SALES AND A SALES AND A SALES	1 (a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b				
		energy (and	1	coacum melfe	ol ice Pack	



6740 Campobello Road, Mississauga, Ontario L5N 2L8 Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266 CAM FCD-01191/6

VERITAS	CAM F	CD-01191/6					_		_		CH	AI	N OF C	USTO	DDY	RECO	ORD		Page 1 of 1
	Invoice Information		Repo	ort Information (i	f differ	rs fror	m inv	oice)				Pro	oject Informa	ation (w	/here ap	plicable	}		Turnaround Time (TAT) Required
Company Name:	Golder Associates		Company Name:	Golder Associat	tes						Quotation #	e ,	NA		_				X Regular TAT (5-7 days) Most analyses
Contact Name:	George Schneider		Contact Name:	George Schneid	ler						P.O. #/ AFE	#:	20253946-60	011-10	_				PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS
Address:	210 Sheldon Drive, Cambridge		Address:	210 Sheldon Dri	ive, Ca	ambrid	lge				Project #:		20253946						Rush TAT (Surcharges will be applied)
	Ontario, Canada N1T 1A8			Ontario, Canada	a N1T 2	1A8					Site Locatio	in:	Ignace						1 Day 2 Days 3-4 Days
Phone: 519	620 1222 Fax:		Phone: 519 620 17	222		Fax:					Site #:		IG_BH06						
Email: george	e_schneider@golder.com		Email: <u>george sc</u>	hneider@golder.c	:om						Site Locatio	in Pr	ovince:C	Ontario					Date Required:
MOE REGULATED D	RINKING WATER OR WATER INTENDED FOR HU	MAN CONSUMPTI	ON MUST BE SUBMITTED	ON THE BUREAU VERI	TAS DR	RINKING	WATE	R CHAIN	OF CUS	STODY	Sampled By	_	Farid Ansari						Rush Confirmation #:
	Regulation 153		Other Regulation	15	L	_	_	_	_	-	Analysi	s Re	quested	_		_			LABORATORY USE ONLY
Table 1	X Res/Park Med/ Fine Ind/Lomm X Coarse Agri/ Utner EASE CIRCLE) O / N	CCME MISA PWQU Other (SJ REG 558 REG 406	Sanitary Sa Storm Sew Kegion pecity) (MIN. 3 DAY TAT REI Table	ewer Bylaw ver Bylaw QUIRED)	BMITTED			kage										125	CUSTODY SEAL Y / N Y / N COOLER TEMPERATURES Present Intact N N 24 25
Include Criteria o	n Certificate of Analysis: Yes				s sur			Is Pac										ANALY	
SAMPLES MUST	BE KEPT COOL (< 10 °C) FROM TIME C	OF SAMPLING	UNTIL DELIVERY TO	BUREAU VERITAS	TAINER	ICS F1	4	8 Meta										NOT	
	SAMPLE IDENTIFICATION	DATE S (YYYY/	AMPLED SAMPLED MM/DD) (HH:MM)	MATRIX	# OF CON	BTEX/ PI-	PHCs F2-F	0.Reg 15										ногр- рс	COOLING MEDIA PRESENT: (Y) / N COMMENTS
1	IG_BH06_Baseline_Drill	2021	-08-08 12:00	Sand, some gravel	4	x	x	х	T	Τ									
2 IG	_BH06_Baseline_Refueling	2021	-08-08 12:30	Sand, some gravel	4	x	х	х											
3 10	G_BH06_Baseline_Parking	2021	-08-08 13:00	Sand, some gravel	4	x	х	х											
4	IG_BH06_Baseline_MW1	2021	-08-12 12:30	Sand, some gravel	3	x	х	х											
5	IG_BH06_Baseline_MW2	2021	-08-12 13:00	Sand, some gravel	3	х	х	х									1	2	
6	IG_BH06_Baseline_MW3	2021	-08-12 13:30	Sand, some gravel	3	х	х	x											20-Aug-21 08:42
7																		Em	a Gitei
8																-	1		110 (0100Ť0) 0 () 01 1 1 010 —
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stock	Shady Hashem	2021-08-1	13 12:3	io <i>[[[6]</i>	Q	Y	2	М	av	reli	y	1	orelo	81	20		08:	42	

Golder Associates Ltd Client Project #: 20253946 Project name: IGNACE Client ID: IG_BH06_BASELINE_DRILL

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Golder Associates Ltd Client Project #: 20253946 Project name: IGNACE Client ID: IG_BH06_BASELINE_REFUELING

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Golder Associates Ltd Client Project #: 20253946 Project name: IGNACE Client ID: IG_BH06_BASELINE_PARKING

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Golder Associates Ltd Client Project #: 20253946 Project name: IGNACE Client ID: IG_BH06_BASELINE_PARKING

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



APPENDIX B

IG_BH06 Site Setup Photos





Photo 1 - Installation of the perimeter fencing around IG_BH06.



Photo 2 - Lockable site gate at IG_BH06 and safety signs.





Photo 3 - Installation of drilling area fencing.



Photo 4 - NWMO/WLON site and site washroom trailers.





Photo 5 - Golder office trailer.



Photo 6 - WP02 core storage seacan – exterior.





Photo 7 - WP03 core logging seacan – exterior.



Photo 8 - WP02 core storage seacan - interior.





Photo 9 - WP03 core logging seacan - interior.



Photo 10 - Drill pad secondary containment system installation.





Photo 11 - Setting up the drilling rig, AMC SRU, and wastewater and fluorescein tanks seacan.



Photo 12 - Drilling rig by Discovery Drill Manufacturer - EF-100.





Photo 13 - Two 28,350 litre baker tanks.



Photo 14 - Power generator, 2 fuel tanks in secondary containment and spill kits.





Photo 15 - Trenching and ABS conduit installation.



Photo 16 - Light tower in a secondary containment and spill kit.





Photo 17 - Light tower in secondary containment and spill kit.



Photo 18 - Garbage and recycling bins covered with impermeable liner.



APPENDIX C

IG_BH06 Aerial View of As-Built Site Set-up



As-Built Site Facilities Layout - IG_BH06



Site Facilities Legend – IG_BH06

1	Light Towers- 4-kW - Wacker Neuson Metrolite LTV4	13	Tailgate Meeting Area
2	Power Generator – 56 kW - MQ WhisperWatt 70	14	Site Washroom Trailer
3	Fuel Tank - 4,500 L double-walled fuel storage tank	15	Drill Cuttings Storage - drilli bags that are stored in seco
4	Golder's Site Trailer - 40' x 10' mobile office trailer	16	Drill Rig - Skid Mount rotary Drill Manufacturer Ltd.
5	NWMO/WLON Site Office - 24' x 10' mobile office trailer	17	Centrifuge Unit - Australian Unit
6	Rodren Drilling Site Office - 24' x 10' mobile office trailer	18	Wastewater, and Fluorescei
7	WP03 Core Logging and WP02 Core Storage Seacans – 40' x 8' modified shipping containers	19	Core Extraction Shack
8	General Storage Seacan - 20' x 8' seacan	20	Rod Sloop
9	Water Tanks - two 28,350 litre Baker tanks	21	Silt Fence
10	Solid Waste Bins - one garbage bin and one recycling bin	22	Parking Lot with room for 6
11	Site Security - One lockable gate	Ð	IG_BH06 Location
12	Security Fence - ~ 190 linear metres of 2.5 m tall fence (silver) and ~43.9 linear meters of 2.9m tall fence (orange)		

ng cuttings stored in 1m ³ tote ndary containment
drill model EF-75 by Discovery
Mud Company Solids Removal
n Tanks Seacan - 20' x 8' seacan
pickup trucks

APPENDIX D

IG_BH06 Site Commissioning Checklist



BOREHOLE: IG_BH06

ltem No.	ltem	General Requirements	Date Commissioned	Checked by	Approved by	Comments
1.0	SITE INSPECTION					
1.1	Fill Material / Granular Surface	The site's granular surface is stable and unlikely to produce excessive dust during dry / hot weather or excessively slippery surfaces during wet / cold weather	11 August 2021	FA	КМ	
1.2	Litter and Debris	There is no visible litter or debris observed at the site	11 August 2021	FA	KM	
1.3	Silt and Snow Fencing	Silt and snow fencings are in place and are functioning as intended	19 August 2021	РВ	КМ	Initially installed silt fence was damaged, the silt fence was repaired by MCL on 19 August 2021
1.4	General Site Levelling	Site generally levelled to allow placement of surface facilities and safe movement between facilities	11 August 2021	FA	КМ	
1.4	General Site Drainage	Site grading allows for adequate drainage without ponding	11 August 2021	FA	KM	
2.0	FENCING					
2.1	Silt Fencing	Silt fencing around site perimeter, properly installed and in good order	05 September 2021	SH	KM	
2.2	Snow Fencing	Snow fencing around site perimeter, properly installed and in good order	N/A	N/A	N/A	No snow fencing
2.3	Modulok Security Fencing	Security fencing around required areas, drill area separated, properly installed and in good order	05 September 2021	SH	КМ	
3.0	OFFICE TRAILERS					
3.1	Trailer 1 (Golder)	Trailer correctly positioned, blocked and levelled, stairs installed, furnishings supplied meet requirements, heated	05 September 2021	SH	КМ	
3.2	Trailer 2 (NWMO)	Trailer correctly positioned, blocked and levelled, stairs installed, furnishings supplied meet requirements, heated	07 September 2021	SH	КМ	
3.3	Trailer 3 (Rodren)	Trailer correctly positioned, blocked and levelled, stairs installed, furnishings supplied meet requirements, heated	05 September 2021	SH	KM	
4.0	CORE LOGGING AND STORAGE					

ltem No.	Item	General Requirements	Date Commissioned	Checked by	Approved by	Comments
4.1	Core Logging Seacan	Seacan correctly positioned, blocked and levelled, interior meets requirements, heated	05 September 2021	SH	КМ	
4.2	Core Logging Table	Core logging table meets design specifications, correctly installed	06 September 2021	SH	KM	
4.3	Camera Racking	Camera tracking correctly installed, meet performance criteria	06 September 2021	SH	KM	
4.4	Core Storage Seacan	Seacan correctly positioned, blocked and levelled, interior meets requirements, heated	05 September 2021	SH	КМ	
4.5	Commercial Refrigerator	Refrigerator installed correctly, operating correctly, provides adequate storage capacity	05 September 2021	SH	КМ	
5.0	COMMUNICATIONS					
5.1	Cellular Phone / Emergency System	Phone is installed and functioning correctly	05 September 2021	SH	КМ	
5.2	Cellular Internet	Cellular Internet Wi-Fi network is installed and functioning correctly, reception is adequate in all required areas of the site	05 September 2021	SH	КМ	Internet is slow sometimes
6.0	GENERATORS					
6.1	Generator	Generator installed and functioning correctly, installation completed by an electrician, and certified by electrician to meet codes	05 September 2021	SH	КМ	
6.2	Secondary Containment	Secondary spill containment in place beneath fuel tank, correctly installed, of adequate capacity	05 September 2021	SH	КМ	
6.3	Power Distribution	Power distribution panel installed and functioning correctly, installation completed by an electrician, and certified by electrician to meet codes	05 September 2021	SH	КМ	
7.0	LIGHT TOWERS					
7.1	Light Tower	All light towers installed and functioning correctly, installation completed by an electrician, and certified by electrician to meet codes	05 September 2021	SH	КМ	
7.2	Secondary Containment	All secondary spill containment in place beneath fuel tank, correctly installed, of adequate capacity	05 September 2021	SH	КМ	

ltem No.	ltem	General Requirements	Date Commissioned	Checked by	Approved by	Comments
8.0	FUEL STORAGE					
8.1	Fuel Tank	Fuel tank correctly installed, blocked and levelled	05 September 2021	SH	КМ	
8.2	Secondary Containment	Secondary spill containment in place beneath fuel tank, correctly installed, of adequate capacity	05 September 2021	SH	КМ	
8.3	Protective Barricade	Tank is adequately protected from inadvertent collision with mobile equipment	05 September 2021	SH	КМ	
9.0	SANITARY FACILITIES					
9.1	Washroom	Washroom correctly positioned, blocked and levelled, stairs installed, toilets and sinks functioning correctly, heated	05 September 2021	SH	КМ	
9.2	Fresh Water Tank	Water tank building correctly positioned, blocked and levelled, correctly connected to the washroom building, heated	05 September 2021	SH	КМ	
9.3	Septic Tank	Septic tank building correctly positioned, blocked and levelled, correctly connected to the washroom building, heated	05 September 2021	SH	КМ	
10.0	GARBAGE BINS					
10.1	Garbage Bin	Bin placed in suitable location, secure lid	05 September 2021	SH	KM	
10.2	Recycling Bin	Bin placed in suitable location, secure lid	05 September 2021	SH	KM	
11.0	SPILL KITS					
11.1	Drill Fluid Spill Kit	Spill kit components present, size and type meets requirements	05 September 2021	SH	KM	
11.2	Fuel Spill Kit	Spill kit components present, size and type meets requirements	05 September 2021	SH	KM	
11.3	General (Chemical) Spill Kit	Spill kit components present, size and type meets requirements	05 September 2021	SH	KM	

Checked by:

Shady Hashem

if the

Approved by:

Date: 07 September 2021

Date: 07 September 2021

Kyle Matter

APPENDIX E

IG_BH06 ESA Certificate of Acceptance





400 Sheldon Dr, Unit 1, Cambridge, ON, N1T 2H9 Toll Free Tel: 1-877-372-7233 Toll Free Fax: 1-800-667-4278 esa.cambridge@electricalsafety.on.ca

Certificate of Acceptance

FEDIUK ELECTRIC INC

SITE 124 BOX 6 RR4 DRYDEN ON P8N 0A2

Notice Date:	November 25, 2021
Notification Number:	17245780
Customer ID:	105525
Licence Number:	7013430

Telephone: (807)221-8110 Fax: Email:

RE

BORE HOLE 6

BORE HOLE 6 HWY 17 AND TOWER RD KENORA, UNORGANIZED ON

We hereby certify that the electrical installation at the aforementioned address, and as described herein, is accepted in accordance with the requirements of the Ontario Electrical Safety Code.

Work Item	Description	Quantity
1	CONSTRUCTION TRAILER	5
2	OUTLETS AND OTHER DEVICES Receptacles 3.000	3
3	LV DISTRIBUTION EQUIPMENT - 200 AMPS Panelboards 1.000, 200 AMPS	1

The Electrical Safety Authority (ESA) operates as a delegated authority on behalf of the provincial government in accordance with Part VIII, section 113 of the Electricity Act, 1998, S.O. 1998, c.15, Sched. A.(the Act), and the Safety and Consumer Statutes Administration Act, 1996, S.O. 1996, c.19. ESA's mandate is to administer the Act and corresponding Regulations on behalf of the Province of Ontario.

ESA is a not-for-profit corporation under the direction and control of a Board of Directors and is accountable to the Ministry of Government and Consumer Services in accordance with an Administrative Agreement.



golder.com