

FUEL MANAGEMENT PLAN

**FOR THE ASTON BAY PROPERTY
(ALSO KNOWN AS STORM PROPERTY)
NUNAVUT, CANADA**

Prepared For:



Prepared By:



Effective June 2020

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1. Introduction

This Fuel Management Plan (“FMP”) applies to mineral exploration activities conducted by, or on behalf of, Aston Bay Holdings Ltd. (“Aston Bay”) at the Aston Bay Property (the “Property” or the “Project,” also known as the “Storm Property” or “Storm Project”), Somerset Island, Nunavut.

This FMP will come into effect June 2020, pending approval. Copies and updates to this plan may be obtained via Aston Bay.

1.1 Contact Details

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1.2 Purpose and Scope

The primary objective of the Aston Bay Property FMP is to provide straightforward procedures for the storage and handling of fuels for the purpose of reducing the risk of environmental contamination and to ensure the health and safety of all personnel from the accidental release of deleterious materials. The FMP includes the following:

- Promote safe handling and use of all types of fuel;
- Reduce the likelihood of spills of all types of fuel;
- Identify responsibilities and procedures for all staff and contractors;
- Provide site specific information about the facilities and contingencies in place;
- Comply with federal and territorial government regulations and guidelines pertaining to transportation, storage, handling and disposal of any type of fuel.

1.3 Other Plans

The FMP should be considered as a part of the Property wide management system. Other management plans in place at the Aston Bay Property include:

- Abandonment and Restoration Plan (“ARP”)
- Emergency Response Plan (“ERP”)

- Environmental Management Plan (“EMP”)
- Spill Prevention and Response Plan (“SPRP”)
- Waste Management Plan (“WMP”)

1.4 Project Description

Aston Bay Property is located on northern Somerset Island, in the Qikiqtani Region of Nunavut (Appendix A, Figure 1) within the 1:50,000 scale National Topographic System (“NTS”) map sheets 058B14 and 15, 058C02, 03, 06, 07, 10, 11, 13 and 14 and 058F02, 03 and 04. The nearest community to the Property is Resolute Bay, located 112 km to the north, across Parry Sound on the southern edge of Cornwallis Island. The Property includes the Seal Zinc prospect and multiple copper-silver showings, collectively known as the Storm Copper prospect.

Aston Bay Property comprises one hundred eighteen contiguous mineral claims and twelve prospecting permits. The Property covers a combined area of approximately 391, 483 ha and is bound by latitudes 72°45’ N and 73°56’ N, and longitudes 93°20’ W and 95°20’ W (Appendix A, Figure 2 and Figure 3).

From 1964 until 2001, Cominco Ltd. was actively conducting exploration within the Property area. Commander Resources Ltd. (“Commander”) explored on the Property from 2008 to 2011. In November 2011, Aston Bay entered into an option agreement with Commander and by February 2016, acquired 100% of Commander’s interest in the Property. From 2012 to 2015, Aston Bay completed small exploration programs, but no drilling was undertaken. The 10-20 person Aston Camp was established in 2014 located at approximately 73°42’ N latitude and 94°43’ W longitude. In 2016, the Aston Camp was removed, with the exception of one 14’x16’ wooden shack containing survival equipment, and the 40-person Storm Camp and airstrip was established along the Aston River at approximately 73°39’23” N latitude and 94°27’07” W longitude (Appendix A, Figure 4 and Figure 5). Between 2016 and 2018, Aston Bay completed surface sampling, an airborne geophysical survey, and diamond drilling. In 2019, no exploration work was completed.

Aston Bay’s annual exploration program may include 5,000 to 10,000 m of diamond drilling, soil and rock geochemical sampling, geological mapping and ground geophysical surveys. Similar programs are anticipated for 3 to 4 subsequent years. All exploration activities will be helicopter supported and based out of Storm Camp.

A fuel cache of approximately 80,000 L (400 drums) will be established at the current fuel cache, adjacent to camp. The cache will be primarily diesel and jet fuel, with small quantities of gasoline and propane. All fuel and any other hazardous materials will be stored within secondary

containment. Off-season fuel storage may include up to 60 drums of jet fuel and diesel, and up to 20 cylinders of propane. Small, temporary fuel caches of less than 4,000L may also be required to support the drilling and exploration programs. Within 30 days of establishing any temporary fuel cache, Crown-Indigenous Relations and Northern Affairs Canada ("CIRNAC") will be notified of the details of the cache including: location, fuel type, container sizes, method of storage and date of removal.

Aston Bay is currently applying for a Nunavut Water Board ("NWB") Type B Water Licence Renewal and Amendment as the current water licence 2BE-STO1520 will expire on June 1, 2020. Additionally, as the CIRNAC Land Use Permit ("LUP") N2015C0014 will expire April 21, 2021, Aston Bay is also applying for a new Class A LUP. The NWB amendment is requesting an increase in the water allowance, from 82 m³/day (2 m³/day for camp and 80 m³/day for drilling) to 299 m³/day (10 m³/day for camp and 289 m³/day for drilling). In addition, Aston Bay is applying to increase the drilling area to include the entire currently permitted Project Extent, but will ensure that all ground disturbance activities, water use and waste disposal will only occur over lands that have an active mineral tenure held by Aston Bay. No exploration activities, drilling, water use, or waste disposal will be undertaken on Inuit Owned Lands ("IOL"), without a licence granted by the Qikiqtani Inuit Association ("QIA").

2. Fuel Inventory

A small fuel cache remains at the Property (Table 1), located at the Storm Camp fuel cache site. All remaining fuel is stored in covered secondary containment berms. Jet fuel is stored separately from diesel and gas. Remaining propane cylinders were secured to one of the plywood buildings. Inventory remains from 2018 as no work was completed on the Property in 2019.

Table 1: Inventory of fuels stored off-season at Storm Camp (2018).

Material	Container	Quantity on Site
Diesel	205 L Drum	17 Drums
Jet Fuel (Jet A)	205 L Drum	26 Drums
Gasoline	205 L Drum	2 Drums
Propane	100 lb Cylinder	7 Cylinders

During operations, a main fuel cache area will be established adjacent to Storm Camp at approximately 73° 42' 30.5" N; 94° 43' 16.6" W. Diesel, jet fuel, gasoline and propane will be stored in separate caches in the same general area. A temporary cache will be established adjacent to the airstrip, approximately 600 metres west of Storm Camp, to accommodate fuel delivered by Twin Otter prior to moving it to camp. Small fuel caches of up to 4,000 L will be

established at drill sites while drilling is in progress. There may also be temporary fuel caches created to support drilling and exploration in areas far from camp. These temporary caches will store small amounts of diesel and propane, as needed for drilling. Other hazardous materials found on site may include small quantities of various lubricants/oil/grease for drilling and maintenance of motorized equipment, cleaning products, and waste oil.

Diesel, jet fuel, and gasoline at the Property will be stored in standard, sealed and labeled 205 litre (L) metal drums. Propane will be stored in standard 100 lb cylinders equipped with pressure relief valves. Waste oil and fuel will be sealed in 205 L steel drums and removed from camp for proper disposal. Drums will be stored in an organized manner with the bungs at the 9 o'clock and 3 o'clock positions. All empty fuel drums and waste fuel drums were backhauled to Resolute Bay for cleaning and storage/disposal on an ongoing basis.

Table 2: Inventory of fuels to be stored at the Storm Camp during operations.

Material	Container	Maximum On Site
Diesel	205 L Drum	200 Drums
Jet Fuel (Jet A or Jet B)	205 L Drum	200 Drums
Gasoline	205 L Drum	25 Drums
Propane	100 lb Cylinder	50 Cylinders

The Project Supervisor is responsible for maintaining a detailed fuel and hazardous material inventory and is in charge of overseeing the maintenance and monitoring of all fuel and hazardous material caches.

3. Storage and Containment

All fuels and other hazardous materials will be stored within “Arctic Insta-Berms”, or similar products, for secondary containment. These types of berms utilize chemical and fire-resistant fabric (generally polyurethane coated nylon or vinyl coated polyester material) designed for extreme arctic temperatures and puncture resistance. “RainDrain” or similar hydrocarbon filtration systems will be used to safely remove any water collected inside the berms, and as a safeguard against any potential overflows of contaminated water.

Fuel drums will be stored on their sides in organized rows with the bungs in the three o'clock and nine o'clock positions. Drums will be stood upright 1 to 2 days prior to use in order to allow any contaminants to settle. Daily visual inspections will be conducted to identify any damaged or leaking containers, the findings reported in the “Weekly Fuel Inspection Record” (Appendix B). In

the event that a leak is discovered, the substance will either be used immediately or transferred to an undamaged container.

Propane cylinders will be equipped with a pressure release valve that opens and closes to prevent a buildup of excessive internal pressure. Labels, showing data such as date of manufacture and re-testing dates, will be applied to the collar of the cylinders. Propane is non-toxic and will not contaminate soil; therefore, secondary containment berms are not required for storage. All propane cylinders will be secured for safety and stored away from any sources of ignition.

All fuel storage and fuel transfer areas will be located a minimum distance of 31 m from the normal high-water mark of any water body. Spill kits and firefighting equipment will be strategically located near where any hazardous materials are stored or transferred, at all drill sites, in the helicopter(s), and at other locations throughout the camp.

4. Fuel Transportation and Transfer

All fuel will be mobilized to camp by fixed wing aircraft. Drums will be inspected prior to being transferred to camp to identify any defects (i.e. torn, missing, or twisted gaskets, etc.); a second inspection will be performed upon arrival at camp. Regulations outlined in the Transportation of Dangerous Goods Act, and other relevant legislation, will be observed at all times during transport. Fuel drums will be slung by helicopter as needed to drill sites. All drums will be inspected for leaks and defects prior to and after helicopter transport. Empty drums will be removed from site for proper disposal.

Electric or hand wobble pumps equipped with filtration devices will be used for the transfer of diesel, jet fuel, and gasoline from their storage containers directly to their end-use fuel tanks. Portable drip trays or mini-berms will be used to mitigate the risk of any spillage, and fully stocked spill kits will be available at all refueling stations. Proper grounding procedures will always be used during fuel transfer while using an electric pump. Cigarette smoking, sparks, open flames, and any potential ignition sources are prohibited within 100 m of any fuel storage site and at all times during fuel transfer.

When transferring fuel, the drum will be stood upright and blocked with the high side at 12 o'clock, the bung at 3 o'clock, and the vent at 9 o'clock to prevent water or dirty fuel from reaching the openings. The standpipe will be placed in a manner so that it will not be able to reach the lowest point in the drum, thus ensuring any contaminants will remain in the drum.

Any personnel who are required to handle or store fuel will receive appropriate training, including instruction in the operation and maintenance of fuel transfer and storage equipment. All on-site personnel will receive training as outlined in the Aston Bay Property “Spill Prevention and Response Plan”

5. Signs, Labels, and Inspections

All drummed fuel will be clearly labeled in accordance with the Workplace Hazardous Materials Information System (“WHMIS”) and other applicable legislation. Labels will include, but not limited to, the type of fuel, safe handling procedures, reference to Material Safety Data Sheets (“MSDS”), company name, and the date of delivery to site. Signs with the same information, along with MSDS for each fuel type will be posted at each fuel storage or transfer site. “No Smoking” signs will be posted at each fuel cache, drill site, and fuel transfer area.

As previously stated, all fuel drums will be inspected upon arrival at camp, and before and after helicopter transport. Monitoring of drums, fuel transfer equipment, and fuel caches will be ongoing during the exploration program. Daily inspections will be conducted to identify any damaged or leaking containers, and the findings reported in the “Daily Fuel Inspection Record” (Appendix B). Any damage discovered during or as a result of transport will also be recorded. Any leaks or spills will be reported and contained as outlined in the Aston Bay Property “Spill Prevention and Response Plan”. The Project Supervisor is responsible for overseeing the monitoring and inspection program and keeping a detailed inventory of all fuel and other hazardous materials on site.

6. Spill Kits

Spill kits will be located at each fuel cache, storage area, and refueling station. See the Aston Bay Property “Spill Prevention and Response Plan” for further details regarding spill kits, and spill response and reporting procedures.

7. Applicable Legislation and Guidelines

Applicable acts, regulations, and legislation that relate to the storage, handling, and transport of fuel are presented in the following:

7.1 Federal

- Canadian Centre for Occupational Health and Safety Act
- Hazardous Products Act
- Canadian Environmental Protection Act
- Fisheries Act
- Nunavut Waters and Nunavut Surface Rights Tribunal Act
- Transportation of Dangerous Goods Act
- National Fire Code of Canada
- Northern Land Use Guidelines
- Workplace Hazardous Materials Information System (“WHMIS”)
- CCME Environmental Codes of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products
- Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations

7.2 Territorial

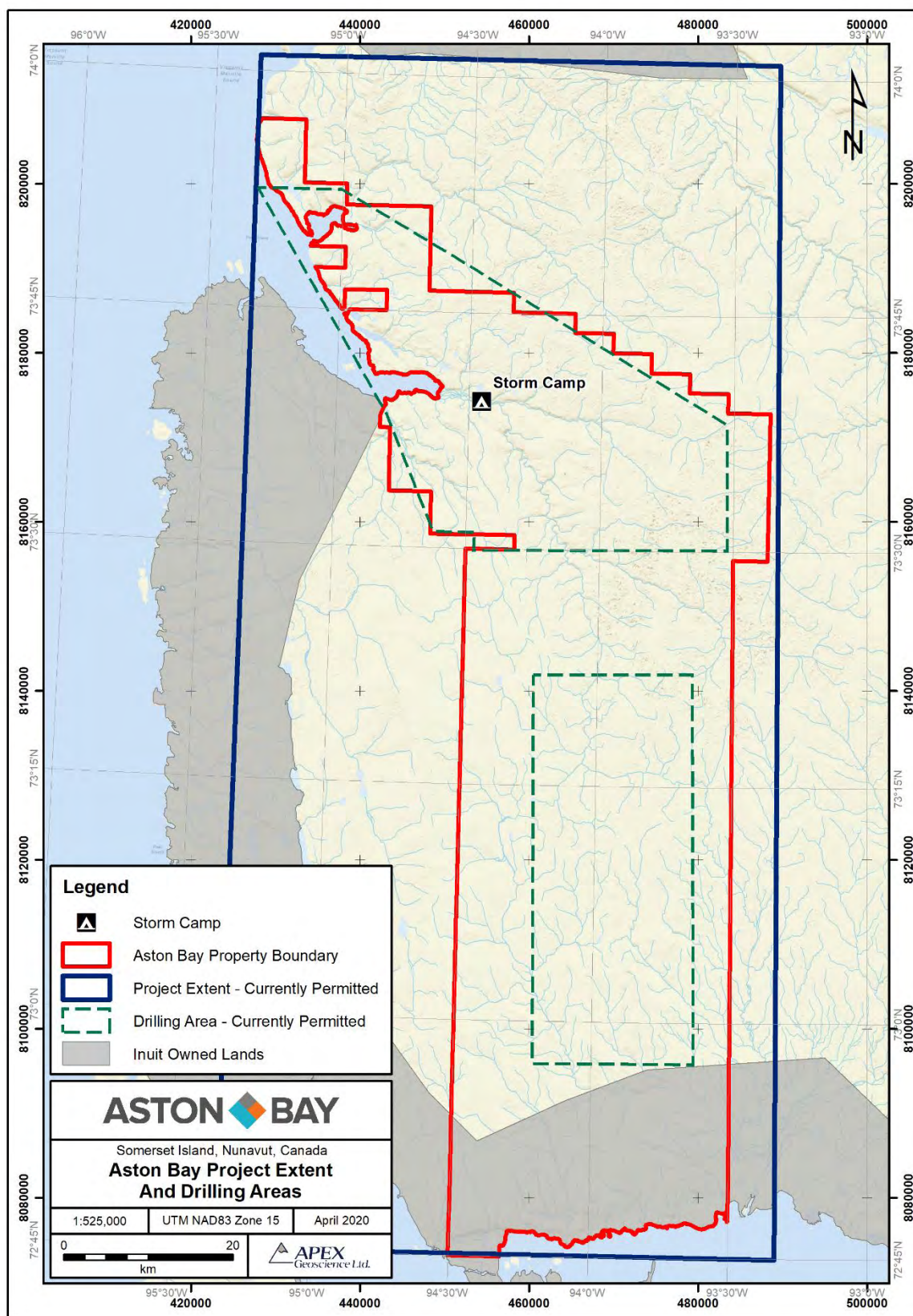
- Fire Prevention Act
- Environmental Protection Act
- Mine Health and Safety Act and Regulations
- Safety Act
- Nunavut Occupational Health and Safety Regulations
- Environmental Guideline for the General Management of Hazardous Waste
- Contingency planning and spill reporting in Nunavut
- A Guide to Spill Contingency Planning & Reporting

Appendix A: Figures

Figure 1. Aston Bay Property location.



Figure 2. Aston Bay Project Extent and drilling areas.



 **APEX**
Geoscience Ltd.



Figure 4. Storm Camp and airstrip locations.

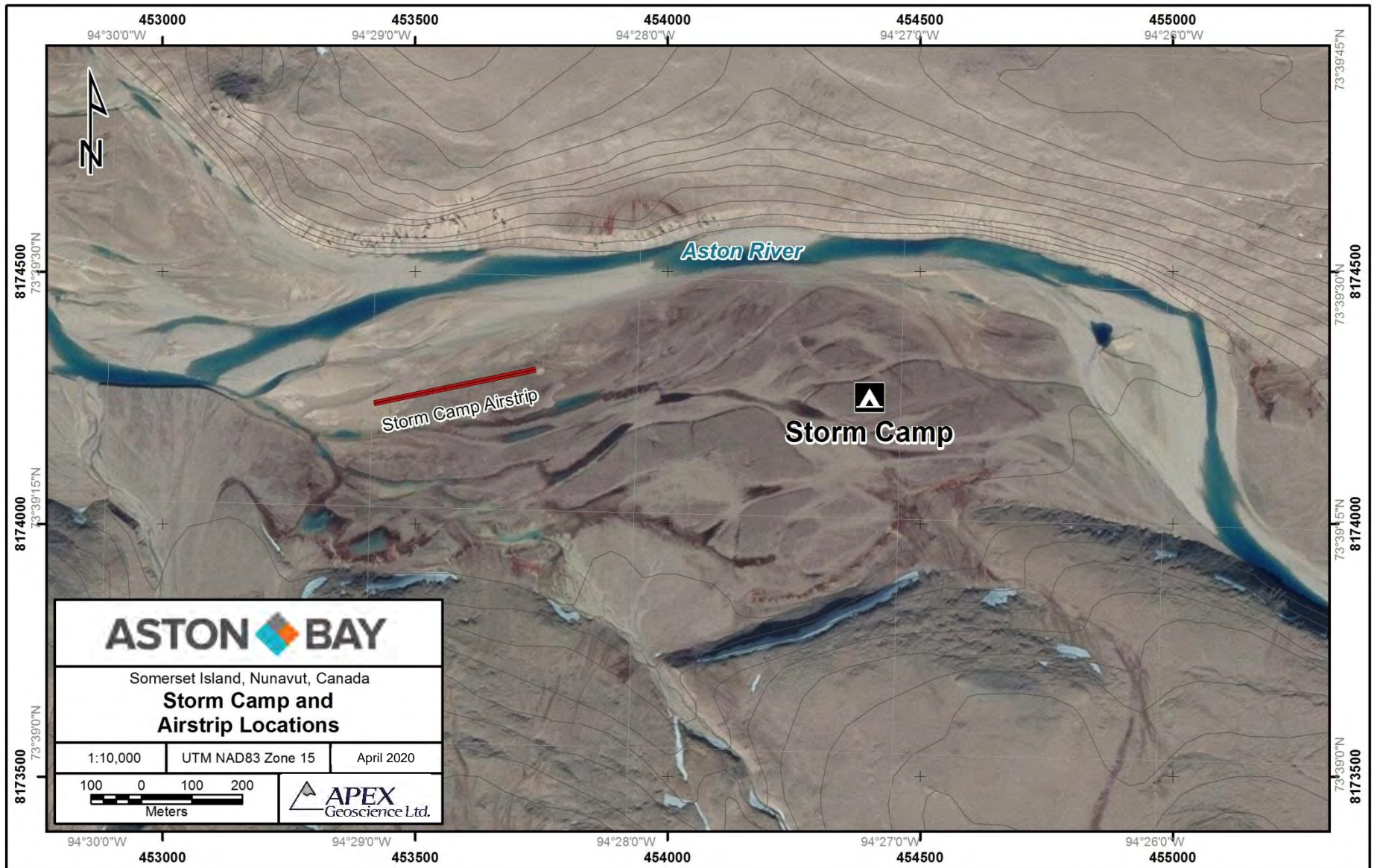
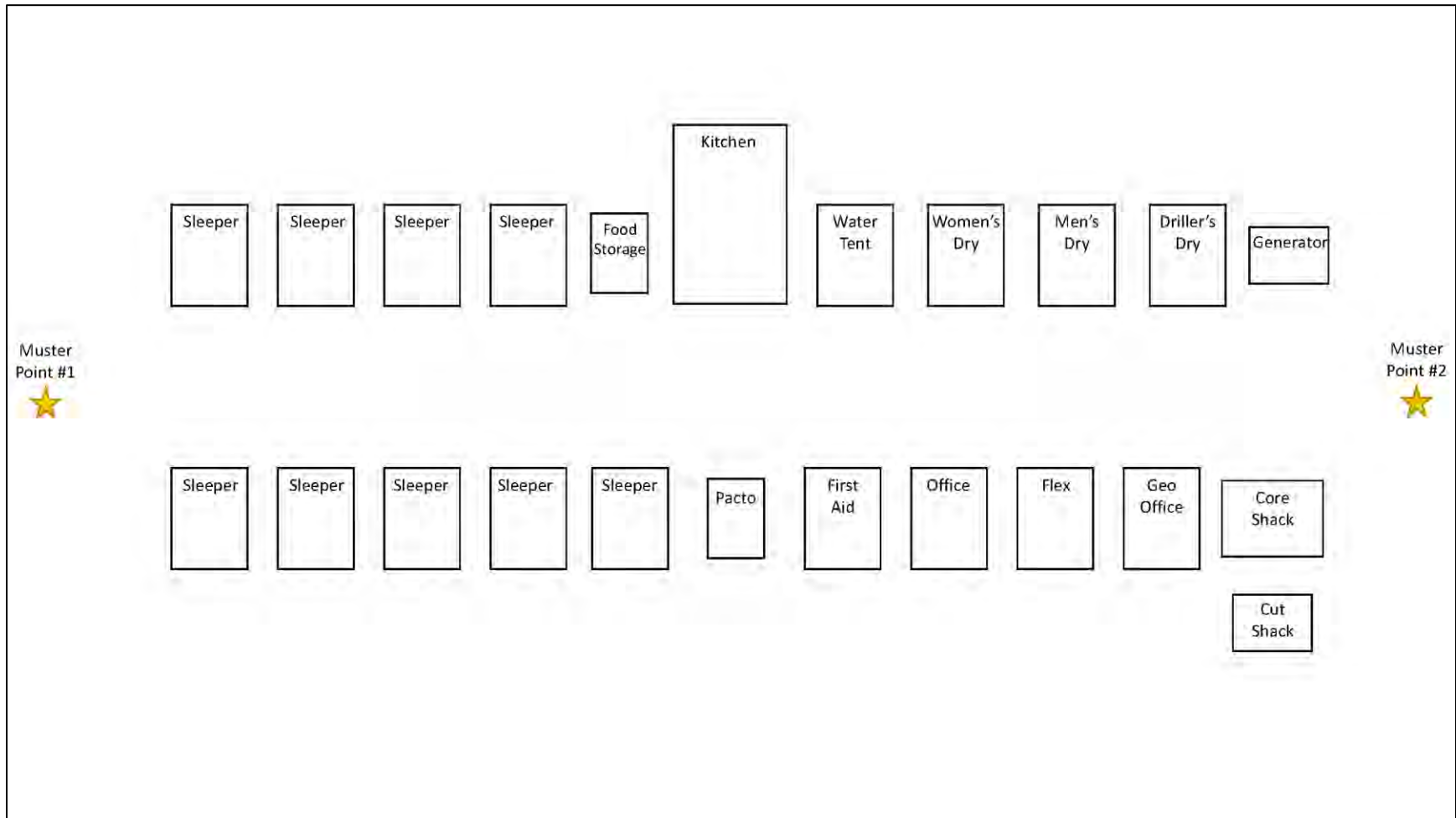


Figure 5. Storm Camp map.



Appendix B: Fuel Inspection Records

Aston Bay Property Daily Fuel Inspection Record

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