

nunavut

Mining Mineral Exploration and Geoscience 2005



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada



Cover photo:
Mike Young takes a
break to enjoy the view
over Buchan Gulf located
between Pond Inlet
and Clyde River on the
East Coast of Baffin Island.
Photo Credit: Jamie Boles,
Custom Helicopters Ltd.

Contents:

Land Tenure in Nunavut	3
Indian and Northern Affairs Canada	4
Government of Nunavut	6
Nunavut Tunngavik Incorporated	8
Canada-Nunavut Geoscience Office	10
Summary of 2005 Exploration Activities	13
Kitikmeot Region	13
Kivalliq Region	32
Qikiqtani/Baffin Region	44

About the Nunavut: Mining, Mineral Exploration and Geoscience 2005

This exploration overview is a combined effort of four partners: Minerals & Petroleum Resources Division, Government of Nunavut; Mineral Resources Division, Indian and Northern Affairs Canada; Department of Lands and Resources, Nunavut Tunngavik Inc. and the Canada-Nunavut Geoscience Office. The intent of this publication is to capture information on exploration and mining activities in 2005, and to make this information available to the public. All exploration information was gathered prior to mid-November 2005.

Prospectors and mining companies are welcome to submit information on their programs for inclusion in the next *Nunavut: Mining, Mineral Exploration and Geoscience*. We thank the many contributors who submitted data and photos for this edition. Feedback and comments are appreciated.

NOTE TO READERS

This document has been prepared on the basis of information available at the time of writing. The authors make no warranty of any kind with respect to the content and accept no liability, either incidental, consequential, financial or otherwise, arising from the use of this document.



Land Tenure in Nunavut

The territory of Nunavut was created in April 1999 as a result of the Nunavut Land Claims Agreement, the largest Aboriginal land settlement in Canadian history. Spanning two million kilometres, the Territory has 25 communities and an approximate population of 28,000 people. Inuit represent 85 per cent of Nunavut's population, creating the foundation of the Territory's culture and values. This culture is inherently connected to the land, shaping government, business and day-to-day life.

In addition to the creation of the new territory, the NLCA gave Inuit fee simple title to 356,000 square km of land. There are 944 parcels (16% of Nunavut) of Inuit Owned Lands (IOL) where Inuit hold surface title only (surface IOL). The Crown retains the mineral rights to these lands. Inuit also hold fee simple title including mineral rights to the remaining 150 parcels of IOL (sub-surface IOL), which total 38,000 square km and represent approximately 2 per cent of the territory. Surface title to all IOL is held in each region by one of the three Regional Inuit Associations (RIAs) while Inuit subsurface title with respect to subsurface IOL is held and administered by Nunavut Tunngavik Incorporated (NTI). NTI issues rights to explore and mine through its own

mineral tenure regime. Mineral rights (mineral claims or leases) that existed at the time of the signing of the NLCA – known as grandfathered rights – continue to be administered by Indian and Northern Affairs Canada (INAC) until they terminate or the holder transfers its interests to the NTI regime. For both surface and subsurface IOL, access to the land, through a Land Use Licence or Commercial Lease, must be obtained from the appropriate Regional Inuit Association.

The Crown owns mineral rights to 98 per cent of Nunavut. INAC administers these rights through the Canada Mining Regulations (CMR). This includes surface IOL, for which access to the land must be obtained from the RIAs as explained above.

Significantly, the NLCA is a final settlement whereby all land claims in Nunavut have been settled with the Inuit of Nunavut, thus providing an unmatched level of land tenure certainty. However land claims overlapping Hudson Bay and the southernmost Kivalliq are being negotiated with residents of northern Quebec and northern Manitoba respectively.

For more information on the location of IOL and Crown land in the territory take a look at the 2005 Nunavut Exploration and Activity Map on page 28. ■

GUIDE TO ACRONYMS

- CMR – Canadian Mining Regulations
- CNGO – Canada-Nunavut Geoscience Office
- EA – Inuit Owned Lands Mineral Exploration Agreement
- ED&T – Department of Economic Development and Transportation, Government of Nunavut
- EIS – Environmental Impact Statement
- GSC – Geological Survey of Canada
- IIBA – Inuit Impact Benefit Agreement
- INAC – Indian and Northern Affairs Canada
- IOL – Inuit Owned Land
- KIA – Kitikmeot Inuit Association
- NIRB – Nunavut Impact Review Board
- NLCA – Nunavut Land Claims Agreement
- NTI – Nunavut Tunngavik Incorporated
- NT – Northwest Territories
- RIA – Regional Inuit Association

Indian and Northern Affairs Canada

Indian and Northern Affairs Canada (INAC) administers mineral tenure on Crown land in Nunavut. This is done through the Nunavut Regional Office (NRO) in Iqaluit, Nunavut, by the Mineral Resources Division and the Mining Recorder's Office (MRO) of the Land Administration Division.

The Mineral Resources Division manages sustainable mineral resource development on Nunavut's Crown land. The division collects, edits, and distributes geoscience data through targeted research and economic geology projects and reviews exploration data filed as assessment work by the mining industry. Mineral Resources works on policy issues related to mineral development and exploration on Crown lands through the Canada Mining Regulations (CMR), and also provides technical

advice during environmental assessments. As an advocate of sustainable mineral development in the territory, the division also collaborates with partners in outreach programs such as Nunavut Mining Week and school and community visits.

Other activities supported by Mineral Resources include:

- Co-managing the Canada-Nunavut Geoscience Office (CNGO) together with Natural Resources Canada and the Government of Nunavut;
- Participating in environmental reviews, providing technical advice and perspective;
- Maintaining a digital archive of assessment data filed in Nunavut dating back to the 1940's;

**Indian and Northern
Affairs Canada,
Nunavut Regional Office**
P.O. Box 100, Iqaluit,
Nunavut X0A 0H0

Website

www.ainc-inac.gc.ca/nunavut



- Maintaining a library of reference material, rock samples and press clippings;
- Promoting mineral exploration within the territory through community outreach, publications and professional networking;
- Completing targeted geoscience in conjunction with CNGO and/or Industry.

The MRO administers all other aspects of mineral tenure on Crown land in Nunavut. Administration of these rights is regulated by the Canada Mining Regulations under the Territorial Lands Act. The MRO also administers coal tenure under the Territorial Coal Regulations and is your main point of contact to acquire crown mineral or coal

tenure. As well, the MRO sells claim maps, claim tags and assists individuals and companies in interpreting the Canada Mining Regulations with information on how to keep their properties in good standing.

Interest in Nunavut's mineral development potential remained strong in 2005 with industry investing close to \$200 million to explore for commodities such as diamonds, base metals and uranium. It was also another busy year for prospecting permits, with 1136 permits issued by the MRO encompassing 48 million hectares of land, the largest area of permitted Crown land in the history of Nunavut. ■

STAFF CONTACTS

MINERAL RESOURCES

Bernie MacIsaa	Manager	867 975 4290	macisaacb@inac.gc.ca
Jurate Gertzbein	Mineral Development Advisor	867 975 4291	gertzbeinj@inac.gc.ca
Linda Ham	District Geologist (Kitikmeot)	867 975 4292	geokitikmeot@inac.gc.ca
Karen Costello	District Geologist (Kivalliq)	867 975 4569	geokivalliq@inac.gc.ca
Paul "Jethro" Gertzbein	District Geologist (Qikiqtani/Baffin)	867 975 4279	geobaffin@inac.gc.ca
Christianne Lafferty	Mineral Archives Administrator	867 975 4293	laffertyc@inac.gc.ca
General Inquiries			nunavutminerals@inac.gc.ca
Archives Orders or Inquiries			nunavutarchives@inac.gc.ca
Mineral Resources Fax		867 975 4276	

LAND ADMINISTRATION

Spencer Dewar	Manager	867 975 4280	dewars@inac.gc.ca
Sheba Pikuyak	Administrative Assistant for Lands & Minerals	867 975 4294	pikuyaks@inac-ainc.gc.ca
Jeffrey Holwell	A/Land Administrative Specialist	867 975 4283	holwellj@inac.gc.ca
Arlene Brett-Miles	Senior Land Operations Clerk	867 975 4576	brettmilesa@inac.gc.ca
John Craig	A/Land Specialist	867 975 4285	craigjg@inac.gc.ca
Lena Akulukjuk	Land Operations Clerk	867 975 4282	akulukjukl@inac.gc.ca
Karin Rookk	Land Operations Clerk	867 975 4275	roockk@inac.gc.ca

MINING RECORDERS OFFICE

Anna North	Mining Recorder	867 975 4281	northa@inac.gc.ca
Nala Alainga	A/Deputy Mining Recorder	867 975 4284	alaingan@inac.gc.ca
Becky Leighfield	Senior Mining Clerk	867 975 4275	leighfieldr@inac.gc.ca
Elayne Wyatt	Land Operations Clerk	867 975 4580	wyatte@inac.gc.ca
Tony Tucker	GIS Technician	867 975 4573	tuckera@inac.gc.ca
Scottie Monteith	Junior GIS Technician	867 975 4278	monteiths@inac.gc.ca
Land Administration and Mining Recorders Office Fax		867 975 4286	

Government of Nunavut

The Government of Nunavut (GN), through its Department of Economic Development and Transportation (ED&T), welcomes the interest and investment of progressive-minded mineral exploration and mining companies.

The Department envisages a vibrant and sustainable minerals industry based on the “triple bottom line” concept, where success in the industry is measured by:

- adherence to best environmental practices;
- sustained flow of benefits to local residents; and
- return of healthy profits to shareholders.

The past three field seasons have seen unprecedented levels of exploration undertaken in Nunavut. A number of quality discoveries have recently been made and there will be substantial opportunities to be realized in the territory as exploration continues and as exploration projects evolve into mines.

ED&T is working to ensure that all Nunavummiut are in a position to benefit from these coming opportunities, and that they have the option of becoming full participants in developments in the territory.

At the same time, it is recognized that exploration and mining companies have the option of investing

in many jurisdictions throughout the world. Therefore, ED&T is committed to working with its partners, NTI and the Government of Canada, to make the legislation, policies and regulatory environment of Nunavut efficient, internationally competitive and attractive to investors.

Current Government of Nunavut initiatives include:

Nunavut Mineral Exploration and Mining Strategy

To collect and understand stakeholder views on a wide range of mining and exploration issues, ED&T carried out consultation meetings throughout the territory in 2005, with participation from Nunavummiut, Inuit Organizations, Institutions of Public Government, the Government of Canada, Community Governments, other GN departments, private Nunavut-based businesses, and Nunavut Arctic College. In addition, in southern Canada, meetings were held with representatives of the mining and exploration industries and environmental non-governmental organizations.

The views expressed in these consultations have been collated and form the basis of the Nunavut Mineral Exploration and Mining Strategy, which will be released in early 2006. This document will clarify the GN's position on mining and exploration,





and will guide the government as it deals with the opportunities and challenges that development of the territory's mineral wealth will bring.

Nunavut Prospectors' Program (NPP)

ED&T provides technical and financial assistance to Nunavummiut with demonstrated prospecting skills to carry out their own prospecting projects. While this program has been in existence since 1999, this year the amount of financial assistance available for each prospector has been increased from \$5000 to \$8000 per year.

Introductory Prospecting Course

Every year, ED&T geologists present a six-day Introductory Prospecting Course to interested residents in communities throughout the territory. Since 2000, the course has been offered in each community, with over 400 graduates to date. Graduates of the course often apply for NPP grants, and are sought after as field assistants on mineral exploration programs.

Community Minerals Education and Training

ED&T works with many other stakeholders, including the Department of Education, the Government of Canada, and the mining and exploration industries, in a number of programs designed to inform Nunavummiut of all ages of the opportunities in the minerals industries. ED&T programs and information include:

- Nunavut High School Math and Science Awards Program;
- Earth Sciences and Mining Teacher Workshops;
- Careers in Mining school and community presentations;
- Mineral exploration company contact list for communities; and
- Nunavut Science Outreach Network. ■

Department of Economic Development & Transportation, Minerals & Petroleum Resources Division

P.O. Box 1000,
Station 1560,
Iqaluit, NU X0A 0H0

Fax
(867) 975-5982

STAFF CONTACTS

HEADQUARTERS

Gordon Mackay	Director, Minerals & Petroleum Resources Division	(867) 975-5917	gmackay@gov.nu.ca
Dave Smith	Manager, Mineral Resources	(867) 975-5914	dsmith@gov.nu.ca

ARVIAT OFFICE

Claudia Riveros	Community Benefits & Education Specialist	(867) 875-2298	criveros@gov.nu.ca
Francois Berniolles	Resident Geologist	(867) 857-2297	fberniolles@gov.nu.ca
Feliks Kappi-Gawor	Community Mining Advisor	(867) 857-2297	mines@gov.nu.ca

Department of Economic Development & Transportation, Minerals & Petroleum Resources Division
P.O. Box 120, Arviat, NU X0C 0E0
Fax: (867) 975-2986

KUGLUKTUK OFFICE

Resident Geologist		(867) 982-7482	mines@gov.nu.ca
Jeremy Ford	Community Mining Advisor	(867) 982-7482	mines@gov.nu.ca

Department of Economic Development & Transportation, Minerals & Petroleum Resources Division
P.O. Box 316, Kugluktuk, NU X0B 0E0
Fax: (867) 982-3701

Nunavut Tunngavik Incorporated



Nunavut Tunngavik Incorporated (NTI) is the Inuit corporation responsible for overseeing implementation of the Nunavut Land Claims Agreement (NLCA). NTI's mandate includes safeguarding, administering and advancing the rights and benefits of the Inuit of Nunavut to promote their economic, social and cultural well-being through succeeding generations. The Lands and Resources Department of NTI is responsible for the implementation of Inuit responsibilities related to the management of Inuit Owned Lands (IOL), the environment, minerals, oil and gas, and marine areas.

There are two forms of mineral tenure that grant exclusive rights on subsurface IOL administered by NTI. These are the Inuit Owned Lands Mineral Exploration Agreement (usually referred to as the "Exploration Agreement", or "EA") and the Inuit Owned Lands Mineral Production Lease (referred to as the "Production Lease"). The Exploration Agreement grants a company or individual the exclusive right to explore and prospect for minerals (excluding oil and gas, and specified substances such as construction materials and carving stone) on a portion of subsurface IOL. This area, referred to as the "Exploration Area", is similar in many ways to a mineral claim under the Canadian Mining Regulations (CMR). A Production Lease grants the holder of an Exploration Agreement the right to produce minerals from a portion of the Exploration Area known as the Production Lease Area.

Since 1999, NTI has had in place a system of application that does not require staking when applying for an Exploration Agreement. Rather, the application requires only a description of the Exploration Area based on latitude and longitude. The applicant must submit to NTI a completed *Application for an Inuit Owned Lands Mineral Exploration Agreement* (available upon request from NTI or from the NTI Lands Department website). The completed application should include a description of the proposed exploration area

defined by latitude and longitude of the boundaries as well as a map showing the proposed exploration area. Applications are received during designated months and are processed at the start of the subsequent month, at which time NTI will decide whether to accept an application and issue an Exploration Agreement. Applications are kept confidential until the close of the application period in which they are received, thus ensuring that all applicants are treated fairly. Further details on the application process are included on the application form.

It should be noted that although the process and documents described here normally apply, NTI, as a private organization, has complete discretion as to whether it will issue an Exploration Agreement (or other agreement), what the process will be for obtaining an agreement, and what the terms of the agreement will be. The terms may include, for example, NTI holding a direct interest in a project.

Under the standard terms, successful applicants, upon executing the new Exploration Agreement and submitting the first year's annual fees, will be granted the exclusive right to explore for minerals on the Exploration Area. In order to gain access to the land, however, the applicant must obtain a surface right issued by the RIA.

NTI currently has 54 active Exploration Agreements with prospectors and exploration and mining companies. These cover more than 12 per cent of the total subsurface IOL. (In addition, grandfathered claims and leases comprise approximately two per cent of all subsurface IOL.) Holders of Exploration Agreements are required to submit annual exploration work reports to NTI that remain confidential for a period of up to three years.

Many of the advanced exploration projects in Nunavut fall on subsurface IOL. The following table summarizes the current active Exploration Agreements and their locations. ■

NTI Lands
PO Box 1269
Cambridge Bay, NU
X0B 0C0

Phone
(867) 983-5600

Fax
(867) 983-5624

Website
www.ntilands.com

PROJECT/DEPOSIT	HOLDER(S)	IOL PARCEL(S)	EXPLORATION AGREEMENTS
QIKIQTANI REGION			
Piling Project ¹ Melville	BHP-Billiton, Commander Resources Comaplex	BI-35 HB-15, HB-16	Qimmiq 1,2,4,5,6; Talik (6 EAs) Melville 1-2 (2 EAs)
KIVALLIQ REGION			
Meliadine ²	Comaplex, Cumberland	RI-01, RI-12	Ant 1-4, Fay 1-4, W1, Tan 1-4, Felsic (14 EAs) Meadowbank 1-3 (3 EAs)
Meadowbank ³	Cumberland	BL-14	Spi Lake
Spi Lake	Comaplex	AR-16	Square Lake
Square Lake	Comaplex	BL-21	Sedna 1 - 5 (5 EAs)
Sedna	4579 Nunavut Ltd	RI-01	Cache
Cache	Full Metal Minerals	WC-08	SDS 1-3 (3 EAs)
SDS	Adam Vary	RE-27	
KITIKMEOT REGION			
Hope Bay ⁴	Miramar Mining	BB-57, BB-60	Akungani 1-3, Aimaokatuk, Tok 1-3 (7 EAs) Doris Production Lease (application) Contwoyto agreements (4 EAs)
Contwoyto	Tahera	CO-08	Hood River
Hood River	Tahera	CO-20	Hilk
High Lake ⁵	Wolfden	CO-29	Muskox agreements (3 EAs)
Muskox ⁷	Gordon Addie	CO-62	Arcadia Bay
Arcadia Bay	Full Metal Minerals	CO-31	Rockinghorse
Rockinghorse ⁸	Kennecott	CO-44	Strongbow
Strongbow	Strongbow Resources	1800 km ² in the Kitikmeot	

Note: All projects referenced below are discussed in this report.

1. Overall project involves Crown land and subsurface IOL.
2. The project involves land held under NTI Exploration Agreements as well as grandfathered claims and leases.
3. The project involves land held under NTI Exploration Agreements and grandfathered leases.
4. The Boston deposit is located on surface IOL, while the Doris, Madrid, South Patch, Naartok and Suluk are on subsurface IOL, distributed among grandfathered leases and NTI Exploration Agreements. Potential extension of the Boston deposit down-dip or along strike to the north will also be on subsurface IOL.
5. The project involves Crown land and land held under NTI Exploration Agreements and grandfathered leases.
6. The project involves Crown land, surface IOL, and subsurface IOL under NTI Exploration Agreements.
7. The project involves Crown land, surface IOL, and subsurface IOL under NTI Exploration Agreements.
8. Near the edge of the project referred to later in this report.

MINING PROJECTS

There are currently two mining projects located in Inuit-owned mineral rights, Miramar's Doris North project and Cumberland's Meadowbank project. Both are undergoing the review process leading to permitting and construction.

STAFF CONTACTS: MINERALS, OIL AND GAS

Carson Gillis	Director of Lands and Resources	cgillis@ntilands.com
Stefan Lopatka	Senior Adviser – Minerals, Oil and Gas	slopatka@ntilands.com
Keith Morrison	Administrative Geologist	kmorrison@ntilands.com

Canada - Nunavut Geoscience Office

The Canada – Nunavut Geoscience Office (CNGO) is a partnership between the Geological Survey of Canada (GSC), Indian and Northern Affairs Canada (INAC), and the Government of Nunavut's (GN) Department of Economic Development and Transportation (ED&T). The mandate of CNGO is to provide accessible geoscience information and expertise in Nunavut in support of sustainable development of mineral and energy resources, informed land-use decision-making, geoscience education, and capacity building. In 2005, CNGO participated in field-based geoscience projects, provided Geographic Information Systems (GIS), cartographic and Remote Predictive Mapping (RPM) support and services, and contributed to public outreach activities.

CNGO PROJECTS

CNGO projects are anticipated to improve the quality of life for Nunavut residents by allowing them to derive economic and social benefits resulting from responsible development of mineral and energy resources in Nunavut. The purpose of each project is to reduce risk of investment by mineral and energy exploration companies, and increase

and/or sustain current levels of exploration in the regions studied and reported on. Projects are designed to make a significant contribution to the geoscience knowledge base of Nunavut, and address a critical knowledge gap in the current geoscience database. The projects are multi-faceted and may consist of components of ground-based field activities, including mapping bedrock and surficial geology, geophysical, geochemical and geochronological surveys, and comprehensive data compilation activities. In addition, the field-based projects include components of community consultations and public outreach activities. The outreach activities are intended to increase public consciousness of the importance of mineral and energy resources, to promote awareness of employment opportunities in geosciences, and to promote Earth Science education for students.

The North Baffin Project: Surficial Geology, Quaternary History and Prospecting

In 2005 CNGO, in collaboration with the GSC, the University of Alberta, and Dalhousie University, expanded the 2003 North Baffin Project from Ice Bound Lakes (NTS 37G) to Conn Lake (NTS 37E) and south Buchan Gulf (NTS 37H/South). The study area lies along the northeast coast of Baffin Island between Bylot Island and the Clyde foreland, areas with contrasting ice sheet reconstructions and chronologies. The study area provides an opportunity to resolve critical issues, and will have significant implications for regional drift prospecting programs.

The primary goal of the project is to reduce mineral exploration risk in the northeast Baffin Island region by improving the existing geoscience knowledge base. The project involves mapping the surficial geology at a scale of 1:100,000, as well as collection of drift, stream and bedrock samples, and detailed bedrock mapping of key localities. In 2005, more than 300 samples were collected for till geochemistry and KIM analyses; 31 stream sediment samples were collected for





geochemistry and KIM analyses; more than 100 bedrock samples were collected for assay, and 90 for lithochemical analyses. In addition, the project collected data for about 1400 ‘ground-truthing’ sites, as part of ongoing development of an RPM protocol, 314 paleo-ice movement measurements, collection of 27 cosmogenic samples and 41 radiocarbon samples for geochronology and research into glacial dynamics influencing the surficial geology of the region.

Based on preliminary results and regional ice reconstructions, the area was likely glaciated to the shelf margin by ice flowing from the Foxe Ice Dome at the last glacial maximum (LGM), until the initial stages of deglaciation at ca. 14 ka. Deglaciation was interrupted by a re-advance (Cockburn) at ca. 9.6 ka, forming extensive moraines in the study area. As deglaciation continued, an ice mass informally referred to as the paleo-Barnes Ice Cap, retreated onto Baffin Island. Continued deglaciation resulted in the damming of several lakes in the study area and formation of DeGeer or cross-valley moraines. The complex glacial history resulted from overprinting of both erosive and non-erosive basal thermal regimes at various stages of the deglaciation, as well as overprinting of LGM-related geomorphology with those of the paleo- and modern-day Barnes Ice Cap. To resolve this, new applications were developed that compare the terrestrial cosmogenic nuclide concentrations in glaciolacustrine deltaic sediment, till, and large boulders to quantify variations in the plateau-wide erosion rate and to qualitatively

assess the duration of glacial transport and ice velocity.

The Boothia Mainland Project: Bedrock and Surficial Geology

This multi-year geoscience program focusing on the Boothia Mainland area, and including parts of NTS map sheets 57A, 57B and 57C, was launched in 2005. Field work in the 2005 field season included 1:250,000-scale bedrock mapping in addition to local, detailed surficial mapping and ice-flow studies. The mapping follows acquisition of an aeromagnetic survey completed in March 2005 (released April 2005). In advance of the field work, a comprehensive RPM for the region was produced, which assisted in developing a more strategic approach to bedrock mapping. The region has significant exploration potential for diamond and precious-metal deposits.

The study area includes part of the north-central Rae domain of the Northwest Churchill Province. The bedrock geology can be broadly divided into three main lithologic associations including: 1) supracrustal rocks of presumed Archean age and possibly equivalent to the Prince Albert Group; 2) variably deformed and metamorphosed meta-plutonic rocks that intrude the aforementioned supracrustal rocks and dominate the bedrock geology of the region; and 3) rare occurrences of a marble - quartzite dominated succession provisionally interpreted to be Paleoproterozoic and tentatively correlated with the Chantrey Group. The Archean supracrustal rocks form narrow, northeast striking

and highly dismembered belts consisting mainly of psammite, semi-pelite, metabasite, local ultramafic horizons, and sulphide-bearing (lean) iron formation. The metaplutonic rocks, inferred to be late Archean, are dominated by biotite +/- hornblende monzogranite, but are polyphase and range in composition from diorite to syenogranite. The state of strain varies regionally: rocks are mainly massive in the south-western part of the study area, and are strongly gneissic and highly strained in the east and north.

Metamorphic grade varies from middle to upper amphibolite facies in the southwest, to granulite facies in the north and northeast. The granulite-facies rocks are characterized by opx-cpx-grt in metaplutonic rocks, and bio-grt-sil-crd-ksp in metasedimentary rocks. In the central and southern portions of the study area, there is local preservation of granulite assemblages, suggesting that granulite facies rocks may have been more widespread than their present distribution.

Granular Aggregate Resource Assessment Project

A supply of high-quality granular aggregate is vital to meet the infrastructure requirements of any community or construction project. In 2005, an assessment of potential granular aggregate resources was carried out in the area around the City of Iqaluit. The survey was necessitated because of resource depletion and environmental concerns at the existing source of granular aggregate for Iqaluit. The 2005 survey also developed

a protocol that can be applied towards future aggregate assessment projects in Nunavut.

In the 2005 field season, potential source areas for granular aggregate occurring within 10 km of Iqaluit were provisionally identified by interpretation of detailed air photographs. This preliminary data, combined with a review of previous assessment reports and regional surficial geology data provided a focus for follow-up field work. Target areas with the best potential to yield economic aggregate resources were visited in the field, and information was collected on the nature, extent, volume, and physiography of the deposits, and access. Ground Penetrating Radar (GPR) was employed to image the subsurface character of deposits and depth to the bedrock contact.

The results of the assessment identified two areas having high potential for resource development. The Northwest Area, located approximately five km northwest of the existing aggregate quarry, contains good quality aggregate, including high quality gravel. The Northwest Area has an estimated minimum volume of 1,000,000 m³ of gravel and more than 4,000,000 m³ combined sand and gravel. Total potential aggregate may be in excess of 14,000,000 m³ for the Northwest Area. The second potential resource, near Tarr Inlet, contains undifferentiated sand and gravel deposits. The estimated minimum volume of deposits in the Tarr Inlet area is almost 300,000 m³ (combined sand and gravel). Preliminary results of the survey suggest the Northwest Area is the best long-term option for aggregate supply for Iqaluit. ■

Canada – Nunavut Geoscience Office

626 Tumiit Plaza
Suite 202
PO Box 2319
Iqaluit, Nunavut
X0A 0H0

Telephone:
867-979-3539

FAX:
867-979-0708

Web Page:
www.nunanet.com/~cngo

CONTACTS

Dr. Donald James
Dan Utting
Celine Gilbert
John Taylor
Olivia Brown
Dr. Alana Hinchey

Chief Geologist
Surficial Geology
GIS Specialist
GIS Specialist
RPM Specialist
Regional Geology, Geochronology
(NSERC Postdoctoral Fellow)

djames@nrca.gc.ca
dutting@nrca.gc.ca
cgilbert@nrca.gc.ca
jtaylor@nrca.gc.ca
obrown@nrca.gc.ca
ahinchey@nrca.gc.ca

Summary of Exploration Activities 2005

Kitikmeot Region

The Kitikmeot region spans the western and northern mainland of Nunavut, and parts of Victoria, Prince of Wales, King William, and Somerset islands. Kugluktuk and Cambridge Bay are the largest communities in the region and provide services to exploration projects in the area. Yellowknife, to the south in the Northwest Territories, is also an important logistical centre.

The Kitikmeot is geologically diverse. The westernmost portion is underlain by rocks of the Archean Bear Province. The Archean Slave Province occupies part of the western mainland and is overlain to the west and east by the Paleoproterozoic siliciclastic and carbonate rocks of the Wopmay Orogen; this Orogen separates the rocks of the younger Bear Province from the Slave. Inliers of Paleoproterozoic rocks are found on Victoria Island, overlain by the Paleozoic Arctic Platform sedimentary rocks that cover most of the islands. In the east Kitikmeot, the Slave Province is separated from the Western Churchill Province (Archean to Paleoproterozoic) by the Paleoproterozoic Thelon Orogen (ca. 1900 Ma). The Churchill province underlies most of the northern and north-eastern mainland.

Past producers in the region have generally been small with mines at Roberts Bay, Ida Bay, and Ida Point, south of Elu Inlet. The Lupin gold mine, having produced over 3.1 million ounces of gold since 1982, is now shut down and feasibility studies are underway for reclamation plans. Some cost-recovery initiatives, such as a bed and breakfast operation and a mine training facility, are being considered.

Tahera Diamond Corporation's Jericho Diamond Project is well on its way to



becoming Nunavut's first diamond mine. Construction is proceeding on schedule with 505 loads of mine site construction materials trucked in on the winter road and commercial production anticipated to begin in 2006.

Development plans for production at the Doris North gold deposit (owner Miramar Mining Corporation), in the Hope Bay belt, is continuing to progress through the regulatory processes. The company submitted its Final Environmental Impact Statement (EIS) to the Nunavut Impact Review Board (NIRB) in October 2005 and final technical hearings are scheduled for early in 2006.

Diamonds and gold were the two primary commodities sought by companies in the Kitikmeot. Recent diamond exploration covered virtually the entire western mainland and parts of Victoria and Prince of Wales islands. The Coronation Gulf area of the Kitikmeot continued to see strong exploration activity, and the Boothia Peninsula and areas south of Kugaarak in the eastern Kitikmeot were also active with a new diamond district, the Franklin, being identified in 2005.

Gold continues to shine in Nunavut. Quartz vein-hosted gold, lode gold and iron formation gold are all being explored in the Slave. In addition to Miramar advancing their Doris North project

through the regulatory process, exploration work and definition drilling continued on their Boston and Madrid gold deposits also within the Hope Bay belt. Exploratory work and definition drilling continued on their Boston and Madrid gold deposits also within the Hope Bay belt. Other companies working in various locations within this same belt are also enjoying successful programs. The Ulu and Ulu South gold deposits being worked by Wolfden Resources and Wolfden/Strongbow Exploration, respectively, continue to return impressive precious and base metal results.

Traditional exploration targets in the region have included massive sulphide-hosted base metals. Base metal exploration at Wolfden Resources High Lake advanced this VMS project and is seeing increased exploration efforts and new mineralized zones. Sabina Silver Corporation, working east of Lupin at Hackett River, is encouraged by good silver-zinc numbers from drilling results.

Uranium exploration is seeing a resurgence of interest in Nunavut and specifically in the Hornby Bay Basin in the Kitikmeot. Several companies were active this year in the basin, including Hornby Bay Exploration, Triex, Pitchstone and Ur Energy with programs ranging from initial exploration efforts to well-developed drill programs.

AMARUK

Operator, Owners

BHP Billiton Diamonds Inc.,
Diamonds North

Commodities

Diamonds

Coordinates

92° 00'W, 68° 30'N

NTS

57A , 57B

Location

45 km south of Kugaaruk

This property consists of approximately 3.24 million hectares and includes the Deep, Dar and Hood claims. Approximately \$3 million was spent in 2005 with the collection of till samples, soil samples and approximately 12,000 line-km of Dighem Resolve airborne geophysics. Fifteen kimberlite occurrences have been outlined from prospecting and till sampling and one kimberlite, Umingmak, has been defined in outcrop. Approximately 500 kg was collected from Umingmak and submitted for microdiamond analysis.

Umingmak is the first confirmed in situ kimberlite in the region and is exposed in three outcrop showings. The rock is described as an olivine rich macrocrystic kimberlite with mantle derived minerals and nodules. The size of the kimberlite has not been determined.

Prospecting in 2005 was limited to only a small portion of the entire Amaruk property and produced encouraging results. The multiple kimberlite float occurrences discovered on the property span an area of 62 km and demonstrate that the Amaruk property potentially contains a sizable kimberlite field with numerous kimberlite intrusions. More than 100 geophysical anomalies have

been interpreted from airborne geophysics collected in 2004 (11,000 line-km; only 3 per cent of the property). In 2005, an additional 12,000 line-km was covered by airborne geophysics that is currently in the final stages of processing, interpretation and anomaly selection. A comprehensive till sample database of approximately 5400 samples taken across the property will also be used to determine drill targets.

ANIALIK

Operator, Owners

Strongbow Exploration

Commodities

Polymetallic VMS

Coordinates

110° 02'W, 67° 21'N

NTS

76M/06

Location

Approximately 7 km west of Wolfden's High Lake; 150 km southeast of Kugluktuk

Proximity and similar geological setting to Wolfden Resources' High Lake, VMS deposit encouraged Strongbow to explore on the 62,519 hectares Anialik property. This property is located within the Anialik River volcanic belt (ARVB) in the northern Archean Slave Province. This volcanic belt, like many in Nunavut, is an under-explored greenstone belt in Canada.

Exploration in 2005 was completed over a nine week period and consisted of bedrock and soil geochemical surveys, mapping, prospecting and channel sampling. The main goal of the program was to investigate the mineral potential of the belt with the particular focus on the gold potential of the associated volcanic rocks. A number of new gold discoveries were found through detailed mapping

and approximately 3000 soil and 1000 rock samples were collected. The new discoveries are the Locanna, Frank, Greenstone, and Felicia showings, with Locanna defined as a linear zone extending over a strike length of approximately three km. Many of the prospecting samples on the four new discoveries returned values in excess of 1 g/t Au, with high values from Locanna being 44.2 g/t Au, 20.9 g/t Au, and 14.2 g/t Au. Channel sampling also from Locanna returned the highest values of the Anialik property and in three areas along a 7 metre strike length of one vein near the southern end of the corridor returned 14.4 g/t Au over 1.6 m, 51.2 g/t Au over 0.25 m, and 6.8 g/t Au over 1.18 metre.

ARCADIA BAY

Operator, Owners

Full Metal Minerals,
Garnet Point Resources Corp

Commodities

Gold

Coordinates

110° 30'W, 67° 30'N

NTS

76M11

Location

160 km east-southeast of Kugluktuk

The Arcadia Bay property is an Archean lode-gold deposit located on the Arctic Ocean west of Bathurst Inlet. The project is approximately 140 km west of the Hope Bay belt. More than 20 veins and structures with over 5.0 g/t Au have been discovered with a historic resource reported from the North Vein as 640,650 tonnes averaging 7.2 g/t Au (approximately 148,000 oz). However, this resource estimate was completed prior to 2001 and NI43-101 and is therefore unreliable. Arcadia has



been explored by several mining and exploration companies since the 1930's, targeting multiple high-grade veins and shear zones located within greenstone and tonalite.

A 1,500 m diamond drilling program was scheduled for July, 2005 with the objective being to upgrade near-surface, high-grade portions of the North Vein. Additional drilling planned was to step-out from previous intercepts at the GHX vein including: 29.0 g/t Au over 5.6 m and 12.0 g/t Au over 23.1 m. Results from the drill program are unavailable.

ARNAQ

Operator, Owners

Kennecott Exploration Canada Inc.,
Diamonds North Resources Ltd.

Commodities

Diamonds

Coordinates

92° 00'W, 67° 30'N

NTS

56N, 56O

Location

80 km southwest of Kugaaruk

In 2004, Kennecott Canada Exploration Inc. acquired 249,295 hectares of permits and funded the staking of 80,940 hectares of claims immediately south of the

Diamonds North/BHP Billiton Amarak project. Diamonds North staked 56,658 hectares of claims north of Kennecott's permits and approached the company about a 26:74 Diamonds North/Kennecott joint venture agreement which was formed on 380,418 hectares of land. Under the terms of this agreement, Kennecott will fund the initial \$5.5 million of exploration expenses. Kennecott completed 20,000 line-km of magnetic airborne surveying and collected 223 samples from the property. Analysis of the airborne data identified 89 anomalies of which ten are considered high priority and 33 moderately high priority. The 2005 exploration program included ground geophysical surveying of more than 20 anomalies and drilling of definitive targets; results are pending.

BARROW¹ AND DARBY²

Operator, Owners

Indicator Minerals Inc.,
Hunter Exploration Group

Commodities

Diamonds

Coordinates

¹89°30'W, 68°20'N;

²93°20'W, 67°20'N

NTS

¹57A7, ²56N6

Location

¹15 km south of Kugaarak;

²120 km southwest of Kugaarak

The highlight of Indicator's 2005 exploration program was the discovery of multiple kimberlite boulder trains on its two key properties, Barrow and Darby, located in the newly identified Franklin Diamond District. Both projects are Indicator's most advanced and are scheduled for 2006 drilling.



Work on the Barrow project, approximately 44,517 hectares of mineral claims located 15 km south of Kugaaruk, included the collection of 233 heavy mineral samples, prospecting and ground geophysics. Indicator minerals with diamond inclusion chemistry have been recovered in till samples and the interpretation of airborne geophysical data has identified high priority targets up-ice from these mineral anomalies. Kimberlite float with a macrodiamond was discovered while following up a geophysical target and a 6.7 kg sample has been sent for mineral analysis.

In 2005, work on the Darby project, located approximately 120 km southwest of Kugaaruk and consisting of 77 mineral claims covering more than 79,726 hectares, identified several kimberlite float occurrences that are concentrated in three distinct trains. One of these occurrences yielded a three kilogram peridotitic mantle nodule. 2,400 line-km of detailed airborne Mag/EM geophysical surveys was flown over an area interpreted as the source of kimberlite indicator minerals recovered in 2004. Initial interpretation of this airborne data has outlined more than 15 high priority targets. The largest target is interpreted as having a surface area >10 hectares, has coincident Mag/EM signatures and is associated with one of the kimberlite float trains discovered earlier this year.

BLUE ICE

(including White Ice and Hadley Bay)

Operator, Owners

Diamonds North Resources Ltd.,
Teck Cominco Limited

Commodities

Diamonds

Coordinates

110°00'W, 70°36'N to 108°30'W,
71°00'N

NTS

77E, 77F, 77G, 77H

Location

330 km northwest of Cambridge Bay

The Victoria Island projects represent Diamonds North's most advanced projects. The Blue Ice property covers over 80,940 hectares and straddles the Nunavut/NT border. The geology consists of Ordovician carbonate platform rocks overlying the Proterozoic Shaler Group shale and Elice Formation sandstone; diabase dykes cut only the Proterozoic rocks. Teck Cominco Limited is the operator on the property and funded more than \$4.5M of exploration in 2005.

Kimberlites and trends that have been identified on Victoria Island are the Galaxy, Jaeger, King Eider, Pintail, Sanderling, Sand Piper, Snow Bunting and Turnstone. Exploration efforts since 2002 have focussed on the 20 km-long Galaxy and 25 km-long King Eider confirmed kimberlite trends, two semi-parallel, north-west-southeast trending structures 30 km apart. The majority of the work in 2005 involved the King Eider kimberlite and drilling indicates that the body is at least 180 metres long, up to 50 metres in width and remains open to depth.

A mini-bulk sample of approximately 2.8 tonnes of King Eider kimberlite

obtained from five drill holes (2.1 tonnes of split core) and an additional 1.3 tonnes of kimberlite collected from a trench have all been submitted for diamond analysis via caustic fusion. The collection of this sample followed encouraging results from the previously analyzed 680 kilogram composite sample taken in 2004 that yielded a 0.74 carat stone in a parcel of 434 diamonds, weighing a total of 1.32 carats.

Three new kimberlite occurrences were discovered in 2005, increasing the number of known occurrences on Victoria Island from 36 to 39. One of these new occurrences is centrally located along the Galaxy trend and intersected 2.1 and 17.15 metres (true widths) of kimberlite and 5.3 metres (true width) of brecciated kimberlite. The second discovery located on the south-eastern portion of the King Eider structure consists of multiple hypabyssal kimberlite dykes with true widths of < 1 m each.

Seventy-five reverse circulation drill holes tested 31 discrete geophysical targets, many of which were located "off-trend" of the Galaxy and King Eider structures. One additional kimberlite was intersected, located approximately 500 metres north-west of the King Eider body. Additional 2005 work included 11,700 line-km of new airborne magnetic surveying and collection of 200 till samples.



CANOE LAKE

Operator, Owners

Allyn Resources Inc.,
Strongbow Exploration Inc.

Commodities

Copper, Zinc, Lead, Gold, Silver

Coordinates

111° 08'W, 67° 08'N

NTS

76M/02, 03

Location

25 km south of Wolfden's High Lake;
190 km southeast of Kugluktuk

The Canoe Lake property comprises approximately 15,860 hectares of mining leases, mineral claims and Inuit Owned Lands within the High Lake greenstone belt. The property is centred on two Canada Mining Leases, currently under option from Canadian Natural Resources, and is host to a number of known showings, including the Canoe Lake massive sulphide occurrence, and the Bamako and Tuk Lake gold showings. Copper-zinc mineralization occurs as massive to stringer sulphides within the volcanic-sedimentary pile at the same stratigraphic position as Wolfden's High Lake VMS deposit located 25 km to the north.

Limited previous diamond drilling at Canoe Lake by Texasgulf and Noranda Exploration returned values of 0.8% Cu, 4.8% Zn, 89 g/t Ag and 1.0 g/t Au over 1.8 m. On the Bamako gold showing, limited drilling by BHP Minerals intersected 15.3 g/t Au over 2.6 m. The Tuk Lake gold showing is represented by a grab sample that returned a value of 96.4 g/t Au.

Detailed prospecting programs, bedrock mapping, rock sampling and ground based magnetic and electro-

magnetic surveys were completed over ground geophysical grids established in 2005. Reconnaissance prospecting was completed throughout the claim block to assess a number of airborne geophysical targets defined through a 2004 airborne magnetic and EM survey. Allyn is presently working to earn a 51 per cent interest in the property, by spending \$3 million over a five-year period. Once vested at 51 per cent, Allyn can increase its interest to 60 per cent by spending an additional \$2 million over the ensuing two-year period.



COMMITTEE BAY NORTHEAST

Operator, Owners
Allyn Resources Inc.,
Strongbow Exploration Inc.

Commodities
Gold

Coordinates
92° 00'W, 66° 30'N

NTS
56J, 56K

Location
300 km north of Baker Lake

The Committee Bay Northeast project, the SR claim block, is located within the Committee Bay greenstone belt within central Nunavut. Correlative rocks to the south contain the Meadowbank iron formation-hosted gold deposit.

In 2004, Goldak Airborne Surveys completed a 5731 line-km survey, flown at a flight line spacing of 200 metres, of tri-axial magnetic gradiometer work over portions of the Committee Bay Northeast Project area. In 2005, the remainder of the SR claim block was surveyed by Goldak and 3,946 line-km of tri-axial magnetic gradiometer surveying was completed. This airborne survey covers an approximate

90 km long strike length of the Committee Bay greenstone belt. Numerous positive, strong and linear to highly deformed magnetic anomalies have been identified.

COPPERMINE (Coppermine, Asiak)

Operator, Owners
Hornby Bay Exploration Ltd.

Commodities
Diamonds, uranium

Coordinates
114° 20'W, 67° 20'N to
116° 00'W, 66° 50'N

NTS
86J, K, O, N

Location
80 km south of Kugluktuk

This property covers 214 claims (216,833 hectares) with 90 claims on the Asiak block and 124 claims on the Coppermine block. The property lies in the eastern section of the Hornby Bay Basin within the Archean Bear province. Helikian and Hadrynian rocks of the Coppermine Holocline nonconformably overlie Aphebian basement rocks. The Helikian sandstone defines a middle Proterozoic basin equivalent to the Athabasca basin in

northern Saskatchewan and the Thelon basin in the eastern Arctic.

Uranium mineralization in the basement rocks is associated with graphitic horizons within the Epworth metargillites, shear zones in the hornblende/biotite gneiss and quartz/hematite veining in the metagranites. Several areas within the Hornby Bay sandstone have been discovered to have low grade uranium mineralization associated with clay/hematite alteration zones. The unconformable contact between the sandstone and the basement rocks is the focus of exploration for high grade uranium deposits. A relatively large area of silica-clay alteration has been discovered in the southern section of the Coppermine block.

Work in 2005 included the collection of 227 grab samples, 187 float samples, 766 till samples, 766 soil samples and 6500 line-km of MEGATEM airborne geophysical surveying and 240 line-km of ground geophysical surveys were conducted over 25 grids. Thirteen holes were drilled, for a total of 5135 m, on uranium targets and intersected favourable geology.

The Asiak claim block lies within the north-western trending “diamond corridor” and is prospective for kimberlite pipes. Airborne geophysics has been used to target potential diamondiferous pipes and detailed till sampling has been employed to search for associated indicator minerals.

COPPERMINE RIVER

Operator, Owners

Coronation Minerals

Commodities

Copper, Nickel,
Platinum group elements

Coordinates

116° 30'W, 67° 30'N

NTS

86K

Location

40 km southwest of Kugluktuk

Coronation Minerals’ property covers 30,655 hectares and is believed to be highly prospective for world class copper-nickel-platinum group metal ore bodies. The Muskox layered ultramafic intrusion has recently become the focus of considerable exploration activity for its platinum group metals (PGM) mining potential. Regional gravity studies suggest that most of the intrusion lies under cover rocks (i.e. the Coppermine River Basalts) and is therefore under-explored. The most prospective target on the property is a gravity anomaly target that is arcuate-shaped and measures approximately 2 km by 10 km. This gravity anomaly, coincident with an airborne magnetic anomaly, may represent a large intrusive body containing economic concentrations of nickel, copper, and PGM’s. There are at least 12 documented copper-silver occurrences as well as encouraging indications for gold and platinum.

GEORGE LAKE/GOOSE LAKE (Back River Joint Venture)

Operator, Owners

Dundee Precious Metals,
Kinross Gold

Commodities

Gold

Coordinates

107° 26'W, 63° 56'N

NTS

76G/10, 76G/13, 76G/14

Location

100 km south of Bathurst Inlet

The Back River Joint Venture quartz-vein hosted gold deposits are found within Archean banded iron formation within greywacke folded into an anticline, with the apex of the fold forming a hinge zone near surface. In February, 2005, Dundee Precious Metals bought an option to earn a 60 per cent interest in the Back River project with a commitment to complete an exploration program on the properties totalling \$25 million before August 2006. To date, over \$10 million has been spent. The project is comprised of 45 mineral leases on subsurface IOL, subject to grandfathered mineral claims and leases. The most important properties of the project comprise the George Lake and Goose Lake deposits with an indicated mineral resource of approximately 1.4 million ounces Au and an inferred resource of 600,000 ounces Au. Mineralization is found at George Lake, Goose Lake, Boulder Pond and Boot Lake and occurs in both the high-grade hinge fold zone and the greywacke zone within the core of the fold.

Gold exploration in the George Lake area began in 1982 and drilling began in 1985. Arauco Resources (later Kit



Resources) purchased the property in 1996 and conducted a major drilling program in 1997. In 1999, Kinross acquired the option from a merger group including Kit Resources and Wheaton River Minerals Ltd. Early 2004, Kinross and Miramar Mining Corporation finalized a joint venture agreement on these two projects and Miramar designed an exploration program to add to the production capacity of Hope Bay.

However, in 2005, the ground was optioned to Dundee Precious Metals and 2005 was a busy year for the company. Exploration activity consisted of both a winter and summer diamond drill program totalling approximately 16,000 m, airborne mag-EM geophysical surveys on George, Goose and Boot lake deposits totalling 6500 line-km, reconnaissance prospecting to explore property-wide for new discoveries and mapping verification of previous work.



HACKETT RIVER

Operator, Owners

Sabina Silver Corporation

Commodities

Gold, Silver, Zinc, Copper, Lead

Coordinates

108° 30' W, 65° 55' N

NTS

76F/16

Location

75 km south-southwest of Bathurst Inlet

The Hackett River silver-zinc property hosts three significant massive sulphide deposits; East Cleaver, Boot Lake and Main Zone (also called "A" Zone). Significant mineralized showings, Knob Hill Zone, Downie, Finger Lake and Jo Zone, are also found. Hackett River is one of the largest undeveloped massive sulphide deposits in Canada.

All deposits and showings are located at approximately the same stratigraphic interval and occur over a 6 km long strike length. The East Cleaver, Boot Lake and Main Zone deposits are hosted within a Mineral Horizon Member characterized by the presence of marble and/or calc-silicate, chert and variable quantities of sulphides. The Boot Lake, Finger Lake, Main Zone and Jo Zone deposits and showings are hosted within a southward dipping stratigraphic sequence. The Knob Hill Zone and East Cleaver deposit are found within an overturned anticline that plunges steeply to the west.

Mineralization in each of the three massive sulphide deposits consists primarily of coarse grained pyrite, pyrrhotite, sphalerite, chalcopyrite, galena and rare tetrahedrite and trace arsenopyrite. Locally, mineral zoning is well developed,

both laterally and vertically. Total drilling in six showings (Boot Lake, A Zone West, A Zone East, Finger Lake West, Cigar Lake and East Cleaver) totalled approximately 9300 m in 2005.

An updated mineral resource estimate by Wardrop Engineering Inc. for Sabina, at a zinc-equivalent cutoff grade of 3%, demonstrates that the Boot Lake, East Cleaver and Main Zones contain a combined resource of 51.6 million tonnes. This includes an Indicated Mineral Resource of 37 million tonnes with an average grade of 4.66% zinc, 3.79 ounces per ton silver, 0.63% lead, 0.34% copper and 0.011 ounces per ton gold. The resource estimate, based on drilling done in 2004 and earlier, indicates an Indicated metal content of >150 million ounces of silver and 1.7 million tonnes of contained zinc.

HIGH LAKE

Operator, Owners

Wolfden Resources Inc.

Commodities

Copper, Zinc, Gold, Silver

Coordinates

110° 51'W, 67° 23'N

NTS

76M/7

Location

175 km east-southeast of Kugluktuk

Significant advancements were made at the High Lake Cu-Zn-Ag-Au property through both exploration and development. The property consists of 15 leases (1,710 hectares) located mainly within a land claim which reserves both surface and subsurface rights to NTI. The indicated resource, using a 2.5% CuEqv cutoff, averages 5.01% CuEqv and these values place the High Lake deposit

amongst the highest grade undeveloped copper deposits in the world. In 2005, a renewed focus on exploration resulted in three newly identified mineralized areas, Sand Lake, WW Zone and Cairo Zone, in addition to the known AB, D and West Zones.

Significant mineralization continued to be intersected at depth in the West Zone. Deep drilling in this area extended the deposit by approximately 150 metres at depth. Hole HLW-05-171 intersected three zones of high-grade mineralization and assayed 4.72% Cu, 1.96 g/t Au and 22.66 g/t Ag across 8.0 metres, 1.52% Cu across 10.45 metres and 4.40% Cu, 2.18% Zn, 0.82 g/t Au and 66.72 g/t Ag across 27.0 metres. A broad zone of stringer and massive sulphides associated with an extensive zone of alteration (massive anthophyllite-magnetite and dalmationite) was also intersected, suggesting that this hole intersected the "feeder" for the West Zone deposit and that there is potential for significant expansion at depth. Prior to this drilling, the West Zone was calculated to host a high-grade poly-metallic mineralization resource of >10 Million tonnes.

The three new discoveries were identified by follow-up on areas of mapped intense alteration and/or airborne conductors identified in the 2002 airborne geophysical survey. The Cairo Zone, located along strike from the West Zone, hosts similar mineralization and alteration. Two holes drilled to test the Cairo Zone intersected up to 3.71% Cu across 2.0 metres. The WW Zone is located approximately one kilometre west of the West Zone. The Sand Lake Area is host to some of the largest and most extensive airborne conductors on the entire High



Lake Property. All three new zones will be drill tested in 2006.

In November 2003, Wolfden released its Strategic Plan for the High Lake Mine Project. The (EIS) to satisfy requirements of (NIRB) is expected at the beginning of the second quarter of 2006. The preliminary underground mine plan on the West Zone is completed and open-pit models for the AB and D Zones are being refined prior to incorporation into the pre-feasibility study which will be completed in early 2006. The future mine plans involve the infrastructure from the Nanisivik Mill Facility that will be shipped in 2006. The location of the proposed port site to service the High Lake Project is Grays Bay in the Coronation Gulf. A recent report on the range of expected ice conditions and length of shipping season was completed for Wolfden by D. F. Dickins Associates Ltd.

HOOD RIVER

Operator, Owners
Temex Resources Corporation,
4763 NWT Ltd.

Commodities
Diamonds

Coordinates
112° 00'W, 66° 33'N

NTS
76L/5, 11, 12, 13, 86I/9

Location
120 km southeast of Kugluktuk

The Hood River property consists of 182,115 hectares in three claim blocks with Temex as the operator and earning a 70 per cent interest. The property is underlain by deeply eroded, amphibolite faces, Archean aged granite-greenstone rocks within granitic gneiss complexes intruded by later granitic and mafic/ultramafic complexes. The region is cross-cut by diabase dykes of up to six ages. Several diffuse kimberlite indicator mineral

trains are present on the property. Exploration work in 2005 included prospecting and till sampling magnetic targets chosen from 2004 high resolution airborne geophysical survey, prospecting and till sampling.

HOPE BAY PROJECT

(Eastern Contact, Twin Peaks, North Lahti)

Operator, Owners
Maximus Ventures,
Miramar Mining Corp

Commodities
Gold

Coordinates
106° 30'W, 68° 00'N

NTS
76O, 77A

Location
160 km southwest of Cambridge Bay

Maximus Ventures Ltd. has an option to earn a 75 per cent interest in the Eastern Contact and Twin Peaks target areas in Miramar Mining Corporation's Hope Bay Belt. The Eastern Contact zone encompasses several high-grade quartz vein gold showings near the eastern granite-greenstone contact that defines the limit of the greenstone belt. In 2005, 11 holes were drilled on this property. Three veins were drilled and gold grade results in the drill core were significantly less than assays obtained from surface grab samples and the veins were narrower than those seen in outcrop.



Further drilling was conducted on the Twin Peaks at the north end of the Hope Bay belt; results are pending. This showing is hosted by argillaceous sediments and conglomerates that overlie volcanics and syenitic intrusives adjacent to a major lineament. Twin Peaks has been interpreted as having the potential to host similar large-scale gold deposits at or near the volcanic-sedimentary contact.

HOPE BAY PROJECT (Doris North, Madrid, Boston)

Operator, Owners

Miramar Hope Bay Ltd.

Commodities

Gold

Coordinates

106° 30'W, 68° 00'N

NTS

76O/9,10,15,16, 77A/2,3,6,7,10

Location

130 km southwest of Cambridge Bay

The Hope Bay project was again the largest exploration project in Nunavut with a \$15.5 million 2005 exploration program. This project, 100 per cent owned by Miramar Mining Corporation, is within the Hope Bay greenstone belt that at 80 km long in a north-south direction and 7-20 km wide is one of the most prospective undeveloped belts in Canada. Located in the northeast corner of the Slave Province, the Hope Bay belt is a typical Archean greenstone belt, comparable to the Yellowknife, Kirkland Lake and other prolific gold belts. Significant gold deposits defined on the project include Doris, Madrid (with Naartok and Suluk) and Boston. Current resource estimates are 5.4 M oz of gold with measured and indicated resources of 1.8 M oz at 9.9 g/t Au and an

inferred resource of 3.6 M oz of 6.9 g/t.

Miramar Mining Corporation controls most of the Hope Bay belt (approximately 0101,175 hectares) and has been exploring the belt since 1999. Large portions of the ground are Inuit-owned and administered by NTI. In mid-November 2005, Newmont Mining Corporation of Canada Ltd. took a 9.9 per cent position in Miramar and the additional funds and involvement will enable Miramar to consider larger production strategies for Hope Bay belt.

Work in 2005 consisted of six different initiatives, including permitting of the Doris North Project, definition and expansion drilling on the Naartok and Doris Central deposits, regional exploration including diamond drilling in the Madrid Corridor, regional exploration and mapping work to satisfy assessment requirements, and ongoing resource modelling of the Boston deposit.

The Doris deposit is situated at an inferred inflexion in the Hope Bay structural break and consists of a steeply dipping, over 3 km long quartz vein system in folded and metamorphosed pillow basalts. At the north end, the veins are folded to create a high-grade anticlinal hinge zone lying close to the surface (Doris North). Gold is found at quartz veins and wall-rock contacts and is associated with dark-coloured tourmaline-pyrite septa or ribbons.

In May 2005, a Part 5 review of the Doris North Project under the Nunavut Land Claims Agreement (NLCA) was approved by the Minister for INAC. The NIRB held technical meetings mid-August to review the (EIS) and Miramar submitted their final EIS October 31, 2005. NIRB has scheduled final public hearings late January to early February 2006 in Cambridge Bay and with a positive review, Miramar



would then enter the regulatory phase of the permitting process and file applications for various licences and permits.

Drilling at Doris Central encountered significant mineralization including 54 g/t Au over 4.4 metres. Most of the Doris Central deposit has now been drilled off at 25 m centres and resource limits are reasonably well established.

At the Madrid deposit, 2003 resource estimates define indicated resources of 565,000 oz of gold grading 4.9 g/t and inferred resources of 1,886,000 oz of gold of similar grade. Most resources, including significant gold showings Naartok (with two zones, the Naartok East and Naartok West) and Suluk, lie within the northern 2 km of the 11 km Deformation Zone or Madrid Corridor.

Naartok area infill in 2005 consisted of approximately 6,020 metres of drilling in 17 holes and returned some spectacular results such as drill hole 05PMD328 (11.5 g/t Au over 66.5 m at a depth of 275 m below surface). The Naartok area is currently drilled off on 25 m spacings to a depth of approximately 200 m and at 50 m spacings to a depth of approximately 300 m below surface.

The Boston deposit, located near the south end of the belt, is associated with a flexure in the Hope Bay structural break. Gold and sulphides (mostly pyrite) are found in clots within quartz veins and within the wall-rock halo. Measured and indicated resources are 687,000 oz at 15.4 g/t and inferred resources are 900,000 oz at 10.9 g/t. Field work at Boston in 2005 was limited to re-logging drill holes and resource modelling using 2004 drilling results.

HORNBY PROJECT

Operator, Owners

Ur-Energy Inc.

Commodities

Uranium, Diamonds

Coordinates

116° 45'W, 67° 20'N

NTS

86N/2, 3, 6, 7

Location

90 km southwest of Kugluktuk

Ur-Energy's Hornby Project of the Mountain Lake and Dismal West properties consist of 589 claims covering 52,466 hectares that lie along the northern fringes of the Hornby Bay Basin. Ur-Energy is conducting a two-phase exploration program on the Hornby Project properties, with the second phase work being contingent upon obtaining encouraging results from the initial work. Phase one work involved surveys combined with mapping and prospecting to detect conductors such as graphitic horizons and conductive mineralized zones. 3250 line-km GEO-TEM EM/mag surveys were flown at 300 m line spacings by Fugro Airborne Surveys over the entire project. The completion of ground geophysics and assessments is ongoing, permitting and related processes have been initiated and are anticipated to be prior to the start of the spring 2006 drilling season.



IC¹, LO², TIM³

Operator, Owners

Trigon Exploration Canada Ltd.,

Contact Diamonds^{1,2};

Trigon Exploration Canada Ltd.

Committee Bay Resources,

Indicator Minerals Inc.³

Commodities

Diamonds

Coordinates

89° 00'W, 67° 30'N^{1,3};

88° 00'W, 67° 00'N²

NTS

56P, 46M, 46C

Location

90 km southeast of Kugaaruk

Trigon Exploration and Contact Diamonds have joint ventures projects IC and LO. The IC property is centred 90 km southeast of the hamlet of Kugaaruk and staked in the winter of 2004. This project covers approximately 357,000 acres, 90 kilometres southeast of Kugaaruk and adjoins the Amarak Project of Diamonds North and BHP Billiton as well as Trigon's TIM Project. A reconnaissance till sampling program was conducted on both the IC and LO claim blocks, approximately 175,235 hectares 100 kilometres northwest of Repulse Bay and 80 kilometres south of the IC Project.

Pyrope garnets and chromites with upper mantle affinities were found in several locations, with a concentration of grains observed within a discrete area at the center of the IC block. In 2005, a summer program of 5,200 line-km airborne geophysics, till sampling, field reconnaissance and prospecting was completed. Interpretation of the airborne magnetic survey resulted in the selection of 34 anomalies and 226 heavy mineral

till samples were collected in the area of the anomalies; results are pending.

A 10 m by 5 m elongated area of felseneer float was discovered, comprised of rusty angular brecciated blocks of quartzite containing abundant fracture-filling and disseminated sulphide mineralization. A grab sample returned 1220 g/t Ag, 1.5 g/t Au, 0.70% Cu, 2.51% Zn and 0.69% Pb. The mineralization appears to be associated with a major contact between two magnetically distinct lithologies. Further prospecting and sampling work is being planned for the spring of 2006.

The TIM property comprises 32,171 hectares and is contiguous with the IC property and close to the central indicator anomaly. A total of 37 reconnaissance samples were collected over this property and results are presently being concentrated and picking results are expected by the end of the year. This property is an agreement with Trigon and a joint venture comprising Committee Bay Resources and Indicator Minerals Inc.

JAMES RIVER (North James River)

Operator, Owners

Pure Gold Minerals Inc.,
Bard Ventures Ltd.

Commodities

Gold

Coordinates

110° 45'W, 67° 35'N

NTS

76M/10

Location

30 km northwest of Wolfden's High Lake, 175 km east-southeast of Kugluktuk

The North James River property covers part of the western limb and northern extension of the High Lake Greenstone Belt. Wolfden Resources High Lake deposit lies three kilometres east of the southern claim of the North James River property, while the Arcadia gold deposit (Full Metal Minerals) is located approximately 20 kilometres to the north. The original North James River property consisted of

41 mineral claims but for assessment and claim maintenance purposes, the property has been reduced to nine claims in three separate blocks covering 8,031 hectares.

Six holes (570.7 m) were recently drilled along the Silver Bullet structure and one hole totalling 122 metres was drilled to test an additional nearby target. Gold-bearing quartz veins were intersected in three of the six holes with the best result being 23.2 g/t Au over a 0.7 metre (not true thickness) intersection. Another hole, oriented to intersect the vein approximately 25 metres along strike, intersected multiple vein sets and returned 3.8 g/t Au over 1 metre and 0.7 g/t over 1 m.

These drill results confirm, and expand results from the 2004 surface sampling program. A program of VLF/EM geophysical surveys was planned for 2005; results are pending.

JERICO DIAMOND PROJECT

Operator, Owners

Tahera Diamond Corporation

Commodities

Diamonds

Coordinates

111° 29'W, 66° 00'N

NTS

76E/14

Location

350 km southwest of Cambridge Bay

In 1992-93, Lytton Minerals and New Indigo Resources staked the Jericho, Contwoyto, and Burnside claim group (176,854 hectares) around the northern end of Contwoyto Lake. Extensive airborne geophysical surveys were flown and thousands of till samples were collected. Drilling in 1995 resulted in the discovery of kimberlite and in 1996, the JD/OD-1, or Jericho pipe, was outlined. A decline



was driven into the Jericho pipe in 1997 and 14,555 tonnes of kimberlite was mined for bulk sampling. Of this bulk sample, 9,435 tonnes were processed at the Lupin former mine-site with 10,535 carats recovered.

Tahera entered the environmental review process in 2000 for the development and operation of the Jericho diamond mine. The company received federal approval in 2004 for the project to proceed and signed a formal Inuit Impact Benefit Agreement (IIBA) with the Kitikmeot Inuit Association (KIA). Tahera also entered into an agreement with Tiffany and Co. for the purchase and marketing of the diamonds, with Tiffany providing \$35 M to assist with the project's financing.

Highlights of 2005 include that the Jericho diamond mine construction schedule is on track for substantial completion by year-end. Commercial production is planned for the end of the first quarter of 2006. The project is planned to be approximately nine years (until 2014) and current proven reserves are defined as 2.6 million tonnes averaging 1.2 carats. The mine will be an open pit mine for years one to four, processing 330,000 tonnes per year on site, followed by underground mining.



JERICO CLAIMS (Polar Project, Rockinghorse Property)

Operator, Owners
Tahera Diamond Corporation,
De Beers Canada Inc.

Commodities
Diamonds

Coordinates
111° 29'W, 66° 00'N

NTS
76E/14

Location
350 km southwest of Cambridge Bay

Exploration efforts were concentrated on increasing reserves in the area within trucking distance of the Jericho diamond plant. The neighbouring Polar project, a joint venture with De Beers Canada Inc., with the MuskoX kimberlite is a significant property. This kimberlite represents the best potential to increase reserves in the Jericho area; Tahera has the option to earn a 50-75 per cent interest from De Beers. In addition to the known kimberlites, the Polar property also hosts a number of unresolved kimberlite indicator mineral trains that indicate further discoveries are possible.

The MuskoX kimberlite occupies a surface area of approximately four hectares, which is 2.5 times larger than that of the Jericho kimberlite, and is made up of at least two volumetrically significant units, both of which are highly diamondiferous. A 3,692-kg sample derived from a combination of Tahera's spring drilling program (four holes, 915 m) and a De Beers sample (two holes, 500 m) was processed by caustic dissolution at SRC.

A large-scale evaluation program, including drilling, is planned over the



next 24 months to develop a mineral resource estimate for the MuskoX kimberlite. Based on the encouraging results, the 2006 program budget is expected to be approximately \$12 million, and will include a significant drilling component, including a large diameter reverse circulation drilling project, and extensive core delineation.

The construction of an all-weather access road is being considered from the Jericho kimberlite to the MuskoX body. This road would pass by Tahera's JD-3 diamondiferous kimberlite which lays approximately half way between the Jericho and MuskoX kimberlites; the economic potential of the JD-3 is unknown.

The Anuri kimberlite joint venture, located 90 kilometres northwest of the Jericho mine-site on the Rockinghorse property, contains the highly diamondiferous Anuri kimberlite, a 3.5-hectare multi-phase body made up of two kimberlite lobes that coalesce into a single pipe near the surface. Tahera drilled five holes and collected 1,900 kg, of which one half has been sent for caustic fusion processing. Initial results have been encouraging.



LUPIN

Operator, Owners
Kinross Gold Corporation

Commodities
Gold

Coordinates
111° 14'W, 65° 46'N

NTS
76E/11, 14

Location
300 km south of Kugluktuk

Kinross acquired the Lupin underground gold mine from Echo Bay Mines early 2003 and operated it until the closure this year. Gold in iron formation was discovered in 1961 by the Canadian Nickel Company (Canico). The rocks were repeatedly deformed and mine site stratigraphy consisted of two steeply-plunging, steeply-dipping anticlines separated by a syncline. Three primary ore zones were the West (west limb of the western anticline), Central and East zones (west and east limbs of the syncline). Two other ore bodies, McPherson 1 and 2, occurred in different iron formation lenses, several dozen metres west of the West Zone.

In 1979, Canico optioned the property to Echo Bay Mines, who bought it the following year. Underground exploration and mine construction commenced shortly afterward and the mill was commissioned in April 1982. In 1998, the mine was placed on care and maintenance due to low gold prices. In this period, the mine milled 10.46 Mt with an average grade of 9.9 g/t, producing 2.84 million ounces. The mine re-opened in April 2000 and at the end of the year, proven and probable reserves were estimated at 1.652 Mt grading 8.9 g/t. The mine reached a milestone in 2001 by pouring

its three millionth ounce in May of that year. In 2003, the mine was placed on care and maintenance, followed by stope and pillar removal in 2004, and mine closure mid-2005.

Mine-site facilities and the airstrip are still operational at the site, reclamation work is being undertaken and feasibility studies are being considered with the KIA and other organizations for future uses of the site.

MIE

Operator, Owners
Adriana Resources

Commodities
Nickel, Copper, Cobalt,
Platinum, Palladium, Gold

Coordinates
115° 15'W, 67° 00'N

NTS
86J/11, 14, 86O/3

Location
90 km south of Kugluktuk

Adriana Resources' main property, known as the MIE property, is approximately 540 km² in size and is centered over the northern half of the exposed portion of the Muskox Intrusion, which is part of the Mackenzie Igneous Event. The

Muskox Intrusion is a layered mafic intrusion associated with the Coppermine Volcanics and the Mackenzie Dyke Swarm, which together comprise the Mackenzie Igneous Event. Adriana owns the McGregor Lake Property and M1-M11 claims were staked on the Muskox Intrusion on August 31, 2005. The McGregor Lake property is approximately 9,470 hectares in size. The company considers the base of the Muskox Intrusion in the McGregor Lake area to represent a corridor of opportunity for accumulations of sulphides containing copper, nickel, platinum and palladium.

Reconnaissance sampling in 2005 was conducted to confirm anomalous values along the East and West walls of the Muskox Intrusion. Selected grab samples ranged from (MIE-08) 82 ppm Cu, 51 ppm Ni, 13 ppb Pt, and 10 ppb Pd, to (MIE-05) 2.73% Cu, .036% Ni, 2175 ppb Pt, and 14,828 ppb Pd on the East Wall, and to (MIE-16) 1.41% Cu, 2.28% Ni, 790 ppb Pt and 938 ppb Pd on the West Wall. The company is currently compiling historic information on this property and preparing an exploration program that will include both geophysics and drilling.



MOUNTAIN LAKE, DISMAL LAKE

Operator, Owners

Triex Minerals Corporation,
Pitchstone Exploration Ltd.

Commodities

Uranium

Coordinates

116° 51'W, 67° 18'N

NTS

86N/7

Location

100 km southwest and 150 km
west-southwest of Kugluktuk

The Mountain Lake project, approximately 100 km southwest of Kugluktuk, and nearby Dismal Lake project, approximately 150 km west-southwest of Kugluktuk, are located in the Hornby Bay Basin. Uranium mineralization is hosted within a unit of the mid-Proterozoic Dismal Lakes Group. The Mountain Lake project comprises eight mineral claims totalling 6,647 hectares and the Dismal Lake project comprises seven permits and 14 claims totalling 119,729 hectares. Claims and permits on the properties straddle the NT/NU border. The properties are held in 50:50 joint ventures with Triex, the operator of both projects.

During the 1970s and 1980s, Esso Resources Canada and Cominco Ltd. drilled 190 holes (approximately 22,000 m) on the Mountain Lake project. An inferred resource of 8.2 million pounds U₃O₈ with an average grade of 0.23 % U₃O₈ has been estimated at depths between 28 and 136 metres. Two types of mineralization have been recognized – stratabound sandstone-hosted and discordant fracture filling.

Work in 2005 over the Mountain Lake property included a 684 line-km

MEGATEM II survey and follow-up ground geophysics (magnetic, resistivity, time and frequency domain EM). An 81 line-km GEOTEM survey was completed over a test area of the Dismal Lake project. Other work on the projects included core rehabilitation, sampling, re-logging, ground and airborne radiometric surveying, geological mapping and prospecting. Results from the 2005 exploration program are being compiled and integrated with historic geological and drill data.

REGAN LAKE PROPERTY

Operator, Owners

Strongbow Exploration Inc.

Commodities

Gold

Coordinates

107° 45'W, 65° 10'N

NTS

76G4

Location

Approximately 70 km southwest of
Goose Lake

Strongbow's Regan Lake gold property consists of 9,860 hectares on IOL in the Back River area of the Slave Province. Past exploration in the area has focussed on two occurrences of folded sulphidic iron formation in the south-eastern part of the property. The property hosts over 19 km of oxide and silicate iron formation within the same sedimentary rocks as the gold-bearing iron formations of the George and Goose lakes gold deposits approximately 70 km to the northeast.

In 2005, 14 days were spent conducting bedrock mapping and rock and soil geochemical surveys. Mapping has produced a revised structural interpretation for the area. The geochemical surveys confirm gold in iron formation



horizons within the property with 48 of 205 rock grab samples returning greater than 1 g/t Au with three highest values of 25.8 g/t Au, 29.5 g/t Au, and 26.2 g/t Au. Further compilation and interpretation of exploration results will be used to define priority drill target areas for 2006.

SANAGAK

Operator, Owners

Indicator Minerals Inc.,
Hunter Exploration Group

Commodities

Diamonds

Coordinates

94° W, 74° 45'N

NTS

57F, G

Location

Boothia Peninsula, northwest of
Taloyoak

The Sanagak Project, operated by Indicator Minerals Inc. (IME), consists of approximately 450,000 hectares of prospecting permits located on the Boothia Peninsula, northwest of the community of Taloyoak.

Kimberlite indicator minerals, some with diamond indicator chemistry, were recovered in five spatially separate areas on the property from heavy mineral samples collected in 2004. During the 2005 summer program, 99 heavy mineral samples were collected to follow up the anomalous samples. One of these anomalies is located along the eastern

boundary of the project area (“the Boundary Anomaly”).

During the 2005 field program, IME collected heavy mineral samples immediately east of the Boundary Anomaly to determine if kimberlite indicator minerals are present outside the project area. These samples were flown to the SRC laboratory for expedited processing and analysis. Results confirmed the presence of indicator minerals east of the property and a staking campaign to capture the areas of interest was completed in late 2005. The company staked 42 mineral claims covering more than 43,700 hectares.

Plans for 2006 include additional heavy mineral sample collection to further delineate the extent of the indicator mineral anomalies and the acquisition of airborne geophysical data to identify kimberlite targets.

TURNER LAKE

Operator, Owners
Tradewinds Ventures

Commodities
Gold

Location
Bathurst Inlet

The Turner Lake Property covers 1012.5 hectares located near Bathurst Inlet in the Kitikmeot District of Western Nunavut, Canada. The mineral assemblage of the Turner Lake Property is virtually identical to that of the former Lupin gold mine located 200 km to the southeast. Previous work includes extensive mapping, airborne and ground geophysics, trenching and drilling, exposing at least three high-grade shoots of gold mineralization. In 1989 detailed channel sampling returned an average grade of 4.5 g/t over a true

width of 3.2 metres. Additional historic numbers are 28 g/t Au over 4.75 metres, 12.86 g/t Au over 8.87 metres, 4.08 g/t Au over 15.27 metres, 15 g/t Au over 4 metres and 10 g/t Au over 5 metres. For 2005, Tradewinds had a 4,000 m drill program planned with an expense of approximately \$800,000.

ULU

Operator, Owners
Wolfden Resources Inc.

Commodities
Gold

Coordinates
110° 59'W, 66° 54'N

NTS
76L/15,14

Location
300 km southwest of Cambridge Bay

Wolfden is the current owner and operator of the Ulu gold deposit hosted in amphibolite facies mafic metavolcanic rocks of the High Lake volcanic belt. Gold was first discovered at Ulu in the late 1980s by BHP-Utah Mines Ltd (now BHP Billiton). The deposit, which remains open for expansion, has a geological resource of 565,000 ounces of gold contained in 1.34 Mt grading 12.91 g/t Au between surface and the 360 meter level using a 5 g/t cut-off grade and a 1.5 meter minimum mining width, indicating 3,650 tonnes per vertical meter. A ramp has been completed to the 155 m level on the Flood Zone, including development and the driving of an escapeway/fresh air raise. The mine site contains a runway, camp, power generation, fuel farm, and machinery and equipment for the mining and transportation of ore.

The property has excellent exploration potential as demonstrated by the untested

Ravine showing where prospecting has returned assays of 36.2 and 26.0 g/t Au. Rubbly gossanous quartz veins to the north and south yielded Au values between 22.8 and 89.1 g/t (2.6 oz/ton).

ULU SOUTH

Operator, Owners
Strongbow Exploration,
Wolfden Resources

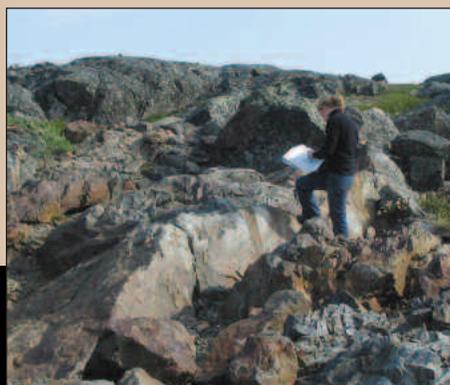
Commodities
Gold

Coordinates
110° 55'W, 66° 45'N

NTS
76L/10

Location
300 km southwest of Cambridge Bay

The Ulu South property consists of approximately 32,000 hectares of Inuit Owned Lands subject to the NTI Agreement covering the southern part of the High Lake volcanic belt in the northern Slave Structural Province. The property ties immediately onto Wolfden Resources' Ulu gold project and the Ulu South property is considered prospective for gold and base metals as well as diamonds. In September 2004, Strongbow and Wolfden entered into an agreement under which Wolfden may earn up to a 60 per cent interest in the property by spending \$5.0 million over five years. Wolfden undertook a compilation of available exploration data to identify priority areas for exploration work in 2005.



60°00"N

55°00"N

50°00"N

60°00"N

55°00"N

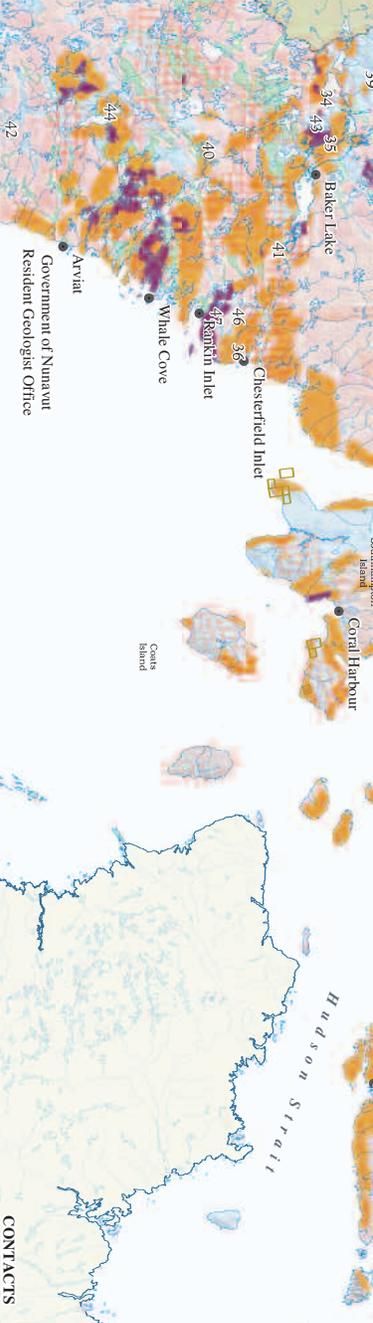
50°00"N

45°00"N

General compilation derived from
 Geology of Nunavut by
 Eric de Kemp, March 8, 1999
 Base map derived from
 National Atlas of Canada, 2 million scale.
<http://www.nunanut.com/~cngo>
<http://www.gov.nu.ca>
 This map is for review purpose only!
 GN, INAC, & C-NGO
 accept no responsibility
 for the accuracy of the data.
 September, 2005

Kivittuq Exploration Projects 2005

Amaruk	1
Amlalik and Rush properties	2
Arcadia Bay	3
Amaq	4
Barrow and Darby	5
Blue Ice (including White Ice and Hadley Bay)	6
Cano Lake	7
Committee Bay Northeast Project	8
Chicago	9
Coppermine, Asiak	10
Coppermine River	11
George Lake/Goose Lake (Back River)	12
Hackett River	13
High Lake	14
Hood River	15
Hope Bay Project (Doris North, Madrid, Boston)	16
Hope Bay Project (Eastern Contact, Twin Peaks)	17
Hornby Project	18
IC, LO, TTM	19
Inulik	20
James River (North James River)	21
Jericho Diamond Project	22
Jericho Claims	23
Knife Lake (Tree 1 claim)	24
Lupin	25
MIE	26
Musk Project	27
Muskox Project	28
Mountain Lake, Dismal Lake	29
Regan Lake Property	30
Sanagaak	31
Ulu	32
Ulu South	33



- Community
- Nunavut Boundary
- Rivers
- Arctic Circle
- Oil and Gas
- Exploration Permit
- Other
- Production License
- Significant Discovery License

- C-NGO Project Areas
- Prospecting Permits
- Coast Line
- Lakes
- Ice

- Lithology
- Intrusive Rocks
- Metamorphic Rocks
- Volcanic Rocks
- Sedimentary Rocks
- Sedimentary & Volcanic Rocks

CONTACTS

Bernie MacIsaac
 Manager of Mineral Resources
 Indian and Northern Affairs Canada
 Iqaluit, Nunavut
 macisaab@fnac-ainc.gc.ca

Dave Smith
 Dept. of Economic Development
 & Transportation
 Government of Nunavut
 Iqaluit, Nunavut
 dsmith@gov.nu.ca

For a copy of this map please contact:
 John Taylor,
 GIS Specialist
 Canada-Nunavut Geoscience Office
 jaylo@nrcan.gc.ca

Qikiqtami Exploration Projects 2005

Aberdeen	34
Baker Lake Gold Project	35
Churchill Diamond Project	36
Committee Bay Project	37
Committee Bay Northeast Project	38
Deep Rose	39
Ferguson Lake Project	40
KDM Project	41
Keewatin Project	42
Kigavik & Andrew	43
Matrix	44
Meadowbank Project	45
Meladine East	46
Meladine West	47
Nanuk Project	48
Thelon Basin	49
Turqavik	50
Alexis Project	51
Aviit	52
Baffin Island Project	53
Baumann Project	54
Baffin Island Property	55
Beluga Sapphire Project	56
Borden Peninsula, Baffin Island Project	57
Borden Project	58
Dorset Project	59
Jackson Inlet	60
Mary River Iron Ore Deposits	61
Oz Series	62
Qilalugaq	63
Qimiq	64
The Strand Fiord Coal Project	65
Wales Island	66

105°00"W

100°00"W

95°00"W

90°00"W

85°00"W

80°00"W

Coronation Gulf Diamonds

The Coronation Gulf Diamond District, southeast of Kugluktuk, covers the northern portion of the Archean Slave Province and 21 kimberlites, including eleven that contain diamonds, have been discovered in the area. The first kimberlite, the Potentilla, was discovered in 2001 and started a 1.6 million hectare staking rush which encompassed the majority of this diamond district. Numerous companies are working in this area either on wholly owned properties or as joint venture projects.

Ashton Mining of Canada holds a 100 per cent interest in five properties and these are the Vic, Kim, Ric, Eokuk and James River properties. Ashton also has a 52.5 per cent interest and a right to earn an additional 7.0 per cent interest in the 15 mineral claims, representing 15,400 hectares of the Kikerk Lake project with Caledonia Mining Corporation and Stornoway Diamond Corporation. Kimberlites that Ashton has discovered include the diamondiferous Artemisia and Thrift kimberlites on the Kim property, the Potentilla and Stellaria kimberlites on the Kikerk property and the Hydra, Perseus, Caltha, Ric-97 and Ric-26 on the Ric property.

Ashton approved a total budget of \$1.4 million for exploration in the region in 2005, including its contribution to the summer program for the Kikerk Lake property. The exploration program focussed primarily on this property. Ground geophysical surveying, indicator mineral sampling, and further drilling was planned to investigate the nature of the Stellaria diamondiferous kimberlite pipe.

Stornoway holds varying interests (between 30 and 100 per cent) in nine

different properties covering over 200,000 hectares in the north Slave area of western Nunavut. Stornoway is the operator on all but two of them. The nine properties are the Jubilee, Jewel, Peregrine, Sceptre and Tiara projects, Aqua and Diva projects, Bear and Kikerk properties.

The Jubilee property is a joint venture between Stornoway, Earth Star Diamonds and International Samuel Exploration Corporation and covers 16,705 hectares. The Jewel property covers 3,103 hectares and is wholly owned by Stornoway, although Strongbow could earn a 35 per cent interest by spending \$25 million.

The Peregrine property is a joint venture between Stornoway (30 per cent) and Diamondex Resources Ltd (70 per cent) and covers 62,496 hectares with a total of \$1 million being spent. In 2005, Diamondex negotiated financing which resulted in Barrick Gold Corporation now holding 10.95 per cent of Diamondex, who received \$11.52 million. This deal makes Barrick a major shareholder and will significantly increase the potential of Diamondex's exploration properties.

The Sceptre and Tiara properties cover 39,541 hectares and are a joint venture between Stornoway Diamond Corporation (40 per cent), International Samuel Exploration (36 per cent), New Cantech Ventures Ltd. (24 per cent) and Dasher Energy (eight per cent). Stornoway has the option of earning up to 60 per cent by funding \$7 million in expenses and issuing shares by the end of 2006.

Strongbow's 100 per cent owned Blue Lake diamond property is located approximately 180 km southwest of Kugluktuk. The property comprises 3,595 hectares of IOL subject to the NTI

Agreement. A prominent kimberlite indicator mineral train is on the property and till samples collected by Strongbow in 2003 and 2004 have returned hundreds of indicator minerals. The mineral train is well cut off, indicating that a bedrock source for these minerals is likely located within the property. The 2005 program was planned to ground truth several geophysical targets and boulder prospect for kimberlite float within the mineral train.

Strongbow Exploration Inc. and Tahera Diamond Corporation planned drilling of at least one priority potential kimberlite target on the Tenacity South diamond project. This property comprises approximately 5,500 hectares and is located adjacent to Tahera's Hood River property that hosts the diamondiferous Tenacity kimberlite. The Tenacity South property is located on IOL in which Strongbow controls 100 per cent of the mineral rights, subject to an agreement with NTI.

Shear Minerals operates one project in the region with their Coronation Diamond Project property consisting of 58 claims in three non-contiguous claim groups, totalling 32,174 hectares. Shear advanced the project to the drill-ready stage in 2002 and determined four medium-priority targets following ground geophysical data and supporting kimberlite indicator mineral anomalies from till samples. The core claims in the property are in good standing for 10 years. Shear is evaluating possible options for the drill testing of these targets.

Nordic Diamonds Ltd. and International Samuel Exploration Corporation have a joint venture agreement on the BRSC project located immediately to the north of Contwoyto Lake. The property

lays approximately half-way between the Lac de Gras region in the NT and the Coronation Gulf diamond region. There are 11 diamond bearing kimberlite pipes located within 10 km of the BRSC property boundary, the most significant being the Jericho kimberlite about 7 km to the south. Three high priority drill targets were selected from 2004 with the expectation of a spring 2005 start. A regional sampling program was conducted in 2005 on the BRSC project and Nordic Diamonds' 100 per cent owned WM claims, a project that lies immediately north of the Jericho project. Kimberlite float was discovered on the WM claims. Also active in the Kitikmeot region is Kaminak Gold Corporation, a new mineral exploration company that formed through the combination of the non-diamond assets of privately held Hunter Exploration Group together with the non-diamond assets of Shear Minerals Ltd. Kaminak now holds one of the largest land positions in Canada devoted to metallic mineral exploration and commodities sought include gold uranium and nickel. With this agreement with the other companies, Kaminak is able to use the technical databases of both Shear Minerals Ltd. and Indicator Minerals for non-diamond exploration. Projects active include the Lach, Bathurst, Needle Lake and BR properties.

Inactive projects

Several projects in the Kitikmeot were inactive in 2005. The Inulik property owned by Allyn Resources is a gold, base metal and diamond project 120 km southeast of Kugluktuk. Three separate claim blocks (ALS/AT, ALN/MARS and TE) cover over 196,279 hectares. Results

announced early in 2004 identified anomalies suggestive of kimberlites. However, Allyn Resources concentrated their efforts on their other Nunavut projects in 2005.

The Musk gold-silver-copper-zinc-lead project in the Back River area of the Coronation Gulf was optioned to Strongbow Exploration from Noranda Inc. The Musk Project comprises a single mining lease as well as 21,000 hectares of mineral claims and 8,558 hectares of IOL. Drilling and detailed evaluation in the 1980's outlined a VMS deposit of 415,000 t grading 1.4 g/t Au, 324 g/t Ag, 1.1% Cu, 1.4% Pb, and 9.8% Zn. Strongbow Exploration notified Noranda early in 2005 that it would not pursue its option to earn a 100 per cent interest in the Musk mining lease. The existing Musk camp was used in 2005 as a base to support continued exploration of other projects.

The Muskox Ni-Cu-Co-Pt-Pd-Au project owned and operated by Prize Mining Corporation, formerly Muskox Minerals Corporation, hosted by the 1.27 Ga Muskox Intrusion, a layered mafic/ultramafic complex. The Muskox Intrusion was first discovered in 1956 by INCO, and was examined between 1969 and 1988 by various companies.

The Yava Zn-Cu-Ag-Au deposit, located between the Hackett and Back Rivers on map sheet 76G/12, has not seen active exploration since 1976. However, it is one of the major massive sulphide deposits in the Slave Province. The deposit contains two zones, a massive zone and a zone of stringer sulphides. In 2004, exploration was re-activated by Expatriate Resources Ltd., who later reorganized and created a new company,



Pacifica Resources Ltd, to control the Yava base-precious metal property. In 2005, Pacifica Resources' main exploration focus was the base precious-metal Selwyn Project in Yukon. Pacifica expected that their exploration focus would shift off the Selwyn property to the Yava Project but encouraging results in the Yukon re-focussed the company's efforts to continue with that project.

Rhonda Corporation and De Beers Canada Inc. have a joint venture agreement for the Tree 1 claim over the Knife kimberlite pipe; this claim covers 2530 hectares. De Beers budgeted \$1.32 million for the 2004 program and drilling that year provided more information on the internal geology and suggested the presence of an additional volcanoclastic unit.

Strongbow's 100 per cent owned Hope Bay project is comprised of five mineral claims (4,121 hectares) located at the northeast end of the Hope Bay volcanic belt, approximately 125 km southwest of Cambridge Bay, NU. The property lays three km north and along strike of Miramar's Doris gold deposit. Past exploration of Strongbow's ORO claims has included detailed bedrock mapping, airborne and ground geophysical surveys, prospecting and drilling although drill intercepts have returned uneconomic gold values. A work program was not undertaken in 2005 but Strongbow considers the ORO claims to be of strategic value due to their proximity to the Doris deposit. The property contains several untested areas of interest that warrant further investigation, particularly once the Doris deposit is in production.

Kivalliq District

The Kivalliq District includes the eastern mainland, Southampton Island and several smaller islands. The communities of Rankin Inlet, Baker Lake, and Arviat are often used as staging points for exploration projects. Scheduled and charter air services, expediting services, and other supporting businesses are available in these centres.

Rocks of the Archean - Proterozoic Western Churchill geological province underlay much of the Kivalliq. Sedimentary rocks of the Hudson Platform are found on islands within Hudson Bay. Past producing mines in the District are the North Rankin Nickel Mine at Rankin Inlet and the Cullaton/Shear Lake gold mine north of Nueltin Lake.

More than 35 exploration projects were active in 2005, targeting a wide range of commodities: gold, diamonds, Ni-Cu-PGE's, base metals, and uranium. Current exploration targets include lode and iron formation hosted gold, epithermal gold, quartz pebble conglomerate hosted gold, mafic – ultramafic Ni-Cu-PGE deposits, diamondiferous kimberlites, unconformity associated uranium, iron oxide-copper-gold (IOCG), and volcanogenic massive sulphide mineralization.



Exploration for uranium was once again occurring in the Kivalliq. Work in 2005 was limited to airborne geophysics, mapping, prospecting, and community consultations.

The Thelon Basin is relatively underexplored and it has not yet been prospected using modern technologies. Historic uranium exploration work was mostly reconnaissance work done in the boom years of the 1970s and 1980s.

Gold and diamonds were the leading commodities sought. Cumberland Resources continued to advance its Meadowbank Project through the regulatory process toward construction. The most active diamond project was the Churchill Project, operated by Shear Minerals. Comaplex, De Beers, Diamonds North, Dunsmuir, Peregrine, Indicator Minerals, BHP and Kennecott had individual diamond exploration programs in 2005.

Emerging Projects in the Kivalliq

The diverse mineral potential throughout the Kivalliq has led to industry partnerships. Some partnerships are based on the parties having mutual interest in the target commodity. Others are based on the partners having different exploration interests.

Shear Minerals, Stornoway Diamonds and BHP Billiton have a partnership on the Churchill and Churchill West properties. In 2005, international gold company Gold Fields Limited concluded purchases to secure 19.8 per cent of Comaplex Minerals through a series of open market transactions and private placements. The companies also entered into a technical assistance agreement on the Meliadine

West gold property which Comaplex operates.

Large land positions in the western Kivalliq acquired in the diamond rush are now being considered for their uranium potential. Recognizing the multi-commodity value of their permits in and about the Thelon Basin, De Beers entered into agreements with two companies in 2005. Cameco optioned 14 permits south of Aberdeen Lake - 2,300 square kilometres termed the Aberdeen Property, located 150 km west of Baker Lake. In consideration for \$1.8 million in uranium exploration expenditures over four years, Cameco can earn a 60 per cent interest in the property.

Majescor announced an agreement with De Beers on permits covering 9,000 square kilometres, 50 km west of Baker Lake in October. The permit area, called the Baker Lake property, has both diamond and uranium potential and the agreement provides for separate options for the two commodities. The land package under option to Majescor consists of 51 mineral permits in the Archean Rae Craton. Thirteen of the permits have been set aside for uranium exploration while the rest have been retained for diamond exploration. Six target areas were defined by De Beers' 2004 regional effort which generated more than 350 samples. Five of the targets were followed up in the fall of 2005 by detailed till sampling and airborne geophysics. The program for 2006 will be established by the partners upon receipt of the 2005 till sampling results. The 13 permits retained for uranium are located on the projected southwest-trending extension of the Kiggavik trend. They contain known uranium showings which appear to be

closely associated with the Snowbird Tectonic Zone. Seven occurrences and small deposits of uranium, known from the 1970s, form a north-easterly trend in the south-eastern corner of the Baker Lake permit area. This trend correlates with the Snowbird Tectonic Zone and the showings are hosted by rocks of the Baker Lake Group. Uranium mineralization is epigenetic and hosted mainly by sedimentary units. The common metallic association is U+Cu+Pb+Ag. COGEMA Resources Inc.'s Kiggavik uranium deposit, first discovered in 1977, contains some 131 million lbs of uranium. These deposits are located less than 20 kilometres north of Majescor's Baker Lake property.

Kaminak Gold Corporation has 100 per cent of the non-diamond rights to 3.44 million hectares of the Churchill Diamond Project, plus an additional 2.06 million hectares in the Kivalliq and eastern Kitikmeot. Taking advantage of strategic agreements with diamond explorers, they have gained access to a database of archived till samples. Two properties within their portfolio are the Sy Property in the Archean Yathkyed Greenstone Belt and Baker Lake IOGC Project.

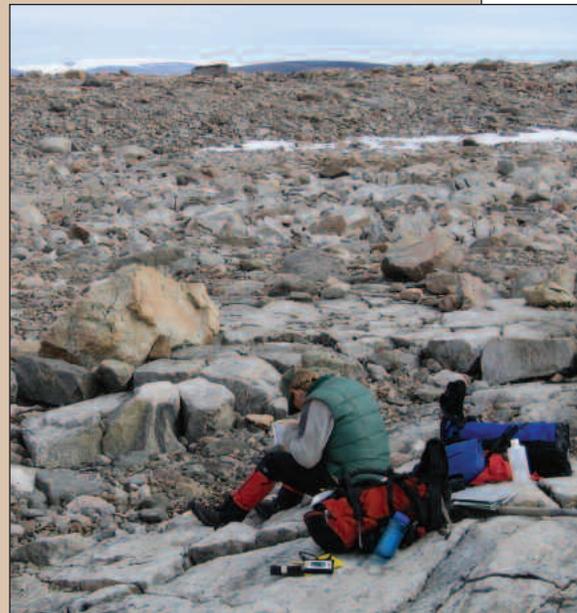
The 101,200 hectare Sy Property is prospective for gold mineralization analogous to that documented on the Meliadine properties. Gold mineralization is related to a regionally extensive northeast-southwest trending shear zone, occurring in quartz veins cross cutting greenschist facies iron formation. Broad areas of carbonate altered mafic volcanics are also host to several gold-bearing zones. Past workers collected 155 surface samples along an 11 km iron formation trend, with nine per cent containing

over 10 g/t Au and 27 per cent in excess of 3 g/t Au.

The geological setting southeast of Baker Lake suggests a favourable environment for the discovery of iron-oxide-copper gold deposits (IOGC). Documented mineralization includes fracture controlled U-Cu-Ag-Au-Se and U-Cu-Mo-Pb-Zn hosted in the Baker Lake sediments and underlying basement rocks, diatreme breccia U-Cu-Zn-Au mineralization in basement gneisses, and micro-fracture U-Cu-Ag mineralization hosted in arkose peripheral to alkaline dykes.

Early in 2005 Brilliant Mining Corporation entered into an agreement with Falconbridge to acquire 100 per cent interest in 15 prospecting permits forming the Chesterfield Property east of Baker Lake. The area is considered prospective for the discovery of Ni-Cu-PGE deposits as it covers the Chesterfield segment of the craton-scale Snowbird Tectonic Zone. Rift related ultramafic and mafic differentiated intrusive complexes, ca 1900-1800 Ma aged, are co-incident with a regional scale gravity anomaly. This setting is similar to that associated with the Raglan, Quebec and Thompson, Manitoba nickel districts.

A 333 line-km helicopter borne electromagnetic and magnetic survey was flown over the Howell Island Ni-Cu-Pd-Au occurrences in 2005. Following a summer field program, 12 claims covering 11,497 hectares were staked to cover anomalous mineral occurrences, including the Howell Island occurrence. These claims fall into the Falconbridge agreement. Brilliant's 2005 sampling returned high assays of 1.83 % Ni, 0.99% Cu, 0.14 g/t Pt, and 0.29 g/t Pt associated with disseminated



to semi-massive pyrrhotite, pentlandite, and chalcopyrite mineralization in an equigranular gabbro dyke. Previous sampling by Falconbridge yielded a best assay of the 6.84% Ni, 0.22% Cu, 0.02 g/t Pt, 1.20 g/t Pd, and 0.16 g/t Au.

Historic sampling at the Cone Hill gold occurrence returned a high value of 15.9 g/t Au. Site visits confirmed the presence of highly altered and sulphidized iron formation horizons for over 7 km along strike. Sampling this year returned a high value of 131.2 g/t Au. The Chesterfield Property also contains several uranium showings along the unconformity between the Baker Lake Group and underlying Archean rocks.

Developing diamond exploration projects are Stornoway's Hyde and Aumaluuktuuk properties. Ground targets continue to be developed through generative grassroots exploration by the strategic partnership of Indicator Minerals, Hunter Group, Committee Bay Resources, Stornoway, and Trigon Exploration on claims and permits in the Kivalliq.

ABERDEEN¹, TURGAVIK²

Operator, Owners

Cameco^{1,2}
 De Beers Canada Inc.¹

Commodities

Uranium

Coordinates

98° 30'W, 64° 20'N

NTS

66B - Aberdeen
66A/5, 2, 66B/8, 9, 15, 16 - Turgavik

Location

125km west of Baker Lake

DEEP ROSE

Operator, Owners

Cameco

Commodities

Uranium

Coordinates

99° 40'W, 64° 52'N

NTS

66B/13

Location

180km west of Baker Lake

The project areas are situated along the eastern margin of the Paleoproterozoic Thelon sandstone Basin near the Kiggavik uranium deposit. The area is underlain by older Paleoproterozoic metasediments, metavolcanics and granitoid rocks and the younger clastic sediments of the Thelon Group. A thick regolith of several 10s of meters has been mapped by previous workers along the unconformity contact between the Thelon sediments and underlying basement rocks. Uranium mineralization has been identified in the Andrews Lake and Kiggavik areas. Mineralization and associated alteration in the immediate project area is largely unknown.

The Aberdeen Project consists of 14 permits optioned from De Beers in August 2005 while the Turgavik Project consists of 131 claims east and north of Aberdeen Lake, staked in late 2004. Total acreage for these two active projects is in excess of 323,760 hectares. The Deep Rose Project has been dormant since 1998. Past exploration work had identified uranium mineralization coincident with some graphitic horizons within rocks of the Amer Group, mineralized boulders.

Cameco's 2005 field program consisted of airborne geophysics (MEGATEM, radiometrics, magnetics, and hyperspectral), prospecting and sampling on the Aberdeen and Turgavik projects. Processing and interpretation of the airborne survey data is underway.

KIGGAVIK¹ AND SISSONS² PROPERTIES

Operator, Owners

Cogema Resources Inc^{1,2}
Daewoo^{1,2}
JCU (Canada) Exploration
Company Ltd.²

Commodities

Uranium

Coordinates

97° 50'W, 64° 20'N

NTS

66A/5

Location

75km west of Baker Lake

The properties are situated on the east side of the Paleoproterozoic Thelon Basin, less than two kilometres from the present day limits of the Thelon sandstone outcrops. Regional exploration on this side of the Thelon basin began in 1974, with the Kiggavik zones discovered in 1977. Uranium mineralization occurs as coffinite

and pitchblende in metasediment-dominated assemblages of possible Archean age. The graphite-lacking basement lithologies have a well developed and regionally extensive regolith. Illite, chlorite and hematite-dominant alteration is prevalent in the host rocks. Current resources identified are: Kiggavik zones 14,872 tonnes uranium at a grade of 0.38%, representing 39 million lbs U₃O₈.

The Sissons Project is located about 20 km southwest of Kiggavik. It includes three areas of uranium mineralization: Andrew Lake, End, and Jane with deposits identified in the former two. Geophysically, the two deposits are characterized by gravity and resistivity lows, centred along faults. Negative gravity anomalies reflect the alteration associated with mineralization. Sudoite, a Mg-rich chlorite, coincides with mineralized areas.

Uranium mineralization occurs as coffinite and pitchblende within the Andrew Lake and End deposits. The End deposit was discovered in 1987, Andrew Lake in 1988. Resources of 13,598 tonnes uranium at 0.28% for 35 million lbs U₃O₈ with 1 tonne gold and 0.7 tonnes platinum are identified in the End deposit.

At the Andrew Lake deposit, the near vertical Andrew Lake Fault strongly controls the mineralization. Current resources identified are 22,160 tonnes uranium at 0.44%, for 57 million lbs U₃O₈ with 3.1 t gold and 2.6 t platinum.

In 2005 COGEMA continued its care and maintenance program on the Kiggavik camp and core storage areas. The program included community consultations and bringing a small group of Baker Lake residents to the site in August 2005.



BAKER LAKE GOLD PROJECT

Operator, Owners

Tanqueray Resources

Commodities

Gold

Coordinates

96° 40'W, 64° 20'N

NTS

66A/4, 7, 10

Location

35 km west of Baker Lake

Tanqueray's project area covers 106,000 hectares in an area 10 km wide by 70 km long over the southern Archean Woodburn Group. The exploration target is Archean lode gold in iron formation.

The 2005 exploration program included 400 line-km of ground magnetics and 100 line-km of ground EM, geological mapping, prospecting, and 1200 m of drilling. Five gold occurrences have been identified: Ayak Gossan, Jaegar Main and Extension, Ayak Mouth, and Ayak West.

Seven of 11 holes intersected gold mineralization. The most significant discovery occurred in the drill testing of the Ayak Gossan zone – identified through ground HLEM surveying over a large magnetic anomaly. Drill intersections of 10.53 g/t Au over 1.14 m core length and 15.06 g/t Au over 1.0 m core length were reported.

To date only a small portion of the project area has been explored. Plans for 2006 include EM and magnetic airborne surveys, with further ground surveys and diamond drilling.

COMMITTEE BAY PROJECT

Operator, Owners

Committee Bay Resources and Gold Fields Exploration Ltd.

Commodities

Gold

Coordinates

90° W, 67° N

NTS

56K, 56O, 56J and 56P

Location

Northeast of Baker Lake

The Committee Bay greenstone belt is one of the largest unexplored greenstone belts in North America. The 300 km long, northeast-trending belt comprises Archean supracrustal rocks of the Rae domain of the Western Churchill Province. Rock types include komatiitic to basaltic volcanic rocks, intermediate to felsic rocks, and banded iron formation.

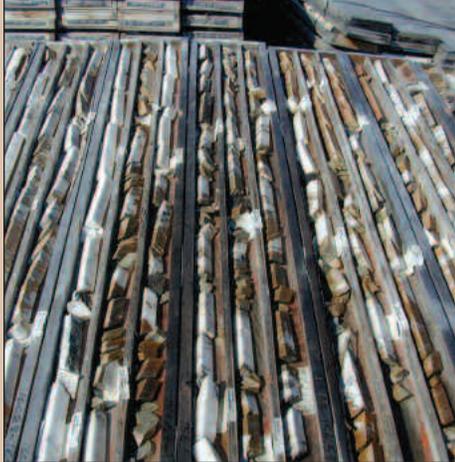
Committee Bay Resources currently holds 0.65 million hectares along the greenstone belt. The company's \$8 million 2005 exploration program had spring and summer components. The spring

program included 5,000 line-km of airborne geophysical (EM and Magnetic) surveys to cover significant project areas. Detailed gridding and ground magnetic surveying occurred over high priority targets, and drill testing of the Raven and Three Bluffs zones.

The summer program included drilling at Three Bluffs to test shallow targets along strike, as well as deeper targets beneath the reported inferred resource delineated in 2004. Initial drill testing of several other prospects including Raven, West Plains, and Betwixt were also completed. Drill testing of the Anuri target was attempted late in the summer but encountered difficulties.

Prior to the 2005 drill program, a near-surface high grade inferred mineral resource of 1.9 million tonnes grading 8.0 g/t Au for 487,000 ounces has been defined by 49 drill holes at Three Bluffs. Using a lower cut-off grade this inferred mineral resource is expanded to 5.1 million tonnes grading 4.0 g/t Au for 657,000 ounces. About 85 per cent of these resources are within 120 m of





surface and the bulk of the high grade gold mineralization is along a shallow plunging structure.

The company's 2005 drill program at Three Bluffs was successful in tracing the high grade gold mineralization to depths in excess of 320 m over a strike length of 600 m. Drill intersections are interpreted to correspond to the north and south limbs of a folded, mineralized iron formation that contains an inferred resource of 8 g/t Au for 487,000 ounces. Gold also occurs along the limbs of the fold where iron formation is in contact with dacite and metasedimentary rocks.

A number of intersections with visible gold did not return high assay values. The company states this reflects the nuggety effects of the gold distribution at Three Bluffs. Spring drilling at the Raven occurrence (20 km west of Three Bluffs) encountered two mineralized zones. These zones are characterized by multiple quartz veins with abundant visible gold, euhedral arsenopyrite and minor pyrrhotite over widths of two to 10 m, concentrated along the sheared contact of a gabbro with intermediate volcanics. Assays reported from the South zone are 12.6 g/t Au

over 5.46 m core length, 36.22 over 2.43 m core length. Some mineralized intercepts from the North zone are 3.57 g/t Au over 1.45 m and 11.63 g/t Au over 0.48 m.

The West Plains gold showing is in the southwest corner of the Committee Bay Greenstone belt approximately 65 km southwest of the Raven occurrence. Two drill holes in the West Plains area tested the northeast extent of a 3 km long EM geophysical anomaly. Both holes intersected a thick silicate iron formation with patches of pyrrhotite that corresponds to low grade gold values. The Lowlands showing is located 1.2 km southwest of those holes and intersected a 45 m wide zone of silicate iron formation containing broad bands of semi-massive pyrrhotite cut by centimetre to meter scale quartz veins. These veins are locally banded and contain up to 15 per cent pyrrhotite. The best reported assays are 14.76 g/t Au over 8.73 m core length and 25.33 g/t Au over 3.07 m. The high grade zones are silica flooded with fine grain pyrrhotite disseminated throughout.

Regional mapping and prospecting along the entire belt with detailed mapping along the Raven-Anuri trend was completed over the summer. The Raven - Anuri trend is believed to be a highly prospective metamorphic "pressure-shadow" located northeast of a large tonalitic intrusion.

For 2006, the company is planning more work at Three Bluffs and further evaluation of targets defined through surface sampling. Three Bluffs work will include infill and deeper drilling along the high grade trend designed to expand the gold resource and a ground geophysical program along strike of the resource area.

CHURCHILL DIAMOND PROJECT

Operator, Owners

Shear Minerals (51%);
Stornoway Diamond Corp. (35%);
BHP Billiton Diamonds Inc. (14%)

Commodities

Diamonds

Coordinates

91° 30'W, 63° 30'N

NTS

55N, O, J

Location

70 km north of Rankin Inlet

The Churchill Diamond Project is comprised of mineral rights to more than 3.64 million hectares located near the communities of Rankin Inlet and Chesterfield Inlet. It is situated within the Western Churchill Province and is underlain by rocks of the metamorphosed Archean Rankin Inlet Group and surrounding Archean gneisses. The Archean bedrock is intruded by Proterozoic diabase and biotite-lamprophyre dykes and overlain by the Paleoproterozoic Hurwitz Group. The Proterozoic Pyke Fault may be an important structure controlling gold mineralization at Meliadine and could also be a favourable structure for kimberlite emplacement. Meliadine's Aya dyke is a ca. 1792 Ma ultramafic lamprophyre. The Parker Lake UML (or Akluilak) dyke, located approximately 120 km northwest of Rankin Inlet, yielded an age of ca. 1832 Ma and may represent a feeder dyke to the Proterozoic (ca. 1850 Ma) CIF volcanic rocks. Narrow kimberlite dykes (Peter and K-L) intersected during drilling of the Meliadine gold deposit yielded ages of ca. 192 Ma (U-Pb on perovskite) and ca. 214 Ma (Rb-Sr on phlogopite).

Shear discovered 17 kimberlites in 2005 before completing its 52-hole 2005 drill program. This brings the total number of kimberlites drilled on the property to 39. In addition, two kimberlite outcrops were located in 2005 through ground work and prospecting. The 2005 drill program commenced in April and continued through to the end of September with 4,631 m of drill testing 44 spatially separate geophysical targets. Final processing of the 2004 till samples was completed in mid-2005. Indicator mineral counts from detailed till sampling continued to refine areas of interest within the larger mineral corridors: Josephine, Sedna and North. Ground prospecting was conducted within the Josephine River and Sedna kimberlite indicator mineral corridors covering an area in excess of 75 sq km. A total of 30 kimberlite boulders were recovered. These include two occurrences of kimberlite float with visible pyropes and coarse grained macrocrystic olivine textures. Macro and micro diamonds were reported from analysis of drill core and surface samples.

Drill tested kimberlites 05KD900-01 and 05KD209-01 have yielded macro diamonds from initial caustic fusion analysis. The first diamond at surface, a clear, octahedron measuring 0.44 x 0.40 x 0.36 mm was recovered in a 69.8 kg sample of pyrope garnet bearing beach sands at the Churchill Diamond Project. The pyrope bearing beach sands were discovered by detailed prospecting, and occur in a narrow higher interest area within the larger Josephine River kimberlite indicator mineral corridor.

In 2005, a total of 1,877 till samples were collected on the Churchill Property in order to infill the sampling density in



the core areas of the property and to better define the indicator mineral trains and the up ice cut off. Since 2000, more than 7,100 surface samples have been collected from the property and all have been processed with more than 55,000 microprobe analysis. This sampling continues to refine the source areas of interest for future drilling.

A recent report for the company by Mineral Services Canada Inc. (Mineral Services) used advanced indicator mineral composition techniques to filter the Churchill Diamond Project database. The results were incorporated in the selection of 2005 drill targets, and detailed sampling plans. Mineral Services reports the known kimberlites discovered in the last two years did not explain the pyropes in till samples. Based on their findings, the unexplained till garnets, which include most G10's recovered to date, are very likely derived from a colder, high interest geotherm (37mW/m²) than garnets in

the kimberlites identified on the property to-date. Mineral Services identified 16 targeted areas that host high interest garnet populations with above average counts indicating the source is likely nearby. The area in which KD900 is located lies immediately up ice of two such areas identified by Mineral Services. The study also concluded certain indicator mineral dispersions at Churchill are narrow and also of limited length (less than 3 km).

In 2005, a dense sampling grid was completed within the Sedna Corridor. Preliminary results have shown increased total counts of pyropes indicating closer proximity to source. For example, one sample (05RMT252) had anomalous pyrope counts (> 60) and is located up-ice of two 2004 anomalous samples containing 19 and 24 pyropes respectively. Increasing detail will enable the targeting of subtle geophysical targets within these areas for the 2006 drill program.

CHURCHILL WEST DIAMOND PROJECT

Operator, Owners

Shear Minerals (51%),
Stornoway Diamond Corp. (35%)
and BHP Billiton (14%)

Commodities

Diamonds

Coordinates

94° 30'W, 63° 15'N

NTS

55M, N

Location

75 km northwest of Rankin Inlet

This 208,016 hectare land package is situated immediately west of the Churchill Property. Two kimberlites were discovered in 2003 from drilling, one of which was diamondiferous.

In 2005, a 3,658 line-km high resolution airborne magnetic-electromagnetic survey was flown. The south-eastern portion of the property is an area of high interest as 98 isolated magnetic targets were identified in earlier surveys. Processing of the data is underway, and it will be used to guide 2006 exploration efforts.



FERGUSON LAKE PROJECT

Operator, Owners

Starfield Resources Inc.

Commodities

Nickel, Copper, Cobalt,
Platinum, Palladium

Coordinates

96° 51'W, 62° 52'N

NTS

65I/9-15, 65J/14 and
16, 65O/1, 65P/3 and 4

Location

160 km south of Baker Lake

Starfield acquired this property in 1999, conducted geophysical surveys, and completed 84,000 m in drill holes between 1999 and 2004. The 2005 drill program will bring the total to approximately 108,000 m. During 2005 Starfield increased the size of its Ferguson Lake mineral claim holdings by 200 per cent to 521,400 hectares. The property now extends approximately 125 km east-west and 71 km north-south at its widest section.

The Ferguson Lake deposit is a Ni-Cu-PGE deposit hosted by moderate to weakly foliated tholeiitic gabbro-hornblendite layered intrusions. The deposits are considered to be of magmatic origin, having formed as immiscible sulphide segregations during emplacement. The sills were emplaced along an east-west trending structure interpreted by Starfield personnel as a regional suture based on 3D magnetic inversion. Gabbro hosting the Cu-Ni-PGE mineralization is exposed 1.8 km along strike on the West Zone and may extend another 16.6 km west.

Starfield followed up its 2004 airborne geophysical survey with a regional 9624 line-km helicopter VTEM and high

resolution magnetic survey, flown over 60 per cent of the newly staked claims. The survey identified numerous conductive anomalies within 450 m of the surface. Ground crews prospected and sampled outcrops along nine conductive VTEM trends having strike lengths of two to eight km. Analysis of rock samples along these trends show that they are geochemically anomalous in Cu+Ag, Cu+Ni+Co, Cu+Zn+Pb+Ag, and Au+Ag. Starfield's geophysical consultant identified 250 anomalies for follow-up as potential kimberlite targets. Regional tills samples were collected on 2x2 km and 4x4 km grids across the entire property.

Delineation drilling of the West Zone and 119 Zone continued to intersect Cu-Ni-PGE mineralization and low sulphide PGE mineralization. So far, a strike length of 4.2 km (from the West Side of Ferguson Lake to the 119 Zone) along a ground geophysical conductor coincident with the mineralization has been tested. An additional 3.8 km remains untested. Drilling continued to encounter the low-sulphide PGE enriched horizons and a lower PGE-enriched sulphide lens. To date in the pit area of the West Zone, drilling along a 1 km strike length, has traced the footwall PGE mineralization, with intermittent low-sulphide bonanza grades of two PGE's and/or lower footwall sulphide lens mineralization.

Starfield uses both borehole and ground SQUID geophysics to guide its drilling in the West Zone and Pit Area. For 2006 Starfield plans to continue its exploration and development plan, including continuing environmental and site development studies, metallurgical testing and resource evaluation.

KEEWATIN PROJECT

Operator, Owners

BHP Billiton;
Tri-Origin Exploration

Commodities

Copper, Gold, Silver, Lead, Zinc

Coordinates

97° 15'W, 60° 20'N

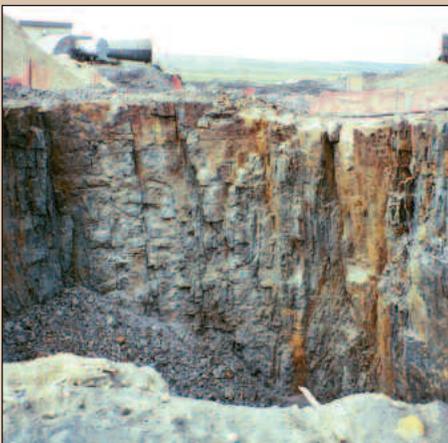
NTS

65A/5, A/6, A/11, A/12

Location

Approximately 150 km Southwest of Arviat

Tri-Origin formed an option agreement with BHP Billiton in September 2004 to explore the latter's properties in the Kivalliq region for gold and Sedex-type base metal deposits. The Keewatin Project lies in a sedimentary basin of Proterozoic age, surrounded by Archean rocks. The basin consists of siliciclastic rocks of the Upper and Lower Hurwitz Group, with iron formation rimming much of the basin. Reconnaissance field work by Tri-Origin in 2003 yielded several anomalous Au values (up to 18.7 g/t Au). In 2005 the Company conducted a 138 line-km AeroTEM survey at 200 m line spacing. EM conductors were delineated, coincident with magnetic responses. Drilling is planned for 2006.



KMD PROJECT

Operator, Owners

Ripple Lake Diamonds Inc.

Commodities

Diamonds

Coordinates

99° 45'W, 65°N

NTS

55M/9, M/16, 55N/12, N/13

Location

130km northwest of Rankin Inlet

The Property is located within the northern Hearne domain of the Western Churchill Province. It consists of Archean rocks of the Hearne Craton and overlying supracrustal rocks are intensely reworked during the 1.8 - 1.9 Ga Trans Hudson Orogen. The Thirst Lake minette dyke occurs near the southeast portion of the property. It was discovered in 1994, and sampling showed it to be diamondiferous, although few macrodiamonds have been reported.

In 2004, the company collected 344 sediment sample concentrates. A pyrope aureole was identified, with two elongated trends and one discontinuous trend. Three sets of G9 pyropes were analysed for trace elements. Based on nickel in garnet thermometry, a small portion of the garnets fall in the diamonds stability field. Additional ground was acquired based on the 2004 findings.

A 3,166 line-km airborne EM/Mag and resistivity survey was flown in 2005. Numerous airborne anomalies were detected and detailed analysis and interpretation is underway.

The company collected a variety of sediment sample types in 2005: 714 tills, 21 lake sediments, and 15 glaciofluvial. The samples are being processed and indicator mineral results are pending.

MATRIX PROJECT

Operator, Owners

Pacific Ridge Exploration Ltd.,
Hunter Exploration Group
and Newmont Canada Ltd.

Commodities

Gold

Coordinates

98° 00'W, 61° 37'N

NTS

65H/12 and 65G/09

Location

175 km west of Arviat

In May 2004, Pacific Ridge and Hunter entered into an option agreement with Newmont whereby Newmont can earn a 60 per cent interest in the Matrix Property, located west of South Henik Lake in southern Nunavut. Gold mineralization is hosted by basal quartz pyrite pebble conglomerate of the Paleoproterozoic Hurwitz Group. Initial work by Hunter identified three gold-bearing pyritic conglomerate zones with grab samples assaying up to 16 g/t Au. Strati-form horizons with up to 20 per cent pyritic pebbles have been identified along a 3 km trend of Hurwitz Group quartz pebble conglomerates. The Hurwitz Group may be analogous to the African Witwatersrand Group sedimentary rocks, known to host approximately 1 billion ounces of gold.

Exploration activities conducted on the Matrix Property in 2005 include airborne geophysical programs of magnetics, radiometrics, and NewTEM, followed by mapping, prospecting and drilling. Drill results are pending. Newmont staked 38 mineral claims in late 2005, adding 46,288 hectares to the project.

MEADOWBANK PROJECT

Operator, Owners

Cumberland Resources

Commodities

Gold

Coordinates

96° 00'W, 65° 04'N

NTS

66H/1, 56E/4

Location

75 km north of Baker Lake



The Meadowbank gold deposits occur within the Archean Woodburn Lake greenstone belt, approximately 75 km north of Baker Lake, and represent the third largest undeveloped gold resource in Canada. The stratigraphy consists of quartzite overlying komatiite, which in turn overlies intercalated felsic to intermediate volcanic rocks and iron formation. Regionally, four phases of deformation are recognized. The stratigraphy is folded into a northwest-trending, isoclinal, recumbent anticline sandwiched between two large granitoid intrusions.

Mineralization is hosted by interbedded iron formation and felsic to intermediate

tuff, with subordinate orthoquartzite and ultramafic schist. Sulphides (pyrrhotite and pyrite) and gold occur within a structural fabric associated with early progressive isoclinal folding. Alteration includes sericitization, sulphidation, silicification and carbonatization.

Cumberland Resources continues to advance its Meadowbank projects towards open pit production. Six near-surface gold deposits have been identified in the project area: Goose Island, Third Portage and North Portage, Vault, Bay Zone, and PDF. The Connector Zone links the Third and North Portage deposits (three zones collectively termed “Portage Zone”). In early 2005 updated resource figures were released as part of a feasibility study. Based on open-pit mining methods, measured and indicated gold resources stood at 23.3 million tonnes at 4.4 g/t Au, for 3.3 million contained ounces from the Portage, Goose Island and Vault zones.

The 2005 exploration program consists of a two-phased program, including a planned 9,000 metre diamond drilling program, and grassroots exploration along the 25 kilometre Meadowbank gold trend.

The company completed geotechnical studies, infill drilling to increase gold

reserves and resources about the Goose Island and Portage proposed pit areas, some grassroots exploration, and continued its environmental baseline studies and impact assessments.

Drilling on the northern and southern flanks of the Goose Island deposit returned mineralized intersections which are expected to increase the quality and size of the Goose Island reserves and resources. Mineralized intercepts on the southern flank occur over better than expected widths (3.2 g/t Au up to 10.97 g/t Au over 2.48 to 9.13 m). Six of 11 holes drilled on the northern flank are expected to extend the deposit 50 m to the north. Two other holes returned grades of 10.09 g/t Au and 14.90 g/t Au at depths of 22 m and 19 m below the surface.

Summer drilling discovered a new near-surface zone - Cannu Gold Zone, 350 m north of the company's planned Portage Pit. Assay highlights include: 21.36 g/t Au over 1.75 m at 72 m below surface; 9.49 g/t Au over 3.12 m at 100 m below surface; and 7.06 g/t Au over 7.44 m at 28 m below surface. The new zone is along trend of the Portage and Goose Island reserves. It may contribute to increasing the resource and reserves of the project.



MELIADINE WEST PROPERTY

Operator, Owners

Comaplex Minerals (78%),
Cumberland Resources (22%)

Commodities

Gold

Coordinates

92° 11'W, 63° 01'N

NTS

55J/13, 55K/16, 55N/1

Location

30 km north of Rankin Inlet

The Meliadine West deposits are hosted within the Archean Rankin Inlet Group, in the hanging wall of the Pyke Break Deformation Zone. Stratigraphy in the area strikes east-southeast and is overturned with south-facing tops. From north to south (oldest to youngest), the stratigraphy includes the Sam Formation (metaturbidites), Upper Oxide Formation, and Tiriganiaq Formation wackes and siltstones. These structurally overlie, but stratigraphically underlie, Wolf-Wesmeg Formation mafic and ultramafic rocks with the inter-layered Lean and Lower Lean Iron Formations, and the Falcon Formation variolitic flows. South of the Pyke Break, Sandhill Formation siltstones and wackes, and Sic Sic Formation polymictic conglomerate are the dominant rock types.

The largest mineral resource on the Meliadine West property is the Tiriganiaq Zone. Gold mineralization in the zone is found in quartz-vein stock works, laminated veins and sulphidized iron formation in complexly folded and sheared iron formation, sedimentary and volcanic rocks. Gold is associated with quartz-ankerite veins, variable pyrrhotite, coarse-grained, euhedral arsenopyrite,

and sericite alteration.

Early in 2005, Comaplex released a new resource figure based on an underground, narrow, high grade mining scenario for the Tiriganiaq Zone, capped high gold assays at 60 g/t, and increased the cut-off grades for load definition. Tiriganiaq Main contains an indicated resource of 2,467,000 tonnes at 10.8 g/t Au (contained ounces 853,000) and inferred resource of 417,000 tonnes at 12.7g/t Au. The West zone contains an inferred resource of 725,000 tonnes at 13.43 g/t Au. Total contained gold in all categories is 1,335,000 ounces.

In December 2004, Gold Fields Ltd. announced the purchase of 11.4 per cent interest in Comaplex in an open market transaction. The companies entered into a further private placement agreement in March 2005, whereby Orogen Holdings Limited, an indirect wholly owned subsidiary of Gold Fields Limited, purchased 2,428,571 shares at a price of \$3.50 for aggregate gross proceeds to Comaplex of \$8.5 million. On closing of this transaction, Orogen (Gold Fields Ltd.) increased its ownership to 7,628,571 shares of Comaplex, representing 19.8 per cent of issued and outstanding shares in the company. The companies also entered into a technical assistance programme whereby Gold Fields will second geological staff and provide engineering consultation on the Meliadine West Project.

The 2005 drill program finished in September. A total of 15,851 m in 48 drill holes was completed. Of that, 18 holes totalling 11,333 m (72 per cent) were completed on Western Deeps portion of Tiriganiaq deposit, three holes totalling 1122 m (7 per cent) on the main

deposit and the remaining 20 per cent on reconnaissance regional targets: 2083 m (13 per cent) on shallow targets within 3 km of the deposit, and 946 m (6 per cent) on two widely spaced assessment targets.

Drill testing of mineralization in the Western Deeps intersected the gold bearing structure at 575 m vertically below surface, assaying 13.4 g/t Au over 3.3 m. The tenure of gold values from intersections in the 1000 zone of Western Deeps is greater than previously reported drill holes. The best value reported to date is 16.0 g/t Au over 6.2 m (11.7 g/t over 6.2 m if cut to 60 gmt Au).

Ten geotechnical holes were completed to the north of the Tiriganiaq deposit. These holes are designed to test the overburden characteristics at three potential portal locations, one of which will provide future underground ramp or shaft access. Condemnation drilling was also completed in areas of possible infrastructure placement.

Surface sampling and prospecting continued along the 70 km Meliadine West property. Approximately 155 line-km of magnetics have been completed on two zones of the far eastern portion of the property (CWM claims). A surface gold occurrence was discovered - the Akpik (Cloudberry) Zone. It has been covered by 39 line-km of magnetics on 12.5 and 25 m line spacings. The Aklak Targets, 5 km southeast of the Akpik Zone, was also covered by ground magnetic surveys (116 line-km) and detailed surface sampling. Plans are to mobilize a drill to this area for spring 2006 drilling.

MELIADINE EAST PROPERTY

Operator, Owners

Cumberland Resources
and Comaplex Minerals

Commodities

Gold

Coordinates

91° 00' W, 65° 30' N

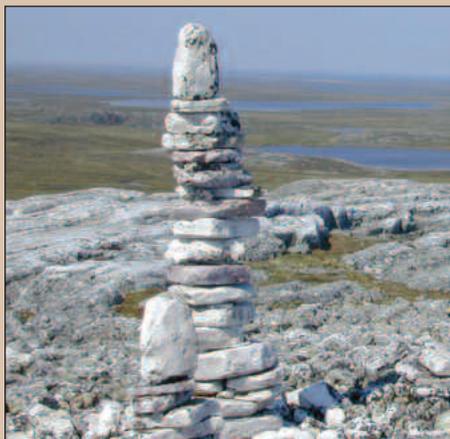
NTS

56 G

Location

30km northeast of Rankin Inlet

The Meliadine East property is the eastern extension of the Meliadine West property. The target of exploration is an economic mesothermal lode gold deposit. H. A. Simons Ltd. completed an independent preliminary engineering study of the Discovery prospect on the Meliadine East property in 1996 and estimated an inferred resource of 1,386,300 tonnes at 6.8 g/t Au (approximately 300,000 ounces) for the deposit. The Discovery gold mineralization is hosted by oxide iron formation and is associated with abundant quartz-carbonate veining and elevated sulphide contents (arsenopyrite, pyrite and pyrrhotite). Cumberland completed a mapping and prospecting program on the property in 2005.



NANUQ PROJECT

Operator, Owners

Peregrine Diamonds Ltd.

Commodities

Diamonds

Coordinates

91° 00' W, 65° 30' N

NTS

56 G

Location

250 km northeast of Baker Lake

The property is underlain predominantly by undifferentiated granitic and gneissic rocks of Archean age and minor granulite-facies likely of Paleoproterozoic age. A greenstone belt, possibly correlative with Archean Prince Albert and Woodburn Lake groups, occurs in the central part of the property and can be traced on aeromagnetic maps over 70 km.

Paleoproterozoic (ca. 1.8 Ga) calc-alkaline plutonic rocks of the Ford Lake batholith occur in the northernmost part of the property. The near-vertical Wager Bay shear zone cuts the northern part of the property in an east-west direction and displays dextral shear sense indicators.

In 2003, Dunsmuir flew a 12,000 line-km high resolution airborne magnetometer survey at 150 m line-spacing and collected 472 till samples to compliment previously acquired till sample results. KIM's recovered from the property include G9 and G10 pyrope garnets, diamond inclusion field eclogitic garnets, diamond inclusion field and kimberlitic chromites, chrome diopside and olivine. Following up on its 2004 FALCON TM airborne gravity gradiometer and magnetic survey and till sampling, the company collected an

additional 199 till samples and carried out prospecting and staking of select areas within the original permit grouping in 2005. As of January 2006 the project area covers about 146,600 hectares. BHP Billiton maintains a back-in option on the property.

NANUQ NORTH PROPERTY

Operator, Owners

Peregrine Diamonds Ltd,
and Indicator Minerals

Commodities

Diamonds

Coordinates

91° 00' W, 65° 30' N

NTS

56 H/2, 3, 6, 7

Location

300 km northeast of Baker Lake

The Nanuq North Property is comprised of more than 32,780 hectares of mineral claims located adjacent to the northern boundary of the Nanuq Project. The claims were staked to capture the potential source(s) of one of two kimberlite indicator mineral trains with diamond inclusion chemistry identified by Dunsmuir between 2001 and 2004. Several samples yielded pyrope garnets with kelyphite rims and one sample yielded a pyrope garnet with a kimberlite mantle, indicating a close proximity to source. The project was not active in 2005 pending resolution on land tenure issues.



TASIQ PROJECT

Operator, Owners

Diamonds North Resources Ltd.

Commodities

Uranium

Coordinates

99° 45'W, 65°N

NTS

66B, 66G, and 66H

Location

150km northwest of Baker Lake

After the assignment of permits in February 2004, Diamonds North recognized the open ground was a function of permit regulations. Till sampling conducted in 2004 yielded kimberlite indicator minerals, including pyrope garnet, chrome diopside and an ilmentite with possible kimberlite attached. Diamonds North then staked the 181,710 hectare block in 2004. Follow-up work in 2005 included 95 till samples. Processing of these samples is underway.

THELON PROJECT

Operator, Owners

Titan Uranium Exploration Inc.

Commodities

Uranium

Coordinates

99° 45'W, 65°N

NTS

66B, 66G, and 66H

Location

150km northwest of Baker Lake

The project area covers seven uranium prospects north of Aberdeen Lake totalling about 68,800 hectares. The potential exists for high grade uranium mineralization similar to the “unconformity type” deposits being mined in the Athabasca area of Saskatchewan and the Kombolgiie area of Australia. Titan’s 2005 field program had three objectives. The first was to establish the level of community support for uranium exploration and developments in Baker Lake.

The second was to ground truth the project’s historic database by examining known showings and boulder trains. And third, locate historic rock cairns identifying proposed drill hole locations and re-establish using GPS.

Prospecting and sampling on the Company’s Wolverine Permit in 2005 resulted in the locating of additional mineralized boulders which refined the limits of two near-source boulder trains. Drill targets are located at the head of uranium boulder trains defined by numerous mineralized boulders ranging up to several per cent uranium. Previous work has identified uranium mineralization in boulders of glacial till with grades ranging from .05% to 2.7% (U_3O_8). Unconformity vein-type mineralization has been located in pebbles and boulders. Analysis of samples from two target areas returned uranium concentrations greater than 30%. Pebbles of unconformity-vein type mineralization at SN-176 assayed 380,000 ppm uranium. Prospecting around Area 4 identified more than 2800 mineralized phosphatic sandstone and breccia boulders.

Past work includes regional geological mapping, prospecting, 13,612 line-km of airborne radiometric, magnetic and electromagnetic surveying, and detailed lake-bottom geochemical sampling. Detailed surveys undertaken to date include ground geophysical, geochemical and scintillometer prospecting. Pending regulatory approval, the company has plans for a drilling program on its seven target areas in 2006.



Qikiqtani/Baffin Region

In the Qikiqtani/Baffin Region, exploration has been increasing significantly each year since 2001. The main focus of exploration in this region is diamonds. The north-western half of Baffin Island and the Melville Peninsula have been the main focus of diamond exploration in the Qikiqtani Region, although De Beers Canada Inc. and Stornoway Diamond Corporation are pursuing diamond exploration in the High Arctic.

Having optioned the OZ property on the Brodeur Peninsula from Kennecott Canada Exploration Inc., Diamondex Resources Ltd. is proceeding ahead with exploration on the property. De Beers

Canada Inc. has by far the largest land position on Baffin Island for diamond exploration and has discovered a series of sheet-like kimberlite bodies on the Baffin property. De Beers also has prospecting permits covering most of Devon Island and is planning an exploration program for 2006. In 2004, Patrician Diamond Corp. discovered diamond-bearing kimberlite bodies on the Borden Peninsula south of Arctic Bay. On the Melville Peninsula, Stornoway Diamond Corporation has discovered a total of nine diamondiferous kimberlite bodies within the Tremblay Corridor and has the largest land holdings on the

Melville Peninsula. By 2004 BHP Billiton had discovered nine kimberlites on the Qilalugaq property near Repulse Bay. BHP Billiton has picked up prospecting permits covering the islands just south of central Baffin Island in the Foxe Basin. Strongbow Exploration has found a total of 10 kimberlite bodies on Wales Island in Committee Bay.

There is a diversity of commodities, other than diamonds, being sought in the Qikiqtani region. True North Gems has optioned the only known sapphire occurrence in Nunavut and is testing the economic viability with a mini bulk sample. The company is also looking for more occurrences of sapphire and other precious gemstones in the Lake Harbour Group of sediments. Commander Resources has had encouraging results in its quest for gold on the southern margin of the Piling Group of sediments on central Baffin Island and Intrepid Minerals will be searching for "Broken Hill" type silver deposits on southern Baffin Island. The increased value of iron ore has enticed Baffinland Iron Mines Corporation to revive their Mary River Iron project. The company hopes to be able to double the tonnage of the deposit through diamond drilling and to bring the deposit to the feasibility stage in three years. In the High Arctic, on Axel Heiberg Island, James Bay Energy Corp. has coal licences and did preliminary surface sampling last year. Southern Baffin Island near Kimmirut and Cape Dorset has also seen some preliminary prospecting and sampling for building stone by the Torngait Ujaganniavingit Corporation of Labrador. The company is examining the marbles of the Lake Harbour Group.



ALEXIS PROPERTY

Operator, Owners

BHP Billiton;
Stornoway Diamond Corp

Commodities

Diamonds

Coordinates

86° W 67° N

NTS

46K, 46L, 46M and 46N

Location

Between Repulse Bay and
Committee Bay at the base
of the Melville Peninsula

The Alexis property consists of 1.25 million hectares of mineral claims. These claims were staked in the fall of 2004 surrounding and adjacent to BHP Billiton's Qilalugaq property. BHP Billiton and Stornoway Diamond Corp. hold a 50:50 interest in the property. Approximately 600 till samples were collected during the 2004 field season. BHP Billiton completed field work in 2005. No details are available at this time.



AVIAT PROJECT

Operator, Owners

Stornoway Diamond Corp,
BHP Billiton,
Hunter Exploration Group

Commodities

Diamonds

Coordinates

69° 30'N 83° 20'W

NTS

47D/04, 05, 06 and 47C/08, 01

Location

Melville Peninsula
Aviat North 30 km west of Igloolik

The Aviat Project, located on the Melville Peninsula, consists of 1.82 million hectares of prospecting permits and mineral claims. Stornoway Diamond Corporation is the operator and carries a 70 per cent interest in the project. The first kimberlite, Aviat 1 (AV1), was discovered by Hunter Exploration Group in 2001 and optioned to Northern Empire Minerals and Stornoway Ventures Ltd. The latter two companies combined in July 2003 to form Stornoway Diamond Corporation. In the same month, BHP Billiton bought a 20 interest share in the Aviat Project

from the Hunter Group. The Hunter Group carries a 10 per cent interest in the property.

The Aviat 2 (AV2) kimberlite was discovered in the summer of 2003, followed by the discover of Aviat 3, 4, and 5 (AV3, 4 and 5) in 2004. The company discovered three new kimberlite outcrops (AV6, AV7 and AV8) from prospecting. The occurrences are all hypabyssal kimberlite visually similar to kimberlites AV1 to AV5, inclusive, all of which proved significantly diamondiferous from initial test work. The three new discoveries are located in close proximity to the other known kimberlites, within approximately 6 km of AV1. AV1 has undergone the most advanced assessment from drilling to date and has returned a sample grade of 0.83 carats per tonne from the processing of approximately 10.4 tonnes of kimberlite (all sieved stones >0.85 mm).

Approximately two tonnes of surface material was collected from AV6, 7 and 8 for diamond analysis, with final results expected by year-end. Similar sized (several tonnes) samples of kimberlite collected at surface from each of AV2, AV3, AV4

and AV5 will also be processed by dense media separation in 2006.

A total of 29 drill holes (approximately 2880 m) were completed during the summer program. Three geophysical targets were drill tested without intersecting kimberlite. One hole was drilled at AV1 and extended the known kimberlite body 170 m to the west of previously reported intersections. The remaining holes focused in the vicinity of the AV2 through AV6 and AV8 occurrences. Multiple kimberlite intersections ranging from 0.1 m to 23.6 m were encountered at those occurrences. Drilling suggests the bodies are sheet-like in nature, although actual dimensions and orientations have not yet been determined. Kimberlite AV7 could not be drilled during the summer drill program due to its proximity to a lake. Results from caustic analysis of drill core samples collected from the Aviat Project in 2005 are anticipated in early 2006.

Prospecting to follow-up anomalous indicator mineral results derived from the 2004 till sampling program has discovered almost 350 locations with kimberlite boulders, not counting the new kimberlite outcrops mentioned above. Although no mineralogical or geochemical studies have been made of these new boulder showings, based on the distribution and field descriptions, spatially related boulders are thought to represent a minimum of five trains coming from discrete source bodies that have not yet been identified. The significance of numerous, more isolated, boulder occurrences is not known at this time. Detailed till sampling was completed in 19 priority areas outside of the known boulder trains, where anomalous till samples with high diamond potential pyrope garnets were recovered in 2004.

BAFFIN ISLAND PROJECT

Operator, Owners

Intrepid Minerals Corp./BHP Billiton

Commodities

Silver, Lead, Zinc

Coordinates

70°W 67°30'N

NTS

26M and 26N

Location

340 km northwest of Iqaluit

In June 2004, Intrepid Minerals and BHP Billiton signed a joint venture agreement to explore BHP Billiton's property on Southern Baffin Island for "Broken Hill" type Ag-Pb-Zn deposits. Intrepid Minerals will earn a 30 per cent interest in the property after spending \$500,000 and,

if successful, the company can spend another \$500,000 to increase its share in the property to 50 per cent. During the 2004 field season Intrepid Minerals conducted a reconnaissance program that included prospecting and sampling and collected 15 samples.

In 2005, the company continued its reconnaissance exploration and the program took place east of the area explored in 2004. The field program took place over a two week period in August and the exploration team worked out of the Commander Resources camp at Dewars Lake. Thirty rock samples and 12 heavy mineral concentrates were collected and reconnaissance mapping of the area was performed.



BAFFIN ISLAND PROPERTY

Operator, Owners

De Beers Canada Inc.

Commodities

Diamonds

Coordinates

80°W 70°30'N

NTS

47E, 47/H, 37C, 37H, 37F, 37G

Location

150 km north of Igloolik

De Beers Canada Inc. has been exploring for diamonds on Baffin Island since 2001 and has performed extensive till and stream sampling, ground and airborne geophysics, reverse circulation drilling and diamond drilling. In 2004 De Beers followed a kimberlite indicator mineral train and found a kimberlite float train. De Beers has significantly increased its land holding on Baffin Island and Devon Island and exploration on Devon Island will begin in 2006.

Work on Baffin Island during the 2005 field season included: glacial striation mapping and kimberlite float prospecting; 1454 m of drilling; 6547 line km of AeroTEM survey and 23 line-km of ground gravity surveys over two grids. The kimberlite float prospecting produced 604 individual pieces of float which suggest multiple high interest kimberlite sources may be present on the property. The drilling intersected several sheet-like kimberlite bodies at the head of the kimberlite float train. No results on the diamond content of the kimberlites were available at the time of writing.

BAUMANN PROJECT

Operator, Owners

Stornoway Diamond Corp.
Indicator Minerals Inc.

Commodities

Diamonds

Coordinates

85°00' W 78°00' N

NTS

49C, D, E, F

Location

200 km north of Grise Fiord

The Baumann Project is composed of 87 prospecting permits on Ellesmere Island. The property was optioned to Stornoway Diamond Corp. in March of 2005. Stornoway can earn a 41 per cent interest in the property by spending \$1 million before 2009 and incurring 100 per cent of the cost of staking mineral claims. In the 2005 field season 123 heavy mineral samples were collected on the property. No results were available at the time of writing.



BELUGA SAPPHIRE PROJECT

Operator, Owners

True North Gems Inc.
Seemeega Aqpik
Nowdluk Aqpik
Chris Lloyd

Commodities

Sapphires/Fancy Sapphires

Coordinates

69°53' W 62°49' N

NTS

25k/13

Location

3.5 km southwest of Kimmirut

The sapphires discovered near the Hamlet of Kimmirut on Southern Baffin Island are hosted in a desilicified syenitic pegmatite lens in the marbles of the Lake Harbour Group of sediments. The sapphires were discovered by Nowdluk Akpiq in 2001 while out hunting. The claims were staked in 2002/2003 by Nowdluk and his brother Seemeega. In November 2003, True North Gems optioned the Beluga Sapphire occurrence from the brothers. At that time there were two known occurrences of sapphires, with the Beluga occurrence being the main showing and the Narwhal being the second occurrence.



In 2004, True North Gems recovered a 4.29 t bulk sample from the Beluga deposit. Regional till sampling and prospecting programs were also conducted and the company discovered 4 additional sapphire occurrences. The results of the bulk sample were very encouraging with the recovery of rough sapphire from the 2004 bulk sample being 790.7 grams/t. The grade of gem quality and near-gem quality sapphires was 33.1 grams/t and 115.0 grams/t respectively. An independent evaluation of a portion of the sapphires that were processed showed an average price of US\$570.85/t. The deposit has produced natural blue, yellow and colourless sapphires to date.

In 2005, True North continued with exploration on the Beluga sapphire occurrence. Work included extraction of approximately 110 t of sapphire bearing material from the Beluga occurrence, detailed mapping and prospecting of the claims. No results from the bulk sample were available at the time of writing. In November True North Gems announced the discovery of a new sapphire occurrence, the Aqpiq Occurrence. The sapphire is colourless, with the largest piece recovered being 49 carats. True North Gems believes the Aqpiq Occurrence is a new style of sapphire mineralization within the same unit that hosts the other sapphire occurrences.

BORDEN PROJECT

Operator, Owners
Indicator Minerals Inc.

Commodities
Diamonds

Coordinates
83°W 72°30'N

NTS
47H, 48A

Location
110 km south east of Arctic Bay

The Borden Project is located on the Borden Peninsula and is comprised of 12 prospecting permits. This project is part of an option agreement between Committee Bay Resources and Indicator Minerals Inc.

In 2004, heavy mineral samples yielded kimberlite indicator minerals in one area of the property. In 2005, 30 heavy mineral specimens were collected to identify the source of the indicator minerals. No results were available at the time of writing.

BORDEN PROJECT, BORDEN PENINSULA BAFFIN ISLAND

Operator, Owners
Patrician Diamonds Inc.

Commodities
Diamonds

Coordinates
80° W 70°30' N

NTS
48B/8

Location
90 km south east of Arctic Bay

In 2003, Patrician Diamonds Inc. staked a package of claims (35,416 hectares) 90 km south of Arctic Bay on the Borden Peninsula. Kimberlite bodies were discovered on the property during staking in the spring of 2003. During preliminary field work in the summer of 2004 angular kimberlite float was found in three separate locations and caustic fusion recovered five diamonds from 162 kg of kimberlitic material, the largest diamond being 0.31 carats.





During June of 2005, Patrician Diamonds Inc. contracted McPhar Geosurveys Ltd. to carry out a high resolution airborne magnetic survey over its Borden Peninsula property. Approximately 3,700 line km were flown in August 2005. Preliminary results were received in September. The data showed a number of magnetic features of high priority interest that occur in proximity to strongly anomalous kimberlite indicator mineral concentrations in stream sediments. Because of the lateness of the season, no follow up of the airborne results was done. These targets will be a priority for evaluation during the 2006 field season.

In 2005, Patrician Diamonds was granted 12 prospecting permits on Cape Dorset and plans to collect till samples to “follow up reports of high concentrations of indicator garnets.”



FURY, SARCPA, GEM AND KINGORA PROPERTIES

Operator, Owners
Strongbow Exploration Ltd.
NDT Ventures Ltd.
Stornoway Diamond Corp.
BHP Billiton

Commodities
Diamonds

Coordinates
69°30' W 66°30' N

NTS
47/A, 47B, 47D, 47E, and 47O

Location
Melville Peninsula and Baffin Island

In May 2004, Navigator Exploration Corp. and Strongbow Resources Inc. combined to form Strongbow Exploration Inc. Strongbow Exploration along with NDT Ventures Ltd can each earn a 30 per cent interest in these four properties from Stornoway Diamond Corp. and BHP Billiton.

Strongbow Resources and NDT Ventures hold the four properties on the Melville Peninsula and just north of the Melville Peninsula on the coast of Baffin Island. The company collected

140 heavy mineral samples in 2004 to follow up anomalous sample results on the Gem and Fury properties and ground prospecting to examine high priority ground geophysical anomalies defined during 2003 field work. However, no further work is currently planned for the Fury, Gem and Sarcpa properties, although the Sarcpa property will be retained due to its strategic position on the Melville Peninsula. The company planned to follow up several till geochemical samples which returned anomalous nickel and copper values in the Kingora property in 2005.



JACKSON INLET EAST AND WEST

Operator, Owners

Twin Mining Corporation and
Stornoway Diamond Corp.

Commodities

Diamonds

Coordinates

88° 16'W 73° 15'N

NTS

58D/1,8

Location

120 km west of Nanisivik

Diamond exploration on northern Baffin Island dates back to the early seventies, when Diapros and Cominco uncovered kimberlites on both the Brodeur Peninsula and to the west on Somerset Island. A second phase of exploration began shortly after the diamond rush arose in the NT, with Lumina Investment and Cyclone Capital conducting work in the region. Twin Mining Corporation acquired the property from privately-held Helix Resources in June 2000.

Since acquiring the property in 2000, Twin Mining has added substantially to its land holdings on the Brodeur Peninsula and has at least four kimberlite bodies, including the Freightrain and Cargo 1.

In February 2004, Twin Mining announced that they had discovered 12 new clusters of kimberlite indicator minerals (KIM) from their work in 2003. Seven of the 12 clusters of KIMs are located on the eastern half of Twin Mining's new claim block and several of the clusters correspond with airborne magnetic anomalies and intersecting structures. The remaining five KIM clusters are within three to six kilometres of the Freightrain and Cargo 1 pipes.

However, the company surmises because of the high number of KIM within the five clusters that there may be other kimberlite bodies hidden under shallow overburden.

During the summer of 2004, Twin Mining outlined 42 anomalies through airborne geophysical surveys on the Jackson Inlet East property. Eighteen of the anomalies were considered significant and crossed up to five flight lines (250 m). On the Jackson Inlet West property, seven anomalies crossing five flight lines were outlined in the same survey.

The exploration program in 2005 consisted of 14,754 line-km of airborne gradiometer survey, minor till sampling and reverse circulation drilling. The drilling program was designed to investigate the presence and quality of kimberlites on the Jackson Inlet property. Drilling tested the Freightrain kimberlite with three holes, the Cargo 1 kimberlite with seven holes and 14 aeromagnetic anomalies with 20 holes. At the time of writing no results were available.



MARY RIVER IRON ORE DEPOSITS

Operator, Owners

Baffinland Iron Mines Corp.

Commodities

Iron

Coordinates

79° W 71°18' N

NTS

37G/05

Location

160 km south of Pond Inlet

The iron deposits at Mary River on north central Baffin Island were first discovered by Murry Watts and Ron Sheardown in 1962. Between 1963 and 1965 exploration work took place on the claims and five high-grade iron deposits were identified. Most of the exploration work was performed on the No.1 Deposit. This work included 3,319 m of core drilling, tracing of the iron formations through airborne and ground geophysics, geological mapping and trench sampling of each of the identified deposits. A bulk sample was also taken for metallurgical testing.

Three gravel airstrips were also constructed and a haul road was established between Mary River and Milne Inlet, as well as topographic and hydrographic surveys conducted by the Government of Canada of Milne Inlet. A full feasibility study was performed to access the viability of the deposit and the deposit was determined at that time to be uneconomic. The property remained dormant until 2004 when Glimmer Resources and Baffinland Iron Mines Ltd combined to form Baffinland Iron Mines Corporation.

The drilling of Deposit No. 1 in 2005 was designed to in-fill drilling conducted in 2004 within approximately one km



of the axis of the fold between the south and north limbs of the deposit, as well as to step out at depth in certain areas. The widely spaced 2004 program had been successful in more than doubling the drill-indicated strike length delineated in the 1960s to about 2.5 km, more than doubling the depth of Deposit No. 1 and adding substantially to the thickness of the deposit with the discovery of an Upper Zone. The 2005 program extended the depth of Deposit No. 1 to more than 450 m measured from the top of the ridge line on the north limb. The objective of the 2005 program was to build on the success of the 2004 program and develop a new resource calculation that would incorporate all of the drilling information. The ultimate goal of the program is to test the feasibility of a 10 million tonne per year operation at Mary River for at least 25 years.

NANISIVIK MINE

Operator, Owners
Canzinc Ltd

Commodities
Zinc, silver

Coordinates
84° 25'W, 73° 03'N

NTS
48C/01

Location
Borden Peninsula, Baffin Island

The Nanisivik Mine went into production in 1977. In the last year of production (2002) the Nanisivik Mine produced 516,544 tonnes of ore at a grade of 10.0% Zn and 42 g/t Ag. Production came to a halt due to low metal prices at the end of September. In June 2004 the Nunavut Water Board (NWB) gave its approval to proceed with a closure and reclamation plan. The closure and reclamation activities at Nanisivik were initially anticipated to be finished in

2005 however, due to delays the work will now be completed in 2006. Work includes removal of the remaining infrastructure, limited maintenance of cover material, finalization of the placement of some cover material, removal of contaminated soils from certain targeted areas and the commencement of post closure monitoring. Beginning in 2007 and for a minimum of five years, geotechnical and environmental monitoring of the site will be conducted to ensure the integrity of the reclamation work.

In June 2003, Canzinc entered into an agreement with Wolfden Resources for the purchase of the Nanisivik industrial complex, including milling equipment and related infrastructure, four diesel electric generators, the ship loading facility and the concentrate storage building. In return, Wolfden agreed to reclaim the industrial complex site to the regulators' satisfaction.

OZ SERIES CLAIMS AND PROSPECTING PERMITS

Operator, Owners

Diamondex Resources Ltd.
Kennecott Canada Exploration Ltd.

Commodities

Diamonds

Coordinates

87° 00'W 73° 08'N

NTS

48C/4,5,6,11, 58D/8,
48G/11,12,13,14, 48H/8,9
48 B/2,3,4

Location

110 km west of Nanisivik

In May 2005, Diamondex announced it had signed a letter of intent to acquire a 100 per cent interest in Kennecott's Oz claims and prospecting permits on the Brodeur Peninsula of Baffin Island. Kennecott discovered three diamondiferous kimberlite bodies on the property: the Tuwawi, Nanuk, and Kuuraq.

The Tuwawi kimberlite is the largest of the three (250 m x 150 m). It was drilled and produced 1520 kg of drill core as a mini bulk sample. Three hundred and nineteen diamonds were recovered from this sample and showed a coarse diamond distribution similar to Twin Mining's Freightrain kimberlite. Little information has been released about the two other kimberlites.

This season Diamondex flew 21,225 line-km of fixed wing magnetic surveys and 2,800 line-km of Fugro Resolve airborne surveys over previously identified airborne magnetic targets. Diamondex also collected 661 till and stream samples and recovered several kimberlite float boulders up to 30 cm in diameter. The boulders were found down-ice from several airborne geophysical targets. Diamondex



has allocated \$800,000 to drill these newly defined geophysical targets. To date Kennecott and Diamondex have spent \$9.5 million on the Brodeur project area.

QILALUGAQ PROJECT

Operator, Owners

BHP Billiton

Commodities

Diamonds

Coordinates

87° W 67° N

NTS

46K, L, M, N

Location

10 km from Repulse Bay

BHP Billiton's Qilalugaq project consists of 405 mineral claims on the southwest end of the Melville Peninsula. The property lies between Repulse Bay in the south and Committee Bay to the northwest. Work on the property started in the area in 2000. In 2004 a 45 person camp was established approximately eight km

from the Hamlet of Repulse Bay.

To date, a cluster of nine kimberlite bodies have been reported on the Qilalugaq property. One of the kimberlite bodies (Qilalugaq) warranted a mini bulk sample. 9.37 tonnes of material was sampled and produced a grade of 0.25 carats/t. This grade was sufficient to warrant a larger bulk sample. The next bulk sample was extracted using a helicopter portable reverse circulation drill. This drill makes a hole 8.5 inches in diameter and can extract approximately 10 tonnes of material with a drillhole 100 m long. A 237 tonne bulk sample was collected. At the time of writing results were still pending. The Qilalugaq kimberlite may be a composite body composed of up to four separate intrusions.

In May 2005, BHP Billiton completed a 10 hole drill program. No results were available at the time of writing.



QIMIQ PROJECT

Operator, Owners

Commander Resources Inc.
BHP Billiton
Falconbridge Ltd.
Nunavut Tunngavik Inc.

Commodities

Gold

Coordinates

73° 00'W 87° N

NTS

37A/9,10, 27B

Location

270 km northwest of Iqaluit

The Piling Group is a lower Proterozoic supracrustal assemblage that is part of the Foxe Fold Belt; the northern extent of the Trans-Hudson Orogen that stretches from Melville Peninsula to the west coast of Greenland. The southern margin of the Piling Group comprises a diverse lower package of siliciclastics, volcanic flows and volcanoclastics and an upper succession of greywacke-

turbidites. The area is considered prospective for Broken Hill-type, VMS and mesothermal gold deposits.

Previously reported exploration in the south Piling Group is limited. In 1985 Petro-Canada conducted a lake sediment survey covering NTS sheets 27B, 37A and D. Comaplex Minerals Corporation carried out geological and geochemical surveys in those areas in 1991. Exploration in the north Piling Group previously attracted Cominco in 1976, 1991 and 2001 and Noranda in 1993. BHP Billiton and Falconbridge received prospecting permits covering the south margin of the Piling Group in 2000. BHP Billiton also obtained ten NTI leases covering the Inuit Owned Lands (IOL) in the area. Under an agreement signed in 2003, Commander Resources can earn a 100 per cent interest in the gold rights to the property by spending \$10.2 million on BHP Billiton's permits by the end of 2012 and by

spending \$8.0 million on the Falconbridge permits by the end of 2011.

Exploration in 2004 was concentrated on the Malrock Lake (local name) area where drilling and surface sampling recovered significant, although discontinuous, gold values in the iron formations. The silicate iron formation is very similar in the style of mineralogy and mineralization to the Musselwhite Mine in north-western Ontario and the Homestake Mine in South Dakota.

In the spring of 2005, the camp was moved westward to Dewars Lake area. Exploration was concentrated in the Ridge Lake area and the Durette Prospect.

At the Durette Prospect chip and channel sampling during the 2005 field season has outlined a zone 500 m in strike length and open in all directions. The best samples collected and assayed at the Durette Prospect are 28.9 g/t over 2.0 m and 18.0 g/t over 2.0 m. The mineralization, a quartz stockwork with

arsenopyrite-pyrrhotite, is above the iron formations and seems to be hosted in a strong east-west structure that is coincident with a strong EM conductor. Commander Resources indicates that drilling will take place on the Durette Prospect next season.

The Ridge Lake Prospect is a structurally thickened sheared and mineralized iron formation and may be part of the same structure hosting the Durette Prospect. This season, diamond drilling at the Ridges Lake Prospect has revealed a zone 600 m long in the Lower (sulphide facies) Iron Formation. The best intersection was 21.3 g/t over 4.24 m. The mineralization intersected with drilling the Lower Iron Formation seems to correlate with surface showings. The showing is open in all directions.

THE STRAND FIORD COAL PROJECT

Operator, Owners

James Bay Energy Inc.

Commodities

Coal

Coordinates

87° W 67° N

NTS

46K, L, M, N

Location

515 km north of Resolute Bay on Axel Heiberg Island

James Bay Energy Corp. has held the coal licences that cover the Kangut Peninsula of Strand Fiord on Axel Heiberg Island in Canada's High Arctic for several years. Axel Heiberg Island lays immediately west of Ellesmere Island within the Sverdrup Basin. In 2004, a team went to Axel Heiberg Island in order to

perform surface sampling of the coal seams on the island. No work was undertaken on the coal licences in 2005, but the company has plans to examine the coal seams in 2006.

Coal occurrences are not uncommon in Canada's High Arctic islands. Coal is found in four formations within the Sverdrup Basin: the Upper Devonian Okse Bay Formation, the Upper Triassic or Lower Jurassic part of the Heiberg Formation, Lower Cretaceous Isachsen formation and the Upper Cretaceous and the Tertiary Eureka Sound Formation. These coal and hydrocarbon resources were examined in the late 1970s and early 1980s by several of the larger petroleum companies. Assessment reports describing this work can be obtained through the Mineral Archives in Iqaluit.



WALES ISLAND PROJECT

Operator, Owners

Stornoway Diamond Corp.
Strongbow Exploration Inc.
BHP Billiton

Commodities

Diamonds

Coordinates

80° W 70°30'N

NTS

47B/3, 46M/15,16

Location

225 km north of Repulse Bay

Exploration permits granted in February 2003, on Wales Island, located in Committee Bay, are held jointly by Stornoway Diamonds Corp. (operator), Strongbow Exploration and BHP Billiton. An airborne geophysical survey was flown during the 2003 field season and identified a series of targets. Two of these targets were drilled in 2004 resulting in the discovery of two kimberlite bodies. The 2005 program on Wales Island started in August and included drilling, ground geophysics and till sampling. Eight new kimberlite bodies were discovered, five through diamond drilling and three with prospecting, bringing the total to 10 kimberlite bodies discovered on Wales Island. Work performed this season included 19 drill holes (1366 m), ground geophysics over 20 targets and 61 till samples. Seven hundred and eight kilograms of drill core and 70 kg of outcrop material will be tested for diamonds by caustic fusion. ■



nunavut

Mining Mineral Exploration and Geoscience 2005



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada