



Turtle Technologies Inc.

Turtle Technologies Inc. Building Retrofit Corner Brook, Newfoundland and Labrador

Environmental Assessment Registration Package

September 24, 2018

Vendor Name and Address

Turtle Technologies Inc.
1 North Shore Highway, Corner Brook, NL
(Mailing Address: P.O. Box 1003, Corner Brook, NL A2H 6J3)
www.turtletech.ca

Signing Authority

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TABLE OF CONTENTS

1. NAME OF UNDERTAKING	4
1.1. PROPONENT	4
1.1.1. Name of Corporate Body	4
1.1.2. Address	4
1.1.3. Chief Executive Officer	4
1.1.4. Principal Contact Person for purposes of environmental assessment.....	4
2. THE UNDERTAKING	4
2.1. Name of the Undertaking.....	4
2.2. Purpose/Rationale/Need for the Undertaking	4
3. DESCRIPTION OF THE UNDERTAKING	5
3.1. Geographical Location.....	5
3.2. Physical Features	8
3.2.1. Proposed Undertaking.....	10
3.2.2. Existing Biophysical Setting.....	10
3.3. Construction (if applicable)	10
3.3.1. Site Development.....	10
3.3.2. Sources of Pollution.....	10
3.3.3. Resource Conflicts/Mitigation Measures.....	11
3.4. Operation.....	11
3.4.1. Cannabis Production	12
3.4.2. Sources of Pollution.....	12
3.4.3. Resource Conflict/Mitigative Measures	14
3.5. Occupations.....	14
3.5.1. Gender Equality	15
3.6. Project Related Documents.....	15
3.6.1. Reports	16
4. APPROVAL OF THE UNDERTAKING	17
5. SCHEDULE.....	17
6. FUNDING	17

Attachments

APPENDIX A - TOPOGRAPHIC MAP AND USE ZONE TABLE

APPENDIX B - LAND SURVEY

APPENDIX C - AERIAL PHOTO OF LAND

APPENDIX D - BUILDING ARCHITECTURAL DRAWING

APPENDIX E - DESTRUCTION OF CANNABIS WASTE

APPENDIX F - HEALTH CANADA APPROVED PESTICIDES

Turtle Technologies Inc. - BeeHighVE Inc.: Production Facility Retrofit Project – 1 North Shore Highway, Corner Brook, NL (Mailing Address: P.O. Box 1003, Corner Brook, NL A2H 6J3)

1. NAME OF UNDERTAKING

Turtle Technologies Inc. Corner Brook, NL Building Retrofit for lease to BeeHigh Vital Elements Inc. (BeeHighVE Inc.)

1.1. PROPONENT

1.1.1. Name of Corporate Body

Turtle Technologies Inc.

1.1.2. Address

1 North Shore Highway, Corner Brook NL A2H 6B9

1.1.3. Chief Executive Officer

- Name: Rita Hall
- Official Title: President and Owner
- Address: 12 River Grove, Humber Valley Resort, NL A2H 0E1
- Telephone No: 709-660-8201

1.1.4. Principal Contact Person for purposes of environmental assessment

- Name: Rita Hall
- Official Title: President and Owner
- Address: 12 River Grove, Humber Valley Resort, NL A2H 0E1
- Telephone No.: 709-660-8201

2. THE UNDERTAKING

2.1. Name of the Undertaking

BeeHighVE Inc. Cannabis Production Facility

2.2. Purpose/Rationale/Need for the Undertaking

The purpose of the undertaking is to establish a highly secure, licensed cannabis

production facility in the city of Corner Brook, NL. BeeHighVE will sell cannabis products in the province of NL, across the country and around the world (as legislation permits).

BeeHighVE Inc., a company founded by Directors Ms. Rita Hall and Mr. Mark German, is a Late Stage applicant under the ACMPR and hopes to become a Licensed Producer of Cannabis in October 2018. BeeHighVE submitted an evidence video to Health Canada in Mid-September 2018 and anticipates a License to Cultivate Medical Marijuana over the upcoming weeks.

The building and property is 100% owned by Turtle Technologies Inc. and Rita Hall is 100% owner of Turtle Technologies Inc. BeeHighVE has a long-term lease with Turtle Technologies Inc. and an option to purchase the building at any time.

The building has been fully retrofitted (as a result of City approvals and Health Canada's "Letter of Readiness" to BeeHighVE Inc). This was accomplished before regulations came into effect regarding the Environmental Assessment Registration application requirement for medical marijuana facilities was put in place.

The purpose of this EA application is to meet with new provincial regulations around cannabis production.

3. DESCRIPTION OF THE UNDERTAKING

Turtle Technologies Inc. owns a 9000 square foot building at 1 North Shore Highway, Corner Brook, NL, and the building has been retrofitted with the intention of leasing the property to BeeHighVE Inc. for use as a Medical Marijuana Production Facility. The building resides on close to six (6) acres of land that is currently zoned Rural but was previously zoned Industrial. Rural zoning is for Agricultural use and there is a discretionary use for General Industry (GI) under this zoning. The City of Corner Brook, NL has specified that Rural zoning is the proper zoning, in this City, for the production of medical marijuana. The property zoning meets Health Canada's regulations for distance away from residential areas, Schools and places where children/youth frequent (500 meters).

1 North Shore Highway was determined by the City to be a good location for production of medical marijuana. Additionally, Health Canada has already approved the zoning.

Once awarded proper licenses, BeeHighVE Inc. intends to grow and sell legal cannabis to the medical and recreational markets.

3.1. Geographical Location

The site is at 1 North Shore Highway, Corner Brook NL. ***It is zoned Rural which, in the City of Corner Brook, is intended for Agricultural use and there is a discretionary use under this zone for General Industrial (GI) which includes Agricultural processing and storage.*** See attached survey for boundaries/location within the City of Corner Brook. Please refer to Appendix A.2 - Use Zone Table 158. Rural

This location was chosen because it meets the requirements for our business purpose – legal production of Cannabis under Health Canada’s Access to Cannabis for Medical Purposes Regulations (ACMPR). See Topographic Map attached as Appendix A.1.

No other site was seriously considered and rejected because other available sites were not appropriate for our business. The City helped in finding an appropriate location that was suitable for the production of medical marijuana. The location is 500 meters away from other businesses and residences and places where children frequent. The zoning has already been approved by Health Canada.

The building is a highly secure facility with a perimeter that is completely surrounded by video cameras and is enclosed by an 8-foot fence with motion detection and three strands of barbed wire around the top.

The Land Coordinates for the property are North 5,426,169.176 and East 349,887.325.

The property runs by the Westerly limit of Route 440 thirty decimal four eight (30.48) meters wide along a curve in a clockwise direction having a radius of one thousand fourteen decimal eight nine eight (1014.898) meters wide, to a point which is distant one hundred twenty-one decimal nine three nine (121.939) meters, as measured on a bearing of south four degrees twenty-three minutes thirty-three seconds west (S4° 23’ 33” W);

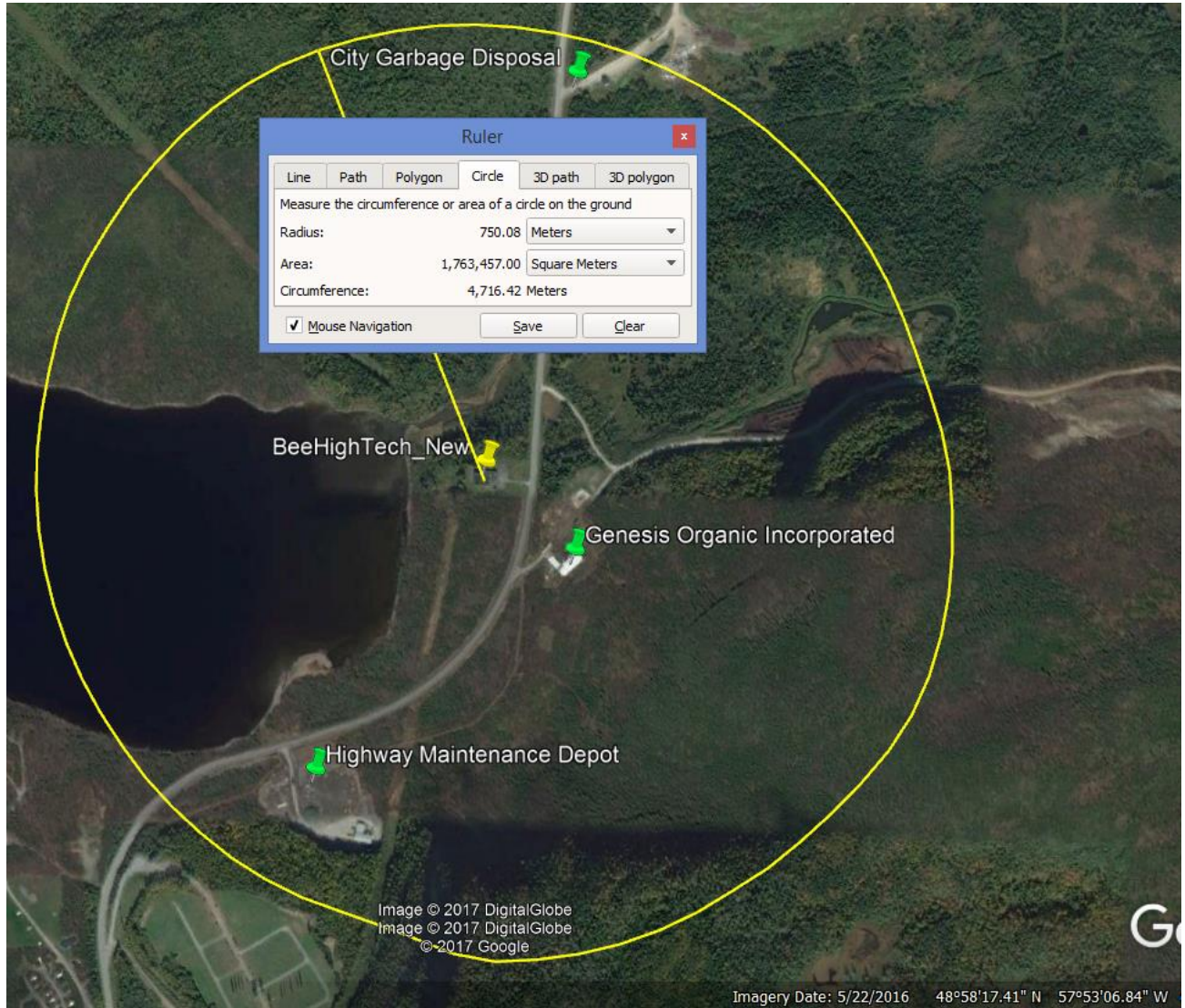
It borders Crown Land, north eighty-six degrees five minutes thirty-five seconds West (N 86° 05’ 35” W) one hundred eighty decimal three seven four (180.374) meters to a survey marker;

The property borders Crown Land, extending along the Easterly shoreline of Waters of Wild Cove, north three degrees zero minutes forty-five seconds east (N 3° 00’ 45” E) one hundred twenty-one decimal nine five zero (121.950) meters;

The property borders Crown Land, South eighty-six degrees five minutes thirty-five seconds East (S 86° 05’ 35” E) one hundred eighty-three decimal three one zero (183.310) meters; more or less, to the point of beginning and being more particularly shown and delineated on the attached plan. See Land survey attached as Appendix A for further details.

We have attached Appendix A: Topographic Map and Use Zone Table; Appendix B: Land Survey; Appendix C: Aerial Photo of the land, and Appendix D: Architectural drawing. Rural Zoning in the City of Corner Brook is used for Agricultural purposes and there is a Discretionary use for General Industrial (GI) which includes Agriculture Processing and Storage. The site is situated directly off the North Shore Highway (Highway 440) and in close proximity to the Trans Canada Highway.

Aerial Photo



3.2. Physical Features

The building is almost 9000 square feet and it resides on almost six (6) acres of land (Turtle Technologies Inc. owns the entire property including the area identified from the Reid Lot Line to the road in front of the property). This building has a brick exterior and a concrete interior. There is a transmission line (as per the site survey) at the back of our property. There is a body of water - Wild Cove Pond, at the back edge of the building property. The only building site within 500 meters of the building is Genesis Organic Inc. (almost 200 meters away). There are no other buildings or large structures within 500 meters of the building. Please refer to Appendix C – Aerial Photo.

The building is surrounded by an 8-foot fence with three strands of barbed wire around the top. There are 23 security cameras surrounding the perimeter of the building on the outside. There are 31 cameras on the interior of the building – including at least one in every room covering every area of each room.

In addition to the fence and exterior cameras, a Fence Detection System has been installed. A continuous wire that detects vibrations has been installed throughout the entire fence. Any vibration/motion will trigger an associated exterior camera to record an event. If a significant vibration is detected or two small vibrations, an alarm will also be triggered. The view will immediately come up in the Security Desk software and an event sent to the monitoring station.

The Security Guard on duty or the monitoring station (monitoring has already been contracted) will see the section of fence in alarm state and be able to determine if additional action is required.

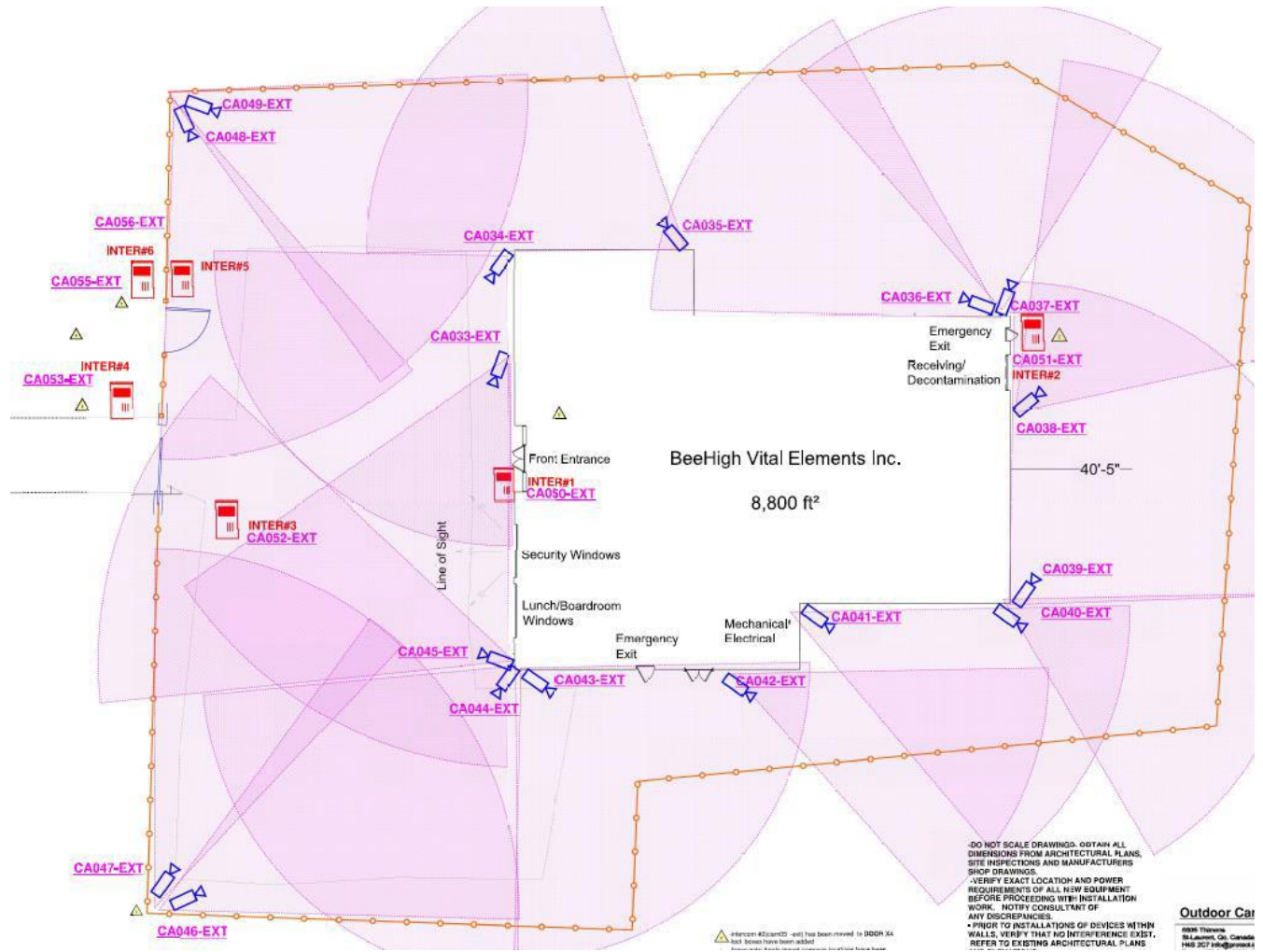
The building was originally built to withstand bombs. The entire production area is enclosed by concrete walls, ceilings and floors that are 10 to 14 inches thick.

Each door, to and within the production area, requires 2 factor authentication – a card swipe and an entry code is required by each person upon entry into each room, and a card swipe is required upon exit. Each person has a unique pass code. The security system software always records the comings and goings of every person in the facility.

There is a security office at the front of the building and a security person monitors all cameras throughout the work day.

The doors to the building are all Steel and all doors and locks meet or exceed requirements under the Physical Security Directive and ACMPR Regulations.

Exterior Security Features



3.2.1. Proposed Undertaking

BeeHighVE's production facility is in a highly secure building that was built to withstand bombs. The building is almost 9000 square feet and this is the only area that we are using for the undertaking. The growing space is 2800 square feet and within the physical production space, there are eleven rooms where cannabis is present and two bathrooms within this space. Outside of the secure production area, there are two additional bathrooms, a janitor's room, a mechanical electrical room, an office, and a security room. There is no other building on the property.

We do not have an artist's conceptual drawing however, we have provided pictures of the interior and exterior of the building. The renovation has now been completed. We are not currently expanding the existing building nor impacting the environment in any way.

Refer to Appendix D – Architectural drawing.

3.2.2. Existing Biophysical Setting

The almost 9000 square foot facility resides on nearly six acres of land that is zoned for Agriculture purposes with a discretionary use for General Industrial (Agriculture processing and storage) and it is surrounded by unused Crown Land on both the left-hand and the right-hand side. Wild Cove Pond runs across the back of the property and is approximately 300 feet away from the back fence.

There will be no potential impact on the environment within the area of the facility. We have already completed the retrofit of the building. Renovation of the facility was accomplished in adherence with municipal and provincial bylaws.

All regular work activities will be conducted inside the building and use of cleaning agents etc. include a limited list of ACMPR approved products (nutrients and acceptable pesticides) that we are able to purchase from suppliers. We will follow our Health Canada approved Standard Operating Procedures for dealing with destruction of plant waste and liquids within the facility. There is an air filtration system (intake air is filtered and the HVAC system uses carbon filters and scrubbers) in place to remove the risk of smells and pollutants getting out into the environment.

3.3. Construction (if applicable)

The Retrofit construction period was 6 months and is complete.

3.3.1. Site Development

April 2018 was the approximate start date for retrofit construction. The fence was replaced, and the roof was repaired a few months earlier, as building maintenance.

3.3.2. Sources of Pollution

We dealt with one of the City's top professional building contractors for our building

retrofit. Our Building Contactor adheres to all provincial and municipal regulations and is well trusted by the City of Corner Brook.

The building is concrete with some metal and no wood. All destruction and the retrofit have already taken place (we have building permits from the City of Corner Brook, approvals from Service NL, and our letter of readiness from Health Canada) and there are no pollutants to deal with.

Airborne emissions: The retrofit construction has been completed and all proper protocol was followed for all activities.

Liquid effluents: The retrofit construction has been completed and all proper protocol was followed for all activities.

Solid Waste: The retrofit construction has been completed and all proper protocol was followed for all activities.

3.3.3. Resource Conflicts/Mitigation Measures

There are no potential resource conflicts. We have retrofitted the interior of the building and proper protocol was followed and in adherence with municipal and provincial regulations.

We have an artesian well on the property and we are not using any other natural resources. The water has been tested, is potable, and there is no action required however, the water is hard. We have three water holding tanks and a reverse osmosis system in place for delivery of water to our plants. We have a new septic bed that was engineered and installed. All permits were all granted by the City of Corner Brook and approvals were provided by Service NL.

3.4. Operation

BeeHighVE Inc. will be growing cannabis legally in accordance with Health Canada's ACMPR and all associated regulations. We are a craft grower focused on providing quality products and personalized service to the medical and upcoming recreational marketplace. BeeHighVE will be producing fresh plants and dried flower from our facility and any other production/manufacturing (such as oil extraction) will be done at a Health Canada approved facility offsite.

We will grow Indica, Sativa, and Hybrid (Indica and Sativa) strains using an aeroponics system. We will use a combination of HID and LED lights in our grow rooms, veg, clone and mother rooms.

We will only use ACMPR approved products and substances (chemicals and pesticides) in conducting business. Refer to Appendix F – Health Canada Approved Pesticides.

The facility meets all ACMPR regulations around filtration - ensuring that no smells and/or pollutants get out into the environment.

3.4.1. Cannabis Production

This is a Permanent Facility that will be used for cannabis production and cannabis will be sold to medical and recreational (once legal) markets.

3.4.2. Sources of Pollution

All Facility Good Production Practices and Good Manufacturing Processes will be monitored and audited regularly by the Quality Assurance Person (QAP).

Pesticides/Chemical Storage

The building retrofit has already been completed and BeeHighVE's Standard Operating Procedures have already been passed by Health Canada under the ACMPR. This includes Good Production and Sanitation Practices that clearly define proper storing and maintenance of chemicals and pesticides, as well as the processes and procedures in dealing with potential occurrences that put health and safety at risk. All staff will be properly and thoroughly trained to deal with such situations. We have already engaged Rockwater Products (from St. John's NL) to provide training on proper use of products for cleaning and sanitation. We have employed a Senior Quality Assurance Person with a Bachelor of Science Degree Biology, 20 years' experience in Quality Assurance over large food manufacturing facilities (including Unilever), and HACCP certification. Our QAP has created a training plan based on these standards and will train all employees that are hired by BeeHighVE.

We will be growing indoors under Health Canada's ACMPR guidelines. We will be using ACMPR approved nutrients, cleaners and plant destruction methods so as not to have a negative impact on people, wildlife and/or the environment. We will adhere to the ACMPR for Good Production Practices. This includes use of a limited list of ACMPR approved products for dealing with sanitation and plant maintenance (cleaners, plant nutrients and acceptable pesticides), and procedures for dealing with destruction of plant waste and liquid within the facility.

Air Emissions, Odor, Pollen

BeeHighVE already has an air filtration (intake air is filtered and the HVAC system uses carbon filters and scrubbers) system in place to remove the risk of smells and pollutants getting out into the environment. Cannabis waste will be destructed and composted following the ACMPR. Our Standard Operating Procedures have been passed by Health Canada.

The HVAC systems:

- Use fan coils to completely seal the indoor environment, contain odours, prevent the introduction of pests and pathogens and more easily maintain room CO2 levels.
- The fan coils recirculate the air already in the indoor environment and do not require an external air exchange to operate.
- The fan coil units connect to an outside chiller via water pipes, so no air will be exchanged between indoor rooms (where cannabis may be present) and outside rooms.

- Rooms with independent fan coil units include:
 - Packaging and Shipping Room
 - Drying Room
 - Secure Room / Vault
 - Trimming Room
 - Flower Room 1
 - Flower Room 2
 - Flower Room 3
 - Flower Room 4
 - Mother Room
 - Vegetative & Clone Room
 - Quarantine/Destruction Room
 - Receiving/Decontamination/Soil Room

- Each room that will have cannabis present is under positive pressure to keep air tight as possible.
- Each room that will have cannabis present including the Secure Room/Vault has a 'drop down sweep' to help seal the room.
- Rooms with outside ventilation are equipped with appropriate filters (carbon filtration and HEPA filtration).

All BeeHighVE resources will receive training from our HACCP certified Quality Assurance Person (already on staff at BeeHighVE). All employees will also receive sanitation training from Rockwater Professionals – a local NL company that specializes in cleaning products and equipment and ensuring the safety of its clients and the environment. The focus of this training will be on product use and safety – resulting in good sanitation practices as well as the safety of our human resources, our clients and the environment.

Solid Waste

BeeHighVE has Standard Operating Procedures to deal with non-cannabis solid waste generated from day-to-day operations. Such solid waste will be handled properly on a regular basis following proper storage and disposal protocol. Regular solid waste will be stored in proper garbage bins until it is sent off-site for disposal. Waste that can be recycled will be sent to the recycling depot. Western Regional Waste Management deals with both regular solid waste and recycling in the City of Corner Brook. We will meet all regulations for disposal of waste.

BeeHighVE has Standard Operating Procedures to deal with Waste from Destruction of Cannabis. These procedures have been reviewed and passed by Health Canada.

We have attached a description of our procedure for Destruction of Cannabis Waste as Appendix E.

Liquid Waste

The Building at 1 North Shore Highway has a new sewer system to deal with regular

waste generated from the facility. The system meets all guidelines and has been approved by Service NL.

Other waste generated from cannabis production activities may include liquid nutrients and Health Canada approved chemicals and pesticides.

BeeHighVE's selected method for growing is Aeroponics. The system uses nutrient enriched mist to feed the plants roots. Roots dangle in the air above a soilless growing medium and are periodically puffed by specially designed misting devices. Aeroponics systems are extremely water-efficient – using 95 percent less irrigation than plants grown in soil and because the nutrients are in water, they are recycled. There is no nutrient runoff because the aeroponics systems are fully enclosed.

Refer to Appendix F– Health Canada Approved Pesticides.

Noise

All growing and production activities will take place inside the building. There will be little to no requirement for an unauthorized noise level during regular work hours or otherwise. There is one building within a 300-meter proximity all others are over 500 meters away from the edge of the property. The building resides on six acres of land and therefore, it is highly unlikely that noise will be heard from the facility.

Noise from shipping and receiving may occur during regular work hours (8:00am – 6:00pm) however, we do not anticipate larger vehicles for delivery and shipping of our plant products.

All systems meet municipal and provincial regulations for noise.

3.4.3. Resource Conflict/Mitigative Measures

The building retrofit has already been completed. We engaged a professional Contracting Company that adheres to municipal and provincial regulations. Proper protocol was followed and all regulations (regarding airborne emissions, liquid effluents and solid waste materials) were adhered to throughout the duration of the project. Building retrofit was done on the inside of the building and therefore noise and the risk of airborne pollutants would have been minimal.

There were no incidents during the entire retrofit.

3.5. Occupations

The building retrofit is complete. There were over 60 resources employed over the duration of the project (i.e. construction, plumbing, HVAC, controls specialists, electrical etc.). All permits and authorizations were given over the course of the project.

After receiving a cultivation license, we will have eight full-time employees for startup. Once BeeHighVE ramps up production, there will be 12 permanent full-time employees and up to 10 part-time and casual resources employed directly by BeeHighVE - as outlined below:

Category of personnel	No. of Employees	Full time or Part time
General/Facilities Manager	1	Full time
Head of Security	1	Full time
Security Support	1	Full time
Master Grower/Head of Production	1	Full time
Grower	1	Full time
Processing/Packaging Technician	1	Full time
Quality Assurance Person	1	Full time
HR and Office Administration	1	Full time
Accounting and Payroll Administration	1	Full time
Client Care Manager	1	Full time
Client Care Support Person	1	Full time
Marketing and Sales	1	Full time
Production and Processing Support	8	Part time/Casual
Maintenance Technician	1	Part time/Casual
General Office Support	1	Part time/ Casual

Several other local companies will be impacted by our project – from the local cleaning product specialists to stationery providers and computer support. There will be a broad spectrum of services and supplies required in maintaining such a facility – impacting jobs and economic development within the City and across the Province.

3.5.1. Gender Equality

While we are a smaller company with less than 10 full-time employees (at the onset), we will strive to ensure employment equity. There are currently an equal number of male and female employees engaged by BeeHighVE. While we will continue to strive for Gender Equality, people will be hired based on qualifications and fit for the positions available.

For further information on gender equity, contact the Women’s Policy Office at 709-729-5009 or visit the website at www.gov.nl.ca/exec/wpo

3.6. Project Related Documents

Construction: All of our Engineered drawings are completed (Architectural, Mechanical, Electrical and Civil).

Property: A land survey and site survey have been done.

Operation: Records of HVAC, Electrical etc. have been compiled by the General Contractor for our site and use.

Environment: Phase 1 and Phase 11 Environmental Assessments have been done and show that there are no issues with the property and no action is required.

In 2012, six (6) test pits were excavated using a track-mounted excavator. Duplicate soil samples were collected from each pit and examined. The report was done by Stantec, St. John's, NL and the analysis was done by Maxxam Analytics in St. John's, NL.

Soil samples were collected at regular intervals from the test pits by bulk sample methods. The samples were examined in the field for evidence of petroleum hydrocarbon impacts. Duplicate soil samples were collected at each sample location. Head space soil vapour concentrations were measured in the duplicate sample jars using a MiniRAE 2000 photoionization detector (PID). Based on the measured soil vapour concentrations and field observations, selected soil samples from test pits TP1 to TP6 were submitted to Maxxam Analytics for lab analysis of Petroleum Hydrocarbons indicator parameter TPH and BTEX in accordance with the Atlantic Partners in RBCA Implementation (PIRI) Protocol.

The stratigraphy in the test pits generally consists of loose to very dense, brown and grey silty sand and gravel (possible fill material) and a dense, reddish-brown clay and silty sand and gravel with a mix of trace organics. Bedrock was not encountered in any of the test pits excavated. All test pits were terminated at the groundwater table.

No petroleum hydrocarbon sheens or measurable free liquid phase petroleum hydrocarbons were observed on the groundwater surface in any of the test pits.

Petroleum hydrocarbon analysis was conducted on one (1) soil sample from each of the six (6) test pits. No visual or olfactory evidence of petroleum hydrocarbons in soil or on the groundwater surface at depth. No visual or olfactory evidence of petroleum hydrocarbons was identified in any of the other test pits. No concentrations of total petroleum hydrocarbon indicator parameters, TPH and TBEX, in the six (6) soil samples analyzed were detected and thus did not exceed the applicable guidelines for the site.

No TPH or BTEX parameters were detected in any of the six (6) soil samples analyzed.

Based on the results of the Phase II ESA conducted at the site, no further investigation or delineation was recommended.

Water: Water testing has been done and has proven to be clear and potable.

Sewer System: The new Septic System has been inspected and approved by Service NL.

3.6.1. Reports

Report 1: A copy of our water testing has been provided. Report 2: A copy of the approval of our Septic System by Service NL has been provided. Report 3: A copy of the Phase 2 Environmental Assessment has been provided.

4. APPROVAL OF THE UNDERTAKING

The building retrofit is complete. Over the term of the project, we received the required building permits and approvals from the City of Corner Brook (municipal), Service NL (provincial) and Health Canada (Federal). This includes our chosen location/zoning for the production of medical marijuana.

We have a Letter of Readiness from Health Canada (Federal Government). All of our Standard Operating Procedures as well as our proposed Security Plan and Physical Location were approved by Health Canada in April 2018. An "Evidence Video" has been submitted to Health Canada and we are currently in the "Active Review" stage – the last stage before a license to produce medical marijuana is issued under the ACMPR. We will also complete the Health Canada process to obtain a sales license under the ACMPR. This involves rigorous testing of our product to ensure that there are no contaminants (unauthorized pesticides, chemicals etc) in our product before it is sent to our clients/patients.

5. SCHEDULE

The retrofit construction is complete, and we are waiting to hear back from Health Canada regarding our Cultivation License for Cannabis at our proposed site – 1 North Shore Highway, Corner Brook, NL.

6. FUNDING

The project does not depend upon grants or loans of capital funds from a government agency (federal, provincial or otherwise).

Capital Costs are approximately \$2 million for this project.

September 24, 2018



Date

Rita Hall, Turtle Technologies Inc.

Appendix A1 – Topographic Map



Appendix A2 – Use Zone Table

USE ZONE TABLE

158. RURAL

PERMITTED USE CLASSES - (see Regulation 127) Agriculture, forestry.
DISCRETIONARY USE CLASSES - (see Regulations 26 and 128) Outdoor assembly, single dwelling, single dwelling (existing), veterinary, outdoor market, general industry, service station, mineral working, recreational open space, conservation, transportation, animal, antenna, hazardous industry*, cemetery** *(See condition no. 8) **(See condition no. 9)

CONDITIONS

1. Advertisements Relating to Onsite Uses

The conditions which shall apply to the erection or display of an advertisement on any lot or site occupied by a use permitted or existing as a legal non-conforming use in this use zone, shall be as follows:

(a) The size, shape, illumination and material construction of the advertisement shall meet the requirements of the Authority, having regard to the safety and convenience of users of adjacent streets and sidewalks, and the general amenities of the surrounding area.

(b) No advertisement shall exceed five (5) square metres in area.

2. Advertisements Relating to Offsite Uses / Third Party Advertisements

The conditions to be applied to the erection or display of a Third Party advertisement on any site, relating to a use permitted in this or another zone, or not relating to a specific land use, shall be as follows:

(a) Each advertisement shall not exceed three (3) square metres in area.

(b) The location, siting and illumination of each advertisement shall be to the satisfaction of the Authority, having regard to the grade and alignment of streets, the location of street junctions, the location of nearby buildings and the preservation of the amenities of the surrounding area.

3. Discretionary Use Classes

The discretionary use classes listed in this table may be permitted at the discretion of the Authority provided that they are complementary to uses within the permitted use classes or that their development will not inhibit or prejudice the existence or the development of such uses.

4. Single Dwelling

One single dwelling may be permitted with a farm or forestry operation and it must be demonstrated to the satisfaction of the Authority that the residence onsite is necessary to the successful operation of the use and the minimum lot size for inclusion of a dwelling is to be 3 hectares. The agricultural or forestry use must be in active operation for a minimum of two years prior to an application for a dwelling use onsite.

5. Single Dwelling (Existing)

When determining whether an existing dwelling may be replaced by new construction, extensively renovated, repaired or extended, consideration will include, but not be limited to, the following:

(a) The dwelling must already exist in the zone at the coming into effect of these Development Regulations.

(b) The lot on which the dwelling is located shall not be located in an area where the Authority has determined that existing houses are to be eventually removed in order to clear the area of all development, either for safety reasons or to accommodate new or different development under the existing land use designation/zone or a proposed new land use designation/zone.

(c) The land on which the dwelling is located is not on a slope of 20% or greater, nor are there any other inherent or obvious hazard(s) or potential hazard(s) that would have a negative impact on the replacement or redevelopment of the existing dwelling or on adjacent lands. Should the topography where the dwelling is located exceed 20 % and major renovations, extension or replacement of the dwelling is proposed, a Land Use Assessment Report will be required to address how the development will be accommodated, taking into account the slope and any other relevant considerations.

(d) The replacement of an existing dwelling is to result in a single dwelling unit only. Double dwellings, row dwellings or apartment buildings will not be permitted to replace an existing dwelling unit, regardless of whether the original dwelling was double dwelling or contained a subsidiary apartment unit, nor will a subsidiary apartment/secondary suite to the main dwelling unit be permitted.

(e) An application to replace an existing dwelling in accordance with the above criteria will be assessed on an individual basis.

(f) The dwelling must be accessible to fire department and other emergency vehicles and located on a recognized city street where municipal snow clearing and other maintenance is normally carried out.

(g) Where fire protection or access may be considered deficient, the owner or applicant requesting to repair, extend or replace the single dwelling may be required to upgrade, install, or otherwise improve the capacity to provide fire protection service or access to a level that is satisfactory to the City of Corner Brook. All costs associated with this will be the responsibility of the owner or developer.

(h) Where one or more municipal services are absent, the City of Corner Brook assumes no responsibility to provide any service which is not currently available. The owner or developer may undertake the cost and responsibility to install any services to the single dwelling if approved by the City of Corner Brook.

(i) As an existing single dwelling is deemed to be a discretionary use of the Rural Zone, the owner of the dwelling being repaired, extended or replaced may be required to sign a Development Agreement whereby the owner of the property agrees to the above conditions and understands that the City of Corner Brook will continue to allow other Permitted and Discretionary Uses of the zone to be developed.

6. General Industry

Where permitted as a discretionary use, General Industry will be restricted to maintenance and repair of equipment, processing and storage related to agriculture or forestry uses.

7. Mineral Working

Where permitted as a Discretionary Use, the conditions relating to Mineral Working Zones shall apply.

8. Hazardous Industry

(a) A hazardous industrial manufacturing use has been developed in a Rural Zone in the proximity of Lady Slipper Road. Due to the nature and material of the product and manufacturing process at the site, no use or activity what-so-ever shall be permitted within a one (1) kilometre radius of the building(s) of this site. Uses proposed beyond the buffer area may be subject to a Land Use Assessment Report.

b) The following limitations apply to hazardous industrial uses that involve the bulk storage of flammable and hazardous liquids and substances:

(i) The total volume of storage on each lot shall not exceed 341,000 litres or 90,000 USWG.

(ii) The siting of such hazardous industrial uses shall take place in such a manner that the site conditions meet all municipal, provincial, and federal regulations with regard to site boundary distances and adequate separations from other industrial uses.

(iii) Separation distances shall be appropriate to maintain public safety, fire safety and land slope separation for the protection of the amenity of surrounding uses.

(iv) The use does not abut or is sufficiently far removed from a residential neighbourhood, public assembly use, community service use or a street where an alternative route is not available.

(v) The use may only be located where an adequate municipal water supply is available or where an alternative adequate water volume and water pressure can be obtained according to all regulating agencies.

(vi) The authority may also impose other conditions as deemed necessary from an environmental, occupational health and safety, fire and life safety and aesthetic point-of-view.

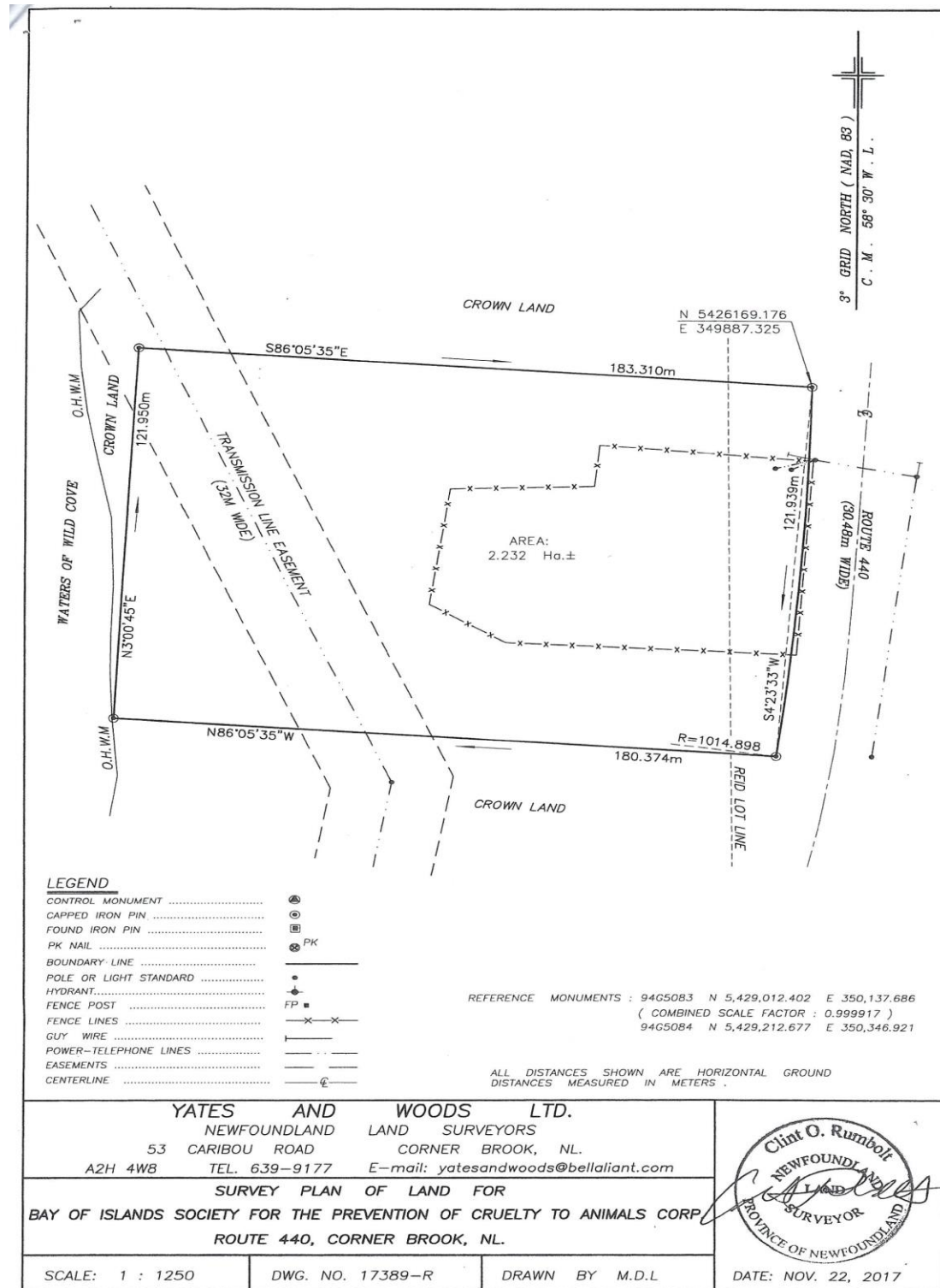
9. Cemetery

Where permitted as a Discretionary Use, cemeteries shall be restricted to animal cemeteries. Any new human cemeteries shall be restricted in this zone to land located directly adjacent to or near Mt. Patricia Cemetery.

10. Accessory Buildings

Accessory buildings in this zone shall conform to the requirements of Regulation 60, Accessory Buildings - General, in Part II of these Development Regulations.

Appendix B – Land Survey



SCHEDULE "A"
DESCRIPTION OF LAND FOR
BAY OF ISLANDS SOCIETY FOR THE PREVENTION OF CRUELTY TO
ANIMALS CORPORATION
ROUTE 440, CORNER BROOK, NL

All that piece or parcel of land situate and being at Corner Brook, NL abutted and bounded as follows, that is to say:

Beginning at a survey marker on the westerly limit of Route 440 thirty decimal four eight (30.48) metres wide, the said point being the most northeasterly angle of the herein described parcel of land and having co-ordinates of North 5,426,169.176 and East 349,887.325;

Thence running by the aforesaid westerly limit of Route 440 thirty decimal four eight (30.48) metres wide, along a curve in a clockwise direction having a radius of one thousand fourteen decimal eight nine eight (1014.898) metres wide, to a point which is distant one hundred twenty-one decimal nine three nine (121.939) metres, as measured on a bearing of south four degrees twenty-three minutes thirty-three seconds west (S 4° 23' 33" W);

Thence running by Crown Land, north eighty-six degrees five minutes thirty-five seconds west (N 86° 05' 35" W) one hundred eighty decimal three seven four (180.374) metres to a survey marker;

Thence running by Crown Land, extending along the easterly shoreline of Waters of Wild Cove, north three degrees zero minutes forty-five seconds east (N 3° 00' 45" E) one hundred twenty-one decimal nine five zero (121.950) metres;

Thence running by Crown Land, south eighty-six degrees five minutes thirty-five seconds east (S 86° 05' 35" E) one hundred eighty-three decimal three one zero (183.310) metres; more or less, to the point of beginning and being more particularly shown and delineated on the attached plan;

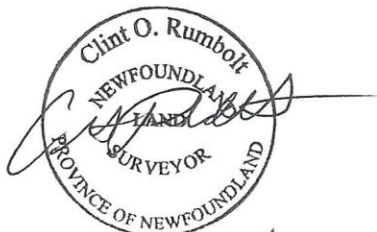
The above described land is subject to a Transmission Line Easement thirty-two (32) metres wide as shown on the attached plan;

The above described land contains an area of two decimal two three two (2.232) hectares, more or less; and being more particularly shown and delineated on the attached plan;

All bearings referenced to the Meridian of fifty-eight degrees thirty minutes west longitude of the Three Degree Modified Transverse Mercator Projection, Zone 3, NAD 83 for the Province of Newfoundland and Labrador.

Yates and Woods Limited
17389-R

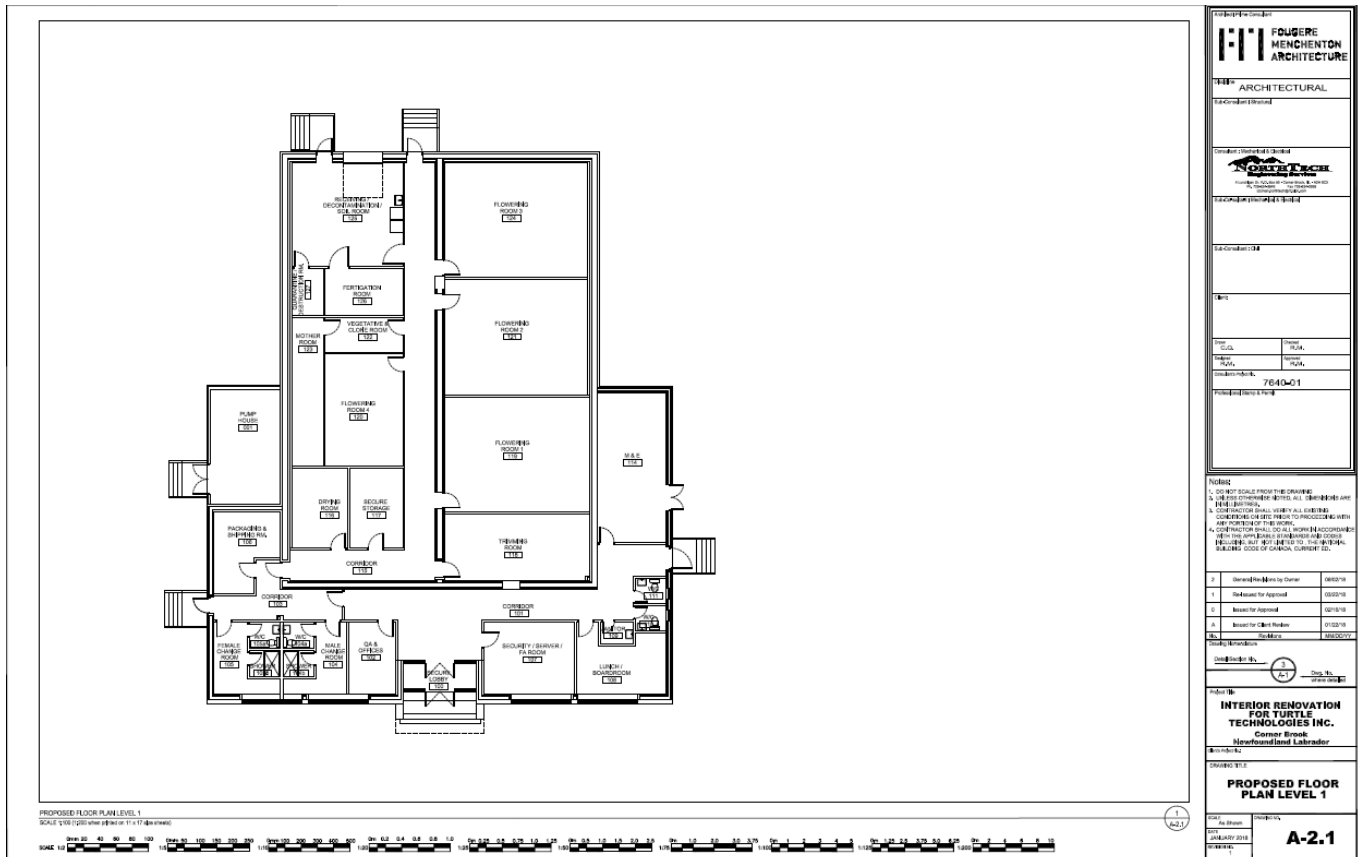
November 22, 2017



Appendix C – Aerial Photo – 1 North Shore Highway



Appendix D – Building Architecture Drawing



Appendix E – Destruction Method

1. PURPOSE

To ensure that all unusable cannabis is destroyed safely and securely.

2. IMPLEMENTATION

This procedure will be implemented by the RPIC when a sufficient volume of cannabis designated for destruction has been accumulated, as dictated by the RPIC, A/RPIC, or QA/QC Manager.

3. SCOPE

This applies to all employees responsible for and engaging in the destruction of non-usable cannabis.

4. RESPONSIBILITY

The RPIC, A/RPIC, QA/QC Manager, or other designated employees are responsible for destruction of cannabis.
All cannabis destroyed must be witnessed by one of the following RPIC, A/RPIC and one (1) senior employee.

5. MATERIALS

- 150 L plastic barrel
- 158 L, 3-mil black clean-up bags
- Kitty Litter, general purpose, unscented
- Water
- Measuring container
- Mixing paddle
- Black nylon cable ties
- Red destruction tags
- Pruners
- Shredder
- PPE
- REC-011-Cannabis Waste Destruction Record Form

6. PROCEDURE

- 6.1 Move material marked for destruction from the vault or secure area to the destruction room.
- 6.2 Weigh all cannabis to be destroyed and record on **REC-011-Cannabis Waste Material Destruction Record form**.
- 6.3 Insert 3-mil clean-up bag into barrel.
- 6.4 It is preferred to shred all leaf material into finer particle sizes to assist in the destruction process.
 - 6.4.1 For all cannabis stalks and root balls, the technician will cut the root ball/stalk into more manageable pieces and subsequently shred.
 - 6.4.1.1 For facilities using soil as their primary growing medium, there will be soil leftover after removing excess soil from the root ball which must be considered during the destruction sequence as well as the maximum weight required per destruction bag.
- 6.5 Place cannabis in clean up bag in barrel.

Note: *no bag is to exceed 23 kilograms.*
- 6.6 Add ten (10) liters of water.
- 6.7 Add one (1) kilogram of cannabis scheduled for destruction.
- 6.8 Add one (1) kilogram of kitty litter.
 - 6.8.1 The correct ratio of kitty litter to cannabis waste is one (1) to one (1).
- 6.9 Mix contents until well blended with mixing paddle.
- 6.10 Attach red destroyed label to cable tie to seal bag and record the date, time, weight, destroyed by, witnessed by.
- 6.11 Add second cable tie one (1) inch below red label cable tie.
- 6.12 After both employees witness the destruction of cannabis, complete record keeping procedures as per **SOP REC-011-Cannabis Waste Material Destruction** and sign the attached record form.
- 6.13 Verification of destruction will be monitored by the QA/QC manager and either the RPIC or A/RPIC who will also sign the **REC-011-Cannabis Waste Material Destruction Record Form**.
- 6.14 Log destruction information into our Record Keeping Software paper record.
- 6.15 After twenty-four (24) hours, place in waste disposal.

7. CORRECTIVE ACTIONS

Any deviations from this SOP will be reported to the RPIC or A/RPIC. When the QA manager determines that the marijuana is not properly destroyed, the procedure and inspection are repeated. The QA manager monitors the destruction process. QA manager will retrain technicians if required and monitor process until satisfied proper procedures are being applied. Corrective actions are recorded on CAPA record forms kept on site.

STS-2 Single Rotor Shredder

The STS-2 is well suited for the reduction of computer and electronic scrap as well as off-spec pre-consumer products. It does more so you can DO MORE!



STANDARD FEATURES

Shred-Tech's STS-2 is manufactured to exacting quality control standards, ensuring maximum shredder durability. Extra heavy-duty construction and attention to detail results in a shredder that performs well and is operator friendly.

OVERVIEW

The STS-2 is capable of processing virtually any and all types of plastics and wood in all shapes, sizes and quantities. Our team of experienced technical sales representatives are trained to advise on the exact equipment specifications needed to meet all application requirements.

Rigorous testing and video & digital imaging hardware, enable our team to provide accurate recommendations; with test results available for the customer to review.

BENEFITS

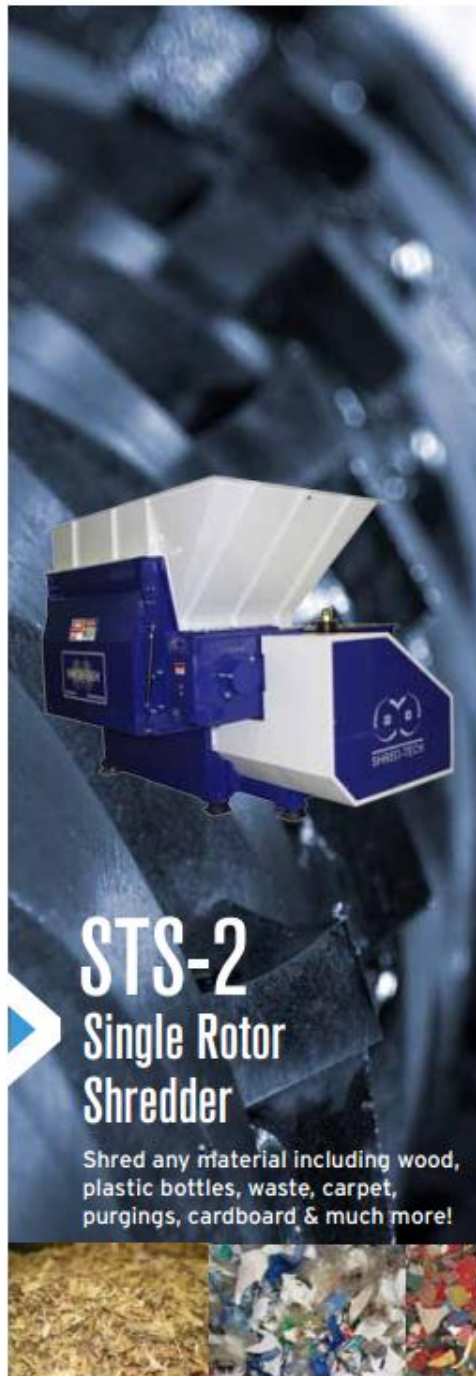
- Reinforced all welded construction - prevents screen damage from tramp metal and other unshreddable objects.
- Available abrasion resistant wear components decrease operating costs.
- Bearings & seals - mounted outboard of the cutting chamber to avoid contamination.
- Two-speed ram for efficient processing.
- Replaceable ram guides.

OPTIONS

As with all Shred-Tech shredders, the STS line can be equipped with a full compliment of options including:

- Custom hoppers and stands
- In-feed and discharge conveyors
- Pneumatic discharge and dust control
- Vibrating, magnetic or rotary separation
- Modern capabilities
- PLC interfacing for peripheral equipment





STS-2 Single Rotor Shredder

Shred any material including wood, plastic bottles, waste, carpet, purgings, cardboard & much more!



Product specifications subject to change without notice.

- >> All Shred-Tech Shredders are available under US Federal Supply Contract. © All rights reserved. Shred-Tech and Shred-Tech logo are registered trade-marks of Shred-Tech.
- >> SHRED-TECH. COMPLETE INFORMATION DESTRUCTION AND RECYCLING SOLUTIONS.
W www.shred-tech.com | E shred@shred-tech.com | T 800.465.3214 or 519.621.3560 | F 519.621.4288
SERVICE HOTLINE 877.566.2345



SHREDDER TECHNICAL SPECIFICATIONS	METRIC	IMPERIAL
PRODUCT SPECIFICATIONS		
Rotor Diameter	220 (mm)	8.66"
Rotor Width	600 (mm)	23.62"
Shredder Motor	18.5 (kw)	25 (hp)
Rotor RPM	80	80
Cutting Chamber Size	655 x 600 (mm)	25.79" x 23.62"
Screen Opening Diameter	40 (mm)	1.57"
Rotor Knife Quantity	23	23
Rotor Knife Size	40 (mm)	1.57"
Bed Knife Quantity	4	4
Hydraulic Ram Motor	1.5 (kw)	2 (hp)
Shredder Length/Width/Height	1,780 x 1,292 x 1,686 (mm)	70.04 x 50.87 x 66.38"
Weight	1,650 (kg)	3,637 (lbs)
OPTIONS		
Various rotor widths and motor powers to suit application		
Various screen opening diameters to suit application		
Wear resistant rotor and screen material		
Rotor cooling for low melt temperature materials		
FEATURES		
Horizontal ram with variable speed dependent upon motor current load		
Ram equipped with angled, serrated face for positive grip		
Gear reduced drive with matched "V" belts		
Four-sided rotor knives made from tool steel can be rotated before replacement		
Adjustable bed knives to maintain critical clearance		
Gas spring assisted cover for quick access to screen		
Rubber vibration isolation foot pads		
TYPICAL APPLICATIONS		
Wood pallets, offcuts		
Plastic mouldings, purgings and film		
Paper products and cardboard		
Beverage containers, plastic and aluminum		
Carpet and fabric		

Appendix F – Health Canada Approved Pesticides

Appendix F - Health Canada Approved Pesticides

<https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/licensed-producers/policies-directives-guidance-information-bulletins/testing-cannabis-medical-purposes-unauthorized-pest-control-products.html>

Adherence to Good Production Practices

Section 63(1) of the ACMPR prohibits a licensed producer from selling or providing or exporting fresh or dried marijuana, cannabis oil or marijuana plants or seeds unless the [Good Production Practices](#) requirements set forth in Subdivision D of the ACMPR have been met. This includes the requirements for use of pesticides.

Registered Pesticides

The Pest Management Regulatory Agency (PMRA) maintains a database repository of registered pesticides that are approved for use on marijuana.

As of August 9, 2018, there are **22 registered pesticides** approved by PMRA for use on cannabis (marijuana) that is produced commercially indoors. They are:

- Agrotek Ascend Vaporized Sulphur
- Bio-Ceres G WP
- Bioprotec Caf
- Bioprotec Plus
- Botanigard 22 WP
- Botanigard ES
- BW240 WP Biological Fungicide
- Cyclone
- Doktor Doom Formula 420 Professional Use 3-in-1
- Influence LC
- Kopa Insecticidal Soap
- Lacto-San
- MilStop Foliar Fungicide
- Neudosan Commercial
- Opal Insecticidal Soap
- Prestop
- Purespray green spray oil 13E

- Rootshield(R) WP Biological Fungicide
- Rootshield HC Biological Fungicide Wettable Powder
- Rootshield Plus WP Biological Fungicide
- Sirocco
- Vegol Crop Oil

Information and labels for the pesticides approved by the PMRA are available in the [Pesticides and Pest Management](#) section of the PMRA website.

If licensed producers have questions or concerns regarding pesticides, or would like approval on the use of particular pesticides, they are encouraged to contact [PMRA](#) for information.

~~AT~~ P.B.

Run Date: 06/10/17
Run Time: 1545

1 Brookfield Avenue
Corner Brook, NL
Department Of Laboratory

Page: 27

** LIVE **

NAME: PW, MCCURDY ERVIN

Report for: GOV. SERV. CENTRE

SPEC #: 17:WA0003317R OLL: 04/10/17-1510 COLLECTED BY: EM
RECD: 05/10/17-1218 SOURCE: WATER

COMMENTS: NAME: ERVIN MCCURDY-SPCA ADDRESS: 6 KENT PLACE, CORNER
BROOK, NL, A2H 6B8
TELEPHONE: 709-634-1327, 709-660-6608
BARCODE NUMBER: 51602 SPECIMEN TYPE: DRILLED WELL

Procedure	Result	Verified	Site
*** MICROBIOLOGY ***			
> BACTERIOLOGICAL WATER ANALYSIS	Final	06/10/17-1304	
TOTAL COLIFORMS	ABSENT / 100ML		
FECAL COLIFORM (E. COLI)	ABSENT / 100ML		



Corner Brook Office
637-2204

INTERPRETATION OF WATER TEST RESULTS:

- Satisfactory
- Unsatisfactory
- Sub-standard
- Unable to Interpret

Comments: _____

Oct 11/17 [Signature]
Date Environmental Health Officer

September 21, 2018

FINAL APPROVAL CERTIFICATE

P.O. Box 1003
1 North Shore Highway
NL

**RE: 1 North Shore Highway
Corner Brook
GSC File number: HS-2018 107247 00**

Dear: Rita Hall

This is to certify that the sewage system at the above location was inspected on 2018 09 20 and has been installed as per the design provided by the Approved Designer Ford Burden, Registration # AD-2018 106861, pursuant to the Sanitation Regulations and the Private Sewage Disposal and Water Supply Standards.

It is your responsibility to retain a copy of this approval and its associated septic system design plans for your files.

Yours truly,



Penny Burke, C.P.H.I.(C)
Environmental Health Officer

C Town of Corner Brook
Ford Burden, Approved Designer



Stantec Consulting Ltd.
607 Torbay Road
St. John's, NL A1A 4Y6
Tel: (709) 576-1458
Fax: (709) 576-2126

**Phase II Environmental Site
Assessment
Former Teleglobe Building, North
Shore Highway, Corner Brook, NL**

Prepared for

W.H. Coates and Judith Coates
Box 74
RR#1
Doyles, NL A0N 1J0

Final Report

File No. 121412093

Date: April 19, 2012

Table of Contents

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
1.1 Background	1
1.2 Site Description	1
1.3 Objective and Scope	2
1.4 Regulatory Framework	2
2.0 METHODOLOGY	4
3.0 RESULTS	4
3.1 Subsurface Conditions	4
3.1.1 Stratigraphy	4
3.1.2 Groundwater	5
3.2 Soil Analytical Results	5
4.0 DISCUSSION AND CONCLUSIONS	5
5.0 RECOMMENDATIONS	5
6.0 CLOSURE	6
LIST OF APPENDICES	
APPENDIX A Drawing	
APPENDIX B Tier I/II Table Checklist and Ecological Screening Checklist	
APPENDIX C Laboratory Analytical Results Summary Table and Laboratory Analytical Report	
LIST OF DRAWINGS	
Drawing No.121412093-EE-01 Test Pit Location Plan	Appendix A
LIST OF TABLES	
Table 1 Applicability of Tier I/II Checklist	Appendix B
Table 2 Results of Laboratory Analysis of Petroleum Hydrocarbons in Soil.....	Appendix C

1.0 INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained by W.H. Coates and Judith Coates to carry out a Phase II Environmental Site Assessment (ESA) at the Former Teleglobe Building site on the North Shore Highway in Corner Brook, Newfoundland and Labrador (NL) (refer to Drawing No. 121412093-EE-01, Appendix A). Specifically, the Phase II ESA was carried out to investigate the potential for petroleum hydrocarbon impacts in soil and/or groundwater on site in the general area of two former underground storage tanks (USTs) that were removed in 2003.

This report is organized in six sections. Section 1 presents background information about the site, explains the regulatory guidelines and their applicability, and describes the scope of the work carried out. Section 2 summarizes the methodology used for the subsurface investigation. Section 3 provides results of the Phase II ESA and laboratory analyses and a discussion of the results. Section 4 provides a discussion of the ESA and presents the conclusions. Section 5 presents the recommendations of this report. Supporting information is provided in the appendices at the end of this report.

This report was prepared specifically and solely for the above project. The report presents all of the factual findings and laboratory results of the Phase II ESA, and presents Stantec's comments on the environmental status of the site.

1.1 Background

A Phase I Environmental Site Assessment (ESA) was previously completed by Stantec for the property (Stantec Report No. 121412093 dated February 9, 2012). It was reported by the current property owner that two 1,500 gallon USTs used to store diesel fuel were previously located on the Site. The USTs were reportedly purged and removed in 2003 and the excavation backfilled with clean fill. Both USTs were reported to be located on a concrete pad, coated in a preservative and in good condition. During the Phase I ESA site visit, a small piece of pipe was observed to be protruding through the snow about 5 m from the north side of the building. It was reported that this pipe may have been a piece of fill pipe that had not been removed when the former USTs were removed from the Site.

There were no confirmatory soil samples collected at the time of the tank removals in 2003. In the absence of laboratory data indicating that petroleum hydrocarbon concentrations in soil were below applicable regulatory guidelines, Stantec recommended that a subsurface investigation be conducted and confirmatory soil samples be collected from the former UST locations.

1.2 Site Description

The site is a commercial property located on the North Shore Highway located within the northeast corner of the City of Corner Brook limits. It is a rectangular shaped lot located west of the North Shore Highway measuring approximately 2.1 hectares. The Site is enclosed within a

chain-linked fence. One building with a floor area of approximately 800 m² is located on the Site. The building has some office space at the front of the building and two large open bays at the rear of the building. The building was reportedly built in the early to mid-1960s. The Site is serviced by an on-site water well on the south side of the property and a septic system west of the site building.

The Site slopes from the south to the north and east to the west. Based on an available topographic map and the observed site topography, regional surface drainage (anticipated shallow groundwater flow direction) appears to be to the north towards Wild Cove Brook and to the west towards Corner Brook Harbour.

Based on an available surficial geology map and previous experience in the area, the native surficial soils of the area likely consist of glacial deposits, principally comprised of sand and gravel till overlying sedimentary bedrock. The characteristic permeability of these soils is moderate.

1.3 Objective and Scope

The scope of work, as per Stantec's proposal dated February 28, 2012, consisted of the following:

- conduct a field program involving the excavation of six (6) test pits in the area of the former USTs. All test pits were excavated to the groundwater table or bedrock or within the maximum reach of the excavation equipment, whichever was encountered first, to assess soil/groundwater conditions at these locations;
- collect representative soil samples from the test pits;
- submit select soil samples to Maxxam Analytics, St. John's, NL for laboratory analysis of total petroleum hydrocarbon (TPH) and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) (6 samples); and,
- prepare a written report presenting all observations and measurements made during the assessment, including conclusions and recommendations, where required.

The current assessment was limited to the general area of the former UST locations and did not include an assessment of the entire site. Groundwater, if encountered, was visually assessed in the field for the presence of petroleum hydrocarbon sheens.

1.4 Regulatory Framework

The Newfoundland and Labrador Department of Environment and Conservation (NLDEC) adopted soil and groundwater remediation criteria for petroleum hydrocarbons on February 22, 2005 under Policy Directive PPD05-01. These criteria are outlined in the Guidance Document for the Management of Impacted Sites, Version 1.01 (September 2005). The purpose of this guidance document is to provide a clear process for the management of impacted sites in Newfoundland and Labrador that result in the satisfactory resolution of environmental contamination, which may present an unacceptable risk to human health and ecological

receptors. The guidance document incorporates recent scientific and regulatory advances in this area that have resulted from work at the international, national and regional levels.

The guidance document is based on a tiered approach to site management. Within this tiered approach, three tiers of increasing technical complexity (Tier I, II and III) are available for the management of impacted sites, all of which provide protection of human health and the environment to achieve the same result of safe site closure. The person responsible, with the assistance of the Site Professional, is able to choose Tier I, II or III depending on the specifics of the site, the contamination, the affected parties and the intended property use after closure. Tier I and II methods result in the selection of clean-up criteria that are protective of human health and the environment. Tier III may either result in the selection of clean-up criteria or in the implementation of risk management techniques to reduce or eliminate exposure to the identified contaminants. As a result of this tiered approach, the clean-up criteria defined under the guidance document are not as stringent as past guidelines and allow for greater flexibility in managing contaminated sites.

For a Tier I assessment, the guidance document and the Atlantic RBCA (Risk-Based Corrective Action) Version 2.0 User Guidance Document (March 2007) outline risk-based screening levels (RBSLs) for evaluating petroleum hydrocarbon impacted sites. These criteria, contained in "Tier I RBSL Tables", are based on default conditions for typical sites and exposure pathways. These criteria are classified by receptor characteristics, groundwater usage and soil type. In addition, the TPH criteria are dependent on the nature of the hydrocarbon type (i.e., the criteria vary for gasoline, fuel oil and lube oil).

If site concentrations exceed the Tier I RBSLs, the site may be remediated to the Tier I RBSLs or a Tier II assessment may be completed to determine more appropriate clean-up criteria. A Tier II assessment may include comparison of the site concentrations to the Tier II Pathway-Specific Screening Level (PSSL) tables or development of Site-Specific Target Levels (SSTLs). PSSLs are only appropriate for sites where the exposure pathways assumed in the Tier I RBSL tables are not complete (e.g., if a property has no building on site, there would be no potential for on-site indoor air exposure).

Users of the Tier I RBSLs and Tier II PSSLs are required to ensure that site conditions are compatible with the default site conditions used to generate the screening criteria. If significant differences exist, the site should be evaluated using a site-specific risk assessment approach. The "Site Assessment and Tier I/II Table Checklist" is provided in Appendix B. Based on the identified site conditions, the Tier I RBSLs for a commercial receptor with potable groundwater, coarse-grained soil, and fuel oil are applicable for the subject site as it currently exists.

In accordance with the Atlantic RBCA requirements, the "Ecological Receptor Assessment Checklist" has been completed and is provided as an attachment. Both Wild Cove Brook to the north and Corner Brook Harbour to the west are located within 150 m of the former USTs. However, based on the results of the investigation, no further ecological assessment is recommended.

2.0 METHODOLOGY

The Phase II ESA was carried out on March 19, 2012 and consisted of the excavation of six (6) test pits (TP1 to TP6) in the area of the former USTs on the site. Clearances for underground services at the site were obtained by Stantec personnel prior to commencing sub-surface investigations.

The six (6) test pits were excavated using a track-mounted excavator provided by Humber Arm Contracting of Corner Brook, NL under the supervision of Stantec personnel. Test pits were excavated to final depths ranging from 5.0 metres below ground surface (mbgs) in test pits TP2-TP6 to 8.0 mbgs in test pit TP1. The locations of the test pits (shown on Drawing No. 121412093-EE-01 in Appendix A) were established in the field by Stantec personnel based on the location of the former USTs provided by the property owner. Subsurface conditions encountered in the test pits were logged by Stantec personnel at the time of excavating and are described in Section 3.1 Subsurface Conditions.

Soil samples were collected at regular intervals (approximately 1 m intervals) from the test pits by bulk sample methods. The soil samples were examined in the field for evidence of petroleum hydrocarbon impacts. Duplicate soil samples were collected at each sample location. The samples were placed in clean glass jars and placed on ice in sample coolers and returned to Stantec's lab in Corner Brook, NL, for sample selection for laboratory analysis. Head space soil vapour concentrations were measured in the duplicate sample jars using a MiniRAE 2000 photoionization detector (PID). Based on the measured soil vapour concentrations and field observations, selected soil samples from test pits TP1 to TP6 were submitted to Maxxam Analytics in St. John's, NL for laboratory analysis of petroleum hydrocarbons indicator parameters TPH and BTEX in accordance with the Atlantic Partners in RBCA Implementation (PIRI) protocol.

3.0 RESULTS

The following sections present the results of the Phase II ESA conducted on the site, including a description of the subsurface conditions encountered during the investigation and a summary of the analytical results of soil samples collected on-site.

3.1 Subsurface Conditions

Conditions encountered in the test pits are described in detail below.

3.1.1 Stratigraphy

The stratigraphy in the test pits generally consists of loose to very dense, brown and grey silty sand and gravel (possible fill material) and a dense, reddish-brown to brown clay with silty sand and gravel with a mix of trace organics. Bedrock was not encountered in any of the test pits

excavated. All test pits were terminated at the groundwater table. A slight petroleum hydrocarbon odour was detected immediately below ground surface in test pit TP5 but was not detected at depth.

3.1.2 Groundwater

The depth to the groundwater in the test pits, as measured on March 19, 2012, ranged from about 5 mbgs in test pits TP2 to TP6 and about 7 mbgs in TP1. Test pits are not normally left open long enough for groundwater levels to stabilize; therefore, groundwater level estimates at these locations should be considered with caution. In general, groundwater levels are expected to vary seasonally and in response to individual precipitation events.

No petroleum hydrocarbon sheens or measurable free liquid phase petroleum hydrocarbons were observed on the groundwater surface in any of the test pits.

3.2 Soil Analytical Results

Results of the laboratory analysis of soil samples for TPH and BTEX are presented in Table 2 in Appendix C with the corresponding analytical reports from Maxxam Analytics, also presented in Appendix C.

Petroleum hydrocarbon analysis was conducted on one (1) soil sample from each of the six (6) test pits. No TPH or BTEX parameters were detected in any of the six (6) soil samples analysed.

4.0 DISCUSSION AND CONCLUSIONS

A Phase II Environmental Site Assessment was completed in the general area of two (2) former USTs at the Former Teleglobe Building located along the North Shore Highway in Corner Brook, NL. A slight petroleum hydrocarbon odour was detected immediately below ground surface in test pit TP5, but there was no visual or olfactory evidence of petroleum hydrocarbons in soil or on the groundwater surface at depth. No visual or olfactory evidence of petroleum hydrocarbons was identified in any of the other test pits. No concentrations of total petroleum hydrocarbon indicator parameters, TPH and BTEX, in the six (6) soil samples analyzed were detected and thus did not exceed the applicable guidelines for the site.

5.0 RECOMMENDATIONS

Based on the results of the Phase II ESA conducted at the Former Teleglobe building in the area of the former USTs, no further investigation or delineation is recommended at this time.

6.0 CLOSURE

This report has been prepared for the sole benefit of W.H. Coates and Judith Coates. The report may not be used by any other person or entity without the express written consent of Stantec and W.H. Coates and Judith Coates.

Any use which a third party makes of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. Any site-specific information provided by other parties and used or referenced by Stantec has been assumed by Stantec to be accurate. The conclusions are based on the site conditions encountered by Stantec at the time the work was performed at the specific testing and/or sampling locations, and can only be extrapolated to an undefined limited area around these locations. The extent of the limited area depends on the soil and groundwater conditions, as well as the history of the site reflecting natural, construction and other activities. In addition, analysis has been carried out for a limited number of chemical parameters, and it should not be inferred that other chemical species are not present. Due to the nature of the investigation and the limited data available, Stantec cannot warrant against undiscovered environmental liabilities. Conclusions presented in this report should not be construed as legal advice.

If any conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.

We trust that the above is satisfactory for your purposes at this time. Should you have any questions or concerns, or require additional information, please contact either of the undersigned at your earliest convenience. This report was written by Keith Rowe, M.A.Sc., P.Eng. and reviewed by Paula Brennan, M.A.Sc., P.Eng.

Yours truly,

STANTEC CONSULTING LTD.



Keith Rowe, M.A.Sc., P.Eng.
Senior Environmental Engineer

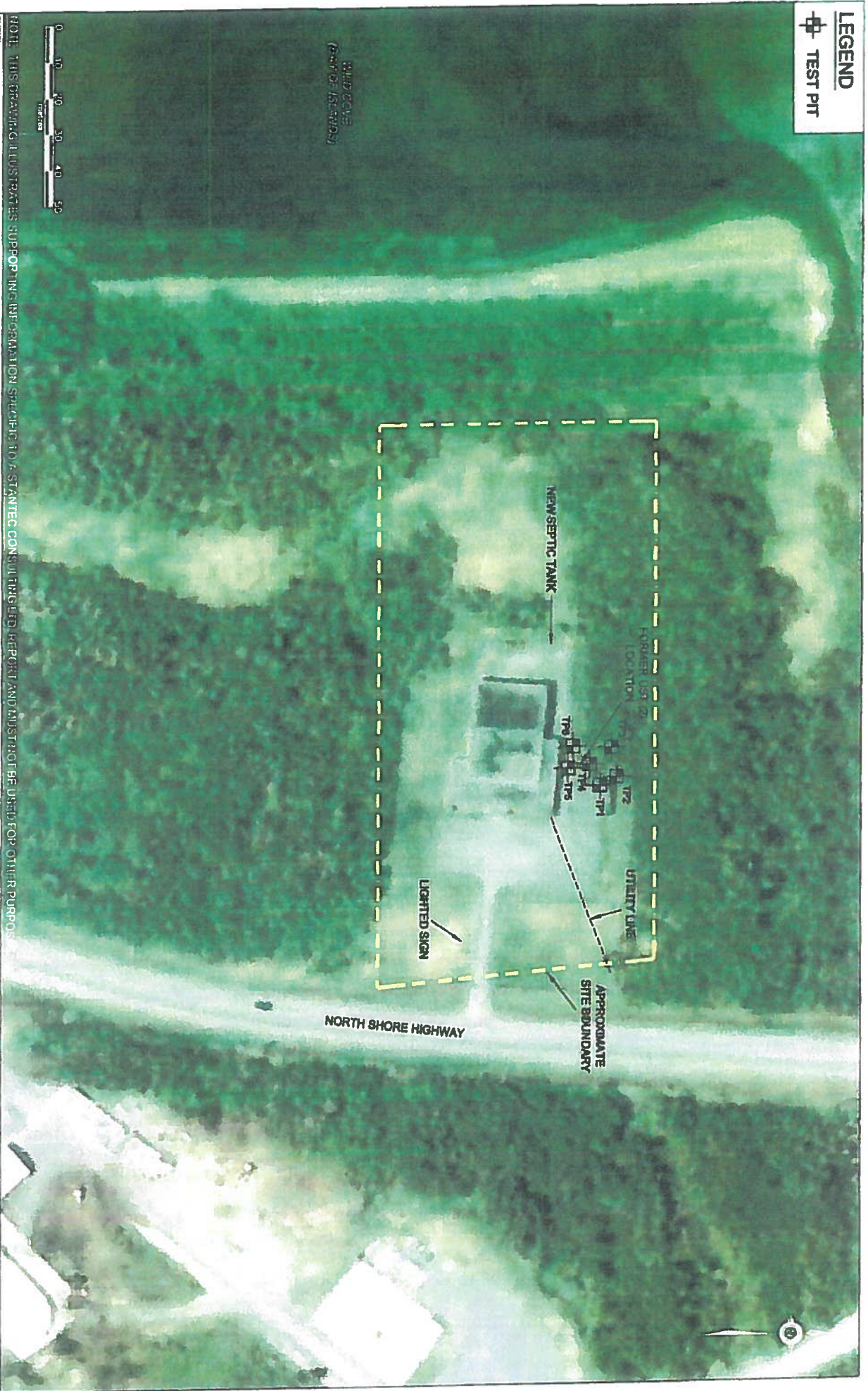


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APPENDIX A

Drawing

LEGEND
 TEST PIT



BLIND CONC
 (PART OF FOUNDATION)

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

W.H. COATES AND JUDITH COATES

PHASE II ENVIRONMENTAL SITE ASSESSMENT,
 FORMER TELEGLOBE BUILDING, NORTH SHORE HIGHWAY, CORNER BROOK, NL

TEST PIT LOCATION PLAN

Stantec Consulting Ltd. © 2012

SCALE	1:1500	DATE	APR. 13, 2012
DRAWN BY	N.M.	CHECKED BY	
EDITED BY	R.L.	REV. NO.	0
DRAWING NO.	121412093-EE-01		
CAD FILE	121412093-EE-03.DWG		



Stantec
 18APR12 12:00PM

APPENDIX B

Tier I/II Table Checklist and Ecological Screening Document



APPENDIX 1

Atlantic RBCA Version 2

REFERENCE GUIDELINES TIER ONE CHECK LIST

FOR

ECOLOGICAL RECEPTOR SCREENING

IN ATLANTIC CANADA

ATLANTIC PARTNERS IN RBCA IMPLEMENTATION

June 2003

APPLICABILITY OF THE TIER I/II RBSL/PSSL TABLES

If the Tier I Risk-Based Screening Level (RBSL) criteria or the Tier II Pathway-Specific Screening Level (PSSL) criteria are to be used, the Site Professional must ensure that the actual site conditions are consistent with the default parameters used to calculate the criteria in the RBSL or PSSL Tables. If not, the site-specific differences must be incorporated by using the Atlantic RBCA model and the development of Site-Specific Target Levels (SSTL).

Table 1. Tier I/II Checklist

Defaults and Mandatory Criteria		Compatible with Defaults?
Issue	Yes or No Comment	
Is there surface staining?	NO	YES
Is there free product in soil or water?	NO	YES
Are there odours or explosive conditions in buildings or infrastructure?	NO	YES
Is there objectionable taste or odour in potable water supplies?	NO	YES
Is any further activity required from the Ecological Screening Document?	NO (see Ecological Screening Document)	YES
Is there any impacted water known or reasonably suspected to be in bedrock?	NO	YES
Is the depth to groundwater approximately 3 metres?	YES (groundwater was encountered at about 5m)	YES
Is the impacted soil thickness less than 3 metres?	YES	YES
Does the on-site building have any of the following: - single storey residential building with no basement? - floor slab thickness less than 11.25 cm? - concrete floor with cracks exceeding the default crack fraction? - dirt basement floor? - sump with dirt bottom? - basements where soil is impacted above applicable Tier I RBSL is in contact with foundation walls?	NO	YES
Do the site conditions significantly differ from those of the default parameters?	NO	YES

If the site conditions are not compatible with the default assumptions, a Tier II or a Tier III risk assessment approach may be required. If more than one type of petroleum product is found on a site, the lowest Look Up Table value should be used.

Purpose

This document provides guidance for conducting a TIER I screening Ecological Risk Assessment (ERA) at a simple site impacted with hydrocarbons. This is a qualitative evaluation designed to determine whether or not additional data is required to quantify risks to ecological receptors through a tiered Ecological Risk Assessment (ERA).

This protocol is to be used in conjunction with the Tier 1 or Tier 2 Human Health Risk Assessment, RBCA tool kit, for Atlantic Canada.

The components of this assessment consist of a check list format to identify the potential receptors at risk and the presence of exposure pathways.

These practices are consistent with the recommended tiered approach from the National Contaminated Sites Remediation Program (NCSRP) as published by Environment Canada

The following guidelines are intended to be the minimum requirements for a preliminary assessment. They should in no way be construed as limiting, if your professional judgement determines that additional or different evaluation is required for a particular site.

Introduction

The components of this evaluation are divided into two steps. Step 1 identifies the presence of ecological receptors on or adjacent to the site, within a suggested distance of 150 metres. This distance is subject to professional judgement.

Step 2 determines the potential for the ecological receptors to be exposed to released hydrocarbons. Risks to ecological receptors essentially require the presence of receptors, potential pathways and the presence of toxicity. Further ERA activities should not be required if one of these conditions is missing.

1) **ECOLOGICAL HABITAT**
(within 150 meters of the site)

YES/NO

- Wetland habitats such as marshes, swamps, tidal flats, beaches YES
 - Aquatic habitats such as rivers, lakes or streams
- YES
- Forested habitats (50 acres or more) NO
 - Grassland habitats NO
 - Provincial/National parks or ecological reserve NO
 - Rare, threatened or endangered species populations NO
 - Other critical or sensitive habitat for wildlife, migratory species NO

If the answer is “**NO**” to ALL questions, then no species of concern are identified. There is no further action required.

If the answer to any on question is “**YES**”, then proceed to the next step.

EXPOSURE ASSESSMENT

YES/NO

- Can dissolved hydrocarbons in groundwater reach any receptor habitat identified above now or in the future? NA
- Can LNAPL (Light Non Aqueous Phase Liquids) reach any receptor habitat identified above? NA
- Can hydrocarbons reach any receptor habitat identified above via surface runoffs? NA

If the site is under a building or pavement, skip the next two questions.

- Is there a potential for direct absorption of contaminants through skin? NA
- Is there a potential for oral consumption of contaminated soil, water, or plants? NA
- Have hydrocarbons, associated with the site being investigated, been known to be present in any of the soils, sediments, or surface water of the receptor habitat(s) identified above at concentrations greater than CCME ecologically-based guidelines? NA

If the answer to any questions above is YES, then further assessment is required. Additional data should be gathered to enhance the knowledge of the site-specific situation such as; fate and transport of contaminants, description of the receptor of concerns, preliminary toxicity estimates and mitigation options. (Tiered ERA)

The results of this screening assessment should be documented in writing in the Atlantic RBCA report. It should detail answers to the questions above and provide documentation or rationale for the answers provided.

Wild Cove Brook to the north and Corner Brook Harbour to the west are located within 150 m of the former tanks location. However, no impacts in soil or groundwater were identified that would impact the identified ecological environments.

References;

- 1) ASTM, RBCA Draft Provisional Standard (RBCA II), Appendix 5 qualitative ecological exposure assessment, ASTM publication, 1997
- 2) BRITISH COLUMBIA Ministry of Environment, Lands and Parks, 1998. Guidance and Checklist for Tier 1 Ecological Risk Assessment of Contaminated Sites in British Columbia. Landis et al. January 1998.
- 3) ENVIRONMENT CANADA, 1994. A Framework for Ecological Risk Assessment at Contaminated Sites in Canada: Review and Recommendations. Scientific series No 199, C. Gaudet, EVS Environment Consultants, ESSA Environmental and Social Systems Analysts, Ottawa Ont. 1994.

APPENDIX C

Laboratory Analytical Results Summary Table and
Laboratory Analytical Report

Environmental Site Assessment
 Globe Building, North Shore Highway, Corner Brook, NL
 Project No. 121412093

D	Sample Date	BTEX Parameters (mg/kg)			Total Petroleum Hydrocarbons (mg/kg)						Resemblance/Comment	
		Benzene	Toluene	Ethylbenzene	Xylenes	C ₈ -C ₁₀	>C ₁₀ -C ₁₆	>C ₁₆ -C ₂₁	>C ₂₁ -<C ₃₂	>C ₃₂ ²		Modified TPH ³
8	19-Mar-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
5	19-Mar-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
5	19-Mar-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
5	19-Mar-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
5	19-Mar-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
5	19-Mar-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	RDL	0.03	0.03	0.03	0.05	3	10	10	15	-	20	-
	Applicable Criteria ¹	0.03	0.38	0.08	11						7,400	

Partners in RBCA (Risk-Based Corrective Action) Implementation (PIRI) Tier I Risk-Based Screening Levels (RBSLs) for a commercial site with potable groundwater and coarse grained soil impacts (March 2007).

PIRI analytical method does not analyse for >C32. Laboratory certificate indicates (Yes or No) whether chromatogram for each sample returns to baseline after C32. Samples are considered returned to baseline if the area from C32-C36 is less than 10% of the area from C10-C32.

6 - C32 (excluding BTEX)
 Portable detection limit; ND = Not detected at the RDL shown; '-' = not applicable



Your P.O. #: 16300R-40
 Your Project #: 121412093
 Site Location: FMR TELEGLOBE
 Your C.O.C. #: b081523

Attention: Steve Moores
 Stantec Consulting Ltd
 St. John's - Standing Offer
 607 Torbay Road
 St. John's, NL
 CANADA A1A 4Y6

Report Date: 2012/03/29

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B240862
 Received: 2012/03/23, 09:32

Sample Matrix: Soil
 # Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
TEH in Soil (PIRI) (1)	6	2012/03/26	2012/03/26	ATL SOP 00111	Based on Atl. PIRI MOE Handbook 1983
Moisture	6	N/A	2012/03/23	ATL SOP 00001	Based on Atl. PIRI
VPH in Soil (PIRI)	6	2012/03/23	2012/03/26	ATL SOP 00119	Based on Atl. PIRI
ModTPH (T1) Calc. for Soil	6	2012/03/23	2012/03/27		

Remarks:

Reporting results to two significant figures at the RDL is to permit statistical evaluation and is not intended to be an indication of analytical precision.

- * RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
- * Results relate only to the items tested.

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

Encryption Key

Gillian Letta Gillian Letta
 29 Mar 2012 11:08:17 -03:00

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

MICHELLE HILL, Project Manager
 Email: MHill@maxxam.ca
 Phone# (902) 420-0203

=====

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.

Total cover pages: 1

Package 1	14.0°C
Each temperature is the average of up to three cooler temperatures taken at receipt	
GENERAL COMMENTS	
Samples received at an average temperature >10°C.	

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
2801114	Isobutylbenzene - Volatile	2012/03/26	73	60 - 140	102	60 - 140	102	%		
2801114	Benzene	2012/03/26	79	60 - 140	94	60 - 140	ND, RDL=0.025	mg/kg	NC(1)	50
2801114	Toluene	2012/03/26	NC	60 - 140	101	60 - 140	ND, RDL=0.025	mg/kg	6.5	50
2801114	Ethylbenzene	2012/03/26	NC	60 - 140	96	60 - 140	ND, RDL=0.025	mg/kg	0.4	50
2801114	Xylene (Total)	2012/03/26	NC	60 - 140	97	60 - 140	ND, RDL=0.050	mg/kg	5.3	50
2801114	C6 - C10 (less BTEX)	2012/03/26					ND, RDL=2.5	mg/kg	8.1	50
2801696	Isobutylbenzene - Extractable	2012/03/26	114	30 - 130	89	30 - 130	91	%		
2801696	n-Dodecane - Extractable	2012/03/26	65	30 - 130	71	30 - 130	77	%		
2801696	>C10-C16 Hydrocarbons	2012/03/26	NC	30 - 130	74	30 - 130	ND, RDL=10	mg/kg	9.3	50
2801696	>C16-C21 Hydrocarbons	2012/03/26	92	30 - 130	81	30 - 130	ND, RDL=10	mg/kg	9.1	50
2801696	>C21-<C32 Hydrocarbons	2012/03/26	79	30 - 130	81	30 - 130	ND, RDL=15	mg/kg	NC	50

N/A = Not Applicable

RDL = Reportable Detection Limit

RPD = Relative Percent Difference

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 to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

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 not sufficiently significant to permit a reliable recovery calculation.

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

(1) - Elevated VPH RDL(s) due to matrix interference.

Maxxam

Validation Signature Page

Maxxam Job #: B240862

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).


DONALD SCIENTIFIC Specialist (Organics)

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