

2009 Northwest Territories Mineral Exploration Overview

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Cover Illustration:

Panorama looking south of the Selwyn Resource's XY Camp at Howards Pass. The NWT/Yukon border intersects mid way through the Airstrip with the XY Nose trenches and kill-zone on the east/left side of the photograph.

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TABLE OF CONTENTS

INTRODUCTION.....	4
NORTHWEST TERRITORIES MINING HIGHLIGHTS FOR 2009.....	5
NORTHWEST TERRITORIES MINERAL EXPLORATION HIGHLIGHTS FOR 2009.....	8
DIAMOND EXPLORATION.....	8
METAL EXPLORATION	13

FIGURES AND TABLES

Figure 1: Location of Mines and Exploration Projects active in the NWT during 2009....6

Table 1: Summary of NWT diamond exploration in 2009.....12

Table 2: Summary of Northwest Territories active exploration projects of precious, base and energy metals in 2009.....20

2009 Northwest Territories Mineral Exploration Overview

Introduction

Gold and rare earth exploration projects were at the forefront of exploration this year in the Northwest Territories. A total of 18 gold and other metal projects were conducted in comparison with 14 diamond projects. This was partially sparked by record high gold prices of over \$1,000 US dollars per ounce and a growing demand for strategic metals, however it also reflected the global economic downturn. Falling stock markets and economic uncertainty in the latter half of 2008 curtailed many planned exploration programs and resulted in a greatly reduced 2009 exploration season. Many exploration projects for all types of commodities were deferred in 2009, and some of the more advanced exploration projects, including some preparing for development, were scaled back to desk top studies, or making use of previously collected core to redefine resources. Natural Resources Canada statistics show expenditures for exploration, deposit appraisals, and mine construction of \$28.7 million by October, in comparison with \$129 million for October of the previous year.

Four mines operated during 2009, including three diamond mines: Diavik, Ekati, and Snap Lake; and Cantung tungsten mine, however, they too were affected by the global economic market downturn. Both Diavik and Snap Lake Diamond Mines saw a reduction in diamond production with the implementation of six-week summer shutdowns; however, shutdowns planned for December were cancelled as economic conditions improved. Ekati Diamond Mine increased production despite the rough diamond market taking a hard hit. The October shutdown of the Cantung Mine is anticipated to continue until the tungsten market improves.

Diamond exploration, which has been at the forefront of exploration in the NWT since the late 1990's, was particularly impacted by the market downturn. The impact was reflected by a decreased number of active exploration projects: from 14 projects, nine on the Slave Craton, and five off-Craton, in 2009 in comparison with 19 active diamond projects in 2008; and by a 79% reduction in number of drilled projects in 2009. Renewed interest in the diamond markets precipitated increased exploration plans for 2010 and resulted in the cancellation of temporary December shut-downs at both Diavik and Snap Lake mines.

Optimism returned to mining and exploration by the latter part of the year, in response to positive market trends, as diamond drills were mobilized and dormant projects returned to a more vibrant status. Continued acquisition of properties, late fall exploration efforts and preparations for up-coming drill programs are evidence that increased exploration can be expected for 2010.

NORTHWEST TERRITORIES MINING HIGHLIGHTS FOR 2009

De Beers Canada's Snap Lake Diamond Mine underwent an operational downsizing as a result of the global economic market downturn. The decision to downsize and reduce production was made in the last quarter of 2008 and was mainly manifested as a summer shutdown. The six week closure, which put the mine into care and maintenance status, was completed September 2, 2009 when production resumed. An additional planned winter shut down was cancelled due to positive trends in the rough diamond market. Production in 2009 amounted to 444,000 carats recovered from 354,000 tonnes of ore at grade of 1.25 carats per tonne. Canada's first fully underground diamond mine targets a 2.5 metre thick dyke that dips northeastward at 12-15°. The deposit has resources (2008) of 1.4 million tonnes (indicated) and 25 million tonnes (inferred), with a recoverable grade of 1.2 carats per tonne. Early in 2008, the mine had an expected annual production rate of 1.4 million carats and a mine life of over 20 years. In December 2009, De Beers Canada announced the intentions to commence a production ramp-up at the Snap Lake Mine in order to attain full production levels by the end of 2012.

The **Diavik Diamond Mine**, 300 kilometres northeast of Yellowknife, owned by **Rio Tinto plc (60%)** and **Harry Winston Diamond Corp (40%)**, had a rough diamond production of 5.6 million carats in 2009. Average grade increased to 4.4 carats per tonne from 3.4 carats per tonne in the previous year. The increase in average grade was primarily driven by a significant increase in the proportion of ore sourced from the A-154 South kimberlite pipe. However the total production was markedly below the 9.2 million carats mined in 2008 from open pit mining of the A-154 North and South Pipes and the A-418 Pipe. Much of this reduction in total production is due to the measures that were undertaken in response to the economic downturn. Diavik reduced expenditures, deferred underground development and lowered production levels through a six-week summer production shutdown. By mid-September, with the rough diamond market recovering, a second planned shutdown in December was cancelled. Work is now focused on the transition to underground mining by the first quarter of 2010, and phasing out open pit mining by 2012. Diavik completed 20 kilometres of development workings in preparation for underground production, along with most of the related underground infrastructure. Reserves reported in the 2008 Rio Tinto annual report are 20 million tonnes at 3.1 cpt. An estimated mine life continuing to 2020, with addition of underground mining, has not changed from the original 1999 forecast of a 16-22 year mine life.

The **Ekati Diamond Mine**, owned by **BHP Billiton (80%)**, **Stewart Blusson(10%)** and **Chuck Fipke(10%)**, produced 4.1 million carats of diamonds during 2009. Production was higher than in 2008 due to an increase in volume of ore processed and the full ramp up of the Koala pipe underground mine which contains a larger proportion of higher value carats. The previous year's total of 3.6 million carats were produced from 4.4 million

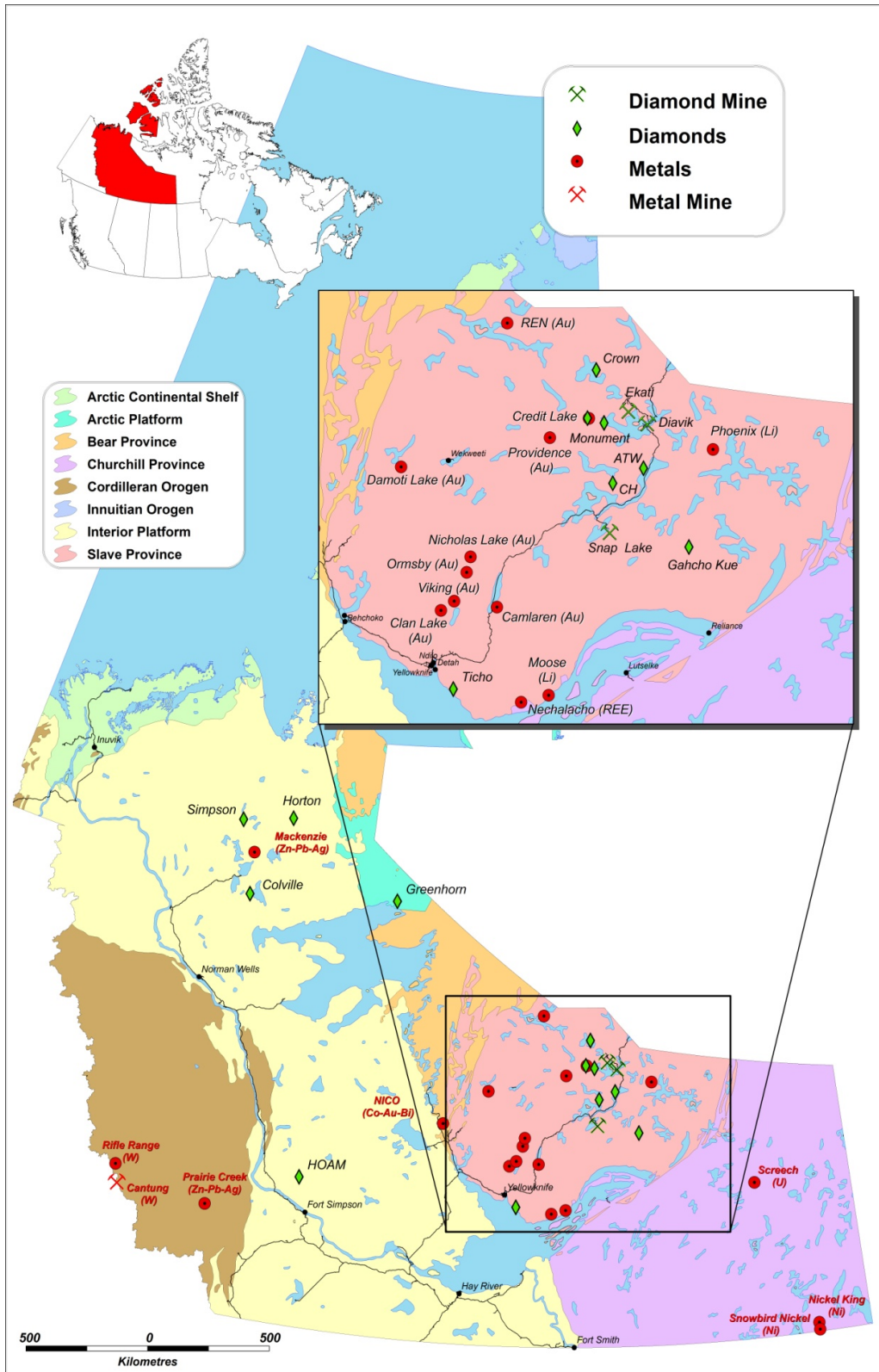


Figure 1: Location of Mines and Exploration Projects active in the Northwest Territories during 2009.

tonnes of kimberlite from the Fox and Beartooth open pits and underground mining of Panda and Koala pipes. In the Core Zone lease area, proven reserves were reported to be 19.1 million tonnes grading 0.3 carats per tonne (open pit) and 3.9 million tonnes grading 0.9 carats per tonne (underground); while probable reserves were reported as 15.5 million tonnes grading 0.6 carats per tonne (open pit) and 5.2 million tonnes grading 0.9 carats per tonne (underground). BHP Billiton plan to cut production costs to \$50 per tonne by the end of 2012, from the current \$70 per tonne, which may enable the Ekati Diamond Mine to remain in production until 2040.

The operations at **Cantung Mine**, Canada's only producing tungsten mine, owned by **North American Tungsten Ltd.**, were temporarily suspended on October 15, 2009 as a result of declining tungsten prices, operating losses and a stockpiled inventory that was sufficient to meet existing contractual obligations. Located at the Headwaters of the Flat River, along the Yukon-NWT border, production at Cantung was 315,192 MTU* WO₃ for nine months that it operated in 2009, up 14% from the total 2008 production of 272,483 MTU WO₃. North American Tungsten's July 2009 updated reserve and resource calculation reported a probable reserve estimate at 0.9 million tonnes grading 1.08% WO₃, using a minimum mining width of 5 metres and a cutoff grade of 0.80% WO₃, and an indicated resource of 1.36 million tonnes at a grade of 1.27% WO₃. Mineral reserves have increased as a result of exploration, definition drilling and 3D modeling. Mineral resources have been identified in the PUG Zone adjacent to the open pit and exploration drilling has intersected new high grade zones including 19 metres at 2.45% WO₃. The history of Cantung's production from the inception in 1962 has included a number of shutdowns due to lower tungsten prices followed by subsequent re-openings. The current mineral reserves and mill production rates of 1100 short tons per day indicate that the mine has maintained sufficient reserves to operate for another 2.5 years. This level of mineral reserve was present when the mine re-opened in 2001 suggesting that the replacement of reserves has kept up with production and the exploration potential of the property has not been exhausted.

* MTU = metric tonne unit, the standard unit of measurement for tungsten, which is equivalent to 10 kilograms of WO₃.

NORTHWEST TERRITORIES MINERAL EXPLORATION HIGHLIGHTS FOR 2009

Diamond Exploration

The locations of diamond exploration programs are shown in Figure 1.

Almaden Minerals Ltd. (58.8%) and partners **Williams Creek Explorations Ltd.** drill-tested seven priority magnetic and weak electromagnetic targets on their ATW property, MacKay Lake. Targets were selected from a February 2009 reinterpretation of geophysical data, coincident with the head of a kimberlite indicator mineral train. Nine diamond drill holes totaling 694 metres failed to intersect kimberlite. Some of the drilled geophysical signatures were the result of pyrrhotite in metamorphosed sediments.

Archon Minerals Ltd. (Stewart Blusson), acquired full ownership of leases covering the Buffer Zone, surrounding the Core Zone Joint Venture and the Ekati Mine site. Eighty-five mineral leases encompassing 173,000 acres, were acquired which have ten drill-confirmed kimberlite pipes and numerous priority geophysical targets. An airborne magnetic geophysical survey commenced in September with two aircraft to provide a higher-resolution dataset for an elongate cluster of untested geophysical targets interpreted from previous surveys. The Jay and Lynx kimberlite pipes in the Buffer Zone have been selected for resource studies as decreasing mining costs at the Ekati mine allows consideration of these lower grade potential resources.

Arctic Star Diamond Corp. prospected their Credit Lake property in detail and collected 71 till samples, forty kilometres southwest of Ekati Mine within the Providence Lake Greenstone Belt. The sampling was designed to close off a kimberlite mineral train (Alpha Train) and test up-ice of a 2008 drill-tested bathymetry anomaly (The Abyss topographic target). Two samples returned anomalous KIM grain counts with 100 and 67 grains.

Arctic Star Diamond Corp. also collected 25 samples on two separate kimberlite indicator mineral dispersal trains from their Crown property, claims staked in 2008, north of Ekati Minesite. From these samples, one anomalous sample with 83 KIMs (3 pyrope, 1 orthopyroxene and 79 olivine) has been reported.

De Beers Canada Inc. (51%) and **Mountain Province Diamonds Inc.** (49 %) are joint venture partners in the Gahcho Kué Diamond Project located in the southeastern Slave Province, 150 kilometres south-southeast of the Ekati and Diavik Mines. The project is one

of the largest potential diamond mines currently at the advanced exploration stage of development. Work this year focused on an updated NI 43-101 compliant resource model released April 20, 2009. The mineral resource, including pipes 5034, Hearne, and Tuzo, has an indicated resource of 30.2 million tonnes containing 50.5 million carats at a grade of 1.67 carats per tonne and an inferred resource of 6.0 million tonnes containing 10.3 million carats, at a grade of 1.73 carats per tonne. The model includes assumptions of economics based on mid-2008 conditions, a bottom cut-off of 1.0mm and includes dilution from a 0.6 million tonne granite raft within the Tuzo pipe. A feasibility study by JDS Energy and Mining for the Gahcho Kué project commenced in September is expected to be complete in mid 2010.

Diavik Diamond Mines Inc. reduced exploration in 2009 and completed only fieldwork necessary to ensure maintenance of their joint venture claims. In early 2009, a geophysical review and a small ground geophysics program were completed followed by a summer program with prospecting and glacial sediment sampling (less than 100 samples). Increased exploration is expected for 2010.

Kennecott Canada Exploration Inc. entered an option agreement with **GGL Resources** to evaluate the CH property, in the MacKay and Courageous Lake area, southwest of Ekati and Diavik mines. A small amount of ground gravity work was conducted to better define select prospective targets.

New Nadina Explorations Ltd. (57.49%) with partners **Chris & Jeanne Jennings** (22.11%) and **Archon Minerals Ltd.** (20.40%) explored their Monument property southwest of the Ekati leases. A 762-line kilometre ground magnetometer survey completed in the spring of 2009 provided greater resolution and more precisely defined magnetic anomalies associated with previously known kimberlite pipes. A review of all geophysical data resulted in additional targets being identified. Five diamond drill holes, totaling 461 metres, were completed to obtain information on size and shape of kimberlite targets of the Northern Zone. Two drill holes tested the outer limits of the land-based Trio kimberlite: the western drill hole confirmed the DD2002 dyke is connected to the Trio kimberlite; and the eastern drill hole did not intersect kimberlite. Thirteen reversed circulation (RC) drill holes in grid-like spacing over the Trio kimberlite indicated a steeply west dipping dyke. A 7.4 kilogram Trio diamond drill core sample submitted to Saskatchewan Research Council returned eight microdiamonds, less than 0.3 mm sieve size. Analysis of a 1018 kilogram sample (127 sub-samples) from RC hole 09-04 returned 848 microdiamonds, two of which were greater than 1.18 mm sieve size and 95% less than 0.425 mm sieve size. A couple of broken diamonds were observed in two of the sub-fractions. The western-most magnetic low anomaly, representing the DD42a kimberlite pipe, was tested with three ice-based drill holes indicating a size of 57 by 27

metres; all three drill holes stopped short in the kimberlite due to technical problems. Microdiamond analysis of a 199 kilogram composite sample from three diamond drill holes in the DD42a pipe resulted in 149 microdiamonds with 1 > 1.18mm and 94 % less than 0.425 mm sieve size.

Olivut Resources Ltd.'s off-craton HOAM diamond property covers 1,071,750 hectares in the Interior Platform region south of Great Bear Lake. A drill program consisting of eighteen holes was completed to target 13 untested airborne magnetic geophysical targets. Two holes tested a previously identified kimberlite (~2-3 ha in size) to assess potential of multiple phases; and several holes were drilled to test anomalies from a structural analysis study. Ten drill holes intersected kimberlite and five new kimberlites were discovered. Both diatreme and/or hypabyssal kimberlites have been identified in the new discoveries. Samples totaling 236 kg of kimberlite were submitted for caustic fusion analysis and returned two microdiamonds from one of the new occurrences. However, detailed examination of drill core material and caustic fusion residues suggests that the intersected kimberlites were not the source of the indicator mineral populations obtained from stream and till samples.

Sanatana Diamonds Inc. and **Kennecott Canada Exploration Inc.** completed fieldwork on their Greenhorn, Colville and Simpson prospects of their Mackenzie JV diamond project, north of Great Bear Lake. A total of 1600 line kilometres of ground magnetic surveys with 25 to 100 metre line-spaced grids was completed on 16 targets. Results from 137 till samples collected and processed from the Greenhorn prospects demonstrated that the till anomaly is local in nature. Closely-spaced sampling and a 763 station gravity grid at 20 x 20 metre spacing was completed for the Greenhorn project, northeast of Great Bear Lake. This work was designed to delineate a source for weathered fragile kimberlite fragments containing indicator minerals, recovered during 2008 exploration. Results from the 2009 surveys were not sufficient to define a drill target and the anomaly remains unexplained.

The Dharma kimberlite was discovered on the Greenhorn property in October 2007 followed by the discovery of the Dharma Uttar kimberlite from the 2008 drill program. Caustic fusion results from 2008 of a 449 kg sample of the Dharma Uttar kimberlite yielded a total of 227 diamonds not passing through a 0.106 mm mesh screen, including eight stones remaining on a 0.85 mm screen. The work at the Dharma kimberlite complex suggests that, while important, the complex has insufficient tonnage to warrant further evaluation on a stand-alone basis at this time.

On the Colville property, 745 kilometres northwest of Yellowknife, Sanatana Diamonds implemented a ground magnetic survey and a follow-up till sampling program (59 samples). This activity was designed to better define the source of an indicator mineral anomaly discovered in 2008. The till anomaly has a high pyrope indicator mineral count

and favourable “diamond permissive” chemistry. Results from 2009 were encouraging and defined a distinct indicator train named the MK-58.

On their Simpson Prospect, RC drilling consisting of three four-inch diameter reconnaissance holes was completed on three priority targets with indicator mineral trains and coincident geophysical anomalies. Kimberlite was not intersected and results of kimberlite mineral analysis on RC-collected basal till samples did not warrant additional work at this time. The targeted indicator minerals anomaly was not explained.

Fifty kilometres southeast of Yellowknife, **Snowfield Development Corporation, Challenger Development Corporation** and **Dave Smith** completed a spring drill program on the Wire claim of their Ticho Property. Seven drill holes tested circular magnetic anomalies, one associated with a deep circular lake. Kimberlite was not intersected. Approximately 150 soil samples were collected from the property. Challenger Development has subsequently terminated their interest in the Joint Venture. Snowfield Development Corp. has also expanded their holdings to include four mineral claims located on Simpson Island at the southwestern end of the East Arm of Great Slave Lake.

In 2009, **Talmora Diamond Inc.** completed an 865 line-kilometre airborne magnetic survey and collected 45 till samples in order to test down-ice of magnetic anomalies on their Horton River Project, 100-200 kilometres south of Paulatuk and 400 kilometres east of Inuvik. Talmora took advantage of the economic slowdown by acquiring more land covering 125 interesting magnetic anomalies and a structural zone containing small round lakes. The original permits were acquired based on anomalous stream sediment samples and to cover the lands up-ice from a zone of diabase dykes from where six diamondiferous kimberlite pipes had been discovered by Darnley Bay Resources Ltd.

Table 1: Summary of NWT diamond exploration in 2009

Operator / Partners	Property	Drilling	Airborne Geophysics	Ground Geophysics	Sampling and Other Work
Almaden Minerals Ltd./ Williams Creek Explorations Limited	ATW (MacKay Lake)	9 ddh (694m)		Surveyed over proposed drill targets	Preparation for 2009 drill targets: reinterpretation of previous Mag, EM/Res, and Grav data and interpretation of geochemical data from 2008 sonic drilling
Archon Minerals Ltd.	Buffer Zone		Detailed Mag		
Arctic Star Diamond Corp.	Credit Lake				Prospecting 71 till samples
Arctic Star Diamond Corp.	Crown				25 till samples
De Beers Canada Inc. (51%) and Mountain Province Diamonds Inc. (49 %)	Gahcho Kué				Mineral Resource update Feasibility study
Diavik Diamond Mines Inc.				Small survey	< 100 till samples, prospecting
Kennecott Canada Exploration Inc./GGL Resources	CH			Grav	Evaluating property
New Nadina / Chris & Jeanne Jennings / Archon Mineral	Monument, Lac de Gras	5ddh 13RC holes		762 line-km Mag	Microdiamond analysis
Olivut Resources Ltd.	HOAM (Off-Craton)	18 ddh			236 kg sample for caustic fusion
Sanatana Diamonds Inc./ Kennecott Canada Exploration Inc.	Mackenzie - Greenhorn (Off-Craton)			Detailed close-spaced Mag; Grav	Close-spaced sampling; 137 samples
Sanatana Diamonds Inc./ Kennecott Canada Exploration Inc.	Mackenzie-Colville (Off-craton)			Mag	Till sampling; 59 samples
Sanatana Diamonds Inc./ Kennecott Canada Exploration Inc.	Mackenzie-Simpson (Off-Craton)	3 Lightweight RC holes (64m)		Mag	
Snowfield Development Corp.	Ticho	7ddh			~150 Soil samples, 4 claims
Talmora Diamond Inc.	Horton River (Off-Craton)		865 line-km Mag		45 till samples, 125 claims

Grav – gravity, ddh – diamond drill hole, RC – reverse circulation, Mag – magnetic, EM - electromagnetic, KIM – Kimberlite indicator mineral, Res – Resistivity

Metal Exploration

The locations of metal exploration programs are shown in Figure 1.

Forty kilometres southwest of Ekati Mine, **Arctic Star Diamond Corporation** followed up on its 2008 Providence Lake Nickel Discovery, on the Credit Lake property. This year, multiple new massive sulphide showings containing pyrrhotite-chalcopyrite mineralization were discovered on the property within the Providence Lake Greenstone Belt. The Finn Valley discovery is 13 kilometres west of the Providence Lake Nickel discovery, and is one kilometre up-section in the younger Yellowknife Supergroup. A 465 line-kilometre ground magnetometer survey with 20 metre line-spacing covered the basal Central Slave Cover Group and Yellowknife Supergroup. Forty-one line-kilometres of ground Horizontal Loop Electromagnetic survey covered 13 grids and 24 individual land-based targets. Discrete shallow conductors were identified as potential massive sulphide drill targets. Fifty-one potentially mineralized targets interpreted from previous airborne geophysical data were mapped and sampled. Successful drill results in 2008 proved the utility of targeting geophysical anomalies with coincident anomalous soil geochemistry. To continue with this technique, 1261 soil samples were collected over geophysical anomalies using a grid spacing of 50 metres. Five mineralization trends have been identified on the property using soil geochemistry/ VTEM/ Ground EM Surveys. These include the TZ28 extension of the Discovery trend, A11, TZ36/35, A9/10, and the TZ29-A5 trends. Fifteen 2008 drill holes were re-logged looking at favourable stratigraphy and mineralization. Microscopy and electron microprobe analysis of silicate and sulphide minerals from 2008 drill core confirmed that the Cu-Ni-Co-PGE mineralization is associated with komatiite and also with mafic amphibolite. Twenty-five additional core samples were collected for whole rock and trace element (ICP) analysis, and additional samples for detailed microscopy and subsequent Electron Probe microanalysis. Drill hole 08CR-18 cut 5.1 metres of massive sulphide and the interval contained 1.75% nickel, 1.75% copper, 0.17% cobalt, 0.250 g/t platinum, 1.230 g/t palladium, 0.354 g/t osmium, 0.264 g/t ruthenium, 0.749 g/t iridium, and 0.794 g/t rhodium.

Avalon Rare Metals Inc., completed definition drilling to increase their Indicated Resource and provide information for a Pre-Feasibility study on their Nechalacho Rare Earth Element (REE) project, at Thor Lake, 100 kilometres southeast of Yellowknife. As of January 2010, they report an indicated resource of 9.00 million tonnes grading 1.86% Total Rare Earth Oxides (TREO), 0.43% Heavy Rare Earth Oxides (HREO) and 23.1% HREO/TREO at a cut-off of 1.60% TREO. Avalon's focus is on the Basal Zone of the Nechalacho deposit due to its strong enrichment in the more valuable heavy rare earth elements as a proportion of the total rare earth elements present. A total of 44 drill holes were completed (9,098 m) intersecting the Basal Zone on a 50-metre grid pattern. Assay highlights include drill hole L09-152 with the highest grade of 2.96% TREO (27.2% HREO) over 11.6 metres, including 4.41% TREO (28.7% HREO) over 2.3 metres.

The results of the 2009 drilling and concurrent academic research work have developed a new genetic model of the deposit. Nechalacho is now recognized as an unusual example of a large, layered peralkaline intrusive complex with an extensive zone of hydrothermal replacement that has apparently upgraded the primary layered magmatic REE mineralization. The results of drill holes L09-205 and L09-206 support this model and confirm that the Basal Zone extends further southwest and to greater depths than previously expected. In particular, L09-206, with an intercept between 249 and 263.2 metres below surface of 14.2 metres grading 1.90% TREO and 30% HREO/TREO.

The metallurgical emphasis is now on caustic cracking to decompose refractory minerals and extract the Rare Earth elements. Mineralogical studies, in preparation for the metallurgical work, on the Lake Zone identified Light Rare Earth elements in bastnaesite, monazite, allanite, parisite and synchisite and HREE are 45% contained in fergusonite and 45% in zircon with the remaining amount contained in LREE minerals already listed. Metallurgical testwork is being done by SGS Minerals Services laboratory in Lakefield. A two stage processing is being considered, with crushing, grinding and mineral flotation as the first step to produce a mineral concentrate. A second stage hydrometallurgical process would then be used to extract the rare earth elements from the minerals. The initial flotation test work reported suggests recoveries of 83% to 86% for the light rare earths, 75% to 82% for the heavy rare earths and 85% for zirconium.

In the southern Mackenzie Mountains, **Canadian Zinc Corp.**'s proposed development and operation of the Prairie Creek zinc-lead-silver project is currently undergoing environmental assessment by the Mackenzie Valley Environmental Impact Review Board. Work was limited to winter road rehabilitation, studies related to the environmental assessment and refinement of the mine plans. The site was temporarily shut down over the winter to reduce overall expenditures.

In June 2009, Canadian Zinc reported results from their (Phase 5) 2008 metallurgical testing of a 530-kilogram representative rock sample of mineralized vein material collected from multiple headings within the underground workings. The testing, using a large volume of representative mine water, was to simulate representative concentrates, tailings and process effluents using the process flow sheet for the proposed Prairie Creek Mine. SGS Lakefield Research Ltd. conducted three large-scale locked cycle tests which indicated an overall grade blended lead sulphide/oxide concentrate of 67% lead, with an 82% recovery of total lead, and a zinc sulphide grade of 58% zinc with a 74% recovery of the total zinc in the plant feed; and an average of 92.7% total silver in plant feed from the zinc and lead concentrates. The Prairie Creek Mine is partially developed with an existing 1000 tonne per day mill and related infrastructure.

Also in June, the legislation to expand the Nahanni Park Reserve was announced by Jim Prentice, Canada's Environment Minister. The expanded National Park Reserve

completely surrounds the Prairie Creek project but excludes the Mine site, associated mineral claims and a buffer area of about 300 square kilometres, while allowing an access road to the site.

Fortune Minerals Ltd. announced in January 2010, a new mine plan and a 43% increase in the mineral reserves on the NICO gold, cobalt, and bismuth project, located in the southern Bear Province, 160 kilometres northwest of Yellowknife. The update, prepared by P&E Mining Consultants Inc., has increased the proven and probable mineral reserves for NICO to 31 million tonnes from the previously reported 21.8 million tonnes. This estimate includes 16.4 million tonnes of proven reserves containing 0.97 g/t Au, 0.12% Co, 0.16% Bi and 0.04% Cu. Fortune Minerals production plans include an open pit and underground operation with feed to a conventional crushing, grinding and flotation mill. Onsite concentration is anticipated to process 4,650 tonnes of ore per day producing approximately 180 tonnes of bulk concentrate per day. The concentrates of gold, cobalt, bismuth and copper will be trucked to the railhead at Hay River and shipped to its own (to be developed) refinery in Saskatoon, Saskatchewan. In February 2009, the results of hydrometallurgical processing on concentrates from a pilot plant test completed at SGS Lakefield Research Ltd., were announced. The test showed that NICO ore could be processed to high value metal products: cobalt and bismuth cathode, gold doré and copper cement. The draft terms of reference from the Mackenzie Valley Environmental Impact Review Board for the Environmental Assessment have been received for Fortune Minerals Ltd. NICO project.

GGL Diamonds Corp. examined the potential of its Providence Greenstone Belt (PGB) property, 250 kilometres north of Yellowknife. Prospecting and sampling was completed this fall on three areas of gold mineralization. The first area (King John) returned values of 22.62 g/t Au and 27.22 g/t Au from 2008 and 2007 samples, hosted by quartz-filled, sheared mafic volcanic rocks adjacent to iron formation. A ground magnetic and VLF-EM survey was conducted over the shear zone, tracing it for 1.5 kilometres. The second area (Lord Cache) examined had previously returned assays of 42.68 g/t Au and 19.88 g/t Au over a 0.55m channel sample. The third area (Noble Count) examined contained a gold-bearing iron formation, discovered by Noranda in 1984. The iron formation was traced for a length of 4 kilometres and a width of 20-40 metres with grab sample results of 8 and 5.11 g/t.

Merc International Minerals Inc.'s drill program on their Damoti Lake gold project was designed to increase the historic resource of the Horseshoe Zone, approximately 210 kilometres north-northwest of Yellowknife and 30 kilometres south of the past producing Colomac Mine site. The iron formation-hosted Horseshoe Zone has seen extensive exploration including underground exploration. A total of 27 holes were drilled in 2009. All but one of the holes intersected gold mineralization greater than 1 g/t, with twenty holes intersecting multiple mineralized zones. New gold intersections reported from the

west limb of the Horseshoe syncline returned values of 3.63 g/t gold over 7.55 metres, including 12.02 g/t gold over 1.10 metres. In October, Merc International confirmed mineralization within the keel of the syncline and extending upwards into the west limb. SRK has completed their site visit to initiate a mineral resource evaluation and preparation of a NI 43-101 compliant technical report. The last resource estimate was made in 2004; an approximate 63 drill holes will be added to the data set for the new study. Detailed ground magnetic, electromagnetic, and localized induced polarization surveys have been initiated over the gold mineralized zones.

North American Tungsten completed a geochemical survey on their Rifle Range Creek project, across the valley from Cantung Mine. This geochemical survey was quite unique in that samples were collected from holes cut through the Rifle Range Glacier using hot water to excavate the holes. Samples were hydraulically extracted from the bedrock/ice interface. Four diamond drill holes totaling 676 meters were completed but no significant visual scheelite was observed. Sub-ice geochemical sampling late in the season has identified additional potential targets to the north of the area that had been initially drilled.

North Arrow Minerals Inc. completed prospecting, mapping, and drilling of their Phoenix lithium project in the Aylmer Lake area. Six new spodumene-bearing pegmatite localities were identified; bringing the total to eight. The showings include the Big Bird pegmatite and this year's discovery of the Curlew pegmatite, 3 kilometres east of Big Bird. Analytical results from 59 samples returned 17 analyses from 0.41% Li₂O up to 3.62% Li₂O and eleven with grades greater than 1.5% Li₂O. Additional mapping and sampling was conducted in conjunction with drilling. The northwest trending "Big Bird" spodumene-bearing pegmatite dike has a strike length of at least 1,200 metres and widths of up to 40 metres. Seven holes (682m) tested the Big Bird and Curlew pegmatites. A drill intersection at Big Bird included 34.3 metres of pegmatite and related felsites and aplite, and returned 1.24% Li₂O. Three additional holes encountered only narrow intersections; a southwest dip has been interpreted from drilling. The Curlew pegmatite has been mapped over 400 meters along strike and drill holes tested 315 metres of strike length. An even longer strike length was interpreted from geophysical surveys. The first hole intersected 25.11 metres of spodumene-bearing pegmatite grading 1.37% Li₂O; the second hole intersected 8.57 metres grading 1.47% Li₂O and the third hole intersected two sections of pegmatite of 14.87 metres core length, grading 1.72% Li₂O and 6.65 metres core length grading 1.26% Li₂O.

Novus Gold Corp. in joint venture with **Terra Ventures Inc.** drilled the REN gold property at Point Lake, approximately 90 kilometres southwest of the formerly producing Lupin gold mine in Nunavut Territory. The property contains several known iron formation-hosted gold showings, including the REN showing which had been drilled by Texas Gulf, Echo Bay and Westview Resources. A non-NI 43-101 compliant resource of 1.8 to 2.7

million tonne deposit in the 10 g/t Au range has been defined on the Main Zone. Results from **Novus Gold** and **Terra Ventures'** nine-hole drilling program indicate a new zone within the Main occurrence of the Ren Property. The reported intersections that contained 2 to 3 g/t Au in lengths that ranged from 10.61 to 32.76 metres, identified a previously unrecognized wide, low-grade gold zone associated with the iron formation. Higher grade intersections up to 22.40 g/t gold over 0.65 metres were also reported. In addition to the drilling, 83 samples were collected in a prospecting program. These samples have expanded the extent of the known showings by identifying a new showing and tracing mineralization and iron formation over a seven kilometers strike length.

Sanatana Diamonds Inc. and **Kennecott Canada Exploration Inc.** submitted a subset of till samples collected on their Mackenzie Diamond project for multi-element ICP-MS analysis. Five separate areas returned elevated zinc (>250 ppm), lead and silver. The highest values to date include: 0.3% zinc, 360 ppm lead and 1.4 ppm silver. Examination of float in this area has identified galena and sulphide. Sanatana Diamonds reported that the zinc anomalies appeared to be associated with Ordovician limestone similar to a Mississippi Valley-type target.

Strongbow Exploration Inc. reported results of a metallurgical study of the Main Zone nickel-copper-cobalt deposit of their Nickel King project, at Thye Lake, 550 kilometres southeast of Yellowknife. A 120 kg composite drill core sample averaging 0.65% nickel from the Lower Sill of the Main Zone was collected for metallurgical testing. SGS Mineral Services completed chemical and mineralogical analysis, grindability, flotation and heavy liquid separations. The final concentrate grade is projected to be 16.5 % nickel, 4.2% copper, and 0.74% cobalt with respective recoveries of: 78.4%, 89.1%, and 63.5%. Mineralogical studies determined that 89.9% of the contained nickel is associated with pentlandite; 9.1% with pyrrhotite and 2% with silicate minerals.

Mineralization is hosted by norite within the Upper and Lower sills of the Main Zone and has a 2007-2008 drill-delineated strike length of 2.6 kilometres. The two sills, 40 metres to 110 metres in thickness may represent the two limbs of a westerly plunging synform. Extensions to the Nickel King deposit have also been identified outside of the current resource model. Ongoing geophysical and structural modeling suggests that Nickel King mineralization may extend a further 600-700 m along strike to the southwest of the current limit of drilling. The deposit also remains open up dip and along strike to the east, where geophysical surveys suggest mineralization could extend a further 250 m. Strongbow reported a NI 43-101 compliant minerals resource for the main zone, by PEG Mining Consultants, having an indicated resource of 11.1 million tonnes grading 0.40% nickel, 0.10% copper and 0.018% cobalt; and an inferred resource of 33.1 million tonnes grading 0.36% nickel, 0.09% copper, and 0.017% cobalt using a 0.2% nickel cut-off grade. Additional discoveries through diamond drilling in 2008 include the Koono (1.0%

Ni, 0.2% Cu, 0.04% Co over 4.35 m) and South Ring (0.47% Ni, 0.27% Cu, 0.03% Co over 21.2 m) prospects within three km of the main Nickel King deposit.

Strongbow Exploration Inc. conducted a two-week exploration program evaluating priority targets along their Snowbird Nickel project, covering 150 kilometres from Strongbow's Nickel King Deposit in the NWT to Stony Rapids, Saskatchewan. Geologists discovered several new areas of nickel-copper sulphide mineralization associated with norite, gabbro and pyroxenite intrusions. The 2009 and 2008 discoveries were found in close proximity to previously identified geochemical or geophysical targets. The program concentrated in the Opescal Lake and Heel Lake areas. Opescal Lake straddles the NWT-Saskatchewan border, and Heel Lake is further south. A new nickel showing was found at the OPN target where five of six mineralized gabbro boulder and subcrop samples returned 0.22% to 1.17% nickel and 0.40% copper. The mineralized subcrop is coincident with a 770 metre long geophysical conductor (>1000 Siemens). The NP8 showing at Opescal Lake is hosted by a norite sill which along with pyroxenite was traced over a 900 metre strike length. Mineralized norite samples returned 0.13% to 0.38% nickel.

TNR Gold Corp. and their spinoff company **International Lithium Corp.** examined and sampled their Moose Lithium Project, near Thor Lake, 115 kilometres east-southeast of Yellowknife. A brief property visit in July concentrated on confirming high-grade lithium from the Moose 1 and Moose 2 pegmatite dikes. The July work was followed up in October by an examination to allow preparation of a NI 43-101 technical report. Spodumene crystals up to 4 metres in length were observed in the Moose 2 pegmatite which has an observed strike length of 427 metres and a width of 25-30 metres. Assay highlights include: 2.07 wt% Li₂O over a 6.7 metre composite sample from Moose 1 and 1.96 wt%Li₂O over 1.7 metre channel sample from Moose 2.

Triple Dragon Resources Inc. have added to their Murray Gold Property near Gordon Lake through the staking of the Camlaren Property, covering the former producing gold mine, and acquiring the May Claim, five kilometers to the south. In October, Triple Dragon also optioned the Burnt Island Property, covering another small past producing gold mine.

Eighty kilometres north of Yellowknife, **Tyhee Development Corp.** completed the drilling portion of fieldwork for the preliminary feasibility study on the Ormsby and Nicholas Lake gold properties. A preliminary assessment of the resources on Tyhee's main properties was released. It suggested that the Ormsby zone contains 3 million tonnes at 3.41 g/t Au (measured) and 7.9 million tonnes at 3.42 g/t Au (indicated), the Nicholas zone has 1.2 million tonnes at 3.81 g/t Au (measured) and 1.5 million tonnes at 3.32 g/t Au (indicated), the Bruce zone has 0.8 million tonnes at 3.64 g/t Au (indicated) and the Clan Lake Main

zone 3 million tonnes at 3.64 g/t Au (indicated). Six geotechnical holes were drilled at both Nicholas and Ormsby, along with three exploration holes. Samples have been shipped for both environmental and metallurgical processing studies; hydrology and electrical power studies are ongoing.

Tyhee Development Corp. completed reconnaissance exploration and trenching on their Clan Lake gold property, 40 kilometres north of Yellowknife and 27 kilometres south of the Ormsby zone. Seven new gold zones were sampled and mapped, while seven other previously identified showings were mapped and sampled in more detail. The strike length and width of the Clan Lake Main zone was reported to have been increased four times its original size; trenching and sampling, 450 metres to the east of the main structure exposed extensive quartz veins with pyrrhotite, pyrite and galena mineralization. Drill holes completed by previous property holders were also re-logged and sampled. Trench samples returned grades up to 13.12 g/t Au over 10.0 metres including 48.8 g/t Au over two metres. The prospecting and mapping further defined Cub and Morel Zones based on samples with up to >100 g/t gold. Grab samples from the new East Cub returned up to > 100 g/t gold and the mineralized zone was traced for 77 metres. Tyhee geologists reported a 6.8 kilometres long by 1.5 to 1.7 kilometre wide northeast-trending zone hosting a series of deformed, oblique or en-echelon silicified sulphide-hosted gold showings.

Ur-Energy Inc. announced in August the start of ground audiomagnetotelluric geophysical survey, and 500 surface samples for bio-leach and soil gas analysis on their Screech Lake uranium project in the southern Thelon Basin. An agreement was secured with Lutsel K'e Dene First Nation to conduct the exploration work in 2009.

Viking Gold Exploration drill-tested their Morris Lake gold property, just south of the former Discovery gold mine. Three targets were to be tested by three holes (640 m) in order to: 1) determine the easterly extent of the Ormsby zone and test two geophysical conductors; 2) extend the background section to the west and 3) test a magnetic anomaly and gossanous tuffs below Narrow Lake. A total of 186 intervals of drill core were submitted for gold analysis. Anomalous gold was not intersected in the first drill hole, however, the base of the Ormsby zone was interpreted to be intersected in the second hole which returned two samples with greater than 100 ppb gold, and up to 114 ppb gold. The third hole returned 11 samples with greater than 100 ppb gold and a maximum value of 1.2 g/t gold. Of the 126 channel samples from 15 sites, 17 samples returned greater than 100 ppb gold and a maximum of 3.37 g/t gold.

Table 2: Summary of Northwest Territories active exploration projects of precious, base and energy metals 2009

Operator / Partners	Property	Commodity	Drilling	Airborne Geophysics	Ground Geophysics	Sampling and Other Work
Arctic Star Diamond Corp.	Credit Lake (Providence Lake Greenstone Belt)	Cu-Ni-Co-PGE			Mag (465 line-km with 10-20 m line spacing), HLEM (13 grids, 42 line-km)	Soil (1261), rock (60), mapping; re-log and re-sample 2008 core (25)
Avalon Rare Metals Inc.	Nechalacho (formerly Thor Lake)	REE	5477m (26 ddh) winter 9098m (44 ddh) summer			NI-43-101 compliant Resource calculation Feb 2009. Updated Resource August. Metallurgical test work
Canadian Zinc Corp.	Prairie Creek	Pb-Zn-Ag				Metallurgical testing
Fortune Minerals Ltd	NICO	Au-Co-Bi				Metallurgical testing/ Feasibility study
GGL Diamond Corp.	(Providence Greenstone Belt)	Au			Mag and VLF-EM	Field examination and sampling
Merc International Minerals Inc.	Damoti Lake	Au	5600 m (27 ddh)			Re-sample historic core initiate
North American Tungsten	Rifle Range Creek	W	676 m (4 ddh)			Geochemical survey using hydraulic sampling
North Arrow Minerals Inc.	Phoenix	Li	682m (7 ddh)			Prospecting (59 samples) and mapping
Novus Gold Corp. /Terra Ventures	REN	Au	(9 ddh)			
Sanatana Diamonds / Kennecott Canada Exploration	Mackenzie	Zn-Pb-Ag				Till samples
Strongbow Exploration Inc.	Snowbird Nickel, Nickel King	Ni-Cu-Co				Resource estimate from drill holes Metallurgical test work on 2008 drill core
Strongbow Exploration Inc.	Snowbird Nickel, Opescal Lake and Heel areas	Ni				Sampling

Table 2 continued

Operator / Partners	Property	Commodity	Drilling	Airborne Geophysics	Ground Geophysics	Sampling and Other Work
TNR Gold/International Lithium Corp.	Moose	Li				Examination and sampling: 2 channel and 2 composite samples
Tyhee Development	Ormsby	Au	1 ddh exploration			6 geotechnical holes; metallurgical work on drill core
Tyhee Development	Nicholas Lake	Au	2 ddh exploration			6 geotechnical holes; metallurgical work on stockpiled ore
Tyhee Development	Clan Lake	Au				Reconnaissance exploration; mapping and sampling; relogging and sampling previously drilled core; 220m trenching
Ur-Energy Inc.	Screech Lake, Thelon Basin	U			Audiomagnetotelluric survey	Soil sampling
Viking Gold	Viking (Morris Lake)	Au	3 ddh (604m)			15 channel samples, mapping

Mag – magnetic, EM - electromagnetic, IP – induced polarization, VLF-EM – Very Low Frequency electromagnetic survey, HLEM – Horizontal loop electromagnetic survey, TEM - time-domain electromagnetic survey, PGE - platinum group elements

FURTHER INFORMATION

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