

Nunavut

MINING MINERAL EXPLORATION AND GEOSCIENCE 2002



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada



Arctic Bay, Nunavut

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A Note About the Overview

This overview is a combined effort by the Minerals, Oil and Gas (MOG) Division of the Department of Sustainable Development of the Government of Nunavut, the Nunavut Mineral Resources Section of Indian and Northern Affairs Canada (INAC), and the Lands and Resources Department of Nunavut Tunngavik Incorporated (NTI). The intent of this edition is to capture information on exploration and mining activities conducted in Nunavut in 2002, and to make this information available to the public. All exploration information was obtained by INAC contributors prior to a news cut-off date of November 1, 2002.

The overview is organized according to the three regions that comprise Nunavut - Kivalliq (formally Keewatin), Kitikmeot, and Qikiqtani (formally Baffin).

Prospectors and mining companies are welcome to submit information on their programs at any time for inclusion in the next overview. We thank the many contributors who submitted information for this edition. Feedback and comments are appreciated.

All money referred to is in Canadian funds except where otherwise noted.

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Land Tenure in Nunavut

Guide to Acronyms

CMR	Canada Mining Regulations
C-NGO	Canada-Nunavut Geoscience Office
INAC	Indian and Northern Affairs Canada
GSC	Geological Survey of Canada
IOL	Inuit Owned Land
MOG	Minerals, Oil and Gas
DSD	Department of Sustainable Development
NLCA	Nunavut Land Claim Agreement
NTI	Nunavut Tunngavik Incorporated
RIA	Regional Inuit Association
NRCan	Natural Resources Canada

In 1993 the largest Aboriginal land settlement in Canadian history was concluded through the *Nunavut Land Claims Agreement* (NLCA). The NLCA provided for the formation of the new territory of Nunavut on April 1, 1999, as well as providing many other rights to Inuit. Nunavut, which covers 1,994,000 square km, comprises the eastern and northern portions of land previously referred to as the Keewatin and Franklin districts of the Northwest Territories. Nunavut's population approximates 27,000, 85% of which is of Inuit origin. A total of 25 communities are home to anywhere from 150 to 6,000 people. Most communities offer a range of services (visit the Canada-Nunavut Community Business Service Centre website: <http://www.cbsc.org/nunavut>), including regular scheduled air service. Several offer specific mining and exploration-related services, and are home to independent prospectors and others experienced in mineral exploration and mining.

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 (Subsurface IOL), which total 38,000 square km and represent approximately 2% 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% of Nunavut. INAC administers rights through the Canada Mining Regulations (CMR). This includes Surface IOL, for which access to the land must nevertheless be obtained from the RIA as explained above (visit the following websites for more





information: http://www.polarnet.ca/ntilands/Exploration_App.htm; <http://npc.nunavut.ca/eng/index.html>; <http://www.pail.ca/inuorg.htm#qikinu>.

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. The Government of Nunavut, INAC, NTI, the C-NGO and other pertinent government divisions and associations are working together to improve the Territory's geoscience knowledge base through regional mapping programs, thematic investigations, and geological compilation.

Government of Nunavut

The Minerals, Oil and Gas (MOG) Division of the Government of Nunavut's (GN) Department of Sustainable Development (DSD) deals with issues related to Nunavut's minerals industry. DSD is committed to establishing a sustainable and vibrant minerals industry across the Territory, which contributes to the sustenance of healthy communities throughout Nunavut.

DSD focuses on community education and awareness of Nunavut's minerals industry, through establishing training programs for employment and integration of earth sciences into the school curriculum. DSD actively supports prospector development through

advancement of prospecting and related skills to facilitate more direct local participation. DSD is also committed to improving the geoscience knowledge base of Nunavut by co-operating with other levels of government and partnering with other organisations such as the Canada-Nunavut Geoscience Office (C-NGO). DSD is also committed to resource management, including upgrading of transportation infrastructure, modernization of land use legislation, and development of an exemplary mineral industry policy. DSD functions as liaison between industry and communities, local service sectors, educational institutions, work forces, and prospectors.

These efforts will lead to improved investor confidence, already surprisingly strong under the current market climate.

Educations and Training Programs

Mineral Exploration Field Assistant's Course

The Mineral Exploration Field Assistant's Course was piloted in May of 2001 at the Nunavut Arctic College in Iqaluit. This multi-partnership, eight-week training for employment course introduced 12 students to fundamental geologic fieldwork concepts and methods that are used in mineral exploration. This primer course introduced students to the business, scientific and technical nature of mineral exploration as a whole, and offered them the opportunity to pursue a career in the minerals industry. Due to the success of the pilot course, DSD plans to facilitate delivery of the course again in March 2003. As in 2001, industry support will be sought for student job placements.

Prospector Development -

Nunavut Prospector Program (NPP)

Initiated in 1999, the NPP provides financial and technical assistance to Nunavut prospectors. Several prospectors have made significant mineral discoveries over the past four years. This year 33 prospectors from across Nunavut received funding of up to \$5,000 through the program. A total of nine NPP-supported prospectors hold mineral claims in Nunavut with interesting gold, platinum, base metal and kimberlite prospects. Furthermore, two of





these prospectors have recently completed exploration deals with exploration companies.

Introductory Prospecting Course

A one-week Introductory Prospecting Course is delivered in communities throughout Nunavut every year. Since 2000, the courses have been offered in all 25 communities. Popular with prospectors and individuals with a general interest in mineral exploration and mining, the course is an introduction to rock and mineral identification, map reading, sample collection and claim staking. The course is a stepping block for people who want to pursue prospecting as a career and/or hobby, building on the Inuit traditional knowledge of the land. In September 2002, a 10-day intensive advanced prospectors course was held at the Lupin mine. Nine prospectors from various communities attended and completed the course.

Supporting Schools -

High School Geology Courses

Resident Geologists delivered two Introduction

to Geology courses to high school students in 2002. A two-day course was offered to eight Arviat students and a six-day course was offered to select Grade 11 and 12 students in Kugluktuk as part of their career and technology studies school curriculum program.

Three presentations were made to Grade 7 to 12 high school students during the last day of the Nunavut Mining Symposium in Cambridge Bay. These presentations included an overview on mineral exploration, mining, and geosciences and related careers. Guest speakers were from the C-NGO, NRCan, Carleton University and DSD.

In April, DSD launched the High School Math and Science Awards Program. The program encourages and motivates high school students to pursue interests and careers in math, science and technology. The program recognizes exceptional performance in math and/or science through a cash award of \$175, \$275 and \$350 to a Grade 8, 10 and 12 student, respectively.



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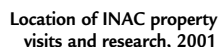
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The Mineral Resources Section's work related to the Canada Mining Regulations included reviewing assessment reports for technical content. All three mines and 11 of

Given the demonstrated association between gabbro-syenite complexes and platinum-group

Mineral Resources:

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metal mineralization, Jurate Gertzbein began studying the Uligattalik Hill intrusion. Located immediately east of the East Zone at the Ferguson Lake nickel-copper-PGM deposit, the intrusion and its importance to mineralization are not well understood. In the first of what could be multiple field seasons, Jurate collected samples for whole-rock geochemical analysis, petrographic studies, and geochronology. Jurate was assisted in her work by summer student Charlene Mannik.

Paul Gertzbein began a preliminary compilation of coloured gemstone occurrences in the Qikiqtani (Baffin) region. To date, lapis lazuli, sapphire, spinel, uvite and schorl tourmaline, garnet and diopside have all been reported in the Lake Harbour metasedimentary rocks near Kimmirut. Colourless and rose quartz, beryl, sapphirine, and amber have been reported at localities elsewhere in the Arctic Islands. The compilation is aimed at developing interest in an overlooked area of Nunavut's geological resource.

The Archives section was also busy as a

result of last year's staking rush. Over 100 reports, including more than 4,000 large maps, were scanned and relayed to clients by Natalie Roy and casual hire Jennifer Cockwell. Over 300 reports have now been scanned, and will soon be available on an FTP site for easy access. Natalie also constructed the section's website, and will be upgrading it in early 2003.

The section's contribution to environmental assessment processes was led by Jason Sharp, who also provided input on proposed parks and ongoing land claims in Nunavut. Jason was involved in the Industry-Government Overview Committee along with representatives from INAC, GN, NTI, and the mining industry.

INAC also established a rock preparation and storage facility in Iqaluit. This includes a rock saw and work area for the use of the district geologists as well as INAC's partners. The facility will also be used to store drill core, with several tonnes of material received from the Polaris and Nanisivik mines this fall.



Nunavut Tunngavik Incorporated

Nunavut Tunngavik Incorporated (NTI) is the Inuit corporation responsible for overseeing implementation of the 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

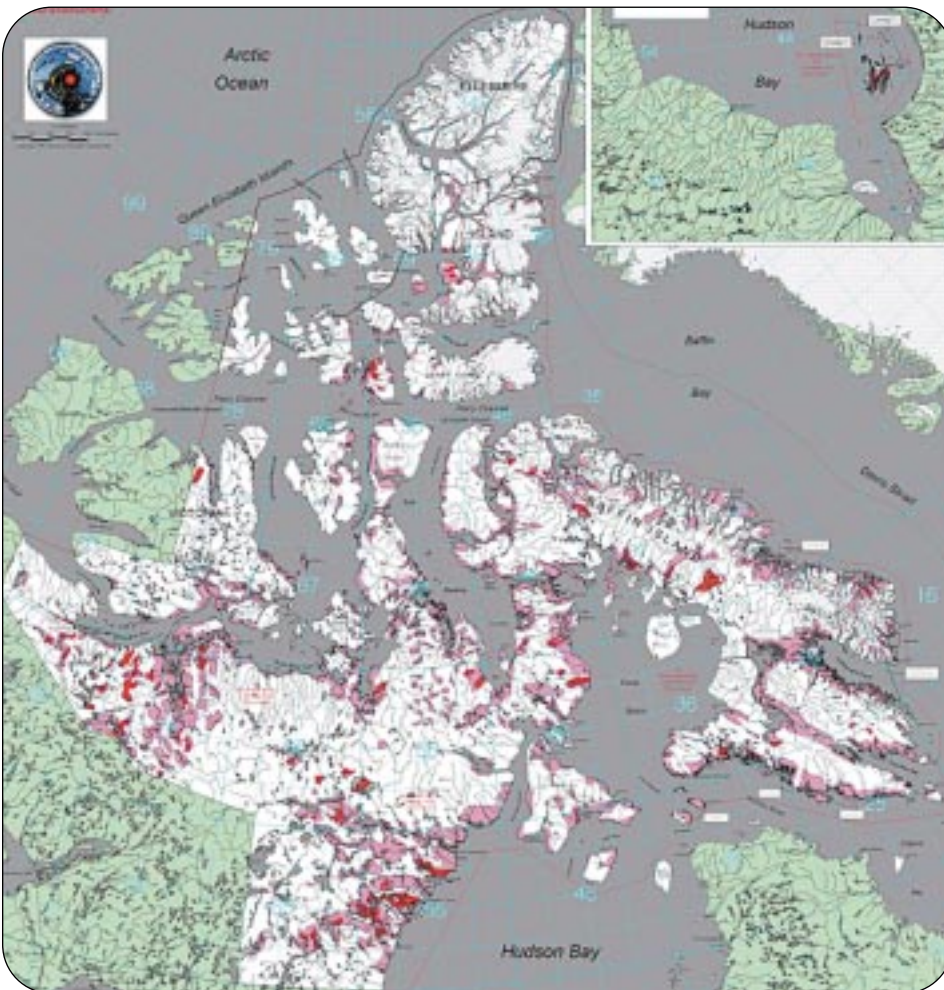
referred to as the Exploration Agreement, or EA) and the Inuit Owned Lands Mineral Production Lease (referred to as the Production Lease). The Exploration Agreement grants a company or individual the exclusive right to explore and prospect for minerals (excluding oil and gas, and Specified Substances 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 CMR.

The 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 form, Application for an Inuit Owned Lands Mineral Exploration Agreement (available on request from NTI or from our Lands Department website - <http://www.polarnet.ca/ntilands/>). The completed application must 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 in 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

Distribution of Inuit Owned Lands, NTI.



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.

More than 11 % of the total Subsurface IOL is covered by active Exploration Agreements with prospectors and exploration and mining companies. In addition, grandfathered claims and leases comprise approximately 2 % of all Subsurface IOL.

In response to the intense interest in diamond exploration in the west Kitikmeot region in 2001 and 2002, NTI requested offers for Exploration Agreements which provided greater benefit to Inuit than the standard agreement. Many applications were received and NTI entered into negotiations with three companies. One agreement has been signed and negotiations with respect to two others are at advanced stages. On the successful conclusion of this process, all of the open Subsurface IOL in the west



Kitikmeot region will be subject to agreements with NTI or grandfathered rights under the CMR.

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.



Qikiqtani Region

Project/Deposit	Holder(s)	IOL Parcel(s)	Exploration Agreements
Piling Project ¹	BHP-Billiton	BI-35	Qimmiq 1-6, 10,11 (7 EAs)
Piling Project ¹	Teck-Cominco	CR-26	Piling Project 1-3 (3 EAs)
Melville	Comaplex	HB-15, HB-16	Melville 1-2 (2 EAs)

Kivalliq Region

Meliadine ²	WMC, Comaplex, Cumberland	RI-01, RI-12	Ant 1-4, Fay 1-4, W1, Tan 1-4, Felsic (14 EAs)
Meadowbank ³	Cumberland	BL-14	Meadowbank 1-3 (3 EAs)
Spi Lake	Comaplex	AR-16	Spi Lake
Square Lake	Comaplex	BL-21	Square Lake
Sedna	4579 Nunavut Ltd	RI-01	Sedna 1 - 5 (5 EAs)
Cache	Adam Vary	WC-08	Cache
SDS	Adam Vary	RE-27	SDS 1-3 (3 EAs)
Rand	Adam Vary	AR-28	Rand 1-3 (3 EAs)

Kitikmeot Region

Hope Bay ⁴	Miramar Mining	BB-57, BB-60	Akungani 1-3, Aimaokatuk, Tok 1-3 (7 EAs)
Contwoyto	Tahera	CO-08	Contwoyto 1-5, New Contwoyto 1-2 (7 EAs)
Hood River	Tahera	CO-20	Hood River
High Lake ⁵	Wolfden	CO-29	Hilk
Muskox ⁶	Muskox Minerals	CO-62	Muskox 1-2 (2 EAs)
Muskox North ⁷	Jerry Diakow, Gordon Addie (re: Trilogy)	CO-62	Muskox North, Muskox Up (2 EAs)
Arcadia Bay	Adam Vary	CO-31	Arcadia Bay
Rockinghorse ⁸	Kennecott	CO-44	Rockinghorse
Strongbow (in negotiation)	Strongbow Resources	all open ground in the West Kitikmeot	

Note:

All projects referenced by these notes are discussed in this report.

- Overall project involves Crown land and Subsurface IOL.
- The project involves land held under NTI Exploration Agreements as well as grandfathered claims and leases.
- The project involves land held under NTI Exploration Agreements and grandfathered leases.
- 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.
- The project involves Crown land and land held under NTI Exploration Agreements and grandfathered leases.
- The project involves Crown land, Surface IOL, and Subsurface IOL under NTI Exploration Agreements.
- The project involves Crown land, Surface IOL, and Subsurface IOL under NTI Exploration Agreements.
- Near the edge of the project referred to later in this report.

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Schultz Lake Compilation

In July of 2002, NTI Lands contracted Carleton University Ph.D. student Thomas Hadlari of Cambridge Bay to compile and produce a 1:250,000 scale bedrock geology map of the Schultz Lake map sheet (NTS 66A). Despite years of GSC field programs and industry exploration in the area, there are no modern bedrock geological maps for NTS 66A. The product of this contract is to be a digital bedrock geology map with marginal notes. The quality will be consistent with Geological Survey of Canada (GSC) Open File Reports. The compilation is being performed in Ottawa under the direction of Dr. Rob Rainbird of the GSC, using published and unpublished data.

University Partnership Program

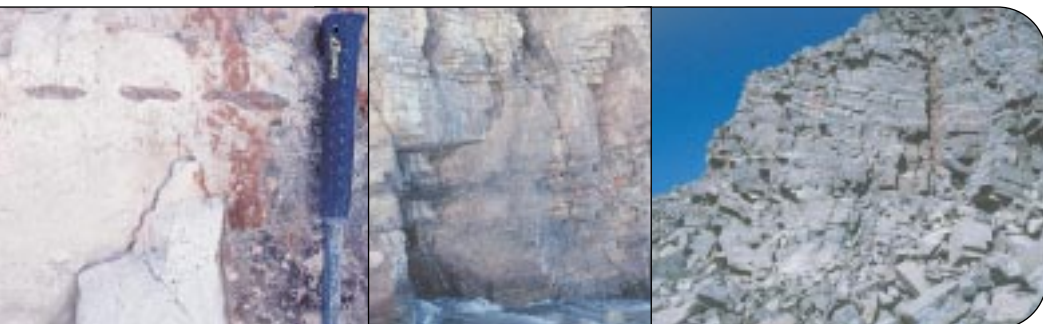
NTI Lands has initiated the University Partnership Program to create links with academic researchers that will provide the technical and scientific resources for mapping projects that it carries out on Subsurface IOL. A related objective of the program is to provide training opportunities in geoscience for Inuit youth. The first partnership is with Dr. Norm Duke of the University of Western Ontario (UWO). This summer, a six-week field program involved NTI's Research Exploration Geologist (Robin Wyllie), UWO's Dr. Duke, two undergraduate students from UWO and three high school students from the Kitikmeot region. The field crew mapped three areas (Regan Lake, Gold Lake and east of Bathurst Inlet) and covered five Subsurface Inuit-Owned Lands (IOL) parcels (BB-07, CO-02, CO-03, BB-22 and BB-24). Products will include bedrock geology maps and two undergraduate theses.



The Committee Bay Project, collaboratively delivered with the GSC, focused on the geology of the Prince Albert group, located southwest of Committee Bay in the north-central part of the territory. The area contains Archean supracrustal rocks considered to have high mineral potential. Over the course of the 2000, 2001 and 2002 field seasons, bedrock and surficial materials mapping has been performed on NTS map sheets 56J, 56K, 56O, and 56P. Bedrock geology maps at a 1:100 000-scale have been published for NTS sheet 56K (GSC

The Arctic Zinc project, a collaboration with GSC-Calgary, completed the mapping and sampling component of its program in 2002.





Geochemical and petrographic analyses on the regionally representative suite of sulphide minerals are now underway. Fieldwork in 2002 resulted in an updated map and regionally integrated structural interpretation of the Eclipse property (eastern Little Cornwallis Island), one of the largest showings in the district, as well as the western part of Little Cornwallis

Island. These results will be published as an Open File map (winter 2003). The three-year mapping project has furnished structural and stratigraphic information for sulphide showings throughout the Cornwallis District, leading to a preliminary synthesis of the district's structural history (to be published in Current Research, February 2003).

A new thematic study focusing on potential base metal-bearing carbonate stratigraphy on the Borden Peninsula, along strike to the southeast of the Nanisivik Mine, was initiated in 2002. Fieldwork focused on stratigraphy and sedimentology of the Society Cliffs Formation, and on the local setting of stratigraphically-delimited sulphide showings. Reports of this fieldwork will be published in the GSC's upcoming Current Research (January, 2003).



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Committee Bay Project
Mineral Deposits
Quaternary, Committee Bay Project
Zn-Pb, Polaris District

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Nunavut Prospector's Program 2002

Thirty-three prospectors Nunavut-wide received funding through the Nunavut Prospectors Program (NPP) in 2002. DSD initiated this very successful program in 2000 to help prospectors evaluate and collect rock samples in order to stake claims and actively contribute to mineral exploration in Nunavut. Eighteen prospectors are from the Kivalliq region, nine are from Kitikmeot region and six are from the Baffin region. Nine prospectors hold mineral claims in Nunavut, and these include some very compelling gold, platinum, base metal and kimberlite prospects.

Kivalliq Prospectors

Inuit prospector activity has been ongoing for several years in the Kivalliq region and currently leads the Territory in both number of prospectors and number of claims staked. A total of 18 of the 33 prospector NPP-recipients come from the Kivalliq, and six hold mineral claims on either Crown or Inuit Owned Land (IOL)

Arviat Area

The community of Arviat leads the region in number of active prospectors. A total of ten out of the 18 Kivalliq prospectors that received NPP funding in 2002 are based in Arviat. Claim holders include Mark Kinniksie, Peter Suwaksiork and Mark Eetak.

Mark Kinniksie holds two claims in the Ranger Seal Lake area, located 120 km southwest of Arviat. The claims cover a wide area of gossanous and pyritic fine-grained volcanic rocks that are cut by rusty quartz veins. Pyrite occurs both as fine-grained, disseminated patches and as 5-10 mm-sided cubes. Analytical results from nine grab samples returned two values of up to 300 ppb gold. Three samples yielded greater than 100 ppm copper.

Mark holds two other claims covering semi-massive pyrrhotite mineralization near the mouth of the Tha-Anne River (SRV claims). Situated approximately 75 km south-southwest of Arviat, 13 of 14 rock samples collected from Mark's SRV claim yielded nickel values in excess of 200 ppm and copper values over 600 ppm. Additional sulphide-rich samples were collected in 2002 and assay results from these are pending.

Peter Suwaksiork holds a claim ~60 km north-northeast of Arviat covering weakly chloritized, pillow basalts and iron formation-hosted mineralization. Assay results from 2000-

2001 yielded Au values up to 1335 ppb and Cu values up to 6630 ppm. A hand specimen taken in 2002 shows exceptional chalcopyrite concentrations, and results from that sample are pending.

Prospector Mark Eetak staked seven claims in 2001-2002 in the North Henik Lake area. Vuggy pyrite locally occurs in the well-exposed carbonates and quartzites. Assay results yield slightly anomalous Ni, Cu and As.

Baker Lake Area

Two prospectors hold claims situated north of the community of Baker Lake.

Martha Tickie holds two claims, one of which shows significant base metal potential including ~10 cm wide veins of massive galena and copper mineralization hosted by quartz veins and associated alteration zones. The other claim exhibits good indications of gold mineralization. Analytical results from 20 samples on the gold property returned four samples with values of greater than 1000 ppb Au, with a maximum value of 100 g/t Au. Five samples also gave greater than 10 g/t silver.

During the summer of 2002, Lucy Andy staked a claim north of Baker Lake. Of the five samples collected in 2001, three contain greater than 200 ppb Au with a maximum of 4,150 ppb Au. Copper values of more than 800 ppm were returned in the same samples. The best copper value is 3.32% Cu. Lucy staked additional claims in 2002 and collected another 14 samples. Analytical results are pending.

Rankin Inlet Area

Prospector William Gawor holds seven claims located between 5 and 25 km northwest of Rankin Inlet. The area is underlain by volcanic rocks

NINE PROSPECTORS HOLD MINERAL CLAIMS IN NUNAVUT, AND THESE INCLUDE SOME VERY COMPELLING GOLD, PLATINUM, BASE METAL AND KIMBERLITE PROSPECTS.

with subordinate quartz arenite, all of which show considerable gossan. Of the 20 samples collected in 2001, nine yielded greater than 100 ppm Cu, with a maximum value of 480 ppm. Six of the samples yielded Ni values > 200 ppm, and three of those were > 1000 ppm.

Iqaluit prospector Chris Lloyd has been active in the area east of Frobisher Bay for six years, and holds one claim (the E&M1 claim) on the Hall Peninsula, ~75 km southeast of Iqaluit. The area of interest is predominantly underlain by marble of the Paleoproterozoic

Rankin Inlet prospector (left),
Advanced Prospectors
Course at Lupin (right)



Pillowed basalt near Sanikiluaq.

metasedimentary rocks of the Lake Harbour Group. Chris has identified occurrences of coloured gemstones and has also delineated some very prospective base metal targets.

Kitikmeot Prospectors

Steve Alookey of Taloyoak has been prospecting the Thom Bay area, 60 km northwest of Taloyoak, for over a decade. During that time he has reported six areas of massive sulphide showings. Through NPP, Steve has been able to systematically sample some of these showings, and from 2000 to 2002 he staked a total of 10 mineral claims. Mineralization consists mainly of pyrrhotite with various concentrations of chalcopyrite and molybdenite. Analytical results from more than 100 rock samples have returned values up to 6,820 ppm Ni, 9,240 ppm Cu, 3,360 ppm Zn, more than 10,000 ppm As, as well as 2,350 ppb Au and 40.6 ppm Ag. Mo values of 279 ppm have also been recorded. Of the five samples sent for analysis for platinum group metals, only low PI was returned. The main focus of Steve's work covers a mineralized area measuring 6 km by 3 km, a most impressive zone that has never before been reported.

**All of the above prospectors can be reached through the Resident Geologists working for the Government of Nunavut's Minerals, Oil and Gas Division of the Department of Sustainable Development.*

Baffin Prospectors

Igloolik prospector Harry Iyerak holds three active claims. One of these, Nuvua, is located ~75 km due south of Arctic Bay. The other two, the Kiggavik claims, are situated on the west coast of Baffin Island, ~250 km southwest of Clyde River. Of the 22 samples collected from the Kiggavik claims in 2002, most of which contain considerable pyrrhotite (5-50%), 13 have >1000 ppm Zn, 11 have >100 ppm Ni, six have >100 ppm Mo, and 13 have > 100 ppm Cu.

Summary of Mining and Exploration – 2002

It is estimated that \$61.3 million were spent on exploration in 2001 (NRCan, www.nrcan.gc.ca/mms/efab/mmsd/exploration/byprov2001.htm) with projections for 2002 of \$67.8 million. The majority of this money will be spent on gold and diamond exploration. Despite being fewer in number, Nunavut's gold projects include several advanced projects with major budgets, whereas the more numerous diamond projects are mostly in their early stages. Consequently, money spent on gold and diamonds is approximately equal. Base metal exploration accounts for a small minority of the expenditures.

The winter of 2001/2002 saw over eight million acres acquired by the mining industry in the form of mineral claims, prospecting permits, and exploration agreements. The vast majority of this land was acquired within a 150 km radius of the diamond discoveries reported in 2001 by Ashton Mining of Canada, Kennecott Canada Exploration, and their respective joint venture partners.

Despite the excitement caused by the staking rush, not all of the new property holders were able to raise exploration capital. Consequently, fieldwork only took place on about half of the land within the North Slave Diamond District. That work produced three new kimberlites – Stellaria (at Kikerk Lake), Thrift (at Kim), and Atani (Rockinghorse). Ashton's follow-up work on the Potentilla and Artemisia kimberlites indicated sub-economic grades, though Potentilla was found to contain commercial-size stones of up to 0.34 carats.

Victoria Island was the site of renewed diamond exploration that culminated with 11 new kimberlite discoveries on the Hadley Bay and Blue Ice properties northwest of Cambridge Bay. Some of these new finds lie on a large structure known as the Galaxy Trend, and at least one of this year's discoveries is diamondiferous. The companies active on Victoria have benefited from the fact that the kimberlites are the only magnetic bodies to penetrate the carbonate platform overlying the island; this

assisted in selecting drill targets from geophysical surveys and also implies that prospecting can result in new discoveries.

Metal exploration in the Kitikmeot remains healthy, with significant drill intersections reported at the Goose Lake and Hope Bay gold projects and at the High Lake base metal project. Once again, Hope Bay was the largest single project in the territory, with expenditures of ~\$13 million.

Miramar has begun permitting the Doris Hinge gold deposit for eventual development, and Nuna Logistics and Kitikmeot Corporation have also begun permitting for the Bathurst Inlet Road and Port project. In terms of permitting, these projects join Tahera's Jericho diamond project, for which a final environmental impact statement is the next step in the process. It is possible that 2003 may see two additional projects begin permitting – Cumberland's Meadowbank gold project and Inmet Mining's Izok base metal project.

The development of some or all of those projects will be necessary to rejuvenate Nunavut's mining industry, which is down to just one



operating mine: Lupin. Both the Polaris and Nanisivik zinc mines have closed their doors and commenced reclamation work. Polaris had exhausted its orebody, and Nanisivik proved to be uneconomic in the face of record-low zinc prices.

Not surprisingly, interest in zinc exploration on Baffin Island and the High Arctic has waned, and the commodity of choice now happens to be diamonds. Only BHP Billiton continued to look for zinc this year at its Piling project on

central Baffin Island. Further north, Kennecott and Twin Mining were joined on northern Baffin by De Beers, which acquired over seven million acres in the form of prospecting permits south-east of the Jackson Inlet discoveries. Stornoway Ventures and Northern Empire Minerals meanwhile acquired permits on the Melville Peninsula and began exploring the Aviat North and South properties.

Diamond exploration is even making a reappearance in the Kivalliq, where Shear Minerals and Northern Empire have reported finding kimberlite float in two locations near Rankin Inlet. Coupled with previously known kimberlite, lamprophyre, and minette occurrences in the area, it suggests that the Kivalliq may have untapped diamond potential.

Gold and base metal exploration in the Kivalliq has remained relatively constant. Cumberland has added a sixth deposit, PDF, to its portfolio of gold deposits at the Meadowbank project, and is now at a feasibility stage. Starfield Resources has begun infill drilling at the shallower parts of the Ferguson Lake deposit and is also investigating recently-discovered platinum-palladium enriched horizons outside of the massive sulphide body.

Looking at the Numbers

The following tables provide information on the distribution of projects by maturity, target commodities, geographical location, and a tally of diamond drilling metreages for Nunavut in 2002 up to November 1. Natural Resources Canada (<http://www.nrcan.gc.ca/mms/efab/mmsd/exploration/byprov2001.htm>) forecasts that mineral exploration and deposit appraisal expenditures in Nunavut will total \$67.8 million this year, compared to \$61.3 million in 2001, \$62.4 million in 2000 and \$37.4 million in 1999.

Active Projects

Region/Commodity	Gold	Nickel/PGE	Base Metal	Diamonds	Totals
Kivalliq:	5	2	0	1	8
Kitikmeot:	5	1	2	25	33
Qikiqtani:	0	0	3	6	9
Totals:	10	3	5	32	50
Estimated 2000 Figures	8	3	12	13	36

Project Maturity

Region/Commodity	Reconnaissance	Mid-level*	Advanced**	Mines	Totals
Kivalliq:	1	4	3	0	8
Kitikmeot:	19	10	3	1	33
Qikiqtani:	6	1	0	2	9
Totals:	26	15	6	3	50
Estimated 2001 Figures	18	10	5	3	36

* Projects with exploration drilling intended to test targets but not outline resources.

**Projects that included drilling or bulk sampling for resource calculations, or projects undergoing environmental assessment.

Drilling

Preliminary Diamond Drilling Metreage Statistics

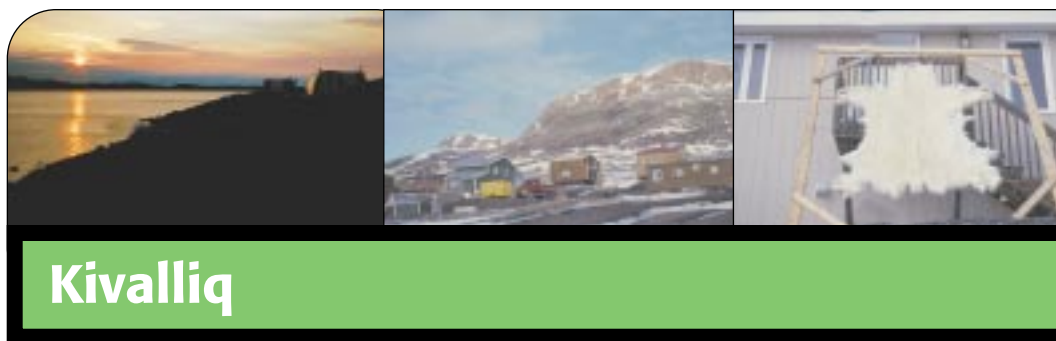
Region/Commodity	Gold	Nickel/PGE	Base Metal	Diamonds	Totals
Kivalliq:	18,250	20,000	0	0	38,250
Kitikmeot:	34,994	200	7,755	6,633	49,852
Qikiqtani:	0	0	0	500	500
Totals:	53,244	20,200	7,755	7,133	88,332
Estimated 2001 Figures	40,951	45,900	8,494	6,907	102,252

Note: Estimated; data is missing for some projects

Mineral Tenure (number and acreage):

Land Status	2001 total	2002 total	Kitikmeot	Kivalliq	Qikiqtani
NTI Exploration Agreements:	64	70	25	31	14
	891,036	1,022,691	385,656	386,706	250,329
Mineral Claims:	440	3639	2831	261	547
	934,804.25	9,114,679.49	6,753,023.98	849,657.53	1,511,997.96
Prospecting Permits:	80	232	26	27	179
	3,643,335.00	12,963,656.70	2,373,168.36	1,907,760.00	8,682,728.34
Mining leases:	263	263	117	112	34
	446,128.41	446,128.41	173,267.35	173,267.35	60,753.82

Note: Neither the Mining Recorder nor NTI accepts responsibility for any inaccuracies or omissions of data.



Kivalliq

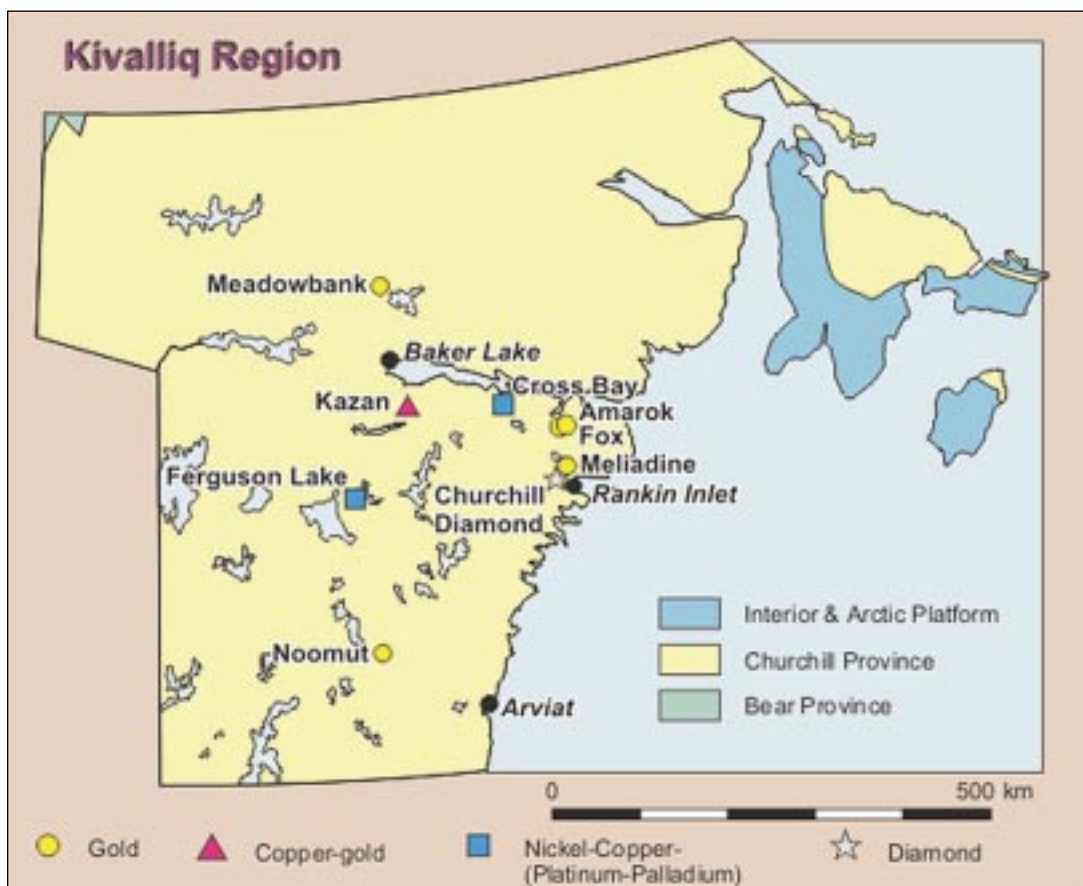
The Kivalliq region includes the eastern mainland, Southampton Island, and several smaller islands. The largest communities — Rankin Inlet, Arviat, and Baker Lake — are the primary staging points for exploration projects in-land and offer expediting services.

The Kivalliq region is underlain primarily by the Archean-Proterozoic Western Churchill geological province. Sedimentary rocks of the Hudson Platform are found covering most of the islands.

Past-producing mines in the region have included the North Rankin Nickel mine at Rankin

Inlet, and the Cullaton Lake/Shear Lake operation north of Nuelin Lake. Past exploration has focussed on lode and iron formation gold, volcanogenic massive sulphide, unconformity-hosted gold, and mafic-ultramafic Ni-Cu+/-PGE deposits. The presence of other styles of mineralization, such as epithermal gold, diamondiferous lamprophyres and kimberlite float have also been demonstrated.

Two large projects that straddle the Kivalliq district boundaries are discussed in other sections: BHP Billiton in the Repulse Bay area (Qikiqtani); Committee Bay Resources (Kitikmeot).



Amarok

Operator, Owners	NDT Ventures Ltd.
Commodities	Gold
Coordinates	93° 20' W, 63° 16' N
NTS	55N/6
Location	70 km NW of Rankin Inlet

The Amarok Property is adjacent to the Fox Project and it covers the northeast extension of the same metasediments and amphibolites. The combined property covers a 40 km long supracrustal package that hosts the gold-mineralized silicate and oxide facies iron formations.

Before acquisition of the Amarok ground, NDT's due diligence (2001) over the AVWolf Showing defined surface gold mineralization over an area measuring 100 x 600 m. From 57 samples (grab and chip) taken at that time, 16 samples returned values over one g/t.

NDT's detailed airborne magnetic survey (summer 2002) determined that the AVWolf showing coincides with an 1100 m long magnetic high. Detailed mapping of the showing identified three bands, up to 25 m wide, in which iron formation occurs. The bands were traced on surface for over 180 m with the strike extensions continuing under cover in both directions. The recent work on AVWolf included procuring 169 channel samples of which 59 returned anomalous gold values concentrated in the two easternmost bands. Gold values in excess of 1 g/t with a high of 4.12 g/t were noted over widths of 0.5 to plus 2 m. NDT's magnetic survey identified multiple, linear to arcuate magnetic highs throughout the property with the longest trend traceable for over 23 km. Several anomalies strike beyond the survey limits and these were checked and found to coincide with float, subcrop and outcrop of iron formation. Sampling of these exposures identified five new areas with anomalous gold values (over both Fox and Amarok). Of the 183 reconnaissance samples taken, 39 returned gold values in excess of 0.15 g/t with a high of 1.41 g/t gold.

Cross Bay Project

Operator, Owners	Falconbridge Ltd.
Commodities	Copper, Nickel, PGE's
Coordinates	93° 30' W, 63° 45' N
NTS	55M, N & 56 C,D
Location	130 km east of Baker Lake

Permits covering an extensive area were taken out by Falconbridge Ltd. in the Cross Bay area, about halfway between the communities of Baker Lake and Chesterfield Inlet. This summer saw reconnaissance mapping, prospecting, sampling and ground geophysics.

Historically, work through the region was mostly focused on uranium exploration in the late 1960s and early 1970s. Cominco's 1976 report by Mosher (061389) provides a regional summation of the geology and structures. Sik Sik Copper Mines Ltd. reported on two short drill holes in 1976. Both holes encountered mafic intrusive rocks, some with undisclosed mineralization.

The area is underlain by Archean Western Churchill granites, gneisses and amphibolites. The Kazan Formation, a sequence of interbedded alluvial and aeolian arkosic sandstones, is in gradational contact with the underlying polymictic orthoconglomerates of the South Channel Formation which, in turn, unconformably overlies Archean basement. Volcaniclastic sediments and andesitic to trachytic flows of the Paleoproterozoic Christopher Island Formation (CIF) conformably overlie rocks of the Kazan Formation (Rainbird et al., 1999). Lamprophyre dykes associated with CIF rocks are petrogenetically linked to the Martell syenites (Roddick and Miller, 1994).

Ferguson Lake Project

Operator, Owners	Starfield Resources
Commodities	Nickel, Copper, Cobalt, Platinum, Palladium
Coordinates	96° 51' W, 62° 52' N
NTS	65I/14,15
Location	160 km south of Baker Lake

Starfield holds 57,304 acres in the Ferguson Lake area. INCO first discovered Ni-Cu mineralization there in 1950-55 and completed 38,000 metres of diamond drilling to outline a resource of 6.354 Mt grading 0.75% nickel and 0.87% copper. Starfield acquired the ground in March 1999 and began diamond drilling and geophysical work.

Mineralization occurs as chalcopyrite-pyrite-pyrrhotite stringers and massive pyrrhotite in zones up to ten metres thick. These are hosted by gabbro in a hornblendite sill or laccolith that can be traced for 9 km on surface and for 18 km using airborne geophysical data. The hornblendite is bounded on either side by amphibolite, which in turn is bounded by hornblende gneiss to the north and south.



Ferguson Lake core shack

The entire sequence is folded in northeast trending folds and is repeated to the north and south. A syenite intrusion is located just to the northeast of the deposit.

The West Zone is the principal deposit receiving exploration attention. In 2001 a new discovery was made in hole FL01-101, where a low sulphide interval above the massive sulphide body proved to contain high Pt-Pl values: 0.35 metres at 103 g/t Pl and 26.7 g/t Pt. Subsequently, Starfield began re-logging other holes and began sampling intervals similar in appearance to the high-grade interval in hole 101.

As a result of the 2001 drilling, Starfield boosted its inferred resource for the property to 51.7 Mt grading 0.92% Cu, 0.58% Ni, and 1.44 g/t combined Pd and Pt. This includes a higher-grade resource of 9.3 Mt grading 1.37% Cu, 0.87% Ni, and 2.06 g/t Pl and Pt. Pl is the dominant of the two precious metals in both cases.

2002 saw an aggressive drilling campaign. Highlights include: FL02-135, which cut 1.1 m averaging 13.96 g/t Pt and 19.13 g/t Pd. This was intersected in the shallow levels of the eastern part of the West Zone, and about 30-50 m beneath the massive sulphide body. This very high-grade intercept comes from the low-sulphide material, ~30 m west of an intercept in hole FL02-109 which returned 1.04 m of 12.89 g/t Pd and 1.38 g/t Pt. Multiple zones of low-sulphide material are now being defined. Although alteration is very subtle, identification of favourable units is facilitated by the low magnetic response of these units.

The new "119 Zone", situated on the extension of the West Zone, is a PGE-rich massive sulphide body which has been drill tested (8,000 m) for a length of 400 m now. The host gabbro is coincident with a portion on a 1,600 m long UTEM geophysical anomaly. FL02-137 revealed 6.22 m of 2.18 g/t Pd and 0.13 g/t Pt, at about 1 km down-hole. Some enhanced copper grades are also evident in this vicinity with grades like 2.23% Cu over 7.78 m in FL02-139. This same interval assayed 2.01 g/t Pd and 0.57 g/t Pt. Drilling continues to test 200m of ground both east and west of the 119 Zone.

Starfield considers the 119 Zone discovery to be important to the West Zone story. The ongoing drilling, late in 2002, is adding significantly to the understanding of PGE distribution. The pregnant gabbro (PGE-enriched) shows some mineral segregation and zonation. Grades and thickness are increasing as drill-testing proceeds westward. Remnant stratification of the sulphides is preserved. Interpretation of chemical data suggests that the pregnant gabbro could host a discrete high-grade Pd-Pt horizon or reef.

Fox	
Operator, Owners	NDT Ventures Ltd.
Commodities	Gold
Coordinates	93°20' W, 63°16' N
NTS	55N/6
Location	70 km NW of Rankin Inlet

NDT Ventures can earn up to a 75% interest in the Fox claims over a five year period by completing \$1,125,000 in work, issuing 500,000 shares of NDT and paying out \$150,000 cash and one set of bagpipes.

The three Fox claims cover an area of amphibolitized mafic volcanic and lesser sedimentary rocks and basal ortho- and paragneiss. These are intruded by Trans-Hudson-age (ca. 1.84 Ga) granitic intrusions and are cut by regionally extensive east-west and northeast oriented structures. Mineralization occurs as thin, auriferous quartz veins in and near lean iron formation.

Complex prospected the property in 2001, collecting 76 grab samples over a 2.2 km strike length. The auriferous veins were found to be spatially restricted to the iron formation horizons and appear to be pre-deformational. Mineralized bands vary in width from less than 0.5 m to up to 20 m where thickened by folding. Twenty samples came back with over 5 g/t gold.

NDT Ventures Ltd. (The Northair Group) optioned the ground in May 2002 and explored this and the Amarok project soon after. A detailed airborne magnetic survey was flown and followed up by surface mapping and sampling. Encouraging values were encountered in four areas. Chip sampling of the Hinge Showing identified highly anomalous gold values over a 90 m strike length. Results include 3.4 m of 5.8 g/t gold and 2.2 m of 5.4 g/t gold. At the Far East Showing, located 1.5 km east of the Hinge Showing, channel sampling was completed over a 120 m exposed length of contorted quartz veining and iron formation. Results include 0.85 m assaying 7.79 g/t gold and 0.4 m of 3.30 g/t gold. At the Lakeshore Showing, located 800 m east of the Hinge Showing, chip sample results include 1 m of 4.35 g/t gold and 0.70 m of 3.11 g/t gold. Chip sampling of the fourth zone, the North Limb, returned 0.75 m of 3.94 g/t gold and 0.6 m of 1.18 g/t gold. Of the 91 samples taken from the four areas, 35 returned anomalous (> 0.15 g/t) gold values with a high of 12.77 g/t gold.

The geophysical interpretation indicates that across the contiguous Fox and Amarok properties, there are several linear, arcuate magnetic highs, the longest being 23 km. Several of the anomalies trend beyond the extent of the survey. Ground follow-up showed the magnetic highs to be largely due to the presence of iron formation.

Kazan Project	
Operator, Owners	Tri-Origin Exploration
Commodities	Copper, Gold
Coordinates	95° 30' W, 63° 45' N
NTS	55M/12-14
Location	70 km south of Baker Lake

Tri-Origin acquired Prospecting Permits 2400-2403 in 2001 to explore for Olympic Dam-style mineralization. BHP-Billiton optioned the ground and funded the 2001 program but has since dropped its option.

Most of the property is covered by arkose, conglomerate, siltstone, and mafic trachyte of the Proterozoic Baker Lake Basin, with later intrusion of the Martell syenite. The southern part of the property is underlain by Archean quartz monzonite and volcanic rocks of the Parker-McQuoid greenstone belt. Cu, Au, and U occurrences are associated with zones of brecciation and veining, with hematite, chlorite, siderite, and/or albite alteration.

Interest in the Bissett Lake area was first peaked by the potential for U deposits in the 1970s. Pan Ocean Oil, New Continental Oil, Esperanza Oil, Cominco, and Noranda were active in the early- to mid-1980s. Modest diamond exploration in the area in 1993 included the recovery of G-5 garnets, clinopyroxenes, and chrome-diopside from about ten till and esker samples. Exploration for Olympic Dam-style mineralization during the mid- to late-1990s has been conducted by several companies but little supporting documentation has been filed.

Tri-Origin began its work with a ~6,000 line-km, state of the art, combined airborne magnetic and gravimetric survey, followed by

ground-truthing and prospecting. Ninety-seven grab samples were collected. Findings support the hypothesis that these Cu, Au, Ag and U occurrences may represent peripheral parts of a large Cu and Au mineralization system.

In 2002, data compilation and final processing of airborne data was completed. This project has progressed to the drill stage.



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 are located within rocks of the Archean Woodburn Lake greenstone belt. Mineralization is hosted by interbedded iron formation and felsic to intermediate tuff, with subordinate orthoquartzite and ultramafic schist. The supracrustal package is folded into a northwest trending, isoclinal, recumbent anticline and is sandwiched between two large granitoid intrusions.

In 2002 Cumberland Resources entered into the feasibility stage with this project. Six gold deposits have now been defined: Goose Island, Third Portage, North Portage, Vault, Bay Zone and PDF. Also significant is this summer's discovery of the Connector Zone, situated between the Third Portage and North Portage deposits. The presence of this zone allows Cumberland to consider the economic and environmental viability of a super size open pit.

Economic studies were completed in January 2002 by consulting engineers MRDI Canada. From the five deposits

outlined at that time the project resources stood at: Measured and indicated — 7,775,000 t grading 5.79 g/t; inferred — 10,937,000 t grading 4.44 g/t. Combined total ounces thus stand at 3,008,000 ounces of gold. Utilizing a production rate of 246,000 oz/yr, with estimated total cash costs of \$US 168/oz and 85% of production from open pits, a mine lifespan of 8.3 years was estimated.

A \$6.5 million two-phase exploration program was undertaken in the spring and summer of 2002. The main objective was to boost the mineable resource number and thus bring a potential mine project to a ten year life span. The 16,000 m (in 142 drill holes) of diamond drilling performed this year brings the historical total to over 550 drill holes put down on the six deposits. Even so, Cumberland reports that only 30% of the property has been drill tested.

In addition to diamond drilling, a large overburden drilling campaign tested the region central to five of the deposits. From 411 holes, approximately 2600 samples were collected and analyzed.

Many highlights came out of the 2002 exploration efforts. The new Connector Zone is a near-surface zone with some spectacular high-grade gold. For example, from hole NP02-397, at a depth of 45m below surface, the drill encountered 44.75 g/t over 6.7 m. Included in that interval is a shorter segment of 175.60 g/t gold over 1.46 m. The Connector Zone will be an important new consideration in this feasibility study just underway.

The Vault Deposit resource has been expanded this year, with drill testing of the deeper portions. This evaluation has extended the deposit to 1000 m down dip. It remains an open deposit. Highlights include: 16.09 g/t over 4.9 m at a depth of 298 m below surface (VLT02-051); and (VLT02-048) at 175m below surface, results of 8.95 g/t over 2.75 m.

Infill drilling at the Vault was carried out this year in order to prepare for reserve definition and to outline some new shallow high-grade zones. Highlights of this drilling include: 11.57 g/t over 12.83 m at 40 m



below surface in VLT02-85 and 14.07 g/t over 10.55 m in VLT02-64.

Mineralization within the Vault Zone occurs as a northeast-trending, shallowly dipping zone of isoclinally folded quartz-sericite-carbonate-pyrite-altered volcanoclastic rocks. One proposal for Vault development is an open pit extending to 75 m deep and 480 m long.

In October 2002, Cumberland announced that the PDF gold occurrence has been designated a deposit and that it is still open in all directions. Originally discovered in 1999 by prospecting, samples taken at that stage outlined a 250 m long discontinuous mineralized trend of pyritic quartz veins and stringers within oxide-facies iron formation. In 2000 all of the six drill holes put into the PDF were mineralized and the best result was from PDF00-05 at 7.11 g/t over 2.55 m at 20 m below surface. In 2002 at least 18 diamond drill holes tested the PDF and highlights of analyses are starting to come in. From hole PDF02-11 there is 18.99 g/t over 4.10 m and from PDF02-16 18.82 g/t over 2.51 m. The drilling at PDF has extended the deposit from surface to a depth of 70 m (200m down dip). Cumberland reports that so far the PDF's geometry and mineralization controls are similar to the Vault, which is about 10 km to the south.

Additional work this year includes the completion of environmental baseline studies, in preparation for the mine development permitting process. Metallurgical and geotechnical studies that tie in to the feasibility analysis continue.

Meliadine West

Operator, Owners	WMC International (56%) Cumberland Resources (22%) Comaplex Minerals (22%)
Commodities	Gold
Coordinates	92° 11' W, 63° 01' N
NTS	55J/13, 55K/16, 55N/1
Location	30 km north of Rankin Inlet

In 2002 the Meliadine project saw no exploration activity. Refer to Nunavut Mining, Minerals Exploration and Geoscience Overview 2001 for details about the geology, Meliadine's deposits, and work summary.

WMC has placed its interest in the project up for sale, along with all the rest of its global gold holdings. As of early November 2002, no buyer had been identified for the Meliadine West project.

Noomut Project

Operator, Owners	Comaplex Minerals Placer Dome Inc.
Commodities	Gold
Coordinates	96.1°W, 61.4°N
NTS	65H/9,10,11,15,16
Location	175 km west of Arviat

Placer Dome entered into a joint venture agreement with Comaplex on the Noomut Au project this year. Placer can earn up to a 75% working interest by spending \$8 million over a five-year period.

Approximately \$1 million was spent exploring the 34-claim package during the summer of 2002. Surface geophysics and ~2,500 m of drilling was the intended focus for 2002 activities.

The salient geology consists of northeast and east-west structures cutting across green-schist volcanic and volcanoclastic rocks. Lode gold mineralization is found in quartz veins associated with these structures. Iron carbonate schist, pyrite and tourmaline are reportedly associated with the veins. Iron formation, gabbro and volcanic rocks are also playing host to mineralization.

There are several Au occurrences on this property, not the least of which is the Esker Gold Occurrence. Drilling from 1997 returned 2.35 g/t Au over 71 m, including 6.41 g/t over 6.5 m and 7.24 g/t over 5.0 m.

The Esker and Yandle occurrences were mapped in detail this year, and 782 m were drilled at Esker and 1468 m at Yandle. Visible Au is reported in five drill holes at the Yandle target. These holes were widely spaced on geophysical and geological targets. Assay results fresh from the field were unavailable as of November 1, 2002.

TrustMe Property/ Churchill Diamond Project

Operator, Owners	Northern Empire Minerals Ltd (35%); Shear Minerals (51%); Hunter Exploration Group (14%)
Commodities	Diamonds
Coordinates	91° 30' W, 63° 30' N
NTS	55N, O, J
Location	70 km north of Rankin Inlet

Northern Empire has optioned this property and, in consideration of 300,000 shares to Hunter Group and \$750,000 in exploration expenditures, is looking to earn a 36% interest in the TrustMe Property.

The TrustMe Property is situated within the Western Churchill Province and is underlain by rocks of the metamorphosed Archean Rankin Inlet Group and surrounding Archean gneisses. The Rankin Inlet Group comprises metamorphosed and deformed sequences of mafic and felsic volcanic rocks, sedimentary rocks, iron formation, gabbro and granite. The stratigraphy 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.

The area has been the focus of gold exploration since the fall of 1989 when gold mineralization was discovered at Meliadine Lake. The discovery led to subsequent exploration



Meadowbank
Suluk main zone

from 1990 to 1992 that outlined the "Discovery Zone" at the Meliadine Au deposit. The Meliadine trend is 75 km long and is host to resources estimated at 5.3 million ounces of gold.

Exploration for diamond-bearing intrusive rocks within the TrustMe area has been limited. Narrow kimberlite dykes, known as the Peter and K-L dykes, were intersected during drilling of the Meliadine gold deposit. Meliadine's Aya dyke is a ca. 1792 Ma ultramafic lamprophyre, whereas the Meliadine kimberlite dykes yield an age of ca. 192 to 214 Ma. Located 120 km northwest of Rankin Inlet is the Proterozoic Parker Lake UML dyke, or the Akluilak dyke. This dyke yields an age of ca. 1832 Ma and may represent a feeder dyke to the Proterozoic (ca. 1850 Ma) CIF volcanic rocks.

In 2001, exploration efforts led to the identification of diamond indicator minerals such as G10 subcalcic pyropes garnet, eclogitic garnets, chrome-diopsides, chromites and picro-ilmenites. The mineral chemistry is reportedly different from that of other kimberlite and lamprophyre rocks already found in the region. This suggests the possibility of a new local kimberlitic source.

On this and the surrounding Churchill Diamond Project (540,000 acres), the partners announced they are spending \$500,000 in 2002. A till sampling program saw the collection of 130 samples, and a detailed (75m spacing) airborne geophysical survey was flown. Ground follow-up during August 2002 resulted in the announcement of two occurrences of kimberlitic float approximately 15 km apart. Both discoveries came from the immediate vicinity of diamond indicator minerals from till samples.

Late in the summer magnetic surveys, prospecting and sampling continued.

Qikiqtani/Baffin Region



In the Qikiqtani region, both the Polaris and Nanisivik mines closed within a month-span at the end of August and September, respectively. The closure of these mines will result in significant economic impact on nearby communities. At this time there are no advanced exploration projects in the Qikiqtani region. Companies such as Noranda Inc. and Teck-Cominco have base metal exploration projects in the High Arctic (Ellesmere, Devon and Somerset islands), while BHP-Billiton/Falconbridge Inc. (the only active exploration reported this year) and Teck-Cominco have projects in the central Baffin region searching for Ni-Cu-PGE and Ag-Pb-Zn deposits.

The main focus of exploration in the Qikiqtani region is currently diamonds. The Brodeur Peninsula has been the main hub of diamond exploration with Twin Mining Corporation reporting encouraging results from the Freightrain kimberlite and increasing their land position on the peninsula. Kennecott Canada Exploration Inc. is the other big player on the Brodeur Peninsula with the Oz claims and other prospecting permits. De Beers Canada Exploration Inc has by far the largest land package on Baffin Island for diamond exploration with 131 prospecting permits (8,043,661 acres) in the north central area of the island. In other areas of the Qikiqtani region, Northern Empire Minerals and Stornoway Ventures Ltd jointly hold the Aviat North and South properties on the Melville Peninsula and have reported favourable indicator minerals from till sampling and a dyke-like body that may be kimberlitic. BHP-Billiton also holds prospecting permits on the Melville Peninsula close to Repulse Bay and is involved with reconnaissance diamond exploration in that area. Navigator Exploration holds prospecting permits over the western third of Akimiski Island 20 km east of Attawapiskat, Ontario and has flown high-resolution magnetic surveys over the property.

Aviat Project

Operator, Owners	Northern Empire Minerals Stornoway Ventures Ltd
Commodities	Diamonds
Coordinates	Aviat North: 69°30' N 83°20'E Aviat South: 67°25' N 83°15'E
NTS	Aviat North: 47D/4-6 and 47C/1, 8 Aviat South: 46O/5-7, 10-12, 58D/1,8
Location	Aviat North: 30 Km west of Igloolik Aviat South: 90 Km south west of Hall Beach

The Aviat project consists of two properties totaling approximately 1.3 million acres, Aviat North and Aviat South, located on the Melville Peninsula. Aviat North lies 30 km west of Igloolik and consists of 10 prospecting permits and 54 mineral claims. The Aviat South property lies 90 km south southwest of Hall Beach and is comprises 12 prospecting permits.

The area of the Aviat properties has been explored by Noranda Inc in the mid 1970s for uranium and in the mid 1980s by Borealis Exploration Ltd for gold, silver and iron. The properties lie within the Western Churchill Structural province and are underlain by Ordovician to Cambrian limestones that are, in turn, underlain by the Penryhn Group and Archean basement.

The prospecting permits were acquired as a result of favourable diamond indicator minerals obtained from a regional prospecting program. A detailed till sampling program (~ 400 samples) and prospecting was carried out this summer under the supervision of Apex Geoscience of Edmonton. Northern Empire Minerals Ltd reported that "one dyke-like, potentially kimberlitic body was found at Aviat." At the November 1, 2002 cut-off, no further results were available.



Baffin Island Project

Operator, Owners	De Beers Canada Exploration Inc.
Commodities	Diamonds
Coordinates	80° W, 70°30' N
NTS	47E, 47H, 37C, 37H, 37F, 37G
Location	150 Km north of Igloolik.

Mineral exploration in this area of Baffin Island has been limited and sporadic. In the mid-1960s, the Baffinland Iron Mine was established in the area near the Mary's River. In 1991, Nanisivik Mines Ltd carried out a drilling program for Au and base metals on a property adjacent to the Baffinland Iron Mine.

In 2000, De Beers Canada Exploration Inc. performed reconnaissance soil sampling on Baffin Island, leading De Beers Canada Exploration Inc to apply for, and receive, 131 prospecting permits covering 8,043,661 acres around Steensby Inlet on northern Baffin Island.

The 2002 program consisted primarily of reconnaissance and follow-up till sampling and surficial mapping. A 24-person camp was established and a total of 4915 till and stream sediment samples were collected on the property.

An airborne geophysical survey, exploration drilling and detailed follow up till sampling program is planned for 2003.

Jackson Inlet

Operator, Owners	Twin Mining Corporation
Commodities	Diamonds
Coordinates	88° 16' W, 73° 15' N
NTS	58D/1,8
Location	120 km west of Nanisivik

Twin Mining Corporation's Jackson Inlet property covers 111 claims (82,640 acres) on the Brodeur Peninsula of Baffin Island. Thirty-two new claims were added in 2002. One kimberlite outcrop was known on the claim block prior to Twin's acquisition of the claims. The area is underlain primarily by Cambrian and Ordovician sedimentary rocks and Silurian limestone.

Diamond exploration on Baffin dates back to the early 1970s, when Cominco and Diapros uncovered kimberlites on both the Brodeur Peninsula and on Somerset Island to the west. A second phase of exploration began shortly after the diamond rush in NWT in the early 1990s, with Lumina Investment and Cyclone Capital conducting work on north Baffin.

Twin Mining Corporation acquired the property from privately-held Helix Resources in June of 2000. During a technical due diligence program, a 94.5 kg sample from a previously known (but unspecified) kimberlite was found to contain 40 microdiamonds and two macrodiamonds. Further prospecting and magnetic surveying began in the summer. Over a dozen new kimberlite occurrences were reported, four of which were trenched. Sample results included 0.196 carats from 887 kg of fresh and weathered kimberlite from Pipe 1. Pipe 2 yielded 1.049 carats from 560 kg of material, and 195 kg from Pipe 3 contained 0.156 carats.

Twin Mining Corporation undertook a large program in 2001, including extensive geophysical surveys. In addition, 17 diamond drill holes, the collection of 87 soil samples and surficial geological mapping were completed on ten claims. The work demonstrated that the occurrences were part of a single large kimberlite: the Freightrain.

A mini-bulk sample of 228 tonnes of dry kimberlite was excavated from 6 separate pits on the Freightrain pipe. Results from the bulk sample were encouraging, with 46.208 carats (869 diamonds at +0.85 mm) of white, transparent diamonds recovered and 4.376 carats of yellow, amber and pink transparent stones. The largest diamond recovered was 1.557 carats, white, transparent and of gem quality. Twin Mining reports a modelled grade based on the mini bulk sample of up to 0.5 ct/tonne. A vertical core drill hole drilled between pits JI-1 and JI-2 indicated that results from the pits are reproducible to depths of 206 m for the Freightrain pipe.

Twin Mining is encouraged by the high quality of diamonds extracted. The Freightrain pipe has yielded to date mainly gem quality,

resorbed diamonds without boarts, rejections, coated and cubes. Diamond Trading N.V. of Antwerp, Belgium stated that "the diamonds are similar to high-quality South African Diamonds".

Diamond extraction from a 924.72 kg sample from Cargo 1 yielded 180 micro diamonds and 43 macro diamonds (> 0.5 mm in one dimension) and indicates continuity and reproducibility of diamond distribution to a depth of 150 m. Soil sampling at Ano 8 resulted in the discovery of diamond indicator minerals.

During the 2002 field season Twin Mining Corporation continued working on its Jackson Inlet properties. No results were available as of November 1, 2002.



Main ore zone,
Nanisivik

Nanisivik

Operator, Owners	Canzinc
Commodities	Zinc, Silver
Coordinates	84° 25' W, 73° 03' N
NTS	48C/01
Location	Borden Peninsula, Baffin Island

Characteristics of the Nanisivik ore body, its geology and history are summarized in the Nunavut Mining, Mineral Exploration and Geoscience Overview 2001.

Nanisivik mine produced 516,544 tonnes of ore at a grade of 10.0% Zn and 42 g/t Ag to the end of September, 2002. In the first half of the year, the Zn grade increased 4% to 10.4% and the Ag grade increased 18 g/t to 44 g/t from the same period last year. This was due to the mining of high-grade pillars and the use of the DMS (Dense Media Separation) plant. The Nanisivik Mine ceased operations on September 30, 2002 due to low metal prices.



Core retrieval, Nanisivik

Oz Series Claims and Prospecting Permits

Operator, Owners	Kennecott Canada Exploration
Commodities	Diamonds
Coordinates	87° 00' W, 73° 08' N
NTS	48C/4,5,6,11, 58D/8,
Location	110 km west of Nanisivik

The Kennecott claims are found in seven blocks located east-southeast to north-northwest of Nanisivik, on the Brodeur Peninsula. Some of the blocks are adjacent to Twin Mining's ground. The area is underlain primarily by Cambrian and Ordovician sedimentary rocks and Silurian limestone.

Exploration interest in the area began in the 1970s, waned, rose again after the early 1990s diamond rush in the N.W.T., and subsequently waned again. VEC Consulting, as Lumina Resources, discovered the Zulu kimberlite in 1994, renamed Freightrain by Twin Mining after acquiring the Freightrain and Slot claims from Fred Tartanic. They then began exploration work in March 2000. At that time Kennecott was in negotiations with VEC to acquire exploration results and prospecting permits held by VEC. Kennecott applied for, and received, an additional eight prospecting permits distributed throughout the peninsula. Later Kennecott increased its holding by staking 57 claims in the summer of 2001. In January 2002, Kennecott again increased their land holdings on the Brodeur Peninsula by applying for and receiving a further six

prospecting permits ~30 km northwest of their Oz claims. Kennecott staked additional ground in the summer of 2002.

During the 2002 field season, Kennecott Canada Exploration collected approximately 300 till samples, 25 stream sediment samples and two rock samples. On their Brodeur Peninsula properties, Kennecott also conducted a 7000-line km airborne magnetic survey and ground magnetic surveys on four grids for a total of ~25-line km.

Piling Project

Operator, Owners	BHP Billiton
Commodities	Lead, Silver, Zinc, Gold
Coordinates	73° 00' W, 68° 38' N
NTS	37A/9,10, 27B
Location	250 km southwest of Clyde River

BHP Billiton (BHPB) is exploring Prospecting Permits 2329-2331 & 2566-2581 and ten NTI Exploration Agreements that cover the southern margin of the Piling Group on central Baffin Island. Through a joint venture with Falconbridge, BHPB can earn a base metal interest in Prospecting Permits 2361-2383.

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 stretching from Melville Peninsula to the west coast of Greenland. The southern margin of the Piling Group comprises a diverse lower package of siliciclastic rocks, 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.

Previous exploration in the south Piling area 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 (1976, 1991 & 2001) and Noranda in 1993. The Geological Survey of Canada and the Canada-Nunavut Geoscience Office are

wrapping up a three-year partnered project in the area.

In 2001 BHPB mounted a work program consisting of regional till sampling, geological mapping and gossan prospecting. In total 610 till samples, 212 rock-chip samples, 65 soil samples were collected for analysis. BHPB and Falconbridge also jointly participated in an airborne hyperspectral survey. During 2002 BHPB flew a 3500-line km Geotem survey. Targets generated from the airborne datasets were mapped and prospected in detail. Some 584 rock-chips and 164 till samples were collected. On one target, 12-line km of ground gravity was surveyed.

Polaris

Operator, Owners	Teck-Cominco Ltd
Commodities	Zinc, Lead
Coordinates	96° 56' W, 75° 23' N
NTS	68H/8
Location	100 km north-northwest of Resolute, on Little Cornwallis Island

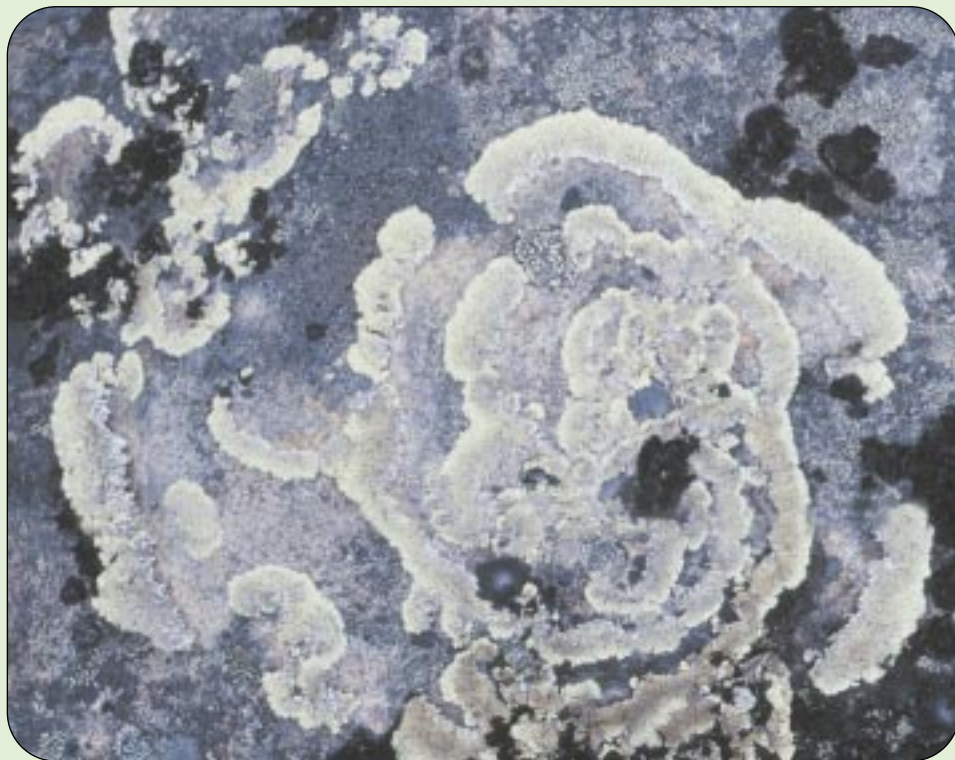


Polaris Ore

For a description of the geology and exploration history of the Polaris deposit, see the Nunavut Mining, Mineral Exploration and Geoscience Overview 2001.

In 2001, production amounted to 1.019 Mt grading 12.4% zinc and 3.3% lead which was marginally less than the production for 2000.

Production in the third quarter was lower than a year ago as the mine shut down on September 4, 2002 after exhausting its ore reserves and having produced 2.6 Mt of Zn and 666,000 t of Pb concentrates over a 20-year mine life. At the end of the third quarter, inventory on hand was 75,000 t of Zn in



Sunburst lichen

concentrate that will be sold from October to May 2003.

Teck-Cominco, SNC-Lavalin Engineers and Constructors Inc. began work on the decommissioning and reclamation of the Polaris Mine. Work began in early September of 2002 and is scheduled to be completed in October of 2004. Total value of the contract is \$32 million. Tower Arctic Ltd, Equipments Industriels Robert Itée and Qikitaaluk Corporation have been hired as subcontractors for decommissioning of the mine.

Repulse Bay Reconnaissance

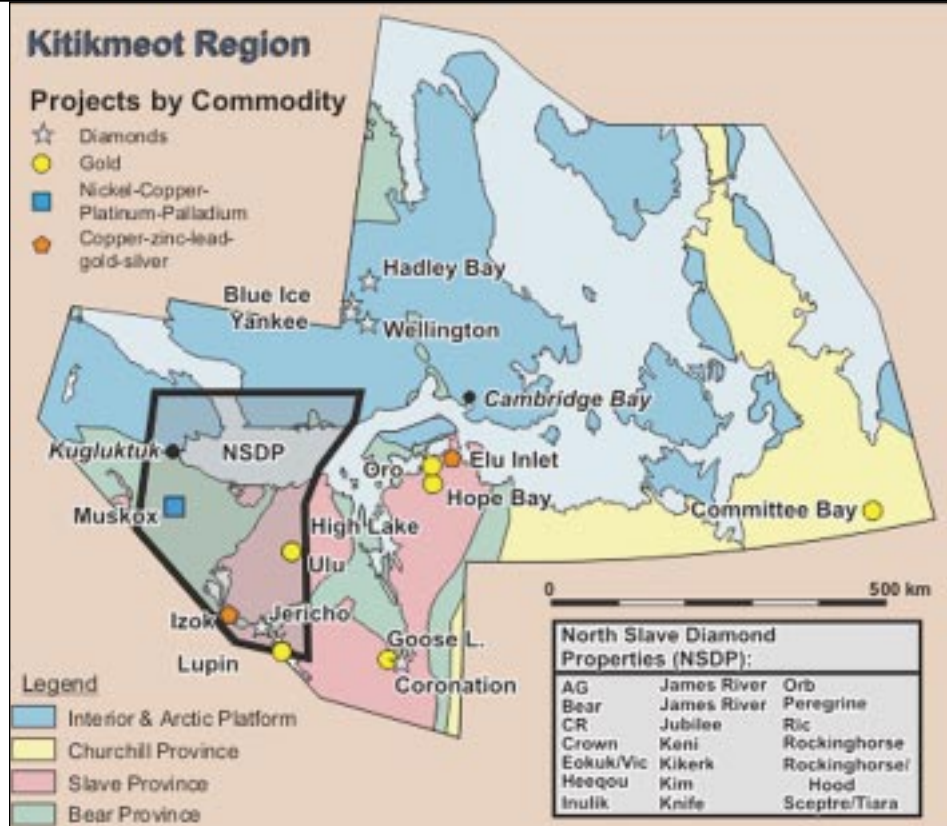
Operator, Owners	BHP - Billiton
Commodities	Diamonds
Coordinates	87° W, 67° N
NTS	46K, L, M, N
Location	50 Km from Repulse Bay

BHP - Billiton's Repulse Bay property is located at the southern end of the Melville Peninsula and consists of 405 claims

(1,041,832 acres). A small portion of these claims lies in the Kivalliq region. The Repulse Bay Property is underlain by the Prince Albert Group and Archean granitoid rocks of the Western Churchill province. The Archean basement is unconformably overlain by northeast - southwest trending belts of the Aphebian Penrhyn Group. In the western part of the peninsula the basement is overlain by the Folster Lake Formation. During the Helikian or Hadrynian (1100 - 700 Ma) the crust in the region was fractured and faulted forming vertical northeast-southwest trending lineaments. By the middle to late Ordovician the region was blanketed by carbonate sediments.

In the summer of 2002, 1000 till samples were collected and an airborne magnetic survey was conducted. No other work or results were reported as of November 1, 2002.

Kitikmeot Region



The Kitikmeot region spans the western and northern mainland, 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 camps in the area; Yellowknife, to the south, is also an important logistical center.

The Kitikmeot is geologically diverse. 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. Inliers of the Paleoproterozoic rocks are also found on Victoria Island, overlain by the Paleozoic Arctic Platform sedimentary rocks that cover most of the islands. The Paleoproterozoic Thelon Orogen (ca. 1900 Ma) separates the Slave Province from the easterly, Archean to Paleoproterozoic Western Churchill Province, which underlies most of the northern mainland.

The small mines at Roberts Bay, Ida Bay, and Ida Point, south of Elu Inlet, are the only

past producers in the region. The Lupin gold mine is active, having produced over 3.1 million ounces of gold since 1982. Mining has been proposed at the nearby Jericho diamond project; the project is in the initial stages of regulatory review. The Doris Hinge gold project is also at the feasibility stage and owner Miramar Mining Corp has begun the needed regulatory reviews.

Traditional exploration targets have included massive sulphide-hosted base metals and lode and iron formation gold in the Slave. Extensive nickel-copper exploration has taken place at the ca. 1.27 Ga Muskox Intrusion, along with vein-type copper and sedimentary-hosted massive sulphides. Recent diamond exploration has covered virtually the entire western mainland and parts of Victoria and Somerset islands.

Diamonds and gold were the two primary commodities sought by companies in the Kitikmeot this year. Nonetheless, base metal exploration at High Lake and Elu Inlet has advanced these VMS projects. Nickel-copper-

platinum mineralization programs around the Muskox intrusion did produce some encouraging results as well.

The Kitikmeot region saw an overall increase in recorded mineral claims of approximately 425 compared to 2001 levels. Also, total acreage staked increased over one million acres during the same time period. This dramatic increase in grassroots exploration is attributed to a staking rush in the Coronation Gulf region that resulted from favourable diamond counts in newly discovered kimberlite bodies.

In August 2001, INAC committed \$3 million towards a feasibility study and associated environmental assessment evaluation to lay the framework for construction of a 295-km all-weather road extending from the Izok Lake zinc-copper deposit to a proposed deep-water port at Bathurst Inlet. The Government of Nunavut and the private sector have contributed a further \$1.5 million each. Studies have shown the project is feasible. The project is directed by a Technical Committee consisting of representatives from Kitikmeot Corporation, Inmet Mining, the Inuit-owned Nuna Logistics Corporation, the Community of Kugluktuk and the Department of Sustainable Development and Department of Community Transportation of the Government of Nunavut.

This infrastructure will facilitate access to Inmet's Izok Lake base metal deposit, which contains a mineable resource of 16.5 million tonnes grading 11.4% zinc, 2.2% copper, 1.1% lead, and 60 g/t silver worth approximately CDN \$2 billion. Other known deposits such as Teck-Cominco's Hackett River Deposit (19.5 million tonnes grading 5.0% zinc, 0.41% copper, 0.75% lead, 145 g/t silver and 0.45 g/t gold) will also benefit from the road and port. Upon development, the infrastructure is expected to focus future exploration to this region.

Bear

Operator, Owners	Navigator Exploration (earning 70%), Northern Empire Minerals (30%)
Commodities	Diamonds
Coordinates	112° 35' W, 67° 00' N
NTS	86I/15; 86P/1, 2, 7, 8
Location	140 km SE of Kugluktuk

The Bear property has an area of about 55,000 acres and was staked in late 2001. Stormoway Ventures can earn 50% of Navigator's 70% interest in the property. Bear is located on the edge of the Bear structural province and is overlain mostly by Epworth Group carbonate and clastic sedimentary rocks.

BHP prospected for shear-hosted gold occurrences in 86P/1 from 1990 to 1994. Monopros (now De Beers) and Caledonia Mining began exploring for diamonds in 1995.

A heliborne magnetic and EM survey was completed in April of 2002. Twenty-three high-priority targets were interpreted from the data. Prospecting and the collection of approximately 150 till samples began in the summer.

Blue Ice

Operator, Owners	Diamonds North Resources
Commodities	Diamonds
Coordinates	110° 00' W, 70° 36' N
NTS	77F/6, 7, 10, 11, 14, 15; 77G/2, 3
Location	330 km NW of Cambridge Bay

The Blue Ice project covers over 200,000 acres and straddles the Nunavut/NWT border. It is one of several diamond projects on Victoria Island that were transferred to Diamonds North from Commander Resources (formerly Major General Resources) in return for 9.9% of the company. The property includes portions of the former Tahoe Lake project, a joint venture between Major General and Dia Met Minerals, which was later acquired by BHP-Billiton.

The property's geology consists of an Ordovician age carbonate platform overlying

the Proterozoic Shaler Group shale and Elice Formation sandstone. Diabase dykes cut the Proterozoic rocks but not the platform. To date, 16 kimberlites have been reported on the island, 14 of which are diamondiferous. Kimberlite dykes totalling 25 km in length have been inferred from geophysics and limited drilling.

Prior to the discovery of diamonds in the north, exploration in this area was limited to uranium prospecting by Uranerz in 1977. Monopros (now De Beers) began exploring the project area in 1994, with a drilling program in 1997 that discovered the Sand Piper, Snow Bunting, Snow Goose, and Gosling kimberlites (the latter two located in the NWT). Major General acquired ground adjacent to Monopros in 1999 and optioned the property to Dia Met Minerals. Dia Met undertook till sampling before being acquired by BHP Billiton. De Beers and BHP-Billiton subsequently left the area, leaving Major General's successor, Diamonds North, with a 100% interest in what is now the Blue Ice property by early 2002.

Diamonds North limited its 2002 work to that part of the property within Nunavut. A 20 km long, northwest trending structure,

the Galaxy Trend, was identified. Three new kimberlite occurrences, Carina, Vega and Virgo, were encountered during drilling, while three more, Pegasus, Sculptor, and Zeta, were found by prospecting. A total of 92.41 kg, representing two phases of the Carina kimberlite, were sent for caustic fusion and returned 86 diamonds, including one exceeding 1 mm in two dimensions. Core from two holes into the previously known Sand Piper kimberlite returned 118 diamonds (12 exceeding 1 mm in one direction) from 6.49 kg and 17 diamonds from 31.74 kg.

Committee Bay Project

Operator, Owners	Committee Bay Resources
Commodities	Gold
Coordinates	Centred on 92° W 66°30' N
NTS	Parts of 56K/J
Location	Wolf Lake, Hayes River

The Committee Bay Greenstone Belt is a 300 km long, northeast trending, discontinuous package of Archean supracrustal rocks located in the Rae domain of the Western Churchill Structural Province. Rock types include komatiitic to

Thule House



basaltic volcanic rocks, intermediate to felsic volcanic rocks and abundant banded-iron-formation. Early geological mapping in the region in the 1960s by the GSC has recently been upgraded by a three-year multidisciplinary mapping initiative coordinated by the C-NGO.

Gold exploration in the region has occurred sporadically since the early 1990s, mostly by Apex Geoscience Ltd. Committee Bay Resources Limited was spawned from Apex's management team and started trading publicly in July, 2001. Apex spent over \$6 million during this time on geological mapping, prospecting, geophysics and drilling. Committee Bay's current land holdings in the belt include 169,000 acres covering over 40 known gold showings. Gold mineralization in the belt is generally closely associated with sulphidized banded-iron-formation. Sulphides tend to occur along the margins of quartz veins, within chlorite-epidote-amphibole alteration zones. Pyrite and pyrrhotite are the dominant sulphide minerals and occur as fine-grained disseminations. Arsenopyrite is locally present.

Exploration in 2002 consisted of rock and till sampling and geological mapping at the Wolf Lake West, Wolf Lake East and Hayes River properties, located in the southwest portion of the greenstone belt. Significant gold showings are known in these regions.

Coronation

Operator, Owners	First Narrows Resources, Shear Minerals
Commodities	Diamonds
Coordinates	106° 30' W, 65° 50' N
NTS	76G/9, 10, 13-16; 76J/4
Location	130 km SE of Bathurst Inlet

The Coronation property consists of 58 claims in three non-contiguous claim groups, totalling 79,500 acres. Shear acquired the properties in 1997. First Narrows can earn up to 80% by spending \$1,000,000 and issuing up to 700,000 shares to Shear by the end of 2004.

Most of the property is underlain by Archean granitoids and gneissic rocks. Felsic volcanic and sedimentary rocks of the

Yellowknife Supergroup occur in the western claim block, and Proterozoic sedimentary rocks occur over part of the eastern claim group.

The discovery of massive sulphide deposits in the nearby Hackett River area in the early 1970s led to exploration for the same by Cominco in 1975. Nine years later, interest in auriferous iron formations in the George Lake area led to considerable work that continues to this day. Very little diamond exploration, and no discoveries, was reported prior to Shear's acquisition of the claims.

Shear's work on the property began in 1998 with the collection of 162 till and eight stream sediment samples. A further 78 samples were collected over 15 selected targets in 2000; 21 samples at eight targets contained anomalous indicator mineral counts.

First Narrows completed ground-based geophysical surveys over these eight targets in the spring of 2002; four of the targets are considered to be high priority for future drilling. Mapping, sampling, and additional till sampling began in the fall with results expected in the early new year.

CR

Operator, Owners	Shear Minerals, Earth Star Diamond, 4763 NWT Ltd
Commodities	Diamonds
Coordinates	114° 40' W, 66° 36' N
NTS	86J/9, 10
Location	135 km S of Kugluktuk

The CR property was staked in early 2002 and has an area of 129,332 acres. Shear and Earth Star Diamond can each earn 35% in the property.

The property is located in the Bear structural province, just east of the Muskox layered intrusion. The claims are primarily underlain by Proterozoic clastic and carbonate sedimentary rocks of the Recluse and Epworth groups, with lesser volumes of Akaitcho Group metabasalt. A number of Mackenzie diabase dykes cross the property.

Between 1978 and 1982, BP Minerals and Uranerz explored the area for its uranium potential. Otherwise, there has been little

exploration reported here.

The first year of work saw pre-existing geophysical data reviewed, with 13 anomalies selected for examination. The anomalies and two northeast-trending structures were prospected, and 12 samples were collected for analysis.

Crown, Jewel, Marquis, Princess

Operator, Owners	Northern Empire Minerals, Stornoway Ventures, Navigator Exploration
Commodities	Diamonds
Coordinates	113° 30' W, 67° 38' N
NTS	86O/1, 8, 9; 86P/4, 5, 7-12
Location	65 km ESE of Kugluktuk

These four properties cover 550,000 acres staked during the winter of 2001/2002. Stornoway can earn up to a 70% interest in all four projects from Northern Empire. Navigator has the right to earn a 35% interest from Stornoway on the Jewel project only.

Archean rocks of the Eokuk Uplift core the property, with granitoids and minor supracrustal rocks underlying the eastern part of Jewel and northwestern half of Crown. Proterozoic Epworth Group sediments dominate the remainder of Crown and most of the Princess block. Proterozoic Rae Group sedimentary rocks occupy most of the Marquis block, with minor Coppermine River Group basalt and Epworth and Recluse groups. Late Proterozoic Morel Sills occur over large parts of the Jewel and Crown blocks, particularly near the coast.

Uranerz Exploration and Mining examined the region's uranium potential in 1979 and 1980. Westsun Resources and Echo Bay Mines investigated silver and gold occurrences along the coast in 1984 and 1985. The southern part of this area was explored by Noranda and Rhonda for Pb-Zn in the mid-1990s, while Caledonia Mining looked for diamonds in the north.

Initial exploration on the property included the collection of approximately 1150 till samples. A large airborne magnetic survey

totalling 26,000 line-km was completed across the project area. Six high priority targets were identified at Princess, 23 at Marquis, 27 at Jewel, and 89 at Crown for a total of 145.

Elu Inlet

Operator, Owners	Sherwood Mining Corporation
Commodities	Base metals, Gold
Coordinates	105° 45' W, 68° 20' N
NTS	77A/2,3,7,10
Location	90 km southwest of Cambridge Bay

The Elu property consists of 110,000 acres located northeast of the Hope Bay greenstone belt. The belt consists of felsic and mafic volcanic rocks with subordinate sedimentary rocks. A major north-trending, iron- carbonate-altered shear zone cuts the belt and is considered analogous to the Hope Bay belt. A mafic plutonic complex separates the two belts but it is thought that the two belts may be related.

Little exploration work has been reported in the belt apart from prospecting. The Hope Bay Joint Venture prospected the area in 2000. In 2001 the joint venture sold the property to Sherwood Petroleum (now Sherwood Mining Corporation) for a total of ten million units (one share, one warrant) in the company. The joint venture conducted exploration on Sherwood's behalf. Sulphide-bearing gossans were discovered along a 12 km long zone in felsic volcanic rocks, including massive and semi-massive sulphides in two locations eight km apart. The more northerly Peninsula showing yielded grab samples of up to 10.3% copper, 5.2 g/t gold, and 150 g/t silver, but subsequent channel samples in trenches returned maximum values of 0.51% copper over two metres, and up to 0.34 g/t gold and 28 g/t silver. Channel samples from the southerly Elu 1 showing assayed 0.45% copper over a m and 0.23% copper over four metres. A second trend of felsic volcanic rocks to the east was found to host anomalous copper occurrences as well.

In 2002, Sherwood focused its exploration efforts on determining the VMS potential of the Elu belt. They completed ground geophysics

and drilled 1,755 metres in 15 diamond drill holes. Drilling tested two parallel, linear trending belts of felsic volcanic dominated stratigraphy, located 4.5 km apart. The easterly trend showed the best potential for VMS-type mineralization, in the area of the Fox and Grizzly showing areas. Results include, 1.6% Zn, 0.14% Pb, 0.09% Cu over 1.8 metres (hole 02elu5) and 1.4% Zn, 0.05% Pb and 1.3% Cu over 0.4 metres (hole 02elu15).

Eokuk and Vic

Operator, Owners	Ashton Mining of Canada, Pure Gold Resources
Commodities	Diamonds
Coordinates	113° 15' W, 67° 15' N
NTS	86P/2, 3, 6, 7, 11
Location	100 km SE of Kugluktuk

The Vic property consists of about 140,000 acres, while the Eokuk property spans approximately 45,000 acres. They were staked to the west and east, respectively, of the Kim property by Ashton in the summer of 2001. The exact distribution of interests in the property may be a part of ongoing litigation between Ashton and Pure Gold.

The two properties are situated on the eastern edge of the Bear structural province. Clastic and carbonate sediments of the Proterozoic Epworth and Recluse groups overlie most of the claims.

Prior to the staking rush of 1991-93, exploration in the area was limited to silver and gold prospecting by Westsun Petroleum in 1984. Monopros (now De Beers) began diamond exploration in the area in 1993, eventually discovering the Kikerk-1 kimberlite on what is now the Vic property. Caledonia Mining's exploration in the area did not produce any kimberlite discoveries.

Ashton began till sampling on the properties in 2001. In 2002, the company operated a program of prospecting and till sampling along previously identified anomalies as well as part of property-wide reconnaissance studies.

George Lake/Goose Lake

Operator, Owners	Kinross Gold Corporation
Commodities	Gold
Coordinates	107° 26' W, 63° 56' N
NTS	76G/13
Location	100 km south of Bathurst Inlet

The area is underlain by greywacke with units of iron formation. Granitic intrusions and thin quartz-feldspar porphyry dykes are locally present. The rocks are folded along north-northwest and northeast trends, and faults cut the property along northwest and north-east trends. Mineralization occurs in close association with iron formation and seems specifically localized at the intersection of thickened iron formation and late folds, faults, and dykes. Gold is found in free form along with pyrite, pyrrhotite, and arsenopyrite.

Gold exploration in the George Lake area began in 1982 with the formation of the George Lake and Back River joint ventures consisting of Homestake Mining, Kerr-McGee Corporation, and the Mac Lab Group. Drilling at George Lake began in 1985, and continued to 1994. Arauco Resources purchased the property in 1996, conducting a major drilling program in 1997. Later that same year, Arauco changed its name to Kit Resources.

The property remained idle until 1999, when Kit was merged into Wheaton River Minerals. Kinross acquired the option to earn a 70% interest by spending \$20 million before November 2004. The new joint venture began exploration with a limited field program in 1999. In 2000, Kinross completed a 40-hole, 11,000 m diamond drill program on the Goose Lake deposit, increasing its resource to 3.897 Mt at 12.51 g/t gold, or 1.567 million ounces. Total indicated and inferred resources at the project stood at 7.806 Mt grading 11.25 g/t, for 2.8 million ounces.

In 2001, Kinross completed a 38-hole, 10,000 m drill program, again focussed on the Goose Lake deposit. Some reported intersections included 7.0 metres grading 38.6 g/t gold (Hole 01GO-59) and 17.45

metres of 11.8 g/t (01GO-65). The deposit has been outlined over a 600 m strike length and to depths of 300 metres, but remains open. Fifty-six grab samples, 450 till samples, and 200 bedrock channel samples were collected. In September of 2001, Wheaton River Minerals Ltd announced it had signed a Letter of Intent to sell its George Lake Project to Kinross Gold Corporation in return for four million shares.

In 2002, a spring/summer drill program totaling 5,734 metres was completed in 26 holes. Drilling was focused on the Goose Lake deposit and significant intersections include, 23.68 g/t Au over 5.45 metres (hole 02GO-07), 25.77 g/t Au over 4.0 metres (hole 02GO-14) and 23.89 g/t Au over 3.7 metres (hole 02GO-21).

Both the George and Goose Lake deposits are on Subsurface IOL, subject to grandfathered mineral claims and leases.

A proposed merger between Kinross Gold Corporation, TVX Gold Inc and Echo Bay Mines Ltd was announced and, if approved would consolidate several significant gold projects in the northern Slave Province, including Goose-George Lakes, Lupin Mine and Ulu.

Hadley Bay

Operator, Owners	Diamonds North Resources, Canabrava Diamond Corporation (earning 50%)
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Commodities	Diamonds
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Coordinates	108° 30' W, 71° 00' N
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NTS	77E/12, 13; 77F/9, 10, 15, 16; 77G/1, 2, 7, 8, 10; 77H/4, 5
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Location	250 km NW of Cambridge Bay
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The Hadley Bay property consists of a number of non-contiguous claims in an area of 11,970 square kms. Canabrava can earn a 50% interest by spending \$5 million and issuing 250,000 shares to Diamonds North over a four-year period.

The property's geology consists of an Ordovician age carbonate platform overlying the Proterozoic Shaler Group shale and Elice Formation sandstone. Diabase dykes cut the Proterozoic rocks but not the platform. One

kimberlite dyke has been identified on the property to date.

Uranerz mounted the first significant exploration program in this region, looking for uranium in 1977. Monopros (now De Beers) began exploring the area in 1993, with WMC International examining the area for its base metal potential at the same time. In 1997, Monopros began drilling magnetic anomalies, and discovered the Jaeger, Turnstone, and King Eider kimberlites. The following year resulted in two more discoveries, Pintail and Sanderling, but Monopros terminated its work on Victoria Island in 2000. Major General Resources subsequently acquired the claims, and by 2002, over 50 prospective targets had been identified.

A 13 hole, 1100 m drill program completed this summer encountered five new kimberlites. A cluster of four new bodies, named Apollo, Neptune, Diana, and Pluto, were found, and a fifth, Juno, was discovered near the King Eider kimberlite. Two holes were completed on King Eider, with three new phases being encountered. A sample was also collected from subcrop of the Turnstone kimberlite for caustic fusion.

A 2,600 line-km heliborne geophysical survey was completed in late August and early September over a prospective part of the property.

High Lake

Operator, Owners	Wolfden Resources
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Commodities	Copper, Zinc, Gold, Silver
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Coordinates	110° 51' W, 67° 23' N
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NTS	76M/7
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Location	175 km ESE of Kugluktuk
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The High Lake property is underlain by north-trending Archean basaltic to rhyolitic flows and fragmented volcanic rocks in the northern part of the High Lake greenstone belt. Less voluminous argillite and greywacke form the easternmost portion of the property. Late Archean plutonic rocks intrude the supracrustal rocks in the western part of the property and Proterozoic diabase dykes intrude all units.

Mineralization on the property is primarily related to volcanogenic processes, with minor remobilization due to later igneous and structural processes. Numerous gossans host copper-zinc-gold-silver mineralization, including the A-B and D zones. The former consists of stringers and massive lenses of chalcopyrite, pyrite, pyrrhotite, sphalerite, and magnetite, while the latter consists primarily of sphalerite, pyrite, and minor chalcopyrite.

The deposit was discovered in 1955 by Kennarctic Explorations. Drilling took place between 1956 and 1959, with resource calculations following considerably later in 1973. The deposit remained idle until Kennco Explorations Canada (same company, different name) completed limited geophysical and geochemical work on the property in 1991. Aber Resources acquired an option to earn up to 60% in 1993 and completed several thousand metres of drilling. Wolfden signed a letter of intent to acquire the property in 2000 and completed the deal in April 2001. Wolfden applied for, and received, an NTI Exploration Agreement for open Subsurface IOL adjacent to the existing property.

In 2001, re-evaluation of previous drill hole data indicates that mineralization occurs beneath a synvolcanic sill, previously believed to truncate the ore zone at depth. The program therefore extended B-zone (or main ore zone) mineralization down-dip and indicates that mineralization is open at depth. Wolfden completed 16 holes totaling 3148 metres, all testing the A-B zone except for a single hole on the D zone. Two notable intersections were 14.35 metres at 12.53% copper, 0.44% zinc, 0.78 g/t gold, and 40.01 g/t silver in HLW-01, and 80.60 metres of 5.75% copper, 0.2% zinc, 0.74 g/t gold, and 26.39 g/t silver in HLW-03. Interpretation of magnetic data suggests the presence of several "feeder" pipes on the property. One pipe is associated with surface mineralization that has returned copper values of up to 6.38%. Combined historical resources for the deposit, outlined by 1993 are 5.3 million tonnes grading 4.05% copper, 2.36% zinc, 1.76 g/t gold and 31.73 g/t silver in three zones.

In 2002, Wolfden completed a \$2 million exploration program consisting of drilling and airborne geophysics. Drilling on the high-grade B-Zone intersected 5.6% Cu and 47.5 g/t Ag over 17.45 metres hole HLW-02-13). Additional drilling from the D-Zone includes results of 1.8 %Cu, 1.9% Zn, 0.5 g/t Au and 45.2 g/t Ag over 5.3 metres (hole HLW-02-14).

In July, Wolfden announced an agreement with Teck-Cominco Limited, whereby Teck-Cominco agreed to subscribe for \$1 million in Wolfden common shares and provide technical support on High Lake for at least one year. This support includes, geological and engineering assistance, geological and geophysical modeling and metallurgical testing. In exchange, Wolfden agreed not to provide technical information to third parties and Teck-Cominco shall have certain priority rights to the High Lake property during the agreement period.

Hope Bay Project

Operator, Owners	Miramar Mining Corp
Commodities	Gold
Coordinates	106° 30' W, 68° 00' N
NTS	76O/9,10,15,16, 77A/2,3,6,7,10
Location	160 km southwest of Cambridge Bay

The Hope Bay project was again the largest exploration project in Nunavut, with \$13 million spent in 2002. Prior to 2002, the Hope Bay project had measured and indicated resources of 3.36 million tonnes grading 15.4 g/t Au for a total of 1.66 million ounces of gold, plus an additional inferred resource of 6.7 million tonnes grading 12.3 g/t Au, for an additional 2.65 million ounces.

Miramar Mining Corp controls most of



Visible gold in quartz vein.



Doris vein with septa.

the Hope Bay greenstone belt (approximately 250,000 acres), large portions of which are Inuit-owned ground administered by Nunavut Tunngavik Incorporated. The Hope Bay belt is located in the northeast corner of the Archean Slave Province. The belt extends north-south for some 80 km and is seven to 15 km wide. Rock types are lower greenschist facies mafic volcanic rocks with felsic volcanic and volcanoclastic rocks and lesser ultramafic and metasedimentary rocks that are transected by a series of extensive, north-south trending altered shear zones. Amphibolite facies rocks are present along the eastern and western margins of the greenstone belt where granitoid rocks have been intruded

Sporadic exploration in the Hope Bay area

began in 1964 and resulted in several gold and silver showings (Discovery, Ida Point, Ida Bay, Rad, Roberts Lake, Lahti). Noranda began exploring for volcanogenic massive sulphide deposits in 1977 but left the belt in 1990. BHP Minerals Canada began staking that same year and commenced drilling in 1992 at the Boston property. BHP received NTI Concession Agreements in 1993, 1994 and 1995 covering Subsurface IOL adjacent to the Boston deposit and around the Doris and Madrid deposits.

BHP conducted over 115,000 m of diamond drilling and drove a decline at Boston in order to complete a 26,761 tonne bulk sample there. In late 1999, Cambiex Exploration Inc (later Hope Bay Gold Corp) acquired BHP's interest



Doris core.



Brecciated carbonate.

for US\$18.5 million and entered into a 50:50 joint venture with Miramar Mining Corp. In 2000, the joint venture's operations included reconnaissance drilling of several showings and deposits, prospecting, and mapping. Major drilling projects were completed at the Boston, Doris and Madrid deposits and the South Patch showing. Mapping and prospecting were completed at Dinger, Wolverine, Jeffe, East Patch, and Kamik.

The joint venture's 2001 program included prospecting and mapping at 1:5000 on the Boston 2 and 13, Quito 2, Akungani 1, Kamik 1, Amarok 1-3, Tok 1 and 3, and Madrid 1 and 2 claims, as well as the mining leases 3548 and 3549. Less detailed 1:10,000 mapping and prospecting were also completed over the Chicago 1 and 4, Heku 1-5, and Boston 18-20 claims. A total of 750 grab, 300 till, 40 soil, and 15 whole-rock samples were collected during this program. Drilling amounted to 24,907 metres (116 holes) completed in three program phases testing several targets along the 11-km long Deformation Zone (DEFZ) and southeast of the Madrid Deposit. Two new significant gold deposits, called Naartok and Suluk, were defined.

Half of the 2001 drilling (66 holes, 12,461 metres) was completed at one of the two new significant gold deposits: the Naartok zone, located west of Madrid. Naartok is characterized by a west-trending, steeply north dipping zone of disseminated, stockwork, and breccia-style gold-pyrite mineralization associated with dolomite-sericite-silica-albite alteration within mafic volcanic rocks. Significant intersections included 13.6 metres at 19.8 g/t gold (hole M126) and 2.1 metres grading 30.4 g/t (hole M192). The other newly recognized



Alteration zone. Hope Bay

significant deposit is the Suluk-Patch Lake area, southeast of Naartok. It was targeted by the remaining 24 holes, which totaled 6,846 metres. There, gold mineralization is associated with brecciated, silicified, and sulphidized mafic to ultramafic volcanic rocks and intercalated carbonaceous and/or graphitic argillite. Among the better intersections was a 19.4 m interval grading 15.6 g/t gold in hole M148.

In 2002, Miramar Mining Corp and Hope Bay Gold merged, giving Miramar 100% interest. They completed 27,831 metres of diamond drilling, 2,228 metres of reverse circulation drilling, and conducted mapping and prospecting. Drilling focused on in-fill drilling of the Doris North area and also tested exploration targets. An updated resource for

the Doris Hinge deposit was released in August, 2002 and reported 458,200 tonnes at 22.09 g/t Au for a total of 323,900 ounces of gold. A feasibility study is expected to be completed by the end of 2002 or early in 2003. Major equipment could be on-site by the summer of 2004, allowing production to commence at the end of 2004.

Exploration drilling focused on targets in the northern half of the belt, including South Patch, Rand Spur, Nexus, Twin Peaks, QSP and Spots. Significant results at South Patch include; 19.9 g/t Au over 4.0 metres (hole PSD-060) and 47.0 g/t Au over 1.7 metres (hole PSD-061).

Drill results indicate the regional Deformation Zone identified in the Madrid



Doris vein.



Altered hyaloclastite.



Carbonate.



Windy camp.

area, is an important structural host for gold mineralization. A new zone was identified in 2002, along a 700 m long trend of the Deformation Zone, between the Suluk and South Patch areas and is called the Marianas Zone. Gold mineralization at Marianas is related to sulphide-rich quartz veining, resembling mineralization at Suluk. Assay results of 8.6 g/t Au over 8.3 metres, including 17.1 g/t Au over 3.2 metres (hole PSD-065) and 6.6 g/t Au over 2.2 metres were encountered at Marianas.

An agreement between Miramar and Sherwood Mining Corporation (formerly Sherwood Petroleum Limited) gives Sherwood the option to earn a 70% interest in any kimberlite discovery in the Hope Bay belt in exchange for work commitments. Sherwood initially re-processed 63 till samples that were previously collected by Miramar in order to aid gold exploration. Results indicate 49 of the 63 samples carried possible diamond indicators, including, garnet, chromite, ilmenite, chrome-diopside and olivine. An additional 115 samples were re-processed and the highest concentration of indicator minerals occurred near the Madrid and Boston gold deposits. A phase 2 program consisted of collection of 240 till samples from the Hope Bay and Elu Inlet belts and geophysical targets were ground truthed.

Inulik

Operator, Owners	Rhonda Corporation
Commodities	Diamonds
Coordinates	113° 10' W, 66° 57' N
NTS	86I/14, 15; 86P/2, 3
Location	120 km SE of Kugluktuk

The Inulik property consists of 46 claims totalling 90,132 acres; Teck-Cominco can earn up to a 70% interest in the property by seeing it through to production. The block falls along the western margin of the Slave craton, and is covered by sedimentary rocks of the Coronation Supergroup.

Echo Bay Mines briefly looked for gold in this area in 1982. Noranda began exploration for lead-zinc and copper mineralization in 1994, and Monopros (now De Beers) initiated its search for diamonds in the area at about the same time, discovering the Kikerk-2 pipe in what is now the eastern part of the Inulik property.

Rhonda became the sole owner of the former Epworth property in early 2000 after Noranda relinquished its interests in the property. De Beers discovered the Knife kimberlite on the adjacent Knife claim in the spring of 2000. Rhonda began collecting till samples in 2001 with two samples about 11 km from the Knife pipe reported to contain tens of thousands of indicator minerals including G10 and eclogitic garnets and ilmenites. Anomalous gold was also reported from some samples along a ten km length of a northeast trending fault system.

This year the company contracted a 4900 line-km airborne magnetic and EM survey. Another 275 till samples were collected, and prospecting identified six kimberlite boulder trains about ten km southeast of the Knife kimberlite. Boulders of hypabyssal kimberlite have been identified and sent out for caustic fusion.

James River (JR & VT Claims)

Operator, Owners	Strongbow Resources (earning 70% in VT and 85% in JR), 4763 NWT Ltd.
Commodities	Diamonds, Gold
Coordinates	112° 00' W, 67° 15' N
NTS	76M/4, 5; 86P/1, 8
Location	150 km ESE of Kugluktuk

The JR and VT claims were staked in the winter of 2001, east of the diamond discoveries reported that summer. The two properties

have a combined area of 253,000 acres.

Located at the edge of the Slave province, the property is primarily underlain in the north by late Archean granitoids and gneisses and Neoproterozoic granitoids. Much of the southern part of the property is underlain by metasedimentary and metavolcanic rocks of the Anialik greenstone belt. The Malley, MacKay, Lac de Gras and Mackenzie dyke swarms are present on the property.

Noranda searched for massive sulphide deposits in the High Lake and Anialik belts in 1981. BHP undertook a gold exploration program in the same belts between 1990 and 1994. Caledonia Mining's diamond exploration in 1994-95 included the western part of what is now the James River property.

Initial work on the property included an airborne magnetic survey that identified sixty targets for ground-based follow-up work. Till samples were also collected. A quartz pebble conglomerate was mapped and sampled, with assays of up to 120 g/t gold reported.

James River (WC Claims)

Operator, Owners	Ashton Mining of Canada
Commodities	Diamonds
Coordinates	111° 30' W, 67° 00' N
NTS	76L/13, 14; 76M/3, 4
Location	180 km SE of Kugluktuk

Staked in the winter of 2001/2002, the James River property consists of 41 claims covering about 105,000 acres. Ongoing litigation between Ashton and Pure Gold Resources may result in the latter seeking an interest in the property.

Metasedimentary rocks of the High Lake greenstone belt occupy part of the northern claim block, with Archean granites underlying the remainder. Numerous Mackenzie dykes cut the stratigraphy.

During the 1970s, exploration for massive sulphide deposits was carried out by Great Plains Development, Texasgulf, Kennarctic, and Noranda. BHP discovered and outlined the Ulu gold deposit in the High Lake belt, 20 km east of the James River property, during the late 1980s and early 1990s; the property

is currently owned by Echo Bay Mines. The southern portion of the property part of Lytton Minerals and New Indigo Resources' diamond reconnaissance program from 1993 to 1996, and was also examined by Monopros (now De Beers).

Ashton's initial work on the property consisted of reconnaissance till sampling.

Jericho	
Operator, Owners	Tahera Corporation
Commodities	Diamonds
Coordinates	111° 29' W, 66° 00' N
NTS	76E/14
Location	350 km SW of Cambridge Bay

In 1992-93, Lytton Minerals and New Indigo Resources staked the Jericho, Contwoyto, and Burnside claim group (437,000 acres), around the northern end of Contwoyto Lake. Extensive airborne geophysical surveys were flown and thousands of till samples were collected by contractor Canamera Geological between 1993 and 1995. Drilling in February 1995 resulted in the discovery of the JD/OD-1 kimberlite. A month later, the JD/OD-2 kimberlite was found 350 meters north-northwest of the original discovery. The JD/OD-1, or Jericho pipe, was outlined by 28,000 meters of drilling in 1996, and a third pipe, JD/OD-3, also known as Nazareth, was discovered, but neither it nor the JD/OD-2 pipe were of sufficient grade to warrant advanced exploration. A decline was driven into the Jericho pipe in 1997 and 14,555 tonnes of kimberlite was mined for bulk sampling. About 9435 tonnes were processed at a diamond pilot plant on the Lupin mine-site, and 10,535 carats were recovered. The diamonds were assigned an average value of US\$69.65 per carat by HIM Laboratories in 1998, and were re-valued at an average of US\$74 per carat in 1999. The Contwoyto-1 kimberlite was found on the Contwoyto claim group in 1999 but produced a grade of only 0.27 carats per tonne.

According to resource calculations released in September 2000, the Jericho pipe has an

indicated resource of 3.667 million tonnes grading 1.14 recoverable carats per tonne, at a value of US\$83.50/tonne. Additional inferred resources stand at 3.401 million tonnes averaging 0.52 carats per tonne. The study proposes an eight-year mine life, with total production in excess of three million carats. Tahera entered the environmental review process in the summer of 2000. A completed Environmental Impact Statement is expected in early 2003, with production possible as early as 2005.

In the fall of 2001, Tahera's exploration staff discovered a weakly diamondiferous kimberlite about six km west of the Jericho pipe. In September, Tahera and Kennecott signed an agreement by which the latter could earn a 62.5% interest in the property, effectively incorporating the claim group into the existing Rockinghorse/Hood River joint venture. Kennecott began with prospecting and ground gravity surveys at the heads of several indicator mineral trains. Four kimberlitic float trains were found to coincide with mineral indicator trains. Float similar to the Jericho pipe was found at the southern end of a mineral indicator train 900 meters west of the Jericho pipe.

Kennecott did not find any new kimberlites during the early part of 2002 and chose not to exercise the option on the property.

Jubilee	
Operator, Owners	Northern Empire Minerals, Stornoway Ventures, Earth Star Diamonds, Wind River Resources, International Samuel Exploration
Commodities	Diamonds
Coordinates	113° 40' W, 67° 29' N
NTS	86O/8, 9; 86P/5, 6, 11, 12
Location	70 km SE of Kugluktuk

The Jubilee project spans 137,250 acres and was staked in 2001. The five companies can each earn a 20% interest in the property. Most of the claim block is underlain by clastic sediments of the Proterozoic Recluse Group, with lesser amounts of Epworth Group carbonates and clastic sediments.

The Jubilee area is located on the eastern

edge of the 1969-70 staking rush for native Cu occurrences. Uranerz carried out an extensive uranium exploration program between 1979 and 1982. Noranda and Rhonda included this area as part of their regional Pb-Zn exploration program in the mid-1990s, discovering a number of showings. Caledonia Mining and Monopros began searching for diamonds in 1993, but no kimberlites were discovered on what is now Jubilee.

Initial work on the property began with an airborne magnetic survey across the claims. At least eleven priority targets were interpreted from the survey. A follow-up program included the collection of approximately 250 till samples.

Keni	
Operator, Owners	Tyler Resources (earning 32.5%), Northern Abitibi Mining (earning 32.5%), 4763 NWT Ltd.
Commodities	Diamonds
Coordinates	112° 00' W, 66° 50' N
NTS	76L/13; 86I/16
Location	170 km SE of Kugluktuk

Keni is comprised of 49 claims with an area of 111,175 acres. The property was staked in November of 2001 and is located east of the diamond discoveries from 2001.

Located in the northern Slave province, the property is dominated by late granitic rocks. Volcanic rocks of the Anialik greenstone belt are present in the northern part of the property, while similar rocks of the Napaktulik belt occur in the southern part of the claim block. Three sets of diabase dykes cross the property, the youngest being the northwest-trending Mackenzie dyke swarm.

Uranerz's search for uranium brought them through the area in 1975. Kelmet Resources briefly looked for gold occurrences here in 1988. Benachee Resources, Snowpipe Resources, New Indigo Resources and Lytton Minerals began exploring for diamonds in 1993 but no kimberlites have been found on the property to date.

Tyler contracted a 4,738 line-km airborne magnetic and EM survey in the spring of

2002. The survey identified thirty-seven anomalies, with eighteen being considered priority targets. A ground program in the summer examined the anomalies, six of which remain unexplained. Eighty-six till samples were collected at the same time.

Kikerk Lake

Operator, Owners	Ashton Mining of Canada (52.5%), Caledonia Mining Corporation (17.5%), Northern Empire Minerals Ltd (30%).
Commodities	Diamonds
Coordinates	112° 37' W, 67° 15' N
NTS	86P/2, 7
Location	125 km SE of Kugluktuk

The 15 claim, 38,738 acre Kikerk Lake property is underlain by rocks of the Paleoproterozoic Epworth and Recluse Groups of the Coronation Supergroup. The former consists of dolomite, shale, and quartzite, while the latter is primarily shale. The Coronation Supergroup unconformably overlies Archean gneisses of the Slave craton.

The 15 claims are among a larger property acquired in 1993 by Caledonia, who collected alluvial and beach gravel samples. Till sampling began in 1994. Portree Inc. acquired the option to earn a 50% interest in 1997 and conducted geophysical surveys over five targets. These were drilled without success. Condor International Resources acquired the option from Portree in 1998 and collected till samples. Eleven shallow drill holes did not locate any kimberlite. Ashton acquired the option to earn a 52.5% interest in the property in 2000 and completed a till sampling program intended to locate the source of an indicator mineral train identified by earlier work. In 2001, additional till sampling, geophysics, and drilling resulted in the discovery of the Potentilla kimberlite and narrow kimberlite dykes one km to the east. An initial sample of 208 kilograms from Potentilla yielded 230 microdiamonds and 22 macrodiamonds.

An additional 5.83 tonnes of kimberlite was collected from Potentilla this spring.

Caustic fusion returned a total of 1.28 carats using a 0.8 mm square mesh. The largest diamond was a 0.34 carat colourless composite crystal. Although the large stone was considered encouraging, the overall grade was not deemed sufficient for additional work.

Drilling of a geophysical anomaly 700 m east of Potentilla produced a new discovery, Stellaria, thought to be a 13 m wide dyke with a strike length of less than 400 m. Seventy-nine diamonds, 13 larger than 0.5 mm in one dimension, were recovered from 105.4 kilograms of Stellaria kimberlite. Some 250 till samples were collected in the area with the intention of developing drill targets for 2003.

Kim

Operator, Owners	Ashton Mining of Canada (89.4%), Pure Gold Resources (10.6%)
Commodities	Diamonds
Coordinates	113° 02' W, 67° 15' N
NTS	86P/2, 3, 6, 7
Location	120 km SE of Kugluktuk

The 130,900 acre Kim project is located just west of the Kikerk Lake property. Like Kikerk, the property is underlain by the Paleoproterozoic Epworth and Recluse Groups.

Ashton staked the property in 2000 and collected a first set of till samples on the property. The Artemisia kimberlite was discovered in September 2001; a 103.2 kg sample of kimberlite core was analyzed by caustic fusion and returned 342 micro- and 38 macrodiamonds (exceeding 0.5 mm in one dimension), the largest of which was 1.23 x 1.15 x 1.10 mm. A 1.157 tonne of the kimberlite was collected from outcrop and yielded 0.20 carats.

Further drilling at Artemisia this spring allowed the collection of 11.0 tonnes of kimberlite, from which 1.176 carats were recovered. No further work is planned for Artemisia.

About 2.5 km southwest of Artemisia, kimberlite float and outcrop and a magnetic anomaly led to the discovery of the Thrift kimberlite. Nine microdiamonds were recovered from an initial surface sample of 100.8 kg.

Knife Lake

Operator, Owners	De Beers, Rhonda Corporation
Commodities	Diamonds
Coordinates	113° 07' W, 67° 02' N
NTS	86P/3
Location	125 km SE of Kugluktuk

The Tree-1 claim covers 2530 acres north of Takijuk Lake. The property's geology consists of Paleoproterozoic Coronation Supergroup carbonate and clastic sedimentary rocks. Mackenzie diabase dykes transect the property and trend north-northwest and east-northeast. Zn-Pb-Ag mineralization has been found primarily within the Rocknest Formation, which consists of inner-shelf facies dolomite and argillite.

Rhonda and Noranda began a joint venture on the property in 1993, initially exploring for stratabound Cu and Zn. Several Zn-Pb-Ag showings, including the Esker, Muskox, Zinc Lake, O'Seim, South, North, and Far Out zones, were discovered between 1995 and 1997. The Harley Cu-Ag showing was examined between 1996 and 1997. Till samples were collected from 1994 onward. In January 2000, Noranda relinquished its interest in the joint venture. Monopros, and subsequently De Beers, acquired the right to explore for diamonds in May 2000, and the former discovered the Knife kimberlite pipe. In 2001, De Beers' reconnaissance work included the collection of ten till samples and one ground magnetic and EM survey totaling 49 line-km. The Knife kimberlite was further tested by 1,278 meters of diamond drilling in seven holes.

No work appears to have been undertaken in 2002 as the result of litigation between De Beers and Rhonda.



Sulphide rich ore zone adjacent to quartz vein. Lupin

Lupin

Operator, Owners	Echo Bay Mines Ltd
Commodities	Gold
Coordinates	111° 14' W, 65° 46' N
NTS	76E/11,14
Location	402 km north of Yellowknife

The Lupin area is underlain by metaturbidites of the Archean Contwoyto Formation, which contains a silicate and sulphide-facies iron formation. The rocks have been repeatedly deformed, such that the mine site stratigraphy consists of two steeply plunging, steeply dipping anticlines separated by a syncline. Where mineralized, the iron formation is well laminated and contains disseminated to massive pyrrhotite, arsenopyrite, loellingite and pyrite. Arsenopyrite is typically found in the iron formation adjacent to steeply dipping quartz veins. The three primary ore zones are the West (in the west limb of the western anticline), Central and East zones (on the west and east limbs of the syncline). Two other ore bodies, McPherson 1 and 2, occur in different iron formation lenses several dozen metres west of the West Zone.

The Canadian Nickel Company (Canico) discovered gold in the Lupin area in 1961. By 1964, trenching, geophysics and diamond

drilling had outlined a resource of 1.2 Mt grading 17.14 g/t gold. In 1979, Canico optioned the property to Echo Bay Mines, who bought it outright the following year. Underground exploration and mine construction commenced shortly afterward and the mill was commissioned in April 1982. Production continued until low gold prices caused the mine to be placed on care and maintenance in January 1998. 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 produced 117,729 ounces by the end of the year, at a cash cost of US\$214/ounce.

At the end of 2000, proven and probable reserves were estimated at 1.652 Mt grading 8.9 g/t. The Center, West and McPherson zones remain open at depth.

The mine reached a milestone in 2001 by pouring its three millionth ounce in May. Lupin is on track to produce 150,000 ounces, having extracted 0.329 Mt grading 8.0 g/t in the first half of the year. Cash operating costs were US\$223 per ounce, with total production costs (including depreciation, amortization, and ongoing reclamation) equalling US\$273 per ounce.

Exploration at the site included a 255-m drift drive on the West Zone south of the shaft on the 890 m level. Approximately 2000 metres

of drilling began testing this portion of the Lupin Ore Unit in September.

Muskox Project

Operator, Owners	Muskox Minerals Corp
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

The 1.27 Ga Muskox Intrusion is a layered mafic/ultramafic complex intruding the Paleoproterozoic Coronation Supergroup. The intrusion is flanked by metasedimentary rocks of the Fontano, Odjick, and Drill formations. The intrusion has a funnel-like shape that is up to 11 km wide and is exposed for 125 km in a north-south direction. Geophysical data suggests the intrusion continues for another 250 km under cover rocks. Regional tilting of the Coppermine Homocline has resulted in the intrusion dipping to the north, exposing the entire sequence from base to roof. The intrusion consists of four main units; the Feeder, or Keel, Dyke, the Marginal Zone, the Layered Series, and the Roof (or Upper Border) Zone.

The Muskox Intrusion was first discovered in 1956 by INCO, who spent three years



Longhole drill. Lupin

Banded iron formation. Lupin



exploring and drilling for nickel-copper mineralization. Numerous companies examined the intrusion between 1969 and 1988 but no significant deposits were outlined. Muskox Minerals staked and negotiated Inuit Concession Agreements (later transferred to Exploration Agreements) in 1995-1997. Initial work included geophysical and geochemical surveys and geological mapping of the Marginal Series near McGregor Lake. Property-wide geophysical work in 1996 included VLF, magnetics, gravity, UTEM, and HLEM. Further surveys, including Controlled Source Audio Magnetotelluric, were completed in 1997-1999. Numerous, highly anomalous grab samples were collected from the Pyrrhotite Lake, Southeast Speers Lake, Sulphide Breccia, Trench 87-1, Chalco Cliffs, and Chromite Reef areas. Work in 2000 included a Controlled Source Audio Magnetotelluric survey and drilling of the Southeast Speers Lake, Pyrrhotite Lake, and Keel-1 targets.

Drill targets in 2001 were Keel 1 West and East, Keel 2, Pyrrhotite Lake, SE McGregor, and the Far West Margin. At Keel 2, hole MU-33 cut four highly anomalous intervals between 1 and 6 metres thick. Based on results of downhole electrical conductivity surveying in this hole, hole MU-35 was drilled to the east, cutting 21 metres of massive sulphides. The best of three intervals in MU-35 was 15 metres grading 1.28% copper, 0.45% nickel, 1.20 g/t palladium, and 0.18 g/t platinum. Hole 36 tested the southern Keel sector and intersected 1.28% copper, 1.17% nickel, 0.17% cobalt and 0.17 g/t palladium over 4.33 metres at 317.09-321.42 metres depth, part of a 28.6-m massive to semi-massive sulphide intersection. The company reported this to be a new mineralized zone.

Exploration in 2002 was planned for drill testing high-priority targets, including the Northeast Spears Target. This target is a 2 km long conductor within the eastern Basal Margin of the Muskox Intrusion. At least 4 holes were planned for this target, and in addition a 900 line-km airborne Magnetic-EM survey was planned over the Keel dyke portion of the Intrusion. Drill results were not available by press time.

Oro Claims

Operator, Owners	Navigator Exploration Corp
Commodities	Gold
Coordinates	106° 01' W, 68° 14' N
NTS	77A/3
Location	125 km southwest of Cambridge Bay

The Oro Claims cover 10,183 acres at the north end of the Hope Bay greenstone belt, just north of Miramar's Doris deposit.

Past exploration of the area resulted in the discovery of the Ida Point and Wombat (Granite) gold showings and the Ida Bay and Roberts Lake silver deposits in 1966-1967. Then-owner Roberts Mining Company carried out limited mining of the high-grade silver ore at Roberts Lake and underground exploration of the Ida Point Showing. Ida Point is a carbonate-altered shear zone within mafic volcanic rocks, whereas the Wombat showing occurs as quartz veins in sheared granite along the eastern edge of the greenstone belt.

Navigator acquired an option on the property in 1998. Drilling and channel sampling that summer produced intersections of up to 5.96 metres grading 5.48 g/t gold at the Ida Point. In 2000, grab samples collected on the Oro 5 claim assayed up to 9.54 g/t gold, and evidence for a shear zone was found in a northeast-trending valley. A heliborne magnetic and electromagnetic (EM) survey was flown over the entire property in September, with additional lines over the suspected shear zone. In 2001, the property was mapped at 1:10,000 to provide a framework by which to focus further exploration. Thirty-two whole-rock samples were collected. Eighty-eight grab samples were also collected; 10 samples from seven locations assayed greater than 1 g/t gold.

In 2002, exploration was focused on diamond drilling, and included 1,429 metres in 10 holes. Eight of the holes were designed to test targets on ORO-5, attempting to locate possible extensions of the Doris gold deposit, located 3 km along strike to the south. All eight holes intersected altered mafic volcanic rocks and although no economic

grades were encountered, one zone returned 7.1 g/t Au over 30 cm. The two remaining drill holes tested the H4 quartz vein on ORO-2. Drilling confirmed the presence of the vein, and anomalous values were encountered across its width (approximately 5.4 metres), including 1.99 g/t Au over 0.45 metres. Additional exploration on the ORO claims is planned for 2003.

Orb

Operator, Owners	Stornoway Ventures (earning 70%), 4763 NWT Ltd.
Commodities	Diamonds
Coordinates	112° 15' W, 67° 20' N
NTS	86P/1, 2, 7, 8
Location	130 km SSE of Kugluktuk

The Orb property's 98,000 acres are located adjacent to the northeast corner of Ashton/Pure Gold's Eokuk property. Orb was among the many properties staked during the staking rush of November 2001.

The property lies on the edge of the Bear structural province, and includes the southeast portion of the Eokuk uplift in its northwest corner. The remaining claims are covered by the Recluse and Epworth sedimentary rocks, with some younger intrusions of the Hepburn suite.

This area has not seen much exploration prior to the current staking rush. BHP did explore for gold to the south of the property in the early 1990s, and Caledonia Mining and Monopros completed regional reconnaissance work in the mid-1990s. No kimberlites were discovered as a result of either program.

An aeromagnetic survey was completed over the property in the spring of 2002, concurrent with surveys over Stornoway's other projects in the area.

Peregrine

Operator, Owners	Northern Empire Minerals; Diamondex Resources can earn 70%
Commodities	Diamonds
Coordinates	113° 37' W, 67° 16' N
NTS	86P/3-6
Location	90 km SE of Kugluktuk

The Peregrine property consists of 51 claims covering 152, 469 acres; the property was staked in the winter of 2001/2002. Diamondex can earn a 70% interest in the property by spending \$1 million on exploration prior to December 1, 2004.

Clastic sedimentary rocks of the Recluse Group cover the majority of the property, with carbonate and clastic rocks of the Epworth Group underlying the remainder.

Three generations of regional exploration have taken place over the current Peregrine property. Uranerz's uranium program was the first in 1974-5, followed two decades later by Noranda and Rhonda's lead-zinc work. Caledonia and Monopros were the primary operators of diamond exploration from 1993 to about 1996. Monopros' efforts resulted in the discovery of the Kikerk-1 pipe on the Vic property, just east of Peregrine.

Diamondex contracted an 8,324 line-km airborne magnetic and EM survey over the entire property. Twenty-four high priority targets were identified for follow-up ground surveys.

Ric

Operator, Owners	Ashton Mining of Canada, Pure Gold Resources
Commodities	Diamonds
Coordinates	113° 00' W, 66° 45' N
NTS	86I/10, 11, 14-16
Location	460 km north of Yellowknife

Covering 126,000 acres, the Ric property is primarily underlain by Archean granitoid and gneissic rocks with Paleoproterozoic carbonate and clastic rocks covering the northwestern corner. The exact distribution of interests in the property is the source of litigation but is between Ashton 89.4% / Pure Gold 10.6% and Ashton 88% / Pure Gold 12%.

The Ric property has been explored by the Ashton/Pure Gold joint venture since 1993. Till sampling and ground and airborne geophysical surveys were completed over several seasons, and prospecting of an indicator mineral train resulted in the discovery of the Hydra kimberlite in 1999. The Perseus

kimberlite, inferred to be a 10 m wide sill, was discovered in 2000. In 2001, ground geophysical surveys were completed along a 1.4 km length along strike with the dyke, and detected several anomalies. Drilling on two anomalies, 290 and 420 m along strike from the discovery holes, also intersected kimberlite. The thickness and dip of the intersections suggest both holes cut the Perseus dyke along strike.

No drilling took place in 2002, but Ashton collected till samples and prospected around previously identified indicator and geophysical anomalies, and continued reconnaissance till sampling across the property.

Rockinghorse

Operator, Owners	Kennecott Canada Exploration (50%) Tahera Corporation (50%)
Commodities	Diamonds
Coordinates	113° 05' W, 66° 35' N
NTS	86I/2, 3, 6-12, 14, 15
Location	160 km SE of Kugluktuk

The Rockinghorse property covers 328,391 acres north of Takijuq Lake (also referred to as Napaktulik Lake and Takiyoak Lake). The eastern half of the property is underlain by Archean intrusive rocks, with some mafic to intermediate volcanic and gabbroic rocks in the northeast. The Paleoproterozoic Epworth Group underlies the western part of the claims.

Tahera Corporation and its predecessors, Lytton Minerals and New Indigo Resources, have held the ground since the early 1990s. Till sampling and geophysical surveys were conducted by contractor Canamera Geological until 1997, at which time the property was optioned to Kennecott, who became the operator. In 1999, Kennecott drilled the Altair pipe in the northwestern corner of the property, but caustic fusion results from drill core did not return encouraging diamond counts. The Nanurjuk kimberlite was discovered in May of 2000.

Kennecott's 2001 program was highlighted by the discovery of four kimberlites. Sampling of the Anuri and Anuri East bodies resulted in

high initial diamond counts; caustic fusion of 656 kg from Anuri yielded 937 diamonds, 337 of them exceeding 0.5 mm in one dimension. A 78 kg sample from Anuri East contained 68 diamonds, of which 18 exceeded 0.5 mm in one dimension.

In 2002, Kennecott completed additional drilling of 580 m at Anuri and sent out about 750 kg for caustic fusion. The drilling and geophysical work suggests that Anuri and Anuri East coalesce at depth, and that the kimberlite has high and low grade zones within it. The combined body has an estimated resource of 20 million tonnes to 200 m below surface, with dimensions of 125 by 280 m. It remains open to the west. A single drill hole of 112 m also resulted in the discovery of the Atani kimberlite.

Elsewhere on the property, Kennecott ran 300 line-km of magnetic surveys across 56 small grids, along with 21 line-km of EM on 17 grids and 13 line-km of gravity on 2 grids. Twenty-five till samples, four water samples, and four rock samples were collected for analysis.

Sceptre & Tiara

Operator, Owners	International Samuel Exploration (40%), Cantech Ventures (40%), Dasher Energy (20%), Stornoway Ventures (earning 60%)
Commodities	Diamonds
Coordinates	113° 40' W, 67° 00' N
NTS	86I/13-15; 86P/1-3
Location	110 km SE of Kugluktuk

The Sceptre and Tiara properties lie to the west and east of Rhonda's Inulik property. Sceptre consists of 75 claims totalling 182,943.64 acres, and is located at the coordinates noted above. Tiara is made up of 18 claims totalling 38,849.05 acres and lies about twenty km east of the eastern edge of Sceptre. The claims were among those staked during the winter of 2001/02. Stornoway Ventures is earning a 60% interest from International Samuel, Cantech, and Dasher.

Sceptre is mostly located within carbonate and clastic rocks of the Epworth Group, with some clastic Recluse Group sediments at the

north and south ends of the block. Tiara is cored by Recluse Group that is flanked by the Epworth Group.

Uranerz examined the area's U potential in 1974-75. Echo Bay and later BHP prospected for Au in the mid-1980s and early 1990s. Rhonda and Noranda included the area in their regional Pb-Zn exploration project. Diamond exploration began in about 1993, with Caledonia, Monopros, and the Benachee-Snowpipe-Lytton-New Indigo joint venture collecting till samples and carrying out geophysical work. During this time, Monopros found the Kikerk-1 and Kikerk-2 pipes on what are now the Vic and Inulik properties between Sceptre and Tiara.

The partner's exploration program began with a 6500 line-km heliborne magnetic and EM survey that identified 112 prospective kimberlite targets. Of these, 28 were selected for follow-up ground-truthing and prospecting. Approximately 540 till samples were to be collected at the same time.

Ulu	
Operator, Owners	Echo Bay Mines Ltd
Commodities	Gold
Coordinates	110° 59' W, 66° 54' N
NTS	76L/15,14
Location	530 km north of Yellowknife

The Ulu gold deposit is hosted in amphibolite facies mafic metavolcanic rocks of the High Lake volcanic belt. The main Ulu claims (Ulu-1 to 4) cover a two to three km wide lobe of supracrustal rocks surrounded by granite on three sides. Gold was first discovered at Ulu in the late 1980s by BHP-Utah Mines Ltd (now BHP-Billiton Inc) during reconnaissance mapping and prospecting. In 1989, BHP discovered a 400 m long trend of arsenopyrite-rich frost heaved boulders (later named the Flood Zone) and assays ranged from 20-40 g/t Au. Between 1989 and 1994, the Ulu claims were mapped at a 1:5,000 scale and selected areas mapped at 1:1000 and extensive in-fill and exploration diamond drilling was completed.

The most significant gold deposit at Ulu is the Flood Zone, a 435 m northwest striking and steeply southwest dipping zone that ranges from 2-18 metres wide. Mineralization consists of quartz veins that carry abundant arsenopyrite and loellingite accompanied by biotite, clinopyroxene and k-feldspar alteration.

In 1995, Echo Bay Mines Ltd purchased the Ulu project and estimated a resource of 1.5Mt at a grade of 12.78 g/t Au for the Flood Zone. Echo Bay completed a drill program and a portal was excavated in 1996. A bulk sample was taken from the 25m level for metallurgical testing and in 1997, a ramp was extended to the 155m level. A total of 16,000 metres of underground drilling was completed before a decline in gold prices forced an end to activities. Although dormant since 1997, Echo Bay has been maintaining environmental and engineering studies and is planning geological work in 2003.

Wellington Project	
Operator, Owners	Diamonds North Resources, Majescor Resources (earning 50%)
Commodities	Diamonds
Coordinates	108° 30' W, 70° 15' N
NTS	77E/4; 77F/1, 7-10
Location	170 km NW of Cambridge Bay

The Wellington property consists of prospecting permits and claims totalling approximately 565,000 acres. Commander Resources, formerly Major General, transferred the property and other diamond interests to Diamonds North in early 2002. Majescor can earn a 50% interest in the property by spending \$2.25 million in exploration before the end of 2005.

The property's geology consists of an Ordovician age carbonate platform overlying the Proterozoic Shaler Group shale and Elice Formation sandstone. Diabase dykes cut the Proterozoic rocks but not the overlying carbonates. One kimberlite dyke has been identified on the property to date.

Prior to the discovery of diamonds in the north, exploration in this area was limited to



Ulu trench

U prospecting by Uranerz in 1977. Following the discovery of diamond-bearing kimberlites at the adjacent Washburn property in 1998, Major General acquired the Wellington property as prospecting permits to the east in 1999. Dia Met Minerals entered into a joint venture that summer and spent the next two years collecting till samples and undertaking geophysical surveys. After Dia Met was acquired by BHP-Billiton, the joint venture was terminated.

In 2002, Diamonds North and Patrician Diamonds signed a letter of intent whereby Patrician could earn 40% in the property; however, the agreement lapsed during the summer. Majescor subsequently entered into an agreement with Diamonds North and completed helicopter-borne magnetic surveys over two large blocks and 16 isolate anomalies, for a total of 1065 line-km. Several anomalies resembling kimberlites were identified from the preliminary data and will be examined further once final data is received.

Yankee Property*

Operator, Owners	Hawkeye Gold International Inc. (50%), Diamonds North Resources (50%)
Commodities	Diamonds
Coordinates	109° 52' W, 70° 06' N
NTS	77F/2
Location	220 km NW of Cambridge Bay

The 64,000 acre Yankee project lies directly west of the Washburn project and resides in the same regional geological context (see above).

Prior to the discovery of diamonds in the north, exploration here was also limited to U prospecting in 1977. Major General began exploration on Victoria Island in 1994, which culminated with several kimberlite discoveries on the Victoria Island property by the Monopros/Major General/Ascot Minerals joint venture in 1998-1999. Major General secured the 90,000 acre Yankee property, located to the west of the Victoria Island kimberlites, via

prospecting permits in 1998. Hawkeye Gold entered into an option agreement in June 1999. The following year, Hawkeye completed a 750 line-km airborne geophysical survey. Ground magnetic surveys and till sampling were completed over nine anomalies generated by previous geophysical surveys.

During 2001, ground magnetic surveys were completed over three land-based targets. The results suggest the presence of two kimberlite-like signatures, with indecisive results for the third. Five additional targets under lakes were to be surveyed but hazardous ice conditions forced a deferment. Till samples collected down-ice from each of the targets in 2000 are reported to contain up to eleven kimberlitic garnets. Major General was renamed Commander Resources in 2002, and transferred its interest to newly formed Diamonds North Resources, in return for 9.9% of the company's shares.

Hawkeye undertook a 600 m drill program in June 2002 that tested four targets, three

of them under lakes. None of the holes encountered kimberlite, although one was terminated before intersecting its target due to deteriorating ice conditions.

