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## Amador Gold Corp. Loveland Discovery Understanding Xstrata plc Montcalm Nickel Mine Tour in Photos

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### Amador Gold Corp – (AGX-V C\$0.25) Xstrata plc – (XTA-L GBP 3998 (pence))

Amador Gold Corp, in the author's analytical opinion, is finally on the verge of defining a significant volume of mineralized material at the Loveland project; one that may capture the attention of a major company happily mining the same mineral commodities not far away. This analysis will introduce what the Company has at Loveland as an early-stage example of discovery. It will also introduce the Montcalm Mine of Xstrata Nickel in a photo essay that suggests what the Loveland target may eventually resemble.

#### MiningInsights™ Drill Hole Analysis

The Company drilled three holes. The first intersected 0.40% nickel and 0.55% copper over a reported drill width of 35.5m, and contained four separate higher-grade intervals. The second hole hit two separate zones of copper and nickel mineralization. The third hole hit a reported 45.0m of 0.75% copper and 0.70% nickel, with four separate higher-grade intervals. Drill holes were spaced 50m apart, along strike, with the second hole drilled to the northwest of the first, and the third hole drilled to the southeast of the first. The total strike length of defined mineralization is thus 100m.

Analyzing the higher-grade intervals by imputed tonnage value for the first hole gave the following results:

From (m)	To(m)	Width (m)	Ni %	Cu %	Ni (US\$)	Cu (US\$)	Sum	Per tonne
113.0	113.9	0.9	1.03	0.68	\$ 792.59	\$ 149.45	\$ 942.04	\$ 348.90
118.0	119.0	1.0	0.93	1.35	\$ 795.15	\$ 329.67	\$ 1,124.82	\$ 374.94
122.7	128.5	5.8	1.00	0.87	\$ 4,959.00	\$ 1,232.23	\$ 6,191.23	\$ 355.82
147.5	148.5	1.0	0.84	0.9	\$ 718.20	\$ 219.78	\$ 937.98	\$ 312.66

The tonnage values are calculated as the intersection thickness one metre high and one metre long, with a specific gravity of 3.0 tonnes/ cubic metre. On a per-tonne basis, the implied values at representative 15-month futures prices for nickel and copper average US\$348.08/tonne.

The rock between the high-grade zones, the grade of which was back-calculated (because the values are not given in the news release) carries a value of US\$95.00/tonne. Together, the 35.5m intersection carries an implied value of US\$158.77/tonne.

The upper intersection in hole 2 (7.6m of 0.27% nickel and 0.59% copper) carries a value of US\$124.20/tonne. The lower intersection (0.51% nickel and 0.77% copper over 2.7m) carries an implied per-tonne value of US\$208.24. One could conclude that lower grades and a wider spacing between low-grade intersections means no further exploration is needed in this direction.

But certainly to the southeast! Hole AMDG-03 returned three reported intervals spaced much more closely and of higher average grade than the comparable intersections in hole AMGD-01:

From (m)	To(m)	Width (m)	Ni %	Cu %	Ni (US\$)	Cu (US\$)	Sum	Per tonne
120.6	130.0	9.4	1.48	0.9	\$ 11,894.76	\$ 2,065.93	\$ 13,960.69	\$ 495.06
132.6	136.5	3.9	1.15	1.11	\$ 3,834.68	\$ 1,057.14	\$ 4,891.82	\$ 418.10
146.4	160	13.6	0.70	1.06	\$ 8,139.60	\$ 3,520.39	\$ 11,659.99	\$ 285.78

The weighted average of these high-grade intervals is 1.03% nickel and 1.01% copper, and accounts for 27.9m of the total reported interval. The implied per-tonne value is US\$399.65; for the total 45.6m interval, it is US\$260.55 – a result that should accelerate the exploration in this direction.

## Correlating High-Grade Zones!

Take the 120.6m-130.0m intersection in hole AMGD-01. Correlate it with the 122.7-128.5m intersection in hole AMGD-03. Since both holes have the same orientation in space, these two intersections line up really well. The 50m distance between these alone contains about 7,600t at a value of US\$457.50/tonne. One can correlate the third high-grade intersection in both holes as well, and it would be interesting to know where the 1.0m intersection in hole AMGD-01 blows out to 13.6m in hole AMGD-03.

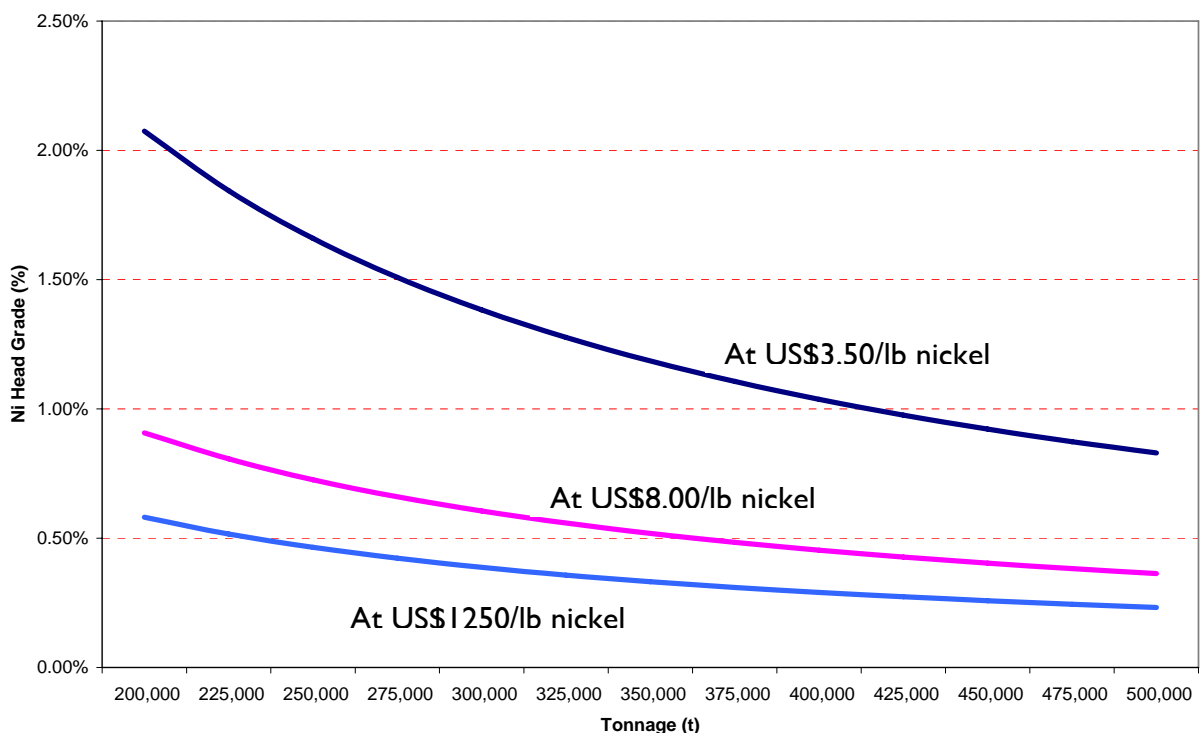
## Contributory Corporate Value of Exploration Success

When dealing with continuity of potential ore blocks in an orthogonal system, we need numbers for the x, y, and z axes. X is the intersection width; y is the vertical component of the intersection width and represents the height of the oreblock. Z is 25m on each side of each hole for a total of 100m implied strike length. Representative tonnage for the intersection in hole AMGD-01 totals about 155,000. The equivalent for hole AMGD-03 totals about 258,000.

Metal content attributable to AMGD-01 is 620 tonnes of nickel and 853 tonnes of copper. For AMGD-03, the values are 1,935 tonnes of nickel and 1,806 tonnes of copper. The contained value of nickel (at US\$3.50/lb) and copper (at US\$1.00/lb) is C\$25.6MM; a value approaching the market cap of the Company (at metal prices we won't likely see for quite some time).

Here is a chart of the nickel head grade required such that the value of the rock (in tonnes) equals the market cap of the Company at various underlying nickel prices:

Loveland Ni Head Grade Needed to Equal AGX Market Cap



## MI Investment View

Initial indications of discovery continuity, grade, and potential value suggest a favourable future to Loveland exploration in its' own right, and without regard to either the old Cominco results nor the Hollinger results reported in the news release. No, this could become a stand alone entity for the Company, and potentially sooner than other corporate projects in the area.

## Xstrata Nickel Montcalm Mine Tour!

The Montcalm Mine is located a scant hour's drive from Timmins, Ontario and appears to be the very model of a profitable operation. Unfortunately, investment analysis such as that above is not possible, as operating data is for the most part consolidated into "Sudbury Operations", part of Xstrata Nickel 'Canada'. We used the visit to gain some insights into how to construct a profitable mine, cheaply, as Falconbridge did originally.

From the chart above, consider how much money the Montcalm mine is probably contributing to the global fortunes of Xstrata plc with a head grade of 1.37% nickel and 0.69% copper and a production rate approaching 875,000 tonnes per year.<sup>1</sup> Annual metals production in concentrate form total about 11,000 tonnes nickel and about 5,500 tonnes copper.<sup>2</sup> Using consolidated cash cost numbers, it appears that the Montcalm Mine contributes around US\$225MM annually to Xstata coffers.

## Montcalm Surface Infrastructure

One of the attractions of underground mining is that the action takes place below the surface datum, so the surface infrastructure can be minimized quite dramatically. The image shows the Montcalm mine where the largest areal extent is the water treatment facility.



The yellow line measures 830m, an equivalent distance to less than two city blocks of downtown Toronto. Walk from the edge of the forest to the edge of the forest through the office complex, contractor shop, and crushing pad (the red line), and you've traveled one-fifth of the length of the shortest runway at Pearson airport, Toronto. The total areal extent of the surface infrastructure is only slightly larger than Sherway Gardens, a suburban Toronto shopping centre and without the extensive parking lot.

Good luck to you trying to find this mine on Google Earth or airphotos if you don't know exactly where it is. Like other underground operations, the environmental footprint of the Montcalm Mine is SMALL.

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Amador Loveland Project & Xstrata Montcalm Mine Tour, April, 2008



The office complex consists of several office trailers hooked together. The interior design is one of 'safety' and sheer operational efficiency – since the mine was put into production with nickel at US\$3.50/lb, the less spent upfront means the less the reserve base has to cover in production. The core shack (below) is well set up to deal with many boxes of core at once. When the mineralized interval is 45m wide (10 boxes), there is enough space for a few boxes of rock from either side.



Perhaps the most complicated infrastructural element is the water treatment facility. Water is collected round the site by catchment ditches and funneled to the maze of pipes left. Lime is added (at the white arrow) to adjust the pH; the pumps drive an impeller to ensure the lime is mixed whereupon the water goes out to the settling ponds. When treated to the standards required, it is discharged to a local river (not continually – in batches, so as to minimize interference with fish populations).



This is the area of constant activity. The entrance to the portal is just off to the right; the ore is stacked in piles just past the portal. The rock is crushed and loaded into 38-tonne trucks.

The ore is taken to the Kidd Metallurgical plant in Timmins where it is processed to a nickel-copper concentrate. This is smelted at the Company's facilities in Sudbury.

A significant permitting advantage for this mine was that there is no mill on site. The rock that is extracted from the ground is not chemically changed through a milling circuit and remains in 'aggregate' form. In permitting terms, this

implies that the Montcalm Mine is more of a 'quarry' operation than a traditional 'mine'. In the event that Amador defines a mineable deposit on Loveland and is able to negotiate a toll milling arrangement with a third party in Timmins, then eventual production may be accelerated through permitting a 'quarry'.

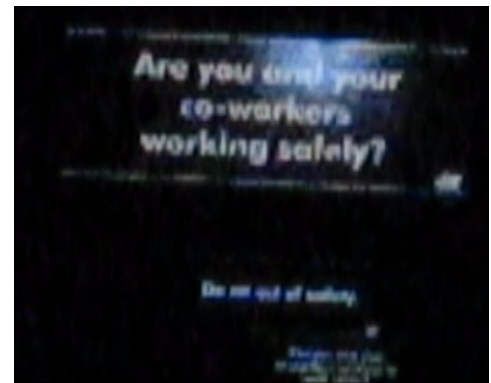
The Montcalm Mine uses a mining contractor to extract the ore and bring it to surface. A transport company is also contracted to crush the ore and transport it to the mill.

## Underground at Montcalm

The first thing one notices is the predominance of safety-related reminders. First, the record sheets for mining contractor safety meetings both surface and underground required of the all workers regardless of position in the corporate hierarchy. Then, the reminders hanging from the back (roof) as noted.

The culture of safety is so pervasive at Montcalm that Mr. Kris Straub P.Geol., the mine geologist, took a scaling bar to loosen and remove large chunks of rock that were still trapped behind a wire screen. Would the rock have fallen out with continued vibration from passing trucks? "Perhaps"; this was a good enough reason for preventative action.

Then, the excellence of the mining infrastructure, as seen right. This is an equipment storage area on the way down to the production areas. Everything appears orderly and tidily placed, everywhere. The ramp itself is wide enough to let vehicles and people pass safely, and high enough to keep the air and water pipes and hoses from being damaged by passing vehicles. The ramp is smooth, with a light cover of uniformly broken rock for traction – this 'road' is in far better shape than any of the highways leading into Timmins!



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This is a 'semi-massive' zone of ore (under the light) and the 'disseminated' style of mineralization outwards of it. Mineralization encompasses a good percentage of the rock; here and in many other places visited. Does it look like that of the Loveland property? Hard to tell, but the mineralization and structural controls appear spot-on. In analytical terms, we progressed past mineralogy; past host structure; past high-grade/low-grade distribution; and into determining whether a rock type present at Montcalm implicit in mining rock stability

was also present at Loveland – perhaps not, but this is not a detractor to investment.



Mining Insights Inc. would like to thank Kris Straub P.Geo. (centre right) and David Black (centre left) for an excellent tour of the Montcalm Mine. The mine is an excellent example of how to build and run a profitable mining operation, and appears to act as a superb proxy for what might be relevant to further Loveland discovery by Amador Gold Corp.

## Cited References

1. Xstrata plc. Interim Report 2007. Xstrata plc, p53.
2. *ibid*, p40.

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