

2014 Northwest Territories Mineral Exploration Overview

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Cover Illustration:

A boulder of semi-massive sulphide from the BB zone at Indian Mountain Lake. The Panarc VMS-hosting property was one of the projects supported by the Mining Incentives Program. Photo courtesy of Hendrik Falck.

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TABLE OF CONTENTS

INTRODUCTION.....	4
NORTHWEST TERRITORIES MINING HIGHLIGHTS FOR 2014	7
DIAMOND EXPLORATION.....	13
METAL EXPLORATION	25
FURTHER INFORMATION.....	43
 FIGURES AND TABLES	
Figure 1: Location and areal coverage of claims, leases and permits for 2014 in the Northwest Territories.	6
Figure 2: Location of Mines and Exploration Projects active in the Northwest Territories during 2014.....	12
Table 1: Summary of Northwest Territories diamond exploration in 2014.....	24
Table 2: Summary of Northwest Territories exploration projects for precious, base and energy metals in 2014.....	41

2014 Northwest Territories Mineral Exploration Overview

Introduction

For many years, the Northwest Territories (NWT) has led Canada in diamond and tungsten production and this record continues for 2014 (NRCan, 2014). Production from the first nine months surpassed expectations from both the Ekati and Diavik diamond mines with Ekati producing 2.3 million carats and Diavik producing 5.7 million carats. By year-end December 31, 2014, Diavik produced 7.23 million carats, on par with 2013 production. Ekati's year-end production figures were not available at the time of writing. Development of Ekati's Misery pit, development approval for the Pigeon pit, and adding the Lynx kimberlite to the water licence are part of the July updated mine plan with operation to 2020. NWT diamond production figures were also augmented by 1.2 million carats produced from Snap Lake. Production decreased modestly at the Cantung tungsten mine, but exploration and an infrastructure improvement program has extended the mine life to 2017.

Despite the economic climate, optimism was generated by a number of announcements including the De Beers/Mountain Province advancement of Gahcho Kué towards production status and the results from 27,200 metres of delineation drilling and bulk sampling from Mountain Province's adjacent Kennady Lake property. These announcements seemed to spur a re-vitalization of diamond exploration in the Lac De Gras and Gahcho Kué areas as seen by several large-scale property acquisitions.

A highlight in metals exploration is the continuing advancement of Canadian Zinc's Prairie Creek Zinc-Lead project to the development stage with the initiation of underground rehabilitation work. Despite a poor financial market for gold exploration, two projects had substantial drill programs: 13,647 metres of drill core from Nighthawk's Colomac Gold Project and 4,505 metres from TerraX's drill program on the Yellowknife City Gold project were recovered to update and increase historic gold resources and zones.

Less fortunate are the NICO and Nechalacho development projects which have been put on hold, lacking funds for construction and challenges over processing plants; while Fortune Minerals and Avalon Rare Metals focus on southern projects. This is also the case for advanced projects such as the Ormsby and Courageous Lake gold projects. Tamerlane Ventures, the holder of the Pine Point property, was placed into receivership.

Natural Resources Canada's estimates of \$102.6 million in intended expenditures on exploration and deposit appraisals for the NWT largely reflect major capital expenditures at advanced projects (NRCAN, Sept 2014). Grassroots exploration spending continues to languish. New projects are few and far between, as evidenced by the lack of Prospecting Permits issued for the beginning of 2014.

By year-end, 411 new claims totaling 433,950 hectares had been staked in the Northwest Territories (See Figure 1.). This marks a notable increase from the low levels (163 claims) experienced in 2013. This resurgence can be attributed mainly to companies taking a selective second look at existing diamond targets. Since 2005, the amount of land covered by mineral tenure has fallen from 19.8% to the current level of 2.1%. Daily updates can be viewed on-line through the Government of Northwest Territories' (GNWT) Mineral Tenure Map Viewer (www.geomatics.gov.nt.ca).

The GNWT's Mining Incentive Program (MIP) was launched in June 2014, to kick-start exploration in the NWT. Funding totaling \$396,044 was given to eight projects for gold, base metals, polymetallic and diamond exploration. For more information about the MIP please visit <http://www.nwtgeoscience.ca/minerals/mip.html>.

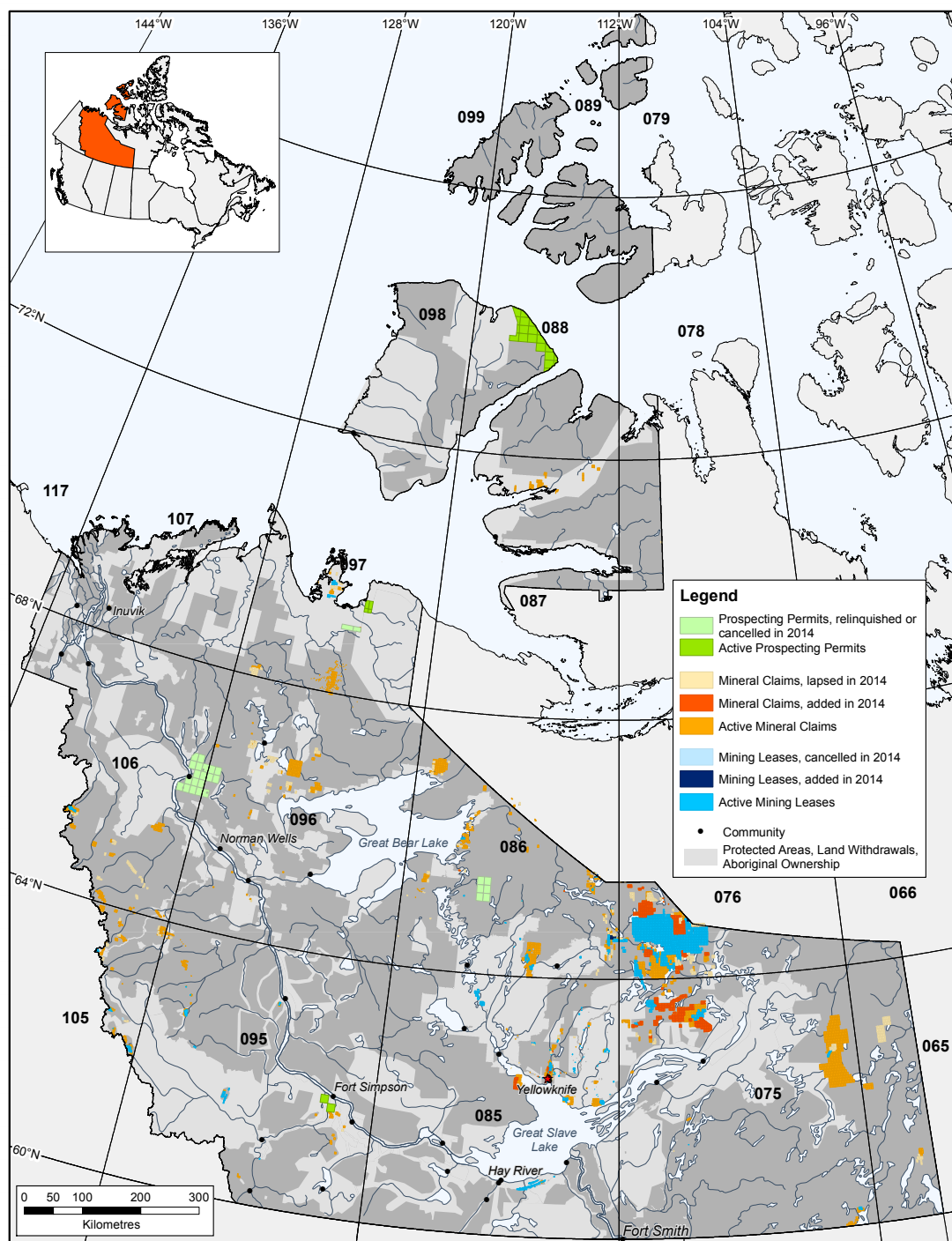


Figure 1: Location and areal coverage of claims, leases and permits for 2014 in the Northwest Territories. New coverage for 2014 includes: 411 claims (433,950 hectares) submitted for recording and 7 leases (4,807 hectares) issued (data compiled by the Mining Recorder, GNWT-ITI, November, 2014).

NORTHWEST TERRITORIES MINING HIGHLIGHTS FOR 2014

The locations of the mines are shown in Figure 2. (Page 12)

The Snap Lake diamond mine (Snap Lake), owned by **De Beers Canada Inc. (De Beers) (Anglo American plc.)**, 220 kilometres northeast of Yellowknife, recovered 1.2 million carats during 2014. This production rate is on par with the exceptional production of 1.31 million carats reported for 2013. In 2014, Snap Lake produced 1.0 million tonnes of ore at a grade of 1.15 carats per tonne. The average reported price was 182 US\$/carat which is consistent with the results from 2013.

The Snap Lake ore deposit is in a 2.5 metre thick kimberlite dyke that dips northeastward at 12-15°. The deposit has Probable Reserves reported as of Dec. 31, 2013 to be 5.6 million tonnes grading 1.19 carats per tonne with the current mine plan forecasting steady production through to about 2028. The forecast represents an 18-month rolling reserve, as high costs associated with development have meant that ongoing definition drilling is required from the underground development infrastructure as mining progresses.

De Beers is continuing to improve water management while working within the discharge parameters of the water licence that was renewed in 2012. Snap Lake received approval in November 2014, to proceed with a request for an amended water licence from the GNWT.

The **Diavik diamond mine** (Diavik), located about 300 kilometres northeast of Yellowknife, owned by **Rio Tinto plc** (60%) and **Dominion Diamond Corporation** (40%)(DDC), has been in production since 2003 and by December 31, 2014 had produced about 91 million carats of diamonds from 24 million tonnes of kimberlite. In 2014, over 7.23 million carats were recovered from 2.28 million tonnes of ore processed, comparable to Diavik's 2013 production. Mining during this period was exclusively by underground methods with approximately 0.9 million tonnes sourced from A-154 North, 0.5 million tonnes from A-154 South and 0.8 million tonnes from A-418 kimberlite pipes. First and second quarter production were favorable comparable to the same period in the previous year. During the third quarter supplies of stock piled ore were exhausted and there was a 5% reduction in the volume of ore processed. This was offset by improvements in equipment availability and efficiency, and full utilization of the processing plant.

All three kimberlites in the mine plan were in underground production providing improved tonnages. However, lower grades in all three ore bodies and processing of a higher proportion of A154 North ore in the fourth calendar quarter of 2014 reduced the amount of carats recovered by 25% from the comparable calendar quarter of 2013.

Pipe	Ore Processed (000s tonnes)	Carats (000s)
A-154 South	500	1,900
A-154 North	893	1,915
A-418	875	3,195
Coarse Ore Rejects	7.5	220
Total	2,275	7,230

The most recent mineral reserve calculation was released by DDC as of December 31, 2013. The total Proven and Probable Mineral Reserve for the A-154 South (2.2 million tonnes at 3.6 carats/tonne), A-154 North (7.5 million tonnes at 2.1 carats/tonne) and A-418 (6.5 million tonnes at 3.5 carats/tonne) pipes is 16.4 million tonnes at 2.9 carats/tonne.

A new mining plan for Diavik was published in February 2014 in which cost reduction methods were emphasized. Currently in the A-154 North pipe, blast-hole stoping is employed and lower cost cemented rock fill (rather the originally planned but more expensive cemented paste) has been implemented. An improved understanding of ground conditions from on-going underground operations has resulted in the use of sub-level retreat in the A-154 South and the A-418 pipes. Under this mine plan, Diavik will continue mining operations until 2023.

The reported projection for 2015 is to produce 6.7 million carats from 2.1 million tonnes of ore. Mining activities will be exclusively underground with approximately 0.8 million tonnes expected to be sourced from A-154 North, approximately 0.4 million tonnes from A-154 South and approximately 0.9 million tonnes from A-418. In addition to the 6.7 million carats produced from run of mine ore, there will be production from Coarse Ore Rejects (COR).

The development of the A-21 pipe (not included in the Diavik mining plan) was announced late in November. The resource of the A-21 pipe has been estimated to be 3.6 million tonnes of measured resources, at a grade of 2.8 carats per tonne, and 0.4 million tonnes of indicated resources at a grade of 2.6 carats per tonne.

The total cost of development for the open pit at A-21 has been estimated at approximately US\$350 million with production planned for late 2018. The kimberlite is located adjacent to the current mine infrastructure; however it is located under a lake and requires the construction of a dyke to isolate the open pit operations. The necessary operating licenses and agreements are in place for project implementation. Preparations have commenced, with the first equipment and supplies scheduled to be transported in early 2015 to the Diavik mine site on the seasonal winter ice road, followed by pipeline construction, initial dyke foundation and abutment work. Dyke construction is planned

during the 2016 and 2017 summer seasons, with dewatering and pre-stripping of the open pit in 2018.

The **Ekati diamond mine** (Ekati), owned by **Dominion Diamond Corporation** (88.9%)(DDC), and **Stewart Blusson** (11.1%) produced 2.34 million carats from the processing of 3.2 million tonnes of ore during the first nine months of 2014. In October, it was announced that DDC had completed the acquisition of the interests of C. Fipke Holdings Ltd. (FipkeCo) in the Ekati Diamond Mine. The acquisition included both the Core Zone, containing the current operating mine and other permitted kimberlite pipes, and the Buffer Zone, which is an adjacent area hosting kimberlite pipes such as the Jay and Lynx pipes. After Dr. Stewart Blusson and Archon Minerals Limited exercised their rights of first refusal to acquire their proportionate share of the interests, DDC's interest in the Core Zone was increased to 88.9% and a 65.3% interest in the Buffer zone. The base purchase price for the acquired Core Zone interest was a total amount payable of US\$55.4 million.

During the first nine months of 2014, mining activities were focused on ore production from the Fox open pit and Koala North and Koala underground mines and pre-stripping operations at the Misery open pit expansion. Additional diamonds were recovered from the processing of a stockpile of coarse oversize kimberlite.

Pipe	Ore Processed (000s tonnes)	Carats (000s)
Koala	66	831
Koala North	199	174
Fox Open pit	1489	503
Coarse Ore Rejects	358	247
Misery South and Southwest	452	582
Total	3,164	2,337

Improvements made to the process plant have raised the recovered grade by 15% in comparison with the mine plan. Previously, Ekati had bypassed a re-crush circuit in order to maximize process plant throughput and did not recover diamonds entrained within the coarse fraction of the tail rejects. Activating this circuit has improved recoveries, adding mostly smaller diamonds not currently included in reserves. Additionally, two Heavy Media Separator modules at Ekati have historically also been run at high hourly feed rates leading to relatively high losses of diamonds. Lower and more consistent operating rates for the modules have resulted in higher diamond recovery across all feed types. Improved operating procedures for monitoring screen panel wear have also contributed to the increased small diamond recovery.

The current mine plan (July 2014) assumes production from Fox, Misery, Pigeon and Lynx open pits, and the Koala and Koala North underground operations. Koala North is currently being mined using sub-level retreat and is scheduled to finish later this year. Meanwhile, Koala is being mined through a sublevel/inclined cave underground operation and is scheduled to finish in 2020. Fox finished production as an open pit as scheduled this year. Mineral resources that are not included in the current mine plan include Jay, Sable and Fox deep.

The planned capital expenditures for 2014 included approximately \$100 million for the continued development of the Misery Pipe estimated at 4.0 carats per tonne and \$105/carats (as of January 31, 2014). Stripping of waste material and satellite kimberlite is in progress with full production was anticipated from the Misery Main Pipe in fiscal 2016 and completion of mining in fiscal 2018. The processing of stripping material during 2014 produced approximately 0.4 million carats with an average price of \$78/carats. Additionally, the stripping of waste material at the Pigeon Pipe has commenced with mining of kimberlite planned to begin in fiscal 2016 and finish in fiscal 2020. The current mine plan estimates production of 0.8 million tonnes of kimberlite from the Pigeon pipe in 2016.

On April 30th, 2014, the Wek'èezhìi Land and Water Board (WLWB) issued a Land Use Permit for the Lynx Project and made recommendations to the Minister of Environment and Natural Resources (ENR), GNWT on an amendment on the Ekati Water Licence to incorporate the Lynx Project. On May 30, 2014, the ENR Minister, J. Michael Miltenberger signed the amended Ekati Water Licence.

In November, DDC filed a Developer's Assessment Report as part of the process to permit the mining of the Jay kimberlite pipe, located in the Buffer Zone property (**Dominion Diamond Corporation** 65.3% /**Stewart Blusson-Archon Minerals** 34.7%) by Lac du Sauvage, approximately 7 kilometres to the northeast of the Misery pit. The current NI 43-101 compliant resource estimate for the Jay kimberlite pipe includes 36.2 million tonnes of Indicated Resource containing 78 million carats at 2.2 carats/tonne and 9.5 million tonnes of Inferred Resource containing 13 million carats at 1.4 carats/tonne. An extensive drilling program was conducted at Jay over the winter in 2014. The drilling also targeted the Cardinal pipe, which is located approximately 5 kilometres southeast of the Jay pipe, however the development plan is currently limited to the Jay pipe.

The project proposes the building of a water retention dyke following a horseshoe-shaped alignment from the shoreline out into Lac du Sauvage to isolate the portion of the lake overlying the Jay pipe. The dyke will be 5 kilometres long with an average water depth of 5 metres. The announced project timeline forecasts dyke construction to commence in the summer of 2016 and would continue through to 2019. De-watering and pre-stripping would follow with conventional open-pit mining expected to begin in 2020. The Jay Project has the potential to extend the Ekati Mine life until 2030. A pre-feasibility study

based on engineered estimates is expected to be published in 2015.

At **North American Tungsten Corporation Ltd.'s (NATC) Cantung mine**, Canada's only producing tungsten mine, production for the first nine months of 2014 consisted of 2,120,000 kilograms of WO_3 having an average grade of 0.91% WO_3 , compared to 2,684,000 kilograms at 1.02% WO_3 during the full year in 2013. Production was from a blend of open pit ore that was mined and stockpiled during the summer and ore from the underground workings in the E-Zone. While overall production levels have remained relatively consistent, the quarterly production results have demonstrated the impact of a variable ore grade. The average mill recovery for nine months was 76.3%, from the 298,500 tonnes milled, consistent with recoveries achieved in 2013. In addition to tungsten, Cantung also produced 188,000 kilograms of copper during the first nine months of 2014 compared to 306,000 kilograms of copper produced in 2013.

Production levels demonstrate the positive impact of the mill and mine improvements. Mill throughput has increased to 1,350 tons per day, while upgrading of the gravity and flotation circuits has benefited the total metallurgical recovery. Construction has raised the dam level on Tailings Pond 5 to accommodate the increased tailings volume from the higher mill throughput.

Efforts are also underway to revise the tailings management program, with upgrades to the current tailings ponds, enhancements to its wastewater treatment plant and development of a long-term storage dry stack facility for tailings.

These extensive improvements to mine infrastructure have been complimented by an exploration program to define new resources to extended mine-life. NATC continued its underground diamond drilling program to further define resources. A second underground diamond drill commenced drilling in June 2014, to increase the meterage to a combined 4000-metre program. Geophysical surveys are also being employed to supplement and guide the diamond drilling. A surface exploration drill program commenced in July 2014 to follow up on results from the 2013 summer drill program and to enable the exploration and evaluation of potential ore targets in the vicinity of the Cantung ore body. A surface-drilling program conducted in the spring of 2012, resulted in the discovery of the Dakota Zone, 700 metres from the main E-Zone. No results have been reported for the 2013 and 2014 drilling.

In November 2014, a report was released entitled Technical Report on the Cantung Mine, Northwest Territories, Canada. The NI 43-101 compliant report defines an Indicated Mineral Resource of 3,482,682 tonnes at 0.97% WO_3 and an Inferred Mineral Resource of 1,242,843 tonnes at 0.8% WO_3 using a minimum mining width of 5 metres and a cutoff grade of 0.50% WO_3 . The updated reserves and resources allow the estimated mine life to be extended beyond 2017.

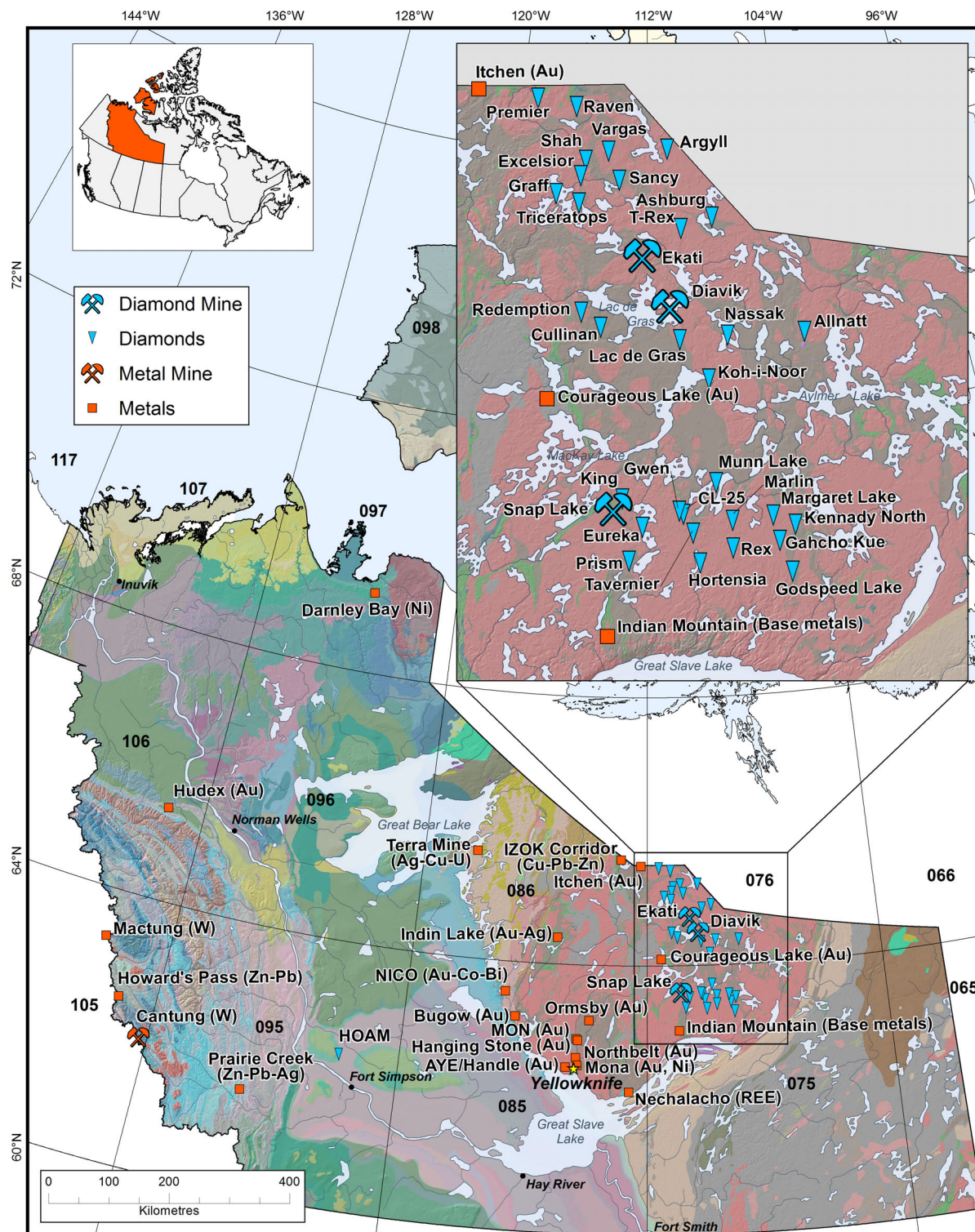


Figure 2: Locations of mines and exploration projects active in the Northwest Territories during 2014.

DIAMOND EXPLORATION

The locations of diamond exploration programs are shown in Figure 2. (Page 12)

Arctic Star Exploration Corp. staked 12 claims in 2012 to form the Redemption property and acquired 4 mineral leases in February 2013 from **GGL Resources Corp.** for a total of 11,500 contiguous hectares south of Lac de Gras, 32 kilometres southwest of the Ekati mine. Subsequently, an option to earn a 55% interest in the Redemption property was agreed to by **North Arrow Minerals Inc.** (NAM). In 2014, NAM commenced a program of ground geophysical surveys over targets that were prioritized based on results of a 2013 airborne gravity gradiometry survey and a review of previous geophysical datasets. Twenty-one grids covering 40 airborne geophysical targets were selected, prioritized on their location with respect to the up-ice termination of the South Coppermine Kimberlite Indicator Mineral (KIM) train, a large unsourced KIM train in the Lac de Gras region.

Based on the geophysics results a 1,000 metre-drill-program was initiated in July. A total of 799.8 metres were drilled to test seven targets located in the central part of the property. None of the drill holes encountered kimberlite.

Drill hole 14-RED23-08 tested a linear gravity low and encountered predominantly fresh to weakly altered granite that included a moderately to strongly fractured fault zone from 89.9 metres to 99.7 metres downhole. A dull green clay gouge was collected for kimberlite indicator mineral analyses for which results have not been reported.

Geophysical targets located beneath lakes are the targets of a drill program to be initiated this winter.

Arctic Star Exploration Corp. also announced the staking of 62 contiguous claims (54,000 hectares) located in the northeastern part of the Lac de Gras kimberlite field, 22 kilometres northeast of the Diavik diamond mine. The T-Rex property covers 13 known kimberlites, which are documented in mineral exploration assessment reports and government databases. Public assessment reports also show three unexplained kimberlite indicator mineral dispersal trains that contain pyrope, chrome diopside, ilmenite, and chromite.

Following the staking of the T-Rex property, **Arctic Star Exploration Corp.** announced the staking of the Triceratops Property covering an additional six historical kimberlite discoveries. The Triceratops property consists of 62 contiguous claims (46,840 hectares) located 31 kilometres northwest of the Ekati diamond mine. The six kimberlites including: Vega, S-141, Torrie, Sputnik, Sue and Eddie, were discovered during the initial Lac de Gras diamond rush. The claims also cover three unexplained kimberlite indicator mineral (KIM) dispersal trains that contain pyrope, chrome diopside, ilmenite, and olivine. Complex KIM dispersal trains near the Torrie kimberlite cluster are difficult to explain with current known kimberlites. Future work proposed by Arctic Star includes using heli-borne

gravity to generate new drill targets.

Canterra Minerals Corporation (formerly, **Diamondex** and **Triex Minerals Corporation** merged 2009) (CMC) revitalized dormant properties in the NWT with the staking of 43 claims (43,000 hectares). The five properties are located between the De Beers' Snap Lake Diamond Mine and the Gahcho Kué Project (De Beers/Mountain Province Diamonds). Eight claims (13,500 hectares) were added at the King Property, located 8 kilometres north of Snap Lake and covering the down-dip extension of the Snap Lake kimberlite dyke. Five mineral claims were initially staked adjacent to the 4 mineral leases of the Hilltop property, originally acquired in 1999. Subsequently, 3 claims were added to enlarge the Hilltop Property to 11,064 hectares. The Hilltop property, located 30 kilometres southwest of Snap Lake Diamond Mine, is suspected to host the source of a 7 kilometre-long KIM train with numerous kimberlite fragments. The Prism property, located 35 kilometres south of Snap Lake, comprises 11 mineral claims (11,500 hectares) and hosts two KIM trains. Nine geophysical anomalies have been identified from a previous airborne geophysical survey coincident with these mineral trains. The Gwen property (discovered by Winspear Resources Ltd. in 1994-1995) consists of 10 claims (10,450 hectares) that were staked adjacent to two diamond-bearing kimberlite pipes (CL-25 and CL-174). CMC also staked ten mineral claims (10,450 hectares), referred to as the Marlin property 20 kilometres northwest of the Gahcho Kué project seeking to locate the source of anomalous KIM concentrations and seven geophysical anomalies. Subsequently, thirteen additional claims were staked to increase the property size to 25,838 hectares.

A detailed basal till sampling program was conducted at the Hilltop, King, Marlin, Prism and Gwen properties. A total of 656 basal till samples were collected during the summer and fall to augment CMC's existing indicator mineral database and geophysical data sets. A geophysical program was also undertaken utilizing the HeliFALCON gravity gradiometer system combined with airborne magnetics flown at a 75-metre line spacing with an average clearance of 45 metres-above-terrain. A digital terrain model together with detailed bathymetry, using WorldView2 high-resolution satellite imagery, was also completed. This data will be used to interpret the geophysical survey and help identify high-definition gravity and magnetic anomalies.

Results from the till sampling program, as well as the airborne gravity survey are expected by early 2015, however, preliminary results from the reconnaissance till sampling did encourage the company to stake the Rex property. The 21 claims covering 25,030 hectares are located approximately 35 kilometres west of the Gahcho Kué diamond project. Rex encompasses several kimberlite indicator mineral anomalies that contain G9 and G10 garnets, kimberlitic ilmenites and chromites as well as two kimberlite indicator mineral trains. During the 2014 field season, 38 reconnaissance samples were collected from Rex and visual picking results were the basis for the staking, while individual grain studies including electron microprobe analysis have yet to be reported.

At the end of August, **CMC** announced an option agreement with **Margaret Lake Diamonds Inc.** for the Marlin Property, which is contiguous to the north and west of the Kennady Diamonds project. Under the option agreement, a total of 126 basal till samples were collected. A geophysical program was also undertaken utilizing the HeliFALCON gravity gradiometer system combined with airborne magnetics. A 1,500 line-kilometre survey was flown over the northern portion of the Marlin Property using the 75 metre-line-spacing and 45 metre elevation parameters. While final results are not anticipated for the till sampling program and the geophysical survey until early 2015, preliminary reports have revealed the discovery of a 1.0 x 1.0 x 1.4 millimetre off-white, modified octahedral diamond, as well as several anomalous indicator minerals including pyropes recovered the till sampling program.

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, approximately 150 kilometres south-southeast of the Ekati and Diavik mines. A revised 2014 Feasibility Study Report prepared by JDS Energy and Mining Inc. and Hatch Ltd. was released in April 2014. It reported a total Probable Mineral Reserves of 35.4 million tonnes containing 55.5 million carats for three kimberlites (5034 grading 1.74 carats/tonne, Hearne grading 2.07 carats/tonne, and Tuzo grading 1.57 carats/tonne). The feasibility study was based on three open pits with a full production of 250,000 tonnes per month. Excavation of the pits will be staggered with production of 3 million tonnes of kimberlite per year allowing for a 12-year mine life. The annual production target is 4.45 million carats with anticipated revenue of US\$149.66/carat. The capital cost for the project is \$1,019 million including \$75.6 million of contingency with the total life of mine capital costs are estimated at \$1,290.8 million consisting of: \$259.5 million sunk costs; \$858.5 million initial capital; \$80.1 million working capital; and \$92.7 million sustaining and closure costs.

Gahcho Kué Mineral Reserve Estimate (JDS, March 2014 FS)

Pipe	Tonnes (million tonnes)	Grade (carats per tonne)	Carats (million carats)
5034	13.4	1.74	23.2
Hearne	5.6	2.07	11.7
Tuzo	16.4	1.25	20.6
Total	35.4	1.57	55.5

Mine site development commenced in December 2013. Construction of the main airstrip was initiated and prefabricated structures for the main camp were delivered during the winter road season. The main camp and airstrip were expected to be complete by mid 2014. Construction of two 18,000 cubic metre fuel tanks was also started. Major construction is predicted to be complete by 2016, followed by plant commissioning in mid-2016 and first production in by the fall of 2016. The mine is anticipated to produce \$7,720.8 million in realized value revenues over its 12-year mine life resulting in a 32.6% Internal Rate of Return (IRR) and a \$1,004.8 million Net Present Value (NPV) at 10%

excluding sunk costs of \$259.5 million incurred prior to Dec 31, 2013. Including sunk costs of the project yields a 21.9% IRR and \$747.3 million NPV.

A revised independent valuation of diamonds conducted by WWW International Diamond Consultants Ltd. was released. It evaluated the value of the diamonds recovered to date. The averaged modeled price per carat for the Gahcho Kué kimberlites based on the prices as of August 8, 2014 is US\$123. This result represents an approximate 40 percent increase over the previous April 2010 average modeled price.

In addition to the favourable feasibility study, a Type A Water Licence was approved by the GNWT and an Impact Benefit Agreement was negotiated with the Lutsel K'e Dene First Nation. This followed previously signed agreements with the North Slave Métis Alliance and the Tłı̨chǫ Government early in 2014.

A drill was mobilized to site in January 2014 to commence a 2250-metre program consisting of three vertical holes to test the Tuzo kimberlite at depths of 750 metres. Challenging ground conditions resulted in one hole (MPV14-408C) having to be wedged twice (MPV14-409C and 410C) and eventually abandoned in kimberlite due to unstable ice conditions after reaching a depth of 570 metres below surface. A second drill was added to the program to expedite the drilling. A total of 3003 metres of drilling confirmed the continuation of the kimberlite to a depth of more than 740 metres below surface with the Tuzo kimberlite plunging toward the northeast below 740 metres. The core has been sent to Geoanalytical Laboratories Diamond Services (GLDS) of the Saskatchewan Research Council (SRC) and results have not been reported.

Denendeh Exploration and Mining Company (DEMco) acquired thirteen claims near Lac de Gras and Munn Lake. These dispersed properties include eight known kimberlite pipes formerly held by De Beers Canada, including seven pipes at Hardy Lake and the CI-25 kimberlite near Munn Lake. An additional, six claims were acquired to cover are electromagnetic and magnetic targets northeast of Lac de Gras between the Diavik and Ekati leases.

Kennady Diamonds Inc. (Mountain Province 100%) continued to explore the Kennady North project, which has been greatly expanded and now consists of 16 leases and 58 claims (61,000 hectares) to the north of Gahcho Kué. This property includes the diamondiferous MZ, Doyle, Kelvin, and Faraday kimberlites.

In February 2014, two exploration camps were re-occupied at Kennady North (Bob and Kelvin camps) by geophysical crews. Ground-penetrating radar and Ohmmapper surveys were used to improve definition of the Kelvin and Faraday kimberlites prior to drilling. Preliminary interpretations suggest that the Kelvin and Faraday kimberlites are discrete

intrusions to be modeled separately. Both of these kimberlites appear to be steeply dipping dykes or sheets with strike-lengths of over one kilometre, striking northeast.

The geophysics was followed by approximately 10,000 metres of delineation drilling of the Kelvin kimberlite, and by large diameter drilling to extract a mini-bulk sample. Promising results were presaged by the recovery of a high quality white/colorless and transparent diamond measuring approximately one millimetre in diameter from the core of the Kelvin hole KDI-14-012a at a down-hole depth of approximately 114 metres. The winter drill program was successfully completed in May 2014, having drilled 10,200 metres and collecting 25 tonnes of sample from the Kelvin kimberlite. The mini bulk samples were shipped to GLDS at the SRC for diamond recovery through dense media separation.

Kelvin Diamond Recovery Results (Oct. 6, 2014 News Release)

Batch	Sample Weight (tonnes)	Number of Diamonds According to Sieve Size Fraction (mm)							Total	Carats	Sample Grade (c/t)
		+0.850 - 1.180	+1.180 - 1.700	+1.700 - 2.360	+2.360 - 3.350	+3.350 - 4.750	+4.750 - 6.700	+6.700 - 9.500			
Total*	24.97	200	347	149	49	5	1	0	751	44.64	1.79
2013 Sample	4.30	297	126	52	10	6	1	0	492	18.57	4.32
TOTAL	29.27	497	473	201	59	11	2	0	1,243	63.21	2.16

*Includes DMS and recovery cleanup

The three largest diamonds recovered from the Kelvin mini-bulk sample include: 1.27 carat off-white, transparent, broken, irregular with inclusions; 1.00 carat white/colorless, transparent, dodecahedron, twin with minor inclusions; and 0.70 carat white/colorless, transparent, dodecahedron, twin with minor inclusions.

Drilling to delineate the Faraday kimberlite extended over 1,500 metres with the recovery of 230 metres of kimberlite. Highlights include intercepts ranging up to 42 metres at Faraday 3 suggesting the presence of a kimberlite “blow”. Approximately 933 kilograms of kimberlite were processed using caustic fusion at the GLDS SRC containing 4.76 carats with a sample grade of 5.10 carats/tonne being reported in Early August.

Faraday Diamond Recovery Results (Aug. 5, 2014 News Release)

Total Weight (kg)	Number of Diamonds According to Sieve Size Fraction (mm)												Total Diamonds
	+0.106 - 0.150	+0.150 - 0.212	+0.212 - 0.300	+0.300 - 0.425	+0.425 - 0.600	+0.600 - 0.850	+0.850 - 1.180	+1.180 - 1.700	+1.700 - 2.360	+2.360 - 3.350	+3.350 - 4.750	+4.750	
933.08	1,879	1,180	741	420	207	104	59	25	6	7	0	0	4,628

The three largest stones, 0.40, 0.25 and 0.22 carat diamonds, are described as transparent and either white/colorless or off-white.

In early May, one of the drill rigs was moved to test newly identified drill targets outside and to the west of the Kelvin – Faraday kimberlite corridor. Ground geophysics was completed and four drill holes tested the G6 geophysical anomaly without intersecting kimberlite.

Following the successful completion of the winter/spring drilling program, a summer program was outlined: wide-spaced overburden till sampling by reverse circulation drilling at approx. 270 sites across the entire Kennady North project area, ground geophysics, including Ohmmapper, ground-penetrating radar and ground gravity surveys, LiDAR airborne mapping of the project area and infrastructure upgrades to support an expanded 2015 winter exploration program.

These activities were to compliment a 5,000 metre drill program with two drills. One rig was drilling at the northern edge of the Kelvin northwest lobe where kimberlite had previously been intersected over a length of 80 metres, followed by a “fence” of holes from northeast to southwest along the western shore of Kelvin Lake to test the continuity to depth of the Kelvin kimberlite dyke, which dips to the northwest at approx. 15°. The second drill rig was planned to drill vertical and near vertical holes along two lines from the lakeshore to the northwest along the strike of the northwest lobe of the Kelvin kimberlite. Good progress prompted Kennady diamonds to mobilize a third drill rig to support an expanded summer drill program from the initial target of 5,000 metres to 18,000 metres. Poor weather conditions, principally dense fog, hindered the drilling in late fall and the program was stopped with 16,600 metres completed. The temporary cessation of drilling allowed the construction of a new Kelvin camp, which was commissioned by mid-November with the resumption of drilling bringing the 2014 drilling total to approximately 27,200 metres.

Approximately 18.7 tonnes of kimberlite were sent to the GLDS at the end of November for processing at the dense media separation plant. An additional four tonnes of kimberlite from Kelvin has been processed by caustic fusion at GLDS, and one tonne has been processed by caustic fusion at the Rio Tinto diamond laboratory in Thunder Bay. A grade of 2.59 carats per tonnes was reported for mini-bulk sample 40 percent higher than the previously collected 25 tonne mini-bulk sample recovered last winter. The most recent mini bulk sample was recovered from the north lobe of the Kelvin kimberlite, while the earlier sample was recovered from the shallower and partly outcropping southeast lobe.

Kelvin Diamond Recovery Results (Jan 26, 2015)

Batch	Sample Weight (dry tonnes)	Number of Diamonds According to Sieve Size Fraction (mm)							Total Diamonds	Carats	Sample Grade (c/t) +0.85m m
		+0.850 - 1.180	+1.180 - 1.700	+1.700 - 2.360	+2.360 - 3.350	+3.350 - 4.750	+4.750 - 6.700	+6.700 - 9.500			
Zone A	5.87	87	152	76	25	7	1	0	348	24.71	4.21
Zone B1	3.75	47	85	32	10	4	0	0	178	11.00	2.93
Zone B1(a)	1.67	12	28	14	4	2	0	0	60	5.16	3.09
Zone B2	1.90	11	18	3	1	0	0	0	33	1.15	0.61
Zone B3	2.62	2	13	4	1	0	0	0	20	0.97	0.37
Zone B3(a)	1.90	12	17	6	4	2	0	0	41	3.74	1.97
Zone C	1.17	5	24	4	3	0	0	0	36	1.97	1.68
TOTAL	18.88	177	339	140	48	15	1	0	720	48.84	2.59

*Includes DMS recovery cleanup

The four largest diamonds recovered from the new Kelvin mini-bulk sample are described by SRC as:

- 1.11 carat off-white, transparent, aggregate with inclusions;
- 1.10 carat white/colorless, transparent, irregular with inclusions;
- 0.95 carat off-white, transparent, octahedral, no inclusions; and
- 0.90 carat white/colorless, transparent, dodecahedron, no inclusions.

By the end of 2014, a total of 53.15 tonnes of kimberlite were recovered from Kelvin by drilling. Processing by dense media separation and caustic fusion methods yielded 124.90 carats greater than 0.85 millimetres. The largest diamond recovered from that sample weighed 2.48 carats. The 27,200 metres of drilling increased the strike length of the Kelvin kimberlite pipe to over 600 metres and indications are that the volume continues to increase along strike to the north. The position of some intersections indicate that the Kelvin pipe may be turning from north to northeast in the direction of the Faraday kimberlite, which is approximately one kilometre to the northeast.

Preparations are also underway in 2015 to recover a 500 to 700 tonne bulk sample from the Kelvin kimberlite by large diameter drilling with continuing delineation drilling on both the Kelvin and Faraday kimberlites. The diamonds recovered from this larger bulk sample will be used for revenue modeling of the Kelvin kimberlite.

Margaret Lake Diamonds (formerly, **JDV Capital Corp.**) announced an option agreement with **Harsbo Minerals Ltd.** to acquire up to a 70% interest in the 19 mineral claims (19,716 hectares) of the Margaret Lake property. These claims located 300 kilometres east-northeast of Yellowknife, are contiguous with the Kennady North Project held by Kennady Diamonds. A review of previous work conducted in the 1990's demonstrated several indicator anomalies and kimberlite-like electromagnetic (EM) and magnetic signatures. In response to this data review four additional claims were staked, expanding the property to 23,199 hectares.

A contractor reviewed publically available 1993 and 1997 DIGHEM airborne geophysical data, which was filed as assessment work covering the property, as well as ground and other geophysical data. Based on review of the assessment report data, 27 anomalies were identified with three principal targets, known as A286, A294, and Drop Lake. These targets are defined by coincident ground gravity, magnetic, and Horizontal loop EM (HLEM) anomalies for the first two, and strong HLEM plus historical airborne anomalies for the third.

To follow up on the assessment report review **CGG Canada Services Ltd.** was contracted to conduct an airborne gravity gradiometer survey with the Falcon System incorporating gravity and magnetics. A bathymetric analysis was also undertaken to compliment the airborne gravity data under lakes. While the results of the survey have not been reported, a preliminary review of data from the current airborne survey shows a gravity response that relates to A286 and A294, the two historical ground gravity targets.

In addition to the Margaret Lake Property, **Margaret Lake Diamonds** staked and owns a 100% interest in four additional claims (3,483 ha) to the north and contiguous to the Margaret Lake property referred to as the Kirk Lake Property.

Olivut Resources Ltd.'s (ORL) HOAM diamond property covers over 52,000 hectares of the Interior Platform south of Fort Simpson. ORL's exploration of the HOAM project area has resulted in the discovery of 29 kimberlites to date including one intersected during the 2012 drill program. However, caustic fusion analysis of 254 kilograms of kimberlite core by SRC revealed no diamonds.

In 2013, ORL undertook a detailed helicopter-borne magnetic survey to examine anomalies identified in its previously flown regional geophysical survey. A total of 23 surveys were conducted at a line spacing of 50 metres. An additional larger survey was completed over an area containing known kimberlite intersections to assess regional structures. Activities in 2014 comprised an ongoing interpretation of the extensive regional airborne geophysical database to define targets up-ice from promising KIM populations. Bedrock sources for these KIMs have not been identified by previous work. Plans for detailed airborne magnetic surveys in 2014 were hampered by funding and weather (including forest fire) conditions.

In June 2014, **Prima Fluorspar Corp.** announced an option agreement with **DG Resource Management Ltd.** for an undivided 100% interest in 46 mineral claims (42,000 hectares) known as the Godspeed Lake property. This announcement was accompanied by a name change to **Prima Diamond Corp.** (PDC) to better reflect the company's revised exploration focus. The Godspeed Lake property is immediately to the south of the Gahcho Kué property and 290 kilometres east of Yellowknife. Previous exploration efforts on the property identified a few KIM-bearing tills and four ground geophysics anomalies.

PDC's holdings were expanded in July when it announced agreement to acquire 19 claims (14,000 hectares) of the Munn Lake property from **DG Resource Management Ltd.** and **Zimtu Capital Corp.** The Munn Lake property, located 40 kilometres northwest of the Gahcho Kué property was previously held by **SouthernEra Resources Ltd.** (SERL) from 1996 to 2007. The property contains the Munn Lake kimberlite from which a 42 kilogram sample returned two macro diamonds and 12 microdiamonds and the Yuri boulder field where a 581 kilogram-sample contained 226 diamonds including 62 macrodiamonds. Four other distinct KIM trains have also been identified on the property but the sources remain to be located.

Additional airborne geophysical surveys accompanied by till sampling programs have been proposed by PDC for both properties.

During March and April 2014, **Proxima Diamonds Corp.** (Proxima) a wholly owned subsidiary of **Adent Capital Corp.** staked 16 prospects consisting of 65 claims (72,000 hectares) including the first claims filed with the newly devolved GNWT Mining Recorder. Nine of the 16 properties lie north of Lac de Gras, covering claims formerly held by SERL and **Tanqueray Resources Ltd.** Another four properties are located southeast and southwest of Diavik, while three more are southeast of Snap Lake. Subsequently, Proxima staked the Orlov block (18,775 hectares) on the east side of the De Beers' Snap Lake Diamond Mine property to cover a KIM train. The properties are summarized in a table adapted from Proxima's technical report.

Property Anomaly Summary Table (modified from Robinson,
Proxima Technical Report, May 2014.)

Target Name	Claims	Size (ha)	Kimberlite	Diamonds	KIM Trains	Geophysical Anomalies	Location
Sancy	5	6250	2	Yes	4	2	20 km east of Yamba Lake
Premier	3	3750	0	No	2		30 km east of Yamba Lake
Raven	3	2650	0	No	2		10 km east of Premier
Vargas	2	1387	0	No	2	3	50 km north-northeast of Ekati
Shah	5	6250	2	No	2	2	12 km east northeast of Yamba Lake
Excelsior	1	1051	0	No	1	3	12 km east northeast of Yamba Lake
Graff	4	5000	0	No	1		Yamba Lake
Ashburg	4	3741	1	No	2	7	Hardy Lake
Allnatt	3	3750	0	No	1	3	Clinton-Colden Lake 70 km east of Diavik
Nassak	7	7740	0	No	3	1	Thonokied Lake 34 km east northeast of Diavik
Koh-i-noor	10	11767	0	No	2	4	MacKay Lake 40 km southeast of Diavik
Cullinan	14	14544	1	No	3		Lac de Gras 30 km west of Diavik
Eureka	1	1250	0	No	3	9	20 km southeast of Snap Lake
Travernier	1	1250	0	No	1	4	35 km south of Snap Lake
Hortensia	1	1250	0	No	1		40 km south of Snap Lake
Argyll	2	471	0	No	0	2	Contwoyto Lake
Orlov	16	18775	0	No	1		East of Snap Lake

A high-resolution airborne magnetic survey was flown over two blocks totalling 2079 line-kilometres on the Koh-i-nor property in April 2014, by **Precision GeoSurveys Inc.** An agreement was also reached with **GGL Resources Corp.** to utilize a proprietary database of exploration data.

During late summer and into fall, Proxima conducted a work program consisting of confirmatory kimberlite indicator mineral (KIM) till sampling; geological mapping and prospecting; and relocation of historic diamond drill holes and geophysical survey grids. Seventy nine KIM till samples were collected immediately down-ice of prospective targets to confirm historical data. While no results have been announced, the intended focus was on three targets southwest of Snap Lake: Eureka, Travernier and Hortensia.

Table 1: Summary of Northwest Territories diamond exploration in 2014.

Operator / Partners	Property	Drilling	Airborne and Ground Geophysics	Sampling and Other Work	Studies and Permitting Updates
North Arrow Minerals (55%) / Arctic Star Expl. Corp.	Redemption	800 m drilled 7 targets	21 Grids		MIP funding
De Beers Canada Inc. (51%) / Mountain Province Diamonds Inc. (49%)	Gahcho Kué	Tuzo Deep drilling 5 Holes, 3003 m			2014 IBA with Tẖcẖq, North Slave Métis and Lutsel k'e development Pioneer and quarry permits and water licence issued 2014; Feasibility study released.
Canterra Minerals/ Margaret Lake Diamonds	Marlin		1500 line km HeliFALCON grav. + mag survey	126 Basal Till samples	WorldView2 high-resolution satellite imagery
Canterra Minerals	King, Hilltop, Prism, Gwen Rex		HeliFALCON grav. + mag survey	656 Basal Till samples, 38 recon till samples	WorldView2 high-resolution satellite imagery
DEMco	Lac De Gras/ Munn Lake				Acquired property
Kennady Diamonds Inc.	Kennady North	Winter/Spring drilling: 10,200m Summer/Fall drilling: 17,000m	2014:ground-penetrating radar, grav and Ohmmapper	Winter program: 25 tonnes from Kelvin and 1 tonne from Faraday Sumer program: 28.7 from Kelvin	Acquired property south and west including Doyle and MZ kimberlites; LiDAR mapping of Kennady North
Margaret Lake Diamonds Inc./Harsbo Minerals	Margaret Lake		HeliFALCON grav.+ mag survey		Staked 4 additional claims; WorldView2 high-resolution satellite imagery review of historic DIGHEM data
Olivut Resources Ltd.	HOAM				Review of geophysics data
Prima Diamond Corp	Munn Lake & Godspeed Lake				Property acquisition,
Proxima Diamonds Corp	Northern Gem 17 properties		Hi Res. mag survey 2079 line-km	79 Till samples and prospecting	MIP funding, purchased GGL Resources database

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. (Page 12)

Avalon Rare Metals Inc. (Avalon) efforts continued at the Nechalacho Rare Earth Elements project located on the north shore of Great Slave Lake, approximately 100 kilometres southeast of Yellowknife.

Avalon released a revised estimate of Measured Mineral Resources (August 15, 2013) with a base case of 12.56 million tonnes averaging 1.71% Total Rare Earth Oxides (TREO), 0.38% Heavy Rare Earth Oxides (HREO) and 22.5% Heavy Rare Earth Oxides/Total Rare Earth Oxides (HREO/TREO). The revision used an increased cut-off grade expressed as a net metallurgical return of US\$345 per tonne.

In April 2013, Avalon announced the results of a feasibility study prepared by SNC-Lavalin Inc., for a 2,000 tonne per day underground mine with an access ramp and primary crushing underground with a design capacity of 730,000 tonnes a year and based on a mine life of 20 years. Forecast operating costs of \$264.5 million per year and revenues averaging \$645.8 million per year (\$456.5 million from separated rare earth oxides and \$189.3 million from the sale of an enriched zirconium concentrate). The study reported that the discounted cash flow analysis had a 22.5% IRR on a pre-tax basis and a 19.6% IRR on an after-tax basis, assuming 100% equity financing. The project's NPV at a 10% discount rate is \$1.351 billion pre-tax and \$900 million after-tax with a payback period of 4.3 years. The construction capital costs were reported to be \$1.575 billion of which approximately \$1.152 billion were expected to be incurred in the NWT.

Technical studies to optimize elements of the 2013 Feasibility Study have been completed and an updated study is anticipated. Reported improvements include investigations on the flotation circuit in the concentrator that increased the TREO flotation recovery to more than 91.5% (89% reported December 2013 and 78% in April, 2013). The hydrometallurgical process has been upgraded; with increased efficiencies for using and recycling the hydrochloric acid, magnesia and limestone reagents, while overall HREO recoveries surpass 93%. A process to derive a marketable zirconium basic sulphate has also been successfully developed.

The location of the hydrometallurgical plant site is also being reconsidered. A decision on a hydrometallurgical plant site location will be made upon completion of due diligence investigations of three promising Saskatchewan locations. Revisions to the cost of reagents in this region may help develop new values for the updated feasibility study. The only significant technical work remaining is a pilot plant trial of the new hydrometallurgical process flowsheet to finalize engineering and plant design criteria.

A large diameter-drilling program was completed at the Nechalacho site in August 2014. Seven PQ drill holes totalling 1,773 metres were completed, resulting in 3 tonnes of Basal Zone ore material being collected. This core augmented an existing inventory to total eight tonnes of ore for use in metallurgical optimization tests. The only other significant work done at the site in 2014 was a program of tree clearing to prepare several areas for initial construction work. These areas are for the planned fuel storage site, the accommodations, the ramp portal site and an area that will be used as a quarry. This will enable immediate start-up on the construction of a larger camp and the driving of the underground ramp once permits and financing are in place. No further drilling or site development work is planned before summer of 2015.

In April 2014, Avalon received a Class A Land Use Permit from the Mackenzie Valley Land and Water Board (MVLWB) allowing it to start pre-construction work at the Nechalacho. This allows site preparation, early camp construction, portal and road development, as well as power and water treatment infrastructure to be emplaced. Technical review sessions related to the full Type A Construction and Operations Land Use Permit and Water Licence were conducted in July towards qualification for a Class B Water Licence.

Avalon also announced in February 2014, that negotiations for a participation agreement had been successfully concluded with the Northwest Territory Métis Nation.

In contrast to 2013, 2014 was a much quieter year for **Canadian Zinc Corporation** (CZN) at the Prairie Creek zinc-lead-silver project. In 2013, CZN was granted all the necessary permits and licences to allow for the construction, development and operation of the Prairie Creek mine and the entire 184 kilometre access road, which connects the Prairie Creek property to the Liard Highway.

The Mineral Reserves at the Prairie Creek mine, based on a pre-feasibility study completed by SNC Lavalin in June 2012, were estimated at 5.22 million tonnes averaging 9.4% zinc, 9.5% lead, and 151 g/t silver. The Proven and Probable Mineral Reserve is capable of supporting a mine life of 11 years at the planned rate of 1,000 tonnes per day. The pre-feasibility study suggested that the Prairie Creek project has a NPV of \$253 million using an 8% discount, with an IRR of 40.4% and payback period of 3 years based on long-term metal price projections of US\$1.00/lb zinc, US\$1.00/lb lead and US\$ 26.00/oz silver.

In April 2014, applications were submitted to the MVLWB and to Parks Canada for Land Use Permits to permit the upgrade of the winter access road to an all-season road. The applications were referred to environmental assessment by the Mackenzie Valley Environmental Impact Review Board (MVEIRB). A Developer's scoping document was presented to local affected communities and organizations and the MVEIRB issued draft terms of reference for comment. In July, a helicopter supported field program was

completed along the road corridor joining the mine with NWT Highway 7, to further assess and gather detailed data in support of the permit application.

The site at the Prairie Creek Mine re-opened in May, with activities commencing on the normal care and maintenance programs. Pre-development programs were prepared for the removal of obsolete equipment and material in the powerhouse, upgrading accommodations, geotechnical studies of the water storage pond and waste rock pile facilities and further roadwork.

AMC Consultants started an optimization study of the underground mine plan to reduce the initial development period, shorten the development schedule and lower underground mining costs. Geotechnical investigations to determine optimal mining methods were completed during the first half of 2014. Metallurgical concentrate studies, designed to optimize the mill flow-sheet and reduce smelter penalty charges, are also being completed.

Procon Mining and Tunnelling Ltd., was awarded the contract to carry out mine rehabilitation, exploration, mine development and initial production. In October, CZN announced the start-up of its underground program. The first stage was to re-open and access the underground by dewatering and re-install electrical and ventilation services to the 650 metre-long decline, at the end of the 870 underground level. An exploration diamond drill program from underground drill stations near the end of the decline are planned to upgrade a portion of the inferred resources to the indicated category. The drilling will be completed on four, 50-metre sections and requires 6,000 metres of diamond drilling over 21 holes.

While the underground rehabilitation and exploration program is proceeding, upgrades and repair work will be conducted to improve the existing camp. This surface program will include engineering design work for the water storage pond and the waste rock pile.

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 1.93 million kilograms of silver. CZN estimates the mine will provide full-time jobs for about 235 people, once in full operation.

Darnley Bay Resources Ltd. (DBRL) continued work on their 456,000 hectare Darnley Bay project approximately 400 kilometres east of Inuvik. DBRL was formed in 1993 to explore for and develop base metal and potentially other deposits related to the 50 x 80 kilometre, 132-mGal Darnley Bay gravity anomaly near Paulatuk. The source of the anomaly remains unexplained. In January 2014, two new claims were staked on Inuvialuit land to

complement the four existing permits in the area. Remediation work was conducted to demobilize equipment and materials associated with a 2011 drill program.

Denendeh Exploration and Mining Company (DEMCo), a subsidiary of **Denendeh Investments Inc.** acquired four properties, in the Camsell River area from Fortune Minerals Inc., North Continental Energy Ltd., United Coal and Michael Magrum. Denendeh Investments Inc. launched DEMCo in June 2013, with a goal of exploring and developing potential resource targets on and off settled land claim areas.

The Camsell River area is a former silver mining district, located south of Great Bear Lake and is also the host to Iron Oxide Copper Gold type deposits. Silver mining was conducted in this region until 1985 and included the past producing Silver Bear (Terra), Norex and Northrim mines. DEMCo's most recent acquisition is a lease positioned between the Norex and Northrim mines, that is along the strike projections of high-grade silver veins from the adjacent mines. The current property consists of 12 mineral claims that include 8,114 ha.

In 2014, a mapping and prospecting project was started to define the alteration system related to the mineralization at Terra. This involved extensive prospecting and the collection of over 400 grab samples, which returned values up to 21.04% Cu, 279 g/t Ag, 16 g/t Au, 11.8% Pb, and 2.91% Zn. In addition, 400 core intervals were sampled from historical core including SS81-01, a 1981 diamond drill hole that returned wide intersections of low-grade disseminated Cu-Zn-Pb-Au-Ag-Pt sulphides (42.1 metres with 0.49% Cu equivalent and 65.5 metres containing 0.51% Cu eq. including 29.0 metres @ 0.67% Cu eq.). Additional work included data compilation and three-dimensional modeling of archived airborne magnetic survey data, which has indicated the presence of large (1 to 5 kilometre-scale) magnetic bodies at depth. A gravity survey is planned for this winter to refine exploration targets.

DEMCo also staked the Bugow gold showing at the north end of Russell Lake, directly north of Behchokq̃. Gold is hosted in quartz veins cutting a poly-deformed iron formation hosted in turbiditic metagreywacke sediments. The property has had multiple owners since its initial staking in 1939 and the most recent previous owner, Aber Resources' 1987 Annual Report quotes a non-NI 43-101 compliant resource of 100,000 tons (90,000 tonnes) grading 0.3 oz/ton (10.2 g/t) Au.

Lane Dewar /Wayne Kendrik prospected their Hanging Stone claim block on Sito Lake, 50 kilometres north of Yellowknife. A total of 184 samples from the seven claims, were collected from quartz veins hosted in carbonate-biotite altered shear zones cutting mafic to intermediate volcanic rocks. Mineralization was locally concentrated along

gabbro/metasediment contacts. Ten samples returned anomalous results containing over 10 g/t Au.

The NICO project owned by **Fortune Minerals Ltd.** (FML) passed several milestones in 2014. In January 2014, the Wek'èezhì Land and Water Board (WLWB) approved an interim Land Use Permit to allow staging equipment and site preparation prior to completion of full mine permits. Fortune is working with the NWT Power Corporation to connect the NICO property into the Snare/Yellowknife grid, 22 kilometres from the site, after the announcement of NWT power system plan. In February 2014, the Saskatchewan Minister of the Environment conditionally approved FML's proposed Saskatchewan Metals Processing Plant. In June the WLWB issued the Land Use Permit and approved the Type A Water Licence required to construct and operate the NICO gold-cobalt-bismuth-copper mine. In July, the ENR Minister, Michael Miltenberger gave final approval for the Type A Water Licence required for mine construction and operation.

NICO is an iron-oxide-copper-gold (IOCG) deposit, located in the southern Bear Province, approximately 160 kilometres northwest of Yellowknife. Ore is hosted in three stratabound lenses of brecciated ironstone up to 1.3 kilometres in length and 550 metres in width, with individual lenses up to 70 metres thick that dip 40-50°. P & E Mining Consultants Inc. (2012) completed a resource calculation of Proven and Probable Mineral Reserves, which was updated by Fortune Minerals (May 2014) for a feasibility study. The calculation identified Proven and Probable reserves of 33.0 million tonnes averaging 1.03g/t Au, 0.11% Co, 0.14% Bi, and 0.04% Cu. The feasibility study completed by Micon International Ltd. is based on an open pit mine producing 4,650 tonnes of ore per day, for 20 years. A small underground mine is planned to operate during the first two years of mine life to augment the production with 1,544 tonnes of high-grade ore per day. The processing plant will have a throughput capacity of 1.7 million tonnes of ore per year, utilizing conventional crushing, grinding and flotation processes to produce approximately 54,500 tonnes per year of a bulk sulphide concentrate. The NICO Project is scheduled to mine and process 33.1 million tonnes of ore, and to produce 25,300 kilograms of gold, 31 million kilograms of cobalt, 34 million kilograms of bismuth and 5 million kilograms of copper.

Under the base case input estimates, the NICO Project is expected to yield an after-tax undiscounted life-of-mine cash flow of \$837 million, a NPV of \$224 million at a discount rate of 7% per year and a post-tax IRR of 15.1% per year. The pre-tax economic indices are a NPV \$254 million at a discount rate of 7% per year and an IRR of 15.6% per year.

MMG Ltd. (*formerly Minerals and Metals Group*) spent much of 2014 reflecting on the results of base metal exploration at work at the Izok Lake copper, zinc, lead and silver

deposit and the Izok Corridor project as a whole. The current resource at Izok Lake straddles the NWT/Nunavut border but is mostly in Nunavut, and is reported to contain a JORC-compliant (Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves) 14.8 million tonnes at 12.8% Zn, 2.5% Cu, 1.3% Pb and 71 g/t Ag. The 2012 pre-feasibility study recommended mineral processing facilities at Izok Lake, including a 2 million tonnes/year concentrator, which would also process the ore from the High Lake mine, Nunavut. Expected initial annual production was 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 plan required 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 back-haul of High Lake ore to the Izok mill.

The Izok Corridor project was considered to be an important component of MMG's strategy to replace the 500,000-tonne/year Century mine in Australia, scheduled to close in 2016. An extensive work program was conducted in 2013, including exploration mapping and drilling, ongoing community consultation and the collection of environmental and social data. A proposal for the project was submitted to the Nunavut Impact Review Board and key authorizing agencies in early September 2012, starting the environmental assessment and regulatory review process as per the Nunavut Land Claims Agreement. Subsequently, MMG asked to submit an updated project description with design and execution options that it anticipated to improve the economic viability of the Izok Corridor project. The revised mine plan includes a relocation of the three-million tonnes per year ore plant at Grays Bay. Mining would be staged commencing at Izok Lake followed by mining at High Lake while building more modular components into the mine design. The resulting project, with a lifespan of 11 years could be operational in 8 years but MMG reports that the capital costs of building the needed regional transportation and communications infrastructure is still more than the project can support.

During the first half of 2014 MMG's efforts were focused on completing the Independent Peer Review for the feasibility study. MMG announced that it would continue its effort to identifying additional mineral resources in the Izok Corridor with the 2014 exploration program at Izok commencing in early August. No specific activities or results have been reported.

New Discovery Mines Ltd. (NDML) received a land use permit for Advanced Exploration (June 2014) to open the northern adit and access the underground ramp at the former Mon gold mine. The Mon mine, located 50 kilometres north of Yellowknife, last produced from 1989 to 1997 and was successfully reclaimed. Approximately 79 kilograms of gold was produced from 4106 tonnes of ore, milled on site. Gold is hosted in quartz veins lying near the contact between a mixed sedimentary/volcanic sequence and thick gabbroic sills. The vein system has been traced approximately 210 metres along strike and to depths generally less than 50 metres. Gold grades are erratic but appear to be proportional to the

sparse sulphide content of the veins. A bulk sample was collected for metallurgical purposes, primarily to ascertain the environmental characteristics of tailings from a planned gravity plus flotation operation for permitting purposes. An unmanned aerial vehicle survey was completed for high-resolution aerial photographs and topographical control to allow for more detailed engineering plans. NDML intends to extend the ramp from elevation 230 metres to elevation 200 metres, and extract a bulk sample.

Dave Nickerson reported having conducted channel sampling and series of short diamond drill holes on his AYE 1 and Handle 1 claims adjacent to the former Giant gold mine in Yellowknife. Blasting and brush clearing in connection with the construction of the new Giant by-pass road in 2013/2014 greatly increased access and the exposure of the AYE quartz vein which can now be easily traced for 300 metres, with an average width of about 0.5 metres. Fifteen chip samples were collected in 2014 and assayed for gold. Gold values were erratic, highlights included: 43.8 g/t over 0.65 metres; 33.3 g/t over 0.30 metres; and 21.9 g/t over 0.40 metres.

The Number 9 vein on the Handle 1 claim near Handle Lake was explored by 28 longitudinal trenches (each one metre in length) and six short diamond drill holes. On surface an ore shoot 10 metres-long and averaging 0.27 metres in width contains 33.35 g/t gold. The three best assays were 64.6 g/t over 0.18 metres; 52.7 g/t over 0.35 metres; and 52.7 g/t over 0.34 metres. Diamond drilling confirmed the presence of the gold bearing shoot at a vertical depth of three metres. Visible gold was observed in both the northernmost and southernmost of six holes, which were drilled at a spacing of two metres apart.

Nighthawk Gold Corp. continued the exploration of its Indin Lake property, located 210 kilometres north of Yellowknife. The large land package (92,993 hectares) covers a number of gold deposits including the historical Colomac open pit mine, which produced 527,908 ounces (18,100 kilograms) of gold during the 1990s. The Colomac portion of the larger Indin Lake property hosts five known gold deposits – Colomac Main, Grizzly Bear, Goldcrest, Dyke Lake, and 24/27 – of which, only the main Colomac deposit was mined.

The Colomac Sill, host to the Colomac deposits, occurs near the east side of an intrusive complex in contact with, or nearby, andesitic volcanics. The intrusion consists mainly of a medium-grained quartz diorite/quartz gabbro (dioritic to trondhjemitic). Where drill-tested along a strike length of about 6 kilometres, the Colomac Sill ranges from 40 to 200 metres in width (averaging 100 metres). The quartz diorite (historic QFP) portion of the Colomac Sill ranges from 9-60 metres in width (averaging 30 metres). The sill is oriented 010/80° in the north, and 023/80° in the south, showing evidence of brittle deformation to produce fracture stockworks and auriferous quartz-vein zones that are highly altered and carbonatized. It does not have a strong tectonic fabric. **ACA Howe** updated a resource

estimate for Colomac (June, 2013). The estimate is 39.8 million tonnes with an average grade of 1.67 g/t Au for 2.1 million ounces (59,000 kilograms) of Au using a cut-off grade of 0.6 g/t Au. The resources were included from: Colomac Dyke North, Colomac Dyke Central, Colomac Dyke South, Dyke Lake (Goldcrest North) Goldcrest, Grizzly Bear, and 24/27.

The Kim and Cass gold deposits were the most recent additions to the land package, acquired in December 2013. The Kim and Cass gold deposits, which are connected by road to Colomac located 20 kilometres to the northeast, were intended to be mined in the mid 1990's, by Royal Oak Mines Ltd. (ROML) An open pit was planned to develop the Cass deposit, however the ROML closed its Colomac operation before production was achieved from the Cass deposit. In addition to acquiring the four mining leases covering the Kim and Cass deposits, Nighthawk also acquired 32,000 metres of core that had been previously drilled, much of which was preserved on site. Nighthawk conducted an extensive program of selective re-logging and re-sampling. Highlights from this re-sampling include: 36.85 metres of 5.67 g/t Au; 80.7 metres of 4.53 g/t Au; 61.5 metres of 4.24 g/t Au; 52 metres of 5.1 g/t Au; and 24 metres of 9.32 g/t Au.

In the Cass zone, gold is hosted in mineralized quartz-stockwork and quartz-carbonate veins containing minor pyrrhotite, pyrite and arsenopyrite within a northeast trending gabbro sill. Drilling has defined mineralization over a strike length of 360 metres and to a depth of 210 metres. The Kim (Main) Zone is hosted by a series of northerly striking, steeply dipping mafic to intermediate volcanic rocks. Mineralization hosted by the mafic volcanic rocks has been traced over a strike length of 650 metres and up to 150 metres depth. A north-south trending late reverse fault offset the near surface mineralization but mineralization has been intersected below the fault at depth.

In July 2014, a 14,000-metre drill program was initiated. Two drill rigs completed a resource expansion drilling program at the Goldcrest (6,038 metres) and Colomac Main gold deposits (3,643 metres). The third drill targeted the Cass (2,962 metres) and the Echo Indin (1,040 metres) gold deposits.

Goldcrest is a 2.5 kilometre-long mineralized mafic sill similar in composition to the Colomac intrusion, which is located 400 metres to the east of Goldcrest. Highlights of the drilling include two Goldcrest holes: hole G14-05 intersected 20.25 metres of 4.83 g/t Au, including 5.25 metres of 10.21 g/t Au; and hole G14-04 intersected 19.60 metres of 4.19 g/t Au, including 7.90 metres of 7.85 g/t Au. Preliminary geochemical analyses suggest that the host to mineralization at Goldcrest is also differentiated igneous intrusion, suspected to be co-magmatic with the Colomac sill. Both sills intruded a host mafic volcanic sequence and were subsequently folded with tops facing east. Gold mineralization is preferentially localized within the more brittle, sodic and silica-rich upper portions of the sills. Holes G14-04 and G14-05 intersected a higher-grade gold shoot at depth that exhibits the same steep northerly plunge as exhibited by higher-grade

zones at Colomac Main.

At the Colomac Main deposit, hole C14-02 intersected 25.00 metres grading 2.38 g/t Au, including 8.75 metres of 4.98 g/t Au, effectively tracing Zone 2.0 mineralization down plunge of previously drilled higher-grade shoots. Even more significant was the hole C14-06 which intersected 52.50 m of 7.78 g/t Au, including 21.00 m of 16.73 g/t Au north of Zone 2.0. This intersection has been reported to indicate a new zone (Zone 1.5) to the north of Pit 2.0. Additional intercepts including hole C14-04 containing 20.25 metres of 1.79 g/t gold, 23.25 metres of 1.66 g/t gold, and 42.25 meters of 1.28 g/t gold suggested additional mineralized areas at depth between zones 2.0 and 2.5.

At Cass, multiple intersections demonstrate the extent and continuity of near-surface mineralization from a step-out of over 100 metres to the west of previous drilling and up to 700 metres to the northeast. Hole CM14-02 intersected 51.00 metres of 2.25 g/t Au, including 9.00 metres of 4.72 g/t Au, hole CM14-04 intersected 4.40 metres of 38.90 g/t Au, and hole CM14-06B, intersected 36.20 metres of 2.89 g/t Au, including 22.00 metres of 4.24 g/t Au and including 5.00 metres of 7.90 g/t Au.

In September 2014, **North American Tungsten Corporation Ltd.** (NATCL) received environmental approval for the Mactung Project from the Yukon Environmental and Socio-Economic Assessment Board. The board's assessment was certified by the Federal and Yukon Governments with the publication of decision documents that include considerations that must be incorporated into Mactung Project's design and operations in order to mitigate the mine's impact.

The Mactung property is in eastern Yukon, approximately eight kilometres northwest of Macmillan Pass on the Canol Trail, straddling the Yukon-NWT 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. NATCL 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-per-day using a scheelite gravity and flotation process and transport the tungsten concentrate by road to Edmonton and Vancouver.

The Indian Mountain Lake property consisting of 6 claims (4411 hectares) is held by **Panarc Resources** (Panarc), 185 kilometres east of Yellowknife. Five contiguous claims (BB1-5) cover mineralization at BB Lake and Brislane Lake while a satellite claim to the north (NZ 1) covers an extension of the belt at Tindale Lake. Panarc has restaked the original leases and the adjoining stratigraphy containing several similar showings. The Indian Mountain Lake volcanic belt contains several volcanogenic base metal deposits

including the BB Lake, Kennedy Lake, Kennedy Lake West, and Susu Lake. The BB Lake deposit has non-NI 43-101 compliant historical resources estimated at 3.0 million tonnes at 10% combined zinc-lead-copper, 4.0 oz/ton (125 g/t) Ag, and 0.02 oz/ton (0.6 g/t) gold.

Mineralization in the Indian Mountain Lake area consists of volcanogenic massive sulphide mineralization within the metavolcanic rocks and the immediately overlying sediments. This summer, only a reduced program of sampling and mapping was undertaken due to extensive forest fire activity in the area. The results have not been reported.

Perlis Enterprises Inc. purchased the mineral claims (990 hectares) hosting the past producing Thompson-Lundmark mine in 2012. The mine produced gold from quartz veins hosted in turbiditic metagreywacke sediments between 1941 and 1943. After a short shutdown period due to conditions related to World War II, the mine reopened in 1947 and subsequently closed in 1949. A site visit and sampling program were conducted in September 2014. No results have been released.

Seabridge Gold Inc. continued their exploration of the Walsh Lake discovery on the 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 a rhyolitic to dacitic dome complex including the FAT deposit which has been reported (July 2012) to have a Proven and Probable reserve of 91.1 million tonnes at a diluted grade of 2.2 g/t Au.

The 2013 program of 29 holes (8,278 metres) in winter 2013 was designed to follow-up on the Walsh Lake discovery of 2012, where a promising high-grade gold occurrence was located approximately 10 kilometres south of the FAT deposit. The Walsh Lake deposit appears to be the southern extension of the historical Tundra Mine, a high-grade gold mine closed in 1999.

In 2014, Seabridge Gold completed a geophysical survey to aid in drill testing the greenstone belt for more satellite deposits. In addition, they announced a mineral resource estimate for the Walsh Lake deposit of 4.62 million tonnes of inferred resources grading 3.24 g/t Au (482,000 ounces of gold) based on a cut off grade of 0.60 g/t. The independent NI 43-101 compliant resource estimate was prepared by **Resource Modeling Inc.** of Stites, Idaho. The Walsh Lake model is based on 53 diamond core holes (totaling 17,450 metres) with a 50-metre spacing. Beyond announcing the resource calculation, Seabridge Gold focused its exploration efforts on the KSM property in northern British Columbia.

In July 2013, **Chihong Canada Mining Ltd.**, a subsidiary of **Yunnan Chihong Zinc and Germanium Co. Ltd.** acquired 100% ownership of the **Selwyn Chihong Mining Ltd.** and the Selwyn project. The project includes 15 zinc-lead deposits and covers 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. The global Indicated Resource for 2012 was 185.57 million tonnes grading 5.2% Zn and 1.79% Pb for a metal content of 21.26 billion pounds (9.64 billion kilograms) of zinc and 7.30 billion pounds (3.31 billion kilograms) of lead. The Inferred Resource was 237.86 million tonnes grading 4.47% Zn and 1.38% Pb for a metal content of 23.45 billion pounds (10.63 billion kilograms) of zinc and 7.22 billion pounds (3.27 billion kilograms) of lead.

Selwyn Chihong Mining Ltd. before its acquisition was 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. However, the company is now contemplating a larger scale open-pit mine with a 35,000 tonne-per-day mill option. In 2014, the company budgeted \$22 million for a 55,000-metre drill program that targeted six of the eight mineralized zones suitable for open pit development. To date, 284 holes (54,898 metres) have been completed utilizing six drills to redefine the resource and conduct geotechnical testing. Drilling included 3 holes (735 metres) in the NWT on the XY Nose deposit.

Another \$13.5 million was spent on upgrading the Howard's Pass Road, an access road that links the Selwyn project to Yukon Territory's contiguous road system. Work to upgrade the road from Cantung to Howards Pass including the construction of a bridge at Steel Creek and bridges to replace culverts at other creek crossings was completed by October. A bankable feasibility study is due to be completed by the end of 2015.

Songful Resources Ltd. staked two properties in the Mackenzie Mountains during the spring of 2012. The DJ property consisting of six claims (5,016 hectares) is sited 218 kilometres south west of Norman Wells and the Hudex property initially comprising 16 claims (13,377 hectares) is located 116 kilometres northwest of Norman Wells. Both properties were located based on anomalous stream sediment results published by the Northwest Territories Geoscience Office. Of particular interest were the high arsenic, antimony, mercury and thallium values, which fits with a conceptual Carlin-type gold model in this area. The DJ property covers part of the Misty Creek Embayment along the eastern margin of the Selwyn Basin, a late Precambrian to Devonian depositional basin characterized by off-shelf deep water shale in a basin bounded by platform carbonates to the northeast. The Hudex property is underlain by Cretaceous sediments that have truncated the Paleozoic sequence.

During the summer to late fall of 2012, a first phase prospecting, stream sampling and mapping program was completed for the DJ and Hudex properties by Aurora Geosciences Ltd. The stream sediment data returned positive results encouraging a reconnaissance program to be undertaken in 2013. Thirteen drainage basins were assessed using stream sediment and soil sampling programs. Anomalous drainages and a 300-metre soil anomaly containing elevated gold were identified. Songful Resources suggests that poorly-exposed shale beds are the original hosts for the arsenic, antimony, mercury and thallium values returned from the stream sediment sampling. Nine claims (7524 hectares) were subsequently staked to cover all extension of the anomalous areas identified.

In 2014, a more expansive sampling program was undertaken. Over 750 soil and 230 stream silt samples were collected to expand the survey coverage to the new claims. Results have not yet been published.

Tamerlane Ventures Inc. filed for receivership in January 2014, ceasing exploration of their Pine Point property, on the southern side of Great Slave Lake. The property and company reserves were turned over to Duff & Phelps Canada Restructuring for a sale of assets.

In March 2014, Tamerlane released a summary report, by Gann and Siega, providing a pre-feasibility level analysis for an operating scenario. The deposits (10 of 42 known deposits) would be mined through the development of an underground mine (R-190) and 9 open pit mines (8 Cluster Pits and N-204). A pre-concentrated lead-zinc product from dense media separation plants would be trucked from the Cluster Pits and N-204 mines to a main mill site located at the R-190 deposit. Reserves at R-190 were reported to be: Proven: 647,308 tonnes grading 12.47% zinc and 6.10% lead and Probable: 357,311 tonnes of 8.27% zinc and 3.79% lead. At N-204: Probable 12,830,000 tonnes grading 2.6% zinc and 0.7% lead diluted and the combined mineral reserves of the Cluster Pits were reported to be 10,402,044 tonnes of proven and probable reserves at 1.49% Lead and 3.54% Zinc.

The ten deposits would be mined over a period of 11 years. The Base Case NPV (after Tax) is US\$112 million at an 8% discount rate. The pricing at US\$1.25 zinc and US\$1.15 lead yields a NPV of \$259 million. The capital costs were estimated at \$122 million to develop the R-190 underground mine, construct the DMS, concentrator, shop, tailings facility, injection wells and administration building. Capital requirements for the Cluster Pits were \$37 million including open pit mine development and a 5400 tonne per day DMS plant, while the N204 capital requirements were \$32 million. Overall the project was reported to have an IRR of 35% after full load taxes and all royalties.

TerraX Minerals Inc. continued exploration efforts on their expanded Yellowknife City Gold project. The 9,490 hectares property now consists of five claim groups including: Northbelt, Goodwin, Walsh Lake, Ryan Lake and U-Breccia located immediately north of Yellowknife, that TerraX has assembled since early 2013. Much of the activity in 2014 focused on the main claim block, the Northbelt property, which represents the northern extension of the shear system that hosted the historical Giant and Con gold mines. An extensive prospecting and structural mapping program identified multiple shear systems that host numerous gold showings but have seen limited historical drilling. A winter drill program was started in March, during which 13 holes totaling 2,363 metres were completed. Four holes (1,001 metres) were drilled to test a base metal target at Homer Lake. The drilling at Homer Lake tested a 400-metre-long electromagnetic anomaly with an interpreted steep westerly dip that had been identified by airborne surveying in 2013 and continues for a kilometre to the south as a weaker electromagnetic anomaly. Hole TNB14-004, intersected 71 metres of sulfide mineralization, including 3.42 metres of massive sulfides grading 3.41 g/t Au, 69.3 g/t Ag, 3.67% Pb and 3.17% Zn.

Four holes (533 metres) were completed on the Crestaurum shear zone of which three were designed to twin historic drill holes for which no drill core was preserved. Highlights include 10.02 metres grading 4.17 g/t Au in hole TNB14-011. The final five holes (829 metres) tested the interpreted northern strike extension of historically drilled mineralization in the Barney Shear. TNB14-010 encountered multiple zones including a central zone of 12.5 metres grading 1.40 g/t Au, 20.3 g/t Ag and 1.69% Pb.

A LiDAR (Light Detection and Ranging) survey was flown over the property by LiDAR Services International Inc. in July 2014. This survey provided detailed elevation data of bare earth and vegetated terrain models, as well as a high resolution airphoto mosaic.

TerraX followed this with a summer drill program consisting of 14 holes (2,142 metres); Nine of these holes (808 metres) were drilled at Crestaurum in order to confirm the historical drill data. The drilling intersected a number of noteworthy intersections including 3.1 metres of 13.8 g/t Au in TNB14-015 and 2.9 metres of 33.6 g/t Au in TNB14-019. More significantly these holes confirmed the historical results, which will allow for 181 legacy holes to be incorporated into a NI 43-101 compliant resource estimate.

The company also completed another five holes (1,334 metres) at the Barney shear during the summer, four of which were wedged off of holes drilling in 1995 and 1996. One such hole, NB95-16W1, cut 22.4 metres grading 6.35 g/t Au. NB95-16W3, wedged 200 metres down the same hole, cut 45.7 metres grading 1.56 g/t Au. In NB96-24, the volcanic rocks were sheared at 188 metres downhole and were strongly altered 287 metres downhole with 1-3% pervasive mineralization to zones with up to 10% sulphides including pyrite, arsenopyrite, chalcopyrite, galena, pyrrhotite, sphalerite and stibnite. Additionally, from 588 metres to 674 metres disseminated pyrite, chalcopyrite, molybdenite, pyrrhotite and

galena and quartz veins are associated with altered granodiorite porphyry. TerraX considers the mineralized porphyry containing gold, silver, copper and molybdenum indicative of a different style of mineralization in the Northbelt property and notes reports of similar porphyry mineralization proximal to shear zones associated with the past producing Con gold mine.

TerraX sampled quartz veins and shears from what appears to be a mineralized porphyry two kilometres west of the Barney Lake Shear Zone within and adjacent to the Ryan Lake granodiorite. Grab samples returned values of up to 141 g/t Au, 445 g/t Ag, 3.01% Cu and 6.32% Mo. Results reported historical hole NB94-01A from the 20 Shear, include a 21.12-metre intersection (from a depth of 285.88 metres) averaging 2.97 g/t Au, including 3.88 metres averaging 8.81 g/t Au. TerraX completed extensive repairs to the Crestaurum road in December 2014 to improve access to the 2015 drill areas.

TerraX has conducted four three-week field programs, two in 2013 and two in 2014. Initially, TerraX concentrated on locating historical drill collars in the field, finding approximately 125 of the collars at Crestaurum and more than 100 elsewhere on the property. All drill hole locations were recorded with a hand-held GPS and 155 of the most important holes in the southern part of the property were subsequently surveyed with a differential GPS to <1 m accuracy by Ollerhead & Associates Ltd. of Yellowknife. In many drill holes casing has been left intact and capped, offering the option of carrying out downhole geophysical surveys and wedging directly from holes with mineralized intersections.

In total TerraX has collected approximately 1740 surface (grab, chip and minor channel) samples for assay demonstrating that gold is widely distributed throughout the property. Most mineralization occurs on north to northeast-trending (000 to 030° trending), sub-vertical structures, although locally northwest-trending structures are important, particularly in the Crestaurum area. Structures observed on surface consist of 0.5 to 15 metre wide zones of iron carbonate alteration, with or without sericite or chlorite. One or more quartz veins typically occur within the structure; such veins can be up to 1 metre wide and have varying amounts of pyrite, arsenopyrite and base metal sulphides (galena, sphalerite, less commonly chalcopyrite). Bands of semi-massive sulphide up to 1 m wide are common in the northern part of the property and less common in the southern part.

As part of the surface program two geologists from Virginia Mines Inc. mapped immediately west of Homer Lake and collected 99 grab and chip samples for assay and an additional 14 samples for whole rock analysis. Assay results ranged from below detection to 6.61 g/t Au, 357 g/t Ag, 1.51% Cu, 7.02% Zn, and >20% Pb. When combined with results from 2013 sampling, two metal domains are apparent: a gold +/- copper domain to the west and a gold-silver-lead-zinc domain to the east.

Transition Metals Corp. (including **HTX Minerals Corp.**) (50%) /**Nunavut Resources Corp.** (50%) staked the Itchen Lake Property consisting of 19 mineral claims (19,836 hectares) in 2012. The claims are mainly located in Nunavut with a portion extending to the southwest into the Northwest Territories, 265 kilometres northeast of Yellowknife. The property is underlain by metasedimentary rocks of the Archean Yellowknife Supergroup and contains the contact between the Contwoyto and Itchen formations. These formations are comprised of metamorphosed greywackes and mudstones deposited in a greywacke-turbidite basin. The primary exploration target is banded iron formation (BIF) hosted gold, similar to the Lupin gold deposit.

Exploration between 1960 and 1993 resulted in the identification of 74 gold occurrences associated with the banded iron formation and 66 drill holes have been previously drilled. Recent exploration efforts in 2012 confirmed historical assays. In June 2013, a 750 line-kilometre airborne magnetic and electromagnetic survey and a hyper-spectral remote sensing project were conducted in partnership with **LookNorth**. The survey revealed 180 mid-time and 62 late-time conductive anomalies corresponding largely to iron formation, or covered extensions based on elevated magnetic signatures.

The survey was followed by a fieldwork program including prospecting, ground geophysical surveying and detailed mapping and sampling was completed in 2013. In total, 125 assay samples were collected, physical properties measurements made, forty of the samples returned elevated gold values, with the highest value obtained being 8.1 g/t Au. Historical drill core associated with the Fuzz B showing was located and sampled, and a number of historical drill collars were surveyed using GPS. In late 2013, permits for a drill program were approved and 2014 plans were to test 10 drill targets. No reports of drilling have been released.

Eighty kilometres north of Yellowknife, **Tyhee Gold Corp.** (TGC) maintained the Yellowknife Gold project at Ormsby and Nicholas Lake. 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 (48,619 kilograms) of gold contained within 27 million tonnes of ore. Proven and Probable reserves (August 2012) 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 (37,700 kilograms) of gold.

In June 2013, TGC notified the MVEIRB that TGC would need more time and on July 23, 2013 Tyhee requested that the Review Board grant the Company an adjournment to the Environmental Assessment proceedings. MVEIRB responded that it would hold in abeyance the application until TGC requests that the proceeding should be reinitiated.

In January 2014, TGC and Det'on Cho Corp. (DCC), the economic development arm of the Yellowknives Dene First Nation (YKDFN), signed a non-binding Memorandum of

Understanding stating how they will work together to advance the Yellowknife Gold Project and encourage the realization of business and employment opportunities for the DCC and YKDFN Dene members.

Westhaven Ventures Ltd. announced that it would option the Mona property from **Dave Nickerson** in April 2014. The Mona property consists of two contiguous mineral claims (1,776 hectares) located five kilometres to the east of Yellowknife. The area is underlain by turbiditic metagreywacke, which is cut by a large mafic sill known as the Hay-Duck Sill. The property has been prospected for gabbro-hosted nickel-copper and sediment-hosted gold deposits. These claims were recently returned from an option agreement with North Arrow Minerals who had initiated an airborne geophysics survey that identified a north-south trending linear magnetic high related to the Hay-Duck intrusive and six significant conductors. A ground geophysical survey was conducted over one of the conductors, suggesting a shallowly east-dipping body with a coincident anomalous magnetic response. Fifteen grab samples were collected from surface expressions of the conductors and three of the six conductors returned significant results (up to 5.1 g/t Au) and (up to 0.17% Ni). A drill was mobilized and one hole (122 metres) was initiated. The drill hole failed to intersect the target and the program was shut down. In addition, Westhaven announced that it was not progressing with the option.

Table 2: Summary of Northwest Territories active exploration projects for precious, base and energy metals in 2014.

Operator / Partners	Property	Commodity	Drilling	Airborne and Ground Geophysics	Sampling and Other Work	Studies and Permitting Updates
Avalon Rare Metals Inc.	Nechalacho	REE	7 PQ drill holes, 1,773 metres			Northwest Territory Métis Nation (NWTMN) have signed a participation agreement
Canadian Zinc Corp.	Prairie Creek	Pb-Zn-Ag	UG drilling planned			\$5.7 million to further define mineral reserves and resources; \$10.1 million for underground development, winter road access, optimization studies
Selwyn Chihong Mining Ltd.	Howards Pass	Zn-Pb	3 ddh (735 m)			Road construction and bridge building
Darnley Bay Res.	Darnley Bay	Ni				Camp clean up and 2 claims staked.
DEMCo	Terra Mine/Bugow	Au, Ag, REE		Review past geophysics	Prospecting, sampling historic core	MIP funding
Dewar/Kendrik	Hanging Stone	Au			186 chip and grab samples	MIP funding
New Discovery Mines	MON	Au		UAV survey (topography)	Prospecting, Bulk sample planned	Land Use A and Water Licence type "B" for UG development
Fortune Minerals Ltd.	NICO	Au-Co-Bi			Pre-construction preparation	Land Use permit and type "A" Water Licence approved by Wek'eezhii Land and Water Board based on EA. Sask. Minister conditionally approved Sask Metals Processing Plant;
MMG (Minerals and Metal Group)	Izok Corridor (Mostly in NU)	Cu-Pb-Zn				Requires infrastructure partner to move forward
Nighthawk Gold Corp.	Indin Lake, Colomac, Kim, Cass	Au	Drilling at Colomac Goldcrest Cass, Kim 13,647 m		Sampling historic core from Kim/Cass; prospecting	Acquired property including Kim and Cass deposits
Nickerson	AYE/Handle	Au	Pack Sack Drilling		Chip sampling	MIP funding

Operator / Partners	Property	Commodity	Drilling	Airborne and Ground Geophysics	Sampling and Other Work	Studies and Permitting Updates
Panarc	Indian Mountain	Base Metals			Prospecting and mapping	MIP funding
Seabridge Gold Inc.	Courageous Lake	Au		Grd Mag and VLF 115km?		43-101 Inferred Resource estimate for Walsh Lake
Songful Resources	Hudex	Au			750 Soil samples and 240 stream sediments samples, prospecting	MIP funding
TerraX Minerals Inc.	Yellowknife City Gold (Northbelt, Walsh Lake, U-Breccia, and Ryan Lake)	Au	Winter drilling 13 ddh (2363 m) Summer drilling: 14 ddh on Northbelt (2142 m)		Mapping and prospecting and surveying, LiDAR survey	MIP funding
Tyhee Gold Corp.	Clan Lake/ Ormsby/ Nicholas Lake	Au				MOU with Det'on Cho Corp
Westhaven Ventures/Dave Nickerson	Mona	Au, Ni	1 ddh ~120m			

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

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