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Registration Effective August 27th and Now Operational

DULUTH METALS (DM.TO C\$3.04, rated Overweight) COVERAGE INITIATED AT OVERWEIGHT OWING TO ROUGHLY 600 MILLION METRIC TONNE NICKEL-COPPER-COBALT-PRECIOUS METALS DEPOSIT IN MINNESOTA

Earnings per share	2007E	2008E	2009E	2010E	\$2011
	\$(0.26)	\$(0.18)	\$(0.12)	\$(0.10)	\$(0.11)
Earnings per share	2012E	2013E	2014E	2015E	2016E
	\$(0.14)	\$0.29	\$0.46	\$0.46	\$0.49
Earnings per share	2017E	2018E	2019E		
	\$0.53	\$1.00	\$1.05		

We have initiated research coverage of Duluth Metals (DM.TO C\$3.04) with an Overweight investment rating and \$10 price target based on the promising nickel-copper-cobalt-platinum-palladium-gold “Nakomis” underground deposit it controls in northeastern Minnesota. We do not expect revenues from commercial production until the 2013 time frame assuming permits are obtained by the end of 2010, and have written because of the promising large 600 million metric tonne size of its deposit.

Duluth Metals appears to control about 20% of the 3.1 billion tonne-plus “Duluth Complex” series of deposits in a richer than most other underground zone holding about 1.4 billion pounds of payable nickel, 5.9 billion pounds of copper and over six million payable ounces of combined platinum, palladium and gold. About one-half to two-thirds of the “in situ” minerals are recoverable and payable.

The invention of autoclave pressure leaching, economic recoverability of platinum group metals and higher relative platinum group metals contribute to economic viability in this century after historic exploration in the 1960s and 1970s failed. Of course, higher prices help.

We estimate commercial production begins around 2013, and that a 50% “second phase” expansion occurs in the 2017-18 time frame. At a 30,000 metric tonne per day 2018 ore throughput rate the current known mineralization may be enough for 60 years of production. Cash operating breakeven points may be near \$5 nickel, \$1.00-\$1.50 copper and \$1,000 platinum, \$300 palladium and \$600 gold. We estimate revenues are 44% nickel, 42% copper, 1% cobalt and 13% combined precious metals.

DULUTH COMPLEX APPEARS WORTH \$4 TO \$9 BILLION BASED ON PUBLIC DISCLOSURES OF THESE FOUR COMPANIES

Our simple evaluation of the four publicly traded companies suggests a district valuation of \$4 billion valuing nickel at \$1.00 and copper at \$0.10 per recoverable pound and deducting needed development investment. The value increases to \$9 billion if the recoverable resource values increase to \$1.75 and \$0.175 per pound, respectively..

We set a price target of \$10 per share or almost a quadruple for Duluth Metals based on such parameters without paying any premium for continuing exploration. We estimated its “East Zone” contains 150 mmt of resources similar to the “West Zone.”

We set a price target of \$6 for Polymet, which is three years ahead of the other companies. It possesses a 100,000 ton per day mill, an almost completed environmental impact statement and a much lower capital requirement. It is at least three years ahead of the others.

Insufficient data is available to evaluate Franconia Minerals.

TeckCominco’s largest Mesaba deposit enjoyed little work in the past several years. TeckCominco appeared demoralized when Polymet outbid it to win the former Erie Mining mill and infrastructure from Cleveland-Cliffs, which now owns 7% of Polymet.

EARLIER STUDY IN 2002 BY MINNESOTA GEOLOGICAL SURVEY AND UNIV. OF MINNESOTA ESTIMATED A LARGER REGIONAL RESOURCE THAN OUR ESTIMATE

In 2002 the Minnesota Geological Survey and University of Minnesota (Miller, et al. republished by Duluth Metals) estimated a 4.4 billion metric tonne resource among the 13 known deposits averaging 0.66% copper and 0.20% nickel using a cut-off grade of 0.50% copper-equivalent.

This study five years ago did not have the benefit of much recent drilling on the properties of Duluth Metals, Franconia Mineral, or Polymet. Its definition of “resources” did not conform either to US SEC or Canadian NI43-101 standards.

It did evaluate some of the ten deposits outside of the control of the four public companies currently active in the Duluth Complex and discussed in this report. Its analysis suggests that up to 2 billion tonnes of material may exist outside of the control of the four companies with 3.1 billion tonnes of resources discussed in our report.

TABLE 1: SURFACE EXPLORATION "INITIAL STAGE" DEFINES DULUTH COMPLEX AS #3 NICKEL WORLDWIDE

	Resource mmt	ni % mm lbs	cu % mm lbs	co % mm lbs	pt g/t 000 oz	pd g/t 000 oz	au g/t 000 oz
Duluth Metals							
West Zone (Nakomis) Measured and Ind.	346.8	0.204	0.617	0.011	0.138	0.31	0.076
West Zone (Nakomis) Inferred	108.0	0.18	0.645	0.009	0.187	0.413	0.098
East Zone (< 10 holes) our estimate	<u>150.0</u>	<u>0.19</u>	<u>0.62</u>	<u>0.01</u>	<u>0.1</u>	<u>0.2</u>	<u>0.1</u>
In Situ Metal	604.8	2,616.6	8,303.4	138.6	2,670.6	5,855.7	1,670.1
Mineability %		75%	75%	75%	75%	75%	75%
Recovery Rate %		72%	95%	40%	84%	85%	61%
PAYABLE METAL		1,409.04	5,909.93	41.58	1,680.45	3,750.57	767.84
Franconia Minerals							
Birch Lake Inferred Resource	100.4	0.19	0.59	0.01	0.32	0.65	0.14
Maturi Inferred Resource	83.1	0.26	0.7	0.02	0.1	0.26	0.05
Spruce Road almost inferred	<u>236.0</u>	<u>0.15</u>	<u>0.5</u>	<u>0.01</u>	<u>0</u>	<u>0</u>	<u>0</u>
In Situ Metal	419.5	1,677.3	5,189.8	110.8	1,300.3	2,793.1	585.6
Mineability %		75%	75%	75%	75%	75%	75%
Recovery Rate %		70%	90%	40%	70%	70%	40%
PAYABLE METAL		880.59	3,503.12	33.24	682.64	1,466.39	175.67
TeckCominco Mesaba(aka Babbitt)							
Open Pit	861	0.11	0.43	<u>0.01</u>	<u>0</u>	<u>0</u>	<u>0</u>
Underground inferred	400	0.19	0.82	<u>0.02</u>	<u>0</u>	<u>0</u>	<u>0</u>
In Situ Metal		3,763.5	15,393.3	366.2	-	-	-
Mineability %		75%	75%	75%	75%	75%	75%
Recovery Rate %		70%	90%	40%	70%	70%	40%
PAYABLE METAL		1,975.84	10,390.49	109.86	-	-	-
Polymet							
Proven and probable	249.2	0.08	0.28	0.008	0.07	0.237	0.03
Measured and Indicated	329.5	0.077	0.26	0.007	0.07	0.232	0.03
Inferred	228.3	0.079	0.275	0.006	0.08	0.265	0.04
In Situ Metal		1,396.4	4,810.8	125.0	1,889.7	6,301.9	851.8
Mineability %		75%	75%	75%	75%	75%	75%
Recovery Rate %		70%	92%	41%	73%	75%	67%
PAYABLE METAL		733.10	3,330.25	38.15	1,030.34	3,554.27	428.03
		ni mm lbs	cu mm lbs	co mm lbs	pt 000 oz	pd 000 oz	au 000 oz
Four majors In Situ Total (ex-10 smaller)	3,092	9,454	33,697	741	5,860	14,951	3,107
Four Majors Payable Metal Total		4,999	23,134	223	3,393	8,771	1,372

Source: Company Reports; John Tumazos Very Independent Research, LLC Estimates. Underlined italics denote that our estimate has been made prior to a company's measurement of its own mineral. TeckCominco and Franconia Minerals' Spruce Road have minor precious metals that neither have calculated nor measured. This is not a "true global resource" as about 10 known deposits exist outside of the control of these four major public companies.

Table 2: Duluth District Valuation Comparisons Base Case

	Duluth Metals	Franconia Minerals	Polymet	TeckCominco
Ni Value @ \$1.00 per payable lb	1,409	881	733	1,976
Cu Value @ \$0.10 per payable lb	591	350	333	1,039
Add Net Cash	22	20	35	-
Deduct Capital Spending	(616)	(616)	(400)	(1,000)
Deduct Environmental Risk Spruce Road Open Pit		(739)		
Subtotal Deposit Value	1,406	(104)	701	2,015
Stock Price	2.75	2	4	
Shares Outstanding F.D.	95.6	66.4	158.8	
Market Capitalization	262.9	132.8	635.2	NM
Mkt Cap Divided by Duluth Complex assets	19%	-128%	91%	NM

Table 3: Duluth District Valuation Comparisons PRICE AND RESOURCE SIZE UPSIDE Case

Ni Value @ \$1.75 per payable lb	2,466	1,541	1,283	3,458
Cu Value @ \$0.175 per payable lb	1,034	613	583	1,818
Add Net Cash	22	20	35	-
Deduct Capital Spending	(616)	(616)	(400)	(1,000)
Deduct Environmental Risk Spruce Road Open Pit		(1,292)		
Subtotal Deposit Value	2,906	266	1,501	4,276
Stock Price	2.75	2	4	
Shares Outstanding F.D.	95.6	66.4	158.8	
Market Capitalization	262.9	132.8	635.2	NM
Mkt Cap Divided by Duluth Complex assets	9%	50%	42%	NM

Source: John Tumazos Very Independent Research, LLC Estimates

GREAT SIMILARITY TO SUDBURY, ONTARIO SULPHIDE MINERALS AND GEOCHEMISTRY, THOUGH NO “METEORITIC THEORY” OF GENESIS HERE

We are attracted to the similar mineralogy of ores in northeastern Minnesota to Sudbury, Ontario, which we visited on June 22nd and Sept. 6th this year. The Duluth deposits enjoy identical copper, nickel, cobalt, platinum, palladium and gold combinations to Sudbury.

Yes the grades have been lower in Minnesota, but little exploration has been done to depth where Sudbury often offers bonanza grades. The Minnesota ores contain no silver, and some of the deposits such as Spruce Road or TeckCominco’s Mesaba have no precious metals at all. Few massive sulphides with total values over 1%-2% nonferrous have been found in Minnesota.

The geochemistry of the Minnesota ores are similar magmatic sulphides as Sudbury. We are optimistic that the recent resumption of exploration and infusion of modern techniques after a long hiatus could prove successful.

THEORIES OF GENESIS

The Duluth Complex deposits stem from the massive MidContinent Rift fault. Roughly 1.1 billion years ago the earth tried to split or rupture, and magmas traveled upwards via the fault. The MidContinent Rift lies under water near the north shore of Lake Superior.

The actions were so violent that the magmatic flow moved northwestward over 100 miles. The magma reacted with adjoining sediment hosted rocks. Something caused the particular economic minerals to concentrate on the contact to the west with certain taconite iron ores.

There is no evidence of meteoritic activity in the Duluth Complex as often Sudbury geologists theorize created the Sudbury massive sulphide flows.

The Duluth Complex gives rise to the possibility that some similar rupture in the earth's crust created both the Duluth Complex and Sudbury systems.

COMPARISON OF PUBLIC DATA OF FOUR PUBLIC COMPANIES TO SEVERAL MAJOR NICKEL EXPANSIONS AROUND THE WORLD

A quick comparison of large projects suggests that Sudbury, Ontario, Norilsk in northwest Russia's Kola peninsula east of Finland and Xstrata's 49%-owned Koniambo deposit shared with the New Caledonia government appear larger than the Duluth Complex based on current known data.

It is important to stress that we define the "Duluth Complex" as the public disclosures of TeckCominco, Duluth Metals, Polymet and Franconia Minerals. Their data is based on 1960s and 1970s drilling and surface holes drilled in the past several years. The Minnesota Geological Survey and Univ. of Minnesota joint 2002 study suggests another 1.5 to 2.0 billion tonnes exist outside of the disclosure of these four public companies probably in the ten other deposits outside of the control of the four public companies.

In other words, future exploration may demonstrate the Duluth Complex is 2 to 4 times larger than we have quantified in Table 1, and it may turn out to be larger in size. We could be selling it short as the fourth largest nickel district in the world of any sort or third largest sulphide, but we do not want to get carried away.

Table 4: CONTAINED NI BEFORE RECOVERY LOSS

	ni bil pounds reserve and resource	
Duluth Complex, MN	9.454	TCK, PLM, DM, FRV
Kabanga 100%, Tanzania	2.738	ABX-Xstrata
Goro, New Caledonia	3.915	CVRD
Koniambo, New Caledonia	14.191	Xstrata
Ravensthorpe, W. Australia	2.105	BHP
Vermelho, Brazil	4.375	CVRD
Onca Puma, Brazil	1.857	CVRD

Source:: Company reports

TWO SHAFTS SUNK TWO GENERATIONS AGO AND “CAPPED” OVER 25 YEARS AGO

Inco, Amax Inc., U.S. Steel and Cleveland-Cliffs conducted much exploration in the region between one-quarter and one-half century ago. Amax Inc. defined the largest TeckCominco Mesaba property. U.S. Steel defined the Polymet Northmet deposit. Inco defined the Maturi deposit of Franconia Minerals that follows onto Duluth Metals property. The entire district has seen just over 2,000 holes drilled/

Amax Inc. sunk a 1,700 foot shaft on the TeckCominco Mesaba deposit, which flooded and was capped around 1980. Inco sunk a 1,000 foot shaft on the Maturi deposit now owned by Franconia Minerals, and filled the shaft in and capped it also around 1980.

The state of Minnesota requires that one-fourth of all drill cores be deposited in the state core shed (maybe world's largest) in Hibbing, MN. This provides a data repository.

Today, platinum and palladium have become valuable and technology to identify, measure and recover them improved. Second, hydroleach autoclave technology can recover these deposits very cheaply. Third, major advances in open pit mining enable the low grade ores to be extracted more cheaply. Finally, high metals prices encourage development although Polymet expects fine returns at \$1.25 copper and \$5.60 nickel.

LACK OF UNDERGROUND EXPLORATION SO PRODUCTIVE IN RECENT YEARS IN SUDBURY, ONTARIO

No underground exploration has been done in over 25 years in this district. In Sudbury, Ontario much of the greatest success has been underground exploration. Much occurs “by accident” as shafts and tunnels and infrastructure needed for production of already known zones inadvertently encounters new zones never anticipated.

Once underground, geologists may “see” geology. High grade “stringers” may be encountered. Drill platforms several thousand feet underground are more cost effective in locating deposits unable to be tested from surface.

We do not believe that 1960s and 1970s work updated with recent surface exploration has found even one-half of the ultimate size of the Duluth Complex nickel-copper ores.

Table 5: Estimated Duluth Metals Income Statement

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nickel Revenues	44%							148.2	197.6	197.6	197.6	197.6	296.4	296.4
Copper	42%							142.0	189.4	189.4	189.4	189.4	284.1	284.1
Cobalt	1%							3.4	4.5	4.5	4.5	4.5	6.8	6.8
Platinum	7%							22.2	29.5	29.5	29.5	29.5	44.3	44.3
Palladium	5%							15.8	21.0	21.0	21.0	21.0	31.6	31.6
Gold	2%							6.3	8.4	8.4	8.4	8.4	12.6	12.6
Total Sales	100%	0	0	0	0	0	0	337.9	450.5	450.5	450.5	450.5	675.7	675.7
Underground mining								82.1	109.5	109.5	109.5	109.5	164.3	164.3
Milling and autoclave								82.1	109.5	109.5	109.5	109.5	153.3	153.3
Outside refinery 25% take (alternative expression as no revenue and no cost)								49.0	65.3	65.3	65.3	65.3	97.9	97.9
Administration		4.0	4.0	4.0	4.0	7.0	10.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Exploration, research, feasibility		10.0	10.0	7.0	7.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0	10.0	10.0
Depreciaton		0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0	30.0	30.0	30.0	40.0	40.0
Other expense, net		1.0	1.0	1.0	1.0	1.0	1.0	-1.7	-0.2	-0.8	-0.4	-0.1	-0.2	-0.8
Interest Expense		-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	42.0	40.0	36.0	30.0	30.0	30.0	22.0
Pretax Income		-14.6	-14.6	-11.6	-11.6	-12.6	-15.6	34.3	76.4	76.0	81.6	87.3	165.5	174.0
Income Taxes		0.0	0.0	0.0	0.0	0.0	0.0	1.0	22.9	22.8	24.5	26.2	49.6	52.2
Net Income		-14.6	-14.6	-11.6	-11.6	-12.6	-15.6	33.3	53.5	53.2	57.1	61.1	115.8	121.8
Primary Shares		57.0	80.0	100.0	115.6									
Fully Diluted Shares		95.6	105.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6
EPS		-\$0.26	-\$0.18	-\$0.12	-\$0.10	-\$0.11	-\$0.14	\$0.29	\$0.46	\$0.46	\$0.49	\$0.53	\$1.00	\$1.05
Tonnes Ore at Reserve Grades (000)								5,475	7,300	7,300	7,300	7,300	10,950	10,950
Ni recovery 71.8%	71.8%							0.19	0.19	0.19	0.19	0.19	0.19	0.19
Cu recovery 94.9%	94.9%							0.62	0.62	0.62	0.62	0.62	0.62	0.62
Co recovery 40%	40.0%							0.01	0.01	0.01	0.01	0.01	0.01	0.01
Pt recovery 83.9%	83.9%							0.15	0.15	0.15	0.15	0.15	0.15	0.15
Pd recovery 85.4%	85.4%							0.35	0.35	0.35	0.35	0.35	0.35	0.35
Au recovery 61.3%	61.3%							0.09	0.09	0.09	0.09	0.09	0.09	0.09
Ni mm lbs								16.47	21.96	21.96	21.96	21.96	32.93	32.93
Cu mm lbs								71.02	94.69	94.69	94.69	94.69	142.04	142.04
Co mm lbs								0.48	0.64	0.64	0.64	0.64	0.97	0.97
Pt oz								22,155	29,540	29,540	29,540	29,540	44,311	44,311
Pd oz								52,620	70,160	70,160	70,160	70,160	105,240	105,240
Au oz								9,712	12,950	12,950	12,950	12,950	19,425	19,425
Mining/backfill cost per tonne								15	15	15	15	15	15	15
Milling and autoclave cost per t								15	15	15	15	15	14	14
Ni price								9	9	9	9	9	9	9
Cu price								2	2	2	2	2	2	2
Co price								7	7	7	7	7	7	7
Pt price								1000	1000	1000	1000	1000	1000	1000
Pd price								300	300	300	300	300	300	300
Au price								650	650	650	650	650	650	650

Source:: John Tumazos Very Independent Research, LLC Estimates

Table 6: Estimated Sources of Funds

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Net Income		-14.6	-14.6	-11.6	-11.6	-12.6	-15.6	33.3	53.5	53.2	57.1	61.1	115.8	121.8
Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0	30.0	30.0	30.0	40.0	40.0
Deferred Taxes		0	0	0	0	0	0	0.3	5.7	5.7	6.1	6.5	12.4	13.1
Other Noncash Charges		0.4												
Debt					175	175	175					100		
Equity		18.3	100											
Asset Sales														
Other Items, Net														
Total Sources of Funds		4.1	85.4	-11.6	163.4	162.4	159.4	63.6	89.2	88.9	93.2	197.7	168.2	174.9
Uses of Funds														
Capital Spending		5	25	50	125	175	150	50	25	25	25	170	75	25
Dividends													28.9	28.9
Debt Repayment								25	50	75	75	25	50	125
Noncash Working Capital								25						
Change in Cash		-0.9	60.4	-61.6	38.4	-12.6	9.4	-36.4	14.2	-11.1	-6.8	2.7	14.3	-4.0
Total Uses of Funds		4.1	85.4	-11.6	163.4	162.4	159.4	63.6	89.2	88.9	93.2	197.7	168.2	174.9

Table 7:

Balance Sheet	12-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cash	8.9	8.0	68.4	6.8	45.2	32.6	42.0	5.6	19.9	8.8	2.0	4.6	19.0	14.9
Accounts Receivable	0.0	0.1	0.1	0.1	0.1	0.1	0.1	33.8	45.0	45.0	45.0	45.0	67.6	67.6
Inventory								27.0	36.0	36.0	36.0	36.0	54.1	54.1
Prepaid asses	0.7	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Current Assets	9.7	8.6	69.0	7.4	45.8	33.2	42.6	67.4	101.9	90.8	84.1	86.7	141.6	137.6
PPE Fixed Assets	0.1	5.0	30.0	80.0	204.9	379.9	529.9	549.9	544.9	539.9	534.9	674.9	709.9	694.9
Total Assets	9.7	13.6	99.0	87.4	250.8	413.1	572.5	617.3	646.8	630.7	618.9	761.6	851.5	832.4
Current Liabilities	0.4	0.6	1.0	1.0	1.0	2.0	3.0	35.8	55.1	54.6	54.1	53.6	93.6	93.1
Debt					175.0	350.0	525.0	500.0	450.0	375.0	300.0	375.0	325.0	200.0
Reclamation								1.0	2.0	2.5	3.0	3.5	4.0	4.5
Deferred Taxes					0.0	0.0	0.0	0.3	6.0	11.7	17.8	24.4	36.8	49.8
Shareholders Equity	9.4	13.0	98.4	86.8	75.2	62.5	46.9	80.2	133.7	186.9	244.0	305.2	392.1	485.0
Total Liabilities	9.7	13.6	99.4	87.8	251.2	414.5	574.9	617.3	646.8	630.7	618.9	761.6	851.5	832.4

Source: Duluth Metals; John Tumazos Very Independent Research, LLC estimates

Table 8: Net Present Value

Balance Sheet	12-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cash in		27.6	0.0	0.0	0.0	0.0	0.0	63.6	89.2	88.9	93.2	97.7	168.2	174.9
Cash out		19.6	39.6	61.6	136.6	187.6	165.6	75.0	25.0	25.0	25.0	170.0	75.0	25.0
Discount factor at 9%		1	1.09	1.1881	1.295	1.4116	1.53862	1.6771	1.828039	1.99256	2.171893	2.36736	2.580426	2.812665
Net cash flow in current \$		8.0	-36.3	-51.8	-105.5	-132.9	-107.6	-6.8	35.1	32.1	31.4	-30.6	36.1	53.3
Cumulative NPV of cash by year		8.0	-28.3	-80.2	-185.7	-318.6	-426.2	-433.0	-397.9	-365.8	-334.4	-364.9	-328.8	-275.5
Alternate 7% discount factor		1	1.07	1.1449	1.225	1.3108	1.40255	1.50073	1.605781	1.71819	1.838459	1.96715	2.104852	2.252192
Net cash flow in current \$		8.0	-37.0	-53.8	-111.5	-143.1	-118.1	-7.6	40.0	37.2	37.1	-36.8	44.3	66.5
Cumulative NPV of cash by year		8.0	-29.0	-82.8	-194.3	-337.4	-455.5	-463.1	-423.1	-385.9	-348.8	-385.6	-341.3	-274.8

INTERPRETIVE COMMENT: THE PROJECT ENJOYS A "CASH PAYBACK BREAKEVEN YEAR" AT THE END OF 2023 AT A 7% AND THE MIDDLE OF 2025 AT A 9% DISCOUNT FACTOR. This stems from the outlay of upwards of \$600 mm prior to 2013 revenue and another \$250 mm in 2017-18 for presumed expansion to 30,000 from 20,000 metric tonnes per day after which the cash generation is particularly fine.

Duluth Metals will enjoy about 1.25 billion pounds of "payable nickel," 5 billion pounds of payable copper and over 5 mm oz of combined pt, pd and gold "in the ground" at the beginning of 2020 to which we assign a value near \$2 billion, whose terminal value drives mine construction.

The 20,000 metric tonne per day "cash breakeven" is near \$5 nickel, \$1.50 copper and the generous \$1,000 pt, \$300 pd and \$650 gold scenario. While many permutations of metals price scenarios can be defined in the six product price array, we estimate the 2019 30,000 metric tonne per cash breakeven is near \$5 nickel, \$1.15 copper, \$7 cobalt, \$1,000 pt, \$300 pd and \$650 gold. We did not inflate either selling prices or costs.

Source: John Tumazos Very Independent Research, LLC estimates

FIVE VALUATION ALTERNATIVE APPROACHES

Enterprise value per pound of reserves, P/E on pro forma earnings, net present value, qualitative geologic inference and probability of permitting/environmental risk discount are five alternative approaches to valuing a "deposit" company like Duluth Metals. It has a deposit, but may prove five years away from earnings.

It has established a measured and indicated resource, and on October 4th published its first estimate of metallurgical recovery rates. It has completed two vital building blocks of a feasibility study, but detailed engineering, capital cost estimates, economic analysis, sequencing,

base line environmental studies, draft EIS, comments and final environmental approval remain. Once in hand, final construction contracts, equipment orders, shaft sinking and project construction may begin. Much work remains.

The stock appears worth five to ten times its recent price based on enterprise value per pound analysis, using either \$1.00 ni/\$0.10 cu as a “base case” and \$1.75 ni / \$0.175 per pound cu resource valuation metrics. A buyer with a very long time horizon like Aluminum Company of China, Anglo-American, Rio Tinto or others might use this approach, NPV, geologic inference and environmental risk discounts in moving ahead.

NPV is virtuous, but choice of a commodity price scenario, cost growth metric or discount rate may complicate it. NPV analyses pay little value for resources to be mined over 20 years into the future, and Duluth Metals has a good chance of a 60 year life as a 30,000 tonne per day underground mine and mill. One company we visited recently “inflated” its commodity price revenue each year, high graded by 60% in its first decade and chose a very low cost metric for a “downhill truck haul” in its first decade. Such schemes can distort a P/E approach as well.

Qualitative factors should be considered. Infill drilling may increase the “West Zone” of the Maturi or Nakomis resource. The newer “East Zone” appears significant, and we estimated it was one-third of the size of the current known West Zone. Duluth Metals’ land position is finish and appears limited to its one key deposit, but 600+ mmt with over \$100 per tonne of contained revenue is plenty adequate.

ENTERPRISE VALUE PER POUND, NPV AND P/E APPROACHES CONVERGE INTO ON ANOTHER IN OUR OPINION

In our tables 2 and 3 we compare the publicly traded Duluth Complex companies in an enterprise value per pound framework. We assign a “base case” conservative \$1.00 per pound of nickel, \$0.10 per pound of copper and assign no explicit value to the four coproducts offering 14% of future revenue in our estimates.

In table 8 we calculate a formal NPV for Duluth Metals, which hinges on the “subjective” estimate of terminal value in 2020. The “terminal value” will be estimated either from “cents per pound” of mineral in the ground or else a “P/E” to the going concern on the 30,000 metric tonne per day scenario with one incremental 50% expansion in 2017-18 after startup in 2013 at 20,000 metric tonnes per day.

We believe a 15 P/E in 2019 will be appropriate owing to the 60 year resource life at a 30,000 metric tonne per day production rate, its low costs and the relative scarcity of most of the minerals Duluth Metals will produce.

ENVIRONMENTAL RISK FACTORS

We believe there is a large chance of environmental delay, and a small chance of complete rejection. This is a key reason we factored 5 ¼ years to startup. Minnesotan regulators are meticulous, and will ask for various alternative studies and hear public comments.

We believe this project is lower risk, even though it lies near the northern end of the mineral belt and lies within ten miles of the Boundary Waters Wilderness Area. First and foremost, it will be an underground mine with one-tenth of the environmental disturbance of an open pit. Duluth is the only one of the four public companies on the Duluth Complex mineral belt that its SOLELY

underground. Second, it will practice a “room-and-pillar” mining method in which roughly “half” of its tailings will be replaced into the underground mine as “cemented backfill” for support, stability and waste disposal. Third, its chalcopyrite, cubanite and talmanite host rocks are not acid generating sulphides like the pyrrhotite common to Polymet or TeckCominco’s surface deposits. Fourth, the RECOVERABLE, PAYABLE metal resources of the four public companies are near \$170 billion at current prices, and to date the environmental movement has never stopped an entire mineral district or class of deposits nor any economic value of such massive size.

Instead, past environmental objections have focused on specific projects with specific real or imagined defects or risk factors. The Macdonald gold deposit near Lincoln, Montana, for example, had no fatal defect in our opinion. The economic “opportunity cost” involved in its rejection might be characterized as 75% recovery of 10-13 mm oz “in situ” or \$6-\$7 billion in today’s dollars. The Duluth Complex, based on current knowledge that might not be even 50% of the ultimate resource base, appears to be 25 to 50 times larger than any project previously rejected in the U.S.

QUALITATIVE GEOLOGIC INFERENCE OF POTENTIAL RESERVE EXPANSION

Since the mine offers a 60 year life at 100% of its resource at a 30,000 metric tonne per day rate, it is not critical for this company to find more mineral. Some could “pooh pooh” the exploration potential because the land package is a specific, finite portion of the mineral belt.

However, we foresee at least three opportunities. First, most of the current drill spacing has been done on 200 meter spacings in the “west zone” of the Nakomis deposit near the historic Maturi shaft of Inco. It is possible that securities law and personal liability considerations encourage a conservative interpretation of information, and that the contained tonnes or mineral grades will improve 5% to 10% or more when the drill spacings are tightened from 650 to 100-300 feet.

Second, the “west zone” is “open” to the east and south.

Third, Duluth Metals has placed just over ten holes into the “east zone” with similar grades enjoyed for nickel and copper and slightly higher total precious metals grades as the “west zone.” Duluth Metals does not have enough information to attempt to calculate a mineral resource on the “east zone,” but we assigned it one-third of the value of the “west zone” or 150 mmt at the same grades. The thickest “east zone” hole was 570 feet and most range in the 40 to 200 foot thickness.

Fourth, future underground shafts and tunnels may inadvertently or accidentally discover unsuspected or “above plan richness” zones such as sometimes Sudbury, Ontario miners enjoy. For example, we walked through the 87 foot long “bronze tunnel” of FNX Mining’s Podolsky 2000 zone on September 6 that contains about 26.5% copper, 1.5% nickel and 0.6 ounce (emphasis ounces not grams and note there are 31.1 grams per oz in a metric tonne and 34.3 rams per oz in a English ton; further, one gram per metric tonne = one part per million) total pt, pd and au.

Fifth, certain exploration techniques are “more effective” from within a mine rather than remotely from surface over 2,500 feet from the deposit. Downhole geophysics, drill accuracy and visual mapping are much more effective as well as perhaps one-tenth as costly. It is likely that Duluth Metals’ geologists will postpone some evaluations until they can be done more easily, cheaply and reliably from depth. After all, Duluth Metals has plenty of ore.

EXCEPTIONAL DRILL CORE RECOVERY OR “COMPETENCE” BODES WELL FOR UNDERGROUND MINE CONDITIONS

We were greatly impressed at the visible sulphides (bronze spots or blotches in nearly black host rock) in the drill cores of Duluth Metals, Franconia Minerals or Polymet.

We were most impressed at the “solid pipe” nature of the drill cores recovered by Duluth Metals or the neighbor Franconia Minerals. A typical “box” of drill cores appeared to have maybe one natural break. Sometimes drill crews “break the stick” for their own ease of handling, and not all breaks in the boxes of cores represent natural weaknesses in the host rock.

“Competent” host rock facilitates easier mining. The adverse circumstance miners seek to avoid are conditions like the recent Newmont Mining Leeville underground mine in Nevada for which large amounts of steel and cement support were necessary to make tunnels safe, and the cost per ton was nearly double initial estimates and the pace of mining much slower owing to the need to fortify the naturally “incompetent” rock. Further, the faults, cracks and fissures that make rocks weak can be conduits for ground water, and large amounts of water can be another problem. Barrick Gold’s Meikle underground mine in Nevada at one point pumped up to 68,000 gallons per minute of 140 degree Fahrenheit water, which complicates mine operation, environmental permitting and community relations with neighbors in agriculture or recreation. “Fewer cracks are better” from all vantage points.

ROOM AND PILLAR RECOVERIES TREATED AT 75% THOUGH 85% EXTRACTION TARGET ARTICULATED

Both Duluth Metals and neighbor Franconia Minerals plan to use the “room-and-pillar mining method, which the unusually competent host rock structure encourages. They plan to take about 65% of the separately-owned deposits in the “first pass,” use cemented-waste-backfill to dispose of half of the ground ore tailings and hope to extract another 20% of the original deposit to leave just 15% of the ore behind as “permanent pillars.”

In our economic analysis we gave credit to just 75% each deposit. There may be some appendages or portions that do not fall into the economic mine plan, and it may prove possible to remove more or less of the pillars than planned.

In the early twentieth century the Treadwell gold mine, operated by the Alaska Juneau mining company just west of Juneau from Admiralty Island, removed “a few pillars too many.” The Gastineau Channel began to enter the mine as the ocean floor, which was the ceiling of the deposit, caved. Sufficient warning permitted miners to exit, but dozens or hundreds of work mules drowned.

USE OF NEIGHBOR’S CAPITAL COST ESTIMATE IN ABSENCE OF DULUTH METALS COMPLETION OF ITS OWN CALCULATION

Neighbor Franconia Minerals estimates a \$616 mm capital cost to build a 18,000 tonne per day mill. Its capital cost should be higher than Duluth Metals because Franconia needs to sink shafts into two separate underground deposits, Birch Lake and Maturi, which weighs in favor of Duluth Metals having lower capital costs. However, Duluth Metals is deeper and we have factored in a slightly larger 20,000 tonne per day mill.

We have used the capital cost estimate of Franconia Minerals in view of Duluth Metals not having published one nor a prefeasibility study. We sense such efforts are “in earnest,” and we respect Duluth Metals silence as it undertakes its evaluation.

There is a chance the capital costs turn out to be 10% less for Duluth. However, the 600+ mmt potential resource is so large that Duluth Metals may ultimately have two or three production shafts and a much larger operation than the 30,000 metric tonne per day scale we envision.

POTENTIAL BENEFITS OF A MERGER WITH NEIGHBOR IGNORED, THOUGH PLAUSIBLE AND LOGICAL

Operation of “one mine” combining the Franconia Minerals Maturi, whose 1,000 foot shaft was “filled” about 25 years ago by Inco, with the Duluth Metals “Nakomis” west and east deposits would be safer. Joining the tunnel systems, ventilation and shafts would provide multiple means of egress in the event of an accident and better ventilation.

Second, combining facilities would reduce the environmental footprint. We do not believe there will be fewer underground mine shafts because the sheer size of the deposits encourages multiple shafts to permit large scale production. However, there may be one rather than two mills, one pressure oxidation/autoclave building slightly smaller than two and one tailings disposal rather than two. Warehouses, service shops, administrative offices and other infrastructure would not need to be duplicated. We estimate that about ten fewer acres would be disturbed if the projects joined.

Third, capital and operating costs should be less accordingly. The capital savings might range from \$50 to \$150 million, and operating cost savings might be near 5%-10% or \$15 to \$35 million for each firm.

State of Minnesota environmental agencies might suggest such a plan, but they have no power other than “foot dragging” to force such an outcome.

TIMING

We have provided a 6 to 12 month “contingency” in our schedule for 75% of “capacity” output in 2013. Many unknowns exist.

First, “baseline” environmental data must be collected to “inventory” plant and animal life prior to submitting a draft environmental impact study (EIS). Various building blocks of feasibility study must be complete. Duluth Metals has published a form 43-101 “measured and indicated” resource and recovery rates, obviously, but not a firm capital spending number. We do not know when prefeasibility or final feasibility study will be completed, but under one year is plausible.

We have estimated 20,000 metric tonnes per day is a reasonable initial scale, and this can be expanded 50% after four years of output. Too much “up front” capital expending may be dilutive or require too much initial debt or lenders may suggest hedging, which suggests a “phased approach” is ideal. We have estimated a draft EIS is submitted in 2H2008 and approved 2H2010.

We estimate shaft sinking begins after final permits are in hand and legal challenges over. Yes both the permitting and shaft sinking could be completed in under 2 years, but we do not want to get “carried away. The surface mill and autoclaves presumably will be built concurrently, and may require less time than underground shaft and tunnel development.

FINANCING

We have estimated Duluth Metals issues 20 mm shares at US \$5.00 each in mid-2008 to raise \$100 mm in equity, and borrows the remainder of the funds needed at 8%. We estimate it uses internal cash flow and \$100 million of debt in 2017 to expand 50%. We estimate year-end 2019 balance sheet will contain \$200 mm in debt and \$485 mm in equity.

TARGET PRICE AND INVESTMENT VIEWPOINT

We initiated coverage with an Overweight investment recommendation and a US \$10 per share price target based on (1) the potential for more mineral to be defined and better economics than we have modeled to be established, (2) a likely high P/E owing to potential 50+ year reserve life, (3) relatively low \$5 nickel and \$1.00-\$1.50 copper direct cash cost breakeven points, (4) takeover appeal and (5) \$1.00 per share of earnings estimated at a 30,000 metric tonne per day operating scale after a 50% second phase expansion.

Clearly the 2013 time frame for revenue and ever present environmental challenges exist, though the underground nature lessens environmental impacts, the depressed iron ore range employment picture and a \$25 billion future revenue profile at \$9 nickel, \$2 copper and one-half to two-thirds payability suggest the Minnesotans will need and support this project.

We estimate this stock will be worth \$15 to \$20 per share after it demonstrates a 24 month production history around 2014 or 2015 to verify all operating parameters.

RISKS

Timing of environmental approval, lengthy litigation, final environmental approval, capital cost overruns, operating cost overruns, metals prices, exchange rates and the global economic cycle each represent major risks.

The presence of six separate minerals or three “groups” of products, nickel, copper and precious metals, provides a sort of diversification. However, historically a large covariance exists among the various metals.

Duluth Metals and the other neighboring projects each should be able to produce a salable refined copper finished product. However, the other five minerals will be collected within a “nickel concentrate” that might be resold to CVRD, Xstrata, Japanese refineries, Norilsk, Outokumpu or some others. Until the Duluth Complex regional companies join force to build such a refinery, the outside processing will involve transport costs, fees and about a 25% “take away” or ownership of the metals by the custom nickel refinery.

CHANGE IN THIS RESEARCH OPERATION

This report reflects research coverage by JTVIR, LLC. In no way shape or form should it be misconstrued as involving Prudential Equities Group (PEG), which shut down on June 6, 2007 as noted. The continuation of that same quarterly or full year earnings estimate for 2007 as JTVIR, LLC should not be construed or mistaken to involve PEG, which shut down on June 6, 2007. Certain data, such as the logic of the earnings model, are similar owing to the same primary author, but this coverage initiation herein involves a different entity and no employment or affiliation with the former Prudential Equity Group, LLC.

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“John Tumazos Very Independent Research, LLC” (JTVIR) is a Delaware Corporation with registration effective on August 27, 2007 as an investment advisor in the state of New Jersey owing to our place of business in New Jersey.

JTVIR is not a broker-dealer, and conducts no trades. Its primary business is to provide “unbundled” metals and paper industry securities and market research to institutions or corporations in a zero commission, electronic execution, electronic dissemination, unbundled format for a specified annual fee structure.

Our investment rating system for securities recommendations is Overweight, Neutral Weight or Underweight. Overweight or Underweight recommendations are estimated to vary from the relative performance of the S&P 500 by more than 10% annually, and the intended time horizon is up to 24 months. Our securities research is intended for institutional investors that might buy up to 10% of a given company, and as such focuses more towards longer-term dynamics impacting the net present value of future cash flows rather than “day trading” sorts of near-term issues.

Except for 32,400 shares of Polymet Mining that John Tumazos bought between April 18 and 23, 2007 (outside counsel advised ownership more than 30 days prior to publishing or contemplating was the definition of a long-term holding and not “front-running”), neither JTVIR, its members or its employees own or have a financial interest in any securities discussed in this report. Our policy is full disclosure.

Our policy permits personal trading in the metals or paper industries, though no positions were taken in companies within regular research coverage after July 2001 after joining Prudential Financial and until after one month of completed New Jersey registration of JTVIR. Our policy is that any personal trading must be consistent with our recommendation, made two business days or more AFTER a recommendation or change in recommendation and held for a minimum of 30 days or one month. We believe it is virtuous for a securities analyst to “put his or her money where his mouth is” to invest consistent with the recommendation to clients after such recommendation has been made, and we disagree with some restrictions made upon broker-dealer employees after 2000 era scandals.

Our policy permits up to three directorships and up to five consulting projects, advisory assignments or financial advice to corporations that might supplement, backcheck or substitute for certain services of a large investment banking firm. For example, we would accept an engagement to evaluate investment banking advice on behalf of a manufacturing company concerned whether advice is sincere or intended to maximize fees. Currently no such relationships exist.

Our policy is full disclosure of any advisory relationship or conflict going back three years. None currently exist.

Numerous prior investment banking relationships existed prior to three years history to the pre-1997 time frame under the employment of Donaldson, Lufkin and Jenrette or Oppenheimer & Co., Inc. Some of these we can recollect included 14 different gold mine valuations or sales for Barrick Gold, LAC Minerals (later acquired by Barrick), Addington Resources (gold assets in Montana acquired by Canyon Resources), Westworld Industries (Bolivian assets acquired by Battle Mountain Gold later acquired by Newmont Mining), Coeur d'Alene Mines, Crown Resources (acquired by Kinross Gold), Freeport-McMoRan Gold (acquired by Minorco later AngloGold later Queenstake Resources), FMC Gold (later renamed Meridian Gold) and others. Sole managed initial public offerings included Reliance Steel & Aluminum and Huntco. Lead-managed initial public offerings included American Steel & Wire (later acquired by Birmingham Steel) and lead-managed underwritings included Quanex. Co-managed underwritings included the IPO of Century Aluminum and offerings for AK Steel, Kaiser Aluminum, Agnico-Eagle Mines, Cameco and others. Asset sales or purchase advisories, fairness opinion or trusteeships were done for Thyphyn Steel (sold to Ryerson Tull), Cyclops Corp. (sold to Armco later sold to AK Steel), Allegheny Corp., Bethlehem Steel, the U.S. Dept. of Justice pursuant to the June 1984 merger of LTV and Republic Steel to sell the Gadsden, AL integrated flat-rolled mill, Cobre Copper, and others. Typically more than five investment banking assignments were evaluated, partly executed or "due diligenced" for any completed transaction. Some examples we can recall for which a prospectus was either drafted or partly drafted indicating much work included stock underwritings not completed for Wheeling-Pittsburgh Steel, Steel Dynamics, Atlas Corp., Webco, Sharon Steel, IPSCO, Co-Steel Inc., and others.

ANALYST UNIVERSE COVERAGE:

John C. Tumazos, CFA: Rio Tinto, Louisiana-Pacific, Nucor Corp., Newmont Mining, U.S. Steel, International Paper, BHP Billiton, MeadWestvaco Corp., Antofagasta PLC, Allegheny Technologies, Alcoa Inc., Inco Limited, Bowater, Inc., Temple-Inland, Barrick Gold, Abitibi-Consolidated, Weyerhaeuser Co., Alcan Inc., Smurfit-Stone Container, Plum Creek Timber, Worthington Industries, Goldcorp Inc., AngloGold Ashanti, Freeport McMoRan Copper & Gold, Novelis Inc., FNX Mining.

Dynatec is a company not continued in the research coverage of JTVIR, LLC that was previously included in the prior June 6, 2007 Prudential Equities Group universe owing to a pending takeover by Sherritt International. Alcan, which Rio Tinto soon will acquire, also will be discontinued from coverage.

Subsequently, since September 2007 JTVIR, LLC has initiated coverage of new companies not previously covered in the former universe. These new companies include General Moly, Inc., Duluth Metals, Polymet Mining and Century Aluminum.

In accordance with applicable rules and regulations, we note above parenthetically that our stock ratings of "Overweight," "Neutral Weight," and "Underweight" most closely correspond with the more traditional ratings of "Buy," "Hold," and "Sell," respectively; however, please note that their meanings are not the same. (See the definitions above.) We believe that an investor's decision to buy or sell a security should always take into account, among other things, that the

investor's particular investment objectives and experience, risk tolerance, and financial circumstances. Rather than being based on an expected deviation from a given benchmark (as buy, hold and sell recommendations often are), our stock ratings are determined on a relative basis (see the foregoing definitions).

There is no intention to "balance" the number of Overweight or Underweight ratings, as instances of broad over- or under-performance among basic industrials may occur. JTVIR makes each investment judgment in a "bottoms up" manner based on the assets of each individual company.

Price Target – Methods/Risks

The methods used to determine the price target generally are based on future earning estimates, product performance expectations, cash flow methodology, historical and/or relative valuation multiples. The risks associated with achieving the price target generally include customer spending, industry competition and overall market conditions.

Additional risk factors as they pertain to the analyst's specific investment thesis can be found within the report.

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