



# MINING RESEARCH

Week Ending November 2, 2001

Issue No.518

**YORKTON**  
FINANCING CANADA'S FUTURE

Art Ettlinger, Ph.D, P. Geo., Calgary, AB.

Indices	Net Change* 10/26 – 11/02	Gold London Spot	US \$	Commodities	US \$	Net Change 10/26 – 11/02
CDNX	2997.11 +31.96	Friday 10-26	277.25	Aluminum	0.5980	-0.0100
CDNX-MX	7672.30 +135.15			Copper	0.6115	-0.0190
TSE 300	7023.97 +19.05	Monday	278.60	Lead	0.217	-0.001
TSE-MM	3670.92 -66.35	Tuesday	280.40	Nickel	2.014	-0.059
TSE-MET	2516.66 +153.97	Wednesday	278.75	Zinc	0.339	-0.007
TSE-Int.M	3826.85 -115.00	Thursday	280.60	Palladium	340.00	-10.00
TSE Gold	5167.98 +288.60	Friday 11-02	279.90	Platinum	420.70	-9.70
NASDAQ	1745.73 -23.23			Silver	4.099	-0.104
DJIA	9323.54 -221.63	Euro/USD	0.9029	CRB Index	185.58	+0.96

### Featured This Week:

- **Ashton Mining and Pure Gold:** report outstanding diamond counts from Artemesia
- **Tahera Corp:** Releases encouraging diamond counts from Anuri East and reinforces the developing importance of the Northern Slave Diamond Field
- **Altius Minerals: Options:** options significant advanced-staged copper property on the Rock

### News this Week

Ashton Mining of Canada Inc. (ACA TSE, \$1.20) 37.15 million shares o/s and Pure Gold Minerals Inc. (PUG TSE, \$0.15) 46.24 million shares o/s reported diamond assays from their Artemesia kimberlite, discovered in the fall on the Kim property in the north Slave craton region of Nunavut. This area of the Slave craton has

yielded several new kimberlite discoveries (Figure 1) with **very encouraging** early-stage diamond counts. The results from Artemesia are outstanding (Table 1) and closely follow the release by Ashton of results of similar quality from the Potentilla kimberlite, located approximately 15 km to the southeast of Artemesia (see Figure 1).

**Table 1. Ashton Mining of Canada – Artemesia Diamond Counts**

Kimberlite Facies	Sample wt., kg	# Micro-diamonds	# of Macrodiamonds (>0.5mm in one dimension)
Diatreme	103.2	342	38 <sup>1</sup>

For comparison, here are the results from Potentilla discussed in last week's Mining Research:

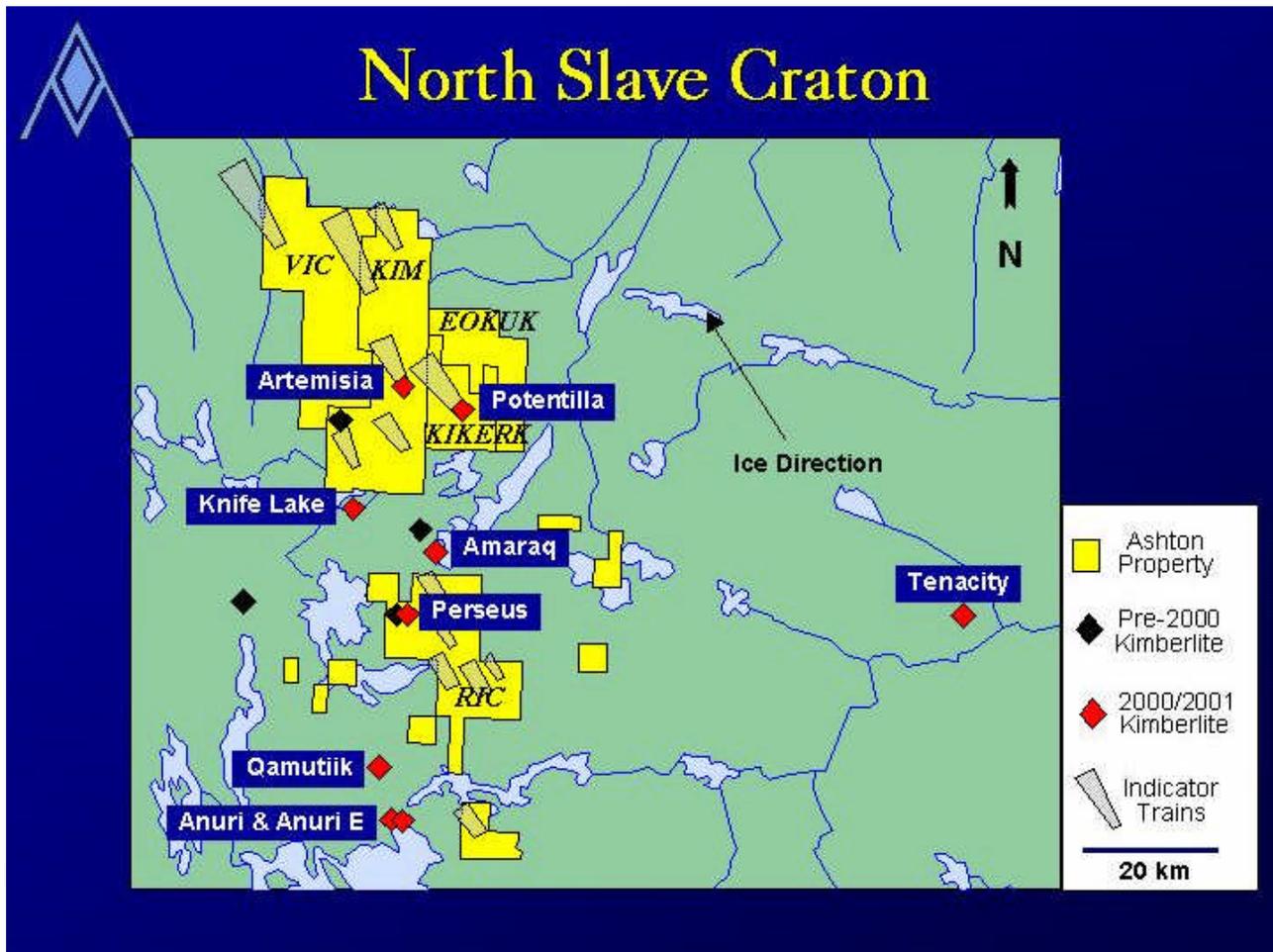
Diatreme	129.1	160	15 <sup>2</sup>
Hypabyssal	78.7	70	7 <sup>3</sup>
Total	207.8	230	22

#### Notes:

1. Thirteen of the macrodiamonds from this sample measure >0.5 mm in two dimensions with the three largest stones measuring 1.23 x 1.15 x 1.10 mm, 1.13 x 0.80 x 0.68 mm, and 0.94 x 0.92 x 0.08 mm
2. Seven of the macrodiamonds from this sample measure >0.5 mm in two dimensions with the three largest stones measuring 2.13 x 1.94 x 0.87 mm, 1.37 x 0.99 x 0.87 mm, and 1.12 x 0.90 x 0.40 mm.
3. Three of the macrodiamonds from this sample measure >0.5 mm in two dimensions with the largest stone measuring 0.80 x 0.52 x 0.39 mm.



Figure 1. North Slave kimberlite distribution. Pre-2000 kimberlite discoveries are not known to be significantly diamondiferous.



The Kim property is located 500 km north of Yellowknife and 50 km south of Coronation Gulf. Artemisia was discovered during investigation of a number of indicator mineral dispersion fans identified in previous years. It crops out at the surface and **was discovered by boot and hammer prospecting**. One follow-up till sample collected during this program returned more than 300 indicator minerals as well as a diamond measuring 0.70 x 0.56 x 0.45 mm. Kimberlite outcrop and float occurs over an area measuring 140 x 150 m and it may extend beyond this area in one direction. Artemisia was confirmed by drilling a vertical hole in the center of the float area. The

hole intersected kimberlite breccia close to surface and was terminated in kimberlite at 169.2 m.

Quantitative comparisons that show the significance of these early-staged results from *Potentilla* and *Artemisia* are difficult to make since diamond counts from samples weighing only a few ten's to a few hundred's of kilograms can vary widely, even within the same kimberlite body. As we've always stated, samples of this size are really only useful in guiding potential future work programs. With this in mind, the next table presents some early staged caustic fusion results from other well-known diamond projects on the Slave craton. To us, this data illustrates both the



wide variability of microdiamond distributions in kimberlites, and that results from Pontentilla and Artemisia are "in the ball park" of what can be expected from an economic, or near economic kimberlite.

A hallmark of the data below is that in almost every case, more than 1 diamond per kilogram has been recovered and the macrodiamonds comprise more than 20% of all diamonds recovered from these small samples.

**Table 2. Selected early-staged diamond counts from some major Canadian diamond projects**

Kimberlite (Property)	Sample weight, kg	# micro-diamonds	# macro-diamonds
Koala (Ekati)	268.4	38	51
A-21 (Diavik)	154.6	116	38
A-154-S (Diavik)	198.9	150	99
A-154-N	373.2	376	170
SL97-813 (Snap Lake)	15.26	62	22
60353 (Snap Lake)	24.55	75	28
JD-016 (Jericho)	162.7	272	108
JD-029 (Jericho)	103.1	45	21
5034 (Kennady Lake)	184.37	1397	295
Hearne (Kennady Lake)	132.0	324 (micros + macros)	

When combined, the early results from *Potentilla* (70% **Caledonia Mining**, 30% **Northern Empire** with Ashton to earn 59.5%) and now *Artemisia* (Ashton ~90%, Pure Gold ~10%) suggests that a potentially economic cluster of kimberlites is developing to Ashton's credit in this northern part of the Slave craton. Ashton controls more than 190,000 ha in the northern Slave and as we pointed out last week, there remain additional high-quality exploration targets on several of the property blocks held by Ashton in this region. It is also worth noting that like *Artemisia*, surface prospecting resulted in the discovery of the *Hydra*, *Perseus* and *Potentilla* kimberlites, also in the same general area. Outcropping kimberlites are more rare than a sustained rally in gold, and when identified, make exploration and subsequent sampling that much cheaper.

Ashton remains a **Speculative Buy** and our top junior diamond pick. More information about the company can be found at: <http://www.ashton.ca/>.

Speculative investors should also consider shares in **Northern Empire Minerals Ltd. (NEM CDNX, \$0.35)**, **Pure Gold Minerals** and **Tahera** (see below) as alternative ways to gain exposure to the Northern Slave diamond field.

**Tahera Corp. (TAH TSE, \$0.16) 290.38 million shares o/s** announced diamond results from their *Anuri East* kimberlite, also located in the Northern Slave area (see Figure 1). *Anuri East*, as well as the nearby *Anuri* kimberlite is located on the *Rockinghorse property*, a JV with Kennecott Canada Exploration Inc. A fall 2001 exploration program, centered on the *Anuri* discovery, included airborne magnetic/EM surveys and a gravity survey. Tahera reports that several kimberlite targets are emerging as this data is being processed.

Diamond counts from *Anuri East* and previously reported assays from *Anuri* are summarized in



Table 3. While Anuri East yielded slightly less than one diamond per kilogram, it's companion, Anuri, contained more, as well as a respectable macro to microdiamond ratio. Again, these results are based on very small samples from limited drill intersections. These kimberlites lie at least in part beneath a lake, consequently winter drilling is required before a better understanding of this

discovery is possible and a decision as to the next phase of sampling can be made. Tahera remains a **Speculative Buy** at current price levels for their land position in the Northern Slave and their ongoing work at Jericho with Kennecott.

For more information see: <http://www.tahera.com>.

**Table 3. Tahera Corp. – Anuri East Diamond Counts**

Sample Weight, kg	Total Diamonds Recovered (+0.15 mm)	Diamonds Recovered >0.5 mm in 1-dimension	Diamonds Recovered (+0.5 mm square mesh)	Diamonds Recovered (+1 mm square mesh)
78	68	18	2	1
For comparison, here are the results from Anuri discussed in <b>Mining Research</b> for the week ending 9-07-01				
489	730	264	47	6
167	207	73	14	3

Ed. Note: If it appears that we are now putting more of an effort into covering diamond exploration in the Northern Slave after spending several issues on the merits of investing in gold, and gold only, this is true. But the facts are gradually changing. While the gold price still may be in an up trend, the cumulative effect of several news releases with much better than average diamond counts coming from new discoveries in the Northern Slave cannot be ignored. We believe that when speculative capital returns to mining, Ashton and its JV partner's will be in the diamond spotlight.

**Altius Minerals Corporation (ALS CDNX, \$0.80) 13.07 million shares o/s** has signed an agreement to acquire the northern portion of the *Rambler copper-gold property* from Ming Minerals Inc. (private co.). The Rambler North property is located on Newfoundland's Baie Verte Peninsula and has excellent infrastructure. The Rambler mill was last operated in 1996 following considerable refurbishments, including the installation of a gold circuit.

The Ming deposit was mined from 1971 to 1982, reportedly producing 2.1 Mt grading 3.5% Cu,

1.0% Zn, 2.4 g/t Au and 20.6 g/t Ag from a 2000 ft shaft. The massive sulphide body is structurally deformed and plunges moderately over a known distance of 5700 ft. It is reported to be open below the 2600 ft level of the Ming Mine where mining stopped near the boundary with a neighboring property that has since been consolidated into the current property package being acquired by Altius.

In the last year of mining, an exploration drift was completed at the 1807 level in order to test the productive horizon along strike to the northwest. It first revealed that the deposit contains native gold mineralization within fractures along the thinned, un-mined margin. Continued drifting resulted in the discovery, 600 feet to the northwest from the Ming deposit and adjacent to the neighboring property boundary, of a new zone of massive sulphides that returned assays of up to 11.51% copper over 8.5 ft. This "1807" zone requires drilling down plunge across the former property boundary to determine what size potential may be present.

The Ming footwall stringer zone sits 300-400 ft stratigraphically below the Ming deposit. It too is moderately plunging and is known to extend from



# MINING RESEARCH

Week Ending November 2, 2001

Issue No.518

**YORKTON**  
FINANCING CANADA'S FUTURE

**Art Ettlinger, Ph.D, P. Geo., Calgary, AB.**

approximately 1,200 to 3,000 ft below the surface, where it remains open. Only limited drilling from the Ming Mine workings has tested this zone. It averages ~120 ft in thickness and the former mine operator estimated the zone to contain "11 Mt grading a sub-economic 0.9% Cu above the 2200 foot level". A drill hole, contained within the above estimate returned 131 ft grading 2% Cu, including 55 ft grading 2.89% Cu and 0.7 g/t Au. Altius' geologists believe this zone could grade to massive sulphide, or possibly even merge with the overlying Ming massive sulphide body.

Since closing in 1982, little exploration activity has occurred on the property. There is ample anecdotal evidence suggesting significant zones of copper mineralization remain at depth and systematic surface exploration over the merged property has not occurred. A brief visit we made to the property two years ago supports this view. Several key targets exist below previous mine workings and Altius plans to drill test these targets when exploration begins on the property next year.

In order to acquire a 100% interest in the Rambler property Altius must pay Ming a total of 200,000 shares and make exploration expenditures of \$500,000 in stages over a four-year period. Ming has also granted Altius a first right of refusal to

acquire the southern part of the Rambler property (Rambler South) including the mineral processing facilities.

We view the Rambler North acquisition as the most significant acquisition made by the company to date. It gives Altius an advanced-staged exploration project with the potential to add Cu-Au resources relatively quickly. The principle unknown is the Ability of the Altius exploration staff to explore in a mine situation and contend with resource development rather than generative exploration projects.

Altius remains a **Speculative Buy** at current price levels and should be looked at for acquisition into speculative portfolios over the winter months prior to commencement of drilling at Rambler.

Further information about the company, including Rambler mine maps can be found at: <http://www.alt-min.com>.

**ADE, Calgary, AB, November 5, 2001**

This report is based on information available to the public. Information presented, while obtained from sources we believe to be reliable, is not guaranteed either as to accuracy or completeness. Estimates and projections contained herein are Yorkton's own or obtained from consultants. This report is not an offer to buy, sell or solicit an offer to buy or sell securities mentioned herein. The research material is approved by Yorkton Securities Inc., regulated by SFA for the conduct of investment business in the U.K. Approval is only to the extent defined in Section 57 of the Financial Services Act 1986. The investments or investment services, which are the subject of this research material, are not available for private customers as defined by the SFA. Yorkton Capital Inc. accepts responsibility for content of this report and U.S. persons receiving this report, wishing to effect a transaction in any security described herein, should do so with Yorkton Capital Inc. Yorkton Securities Inc., Yorkton Capital Inc. and their respective officers and directors has, or may have, a position or holding in, or may effect transactions in the investments concerned, or related investments, and is providing, or has provided within the last three years, significant advice or investment services in relation to the investments concerned or related investments. Yorkton Securities Inc. has or may perform financial advisory, investment banking, or other services for the companies mentioned herein. Copyright, Yorkton Securities Inc. under the Berne Convention. All rights reserved. No part of the publication may be reproduced without written permission of the publishers. Printed in Canada.