2012 Northwest Territories Mineral Exploration Overview March 2013



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Cover Illustration:

An overview of the Prairie Creek Minesite looking south, downstream along Prairie Creek. Photo courtesy of Hendrik Falck.

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2012 Northwest Territories Mineral Exploration Overview

Introduction

The year started on an optimistic note with many exploration plans being announced. However, a shift in the global economic climate in late 2011 had started to impact the pace of exploration financings by early 2012. Many junior companies had trouble raising the necessary funds to sustain exploration spending, forcing them to scale back on fieldwork and defer new activities. The financial challenges created by the European Debit Crisis, an uneven recovery in the U.S. market, and an economic slow-down in China were not restricted to the exploration companies. In spite of a lack of new diamond supply and strong growth in demand, particularly from India and China, diamond producers found that they could not sell all their production. Diamantaires (diamond cutters), who depend on financing for 90 per cent of their rough diamond inventory, encountered difficulties arranging affordable financing since the main diamond-lending banks were capping their lending facilities.

The result of this "scaling back" is immediately evident in the claim staking statistics. By year-end 2012, only 96 claims totaling 62,128 ha had been staked in the Northwest Territories, many of those covering recently-lapsed claims. This is in stark contrast to the 710 claims covering ca. 550,000 ha. staked in 2011, when staking had expanded into in new regions of the NWT and returned to areas in which it had been absent for over 20 years. In regions where large portions of crown lands are tied up in land-claim withdrawals, very few option agreements and exchanges of ownership of grandfathered claims occurred this year.

Similarly reduced exploration efforts have also been documented all across the north. In Nunavut the number of recorded claims went from 1061 claims (919,851 ha) in 2011 to 301 claims (265,940 ha) in 2012. Even more dramatically, Yukon claim staking went from a staking rush of 94,278 claims in 2011 to 11,731 claims staked in 2012.

Additional uncertainty was felt by companies searching for diamonds, as both BHP Billiton and Rio Tinto Exploration Canada Inc. reviewed their positions in the diamond market. Majority stakes in operating mines were put up for sale, and major exploration projects were either sold or mothballed and options returned to partners, as these large companies determined that the diamond market was of insufficient size in context of their broader corporate portfolios.

More-advanced projects with previously secured financing or companies in production were relatively active this year, often with multiple drills turning. Project operators chose to increase their exploration allocations in an effort to define or replace reserves, resulting in a continuation of drilling programs. Companies that were moving properties through the feasibility stage of exploration continued to expend large efforts to upgrade reserve

estimates in order to meet securities-exchange compliance standards. An additional measure of confidence can also be interpreted from mining companies' increases in "on-property" exploration efforts and large investments in mine infrastructure. These efforts were not restricted to a single commodity but encompassed lead, zinc, gold, diamonds and rare earth minerals.

Four mines operated during 2012, including: Diavik, Ekati and Snap Lake diamond mines, and Cantung tungsten mine. Diavik mine transitioned to a completely underground operation, but announced work to develop a new open pit. Ekati diamond mine saw lower production as higher-grade reserves were exhausted and the mine matured. Ekati, Canada's first diamond mine, opened in October 1998 and is expected to close in 2018. In November 2012, after much speculation, BHP Billiton announced that it was selling its 80% interest in the Ekati mine and the Core-zone claims and a 58.8% interest in the Buffer-zone claims to Harry Winston Diamond Mines for \$500 million. This deal is expected to be complete before the end of June 2013. Snap Lake mine recently published production figures that show a relatively constant level of diamond production was achieved in 2012, in-line with a previously announced mine optimization plan that extended the mine life to twenty years. An additional development in the NWT diamond industry occurred in March 2012, when Rio Tinto announced a review of its diamond business. Harry Winston is said to be considering the purchase of Rio's 60 percent stake in Diavik. Harry Winston has also sold its luxury goods sales division to Switzerland's Swatch Group, in order to concentrate on mining. Upon completion of the deal, Harry Winston will be changing its name to Dominion Diamond Corp.

Cantung mine production was interrupted by severe weather and road flooding, but overall production numbers are similar to pre-2010 shut-down levels. Cantung mine is set to close in 2014, but ongoing exploration may change that date.

Exploration and environmental work is continuing on several projects, including: Avalon Minerals' Nechalacho, Canadian Zinc's Prairie Creek, Fortune Minerals' NICO, Tamerlane's Pine Point, Tyhee Gold's Ormsby/Nicholas Lake and Seabridge Gold's Courageous Lake projects. All of these advanced projects were the subjects of extensive efforts to move them closer to production. In addition, reports from De Beers Canada and Mountain Province Diamonds Inc. indicate a positive feasibility for the Gahcho Kué project. The proposed mine plan calls for recovery of 4.5 million carats annually from open pits on the 5034, Hearne and Tuzo kimberlite pipes, for an eleven-year mine life. Canadian Zinc received approval in December 2011 from the Mackenzie Valley Environmental Impact Review Board for the Prairie Creek lead-zinc-silver project to proceed to the regulatory phase, and in January 2013 the Mackenzie Valley Land and Water Board issued a 5-year land-use permit for the establishment and operation of a winter road as well as a 7-year Type B water license. These permits will allow initial construction work on the road prior to finalization and issue of the main operational permit and a Class A water license, which is needed prior to production. Avalon Minerals'

Nechalacho project received positive news from its metallurgical and refinement testing, and a feasibility study is on track for completion in the second quarter of 2013.

While the Northwest Territories seemed like a quiet place in 2012, it was not alone, as the causes for the slow-down originated mostly outside of the territory and their impacts were global.

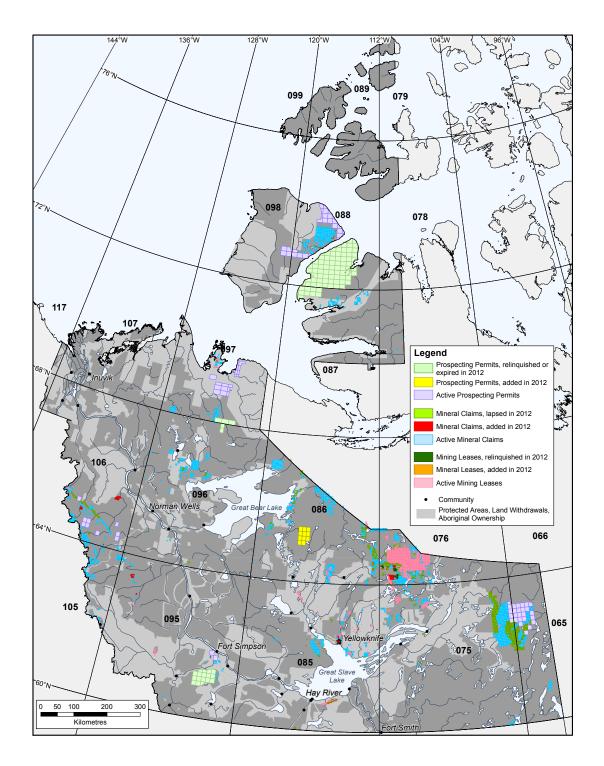


Figure 1: Location and areal coverage of claims, leases and permits for 2012 in the Northwest Territories. New coverage for 2012 includes: 96 claims (62,128 ha) submitted for recording; 46 leases issued (25,354 ha); and 11 Prospecting Permits issued (179,052 ha); (data compiled by the Mining Recorder, AANDC, December, 2012).

NORTHWEST TERRITORIES MINING HIGHLIGHTS FOR 2012

The locations of the mines are shown in Figure 2.

De Beers Canada's Snap Lake diamond mine, 220 kilometres northeast of Yellowknife, recovered 0.9 million carats in 2012, showing a relatively steady production compared with a 2011 recovery of 0.88 million carats from 814,000 tonnes, and 0.93 million carats in 2010. In 2012, Snap Lake continued its ramp up to full production and recruiting programs were executed throughout the year to fill the positions necessary to meet the design capacity of 1.4 million carats per year by 2014. Currently, an average of ca. 2,000 tonnes of ore is processed in a plant designed to handle 3,150 tonnes of ore per day.

A diamond drill program both on surface and underground was completed in 2011, allowing the move of projected resources to the reserve category. An 11-hole program completed from surface combined with a seismic survey were used to define an area of the kimberlite dyke located 700 to 1,300 metres from current workings. This promising area of dyke is flat with low dilution and can be mined using current mining methods. Subsequently, an extensive mine-plan optimization process was completed for the Snap Lake mine that included focused footwall development being implemented through 2014 to open up new areas of the Snap Lake kimberlite. The Snap Lake ore is in 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. The current mine plan forecasts steady production through to about 2030.

In 2012, **Anglo American plc.** acquired the Oppenheimer family's remaining 40% interest in De Beers for US\$5.1 billion, increasing Anglo American's current 45% shareholding to 85%.

The **Diavik diamond mine**, 300 kilometres northeast of Yellowknife, owned by **Rio Tinto plc** (60%) and **Harry Winston Diamond Corporation** (40%), has been in production since 2003 and had produced about 76 million carats of diamonds from approximately 20 million tonnes of kimberlite as of December 31, 2012. This includes the total production for 2012 of 7.2 million carats recovered from 2.1 million tonnes of ore processed. This is a modest increase in production from 6.7 million carats from 2.2 million tonnes of ore processed in 2011. The increase is attributable to a shift in production from the lower grade, lower value ore from the A-418 open pit to higher grade and higher value ore from the underground mining of the A-154 North and South pipes. Open-pit mining of the A-418 pipe was completed in September 2012, with production of 4.3 million carats from 1.2 million tonnes of ore, although processing of the ore continues into 2013. The remaining 2012 production included 1.9 million carats from 0.4 million tonnes of ore from A-154 South kimberlite; 0.9 million carats from 0.5 million tonnes of ore from A-154 North kimberlite; and 0.1 million carats from reprocessed plant rejects. Production of the

lower grade reprocessed plant rejects was deferred and production was impacted by a reduction in plant processing throughput due to changes in the geological composition of the ore.

The production levels were maintained in spite of a five thousand tonne rockfall from the edge of an open pit. Continuous pitwall monitoring gave sufficient warning and all employees were out 10 hours before the rockslide started.

Harry Winston released a new Mineral Reserve calculation as of December 31, 2011, based on each pipe and by mining method (open pit *vs.* underground), followed by a Resource calculation in January 2012. The total Proven Mineral Reserve for the A-154 South, A-154 North and A-418 pipes is 5.4 million tonnes at 3.0 carats per tonne and the Probable Reserves are 13.5 million tonnes at a grade of 3.2 carats per tonne. Measured and Indicated Resources for A-21 are 3.6 million tonnes at 2.8 carats per tonne and 0.4 million tonnes at 2.6 carats per tonne, respectively. Reprocessed plant rejects and small diamond recoveries are not included in the reserve and resource estimate.

The updated life-of-mine plan includes the development of the A-21 kimberlite pipe. With a detailed preliminary assessment and advanced engineering completed, a budget of \$5.8 million has been proposed for the final feasibility and completion of engineering in 2012. The next phase, pending approval by the joint venture partners, would then involve the crushing and screening of rock for berm construction using existing infrastructure at a cost of about \$46 million. A final approval for berm and cut-off wall construction, as well as, pit development and pre-stripping to deliver ore, would be achieved in 2017. The total A-21 budget is estimated to be about \$500 million.

The mine life of Diavik, which has now transitioned into a fully underground operation, is expected to extend through 2023 with the addition of A-21.

Diavik Diamond mine has started the construction of a wind farm at its minesite located on East Island at Lac de Gras. When the farm is completed, four 2.3-megawatt turbines will be constructed, providing a capacity of 9.2 megawatts, which are anticipated to reduce the annual demand for diesel by about 4 million liters, or about 10 percent of total diesel consumption.

The **Ekati diamond mine**, owned by **BHP Billiton (80%)**, **Stewart Blusson (10%)** and **Chuck Fipke (10%)**, produced 1.8 million carats of diamonds in 2012. This production level is consistent with forecast values, which are constrained in accordance with the mine plan, by the need to extract lower-grade material. The trend to declining production levels is expected to continue for the remainder of the mine life to 2018. Annual sales from Ekati represented approximately three per cent of current world rough diamond supply by weight and approximately 11 per cent by value in 2010.

In November 2011, BHP Billiton announced a review of its diamond business, including the 80 percent interest in Ekati and 51 percent stake in the Chidliak development project in Nunavut. DeBeers declined to make an offer after examining the project and by the end of June the bidders, Stornoway Diamonds and US private equity firm KKR & Co. L.P., opted not to submit a binding offer, leaving Harry Winston Diamond as the only interested party.

On November 13, 2012, Harry Winston Diamond Corp announce that it had agreed to purchase from BHP Billiton an 80% interest in the Core Zone Joint Venture and a 58.8% interest in the Buffer Zone Joint Venture. C. Fipke Holdings Ltd. initiated an action in the Ontario Superior Court of Justice against BHP Billiton Canada Inc. and others, but it was shortly thereafter discontinued. The discontinuance of the action and waivers of the rights of first refusal allow the sale to proceed subject to meeting the closing conditions, including regulatory approvals.

At North American Tungsten Ltd.'s Cantung mine, Canada's only producing tungsten mine, production rose to 2,730,000 kilograms of WO₃ having an average grade of 1.05% WO₃ in 2012, compared with 2,240,000 kilograms and an average grade of 0.93% during 2011. The average mill recovery was 76.9%, which was higher than 75.3% from 2011, demonstrating the impact of the capital program implemented during 2011. The \$25.2 million expenditures allowed for the delivery of new mining equipment and completion of underground haulage-way development, improved production rate and mill recovery optimization. The averaged mill feed in tonnes per day was 969 in 2012 compared to 925 in 2011; and total tonnes milled were 339,000 in 2012 *vs.* 322,000 in 2011. Note: yearly production is reported for the year ending September 30. In addition to tungsten, Cantung also produced 295,196 kilograms of copper in the first six months.

Mine improvements continued into 2012 with: the completion of an access drift and a ventilation raise in June, to improve access in the West Extension; completion of the hydraulic backfill plant and system in October, to allow for tailings disposal underground, and in the commencement of the installation of a portable waste treatment facility in December.

In June 2012, large areas of southern Yukon were affected by flooding from significant rainfall combined with a rapidly melting snowpack. The flooding caused multiple washouts, which closed the Nahanni Range road, the sole ground transportation link to the mine. The road closure prompted mining operations at Cantung to be temporarily suspended for 13 days with lost production estimated to be 100,000 kilograms of WO₃. However, the temporary suspension of operations did allow maintenance to be performed in the mill.

In 2011, underground exploration focused on the West Extension below the 3600¹ level. In February 2012, North American Tungsten announced the drill intersection of high tungsten grades from the outer edge of the defined deposit, in a new area called the "Amber Zone" located "below 3700 Level" of the Western Extension and the Central Flats areas. Seven holes were subsequently fan-drilled from the 3680 level. Significant results from the seven holes include 8.1 metres averaging 3.02 percent WO₃ (hole U1983) and 10.4 metres averaging 1.29 percent WO₃ (U1981). Higher grade intercepts included 5.6 metres averaging 4.09 percent WO₃ (hole U1981), 4 metres averaging 2.6 percent WO₃ (hole U1983), and 3 metres averaging 2.5 percent WO₃ (hole U1984). A surface drill program in the PUG area identified intersected targets to be followed-up on in future drill programs. Additionally, recovery of tungsten from tailings ponds on site is under investigation as a high priority.

North American Tungsten has increased the Cantung mine life by five years and the Probable Minerals Reserves to 1,535,000 tonnes grading 1.17% WO₃ as of February, 2011; in addition, Indicated Mineral Resources are estimated at 2.22 million tonnes grading 1.11% WO₃ and Inferred Mineral Resources are estimated at 0.39 million tonnes grading 0.84% WO₃ using a minimum mining width of 5 metres and a cutoff grade of 0.80% WO₃

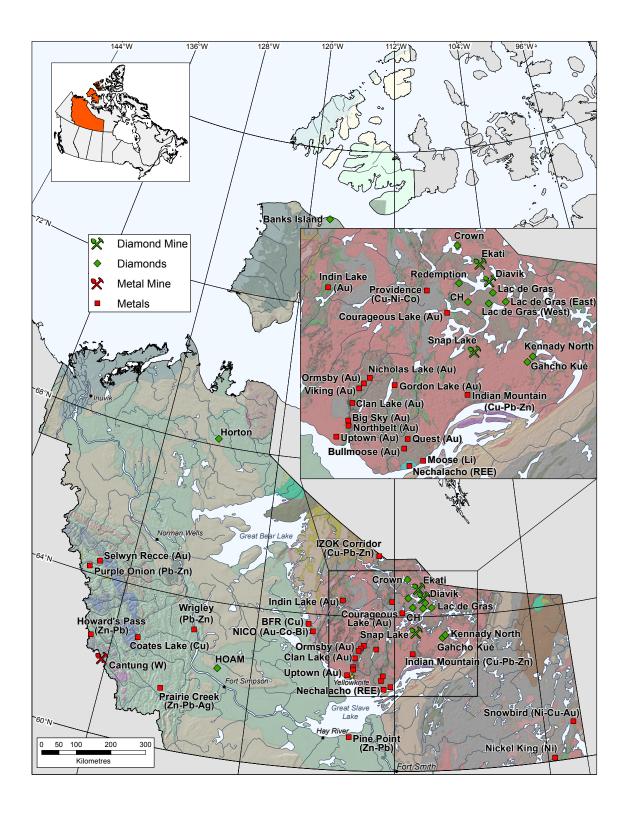


Figure 2: Locations of mines and exploration projects active in the Northwest Territories during 2012.

NORTHWEST TERRITORIES MINERAL EXPLORATION HIGHLIGHTS FOR 2012

Diamond Exploration

The locations of diamond exploration programs are shown in Figure 2.

Arctic Star Exploration Corp. (formerly Arctic Star Diamond Corp.) staked seven claims in 2012 to form the Redemption property and acquired four mineral leases in February 2013 from GGL Resources Corp. for a total of 11,500 contiguous hectares south of Lac de Gras region, 32 km southwest of the Ekati mine. The property has previously undergone geophysical surveys, indicator mineral train and mineral abrasion studies, and surficial mapping programs. Arctic Star's primary drill target is at the head of the well-defined "South Coppermine" indicator mineral train where a magnetic and EM anomaly target was recognized.

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 Gahcho Kué project holds a cluster of four diamondiferous kimberlites, three of which (5034, Hearne, and Tuzo), have a Probable Mineral Reserve of 31.3 million tonnes grading 1.57 carats per tonne, for a total diamond content of 49 million carats. The permitting plan is for an open-pit mine expected to produce 4.5 million carats per year for 11 years.

In 2011, the Gahcho Kué Joint Venture conducted a five-hole (3,725 metres) "Tuzo Deep" drill program to extend the Inferred Mineral Resource below 350 metres, which is the current limit of the Tuzo mineral resource. One hole, MPV-11-326C was abandoned at 528 metres due to stuck drill rods, but continued in MPV-11-327C, which was "wedgedout" at 400 metres.

All five holes confirmed the presence of substantial kimberlite below 350 metres. The kimberlite intersections demonstrated that the Tuzo kimberlite widens at depth, from 125 metres diameter near surface to 225 metres diameter at a depth of 300 metres. This translates into a 78.5 percent increase in the kimberlite volume estimate, from a previous estimate of 6.6 million cubic metres to 11.781 million cubic metres. Most of the 4.58 million cubic metre volume increase stems from increases in the size of the model between 354 metres (the current resource cut-off depth) and 564 metres. The resource has been deepened by 210 metres.

Accompanying this unusual shape is an increase in the diamond grade with depth. The average grade between surface and 300 metres is 1.21 carats per tonne, while the average grade from 300 metres to 350 metres depth is 1.75 carats per tonne. This higher grade has

been attributed to a lower degree of dilution as well as a coarser diamond distribution. In fact, microdiamond results released in November suggest that the grade could increase to over 3 carats per tonne below 350 metres. This is based on the analyses of 657.13 kilograms of core containing 3776 diamonds (2.33 carats total weight) with 2 diamonds greater that 1.7 millimetres and one diamond greater than 2.36 millimetres.

The Gahcho Kué project environmental impact assessment was filed with the Mackenzie Valley Environmental Impact Review Board late in 2010 and the 24-month environmental review is nearing completion. Closure of the public record on the environmental review occurred on January 3, 2013.

In 2011, **Mountain Province Diamonds Inc.** formed a newly incorporated company, **Kennady Diamonds Inc.** to manage Kennady North project (Mountain Province 100%), consisting of 13 leases and claims (12,291 ha) north of Gahcho Kué. This property includes the diamondiferous Kelvin, Faraday and Hobbes kimberlites. A 2,793 line-kilometre airborne gravity survey consisting of 50-metre-spaced flight lines was conducted late in 2011 by Fugro Airborne Surveys Corp. Analysis of the gravity survey resulted in the identification of 106 geophysical targets. The airborne survey was followed by a 560 line-kilometre total magnetic field ground survey conducted at a 20-metre line-spacing over the geophysical targets. The ground survey, managed by Aurora Geosciences Ltd., was completed in early April 2012 and was used to prioritize the geophysical targets for drilling.

Upon receipt of a Type A Land Use Permit from the Mackenzie Valley Land and Water Board, Northtech Drilling Ltd. was retained to conduct a minimum 2,500-metre drill program. Two drill rigs were mobilized, with the first rig drilling in-fill holes along the Kelvin-Faraday kimberlite corridor and the second drill rig testing twelve newly identified kimberlite targets. By the end of summer, kimberlite had been intersected in four holes along the Kelvin-Faraday Corridor. Kimberlite recovered during the drill program was sent to the Saskatchewan Research Council analytical laboratory for caustic fusion. Initial results are promising, with 1889 diamonds (0.92 carats total weight) extracted from a total of 394.4 kilograms of core. An overall grade of 2 carats / tonne has been reported as an average for the combined Kennady North kimberlites. Seventy percent of the diamonds were classified as white and transparent with minor or no inclusions. Five percent were classified as yellow and transparent, with little or no inclusions.

Seven geophysical targets were also drilled but kimberlite was not intersected at any of those targets. Since the summer 2012 field program, a comprehensive review and analysis of the 123,000 ha property was completed by Aurora Geosciences. In February 2013, Kennady Diamonds Inc. announced plans to commence a 5000-metre drill program in March, of infill drilling at the known kimberlites on the Kelvin-Faraday corridor, as well as new targets within the vicinity of the known kimberlites. Prior to drilling, a geophysical

crew is scheduled to complete further ground gravity and horizontal-loop electromagnetic surveys (HLEM) over the Kelvin-Faraday corridor, to assist in drill hole selection. Once drilling has commenced, the geophysical crew will complete gravity and HLEM on 15 newly identified kimberlite targets outside and to the west of the corridor.

Rio Tinto Canada Exploration Inc. funded an exploration program on the CH property under an option agreement with **GGL Resources Corp.** Three of nine kimberlite targets on the CH property, which is in the MacKay and Courageous lakes area, southwest of Ekati and Diavik mines, were drilled in the early part of 2011, followed by the collection of 205 till samples and a surficial mapping program. Samples were submitted for a comparative indicator mineral surface-texture and mineral chemistry study at the Saskatchewan Research Council and the results are pending. In 2012, Rio Tinto Exploration Canada Inc. announced its intention to sell its diamond mines, terminated its agreement for the CH claims, and returned the project to GGL Resources Corp.

The joint venture between North Arrow Minerals Inc. (50%) and Springbok Holdings (Dr. Chris Jennings) (50%) announced an option agreement regarding their Lac de Gras property with Harry Winston Diamond Corp. and its wholly owned subsidiary, 6355137 **Canada Inc.** The Lac de Gras project, which originally consisted of over 32,780 hectares and the contiguous 91,458-hectare block of claims held by Harry Winston Diamond Corp., now form a "joint venture property" totaling over 124,238 hectares. The property directly adjoins the mineral leases that host the Diavik diamond mine, which is located only 10 kilometres to the north. The Ekati diamond mine is located less than 40 kilometres to the northwest. Harry Winston Diamond Corp. committed to at least C\$5.0 million of exploration over a five-year period in order for the option to vest. This agreement was modified in 2012 whereby North Arrow can acquire Springbok Holdings Inc.'s 50% interest in the LDG/GT mining leases and the JT1 and JT2 mineral claims (the "LDG/GT Property"). Surficial mapping, including local ice directions and till characteristics, commenced in 2011 in preparation for a systematic basal till sampling program, which was to be initiated in early 2012. The program was to use a track-mounted reverse circulation drill to sample a complete till column and to reach basal till that was not accessed by previous sampling. However, the work was delayed due to lack of availability of the appropriate drilling equipment. The drilling program is anticipated to commence as soon as permits are received and the appropriate equipment can be sourced.

Olivut Resources Ltd.'s HOAM diamond property covers 57,465 hectares of the Interior Platform south of Fort Simpson. A re-evaluation of regional geophysical data, conducted by an independent expert in early 2011, resulted in the identification of numerous additional targets located up-ice from the areas of anomalous kimberlite indicator minerals. These targets became the subject of 27 detailed geophysical surveys and

additional geochemical sampling. In 2012, a lightweight drill was used to drill eleven holes testing nine geophysical targets. A new kimberlite was encountered with the discovery hole, which intersected kimberlite at 32 metres and was shut down in kimberlite at 120 metres. Caustic fusion analysis of 254 kilograms of kimberlite core by Saskatchewan Research Council revealed no diamonds. Olivut's exploration of the HOAM project area has resulted in the discovery of 29 kimberlites to date. Analysis of the 2012 fieldwork results has provided prioritized targets for evaluation. Kimberlite containing microdiamonds from previous drill programs did not contain the same indicator mineral as had been identified during the till sampling program, suggesting the source of the indicator minerals has yet to be found.

Peregrine Diamonds Ltd. continued exploration on its Lac de Gras East and West properties, located 275 kilometres northeast of Yellowknife. The Lac de Gras project area consists of 51,000 hectares of claims owned entirely by Peregrine, 36,400 hectares of claims held jointly with **Thelon Capital Ltd**. (66.2% Peregrine, 33.8% Thelon) and the 15,107-hectare WO Joint Venture (Peregrine 71.9 %, **Archon Minerals Ltd**. 17.5% and **DHK Diamonds Inc**. 10.6%). Peregrine holds 97.92% of the diamond marketing rights for the WO Joint Venture. As part of the Chidliak purchase in January 2012, BHP Billiton also agreed to extinguish Peregrine's royalty obligations and its own diamond marketing rights on certain properties including the TW, WO and Lac de Gras East and Pellatt Lake properties.

In March, Peregrine commenced a C\$1.5 million diamond exploration program to conduct ground magnetic and electromagnetic geophysical surveys over 15 anomalies and to test additional priority drill targets defined by the surveys. Of the eight geophysical targets with associated kimberlite indicator minerals that the company prepared for 2012 exploration, drilling at the first three identified the LD-1, LD-2 and LD-3 kimberlites, each measuring about one hectare at the surface. LD-1 is a texturally variable crater-facies volcaniclastic kimberlite that contains chrome diopside, garnet and coarse olivine. LD-2 is a black, re-sedimented volcaniclastic kimberlite with about 5 percent country rock xenoliths and contains coarse olivine and garnet. LD-3 is a dark green to black volcaniclastic kimberlite with abundant coarse olivine, garnet and chrome diopside.

A fourth target was drilled without intersecting kimberlite, and planned drilling of a fifth target was deferred. Samples from the three kimberlites were sent to the Saskatchewan Research Council Geoanalytical Laboratories for caustic fusion analyses. Samples from LD-1 returned only 4 microdiamonds whereas LD-2 and LD-3 returned 22 and 24 microdiamonds respectively.

Rio Tinto Exploration Canada Inc. reviewed its position in the diamond market in 2012. It concluded that there was insufficient market size in the context of its broader corporate portfolio. Consequently, it has suspended work in the Banks Island area.

In 2012, **Talmora Diamond Inc.** held 221 claims (27,835 hectares) in the Horton River area, south of Paulatuk in the Northwest Territories. Talmora has kimberlite indicator mineral analyses from the Horton River Project suggesting that that the kimberlite indicator minerals from Diamondex's Lena West project were initially transported and deposited during the Cretaceous from sources east of the Lena West area. Talmora postulates that the additional transportation step means that those highly promising indicator minerals originated from the area that it now holds. Additional staking and a limited exploration program collecting till samples and utilizing a lightweight drill were carried out in August 2012.

Table 1: Summary of NWT diamond exploration in 2012

Operator / Partners	Property	Drilling	Airborne and ground geophysics	Sampling and Other Work	Studies and Updates
Arctic Star Exploration Corp.	Redemption				Staked claims and acquired leases
De Beers Canada Inc. and Mountain Province Diamonds Inc.	Gahcho Kué				Environmental review; hearing; development preparations
Kennady Diamonds Inc. (Mountain Province Diamonds Inc.)	Kennady North	~19 ddh proposed 2500 m (20 targets)	560 line-km grd Mag		
Olivut Resources Ltd.	НОАМ	11 lightweight ddh on 9 targets		254 kg sample of kimberlite for caustic fusion	New kimberlite discovery; 29 to date
Peregrine Diamonds Ltd. /Thelon Capital Venture/WO Joint Venture	Lac de Gras (51,000ha 100% owned by Peregrine)	4 ddh on 4 targets	Grd Mag and EM over 15 targets		3 new kimberlites
Talmora Diamond Inc.	Horton River	5 packsack drill holes		78 till samples	

grav – gravity, ddh – diamond drill hole, Mag – magnetic, EM – electromagnetic, grd - ground

Metal Exploration

The locations of metal exploration programs are shown in Figure 2.

In February 2011, **Aben Resources Ltd.** optioned the right to staking on prospecting permits in the Mackenzie Mountain area from **Eagle Plains Resources Ltd**. The option, which included two properties, the Hit and Justin (Sprogge) projects in the eastern Yukon was granted for 5,000,000 shares and a cash payment of approximately \$150,000 with a 3% net smelter return on any staked properties in the permit area. A field program was mobilized in June 2011, called the Selwyn Recce Gold Project. The program included geological mapping, regional prospecting, geochemical surveys and geophysical surveys. Eighteen high-priority targets that had been previously identified were the focus of the efforts. In total, 7368 soil samples, 681 rock samples, 668 silt samples, 14 heavy mineral bulk samples, and 51 petrographic analysis samples were collected. The results for 2011 field work were released in 2012 and delineated four targets warranting further exploration:

- Grab samples from the ENYO target returned a range of assays including 651 g/t Ag and 5.5% Zn.
- Based on geological mapping and trace element signatures, the Suriso showing may be part of an intrusion-related gold system.
- Grab sample assays from the Bonk showing reached 0.4% Cu, 2.3% Pb and 2.8% Zn in a chemically anomalous horizon that can be traced over a distance of six kilometres.
- Eight grab samples from the Energizer target returned over 10 ppm thallium, considered to be indicative of Carlin-style gold mineralization in the area.

In November 2012, **Avalon Rare Metals Inc.** released a revised resource calculation on the rare-earth-enriched zones of the Nechalacho deposit, located on the north shore of Great Slave Lake, 100 kilometres southeast of Yellowknife. The estimate, prepared by Avalon geologists and independently audited by Roscoe Postle Associates Inc. was based on drilling completed to August 2012 and used a Net Metallurgical Return cut-off of \$320, to capture a high grad sub-zone in the Basal Zone of the deposit. The measured Mineral Resource increased to 10.88 million tonnes grading 1.67% Total Rare Earth Oxides (TREO), 0.38% Heavy Rare Earth Oxides (HREO), and 22.91% HREO/TREO. The updated Basal zone calculation also shows a slight decrease in the combined Measured and Indicated Resources to 65.83 million tonnes of 1.57% TREO and 21.86% TREO/HREO. The total Measured and Indicated Resources for the Nechalacho deposit, including the Upper and Basal zones, are 182.01 million tonnes of 1.26% TREO and 13.01% HREO/TREO.

A total of 10,725.4 metres of drilling in 47 holes was completed using two drills during the 2012 winter program between January 16, and April 26, 2012. A second completed

summer program consisted of 39 HQ holes totaling 10,625 metres over a three-month period. The drilling focused on three main objectives:

- To better define the geometry and continuity of the deposit in the areas to be mined in the first three years of production, especially along the southern margin of the deposit. The main objective of this drilling was to upgrade Indicated Mineral Resources to the Measured level of confidence for inclusion in the mine plan.
- Provision of a 40-tonne bulk sample for metallurgical testing, largely based on recovery of large-diameter PQ core, and
- Geotechnical drilling of the planned ramp route, underground crusher location, tailings area and surface infrastructure locations.

Avalon announced, at the end of January 2013, plans to commence a brief definition drill program in February to infill near the planned underground crusher, within the area to be mined in the first few years.

Upon receipt of all the assays, a final update of the Mineral Resources and Reserves will be prepared for the feasibility study, expected mid-June 2013. Avalon has retained SNC-Lavalin to complete a feasibility study for its Nechalacho Project, as they move into their final stage of project evaluation prior to commencing construction. Avalon plans to have a bankable feasibility study for the project completed by early 2013, with projected production by 2015. As of January 2013, the Feasibility study has completed:

- Environmental baseline work at Nechalacho and Pine Point;
- Development schedule and underground mine plan;
- Flotation plant design;
- Tailings facility;
- Paste backfill plant; and
- Geismar separation-plant design.

Two pilot plant tests were completed to optimize the metallurgical flowsheets for designing the flotation and hydrometallurgical plants. The flotation pilot project was conducted at Xstrata Process Support Laboratories, Sudbury, and it confirmed that refined bench-scale test parameters could be applied at a production scale to reduce total reagent consumption by approximately 33%. This is significant, since reagent costs represent approximately 39% of the flotation plant operating costs (excluding power). The second pilot plant tests were conducted by SGS Minerals Services, Lakefield. The simulation of the hydrometallurgical plant included treatment of flotation concentrate right through the acid baking and leaching processes, removal of impurities by various precipitation operations, neutralization of acid bake residue plus all tailings materials, and final production of a REE precipitate (or mixed concentrate). The use of hydrated lime instead

of magnesium oxide resulted in a more easily transportable feed for the separation plant at a reduced cost, while allowing extensive water recycling.

The products from the hydrometallurgical plant, which is planned to be in the NWT, will be a concentrated feed for the Separation Plant. This feed will undergo a separation process to isolate the individual REE and a final refining into saleable products. Avalon has chosen a site for its heavy rare earth separation plant and refinery in the community of Geismar, Louisiana.

Avalon Minerals also announced an accommodation agreement with the Deninu K'ue First Nation of Fort Resolution. The agreement provides for business and employment opportunities at the Nechalacho project and contains measures to mitigate environmental and cultural impacts that may result from the development.

BFR Copper & Gold Inc. conducted a ground geophysical survey program on its Mazenod Property, in the Tli Cho region, 170 kilometres northwest of Yellowknife. Eleven prospecting permits were also issued to BFR Copper & Gold Inc.

Boxxer Gold Corp. has announced its intentions to conduct a drill program in 2012 on their Gordon Lake gold property located approximately 110 kilometres northwest of Yellowknife, NWT. In 2010, mapping, prospecting and channel sampling of the Syn zone were completed with seven samples returning values from 0.16 g/t Au to 34.8 g/t Au. With the receipt of a land use permit in April 2012, the drill program to test the historical resource can proceed, pending the successful closing of a \$1.75 million private placement. Prospecting and channel sample results from 2011 have not been released.

Bullmoose Mines Ltd. has continued exploration at the Bullmoose Mine, located 65 kilometres southeast of Yellowknife. Camp construction in 2010 accompanied a small prospecting and sampling program. The company applied for a land use permit to conduct an extended test mining operation. Field work besides site visits was deferred in 2012, pending the successful application for a land use permit and a water license. The operation is intended to process existing surface ore stockpiles, identified by the sampling program.

In the southern Mackenzie Mountains, **Canadian Zinc Corp**.'s exploration of the Prairie Creek zinc-lead-silver project is advancing. A revised resource estimate was published in June suggesting that the deposit contains 5.4 million tonnes of Measured and Indicated

resources with an average grade 10.8% Zn, 10.2% Pb, 0.31% Cu and 160 g/t Ag as well as 6.2 million tonnes of Inferred Resources with an average grade of 14.5% Zn, 11.5% Pb, 0.57% Cu and 229 g/t Ag. The report was completed by AMC Mining Consultants (Canada) Ltd.

A mine plan was also released after a review by Barrie Hancock, P.Eng. A portion of the Mineral Resource was converted to a Mineral Reserve using dilution factors in stoping blocks of ca. 22% for quartz-vein-hosted ore and 10% for stratabound ore. The combined Reserve estimate is 5.2 million tonnes grading 9.4% zinc, 9.5% lead and 151 g/t silver, utilizing the cut-and-fill mining method for quartz-vein hosted ore and room-and-pillar for stratabound massive sulfide zones.

Based on the resource calculations, a pre-feasibility study completed by SNC Lavalin in June 2012, suggested that the Prairie Creek project has a net present value of \$253 million using an 8% discount, with an internal rate of return of 40.4% and payback period of 3 years based on long-term metal price projections of \$1.00/lb zinc, \$1.00/lb lead and \$26.00/oz silver.

The proposed mill facilities will have a 1,500 tonne/day crushing capacity, an installed jaw crusher, short head cone crusher, double-decked screen and a 2,000 tonne ore bin. A new dense media separation ("DMS") circuit, designed by DRA Americas, with an 85 tonne/hour capacity, will be installed into the crushing circuit to process -1/2" sized material. Indications from metallurgical testing are that the DMS plant will reject an average of 27% of the waste at minimal metal losses, hence mining input at maximum production rates will be 1,350 tonne/day and, after passing through the DMS plant, will produce approximately 1,000 tonne/day of material to be processed in the grinding/flotation circuit of the mill.

When in full production, the Prairie Creek mine will generate average annual production of 60,000 tonnes of zinc concentrate containing 35 million kilograms of zinc, and 60,000 tonnes of lead concentrate containing 41 million kilograms of lead. The two concentrates will contain 62 million troy ounces of silver, with the majority of the silver reporting to the lead concentrate. Canadian Zinc estimates the mine will provide full-time jobs for about 235 people, once it is in full operation.

Canadian Zinc received approval in December 2011 from the Mackenzie Valley Environmental Impact Review Board for the Prairie Creek project to proceed to the regulatory phase for approvals by the Mackenzie Valley Land and Water Board. In January 2013, the MVLWB board issued a 5-year land-use permit for the establishment and operation of a winter road allowing transportation of fuel and other supplies in and concentrates out, as well as a 7-year Type B water license allowing limited use of water and disposal of waste related to road, initial construction and operational activities. These permits will allow initial construction work on the road prior to finalization and issue of

the main operational permit and a Class A water license, which are needed for the final permitting stage of the zinc, lead, silver mine. Pending approval, construction of mine could begin in 2013 with a projected mine-life of 20 years.

The Prairie Creek mine site was opened in early April 2012 for a drill program of 5,629 m of coring in 12 holes with a budget of \$2.5 million to continue the Casket Creek deephole program and infill-drilling within the defined resource area. Cabo Drilling (Pacific) Corp. supplied manpower and technical supervision for the program to complete the wedging of drill holes around a previous intercept in hole PC-11-187W2 containing 5% Pb and 11% Zn over 3.5 metres of core length. Intersections included 0.9 metres of 4.23% Pb, 2.97% Zn, 31.4 g/t Ag and 0.8 metres of 0.26% Pb, 0.11% Zn, 31.9 g/t Ag. An additional hole, PC-12-213 was halted due to drilling difficulties within a significant fault structure, believed to be the main structural target.

The main drill program close to the Prairie Creek mine was designed to infill the known resource and also to test for extensions of the known resource. The results confirmed the grade and extent of the deposit, with a few surprises. Drillhole PC-12-216 intercepted 1.3 metres grading 2059 g/t Ag, one of the highest silver assays reported from the Prairie Creek property.

A geophysical program involving surface and downhole EM and surface gravity surveys was completed in the proximity of the mine in August 2012. A multi-channel EM anomaly defined one kilometre from the minesite, in an area distinct from the defined mineral resource. A gravity anomaly was also identified over the same area and an estimated depth to source of 200 to 450 metres has been derived.

An auger drill contracted from Mobile Augers and Research Ltd., Edmonton was mobilized for geotechnical holes within the existing water storage pond and proposed areas for the waste rock pile and possible second water pond areas. A series of hydrological wells is planned to further monitor the groundwater. Geotechnical work has also progressed on the road route through Nahanni National Park Reserve and adjacent areas, assessing bridge crossings, reducing steep grades and testing the road base. A detailed fixed-wing LIDAR survey was carried out by McElhanney Surveying along the road route.

Coltstar Ventures Inc. identified the Purple Onion lead-zinc-silver property within the Misty Creek Embayment of the Selwyn Basin, which is located 110 kilometres north of the Canol trail in the Mackenzie Mountains. The property covers approximately 81,353 ha near the Yukon/NWT border covering a 24 kilometre-long geochemical anomaly identified in a NTGO/GSC silt geochemical survey. The Purple Onion claims were staked to cover a sedimentary-exhalative (SEDEX) prospect. Preliminary prospecting identified areas with abundant boulders coated in secondary zinc minerals and large expanses of

bright green zinc moss. In May 2012, Coltstar Ventures Inc. sold the property to **Pure Living Media Inc.** (now renamed **Scavo Resource Corp**.) Aurora Geosciences Ltd. conducted a mapping and prospecting program with some stream sediment sampling.

Copper North Mining Corp., (formerly Western Copper Corp.) expanded its reconnaissance field program at its Redstone property, which consisted of five mineral leases and 22 claims (as of February 2013), located 290 kilometres southwest of Norman Wells in the Mackenzie Mountains. An exploration program conducted by Aurora Geoscience Ltd., consisting of geological mapping, geophysical surveying, geochemical sampling and prospecting was started in July 2012. The key objectives of the program included: testing the potential extensions to the Coates Lake deposit by induced polarization (IP) and ground-based, extremely-low frequency-electromagnetic (ELF-EM) and geochemical surveys. Soil geochemical, biogeochemical, IP and ELF-EM surveys were conducted on the Johnson Vein, Hayhook Basin and Hidden Valley claims and leases.

Highlights of the field work include: extending the IP anomalies, through chargeability delineation, 3000 metres along strike northward from known stratiform Cu-Ag mineralization at Coates Lake property; extending a complex zone 1000 metres along strike to the south of Coates Lake property through 3D modeling and chargeable IP delineation, where historic drill holes intersected Cu-Ag mineralization; and additional structural and stratigraphic data in the < 2km subsurface aided by the ELF-EM survey to better define future drill holes. Several new regional targets were found from anomalous stream sediment geochemistry, including a returned analysis of 490 ppm Cu. The potential use of biogeochemistry to locate concealed Cu-Ag mineralization beneath glacial sediment cover was investigated. Cu-Ag mineralization in talus was traced, through prospecting and geological mapping, over a 500-metre strike length at the Johnson Vein occurrence, 40 kilometres NNW of Coates Lake.

The Coates Lake deposit, within the southeastern portion of the Redstone Property and approximately 116 kilometres north-east of the Cantung mine, has a historic resource estimate of 33.4 million tonnes at a grade of 3.92% Cu. No exploration drilling has been completed since the 1977 Shell drill program. The Hayhook basin, located approximately 80 kilometres NNW of Coates Lake, has over ten known copper occurrences. Chalcociterich dolostone grab samples collected in 2010 have returned grades of 13.8% Cu and 15.6 g/t Ag. The Johnson Vein is a carbonate rock-hosted, fault-related, polymetallic vein Cu-Ag-Zn-Ni-Co vein occurrence located on a lease approximately 40 kilometres NNW of Coates Lake. Two grab samples, collected in 2011 from historic trenches, of massive to semi-massive sulphide rock returned grades of 16.25% Cu, 21.1 g/t Ag, 0.07% Zn, 0.16% Ni, 0.026% Co and 20.1% Cu, 123 g/t Ag, 0.16% Zn, 0.23% Ni, 0.041% Co. The Hidden Valley lease, approximately 30 kilometres NW of Coates Lake, contains vuggy, hydrothermal dolomite-calcite-quartz-tetrahedrite-chalcopyrite breccias. Copper sulphides occur as massive lenses and pods or disseminated tetrahedrite-chalcopyrite.

Grab samples from 2011, of massive tetrahedrite lenses have returned grades as high as 35.0% Cu, 1800 g/t Ag, 0.65% Zn and 0.45% Bi.

In the Sahtu Region, Copper North has completed a "traditional knowledge" study, conducted in partnership with the Tulita Renewable Resources Council, the Fort Norman Métis Land Corporation, the Tulita Land and Financial Corporation, and the Tulita District Land Corporation. An application for a five-year Type A Land use permit to **Redbed Resources Corp.**, one of Copper North's wholly-owned subsidiaries, has been approved by the Mackenzie Valley Land and Water Board.

In April 2012, **Devonian Metals Inc.** reported the results of nineteen holes (3593 metres) drilled in 2011on its zinc-lead-silver Wrigley project, located about 15 kilometres southwest of Wrigley. The hosts are the middle Devonian Nahanni, Headless and Landry carbonate formations, and the ore bodies are strongly fault-controlled. A NI 43-101 compliant resource calculation released in June 2012 concluded that the Wrigley deposits host an Indicated Resource of 728,000 tonnes grading 8.26% Zn, 2.11% Pb and 12.86/t Ag, plus an Inferred Resource of 3.978 million tonnes grading 7.34% Zn, 2.02% Pb, and 12.71g/t Ag at a 4% combined Zn + Pb cutoff. This calculation more than doubled the 2010 Indicated Resource of 230,000 tonnes and Inferred Resource of 2.83 million tonnes. Fieldwork including prospecting and sampling was completed in the summer of 2012.

In December 2012, Devonian Metals released a geophysical report on Volterra 3D induced polarization and gravity surveys by SJ Geophysics LTD for work conducted in June 2012, on grids prepared by Devonian Metals. The 3D inversion models were derived to help identify Pb-Zn mineralization and delineate structural features. The 1.25 kilometre N-S by 1 kilometre E-W grid covers the southern portion of historical work, centered over a known mineralized fault. Thirteen E-W surveyed lines were spaced 100 metres apart. Three known NNE to N trending faults (Zebra zinc, Zip Zap, and Bourne) merge in the centre of the grid and continue to the north as two zones. The gravity and resistivity readings identify the faults south of the merge point but are disrupted by an additional north-trending structure. Two new exploration targets were recognized, including a fold structure in the SW corner of the grid and a near vertical pipe-like structure with a low-density core and high-chargeability lens.

The results of a second stage of metallurgical testing on oxide and sulphide samples were released in February 2013 by Inspectorate Exploration and Mining Services Ltd. The study examined the head sample characterization on new composite samples, a number of different recovery tests for oxides including gravity and ammonium carbonate leaching, as well as locked-cycle flotation of the sulphide samples.

Fortune Minerals Ltd. received a response from the Mackenzie Valley Review Board on January 28, 2013, to its environmental assessment report. The Review Board recommended approval of the proposed NICO gold-cobalt-bismuth-copper mine and mill and that a full environmental review was not necessary, allowing the NICO project to proceed to the regulatory phase. The report and recommendations have been submitted to the Minister of Aboriginal Affairs and Northern Development Canada for approval. NICO is an iron-oxide-copper-gold deposit, located in the southern Bear Province, 160 kilometres northwest of Yellowknife. Ore is hosted in three stratabound lenses of brecciated ironstone up to 1.3 km in length and 550 metres in width, with individual lenses up to 70 metres thick that dip 40-50 degrees. The project proposal is for an open pit and underground mine and mill at site, as well as a hydrometallurgical refinery near Saskatoon, Saskatchewan to process the concentrates.

In 2012, a new geological block model was released by Fortune Minerals. The model, prepared by P & E Mining Consultants Inc., used 327 drill holes and surface trenching including 38 drill holes completed in 2010. The former resource calculation of Proven and Probable Mineral Reserves of 31 million tonnes averaging 0.91 g/t Au, 0.12% Co, 0.16% Bi, and 0.04% Cu was improved by a 2 million tonne increase to 33.0 million tonnes with gold grade increased to 1.02 g/t. The revised mineral reserve now contains approximately 1.1 million troy ounces of gold and the new model allowed for a reduction in the open pit striping ratio from 3.4:1 to 3.0:1 while increasing the mine life to 19.8 years.

The results of a front-end engineering and design study prepared by Jacobs Minerals Canada Inc. and including several other engineering companies were announced in July. Pilot plants have confirmed metal recovery levels. Recovery values for gold are anticipated to range from 56 to 85%, cobalt 48%, bismuth 72% and copper 41%. The process plant is designed for a production rate of approximately 1.7 M tonne per year. NICO is expected to produce gold doré, 99.8% cobalt cathode and/or cobalt sulphate heptahydrate containing 20.9% cobalt, 99.99% bismuth ingot, and a copper metal precipitate. The option of producing metallic cobalt does exist, however, based on the results of P&E Mining Consultants Inc., a cobalt sulphate product could offer a higher internal rate of return and net present value. The base case pre-tax internal rate of return for producing cobalt sulphate is estimated to be 14.0% while the base case pre-tax 7% discounted net present value is \$309 million.

GGL Resources Corp. granted an option to **Emerick Resources Corp.** for a 75% interest in the Providence Greenstone Belt claims but due to market conditions, the option was terminated by Emerick in January 2012. The claim group of over 113,311 hectares is 120 kilometres long by up to 30 kilometres wide. During 2012, 23 claims (22,818 ha) were allowed to lapse.

International Lithium Corp. (a subsidiary of **TNR Resources Ltd.)** continued to consult with local communities on their Moose Lithium project, near Thor Lake, 115 kilometres east-southeast of Yellowknife. A diamond drill program was deferred until such time as the permitting process and drill mobilization allows. Spodumene crystals up to 4 metres in length have been observed in the Moose 2 pegmatite, which has a strike length of 427 metres and a width of 25-30 metres. In 2011, a channel sample returned 1.50 wt% Li₂O over 7.5 metres and a grab sample returned 8.44 wt% Li₂O.

Kalgoorlie Mining Company, (formerly **US Nickel Ltd.**) maintained the Snowbird property, consisting of two blocks of claims (Kasba and Wendy) covering 214 km², located 625 kilometres northwest of Thompson, Manitoba. After planning for a drill program in 2011, the Kagoorlie Mining has decided to re-focus its efforts, with the successful acquisition of the Bullant Gold project in Australia. In 2012, PCF Capital Group was engaged to market the Snowbird project and seek expressions of interest. No field activities were undertaken.

In January 2012, **Manson Creek Resources Ltd.** entered into an option with **Panarc Resources** to acquire 100% of the Uptown Gold project, located adjacent to the past-producing Giant mine, Yellowknife. Five gold-bearing zones in Archean granodiorite are known to occur on the 3,388 hectare property, adjacent to the Yellowknife greenstone belt. The zones consist of areas of hydrothermally-altered granodiorite. The anastomosing fractures and quartz veins vary from millimetre widths to well over 3.0 metres, surrounded by a broader alteration halo, along "shear" zones. The alteration consists of silicification and sericitization with minor amounts of hematite alteration.

In May, an exploration program consisting of reconnaissance prospecting and sampling was conducted over the Rod, Fox South, J7 and C areas of bedrock exposure. Sampling highlights include: the C zone, situated between the Rod and Fox South zones, returned 5.88 g/t Au and 0.98 g/t Ag; the Rod zone returned an average gold grade of 22.79 g/t in 15 surface samples including four samples with greater than 100 g/t Ag; the Fox South area returned an average gold grade of 3.06 g/t Au and 1.52 g/t Ag in nine samples over a strike length of 250 metres; the J7 area produced assays of 7.99 g/t Au and 35.56 g/t Ag in continuous chip samples over 2.1 metres of true width.

A second phase of exploration was started at the beginning of November to channel sample many of the shear and associated alteration zones using a rock saw. A small portable prospector drill (JKS Winkie) tested extensions of mineralization observed in the JB3 trench which had returned 7.8 g/t Au and 23.3 g/t Ag over 3.2 metres. Two holes were drilled. The first hole (19.02 m) intersected moderate to strongly altered and sheared granodiorite hosting 0.47 g/t Au and 2.61 g/t Ag over 6.72 metres, including 1.29 g/t Au and 5.20 g/t Ag over 2.27 metres. The second drill hole was collared to undercut the J3

trench, included an intersection that returned 0.14 g/t Au and 0.8 g/t Ag over 1.13 metres.

Minerals and Metals Group (MMG) (acquired by Minmetals Resources Ltd. now renamed MMG Ltd.) continued work at the Izok Lake copper, zinc, lead and silver deposit. The current resource at Izok Lake straddles the NT/NU border but is mostly in Nunavut, and is reported to contain a JORC-compliant 14.8 million tonnes at 12.8% Zn, 2.5% Cu, 1.3% Pb and 71 g/t Ag. Following the completion of a pre-feasibility study in late 2011, a substantial drilling program for resource modeling, geotechnical evaluation and metallurgical test work was undertaken. The new results are intended to inform a definitive feasibility study expected to take 18-24 months and represent an investment of more than \$50 million.

The pre-feasibility study recommended the development option of establishing mineral processing facilities at the proposed Izok mine, including a 2 million tonnes/year concentrator, which would also process the ore from the High Lake mine, Nunavut. Expected initial annual production is 180,000 tonnes of zinc, 50,000 tonnes of copper, 12,000 tonnes of lead, 2.8 million ounces of silver and 17,000 ounces of gold. The proposed transportation route is a 350-kilometre all-weather road to be built connecting the Izok mine to a new port at Gray's Bay. The deep-water port would ship 650,000 tonnes/year of concentrate. The concentrate haul to Gray's Bay would permit the backhaul of High Lake ore to the Izok mill. A proposal for the Izok Corridor project was submitted to the Nunavut Impact Review Board and key authorizing agencies in early September, starting the environmental assessment and regulatory review process as per the Nunavut Land Claims Agreement. The Izok Corridor project is considered to be an important component of MMG's strategy to replace the 500,000-tonne/year Century mine in Australia, as it closes over the next five years.

Nighthawk Gold Corp., (formerly named Merc International Minerals) acquired the historic Colomac gold mine from Aboriginal Affairs and Northern Development Canada to add to their Indin Lake property. The assembled property now covers 94,701 hectares and encompasses most of the Indin Lake volcanic belt, approximately 210 kilometres north-northwest of Yellowknife. Several gold deposits and showings lie within this belt, the most significant being the past producing Colomac open pit gold mine, and including: the North Inca, Diversified, and Lexindin deposits; Damoti Lake, Treasure Island, Laurie Lake, Fishhook, Andy Lake, West Cass, Knob Lake, JPK, Pop Gold, Swamp Gold, McMeekan Gold, Echo-Indin Gold, Lucky Lake, and Goose Lake showings.

In late February, Nighthawk announced an initial NI 43-101 Inferred Resource for Colomac of 1.446 million ounces of gold or 42.65 million tonnes of ore with an average grade of 1.05 g/t Au, using a cut-off grade of 0.6 g/t Au. This included the deposits of: Colomac Dyke North, Colomac Dyke Central, Colomac Dyke South, Dyke Lake (Goldcrest North) Goldcrest, Grizzly Bear, and 24/27. The Colomac Dyke deposit was

mined by open pit methods intermittently between 1990 and 1997, producing 527,908 ounces (18,100 kg) of gold. The site has since been remediated and all mining equipment, processing equipment and infrastructure was removed.

Drilling on the Colomac property commenced in March with two diamond drills and continued with a summer drill program in May, 2012. Thirty drill holes totaling 11,235 metres were focused along a 2.5 km section between Zones 2.0 and 3.5, midway along the host quartz-albite porphyry sill's seven kilometre mineralized strike length. The objective of the drill programs was to test the higher grade Zone 3.5, and to locate a higher grade mineralized shoot in Zone 2, two kilometres to the north. The focus on Zone 3.5 was to expand the zone along strike and below the current resource model. The initial eight drill holes, five drill holes into Zone 2.0 and three into Zone 3.5 (with 50 m spacing), confirmed the presence of broad mineralized envelopes with internal higher grade gold shoots; amenable to shallow, bulk-mining methods, and potentially underground methods. All eight holes had visible gold.

Highlights from the Zone 2.0 program include an intersection of 128 metres from Hole C12-001B containing 1.36 g/t Au, including 71.85 metres of 2.04 grams per tonne gold (vertical depths of intersection between 230 metres to 340 metres). Hole C12-005, from the drilling of Zone 3.5, intersected 56.25 metres of 1.67 g/t Au, including 7.50 metres of 525 g/t Au. The intersection of C12-001B identified a new higher grade shoot plunging below the Zone 2.0 pit, Colomac's largest historical open pit. Zone 2.0 still accounts for a significant portion of the current Colomac Inferred Mineral Resource. Drill hole C12-005, Zone 3.5, is thought to have intersected the southern margin of the previously identified higher-grade shoot plunging 70 degrees towards the north. Nighthawk found this plunge geometry consistent with most other known mineralized systems within the Indin Lake gold property.

Detailed lithogeochemistry from the winter drill program was conducted to investigate the different intrusion lithologies, gold distribution, and alteration. Results indicate that the Colomac sill fractionated to a differentiated sill, with a fine- to medium-grained felsic to intermediate upper zone and a medium- to coarse-grained mafic base. Gold is preferentially concentrated in silica-rich zones of the upper two-thirds of the sill where it is more brittle than the lower and more-ductile mafic base and underlying mafic volcanic rocks. Nighthawk believes the higher-grade plunging shoots are a function of regional structure-sill intersections.

The summer drilling assays confirmed that high-grade gold ore shoots plunge beneath Zones 2.0, 2.5 and 3.5 and are open at depth. The steeply north-dipping shoots within broader uniform mineralized zones appear to increase in width and grade to the north and to depth. Highlights from Zone 2.0 include 125 metres of 1.08 g/t Au including 20 metres of 2.02 g/t Au (Hole C12-03B). A new intersection from Zone 2.5 of 9.0 metres of 8.86 g/t Au (Hole C12-120) will be a target for further drilling. In October, Nighthawk reported a

subvertical hole at Colomac sill's 3.5 Zone, (Hole C12-15) that intersected 203.4 metres of 2.49 g/t Au, including higher grade intersections of 25.75 metres of 7.78 g/t Au and 13.25 metres of 11.4 g/t Au. The true width of the sill at Zone 3.5 is approximately 80 metres. The subvertical hole was testing continuity of a known higher-grade core zone from surface to the 400-metre depth. Nighthawk acknowledges that alternate drill orientations may be warranted to test this zone for resource potential. Royal Oak intersected significant mineralization in a single hole at 1000 metres beneath Zone 3.5 in 1997.

Nighthawk re-logged 8,843 metres of archived core from Royal Oak's 1997 drilling program (20 drill holes from Zone 3.5 and 1 hole from Zone 2.0). Ten to 15 percent of the core was sampled to satisfy QAQC requirements to allow the historic drill results to be added to the next resource estimate update. As of January 2013, all assay results have been returned from the 20 holes sampled and the results confirm the higher grade character of Zone 3.5, its continuity at depth and suggested mineralization in zone 3.0 along strike to the north. One of the reported highlights is from Z3.5-97-03 with 73.15 meters of 1.72 g/t Au, including 3.05 meters of 18.02 g/t Au.

Summer prospecting, sampling and mapping was focused on investigating all known gold showings and investigating regional mineralized volcanic-sedimentary contacts and airborne magnetic targets derived from Nighthawk's recent survey. Several magnetic targets investigated were intrusions with the same distinctive mineralogy as the Colomac sill. Modeling of the strong magnetic signature was use to find similar targets.

Prior to the acquisition of Colomac mine, in 2011, Nighthawk drilled 11,929 metres into targets at Treasure Island, Diversified and North Inca, and between the latter two deposits. Selected highlights from 2011 include: 12.59 g/t Au over 1.25 metres (drill hole TI11-01 from Treasure Island); 7.23 g/t Au over 11.75 metres, including 11.38 g/t Au over 7.40 metres (drill hole DV11-02C from Diversified); and 6.86 g/t Au over 26.0 metres, including 44.34 g/t Au over 3.45 metres (drill hole NI11-02 from North Inca). Visible gold was reported in 22 of the 43 holes drilled.

North American Tungsten Corporation Ltd. announced the completion of the Draft Screening Report for its MacTung project, by the Executive Committee of the Yukon Environmental and Socio-Economic Assessment Board in 2012. The MacTung property is in eastern Yukon, approximately eight kilometres northwest of Macmillan Pass on the Canol Trail, straddling the Yukon-Northwest Territories border. The MacTung deposit consists of a scheelite skarn with an Indicated Mineral Resource of 33 million tonnes at a grade of 0.88% WO₃. North American Tungsten has proposed the development of an underground tungsten mine with an 11-year mine life utilizing bulk stoping and cut-and-fill mining. It would concentrate the tungsten mineral at a milling rate of 2,000 tonnes-perday using a scheelite gravity and flotation process and transport the tungsten concentrate by road to Edmonton, AB, and Vancouver, BC.

The underground production phase will commence at the beginning of 2013 and represent a capital expenditure of \$356.5 million plus a contingency of \$45.6 million. The mine is anticipated to employ 273 people. Power generation will use a powerhouse containing five diesel generators (2.5 MW each) combined with a heat recovery system while the camp and surface facilities will be serviced by one 500 kW diesel generator unit.

The Executive Committee of the Yukon Environmental and Socio-Economic Assessment Board recommended that the MacTung project be allowed to proceed without a review, subject to the terms and conditions specified. The Executive Committee had previously released a consultant's report providing a comparison of a proposed road route thought the Yukon to an existing access route located primarily in the Northwest Territories and intersecting with the North Canol Road two kilometres past the NWT border. The report concluded that the NWT route was shorter, crossed fewer rivers, and had less terrain hazards than the proposed route in Yukon.

Platinum Group Metals Ltd. started exploring the Providence (Credit Lake) copper-nickel-cobalt property located 44 kilometres southwest of Ekati. The property includes 13 mineral claims totaling 13,366 hectares that cover the 21 kilometres long mafic to ultramafic volcanic belt. Platinum Group Metals has compiled and re-interpreted the data supplied by **Arctic Star Exploration Corporation** showing that the Cu-Ni-Co-PGM mineralization is hosted within and at the base of the ultramafic flow/intrusive sill sequence. A \$728,086 field program was initiated in mid March consisting of a camp resupply, gravity survey and a drill mobilization. MEG Systems, Calgary, completed an 800-station gravity survey over the mineralized zone. Two zones of anomalous higher gravity readings interpreted as higher density mafic rock units and possible down-dip and along strike extensions of the massive sulphide zone were identified. The gravity anomalies correspond well with the location of known mineralized zones and conductors modeled from an earlier VTEM airborne survey.

Two phased diamond drill programs consisting of 3150 metres in 14 drill holes confirmed that mineralization continues at depth with intercepts 90 metres vertically below the historic intercepts. Highlights include: (PR12-04) 4.25 metres with 1.62% Ni, 1.04% Cu, 0.15% Co, 0.13 g/t Pt , 1.90 g/t Pd and (PR12-08) 3.65 metres with 1.79% Ni, 1.41% Cu, 0.15% Co, 0.12 g/t Pt, 2.16 g/t Pd.

Seabridge Gold Inc. has continued its extensive exploration program in 2012, at its Courageous Lake property approximately 240 kilometres northeast of Yellowknife. The Courageous Lake property consists of 27,263 hectares covering 53 kilometres length of the Courageous Lake greenstone belt. The greenstone belt hosts several past-producing gold deposits in addition to Seabridge Gold's FAT deposit in a rhyolitic to dacitic dome

complex.

In July, an NI 43-101 reserve calculation prepared by Tetra Tech Wardrop was released as part of a preliminary feasibility study for the Courageous Lake project. The Proven and Probable reserves based on the estimated total undiluted Measured and Indicated resources (January, 2012) of 8.0 million ounces of gold (107 million tonnes at an average grade of 2.31 grams of gold per tonne). The new model includes a Proven Reserve of 12.3 million tonnes at 2.41 g/t Au constituting 96,000 oz. and an Probable Reserve of 78.8 million tonnes grading 2.17 g/t Au for an additional 5.5 million ounces. Estimated in-pit diluted Proven and Probable reserves, including mining dilution within the ultimate pit limit were based on a \$20.10 per tonne cut-off using a gold price of US\$1,244 per ounce.

The pre-feasibility study presumes a single open pit feeding a 17,500 tonne-per-day processing operation at an annual rate of 6.1 million tonnes. The estimated 15-year mine life would produce 385,000 ounces of gold per year at an operating cost of US\$780 per ounce recovered. Start-up capital costs of US\$1.52 billion include a contingency of US\$187 million. At a gold price of US\$1,384 per ounce this scenario has an estimated US\$1.5 billion pre-tax net cash flow, a US\$303 million net present value at a 5% discount rate and an internal rate of return of 7.3%.

In addition to the work on the Courageous Lake project, 12,500 metres drilling was undertaken on a promising high-grade gold occurrence at Walsh Lake, the southern extension of the former Tundra gold mine. The Walsh Lake area located 10 kilometres south of the Courageous Lake FAT deposit, was flown with an airborne magnetic and electromagnetic surveys that showed that these gold occurrences were located on a stratigraphic contact. Holes were stepped north at a 200-metre spacing, targeting the geophysically-traced stratigraphic contact. Drilling on the target consistently intersected gold-enriched silica alteration zones to 20 metres wide above the contact in a siltstone package and up to 60 metres below the contact in mixed felsic and mafic volcanic rocks. The gold is hosted in fine arsenopyite, and multiple intervals of the arsenopyrite-bearing silica-altered rocks can be intersected in zones with widths up to 12 metres.

In 2012, Seabridge reported assay results from 5 drill holes (2028m) in September; from 8 drill holes (6679m) in October; and from the final 10 drill holes (3530m) in November, covering 800 metres of strike. Highlights include: hole CL-210, containing 21.2 metres averaging 8.16 g/t Au; CL-230 with 9.2 metres averaging 9.5 g/t Au; CL-233 with 14.5 metres averaging 12.27 g/t Au; and CL-245 with 11.3 metres averaging 26.2 g/t Au.

Selwyn Chihong Mining Ltd. (formerly **Selwyn Resources Ltd.**) is exploring the Howards Pass area of the Mackenzie Mountains. The Selwyn project involves 14 zinc-lead deposits and zones over a strike length of 37.5 kilometres. The bulk of the Selwyn project is located in eastern Yukon, but it extends southeast across the border into the Northwest

Territories. In September Selwyn Chihong released an updated mineral resource estimate including drill results from a program on the Don deposit completed in April 2012. The report, completed by Kirkham Geosystems Ltd. of Burnaby, concluded that the Don deposit has an Indicated Mineral Resource of 41,788,700 tonnes grading 5.35% zinc and 1.87% lead at a 2.0% zinc cut-off grade, This includes a higher-grade zone of 16.4 million tonnes grading 7.26% zinc and 2.62% lead at a 5.5% zinc cut-off. These higher-grade zones allow planning for a smaller but higher grade mine to initiate the site development and operation. In addition to the Indicated Resource, the Don deposit has an Inferred Resource of 10.1 million tonnes grading 5.07% zinc and 1.57% lead at a base case 2.0% zinc cut-off grade.

A 2007 preliminary economic assessment for the Selwyn Project had considered an openpit plan of mining 20,000 tonnes daily, however, changes in the exchange rate, metal prices and capital and operating cost assumptions have rendered the development plan no longer viable. Instead Selwyn Chihong Mining is evaluating a 3,500-tonne-per-day development concept focused on underground mining of the higher-grade sections in the XY Central and Don deposits. The development plan now under consideration uses selective mining methods, and has relied on detailed mine development and costing information from feasibility-level work completed to date. Since April 2012, the company has also been working to find a sale of either the company or its interest in the Selwyn project.

The global Indicated Resource for 2012 is 185.57 million tonnes grading 5.2% zinc and 1.79% lead for a metal content of 21.26 billion pounds of zinc and 7.30 billion pounds of lead. The Inferred Resource is 237.86 million tonnes grading 4.47% zinc and 1.38% lead for a metal content of 23.45 billion pounds of zinc and 7.22 billion pounds of lead. Selwyn Chihong is looking to have its bankable feasibility study completed by the end of this year, with submissions to the Yukon Environmental and Socio-economic Assessment Board by early next year.

Strongbow Exploration Inc. continued its evaluation of the 7,642 hectare Nickel King project located in the southeastern corner of the Northwest Territories, approximately 135 kilometres northeast of Stony Rapids, Saskatchewan. Strongbow Exploration Inc. entered into an option agreement with **North Arrow Minerals Inc.** whereby North Arrow could earn a 50 percent interest in the Snowbird nickel project, which includes Nickel King. In October, North Arrow notified Strongbow Exploration Inc. that it will not proceed with the option.

The Nickel King Ni-Cu-Co sulphide deposit consists of two stacked, south dipping norite sills, which have been traced over a strike length exceeding 2,600 metres. Metallurgical studies indicate the deposit is amenable to traditional processing techniques and capable of producing a final concentrate with grades of 16.5% Ni, 4.2% Cu and 0.74% Co at recoveries of 78.4% Ni, 89.1% Cu and 63.5% Co. An NI 43-101 compliant (June 2, 2010)

resource of 11.11 million tonnes grading 0.4% Ni, 0.10% Cu and 0.018% Co in the indicated category and 33.06 million tonnes grading 0.36% Ni, 0.09% Cu and 0.018% Co in the inferred category has been derived. Extensions to the Nickel King deposit have been identified outside of the current resource model. No fieldwork was conducted in 2012, but a land use permit was granted by the Mackenzie Valley Land and Water Board.

Tamerlane Ventures Inc. continued their exploration of the Pine Point area, on the southern side of Great Slave Lake. In March 2012, a NI 43-101 Technical Report on the N-204 surface deposit, completed by MineTech International Ltd. of Halifax, was released. This effort raised the previously reported Indicated and Inferred resource (published by Pincock, Allen and Holt Ltd. in February 2011) to the status of Proven and Probable reserves. The calculations identified 12.8 million tonnes of Probable Reserve with an average diluted zinc grade of 2.6% and an average lead grade of 0.7%. In addition, in-pit Inferred resources of 1.5 million tonnes (2.3% Zn, 0.6% Pb) were identified.

The feasibility study used a crusher-Dense Media Separation plant to upgrade the planned pit production to a concentrate of 3.2 million tonnes at 10.060% zinc and 2.64% lead. Using a 7,300 tonne-per-day run-of-mine pit to generate 1,800 tonne-per-day for the Mill feed, the mine would have a life of 5 years and a capital cost of \$32.2 million. The report used the pricing assumption of US\$1.10 per pound of zinc and US\$1.10 per pound of lead. Operating costs for the life of the project were calculated at an estimated US\$22.31 per tonne of ore. The internal rate of return of the deposit is 90% (after tax) with a net present value (after tax) of \$54.2 million (at 10% discount rate).

In April 2012, a second NI 43-101 compliant technical study was released for the R-190 underground project, which includes the R-190 deposit and five other contiguous underground deposits. Capital costs for the mill, infrastructure and R-190 mine are estimated to be US\$122 million including a 10% contingency. Using a pricing of US\$1.10 per pound for both lead and zinc, the undiscounted free cash flow generated from the entire Pine project (all six underground deposits and N-204 open pit) will be approximately US\$274 million at these metal prices. At metal prices of \$0.90 per pound for both lead and zinc, the project would generate an undiscounted cash flow of approximately US\$131 million.

The Proven and Probable reserves for the R-190 area, which includes the R-190, P-499, O-556, X-25, Z-155 and G-03 deposits, were calculated to be 7.8 million tonnes (6.16% Zn, 3.01% Pb) with additional Measured and Indicated resources of 8.0 million tonnes (2.26% Zn, 1.13% Pb). The internal rate of return of the underground deposits would be 25% (after tax) with a net present value (after tax) of \$64.5 million (at 10% discount rate). These reserve calculations do not include the development of the W-85 open pit deposit, or the other remaining 34 known historic deposits on the property.

Early in 2011, environmental baseline work commenced for the additional five underground deposits contained in the R-190 project and the N-204 deposit. Work was conducted in 2012 to finalize geological, engineering, other technical and baseline environmental studies for the other deposits. On March 16, 2012, the Mackenzie Valley Land and Water Board approved a Type A Land Use Permit for the completion and construction of the main mine site at the R-190 deposit location. In addition to obtaining the Land Use permit, the Company also obtained approval for an amended Water License for the R-190 deposit location. Tamerlane plans to continue with the permitting process for the other five underground deposits and N-204 open pit.

Tamerlane Ventures Inc. also initiated an option for the Indian Mountain Lake property north of the East Arm of Great Slave Lake, from Panarc Resources Ltd. The agreement included the Indian Mountain Lake property of 8 claims (6,298 hectares), an additional 2,926 hectares in the Susu Lake volcanic belt, located 7 kilometres southeast of the Indian Mountain Lake Property, and 2,885 hectares of the North Zinc zone, on the south side of Tindale Lake. The Indian Mountain Lake volcanic belt contains several volcanogenic base metal deposits including BB Lake, Kennedy Lake, Kennedy Lake West, and Susu Lake. The BB Lake deposit has non-NI 43-101 compliant historic resources estimated at 3.0 million tonnes at 10% combined Zn-Pb-Cu, 4.0 ounces per ton Ag, and 0.02 ounces per ton Au.

Site visits and a sampling program were undertaken to meet the 2012 option requirements. The program located historical drill holes and re-logged the core. Future work will entail the re-assay of core samples to confirm the historic grades and tonnages. Tamerlane also plans to conduct confirmation and exploration drilling to test the BB Lake ore body at depth. The release of analytical results and technical report writing have been suspended until funding is available.

An amendment to the agreement will allow Tamerlane a deferral of the \$300,000 exploration expenditures from January 2013 to January 2015, in exchange for an additional 150,000 shares from Tamerlane.

Eighty kilometres north of Yellowknife, **Tyhee Gold Corp.** advanced the Yellowknife Gold project at Ormsby and Nicholas Lake by announcing the release of a feasibility study completed by SRK Consulting, Knight Piésold and Lyntek Inc. Subsequently, in January 2013, Tyhee contracted Merit Consultants International Inc. to perform a peer review of the feasibility study, and to provide a more detailed breakdown of estimates and cost-effective ways to supplement the study. In addition, Tyhee announced the award of a contract for final engineering and procurement to Lyntek Inc. who will provide a detailed plan for the engineering and logistics of the project.

Tyhee has identified six separate gold deposits, including Ormsby, Bruce Lake, Clan Lake, Nicholas Lake and Goodwin Lake. These areas have a combined Measured and Indicated resource of 1,715,000 ounces of gold contained within 27,115,000 tonnes of ore. Proven and Probable reserves for the project are estimated at 20.43 million tonnes at an average grade of 2.03 g/t Au, containing 1.33 million ounces of gold. At a base-case gold price of US\$1,400 per ounce and with a projected 4,000 tonne-per-day processing plant comprised of a conventional gravity-flotation-cyanide process and incorporating open-pit and underground mining methods on the Ormsby, Bruce Lake, Clan Lake and Nicholas Lake deposits, the project is estimated to return a pre-tax net present value, at a 5 percent discount rate, of about US\$216 million and an internal rate of return 20 percent based on initial estimated capital cost of US\$193 million for a mine life of about 15 years.

Environmental baseline studies have been carried out by Tyhee and its consultants since 2004. Water management plans have been designed to contain contaminated water within a controlled tailings containment area. Additional water treatment facilities include a potable water treatment plant, a sewage treatment plant, and a cyanide detoxification plant. These facilities are expected to produce water suitable for discharge into the downstream receiving water bodies.

The project is expected to commence with final engineering and procurement in the fourth quarter of 2012 through 2013. Construction is anticipated to begin in the first quarter of 2014, with production commencing in the third quarter of 2015. During operations, average personnel requirements are estimated at 220 people per year, with approximately 120 people on site at any one time.

TerraX Minerals Inc. completed their purchase of the Northbelt property, including the Crestaurum deposit, in February 2013. The property consists of 121 leases (3562ha), 15 kilometres north of Yellowknife. A review of the historical archives is underway, including 300-400 historical drill logs from 1945 to 1996, 200 of which are from the Crestaurum deposit. High grade historical intersections from the Crestaurum deposit were noted containing 24.6 g/t Au over 4.63 metres and 4.61 g/t Au over 19.71metres from a sub-parallel shear (20 Shear).

Viking Gold Exploration Inc. completed site restoration work in 2012 on their Morris Lake gold property, just south of the former Discovery gold mine. Efforts are being made to option parts of its Morris Lake property, but Viking Gold has no plans for its own exploration programs on this property. In 2010, three targets were drill tested in nine holes (1,935 metres). Results included 1.5 metres containing 2.6 g/t Au and 1 metre with 0.8 g/t Au.

Williams Creek Gold Ltd. agreed to a joint venture with Tyhee Gold Corp. to earn a 50% interest in the Big Sky property, located 17 kilometres north of Yellowknife. The property consists of three mining leases covering 597 hectares and 17 claims totaling 2,406 hectares. A satellite data compilation and analyses were completed by Auracle Geospatial Science Inc., followed by a prospecting and mapping program.

Samples were collected from thirteen previously known and newly identified mineralized shear zones. Highlights include two samples containing 47.67 g/t Au and 36.30 g/t Au from the northern portion of the Oro Lake Main Shear Zone, a 10-25m wide 2.8km long shear in mafic volcanic rocks. A sheared gneiss hosts the Soggy Bottom showing where two samples containing 41.4 g/t and 47.96 g/t Au were collected. The Havoc shear zone returned a sample with 53.35 g/t Au. The Chan vein set included samples with 220.2 g/t and 62.34 g/t Au.

WPC Resources Inc. has been exploring for gold near Quest Lake, 85 kilometres east of Yellowknife. A field program starting in 2011consisted a series of drill holes designed to follow-up on the 2010 prospecting and sampling of six gold-bearing quartz veins zones. Gold was encountered in all seven holes drilled in the "A" vein during 2010. The highest values were 6.51 g/t Au over 0.33 metres, 6.33 g/t Au over 0.21 metres, 9.18 g/t Au over 0.32 metres, 8.72 g/t Au over 0.63 metres and 16.00 g/t Au over 0.32 metres. Drilling was discontinued early in 2012 and results from this program have not been reported.

Table 2: Summary of Northwest Territories active exploration projects for precious, base and energy metals in 2012

Operator / Partners	Property	Commodity	Drilling	Airborne and ground geophysics	Sampling and other exploration	Studies and updates
Avalon Rare Metals Inc.	Nechalacho (formerly Thor Lake)	REE	10,725m (47 ddh) 10,625 m (39 HQ holes)			Metallurgical; resource update; environmental assessment
BFR Copper and Gold Inc.	Mazenod			Grd geophysics		Eleven prospecting permits
Canadian Zinc Corp.	Prairie Creek	Pb-Zn-Ag	5,629 m (12 ddh) and geotechnical augering	Surface and downhole EM, Gravity, LIDAR	Trench sampling and mapping	Pre-feasibility; new resource and reserve calculations
Copper North Mining Corp.(formerly Western Copper Corp.)	Redstone (Coates Lake deposit and Johnson Vein)	Cu-Ag		21.3 km Grd IP and 41.25 km ELF-EM	Coates Lake: 690 biogeochemical and 324 stream sediment samples; geological mapping. Johnson Vein: mapping and prospecting.	Application for Type A Land Use Permit
Devonian Metals	Wrigley	Zn-Pb-Ag		13.45 km IP 14.57km grav Grd	Prospecting and sampling	geochemistry; metallurgical testing report
Fortune Minerals Ltd.	NICO	Au-Co-Bi				Environmental assessment; technical report filed; mineral reserves and positive FEED study; pilot plant tests
Manson Creek Resources Ltd	Uptown	Au	32 m (2 ddh) JKS Winkie		91 samples; reconnaissance and detailed prospecting; grab, channel samples	
MMG (Minerals and Metal Group)	Izok Corridor (Mostly in NU)	Cu-Pb-Zn				Project feasibility: engineering and permitting. Project proposal submitted; technical and environmental field baseline programs
Nighthawk Gold Corp. Formerly Merc International Minerals Inc.	Indin Lake, including Colomac	Au	Winter and summer drilling: 11,235m (30ddh)		Re-logged 8834m of historical core (10-15% sampled); lithogeochemical; regional prospecting, sampling and mapping	Colomac mine is acquired; initial 43-101 resource
Scavo Resources	Purple Onion	Pb-Zn			Prospecting, stream	

Platinum Group Metals	Providence Lake	Cu-Ni-Co- PGM	3150 m (14 ddh)	800 ground gravity stations	sediment sampling	Research and compilation
Seabridge Gold Inc.	Courageous Lake	Au	12,237m (23 ddh)			Walsh Lake discovery; updated proven and probable reserves for Fat Lake deposit; preliminary feasibility study
Tamerlane Ventures	Pine Point	Zn-Pb	Spring drilling not yet released			Updated technical report
Tamerlane Ventures	Indian Mountain	Zn-Pb-Ag-Cu			Geological assessment of the BB deposit; re-logged historic drill core	Analysis and technical report on hold due to lack of funding
Tyhee Gold Corp.	Clan Lake/ Ormsby/ Nicholas Lake	Au	23 ddh Clan, 13 ddh Ormsby			DAR Submitted
Williams Creek Gold/Tyhee Gold Corp.	Big Sky	Au			Prospecting, mapping; 796 grab samples	Remote sensing: geospectral and geospatial data acquisition and analysis

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, ddh-Diamond Drill Hole, Grav – Gravity, VTEM – Vertical TEM, REE – Rare Earth Element

FURTHER INFORMATION

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