

NW B Annual Report

Year being reported: 2007



License No: 3BC-SII07007

Issued Date: June 8, 2007

Expiry Date: December 31st, 2007

Project Name: Southampton Island Integrated Geoscience Project

Licensee: Dr. Joyia Chakungal

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Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

General Background Information on the Project (*optional):

The Southampton Integrated Geoscience Project (SIIG) is a partnered territorial - federal field-based project that is updating the geoscience knowledge base for a significant part of Southampton Island, including an area of approximately 15,000 km² of exposed Precambrian bedrock. During 2007, acquisition of regional high-resolution (400 m) aeromagnetic data across eastern Southampton Island took place in conjunction with integrated field-based geoscience studies conducted from a temporary, tent-based research camp. The camp served as a home to 28 researchers, including scientists from the Canada-Nunavut Geoscience Office (C-NGO), Geological Survey of Canada (GSC), university and college students, as well as kitchen and helicopter support staff. The camp was based 50 km northwest of the community of Coral Harbour, the primary community on Southampton Island. that will directly benefit from exploration and resource development.

Licence Requirements: the licensee must provide the following information in accordance with

Select



Select



A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):	Kirchoffer River		
Water Quantity:	> 100m ³ /day	Quantity Allowable Domestic (cu.m)	
	200m ³ /day	Actual Quantity Used Domestic (cu.m)	
	NA	Quantity Allowable Drilling (cu.m)	
	NA	Total Quantity Used Drilling (cu.m)	

Waste Management and/or Disposal

☐ Solid Waste Disposal

☒ Sewage

☐ Drill Waste

- ☐ Sewage
- ☐ Drill Waste
- ☒ Greywater
- ☐ Hazardous
- ☐ Other:

Additional Details:

Water was used for drinking and cooking purposes. Sewage and greywater were buried > 30 metres from the Kirchoffer River. All solid waste was back hauled.

A list of unauthorized discharges and a summary of follow-up actions taken.

Spill No.: (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Revisions to the Spill Contingency Plan

N/A - not applicable



Additional Details:

Revisions to the Abandonment and Restoration Plan

N/A - not applicable



Additional Details:

Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

please see attached.

Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Select ▼

Additional Details:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;

Details described below ▼

Additional Details:

Results of any additional sampling and/or analysis that was requested by an Inspector

Select ▼

Additional Details: (date of request, analysis of results, data attached, etc)

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

No additional sampling requested by an Inspector or the Board ▼

Additional Details: (Attached or provided below)

Any responses or follow-up actions on inspection/compliance reports

No inspection and/or compliance report issued by INAC ▼

Additional Details: (Dates of Report, Follow-up by the Licensee)

Any additional comments or information for the Board to consider

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Date Submitted:
Submitted/Prepared by:
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SOUTHAMPTON ISLAND INTEGRATED GEOSCIENCE (SIIG): PROJECT DESCRIPTION AND UPDATE OF ACTIVITIES

Joyia Chakungal and Mary Sanborn-Barrie, Project co-leaders

In 2007, Southampton Island Integrated Geoscience (SIIG) project was initiated with funding support from the Canada – Nunavut Geoscience Office, Geological Survey of Canada, the Polar Continental Shelf Project, the Department of Indian Affairs and Northern Development, and the Government of Nunavut. The principal objectives of the project included: 1) acquisition of high-resolution, regional aeromagnetic data for the central and eastern portions of Southampton Island (completed on August 24th, 2007), and 2) helicopter supported acquisition of ground-based bedrock and surficial geology data from a tent-based research camp situated approximately 30 km northwest of Coral Harbour (N 64° 36' 46", W 84° 06' 31"; refer to attached map). Between July 7 and August 25, 2007, approximately 11,000 km² of the bedrock and surficial geology of central and northern Southampton Island were mapped at a scale of 1:250,000. Approximately 500 rock; 200 till (soil) samples were collected over the course of the summer. Analysis of the samples (ongoing) will provide new data and ideas intended to promote the exploration potential of the island.

Following complete demobilization of the Southampton Island Integrated Geoscience research camp on August 25th, 2007, four members of the hamlet of Coral Harbour were asked to visit and inspect on behalf of the community the camp site. The inspection crew included Mayor Armand Angootealuk, MLA Patterk Netser, and HTA members Louisa and Noah Kudluk.

To complete the work started in 2007, the east and southeast parts of the island remain to be mapped at 1:250,000 scale. Data pertaining to this region is critical for an integrated understanding of the geology of the island, particularly since it occurs outside the area for which regional geophysical information is now available. With this in mind, an application for logistical support has been submitted to the Polar Continental Shelf Project in which we have proposed to complete the geological map in 2008 with a team of approximately 6 scientists, university students, and employees based in Coral Harbour. Names of the individuals who will be part of the research team will be provided in May, once the team has been finalized. The work is intended to be based from a helicopter supported research camp located in the hamlet of Coral Harbour and carried out between July 7th and August 6th, 2008. With this in mind, 80 drums of Jet-B fuel have been cached at the Coral Harbour Airport, and will remain so for the duration of the work proposed for 2008.

BIBLIOGRAPHY OF RECENT CONTRIBUTIONS:

Chakungal, J., Sanborn-Barrie, M. and James, D. 2007. Southampton Island: an updated geoscience database. Abstract accepted for oral presentation at the Yellowknife Geoscience Forum, November, 2007.

Sanborn-Barrie, M., Chakungal, J., James, D.T., Whalen, J. Berman, R.G. and Craven, J. 2007. The geology of Southampton Island, Nunavut, within a NE Laurentia context. Abstract for poster presentation at the Yellowknife Geoscience Forum, November, 2007.

Zhang, S. 2007. New discoveries of Ordovician Oil Shale on Southampton Island, Nunavut. Abstract accepted for oral presentation at the Yellowknife Geoscience Forum, November, 2007.



