



# **Yukon Minerals Advisory Board**

## **Annual Report 2005**





# **Yukon Minerals Advisory Board**

## **2005 Board Members**

|                              |  |
|------------------------------|--|
| <b>Chairman Clynt Nauman</b> | Alexco Resource Corp<br>Suite 2300 - 200 Granville Street, Vancouver, BC V6C 1S4<br>(604) 633-4888 • <a href="mailto:crnauman@alexcoresource.com">crnauman@alexcoresource.com</a>  |
| Scott Casselman              | Yukon Chamber of Mines<br>315B Third Avenue, Whitehorse, YT, Y1A 1G1<br>(867) 668-7672 • <a href="mailto:scott-aurora@klondiker.com">scott-aurora@klondiker.com</a>  |
| Dan Cornett                  | Yukon Chamber of Mines<br>315B Third Avenue, Whitehorse, YT, Y1A 1G1<br>(867) 668-6463 • <a href="mailto:dan@accessconsulting.ca">dan@accessconsulting.ca</a>  |
| Sue Craig                    | NovaGold Resources Inc.<br>Suite 3454, 1055 Dunsmuir St., Vancouver, BC V7X 1K8<br>(604) 669-6227 • <a href="mailto:sue.craig@novagold.net">sue.craig@novagold.net</a>   |
| Al Doherty                   | Aurum Geological Consultants Inc.<br>106A Granite Rd., Whitehorse, Yukon Y1A 2V9<br>(867) 667-4168 • <a href="mailto:aurum@yknet.yk.ca">aurum@yknet.yk.ca</a>  |
| Bruce Donald                 | Teck-Cominco Ltd.<br>Bag 2000, Kimberley, BC V1A 3E1<br>(604) 687-1117 • <a href="mailto:bruce.donald@teckcominco.com">bruce.donald@teckcominco.com</a>  |
| Bill Harris                  | Yukon Prospectors Association<br>c/o Yukon Chamber of Mines<br>3151B Third Avenue, Whitehorse, Yukon Y1A 1G1<br>(867) 668-5717 • <a href="mailto:freegold@telus.net">freegold@telus.net</a>  |
| Mike McDougall               | Klondike Placer Miners Association<br>3151B Third Avenue, Whitehorse, Yukon Y1A 1G1<br>867 456 7503 • <a href="mailto:k1miner@northwestel.net">k1miner@northwestel.net</a>   |
| Rob McIntyre                 | Access Consulting Group<br>3 Calcite Business Centre, 151 Industrial Rd., Whitehorse, Yukon Y1A 2V3<br>(867) 668-6463 • <a href="mailto:rob@accessconsulting.ca">rob@accessconsulting.ca</a>   |
| Harlan Meade                 | Yukon Zinc Corporation<br>701-745 Howe Street, Vancouver, BC V6C 2B3<br>(604) 682-5474 • <a href="mailto:hmeade@yukonzinc.com">hmeade@yukonzinc.com</a>  |
| Sam Wallingham               | 16 Arleux Place, Whitehorse, Yukon Y1A 3A9<br>(867) 456-7227 • <a href="mailto:swalling@northwestel.net">swalling@northwestel.net</a>  |
| STAFF                        | Gordon Moffatt<br>Secretariat<br>Yukon Territorial Government<br>Energy, Mines and Resources, Mineral Resources<br>P.O. Box 2703 K10A, Whitehorse, YT Y1A 2C6<br>(867) 667-8861 • <a href="mailto:gordon.moffatt@gov.yk.ca">gordon.moffatt@gov.yk.ca</a> |



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# **Forward**

The Yukon Minerals Advisory Board [the Board] provides advice to Yukon Government on a variety of mineral resource related questions under the mandate outlined in Order in Council 1996/06 (Appendix A). The Board's primary objective is to help mold and encourage policy to ensure environmentally and socially responsible development of Yukon's superior mineral endowment. With this third Annual Report tabled in the Yukon legislature, the Board herein recognizes and appreciates the actions of the government in response to key recommendations made by this body in its report tabled in May 2005.

The Canadian exploration and mining community has seen a steady improvement in exploration spending over the course of the last year; indeed in 2005 approximately \$1.3 billion was invested in mineral exploration across the country, primarily in Ontario, British Columbia, Quebec, Saskatchewan and Nunavut. In the Yukon, 2005 exploration related expenditures improved approximately 141% to an estimated \$53 million, a significant improvement over prior years but an amount which is barely 4% of total Canadian investment. It is also an amount which should be viewed as the minimum sustained annual exploration investment required to ensure over time, competitive discovery rates and ultimately, development of a sustainable industry. That such mineral wealth exists in the Yukon is not in dispute, it is merely a question of creating a business environment that enables and encourages increased exploration investment as well as responsible development of new discoveries.

Yukon Government continues to undertake initiatives to improve the administration of its exploration and mine related permitting processes; however, 2005 performance in this respect did not match progress made in prior years. Although continuing the constructive aspects of the integrated permitting management concept, it would appear that Yukon Government needs to revisit matters related to integration of the new Yukon Environmental and Socioeconomic Assessment Act (YESAA) into the regulatory authorization processes which are directly under the control of the Yukon Government. The effect has been to burden the Industry with permitting timelines and complexities which effectively double the time periods previously required to obtain simple authorizations. The process for more complex authorizations remains as yet, untested. This interim uncertainty and delay is unacceptable to Industry, especially in a jurisdiction with abbreviated field seasons. It also potentially places the Yukon in an uncompetitive position relative to its neighbours and other jurisdictions across Canada. Notwithstanding these problems and assuming the Yukon acts quickly to reverse the dysfunctional aspects of its response to the new permitting regime, the Yukon will remain an increasingly attractive place to do business, will attract increasing investment, and will enjoy continued measured advancement of several mining projects hoping to meet initial production targets as early as 2007.

Implementation of YESAA, a requirement under Chapter 12 of the Yukon First Nations Umbrella Final Agreement occurred in November of 2005 with the YESAA board working very successfully with stakeholder groups to provide transparency to the "new federal process". Indeed, the YESAA process is viewed as a potential step forward for Industry with clear timelines and requirements attached to environmental assessment processes. As pointed out in this publication a year ago however, the need to coordinate timelines between the YESAA process and other Yukon Government regulatory authorization processes was critical to the overall success of YESAA implementation. Within the mining community the Yukon has previously been considered a costly, potentially difficult jurisdiction for investors due to the complexity and uncertainty of obtaining the requisite permits and licenses to advance a mineral discovery to development and production in a timely manner. With implementation of YESAA the Yukon Government still has the tools to change this perception and the Board again stresses the importance of the Government acting expeditiously to rectify the current problems. The Board also notes that success will only be achieved when the Yukon enjoys improved industry investment and a higher ranking competitive position in Canada as a preferred place for the mining industry to do business. Such ranking will only come with the development of new mines in a timely and efficient manner.

As developing projects emerge in the Yukon it has become more important for Yukon Government to expand its focus to infrastructure and workforce related issues. The Yukon continues to lack unfettered access to a deep water port capable of meeting the requirements of a developing mining industry although the Board recognizes that the Rail and Port studies due for release in June 2006 will be important in bringing the issue to public attention. The rapidly developing markets for Canadian products in Asia and especially China require that Yukon Government ensure that there is access to port facilities capable of handling ore concentrates and supplies from and for the Yukon as well as appropriate forward thinking and planning for electrical needs as active exploration projects transition to mine development and production.

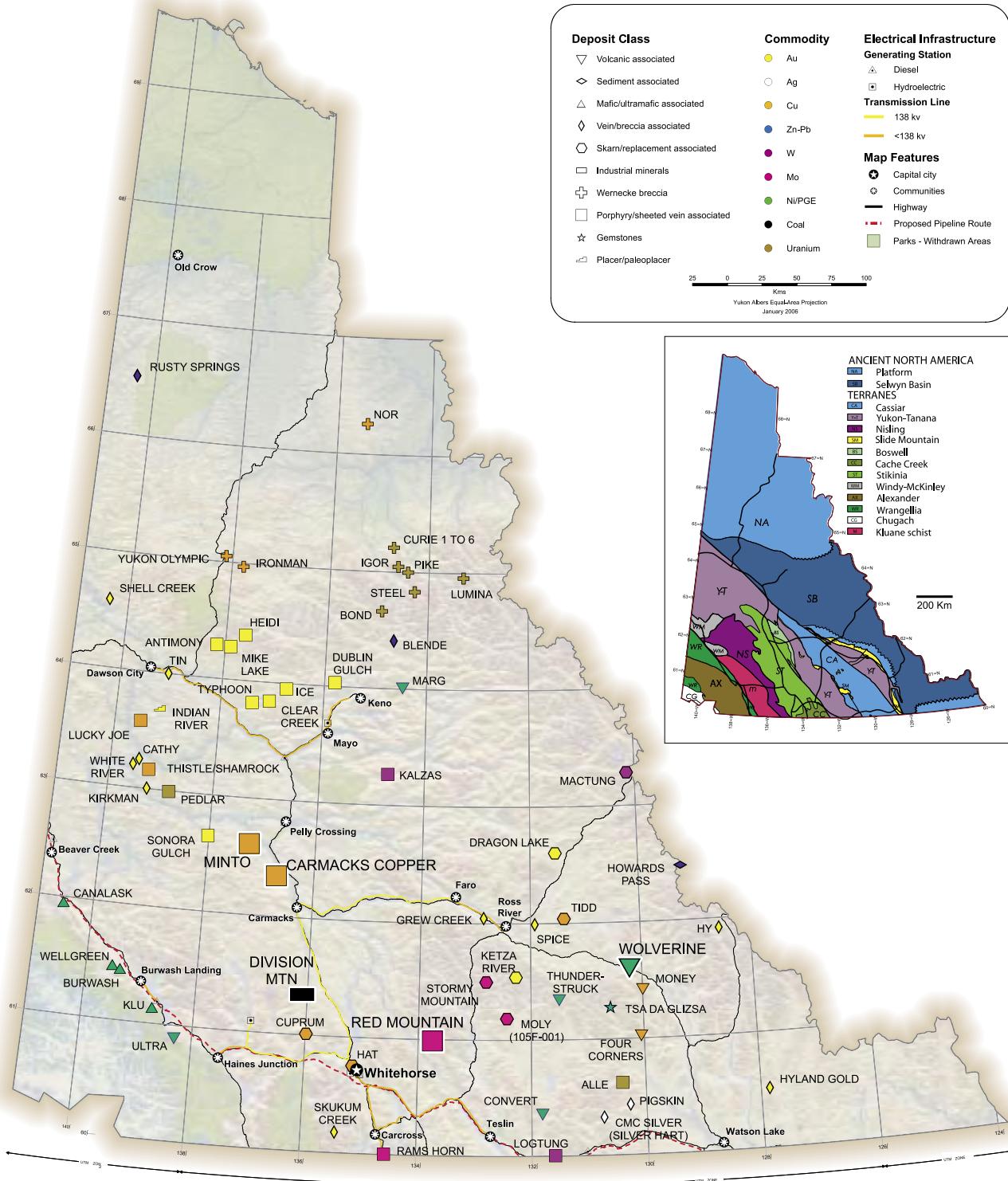
Similarly, the Yukon Government needs to continue to support industry and First Nation efforts to improve coordination and support of mining related workforce training opportunities in the Yukon. With existing projects getting closer to construction and production, many jobs will be created. At this time the Yukon is poorly prepared to meet this demand. The opportunities for First Nations communities to benefit from training programs and an improving outlook for the industry should not be overlooked in this respect.

Yukon Government in 2005 took deliberate steps to constructively deal with numerous challenges related to historic (Type II) mining sites within its jurisdiction. The determination of the Yukon Government to work with the Federal Government to begin mitigating community as well as industry concerns related to these sites is a very encouraging step. Indeed with this progress, public perception of historic Type II sites has changed from that of a potential environmental threat to that of remediation opportunity, no doubt helped by a combined industry and regulatory community more focused on appropriate management practices and technologies in the reclamation phase of the business. The arrangement negotiated by the Federal and Yukon Governments with Alexco Resource Corp. to both contribute toward off-setting historical liabilities of the Keno Hill Type II site and allow exploration and development of this important silver district is a precedent setting step for Canada, and the Board encourages Yukon Government to consider similar approaches for other Type II sites in the Yukon.

Finally mineral wealth is still identified by a lot of hard work including geological and geophysical reconnaissance, mapping, sampling and interpretation of the resulting data. The Yukon Geological Survey (YGS) excels at this challenge and publishes an array of sophisticated geological, geochemical and geophysical reports, widely accessed by the mining industry. The excellence of product delivered by the YGS and associated programs deserves high accolades and the Yukon Government is encouraged to continue its support of this valuable service. Recent upgrading in the technology and programs to access data and utilize digital databases compiled by YGS has allowed greater access by the public and will result in improved efficiency for academics, prospectors, and explorers. Continued focus in this area is anticipated and encouraged.

The Yukon Minerals Advisory Board wishes to thank the Yukon Government for their continuing support of this Board. We respectfully submit this document and remain ready to assist the Government in all mineral resource related matters as appropriate.

Clynt Nauman, Chair





# **Executive Summary**

## **2005 Yukon Government Accomplishments**

The Board is encouraged by the continued efforts of the Yukon Government with respect to the implementation of some of the Yukon Minerals Advisory Board 2005 recommendations. In particular the Board is appreciative of the continued support for exploration and mining related initiatives (and policies) which will enhance the environmentally and socially sound development of the Yukon's superior mineral wealth. The Board however, is flagging a significant concern related to the integration of the newly implemented YESAA process with the internal authorization processes of the Yukon Government. Notwithstanding this concern, the Board recognizes the following significant developments during 2005

- Continuation of the 'Integrated Resource Management' concept, coordinated with proponents and accountable to Deputy Ministers in EMR, ENV. and ECO, and including participation by mutually agreed independent professionals to resolve difficult permitting issues while enhancing environmental assessment efficiency for major projects.
- A significant improvement in exploration and development investment in the Yukon, an increasing number of companies operating, and broad government support for all aspects of the business including promotion of community interests in support of mining development.
- Development and publication of a new reclamation policy framework, removing uncertainty related to long term project planning and setting the groundwork for flexibility in security requirements while protecting the Yukon from future liability.
- Solid progress at several Type II sites, ranging from the development of a government-commercial partnership at Keno Hill, to ongoing reclamation, closure and studies at other sites. The Board observes that public perception with respect to these sites has changed and improved over the last twelve months, but cautions that continued focus is required.
- Continued focused support with respect to the development of the new Placer Authorization.

## **2006 Key Recommendations:**

The Board encourages the Minister and the Legislature to act on all the recommendations in this 2005 report, with special consideration being given to the following key recommendations:

- Implementation of the Regulatory Competitiveness Advisory Force to achieve efficiency and reduce permitting time lines.
- Foster and encourage partnerships to support training opportunities and programs to increase the number of locally trained Yukoner's to ensure greater employment of local people in the mining sector.
- Yukon Government should urgently and deliberately pursue further cross-jurisdictional discussions with respect to port access as well as a rail line to support industrial development requirements for the Yukon.
- Continue support for strengthening of relationships between government, industry interests and First Nations.
- Consult with industry and others to finalize the new reclamation and closure policy.
- Monitor developments in other jurisdictions with regard to map staking and consult with industry to ensure that the sanctity of mineral title and the integrity of the free entry system are maintained.
- The Yukon government should continue to seek innovative ways to incorporate industry perspective in the reactivation, reclamation, and remediation of Type II sites.
- Continue to assist in the timely and full implementation of the new Placer regime.

# Status of Progress on Selected YMAB Recommendations from 2004

| <b>YMAB Function<br/>(pursuant to legislative<br/>mandate)</b>        | <b>YMAB<br/>Recommendation<br/>2004</b>   | <b>YMAB<br/>Comment on Progress<br/>to Date</b>  |
|---|---|--|
| Permitting Efficiency   | <ol style="list-style-type: none"> <li>1. EMR, ECO and ENV coordinate actions to shape the administrative procedures within their own departments to support the requirements of YESAA. Yukon Government needs to develop and implement a coordinated process for adaptive review of regulatory implementation of YESAA recommendations.</li> <li>2. Ensure that required standards recommended through YESAA or the Water Board are not revisited under other required regulatory instruments or authorizations.</li> <li>3. EMR, ECO and ENV continue to promote a regulatory paradigm shift away from the current prescriptive process-driven permitting process and toward a performance driven (standards and criteria) best management practices approach.</li> <li>4. Ensure uninterrupted processing of projects through Yukon Environmental Assessment Act (YEAA) until YESAA Board and offices can effectively assess projects, regardless of implementation date.</li> </ol> | Transition into YESAA was accomplished well, and progress has been made in ensuring that Water Licence issues and Quartz Mining Licence issues are appropriately assigned. However, the poor level of integration between YESAA and YG permitting is unacceptable and requires more effective attention. |
| Reclamation Bonding   | <ol style="list-style-type: none"> <li>1. Continue development and work diligently towards the implementation of new policies and procedures. Consult with Industry and others to finalize policy.</li> <li>2. Pursuant to the 2004 recommendation by YMAB, a reclamation security release process is still required.</li> <li>3. Investigate the implementation of a certificate of closure under the Yukon Waters Act.</li> </ol>   | YMAB applauds YG for developing the Yukon Mine Reclamation Standards Policy, and for involving industry in its development. Regulations, however, remain to be prepared.   |
| Abandoned Type II Sites   | <ol style="list-style-type: none"> <li>1. Strive to exercise fiscal restraint by moving expeditiously from care and maintenance to remediation and closure activities.</li> <li>2. Government to publish timelines and goals for all Type II projects.</li> </ol>   | Progress on UKHM and other sites, but YMAB has continued concerns related to Faro.   |
| Administration of Yukon Quartz Mining Act and Yukon Placer Mining Act | <ol style="list-style-type: none"> <li>1. The Board should continue to provide recommendations to Yukon Government to ensure that the system continues to be increasingly consistent and client friendly.</li> <li>2. Yukon Government should generate a policy to ensure that R-Blocks are not placed over pre-existing mineral claims in good standing.</li> </ol>  | YMAB reports satisfactory progress on this issue.  |
| Development of a New Regime to Manage Placer Mining in Yukon          | <ol style="list-style-type: none"> <li>1. Continue to support the ISC/WC at the highest levels of staff and funding to have the regime design completed and implementation begun by April 2007.</li> <li>2. Create a secretariat to support the implementation of and provide for the long term management of the regime.</li> </ol>  | YG has created and adequately resourced the Placer Secretariat.  |

| <b>YMAB Function<br/>(pursuant to legislative<br/>mandate)</b> | <b>YMAB<br/>Recommendation<br/>2004</b>   | <b>YMAB<br/>Comment on Progress<br/>to Date</b>   |
|--|---|---|
| Yukon Mining Incentives Program (YMIP)                         | <ol style="list-style-type: none"> <li>1. Continue to fund the YMIP in the amount of at least \$700,000 annually.</li> <li>2. Monitor and adjust the balance between the various categories offered within the program based upon industry conditions.</li> <li>3. The Yukon government should increase awareness of YMIP funding amongst First Nations.</li> </ol>   | YMIP continues as a valued and effective program.   |
| Geological, Geophysical & Geochemical Programs                 | <ol style="list-style-type: none"> <li>1. Continue through the Technical Liaison Committee and other venues to review the effectiveness and delivery of Yukon Geology Program.</li> </ol>   | Continued excellent products and service.   |
| Mining Recorder Claim Database and Map Information Services    | <ol style="list-style-type: none"> <li>1. The Yukon Government continue to look at ways to provide services via the internet, and to make these services more user friendly.</li> </ol>   | EMR web page has grown in substance and utility over past year.   |
| Yukon Mineral Exploration Tax Credit (YMETC)                   | <ol style="list-style-type: none"> <li>1. As noted in the 2004 report, the Yukon Government needs to clarify the "residency" issue.</li> </ol>  | While industry continues to benefit from the YMETC, the issue of residency remains unresolved.  |
| Access & Infrastructure  | <ol style="list-style-type: none"> <li>1. The Board recommends the formal establishment of a Government-Industry task force to consider access and infrastructure issues and to provide strategic direction on these critical components of Yukon development.</li> <li>2. Yukon Government should provide the Board with a briefing on the findings of the recently completed Charles River Associates report on the Yukon rail initiative, and continue to lobby the Federal Government for support of the initiative.</li> <li>3. Explore the idea of using an alternate site in Skagway to open up the corridor.</li> </ol> | Encouraging action on the creation and leadership of international Ports and Railway study commissions. YMAB continues to press concern over the importance of the ports issue. |
| First Nation Industry Involvement or Opportunities Initiative  | <ol style="list-style-type: none"> <li>1. First Nations can be encouraged to become better informed and involved in mineral exploration and development activities.</li> <li>2. EMR should support Industry team visits to communities.</li> <li>3. Recognize that partnership agreements between Industry and First Nations are best negotiated as bilateral agreements, i.e. without government involvement.</li> </ol>   | YG should play more of a leadership role in emphasizing industry benefits to First Nations, and industry will provide the opportunities.  |
| Exploration Training   | <ol style="list-style-type: none"> <li>1. Continue to support training opportunities and greater local employment /labor force development in the mining sector within the Yukon.</li> <li>2. Graduates of the training program be considered "qualified" prospectors for the purpose of Yukon Mining Incentive Program.</li> <li>3. Yukon needs to develop medium and longer term strategic plans to improve training and develop skill pools and capacity in communities.</li> </ol>  | Exploration training has been successful.   |
| Public Education Initiatives                                   | <ol style="list-style-type: none"> <li>1. Continue financial support for the Rock On Yukon and Rocking-in-Yukon programs and publications.</li> <li>2. Continue to support and develop additional public awareness campaigns through the various Yukon media.</li> </ol>  | Public education initiatives have been relatively unsubstantial.  |

# **Industry Overview**

According to government sources, mineral exploration expenditures in Yukon in 2005 have seen a continued dramatic increase for the third consecutive year with an estimated \$53 million spent in 2005, an increase of 141 % (\$31 million) over 2004.

Approximately 70% of exploration expenditures were invested in exploration for base metals, 20% for precious metals and the remainder on gemstones and coal.

There were 69 exploration projects underway in the Yukon in 2005 and over 80,000 metres of drilling were completed.

Approximately 400 – 450 people were directly employed in mineral exploration and development in the Yukon in 2005.

## **Yukon Placer Operations Overview**

Since 1890, total historical Yukon placer gold production has been approximately 16.6 million ounces (517 tonnes) valued at more than \$7 billion in 2005 prices. Yukon placer mines have been a very important economic force over these last 116 years.

Placer gold produced for the 12 months ending December 2005 was 70,322 crude ounces (2,187,260 g) a reduction of some 5,800 crude ounces (181,000 g) from 2004 production. This production was valued at \$29.9 million.

Approximately 450 people were directly employed at 128 placer mines in 2005 and at least several hundred more in the service sector. Most placer operations are small and family-run, with an average of 3 or 4 employees.

During 2005 challenges for the placer industry came in the form of dramatic increases in costs of fuel and steel products and an appreciating Canadian dollar which more than balanced the increased price of gold. These factors served to continue the challenging economic conditions in the placer industry.

YGS has identified alluvial terraces in the Fortymile and Sixtymile drainages as potential targets that may host significant quantities of gold. Although limited amounts of exploration have occurred in these areas they remain to be methodically evaluated. By applying new placer exploration techniques, it is anticipated that additional placer gold reserves may be found in non-traditional, more complex geological settings in this and other districts. Application of contemporary geology/geomorphology models to the discovery of new placer resources is vital for the long-term health and sustainability of the Yukon's placer mining industry.

Other encouraging changes in the Placer business in 2005 included the sale of three of the larger long time placer operations promising an injection of new capital and energy. Finally, the increased gold price in December 2005 represented a real increase in value of the metal for the first time since late 2002; these changes suggest a greater level of activity can be expected in 2006.

## **Hardrock Exploration Overview**

Base metal exploration continued a significant comeback in 2005. The Finlayson Lake Volcanogenic Massive Sulphide District was the focus of renewed exploration after a lull of several years. The largest program in the district was conducted by Yukon Zinc on their Wolverine Lake deposit where underground activities were initiated to collect and analyze bulk samples of potential ore material as well as evaluate mining conditions. Yukon Zinc are to produce a pre-feasibility report related to the Wolverine deposit in the near future. Pacifica Resources has rejuvenated exploration activity at the well known Howards Pass Pb-Zn deposit.

Hardrock gold exploration continued to be led by the search for intrusion-related gold deposits mainly related to mid-Cretaceous plutons in the Tombstone Gold Belt portion of the Tintina Gold Province.

Sherwood Copper Corporation acquired 100% of the Minto copper-gold-silver deposit in early 2005. This property has a 29 km production standard access road, mill foundations, and a ball and SAG mill. All permits are in place and construction can continue once a production decision is made.

Alexco Resource Corp. has an agreement for purchase of the assets of United Keno Hill Mines where they will take over care and maintenance of the property as well as initiate an advanced exploration program.

True North Gems conducted bulk sampling for emeralds on their Tsa Da Glisza property. The company also processed the bulk sample acquired in 2004 from their True Blue property, and it was proven to contain blue beryls.

Several other companies are in advanced stage exploration on a variety of properties including;

- Carmacks Copper — Copper — Gold — Western Copper
- Division Mountain — Coal — Cash Minerals
- Dublin Gulch — Gold — StrataGold Corporation
- Grew Creek — Gold — Freegold
- Hyland Gold — Gold — StrataGold and Northgate Exploration Ltd.
- Kalzas — Tungsten — Copper Ridge Exploration
- Ketza River — Gold — YGC Resources
- Lucky Joe — Copper — Copper Ridge Exploration
- MacTung — Tungsten — North American Tungsten
- Red Mountain — Molybdenum — Tintina Mines
- Skukum Creek — Gold — Tagish Lake Gold
- Uranium properties — Cash Minerals and Signet minerals
- Wellgreen — Silver — Coronation Minerals

This list is a sampling of many drill programs that occurred in 2005.

The Yukon Chamber of Mines hosted the 33rd annual Geoscience Forum, where many of these projects were discussed.

## **Development of a New Regime to Manage Placer Mining in Yukon**

A new, integrated framework to manage Yukon placer mining that was developed in cooperation by three levels of government was announced in May 2005 at Dawson City by Archie Lang, Yukon Minister of Energy, Mines and Resources; Eric Morris, Grand Chief of the Council of Yukon First Nations; and MP Larry Bagnell, representing the Honorable Geoff Regan, federal Minister of Fisheries and Oceans.

The new regime is the result of a unique process, in which the Yukon, First Nations and Canadian governments agreed in May 2003 to develop a protocol that would "recognize the importance of a sustainable placer industry to the Yukon and the importance of conservation of fish and fish habitat supporting fisheries."

A coordinating secretariat was established in November 2005 to assist in preparing and implementing the new Yukon placer mining regime. The Yukon government partnered with Fisheries and Oceans Canada and the Council of Yukon First Nations to launch the Yukon Placer Secretariat. The Secretariat will act as an interagency coordinating committee will further develop and implement the regime and ensure it is monitored and improved. First Nations, advisory boards, conservation groups, placer miners and communities will be involved in further consultations about the regime framework. The first task of the Secretariat will be to set up a schedule for consultations in the fall. Consultations will include the incorporation of traditional and local knowledge in the development of individual watershed authorizations and the design of a monitoring strategy. The Secretariat will also attempt to provide a single regulatory window to avoid overlap, duplication and inconsistency.

The Yukon Government is to be commended for its timely implementation and support of and for the Placer Secretariat, and for the continued support of staff from all areas of YG that have been key to the success of the work in the new placer regime. The board notes that the continued support from the highest levels of the Council of Yukon First Nations and the Department of Fisheries and Oceans are also critical to the continued success of the initiative.

Of immediate concern to the placer industry is the duplicative and poorly understood process for integrating the YESAA process with the established Yukon Water Board (YWB) permitting process. This is discussed and recommendations made in the Achieving Regulatory Competitiveness section.

### **BOARD OPINION:**

1. The Yukon Placer Industry is an important and integral part of the Yukon social and economic landscape.
2. The current level of permitting and regulatory overlap remains a challenge to the placer mining industry.

### **RECOMMENDATIONS:**

1. Continue to support the Placer Secretariat at the highest levels of staff and funding to have the regime design completed and implementation by April 2007.
2. Create a Regulatory Competitiveness Advisory Force to address the corrective actions identified in the section "Achieving Regulatory Competitiveness".

# Achieving Regulatory Competitiveness

In recent years, Yukon has developed an unfavorable reputation within the mineral industry as being possessed of an uncertain, costly, and difficult permitting regime. Since November of 2005, the new Yukon Environmental and Socioeconomic Assessment Act (YESAA) has been implemented, amid repeated government assurances of a streamlined permitting system. Although too early to gauge the full effect of this new regime, YMAB has become aware of certain problems that threaten to become a source of further difficulty for the Yukon's mineral industry.

The Boards comments here are to expand on previous comments in this report and are presented in the interests of assisting the Yukon to become competitive with other jurisdictions who seek to attract investment capital from the mining industry. YMAB is aware that other Canadian provincial governments (for example, British Columbia) with whom Yukon competes for investment have recently undertaken broad measures to overhaul and streamline difficult permitting regimes. Yukon is indeed at a crossroads with respect to this competition – failure to present a regime that provides for regulatory certainty and timely project permitting will almost certainly lead to a diminished ability for Yukon to participate in the current prosperity of the worldwide mining industry.

In addition to the potentially lengthy timelines for the conduct of environmental assessments and development of recommendations by the Yukon Environmental Assessment Board (and its' Designated Offices for early stage exploration projects), the Board is specifically concerned over potential delays caused by inefficient coordination between the YESAB and the Yukon Government permitting agencies. While we understand that progress has been and is being made with coordination between YESAB and line Departments such as the Department of Energy, Mines and Resources, much more needs to be done; we also remain highly concerned in respect to the apparent roadblocks to streamlining currently being highlighted by the Yukon Water Board (YWB).

YMAB is cognizant of the fact that the start up of any new regulatory regime will be fraught with inefficiencies during the initial period, some of which will be corrected as the various departments and individuals become more experienced and adept with its administration. We accept that government is working diligently to adjust to the new permitting reality in Yukon. However, there is much more required than the normal 'debugging' of a new process.

Process inefficiencies have arisen in the absence of proper preparation for the onset of YESAA – apparently the extra time taken for the implementation of YESAA was not accompanied by adequate and effective senior oversight and direction of the whole assessment and regulatory process. For example, consequential amendments to existing legislation to ensure efficient operation of YESAA have not been undertaken. This situation, coupled with the recent record pace of regulatory change threatens to place Yukon at or near the bottom of Canadian jurisdictions for the important criteria of regulatory efficiency.

The timelines associated with permit issuance under the Mining Land Use Regulations, for example, were developed in order to allow government the time required to consult and conduct environmental assessments under CEAA. The Board understands, however, that during project permitting (referring to environmental assessment and regulatory process together) in the first few months since implementation of YESAA, the Department of Energy, Mines and Resources has taken nearly the same amount of time to issue permits (including preparation of the new YESAA-mandated Decision Document), post-YESAB, as the YESAB itself took to conduct the environmental assessment. Time periods for the regulatory component of the permitting process have been essentially the same as they were when the departments were also conducting the environmental assessment under CEAA. What has happened, therefore, is that YESAA has not in effect replaced any of the previous total-process timeline; it has merely added more time (in many, if not most cases, doubling the time that was previously required during the effective period of CEAA).

This situation is unacceptable and is in stark contrast with clear and unequivocal promises made by government during the consultation for the YESAA.

Certain processes and procedures that Government of Yukon has developed (and some of which were essentially inherited from DIAND on devolution) need to be modified or scrapped altogether, in recognition that much of governments' obligation to widely consult has been greatly reduced due to the fact that their environmental assessment role has been removed and replaced by YESAA. For example, we understand that draft Decision

Documents are subjected to similar levels of internal distribution and consultation as were draft CEAA screening reports; YMAB urges further attention and action towards process streamlining.

The YESAA legislation offers a promising prospect for reducing timelines for environmental assessments of individual projects: development and application of Standard Mitigative Measures for various classes of activities. With the efficient use of this system, project assessment will benefit from the experience gained by YESAB on previous activities of a similar nature. The Board expects that this will reduce total-process timelines in an important way. The Board understands that this work must ultimately be undertaken by the YESAB itself, however it is unlikely that the YESAB will have the capacity on its own to begin this critical work, at least during this initial period of operation. Yukon Government should play a lead role in offering informative and cogent analysis and suggestions for Standard Mitigative Measures to the YESAB for its consideration.

## **BOARD OPINION:**

1. The Yukon has recently embarked on the third major change in environmental assessment legislation in just over a decade, (with YESAA), and elimination of regulatory change is essential.
2. Early indications are that the inception of the YESAA presents an opportunity to gain more supportive societal acceptance of industry.
3. There are new integration problems for the existing and remaining permitting legislation and processes.
4. Continued uncertainty and difficulty related to the mine permitting process could result in Yukon failing to participate in the current worldwide increase in mining industry activity.
5. Changes to the existing regulatory licensing regime (possibly including legislation, regulations, policy and procedures) needs to be reviewed and streamlined. The Board considers this to be a critical issue to address. Implementation of the IRM process, which includes independent project champions and technical advisors to assist project proponents with the Yukon permitting process, continues to be a significant step forward.

## **RECOMMENDATIONS:**

***Immediately create an independent Regulatory Competitiveness Advisory Force*** managed jointly by the YMAB chairperson and Deputy Minister of EMR with the following two phase mandate:

### **Phase 1** (to be completed by August 30, 2006)

Undertake a whole-process review of the assessment and regulatory regime focusing on the inconsistencies between the assessment and regulatory functions and including a detailed review of policies, procedures and timelines associated with all existing departmental procedures.

- Identify statutory impediments that may be preventing further streamlining measures and present preliminary recommendations for statutory change for implementation;
- Review the role of the Yukon Water Board in the new permitting regime;
- Seek the views and experience of mining industry representatives with recent experience in seeking approvals, to determine case-by-case problems that have arisen during this first season's implementation of YESAA;
- Collect and analyze the recommendations as issued by the various Designated Offices

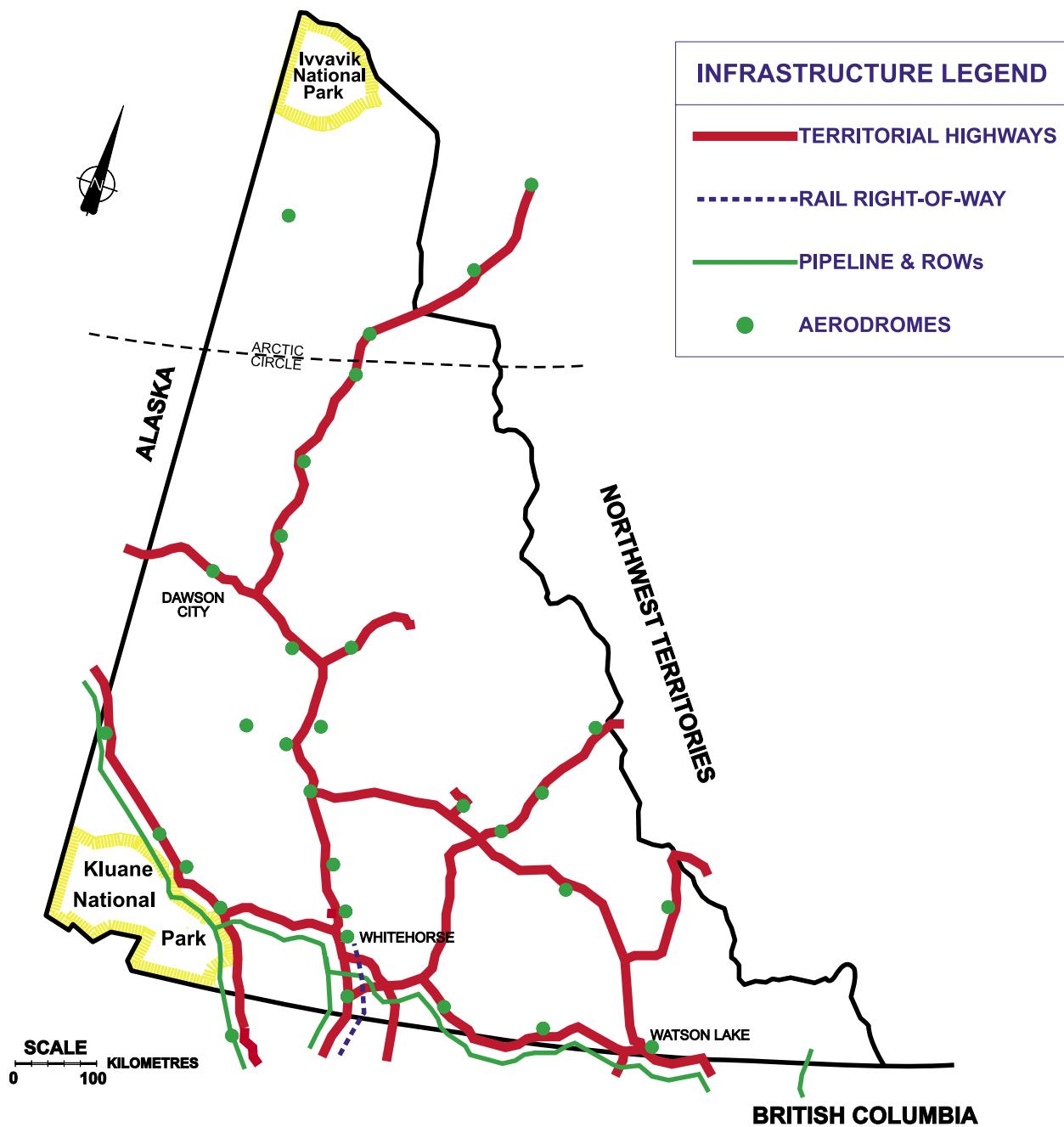
### **Phase 2** (to be completed by December 30, 2006)

Develop appropriate procedures and policies to resolve the issues identified in Phase 1 of the report including but not limited to:

- Assign priority to identifying and implementing those statutory and regulatory changes which are under control of Yukon Government;
- Identify measures to improve efficiencies between YESAA, YG and the Water Board focusing on integration of functions and avoiding or eliminating duplication of process;
- Develop Standard Mitigative Measures for various classes of activities as provided for in the YESAA regulations. Provide this information to the YESAB for their consideration.

# Access and Infrastructure

## Status of Infrastructure in Yukon



Source: Government of Yukon, Transportation Engineering

## **Highway Infrastructure**

The Yukon is served by an extensive, modern highway system, linked to British Columbia, Northwest Territories, and Alaska, as seen in the figure above. The highway system is maintained year round and operated by the Yukon Government, and includes nearly 4,700 kilometres of roads and more than 140 bridges.

## **Rail Infrastructure**

A narrow gauge rail from Skagway, Alaska, connects Whitehorse to year round ice-free port facilities. The system has not been used commercially within Yukon in over 15 years and now serves only as a tourist railway from Skagway to Canada Customs at Fraser, B.C. and occasionally to Carcross, YT.

Recent U.S. political support for the construction of a route through the Yukon has resulted in the passage by the U.S. Congress of the Rails to Resources Act (2002), and a joint Commission to study the feasibility of the rail connection has been created between Yukon and Alaska. The findings of this report are expected in mid summer of 2006.

## **Port Infrastructure**

Port access is critical to maintaining a competitive position for Yukon's mineral industry — particularly important for the economical shipping of bulk commodities, such as concentrates from base metal mining and milling. The ports in Skagway and Haines, Alaska, play a pivotal role in the economic evaluation of Yukon deposits.

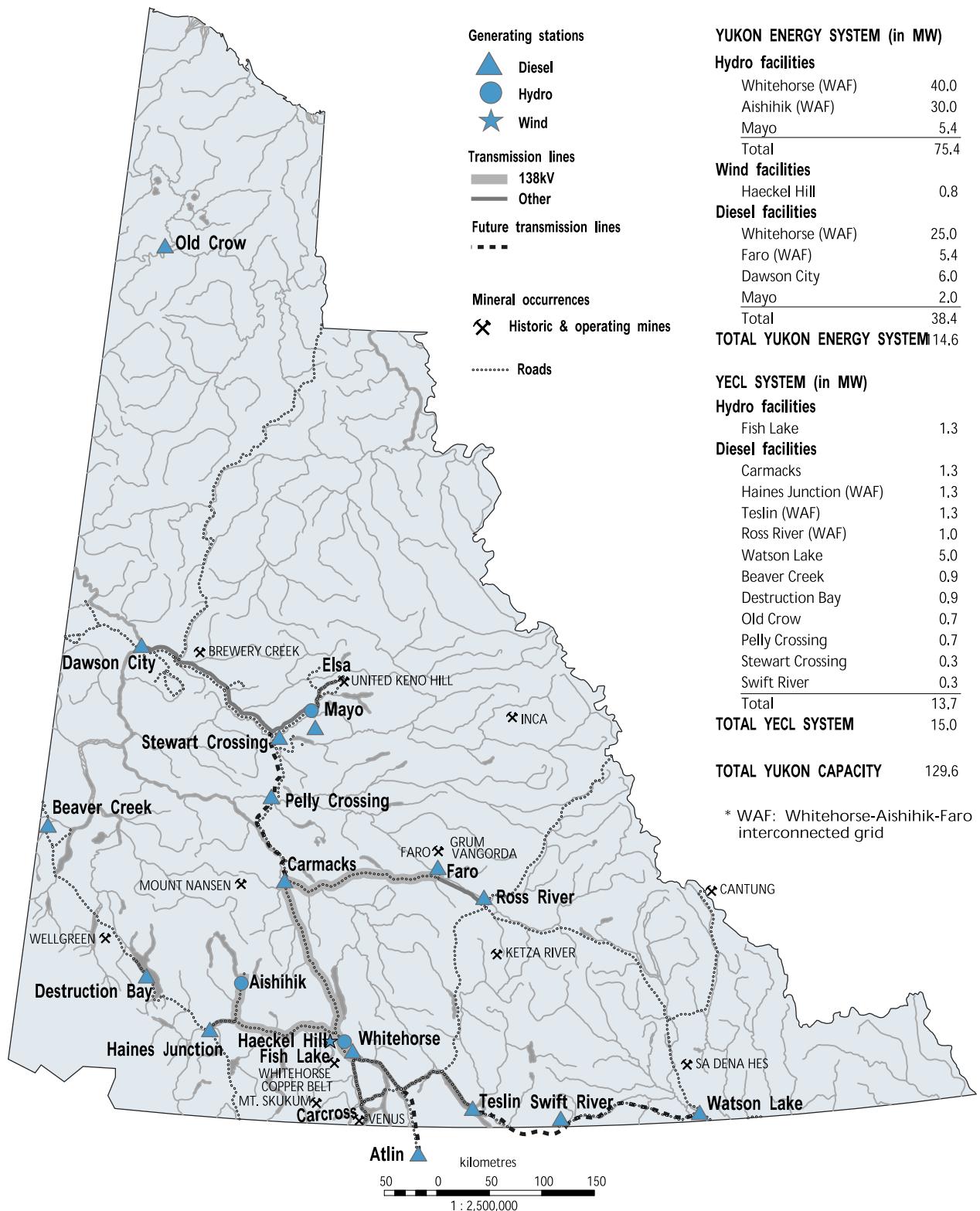
The Territory has long counted year round access to deepwater ocean ports among its most important attractants for investment in the mining industry. During the recent downturn in Yukon's mining industry, developments to accommodate additional cruise ship docking at Skagway may threaten that competitive edge. For example, although the foundation, ore-loading conveyor and support buildings remain on site, the facility has been removed.

Yukon Government and Alaska have established a Joint Task Advisory Committee to provide recommendations regarding resolution of the port issue. The Yukon Ports Access Study final report is on schedule for release at the end of June 2006.

## **Electrical Transmission Lines**

Yukon's electric power generation, transmission and distribution systems are relatively undeveloped (approximately 130 MW total capacity) and are not connected to the North American power grid (Yukon Energy Corporation, 2001). Yukon's main transmission grid (138 kV) connects power generation facilities at Whitehorse and Aishihik with communities in Yukon between Whitehorse and Faro. A sub-transmission line (34 kV) extends south from Whitehorse to Carcross and Teslin. A 69 kV line was completed in 2004 connecting Dawson to the Mayo hydroelectric facility. Yukon Energy is presently assessing a potential line to connect the two grids (Carmacks to Stewart Crossing). Yukon Energy and Sherwood Copper have entered into an agreement to provide hydro power to the Minto copper gold mine and is viewed as a significant step towards creating viable infrastructure for Yukon mines.

The potential for new sources of electrical power generation in Yukon, including hydroelectric, wind, natural gas and coal and coal bed methane, is considered to be favorable. Factors influencing expansion of Yukon's grid and the development of new sources of electrical power would primarily be driven by industrial expansion in the Yukon. The following map, which provides summary information about the capacity and the location of Yukon's power generation and distribution systems, is reproduced with the permission of the Yukon Energy Corporation.



Electric Power Facilities in the Yukon (used with permission of YEC)

## **Pipelines**

Industry interest in developing Yukon's oil and gas reserves has been steadily increasing over the past five years; however, investment has been quite limited mainly due to insufficient pipeline infrastructure.

The Yukon currently has one existing natural gas pipeline, the 20 inch Duke Energy pipeline, in the extreme southeast corner of the Yukon. It originates in the southwestern Northwest Territories and then moves into the Yukon past Devon's Kotaneelee Gas Plant. It acts as a gathering and transportation system for the natural gas produced at the Kotaneelee field, where the only gas production in the Yukon occurs. From the Yukon/B.C. border it extends approximately 160 km to connect to the main North American natural gas pipeline system.

Industry continues with their interest in developing 'northern' natural gas reserves. Gas producers and governments continue their efforts to see the Alaska Highway Pipeline Project and the Mackenzie Gas Project become a reality. The Yukon government supports both projects, and is presently making the case for expandable open access gas pipelines which would provide for the necessary infrastructure to transport Yukon gas to market, and also for access to natural gas from these pipelines which would encourage additional investment from companies wishing to do exploration and development work in the North, particularly in the mining sector.

### **BOARD OPINION:**

1. While establishment of the Joint Rail and Ports Committees is an important step forward, uncertain access to a deepwater port and infrastructure remains a serious impediment for future base metal, coal and iron ore mineral development in the Yukon.
2. Construction of an energy related pipeline system will benefit resource development in Yukon.
3. Connection of the Mayo-Dawson and Whitehorse-Aishihik-Faro grids is seen as an important step toward in upgrading Yukon's electrical supply capabilities.

### **RECOMMENDATIONS:**

1. Continue bilateral negotiations with Alaska for deepwater port access and a railway line.
2. When the port study recommendations are released, in June of 2006, government must move quickly to secure access for current and future anticipated needs.
3. Explore the idea of using an alternate site in Skagway or Haines to open up the corridor.
4. Yukon Government should continue to lobby the Federal Government for support of the rail initiative.
5. YG to support YEC interconnection of the electrical grids.

# Sustainability

## Abandoned Sites

The mining industry and government are both striving to demonstrate that mining activities in the north can be conducted in an environmentally responsible manner and provide a positive economic benefit to Yukon citizens. There are four closed mines that have significant environmental liabilities that are a burden on the Canadian taxpayer (referred to as Type II sites in the Yukon Devolution Transfer Agreement). These sites are currently under government care and through the Assessment and Abandoned Mines Unit, the Yukon Government is jointly working with the Department of Indian Affairs and Northern Development to assess and reclaim these sites. The Devolution Transfer Agreement also recognizes the importance of benefiting First Nations and local communities in the planning, reclamation, and monitoring activities related to these sites.

The Board is concerned that while environmentally sound solutions are being sought; timely, cost effective solutions are still not in place. In the Board's opinion, this continues to cast a negative image to the public of the mining industry and the government's ability to efficiently manage abandoned mine sites.

The most visible example in the Yukon is the Faro Mine. While recognizing that the Faro mine site has very significant and complex environmental issues, the process to assess the site and to develop an environmentally acceptable, cost effective, long-term solution has proceeded too slowly. It is our understanding that from 2001 through until the end of 2006, actual and planned expenditures for maintaining the site, administration, studies, and closure planning will reach \$60 million. It is the Board's understanding that the final site closure plan is to be ready for submission around the end of 2006. It will then still need to proceed through regulatory review before being implemented. Past history does not give confidence that the ultimate implementation of a closure plan or the on-going care of the site will be any more cost efficient.

While the Yukon Government is only one partner in the management of the Type II sites, the Board encourages the Government to expedite what has been an excessively long drawn out process.

First Nations and local communities must have a role in the review of decommissioning and reclamation plans for the abandoned Type II mine sites. They should also expect to enjoy economic opportunities as a result of the activities in their area. At the same time the taxpayer's burden of funding work at Type II sites must be minimized by using effective and efficient consultation processes, and the implementation of the resulting physical work programs must be conducted in a cost effective manner.

In contrast to the Faro site, the Board is very pleased with the Government's handling of the Keno Hill Type II site, where private enterprise is to be engaged to both rejuvenate exploration activity in this important district as well as execute the Type II environmental clean-up.

### BOARD OPINION:

1. Abandoned mines continue to cast a negative image to the public of the mining industry and the government's ability to manage abandoned mine sites.
2. Past history does not give confidence that the ultimate implementation of a closure plan by government, or the on-going care of the site by government will be any more cost efficient.
3. Yukon Government continues to have an ideal opportunity to set in motion a process to clean up environmental problems at selected Type II sites, and stem the long-term flow of maintenance dollars.
4. Expedited remediation of selected sites may very well unlock asset values and renew investment by the mining industry in these important mineral districts.
5. Recognize that appropriate technical remediation and environmental stabilization expertise exists within the mineral sector.

## **RECOMMENDATIONS:**

1. Continue to exercise fiscal restraint by moving expeditiously from care and maintenance to remediation and closure activities.
2. Government must expedite abandoned mine closure planning and implementation. This continues to be an excessively long drawn out process.
3. First Nations and local communities must continue to have a role in the planning and/or reviewing of decommissioning and reclamation plans for abandoned Type II mine sites. The communities and First Nations should also expect to enjoy economic opportunities as a result of remediation activities.
4. Government needs to demonstrate that comprehensive reclamation and site management plans on Type II sites can be completed in a cost effective and timely manner.

## **Reclamation and Closure Policy**

The Board commends the Yukon Government on the recent adoption of the Yukon Mine Site Reclamation and Closure Policy ("YMSRCP").

For the Yukon to be competitive for industry and to encourage new mining ventures, a clear set of policies and regulations for operating in the jurisdiction are essential. The implementation of the new YMSRCP should improve the investment climate for the mining industry in the Yukon by providing a clear set of requirements for planning, operation, and the ultimate reclamation of mine sites.

The Yukon Government states in the YMSRCP that all aspects of this policy are to be implemented through the appropriate regulatory authorizations, and that the policy provides guidance in implementing both the Quartz Mining Act and the Waters Act.

Currently the Water Board (rightly or wrongly) regulates essentially all terrestrial activities at a site under the water licenses it issues, presumably due to their potential adverse effects on the adjacent waters. At the same time, the Quartz Mining Act potentially regulates many of the same activities. The Board is concerned about the potential for duplication and/or conflicting requirements between application of the two Acts.

## **BOARD OPINION:**

1. The Board recognizes and commends the government on progress made by implementing the YMSRCP. The clarity provided by the policy will encourage future mining development in Yukon.
2. Technical guidelines are required to support YMSRCP.

## **RECOMMENDATIONS:**

1. Technical guidelines utilizing industry best practices need to be developed.

## **Financial Assurance**

Prior to the YMSRCP, the financial assurance policy virtually assured that security had to be in the form of letters of credit, cash, or a security bond. All of these forms of financial assurance are difficult for many companies to provide, especially prior to, or just after the start up of a new mine. At those points in time, a company has likely committed or expended substantial sums of capital and has yet to generate any significant earnings. The Yukon's competitive position has been significantly enhanced in the YMSRCP by recognizing flexibility in the form of security, while not exposing the Yukon to future liability. Other jurisdictions (such as British Columbia), have policies that allow for creative options of providing financial assurance with each circumstance being evaluated on its individual merits (i.e. consideration given to the type of risk being secured, the financial ability of the company, the company's past environmental record, as well as consideration of other assets or income streams that may be secured, etc.). The Board encourages the Yukon Government to look at other jurisdictions and be creative and active in the implementation of the new financial assurance policy.

Importantly, the YMSRCP financial assurance policy identifies that it is equally important to adjust the amount of financial assurance periodically as the outstanding environmental liabilities change (either increasing or decreasing) and encourages Companies to enter into site specific arrangements with the Government to ensure security is adjusted as appropriate. This not only improves the financial competitiveness of the Yukon, but it also provides a financial incentive for mining companies to expedite progressive reclamation.

Both the Quartz Mining Act and the Waters Act have provisions for requirements of financial assurances for outstanding environmental liabilities. Currently, financial assurance is stipulated in the Water Licence, and by consent, the Production Licence accepts the security levied by the Water Licence. As this arrangement is by consent rather than legislated, the Board is concerned that there is the potential for duplication of financial assurances being required in the future. This concern will be elevated if environmental requirements become more comprehensive under the Quartz Mining Act in the future. A formal agreement between the agencies regulating the two acts would give more confidence that duplication of financial assurance will not occur.

### **BOARD OPINION:**

1. Financial guidelines documents are required to support YMSRCP.
2. Governments must assure that duplication of financial security will not occur.

### **RECOMMENDATIONS:**

1. YG to develop innovative financial security guidelines in consultation with industry to go along with YMSRCP.
2. YG to develop a formal agreement between the EMR and Environment respecting implementation financial assurance.

## **First Nation/Public Education**

In prior reports from the Yukon Minerals Advisory Board recommendations were made to encourage industry to work together with First Nations on mineral related issues. A very successful Mineral Exploration and Development Symposium was held in March 2003 in Whitehorse and a second symposium was organized at the 2004 Yukon Geoscience Forum. Planning is underway for a conference in November 2006.

2005 saw a substantial upswing in exploration activities and much of industries attention was focused on trying to cope with the increased work load.

Efforts to develop a Yukon Mine Training Association resulted in a firm consensus from industry and First Nations to form a partnership to further advance the concept of a Yukon Mine Training Association. A Board of directors has been appointed and the association has been registered as a non-profit society. Efforts are ongoing to secure sufficient funding to commence training activities.

An exploration safety seminar was held in May 2005 for exploration personnel working for various companies in the Yukon. Approximately 30 individuals attended.

A separate initiative by the Yukon mining industry modeled on the Mining Association of Canada's "Towards Sustainable Mining" was initiated in late 2004. The initiative which aims to develop better understanding, dialogue, and collaboration with stakeholders was announced by Yukon's leading mining industry associations in January 2006. The initiative was encouraged and supported financially by YG Economic Development and EMR. The initiative is designed to forge more effective partnership with communities, First Nation governments, governments and other stakeholders.

### **RECOMMENDATIONS:**

1. Industry to continue efforts to engage with First Nations through community meetings and seminars and at other venues.
2. Industry and government should develop and encourage synergies with other initiatives such as the Yukon Mine Training Association, and the industry sustainability initiative.
3. YG support industry initiatives to develop a Yukon Mine Training Strategy.

## **Land Use Planning:**

Land use Planning is well under way for the North Yukon region, and the Peel Water Shed planning region. This is a good start for land use planning in the Yukon and EMR should continue their support with the Land Use Planning council. The Board underscores the importance of considering mineral potential and access as a priority when developing regional land use plans.

### **BOARD OPINION:**

1. It is of paramount importance that mineral potential and access be considered when developing regional land use plans.

### **RECOMMENDATIONS:**

1. That Yukon Government continue to work closely with the commissions providing data collection and assessment information.
2. Mineral assessments and access corridors are essential components of land use planning. These must be identified and communicated to the commissions by EMR.
3. Ensure that reviews of the draft plans are done with industry in a timely manner.
4. Ensure that government departments integrate their recommendations to the land use planning commissions.

# **Investment Attractiveness**

## **Resource Revenue Sharing**

Chapter 23 – Resource Revenue Sharing – of the UFA contains provisions respecting mineral resource revenue sharing for both crown and Yukon First Nation lands. As the Yukon government is responsible for management of Yukon mineral resources, they have the authority to receive, levy and collect royalties in respect of the production of a mineral resource. Specific provisions within the UFA outline Yukon government's annual financial obligations for royalty sharing of the resource with Yukon First Nations. Yukon government should continue to work with Yukon First Nations to ensure that their resource revenue sharing obligations are fulfilled.

In addition, industry will work directly with Yukon First Nations respecting development of a mineral resource. An agreement can be negotiated directly with a Yukon First Nation to provide opportunities for cooperation, benefits and participation respecting development of a mineral property. Industry should continue to work with Yukon First Nations in this regard.

### **BOARD OPINION:**

1. UFA contains provisions for resource revenue sharing with Yukon First Nations
2. Industry may develop specific agreements with Yukon First Nations and engage communities as required

### **RECOMMENDATIONS:**

1. Yukon Government continue to provide mineral resource revenue sharing as per UFA

## **Yukon Mineral Exploration Tax Credit (YMETC)**

The Yukon government introduced the YMETC in 1999 as an incentive to help stimulate the mining exploration sector. The YMETC is a refundable corporate and personal income tax credit of 25% of eligible mineral exploration expenditures claimed by eligible individuals and corporations conducting off-mine-site exploration in the Yukon.

| <b>Yukon Mineral Exploration Tax Credit — Historical Uptake</b>                                     |                    |                    |                    |                    |                    |                      |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| <b>Revised April, 2006 by EMR Mineral Development (Based on Figures provided by Finance Canada)</b> |                    |                    |                    |                    |                    |                      |
| <b>Calendar Year YMETC Recognized</b>   | <b>Actual 2000</b> | <b>Actual 2001</b> | <b>Actual 2002</b> | <b>Actual 2003</b> | <b>Actual 2004</b> | <b>Forecast 2005</b> |
| <b>Eligible credit rate in calendar year:</b>   | 22%                | 22/25%             | 25%                | 25%                | 25%                | 25%                  |
| <b>T1-Personal Tax</b>  | 119,607            | 86,374             | 113,278            | 50,564             | 151,958            | 80,000               |
| <b>T2-Corporate Tax</b>   | 1,822,270          | 1,863,830          | 1,533,421          | 3,150,397          | 3,712,424          | 5,000,000            |
| <b>TOTAL YMETC</b>  | <b>1,941,877</b>   | <b>1,950,204</b>   | <b>1,646,699</b>   | <b>3,200,961</b>   | <b>3,864,382</b>   | <b>5,080,000</b>     |
| <b>Estimated amounts claimed on Personal Tax Returns</b>  | 474,878            | 356,180            | 453,112            | 500,000            | 800,000            | 320,000              |
| <b>Estimated amounts claimed on Corporate Tax Returns</b>   | 7,897,617          | 7,685,897          | 6,133,684          | 13,200,000         | 21,200,000         | 20,000,000           |
| <b>TOTAL ESTIMATED ELIGIBLE MINERAL EXPENDITURE</b>   | <b>8,372,495</b>   | <b>8,042,077</b>   | <b>6,586,796</b>   | <b>13,700,000</b>  | <b>22,000,000</b>  | <b>20,320,000</b>    |

In early 2005 the Yukon Government extended the YMETC until March 31, 2007. One factor in this decision is the strong indication by companies that the YMETC positively influences their decision to invest in exploration in the Yukon. In addition, an extension beyond the usual one year provides the industry with better stability for planning and also allows for strategic marketing of this credit to attract future investment.

The Yukon Mineral Exploration Tax Credit (YMETC) is a refundable corporate and personal income tax credit of 25% of eligible mineral exploration expenditures incurred by eligible individuals and corporations conducting off-minesite exploration in the Yukon between April 1, 2001 and March 31, 2007. There is a per company refundable limit of \$300,000 for work undertaken between April 1, 2006 and March 31, 2007.

### **BOARD OPINION:**

1. The “residency” issue, which is fundamental to qualification for the program, is confusing to companies.
2. During periods of increased mineral exploration activity the program remains important to attract prospectors and new junior exploration companies to Yukon.

### **RECOMMENDATIONS:**

1. As noted in the 2004 report, the Yukon Government needs to clarify the “residency” issue.
2. Maintain program and consider the Alaska model for development incentives.

## **Yukon Mining Incentives Program (YMIP)**

The Yukon Mining Incentives Program (YMIP) is designed to promote and enhance mineral prospecting, exploration and development activities in the Yukon. In the last 10 years this program has resulted in at least 10 significant discoveries, including new occurrences of beryl, gold and base metals. The program's function is to provide a portion of the risk capital required to locate and explore mineral deposits. The annual program is discretionary and reviewed each year in the government's budget. The program is open and available to all prospectors and exploration companies interested in exploring in Yukon.

The program contains four modules:

Grassroots — Prospecting

Grassroots — Grubstake

Focused — Regional

Target Evaluation

Applications for YMIP grants are submitted annually (usually due March 1st) and evaluated by qualified personnel in the Mineral Development Branch of Energy, Mines and Resources. Strong competition for the grants has resulted in a substantial increase in the quality of the applications received in recent years. A comprehensive report on each grant program is a condition of receiving the grant. These reports become public after a period of two years.

A total of 63 projects were approved for a total value of \$1,046,500 in contributions. Proposals approved for funding included 12 Grassroots – Prospecting, 12 Focused Regional and 39 Target Evaluation modules.

EMR, in partnership with Economic Development and the Yukon Prospectors Association also provided support to assist prospectors to attend Roundup 2006 in Vancouver to promote properties for option.

## **Improved Strategic Direction for the Mining Sector**

EMR and Economic Development play similar roles in attracting national and international investment in Yukon mineral resources. Coordination of efforts between the departments would improve the overall ability to attract mineral investment to the Yukon.

EMR and Economic Development departments need to develop a high level co operation and strategy to work together to promote Yukon's mineral potential. This strategy will improve service for the mining sector in general as well as assist individual projects.

### **BOARD OPINION:**

1. Economic Development and EMR both support attracting mineral investment to Yukon.
2. Co-ordinated strategy for attracting mineral investment needs to be developed between Economic Development and EMR.

### **RECOMMENDATIONS:**

1. Co-ordinated strategy for attracting mineral investment needs to be developed between Economic Development and EMR.

# **Technical and Policy**

## **Geological, Geophysical & Geochemical Programs**

The Yukon Geological Survey's mandate is to build, maintain and communicate the geoscience and technical information base required to enable stewardship and sustainable development of Yukon's energy, mineral and land resources. The Survey contributes significantly to the geoscience knowledge base by collecting, compiling and distributing scientific and technical information on the geology and mineral deposits of the Yukon.

Most of the survey's publications and databases are available for download, free of charge, over the Internet. Comprehensive, up-to-date databases include regional geology, regional stream geochemistry, mineral deposits, placer deposits, and mineral claims. These datasets can also be viewed on-line in the Map Gallery, the Survey's interactive map server.

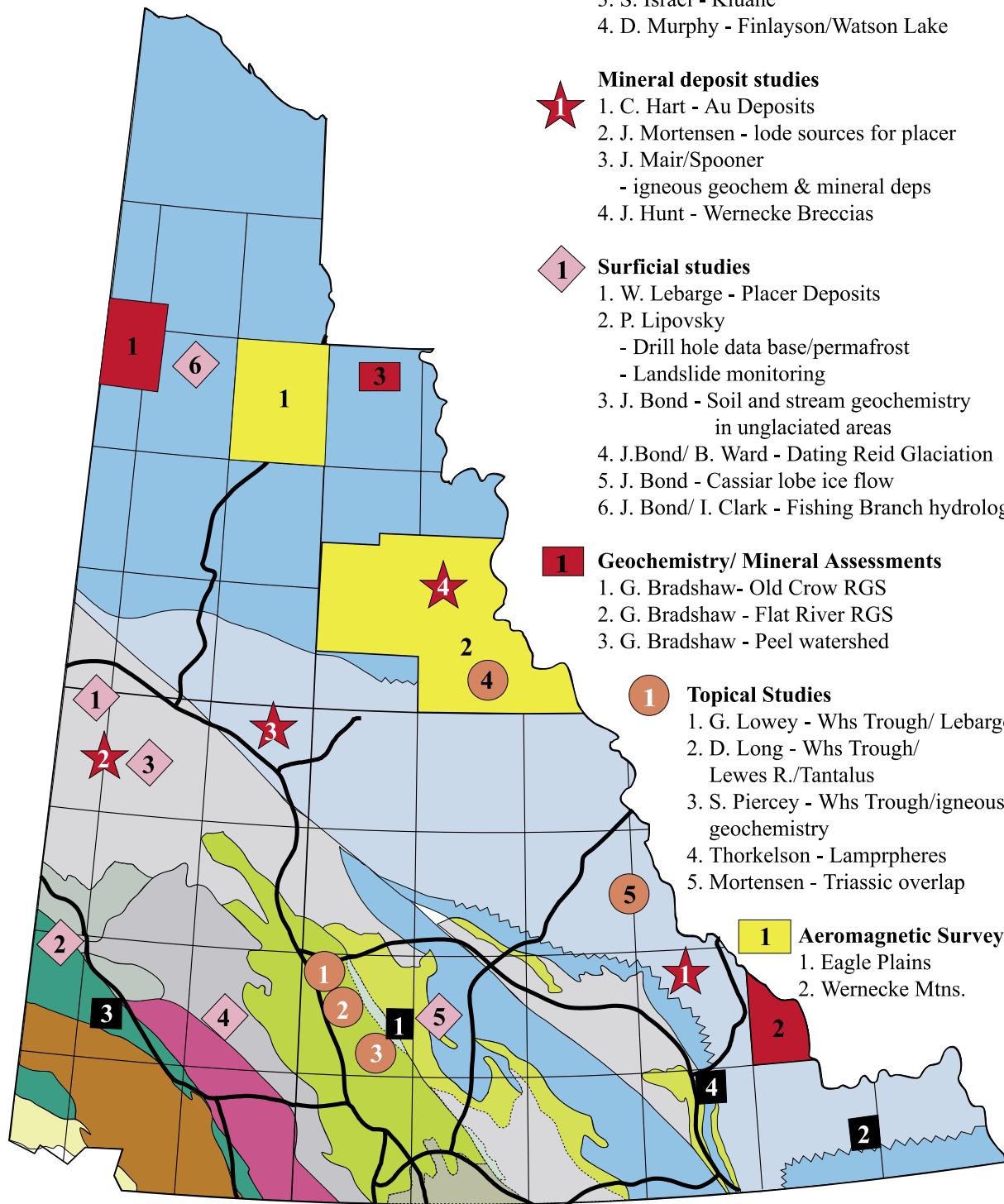
### **BOARD OPINION:**

1. Excellence of Yukon database is widely recognized.
2. Upgrading in Technology and Programs required to access data and utilize databases is being developed and this should continue.
3. Board recognizes the importance of continuing public education.

### **RECOMMENDATIONS:**

1. Continue through the Technical Liaison Committee and other venues to review the effectiveness and delivery of Yukon Geology Program.
2. Continue to develop and promote Yukon's mineral endowment through education initiatives such as Mining Week.

## 2005 Field Projects



### 1:50 000 Scale Bedrock Mapping

1. M. Colpron - Yukon Tanana Terrane
2. L. Pigage - Toobally
3. S. Israel - Kluane
4. D. Murphy - Finlayson/Watson Lake

### Mineral deposit studies

1. C. Hart - Au Deposits  
 2. J. Mortensen - lode sources for placer  
 3. J. Mair/Spooner  
     - igneous geochem & mineral deps  
 4. J. Hunt - Wernecke Breccias

### Surficial studies

1. W. Lebars - Placer Deposits
2. P. Lipovsky
  - Drill hole data base/permafrost
  - Landslide monitoring
3. J. Bond - Soil and stream geochemistry  
     in unglaciated areas
4. J. Bond/ B. Ward - Dating Reid Glaciation
5. J. Bond - Cassiar lobe ice flow
6. J. Bond/ I. Clark - Fishing Branch hydrology

### Geochemistry/ Mineral Assessments

1. G. Bradshaw - Old Crow RGS
2. G. Bradshaw - Flat River RGS
3. G. Bradshaw - Peel watershed

### Topical Studies

1. G. Lowey - Whs Trough/ Lebars Gp.
2. D. Long - Whs Trough/  
     Lewes R./Tantalus
3. S. Piercy - Whs Trough/igneous  
     geochemistry
4. Thorkelson - Lamprpheres
5. Mortensen - Triassic overlap

### Aeromagnetic Surveys

1. Eagle Plains
2. Wernecke Mtns.

## **Yukonmining.com**

This widely used and appreciated website has links to the following topics related to mining in the Yukon:

|                                    |                                 |
|------------------------------------|---------------------------------|
| Yukon Geological Survey            | Yukon Mining Recorders          |
| Maps, Data, Publications           | Prospecting, Exploration, Mines |
| Legislation & Guidelines           | Incentive Programs              |
| Environmental Assessment & Permits | Statistics, Studies, Research   |
| History of Mining in Yukon         | First Nations                   |
| Investment Opportunities           | Jobs                            |
| Educational Resources              | Placer Mining                   |
| Contacts & Links                   | Yukon Mining Recorders          |
| Yukon Geological Survey            | What's New                      |

## **Mining Recorder Claim Database and Map Information Services**

Recently the Yukon Mining Recorders posted the NMRS claim database on their website along with an Interactive Claim Map in web-based GIS format and a link to the Yukon Spatial Data Clearinghouse. The database provides information on Coal Leases, licenses and Permits, Quartz and Placer claims. It is searchable by Mining District, Claim Name, Grant Number, Claim Owner, or Lapsing dates. The Interactive Claim Map will allow clients to view claim data spatially and extract claim information. The Spatial Data Clearinghouse allows clients to obtain data and map shape files free of charge for incorporation in their GIS systems.

These web-based services are very useful tools for mining clients allowing instant access from the computer terminals. Having these services available via the internet will lessen the burden on Mining Recorders. The government is encouraged to provide more of these services on-line.

### **BOARD OPINION:**

1. Yukon mining.com website is very interactive and useful for Yukon mineral industry information.

### **RECOMMENDATIONS:**

1. Continue to support and expand the services available on the internet.

# References

## **Yukon Exploration and Geology 2005**

Burke, M., 2006. *Yukon Mining, Development and Exploration Overview 2005*.

In: Yukon Exploration and Geology 2005, D.S. Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 2-40.

## **Yukon Placer Mining Overview**

LeBarge, W., 2006. *Yukon Placer Mining Overview 2005*. In: *Yukon Exploration and Geology 2005*, D.S. Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 41-45.

## **Yukon Mining Incentives Program 2005**

Steve Traynor 2005 Overview. In: *Yukon Exploration and Geology 2005*, D.S. Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 47-48.

Yukon Energy, Mines and Resources and Indian and Northern Affairs Canada (2003); Type II Mine Sites under the Devolution Transfer Agreement

Yukon Mineral Deposits 2005. S. Traynor (compiler). Yukon Geological Survey, 16 p.

Yukon Energy, Mines and Resources website: <http://www.emr.gov.yk.ca/>

# Glossary of Terms

- **AIDEA** — Alaska Industrial Development & Export Agency
- **CEAA** — Canadian Environmental Assessment Act
- **CYFN** — Council of Yukon First Nations
- **DIAND** — Department of Indian and Northern Affairs – Canadian Federal Government
- **ECO** — Executive Council Office
- **EMR** — Energy, Mines and Resources- Department of the Yukon Government
- **ENV** — Environment Department - Yukon Government
- **IRM** — Integrated Resource Management (Yukon Government working philosophy and subsequently approved strategy)
- **ISC** — Implementation Steering Committee
- **KPMA** — Klondike Placer Miners' Association
- **MLUR** — Mining Land Use Regulations
- **NMRS** — Northern Mineral Records System
- **PDAC** — Prospectors and Developers Association of Canada
- **UFA** — Umbrella Final Agreement – Developed for Yukon First Nations
- **WC** — Working Committee
- **YEAA** — Yukon Environmental Assessment Act
- **YEC** — Yukon Electrical Company
- **YESAA** — Yukon Environmental and Socioeconomic Assessment Act
- **YESAB** — Yukon Environmental and Socioeconomic Assessment Board
- **YG** — Yukon Government
- **YGS** — Yukon Geological Survey
- **YLUPC** — Yukon Land Use Planning Council
- **YMAB** — Yukon Minerals Advisory Board
- **YMETC** — Yukon Mineral Exploration Tax Credit
- **YMIP** — Yukon Mining Incentives Program
- **YMSRCP** — Yukon Mine Site Reclamation and Closure Policy
- **YWB** — Yukon Water Board

# Appendix A: Order in Council

## Creating the Yukon Mineral Advisory Board

M.O. 1999/06  
ECONOMIC DEVELOPMENT ACT

### ECONOMIC DEVELOPMENT ACT

Pursuant to section 9 of the *Economic Development Act*,  
the Minister of Economic Development orders as follows:

1. The annexed Yukon Minerals Advisory Board Order is hereby made.

Dated at Whitehorse, in the Yukon Territory, this 7 day of June, 1999.

A.M. 1999/06  
LOI SUR LE DÉVELOPPEMENT ÉCONOMIQUE

### LOI SUR LE DÉVELOPPEMENT ÉCONOMIQUE

Le ministre de l'Expansion économique, conformément à l'article 9 de la *Loi sur le développement économique*, décrète ce qui suit :

1. Le Décret créant le Conseil consultatif sur l'exploitation minière au Yukon est établi.

Fait à Whitehorse, dans le territoire du Yukon, ce 7 juin 1999.

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Minister of Economic Development

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Ministre de l'Expansion économique

# **Terms of Reference**

## **Organization**

### ***Authority***

The Board is established under the Economic Development Act to advise the Minister of Energy, Mines and Resources on mineral development matters in accordance with these terms of reference.

### ***Mandate of the Board***

The Board shall:

- Make recommendations on specific matters referred to it from time to time, by the Minister;
- Undertake other initiatives, such as conferences and public workshops on mineral development matters, as requested by the Minister; and
- Make recommendations to the Minister to fulfill the objectives of the Board.

The Board shall table with the Legislature an annual report for the previous calendar year by May 1<sup>st</sup>. Matters to be addressed in this report include activities of the Board and, on the request of the Minister, recommendations on matters referred to it in the previous year.

### ***Objectives of the Board***

The Board shall recommend to the Minister measures, including government actions to:

- increase the potential for mineral exploration and development in the Yukon;
- attract capital for the exploration and development of new mines;
- ensure that mines can be developed feasibly and in a timely fashion;
- improve the potential for producing mines to remain viable;
- enhance Yukon participation in mining;
- reduce constraints, including government constraints, on the development of minerals in the Yukon; and
- outreach with first nations to explore the opportunities and benefits of mineral exploration and development in the Yukon.

### ***Duration of Mandate***

The Yukon Minerals Advisory Board will be subject to review after five years, in 2005, to determine its continuance, according to policy objectives and priorities at that time.

### ***Makeup of the Board***

The Board consists of the following representatives:

- Member of the Yukon Chamber of Mines;
- Member of the Klondike Placer Miners Association;
- CEO or senior managers of companies with Yukon mineral exploration projects and/or mines;
- CEO or senior managers of junior mining sector;
- Representatives of national mining associations;
- Other individuals who have at least five years experience in various aspects of the minerals industries.

The Board will consist of no more than 10 members.

Members will be appointed by the Minister of Energy, Mines and Resources. Appointments shall have a duration of up to 2 years, and terms can be renewed by the Minister.

The Minister shall appoint one member of the Board to serve as chair, for a period of two years. Such terms can be renewed by the Minister.

### ***Secretariat***

Secretariat services and other support as required, will be provided by Department of Energy, Mines and Resources. The secretariat will provide certain analytical, technical and administrative services necessary for the effective operation of the Board. Direction of the secretariat will normally be provided by the Chair.

Independent recording and minute-taking services will be provided for by the Department of Energy, Mines and Resources.

## **Proceedings**

### ***Meetings***

The Board will meet, at minimum, once a year.

### ***Quorum***

A majority of the Board, including the Chair, constitutes a quorum.

### ***Conflict of Interest***

A member of the Board will not be considered to have a material conflict of interest if:

- The member has a financial interest in a mining company operating in the Yukon;
- The member has an interest in a mining company receiving financial assistance from government in association with a mineral exploration or development project;
- The member receives financial assistance from government in association with a mineral exploration or development project;
- The member has an interest in a mining company or property with regulatory applications and authorizations under consideration by the Yukon government.

***Board Procedures***

The Board may establish procedures and rules governing the conduct of its business.

***Public Access***

The minutes or other form of record of Board meetings shall be available to the public.



