TECHNICAL REPORT ON THE MINERAL RESOURCE ESTIMATE FOR THE MATURI PROPERTY, MINNESOTA, U.S.A.

PREPARED FOR FRANCONIA MINERALS CORPORATION

Report for NI 43-101

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1 SUMMARY

INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Franconia Minerals Corporation (Franconia) to carry out an independent estimate of the mineral resources of the Maturi copper-nickel PGM deposit, Lake County, Minnesota and to prepare a National Instrument 43-101 (NI 43-101) compliant report. This technical report was written by RPA in accordance with the requirements of NI 43-101, Companion Policy 43-101CP, and Form 43-101F1 of the Ontario Securities Commission (OSC) and Canadian Securities Administrators (CSA).

LAND STATUS

The Maturi deposit is covered by Federal Mineral Lease US ES01352 that is held by the Beaver Bay Joint Venture in trust for Franconia. The lease is located in Lake County, Township 62N, Range 11W of the Fourth Principal Meridian, in parts of sections 32 and 33; and Township 61N, Range 11W in parts of sections 5, 6 and 8. The lease encloses a total of 1,056.28 hectares (2,610.07 acres) including lands that are non-contiguous with the portion of the lease that covers the Maturi deposit. These other lease lands lie in T.61N, R.11W Sections 7, 9, 18, and 19 and T.62N, R.11W sections 27 and 34 as well as T.61N, R.11W, Section 25 in St Louis County.

The lease is administered by the Bureau of Land Management and carries rights to mine, remove, and dispose of all minerals excepting oil, gas, oil shale, coal, phosphate, sodium, and sulphur.

The Maturi property is within the Lake Superior National Forest and part of the Bear Island State Forest. The Boundary Waters Canoe Area Wilderness lies north and east of the property.

EXPLORATION HISTORY

The area has been prospected for iron since the mid 1800's and open pit iron mining the Biwabik Iron Formation has been ongoing since 1884. The Duluth Complex has been explored for copper-nickel deposits since the 1950's after sulphides were exposed during road construction in the Spruce Road deposit area in 1948. Significant PGE content accompanying the copper-nickel mineralization came to light through Minnesota Department of Natural Resources analysis of drill core at Birch Lake in 1985.

The American Copper and Nickel Company (ACNC) acquired most of the current Maturi property from its parent International Nickel Company (Inco) in 1951 to 1953 and carried out surface and limited underground diamond drilling, sank a shaft and developed a drift, and performed metallurgical tests to 1988.

Wallbridge Mining Company (Wallbridge) optioned the Maturi and Spruce Road properties from 1999 to 2000. Wallbridge drilled one hole, verified data, analyzed core rejects, estimated resources and carried out a scoping study on the Maturi deposit. Wallbridge estimated 52.1 million tonnes grading 0.76% Cu, 0.28%Ni, 0.02% Co, 0.24 g/t Pd, 0.11 g/t Pt and 0.05 g/t Au for the deposit as wireframed from 0.7% Cu grade contouring.

In May 2005, Franconia and its joint venture partner, the Beaver Bay Joint Venture, acquired from ACNC a 100% interest in 2,105 hectares (5,201 acres) of mineral rights that cover the Maturi and Spruce Road deposits subject to ACNC's right to 7.5% of net distributable earnings for any future production from the property.

No exploration is being carried out on the Maturi property at the present time although exploration is active on the east adjoining Duluth Metals Limited Maturi Extension property and Franconia's Birch Lake property to the southeast.

GEOLOGY AND MINERALIZATION

The Maturi property is in the Superior Province of Canadian Shield which includes Early Precambrian Middle Precambrian and Late Precambrian sedimentary and intrusive rocks. The Algoman and Penokean Orogenies, which deformed and metamorphosed Early and Middle Precambrian rocks, were accompanied by granitic intrusions.

The Middle Proterozoic, Midcontinent Rift System, extending from Lake Superior south to Kansas in the subsurface, consists of mafic flows and intrusions and rift-filling sedimentary rocks. Intrusions of the Duluth Complex was related to this period of rifting and is cogenetic with Keweenawan volcanics to the east in Michigan.

The Duluth Complex covers 6,500 km^2 and consists of 12 sub-intrusions emplaced over a 10 to 12 million year period. The complex consists of an Anorthosite Series, a Troctolitic Series and a late stage, differentiated Felsic Series. The intrusive footwall in contact with the Giants Range batholith west of the Maturi property has a sharp to gradational contact dipping -10˚ to -35˚ southeast. Hanging wall contacts are gradational with the overlying basalts. Weiblen and Morey proposed an emplacement model in which step and rise normal faults, with steep southeast dips, occur parallel to the trend of the basal contact later magma injected along these structures formed the complex.

The Maturi Cu-Ni-PGE mineralization consists of 1 % to 5 % disseminated chalcopyrite, cubanite, pentlandite, pyrrhotite, bornite, mackinawite, violarite, pyrite, magnetite and ilmenite that forms a tabular zone in the Basal Heterogenous Zone in the lower part of the South Kawishiwi Intrusion (SKI), part of the Duluth Complex. The zone lies at, and immediately above, the footwall contact of the SKI. Better grades of copper, nickel and PGEs are associated with more mafic units near the top of the mineralized zone and there is good continuity from hole to hole and from section to section of widths and values.

MINERAL RESOURCES

Other than one twin hole drilled by Wallbridge, no new sampling has been done since 2000. RPA obtained the digital database and digital geological models from Wallbridge and independently estimated the resources. The RPA estimate is based on Wallbridge's wireframe model (0.4% Cu envelope), ordinary kriging interpolation using an net smelter/process return (US$/tonne NSR) cut-off approach to report resources at incremental NSRs. Based on RPA's review of current economic factors, including operating costs, metallurgical recovery, metal prices and revenue criteria, the US$25 NSR cut-off is reasonable for resource estimation at the Maturi deposit Table 1-1).

TABLE 1-1 SUMMARY OF INFERRED MINERAL RESOURCES
Franconia Minerals Corporation - Maturi Deposit, Minnesota

NSR Cut-Off (US$)	Tonnes (millions)	Cu%	Ni%	Co%*	Pd** g/t*	Pt*** g/t	Au*** g/t
$17.00	155	0.63	0.24	0.02	0.236	0.084	0.039
$18.00	145	0.64	0.24	0.02	0.239	0.086	0.040
$19.00	134	0.65	0.25	0.02	0.243	0.088	0.041
$20.00	121	0.67	0.25	0.02	0.247	0.090	0.043
$21.00	106	0.68	0.26	0.02	0.252	0.092	0.044
$22.00	90.6	0.69	0.26	0.02	0.257	0.095	0.046
$23.00	76.4	0.71	0.27	0.02	0.262	0.097	0.047
$24.00	63.2	0.72	0.27	0.02	0.268	0.100	0.049
$25.00	**51.2**	**0.74**	**0.28**	**0.02**	**0.274**	**0.103**	**0.051**
$26.00	41.1	0.76	0.28	0.02	0.280	0.106	0.052

* Grade assigned based on average of assays
** Grade estimated by correlation with average copper grade.
***Grade estimated by correlation with average palladium grade.

METALLURGY

Inco conducted extensive testwork in 1973 and processed a 9,500 tonne bulk sample from the nearby Spruce Road deposit at Inco's Creighton mill in Ontario. Inco's flotation work produced a bulk concentrate grading 13.4% copper and 2.8% nickel, with recoveries of 89% for copper, 63% for nickel, 28% Co, 65% to 71% for gold and silver, and approximately 65% for PGMs. Lakefield Research flotation work for Wallbridge in 2000 on core from the Spruce Road deposit yielded similar data to that obtained by Inco. This work showed that a high grade copper (30% Cu) concentrate with nickel

contamination (0.4% Ni) can be achieved. Copper recovery, however, is low and a poor quality nickel concentrate at low copper recovery.

Recent hydrometallurgical advances in treating nickel sulphide ores by leaching have been published and applied to Duluth Complex mineralization e.g. PLATSOL process at the Polymet Mining Corporation Northmet deposit, and elsewhere. The PLATSOL process is based on autoclave oxidation and pressure leaching with a chloride additive that is designed to recover precious metals as well as copper and nickel from low grade concentrate. In 2005, Franconia achieved good metal recoveries in pilot plant PLATSOL process testwork on core composites from the Birch Lake deposit that has nickel-copper sulphide mineralization similar to the Maturi. RPA cautions that none of the Cu-Ni-PGE hydrometallurgical processes are commercially proven at the present time. Franconia obtained a licence to use the PLATSOL process from International PGM Technologies Ltd. of Peterborough, Ontario in December 2005.

INTERPRETATION AND CONCLUSIONS

The Maturi deposit is a large low grade deposit with the up dip portion at ±50 m (170 ft.) from surface thus offering mining potential as an open pit and/or bulk underground operation. Inferred Mineral Resources at the Maturi deposit, for an NSR cut-off of US$25/tonne, total 51.2 million tonnes averaging 0.74% Cu, 0.28% Ni, 0.02% Co, 0.27 g/t Pd, 0.10 g/t Pt and 0.05 g/t Au. In RPA's opinion, supported by conclusions reached in a previous reports by Soever (2000), the Maturi deposit resources are appropriately classified as Inferred Mineral Resources at the present time.

Further exploration and work is warranted to further evaluate the mining potential and economics of the Maturi project. Additional drilling is needed to:

- upgrade resources from inferred to indicated
- provide analytical data for PGEs, gold and cobalt.

- collect material for metallurgical investigation to ensure that hydrometallurgical response for the Birch Lake property mineralization also applies to Maturi material and to provide process recovery data specific to it.

The hydrometallurgical treatment of copper-nickel-PGE concentrates is still under development; several alternative treatment strategies are under investigation and there is the potential for one or more plants to be built in the vicinity of the Maturi project by other companies.

Franconia also owns the nearby Birch Lake deposit that hosts an inferred mineral resource of approximately 40 million tonnes at similar copper-nickel grades. This, and the adjacent properties of other companies, may give rise to possible important synergies in terms of economies of scale that could significantly improve the mining potential of the Maturi deposit.

RECOMMENDATIONS

RPA makes the following recommendations for further work on the Maturi Project:

- Franconia should investigate the possibility of synergies with its Birch Lake property and other potential projects in the area in order to reduce capital and operating costs and optimize potential economies of scale. In particular, we recommend that Franconia specifically investigate the scenario of a combined Maturi - Birch Lake operation at the level of a NI 43-101 Preliminary Assessment.

- Subject to positive conclusions from the Preliminary Assessment, a fill-in drilling program should be planned and budgeted to upgrade all, or a portion of, the current resources to Indicated Resources.

- RPA recommends that Franconia carry out flotation work, on drill core collected for metallurgical testing, to optimize metal recoveries of mineralized Maturi material and do hydrometallurgical (PLATSOL) recovery tests similar to what Franconia has done for its Birch Lake deposit.

- Future collar and down hole surveying should be undertaken with the most accurate instrumentation available particularly for resource delineation and

definition. RPA recommends that elevations be checked for the 11 drill hole collars for which the digital database entries differ from the MNDNR records.

- For future drilling programs on the project, RPA recommends that SG testing on drill core be performed by simple immersion testing within the mineralization and immediate hanging and foot walls. Such data will be useful for rock density modelling in future resource updates.

- RPA recommends that the past laboratory QA/QC data be located if possible, compiled and evaluated during future resource updates. RPA further recommends for future resource delineation and definition drilling that a comprehensive QA/QC program be implemented that complies with Toronto Stock Exchange/Ontario Securities Commission (1999) mining task force guidelines.

- The Maturi mineralization continues down dip to the east onto Duluth Metals Limited ground. The boundaries of the Federal Lease are not well located on the ground and should be surveyed.

2 INTRODUCTION AND TERMS OF REFERENCE

Roscoe Postle Associates Inc. (RPA) was retained by Franconia Minerals Corporation (Franconia) to carry out a preliminary assessment of the Mineral Resources of the Maturi copper-nickel PGM deposit, Lake County, Minnesota and to prepare a National Instrument 43-101 (NI 43-101) compliant report. This technical report was written by RPA in accordance with the requirements of NI 43-101, Companion Policy 43-101CP, and Form 43-101F1 of the Ontario Securities Commission (OSC) and Canadian Securities Administrators (CSA).

The principal technical documents and files related to the Maturi deposit are as follows:

- Mineral Resource Estimate and Assessment of the Potential for Economic Mineralization at the Maturi and Spruce Road Deposits, Lake County, Minnesota for Wallbridge Mining company Limited by Alar Soever, Watts Griffis and McOuat Limited (WGM), April 2000.

- Franconia Minerals Corporation Birch Lake Project review of bench scale pressure leaching testwork and preliminary estimates of capital and operating costs by Al Hayden of EHA Engineering Ltd., April 2005.

- Preliminary assessment of the mineral resources of the Birch Lake property prepared for Franconia Mineral Corporation by Graham Clow and Richard Routledge, Roscoe Postle Associates Inc., November 19, 2005.

Work on this report was completed by RPA Consulting Geologist Richard Routledge, M.Sc., P.Geol., and RPA Associate Geologist Greg Greenough.

Mr. Routledge examined drill core for hole 11526R at the Minnesota Department of Natural Resources (DNR) core library in Hibbing, Minnesota, and visited the Maturi property on May 17, 2006. Mr. Routledge visited the adjacent Birch Lake property and examined drill core in November 2003 and the adjacent Wallbridge Maturi Extension property on May 18, 2006, and is familiar the Duluth Complex geology. Mr. Greenough

estimated resources for the Maturi and Spruce Road deposits under supervision by WGM in 2000 and carried out block modelling and a re-estimate of resources with RPA in April-June 2006.

Mr. Routledge held discussions in connection with work on the property with Mr. Ernest Lehmann of Franconia and Lehmann Exploration Management Inc. (LEM) and with Mr. Alar Soever of Wallbridge Mining Company and formerly with WGM. RPA would like to acknowledge the co-operation and assistance that has been provided by these personnel.

Messrs. Routledge and Greenough are Qualified Persons in accordance with the requirements of NI 43-101.

In addition to the reports cited above, RPA has prepared the following relevant NI 43-101 reports:

- "Technical Report on the Maturi Extension Property, Minnesota, U.S.A. Prepared for Duluth Metals Limited" dated May 31, 2006 (Routledge and Greenough, 2006)
- "Technical Report on the Maturi Extension Property Prepared for Wallbridge Mining Company" dated December 30, 2005 (Cargill, 2005a).
- "Maturi Extension property, Minnesota U.S.A. valuation report prepared for Wallbridge Mining Company", unpublished report dated June 20, 2005 (Cargill, 2005b)
- "Review of the Mineral Resources of the Birch Lake Property, Minnesota, U.S.A. Prepared for Franconia Minerals Corporation" dated January 22, 2004 (Routledge, 2004).

Inco drill core for the Maturi deposit was destroyed by fire and is not available for examination. However the Maturi Cu-Ni-PGE mineralization is confirmed by extensive analytical work on Inco core rejects and the diamond drilling of two holes on the property in 2000 by Wallbridge/WGM. RPA's visual estimates of copper tenor in Wallbridge core

held at the Minnesota DNR agree well with assays for the hole examined by RPA. Consequently, RPA did not carry out any independent sampling.

QUALIFICATIONS

Roscoe Postle Associates Inc. (RPA) is an independent firm of geological and mining consultants based in Toronto, with offices in Vancouver, British Columbia, and Rouyn-Noranda, Quebec. Since its establishment in 1985, RPA has carried out consulting assignments for nearly five hundred clients, including major mining companies, junior mining and exploration companies, financial institutions, governments, law firms, and individual investors. Our clients are principally Canadian, American, and European companies.

RPA's business primarily involves providing independent opinions on mineral resources and reserves, technical aspects and economics of mining projects, valuation of mining and exploration properties and scoping, pre-feasibility, and feasibility studies. RPA has completed assignments on projects located in all parts of Canada, the United States, Russia, Latin America, Australia, and in other countries in Europe, Africa and Asia. RPA prepared a preliminary assessment of the Mineral Resources of the Birch Lake deposit, Minnesota for Franconia in November 2005.

RPA has completed several hundred assignments related to mineral resource or reserve estimates and audits. RPA has also audited a number of feasibility studies and carried out many due diligence and project monitoring assignments for chartered North American and European banks. RPA has participated in a number of feasibility studies with Hatch Associates Ltd. (Hatch) and other major international consulting engineering firms.

RPA has extensive experience with nickel-copper PGM deposits including resource and reserve reviews, audits and estimates, QA/QC reviews, database validation assignments for operating mines, and qualifying reports. Details on RPA's qualifications,

services, clients, and types of assignments are available on RPA's website (www.rpacan.com).

LIST OF ABREVIATIONS

In this report, monetary units are United States dollars (US$) unless otherwise specified. The metric system (SI) of measurements and units has been used unless otherwise specified. Tables showing abbreviations used in this report are provided below.

LIST OF ABBREVIATIONS

Abbreviation	Meaning
μ	micro (one-millionth)
°C	degree Celsius
°F	degree Fahrenheit
μg	microgram
A	ampere
a	annum
bbl	barrels
Btu	British thermal units
C$	Canadian dollars
cal	calorie
CFM	cubic feet per minute
cm	centimetre
cm^2	square centimetre
Ct	carat (0.2 grams)
D	day
dia.	diameter
Dmt	dry metric tonne
Dwt	dead-weight ton
Ft	foot
ft/s	foot per second
ft^2	square foot
ft^3	cubic foot
G	gram
G	giga (billion)
Gal	Imperial gallon
g/l	gram per litre
g/t	gram per tonne
Gpm	Imperial gallons per minute
gr/ft3	grain per cubic foot
gr/m3	grain per cubic metre
Hr	hour
Ha	hectare
Hp	horsepower
In	inch
in^2	square inch
J	joule
K	kilo (thousand)
Kcal	kilocalorie
Kg	kilogram
Km	kilometre
km/h	kilometre per hour

Abbreviation	Meaning
km^2	square kilometre
kPa	kilopascal
kVA	kilovolt-amperes
kW	kilowatt
kWh	kilowatt-hour
l	liter
l/s	litres per second
m	metre
M	mega (million)
m^2	square metre
m^3	cubic metre
m^3/h	cubic metres per hour
masl	metres above sea level
mi.	miles
min	minutes
mm	millimetre
mph	mile per hour
MVA	megavolt-amperes
MW	megawatt
MWh	megawatt-hour
opt, oz/st	ounce per short ton
oz	troy ounce (31.1035g)
oz/dmt	ounce per dry metric tonne
ppm, ppb	part per million; billion
psia	pound per square inch absolute
psig	pound per square inch gauge
s	second
st	short ton
stpa	short ton per year
stpd	short ton per day
t	metric tonne
tpa	metric tonne per year
tpd	metric tonne per day
US$	United States dollar
USg	United States gallon
USgpm	US gallon per minute
v	volt
w	watt
wmt	wet metric tonne
yd^3	cubic yard
yr	year

SUPPLEMENTARY LIST OF ABBREVIATIONS

Abbreviation	Meaning
Au	Gold
Cu	Copper
Co	Cobalt
Ni	Nickel
Pd	Palladium
Pt	Platinum
m.y.	Million years
02	Oxygen
µm	micron (10^{-6} metres)

3 RELIANCE ON OTHER EXPERTS

Roscoe Postle Associates Inc. (RPA) has prepared this report for Franconia Minerals Corporation (the Client). The information, conclusions, opinions, and estimates contained herein are based on:

- information available to RPA at the time of preparation of this report,
- assumptions, conditions, and qualifications as set forth in this report, and
- data, reports, and opinions supplied by the Client and other third party sources. RPA does not guarantee the accuracy of conclusions, opinions, or estimates that rely on third party sources for information that is outside the area of technical expertise of RPA.

RPA has not verified the mineral land titles or the status of ownership. RPA has relied on mineral land title information as provided by the Client. RPA has not carried out any independent sampling and assaying.

RPA relied on third party sources for the following information.

- Hydrometallurgical/PLATSOL testing and reporting for the Franconia Birch Lake property by metallurgist Mr. Al Hayden, P. Eng. of EHA Engineering Ltd.

- Environmental and permitting requisites for Minnesota, and property title information provided by Lehmann Exploration Management Inc. (LEM) of Minnesota. LEM has had previous experience with the Maturi and Birch Lake properties.

The information, conclusions, and opinions prepared by Mr. Hayden and LEM as contained in Items 18 and 20 herein are based on:

- Information available to them in 2004 through 2006.
- Data, reports, and opinions supplied by Franconia, LEM, and other third party sources from 2004 through 2005.

LEM has visited the Maturi and Birch Lake properties in the past. Mr. Hayden has visited the Birch Lake property.

4 PROPERTY DESCRIPTION AND LOCATION

The Maturi deposit area, within Federal Mineral Lease US ES01352, is centered at west Longitude 91º 45'33.5" and north Latitude 47º 47'59.5"; and NAD 27 UTM coordinates Zone 15, 592,910E, 5,294,595N (Figure 4-1). Title to the lease is held by the Beaver Bay Joint Venture in trust for Franconia. The lease area covering the deposit is located in Lake County, Township 62N, Range 11W of the Fourth Principal Meridian, in parts of sections 32 and 33; and Township 61N, Range 11W in parts of sections 5, 6 and 8. Figure 4-2 shows the general location of drill holes with respect to the Maturi property Federal Lease boundaries and township survey as compiled by the DNR. The lease carries rights to mine, remove, and dispose of all minerals excepting oil, gas, oil shale, coal, phosphate, sodium and sulphur.

Lease US ES01352 covers a total of 1,056.28 hectares (2,610.07 acres), including lands that are non-contiguous with the portion of the lease that covers the Maturi deposit. These other lands lie in T.61N, R.11W Sections 7, 9, 18, and 19 and T.62N., R.11W Sections 27 and 34 as well as T.61N, R.11W, Section 25 in St Louis County.

The property is within the Lake Superior National Forest and part of the Bear Island State Forest. The Boundary Waters Canoe Area Wilderness lies north and east of the property.

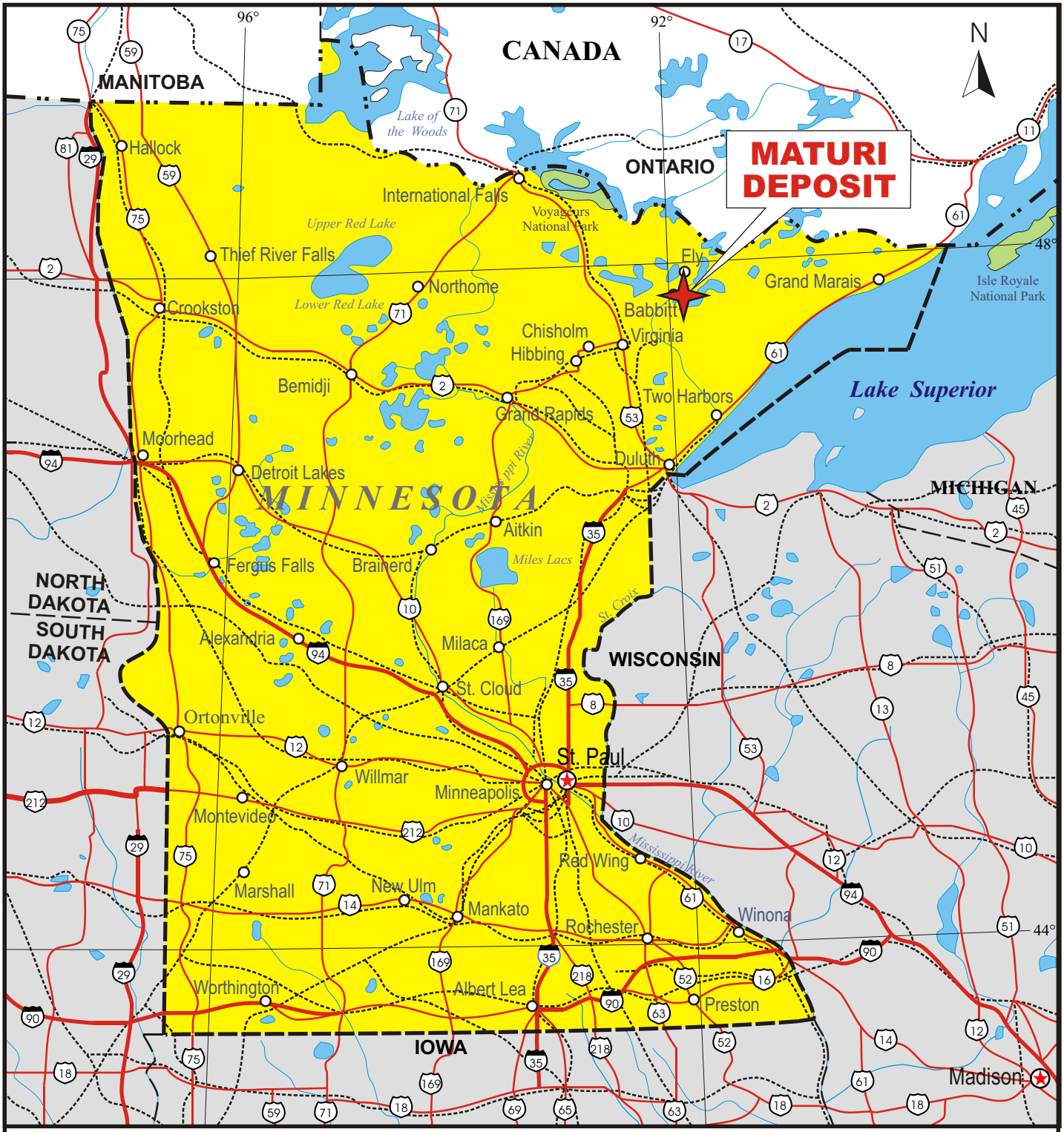


Figure 4-1

0 40 80 120 160 200

Kilometres

Legend:

Highway

Railroad

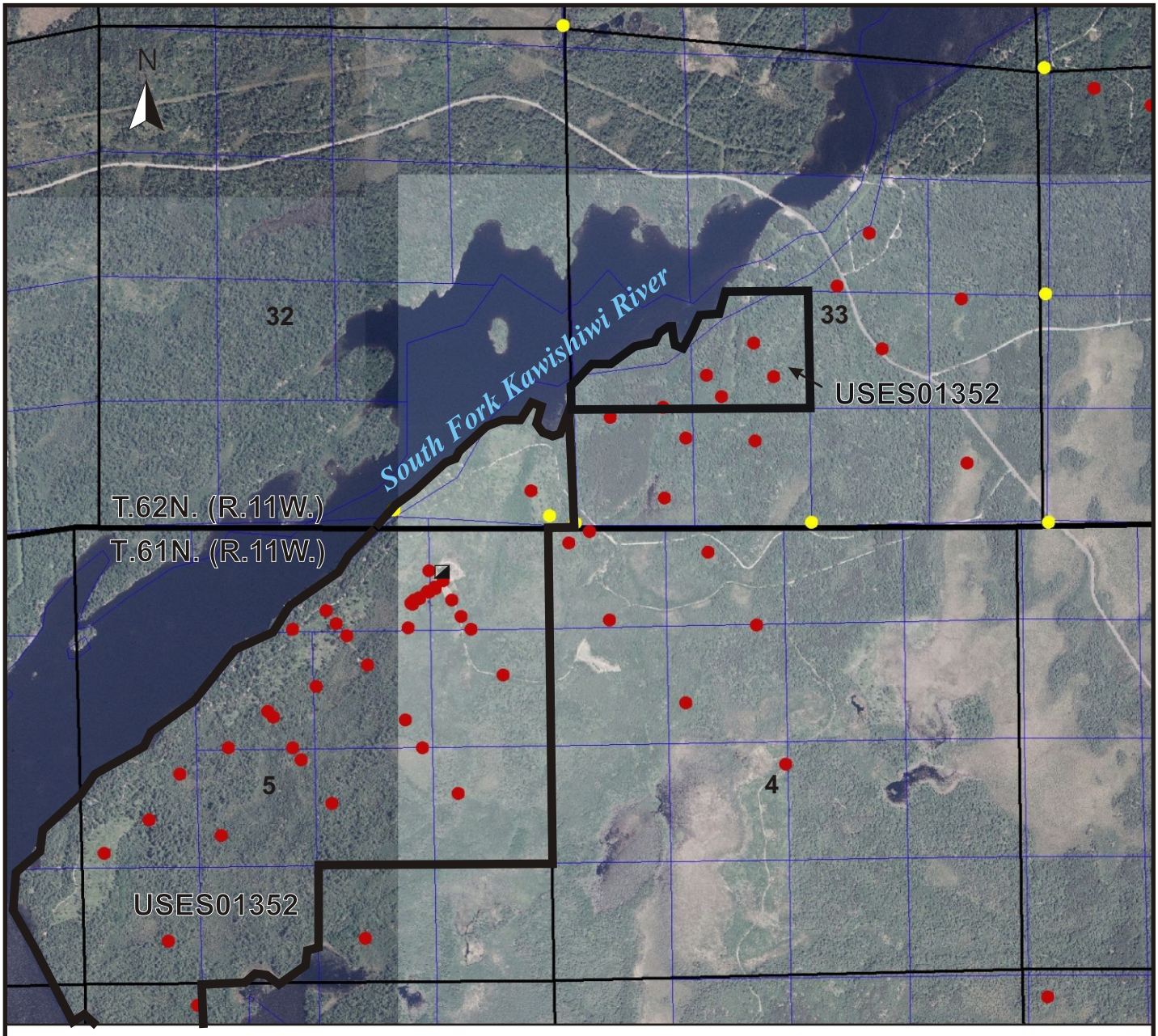
Franconia Minerals Coporation

Maturi Property

Minnesota, U.S.A.

Location Map

June 2006



Metres
0 400 800
0 1/4 1/2
Miles

Figure 4-2

Franconia Minerals Coporation

Maturi Deposit

Minnesota, U.S.A.

Location of Federal Lease and Drill Holes on the Maturi Property

Legend:

- *Drill Hole Collar*
- *Exploration Shaft*
- USES01352 *Franconia Lease Boundary & Number*

June 2006

Source: MNDNR

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

From the city of Duluth, the property is accessed by US highway 53 north for 103 km (64 mi.) to its juncture with State Highway 169 north of the town of Virginia, thence 68 km (42 mi.) northeast on 169 to the town of Ely. From Ely the property may be reached by taking Highway 1 south, which crosses the Kawishiwi River just north of the property, a distance of 20 km (12 mi.). A network of local and forest access roads provides access on the property itself.

Alternatively, the Maturi property is readily accessible by road from the town of Babbitt, a planned mining community of 1,200 inhabitants located approximately 16 km (10 mi.) to the southwest. Franconia maintains an office in Babbitt. From Babbitt, take route 70 west for 5 km (3 mi.) to the Ely-Babbitt Highway 21, north 12 km (7.5 mi.) to Highway 120, north and east on 120 for 8 km (5 mi.) to Highway 1/7, thence south and east to cross the Kawishiwi River just north of the property, a distance of 11 km (7 mi.).

The local infrastructure related to mining is excellent. Low cost electric power, railroad networks, paved State highways, mine equipment suppliers, mining professionals, and relatively low cost labour are available locally to service the seven operating Mesabi Range iron ore mines to the west. The nearest rail access for Maturi is at Babbitt. The port of Duluth on Lake Superior is linked to the rail system and provides worldwide shipping access via the Great Lakes and St. Lawrence Seaway.

The northern Minnesota climate is midcontinental. Average annual temperature is 3˚C (38˚F), with local temperatures averaging -16˚C (4˚F) in January and 19˚C (66˚F) in July. Annual rainfall averages approximately 710 mm (28 in.), with 30% occurring from November to April and 70% from May to October. Annual snowfall averages 152 cm, with accumulation on the ground of 60 cm to 90 cm.

Elevations on the property range from 430 m to 470 m. Topographic relief is generally low and controlled by bedrock. The property is poorly drained and is part of the Kawishiwi River watershed.

Wisconsinan continental glaciation scoured and shaped bedrock into low, north-northeast trending hills thinly mantled by till. Rock exposures are generally less than 5%. Drift is deposited up to 20 m thick in low areas occupied by swamps, which are prominent in the central and east portions of the Maturi property.

The upland areas of the property are forested by second growth mixed conifers and deciduous trees including white, red and jack pines, spruce, balsam, poplar, and birch. Treed swamps and open marshes support reeds, sedges, and sphagnum mosses.

6 HISTORY

The area has been prospected for iron since the mid 1800's and has witnessed the development of open pit iron ore mines in the Biwabik Iron Formation since 1884. Six iron ore mines continue to operate in the region.

The Duluth Complex has been explored for copper-nickel deposits since the 1950's and titaniferous magnetite deposits since the 1960's. The DNR reports that some 1,900 diamond drill holes and 230,000 m have been drilled to explore the base of the Duluth Complex for copper and nickel. The DNR analyzed core from the copper-nickel exploration in 1985 and reported the finding of significant PGE's.

Sulphides were exposed during road construction through the Spruce Road deposit area in 1948. A mining promoter drilled one short diamond drill hole and dealt the property to International Nickel Company (Inco). Inco transferred its title to American Copper and Nickel Company (ACNC), Inco's US subsidiary, and most of the current Maturi property was acquired by ACNC 1951 to 1953 which carried out exploration to 1988 (Table 6-1).

Wallbridge optioned the property, together with the Spruce Road property, from 1999 to 2000. Wallbridge drilled one hole, verified data, analyzed core rejects, estimated resources and carried out a scoping study on the Maturi deposit.

In May 2005, Franconia and its joint venture partner, the Beaver Bay Joint Venture, acquired from ACNC a 100% interest in 2,105 hectares (5,201 acres) of mineral rights that cover the Maturi and Spruce Road deposits subject to ACNC's right to 7.5% of net distributable earnings for any future production from the property.

TABLE 6-1 SUMMARY OF EXPLORATION
Franconia Minerals Corporation - Maturi Property, Minnesota

Year	Exploration
1954-1957	Surface exploration, ACNC diamond drilled 84 holes totalling 23,958 m in the Spruce Road area. Exploration suspended when Federal Department of the Interior would not issue mining permits pending Congress enacting proposed wilderness legislation.
1966	ACNC granted two federal leases at Maturi and Spruce Road deposits;194 m in 48 holes were drilled and a 1,180 tonne bulk sample taken at Spruce Road.
1967	153 diamond drill holes for 24,902 m drilled at Maturi and Spruce Road. Exploration shaft sinking started at Maturi and Bechtel completed a scoping study for Maturi.
1968	Shaft sunk to 332 m, a 576 tonne bulk sample taken and underground exploration carried out on the 305 m level at Maturi. 2,440 tonnes from the drift were stockpiled on surface and the shaft capped. Fifteen holes were drilled from surface (6,523 m).
1969	ACNC drilled 16 holes for 5,326 m.
1973	Maturi buildings and headframe removed and site restored; exploration focused on Spruce Road. .
1975-1979	All ACNC work suspended because of State moratorium on copper-nickel exploration and mining.
1985	DNR samples 1970-1975 Duval core from Birch Lake area and discovers 2 m of PGE mineralization associated with chromite rich oxides.
1986	Since earlier drilling had not assayed for PGM and Au, ACNC investigates Maturi drill core and assays for PGM and gold; only anomalous values found.
1988	ACNC Joint venture with Lehmann Exploration Management Inc. and BHP Utah to explore for PGM mineralization; one hole diamond drilled.
1989	Joint venture dissolved and a new ACNC joint venture with Lehmann Exploration Management Inc. (LEM) was formed.
1990	LEM drilled one hole on ACNC property; seven others in the area (4,313 m total).
1992	LEM unable to obtain financing, LEM joint venture with ACNC dissolved.
1997	ACNC conducts down hole Crone Pulse EM surveys in two holes at Spruce Road, one anomaly at 375 m depth found.
1999	Wallbridge reviews ACNC data and drills hole WM-001 (535 m) for metallurgical samples tested at Lakefield Research and to test a PEM off-hole anomaly at Spruce Road. The anomaly appeared to be related to disseminated mineralization.
2000	1,400 coarse reject samples from 8,000 m in 26 holes were assayed by Wallbridge for Cu, Ni, Co, Pt, Pd, Au and S. Wallbridge commissions WGM to prepare a resource estimate under JORC code and assessment (scoping study) of the potential for economic mineralization. Hole 11526R (355.62 m) drilled to twin Inco hole 11526.
2005	In May Franconia acquired from ACNC, through its Beaver Bay Joint Venture partner, an interest in 2,105 hectares (5,201 ac) covering the Spruce Road and Maturi deposits.

HISTORIC RESOURCE ESTIMATES

Previous resource estimates available to the public include an ACNC estimate and an estimate by Watts, Griffis and McOuat Limited (WGM) on behalf of Wallbridge Mining Company Limited (Wallbridge).

The ACNC estimate of 224 million tonnes averaging 0.50% Cu and 0.19% Ni was based on surface and limited underground drilling, bulk sampling, and a pre-feasibility study. RPA has not reviewed the ACNC resource estimation work.

The Wallbridge estimate in 2000 was part of a preliminary assessment of the Spruce Road and Maturi deposits for their potential for underground bulk mining. The estimate was prepared by 3D computer block modelling using Gemcom and Datamine Software for cut-off grades between 0.5% Cu and 0.8% Cu. The cut-off grades were selected as appropriate for bulk underground mining up to the limit that maintains grade continuity within the deposit. The drill hole assays were contoured at 0.4% Cu for general deposit wireframing and then the higher grade upper portion of the deposit was wireframed at 0.6% Cu and 0.7% Cu for resource estimates within these wireframes. Grades were interpolated for Cu and Ni by ordinary kriging, whereas resource block grades for Co, Pd, Pt and Au were assigned based on inter-element grade correlations (linear) estimated from assay composites. Table 6-2 summarizes the Wallbridge historic estimate.

TABLE 6-2 WALLBRIDGE ESTIMATE OF GRADE AND TONNAGE OF HIGH GRADE CORE AT MATURI
Franconia Minerals Corporation - Maturi Deposit, Minnesota

Cut-Off	Tonnes (millions)	Cu%	Ni%	Co%	Pd g/t	Pt g/t	Au g/t
0.6% Cu	109.3	0.70	0.26	0.02	0.260	0.096	0.047
0.7% Cu	52.1	0.76	0.28	0.02	0.238	0.107	0.053

The Wallbridge preliminary assessment of the Maturi deposit was based on the resource at the 0.7% Cu cut-off grade.

7 GEOLOGICAL SETTING

REGIONAL GEOLOGY

The Maturi property lies within the Superior Province which is composed of Precambrian shield rocks that are exposed in central and northeastern Minnesota and extend north into Ontario. The shield rocks include Early Precambrian (Archean >2,600 Ma) mafic to felsic volcanic rocks, graywackes and granitic intrusives and older ortho and paragneisses; Middle Precambrian (2,600 Ma to 1,800 Ma) clastic and carbonate sedimentary rocks and iron formations; and Late Precambrian clastic sedimentary rocks, mafic lava flows, pyroclastics and interbedded sedimentary rocks (1,800 Ma to 600 Ma). The Algoman Orogeny circa 2,700 Ma and the Penokean Orogeny circa 1,850 Ma resulted in deformation and weak metamorphism of the Early Precambrian and Middle Precambrian rocks, respectively, and the intrusion of granitic plutons.

In eastern Minnesota, the Midcontinent Rift System developed during crustal scale tectonic extension in the Middle Precambrian (mid-Proterozoic). The rift system is traceable from the south shore of Lake Superior south-southwest to the State of Kansas through exposures of mantle-derived tholeiitic to subalkaline Keweenawan mafic flows, intrusives and rift-filling fluvial sedimentary rocks, and in the subsurface as a gravity high anomaly. Intrusion of the Duluth Complex circa 1,120 ±15 Ma was related to the midcontinental rifting and is cogenetic with the Keweenawan North Shore mafic volcanics that form its hanging wall on the east. The Maturi property lies in the southern portion of the Duluth Complex.

LOCAL GEOLOGY

The Duluth Complex is a composite intrusion formed from 12 separate sub-intrusions that were emplaced over a period of 10 to 12 million years. These bodies include the South Kawishiwi Intrusion, the Bald Eagle Intrusion, the Partridge River Intrusion, the

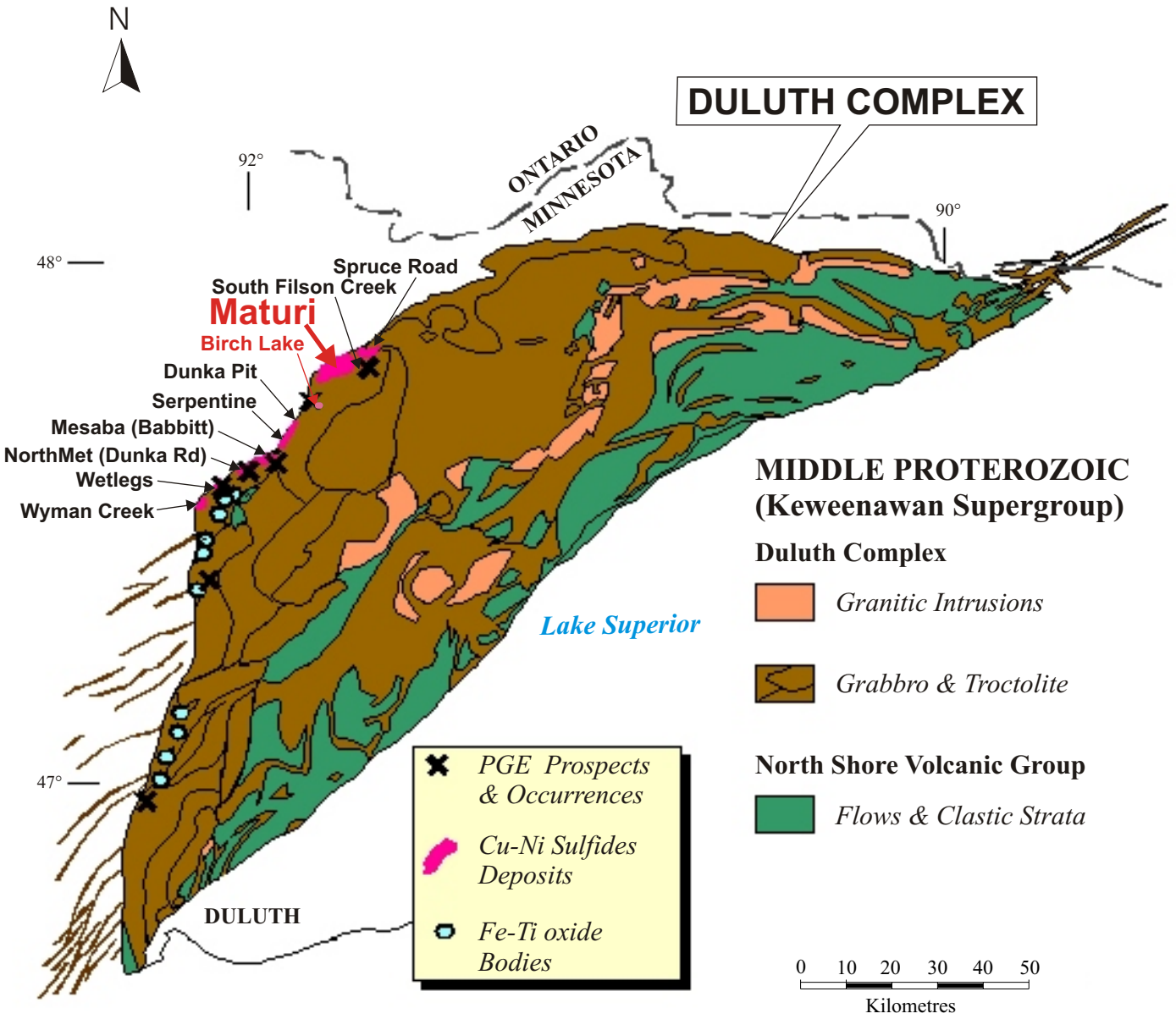
Logan Sills, the Greenwood Lake Intrusion, the Powder Line Gabbro, the Silver Bay Gabbro, and the Sonju Lake Intrusion.

The intrusive complex occupies an area of approximately 6,500 km^2. It extends some 240 km northeast-southwest from the City of Duluth almost to the Ontario border and attains a width of up to 50 km on surface (Figure 7-1).

Footwall contacts on the west and north sides of the intrusive are sharply defined with the metagreywackes and slates of the Middle Precambrian Virginia Formation, the Biwabik iron formation of the Mesabi Range, and the Early Precambrian monzonites of the Giants Range Batholith. The contact and base of the complex dips shallowly to moderately to the southeast (-10˚ to -35˚). On the east and south flanks, contact with the coeval North Shore basalts is gradational.

Anorthositic, troctolitic, gabbroic to ferrogranodioritic, and granitic/granophyric rocks compose the Duluth Complex (the Complex) and have been grouped into an Anorthositic Series, a Troctolitic Series and a late stage, differentiated Felsic Series. Field relations indicate that the Anorthositic Series in the upper part of the Complex is older than the Troctolitic Series that occupies the lower two thirds of the Complex; however, identical age dates of 1,099 Ma for both series supports rapid intrusion. The Felsic Series rocks, and late stage basalts and aplite dikes, cut the anorthosites and troctolites. Inclusions of footwall rocks, magnetite-enriched (iron formation) material and hornfels material, are found in the troctolites near the base of the Complex.

Weiblen and Morey (1980) proposed a half graben model for the emplacement of the Complex intrusives in which step and rise normal faults, with steep southeast dips, occurred in a northeasterly direction parallel to the trend of the Complex's basal contact. Magma was subsequently injected along these structures and coalesced to form the complex. A later series of northwesterly strike-slip faults offset the intrusive-controlling northeast faults.



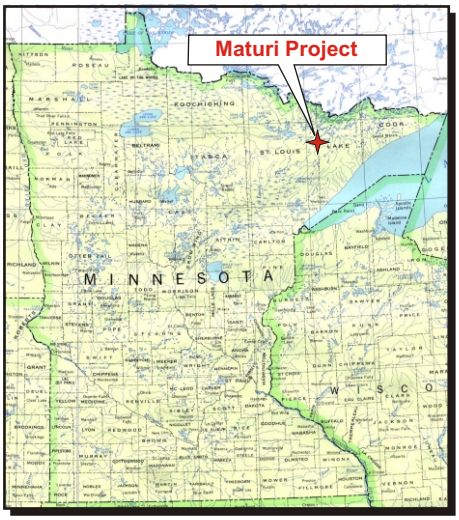


Figure 7-1

Franconia Minerals Corporation

Maturi Deposit

Minnesota, U.S.A.

Geology of the Duluth Complex

June 2006

Modified from the Minnesota Geological Survey

PROPERTY GEOLOGY

The Maturi property is entirely underlain by the lower portion of the South Kawashiwi Intrusion (SKI) that is itself bordered on the southwest by the Partridge River body and on the southeast by the Bald Eagle pluton. The SKI extends approximately 40 km northeast-southwest and is up to seven kilometres wide. The footwall Giants Range Granite lies approximately 500 m northwest of the Maturi deposit. The SKI-granite contact trends northeast and generally dips 20° southeast. Figure 7-2 shows the property geology.

The SKI is composed of an upper sulphide-free troctolite with anorthosite layers and lower sulphide-enriched troctolite, picrite, dunite, anorthosite, oxide cumulates and hornfels. In the vicinity of the Maturi property, there is a middle series of interlayered troctolite and/or picrite, and/or hornfels and Spruce Breccia separating upper and lower troctolites. The limited drilling at Maturi provides for only simplified geologic interpretation and rock units and the mineralization at the base of the SKI appear fairly planar and parallel to the lower contact. The contact strikes 60° and dips 35° to 52° southeast. The lower 60 m to 100 m of the SKI at Maturi is described as troctolite that is topped by a mafic troctolite or picrite. Olivine gabbro is the dominant rock type above this lower assemblage, although some minor troctolite is present.

The Duluth Complex has not been significantly deformed since magma consolidation, but it has been subjected to displacements along reactivated basement faults as well as cross faults. Structures are mostly subvertical north-northeasterly faults and fault zones that are evident as linears on airphotos and topographic maps. These faults have been active pre, syn and post emplacement of the SKI. Where exposed in parts of the SKI and footwall rocks, movement on these faults ranges from 3 m to 120 m. East of the property on ground currently held by Duluth Metals limited, a elevated topography forms a north-northeasterly trending lineament that maybe controlled by basement structures. Stepping or terracing of the granite contact by faults has provided favourable structures that localized mineralization. The Maturi deposit appears to occupy a gentle flexure in the

contact that has formed a broad, easterly plunging embayment in the base of the SKI (Soever, 2000).

The Maturi deposit consists of a tabular sheet of disseminated copper-nickel-iron sulphide mineralization 70 m to 100 m thick that rests on or close to the SKI-granite contact. Dip varies from 35° to 55° and the zone plunges approximately N60°E along the contact. Higher grades are concentrated in the upper 30 m of the zone that strikes approximately two kilometers and extends one kilometer down dip. Mineralization has been traced by drilling down plunge approximately 3,500 m and is open to depth.

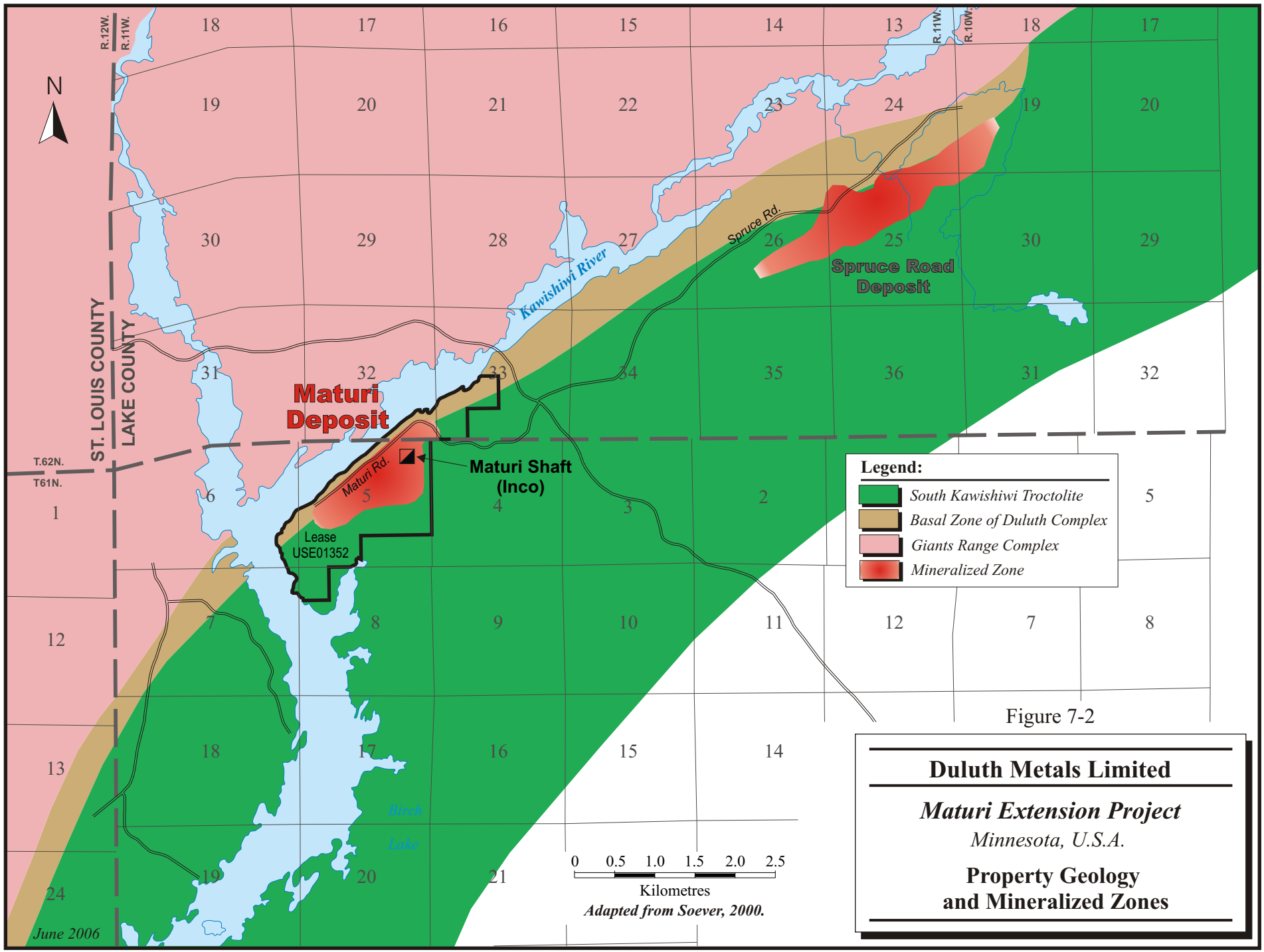


Figure 7-2

Duluth Metals Limited

Maturi Extension Project

Minnesota, U.S.A.

Property Geology and Mineralized Zones

8 DEPOSIT TYPES

The Duluth Complex hosts four types of magmatic mineralization at or near its footwall:

1. Large, low grade disseminated Cu-Ni sulphide deposits that are locally enriched in PGEs.

2. Localized high grade zones of massive Ni-Cu sulphides, some of which are moderately enriched in PGEs.

3. Disseminated, PGE enriched, Cu-Ni sulphides associated with specific types of phase-layer transitions, which, in this sense, are stratabound deposits.

4. Titanium and vanadium oxides-rich ultramafic plugs that are, in some cases, potentially deposits.

The Maturi deposit is an example of the third type of mineralization: 1% to 5% disseminated copper and nickel sulphides bearing palladium, platinum, and gold values with lesser silver and cobalt. The mineralization is stratabound in that it is hosted in troctolitc rocks, consistently associated above the footwall of the SKI, and has a marker unit of mafic troctolite near its top.

9 MINERALIZATION

Sulphide mineralization generally occurs just above the SKI footwall contact as1% to 5% disseminated chalcopyrite, cubanite, pyrrhotite, and pentlandite forming a well-defined tabular zone parallel to the contact. The upper contact is sharp and coincides with the interval more mafic in composition which marks the contact between the lower SKI troctolites and upper gabbros. Higher grades are associated with the more mafic units near the top of the zone. In general total PGMs in assays are less that 0.7 g/t, however, anomalous PGMs >1 g/t are believed to be related to the presence of secondary, structurally controlled mineralization.

10 EXPLORATION

No exploration is being carried out on the Maturi property at the present time although exploration is active in the area. Duluth Metals Limited completed a seven hole drilling program on its east adjoining Maturi Extension property in May 2006. Franconia announced that a core drilling program to collect metallurgical test samples is underway at the Birch Lake property where 11,000 ft. (3,350 m) in four holes and associated offset wedges is planned for completion in September 2006.

11 DRILLING

DATABASE

Inco originally provided the resource drill hole data to WGM in three digital text files:

- collars.txt: locations, depth, azimuth and dip of the drill holes in the New Minnesota co-ordinate system.
- surveys.txt: down hole survey data
- bholes.txt: assay and geology data

These ASCII files had been exported from the Inco Mines Exploration Borehole System (MEBS) in "New Minnesota" coordinates. The latter coordinate system is an INCO system, parallel to UTM NAD27, in Imperial units, with its origin at 540,000E and 5,200,000N, similar to what has been done in the Sudbury camp.

Computer printed drill logs and copies of hand plotted sections were also made available to WGM for compilation. This data had been collected from various Inco drilling campaigns in the area from 1954 to 1973.

RPA obtained the digital drill hole database in Datamine and Gemcom formats from Wallbridge. The database has 280 drill holes totalling 56,874.13 m, which includes holes on the Franconia Maturi property, holes from the Spruce Road deposit, holes on the Wallbridge Maturi Extension property east of the Maturi property, as well as exploration holes located between the Maturi and Spruce Road deposits. There are 53 holes (14,075.38 m) in the database that are collared on the Maturi property. These include 41 surface holes totalling 13,576.11 m and 12 underground holes totalling 499.27 m. Early holes are 11500 series and later holes are 32700 series and 40900 series. The drill holes cover approximately 3,300 m (10,827 ft.) of deposit strike length from UTM 592,000E to UTM 593,399E, NAD27. Drilling is generally sparser towards the ends of the Maturi deposit. The resource estimate at Maturi is based on 50 of the total 53 diamond drill

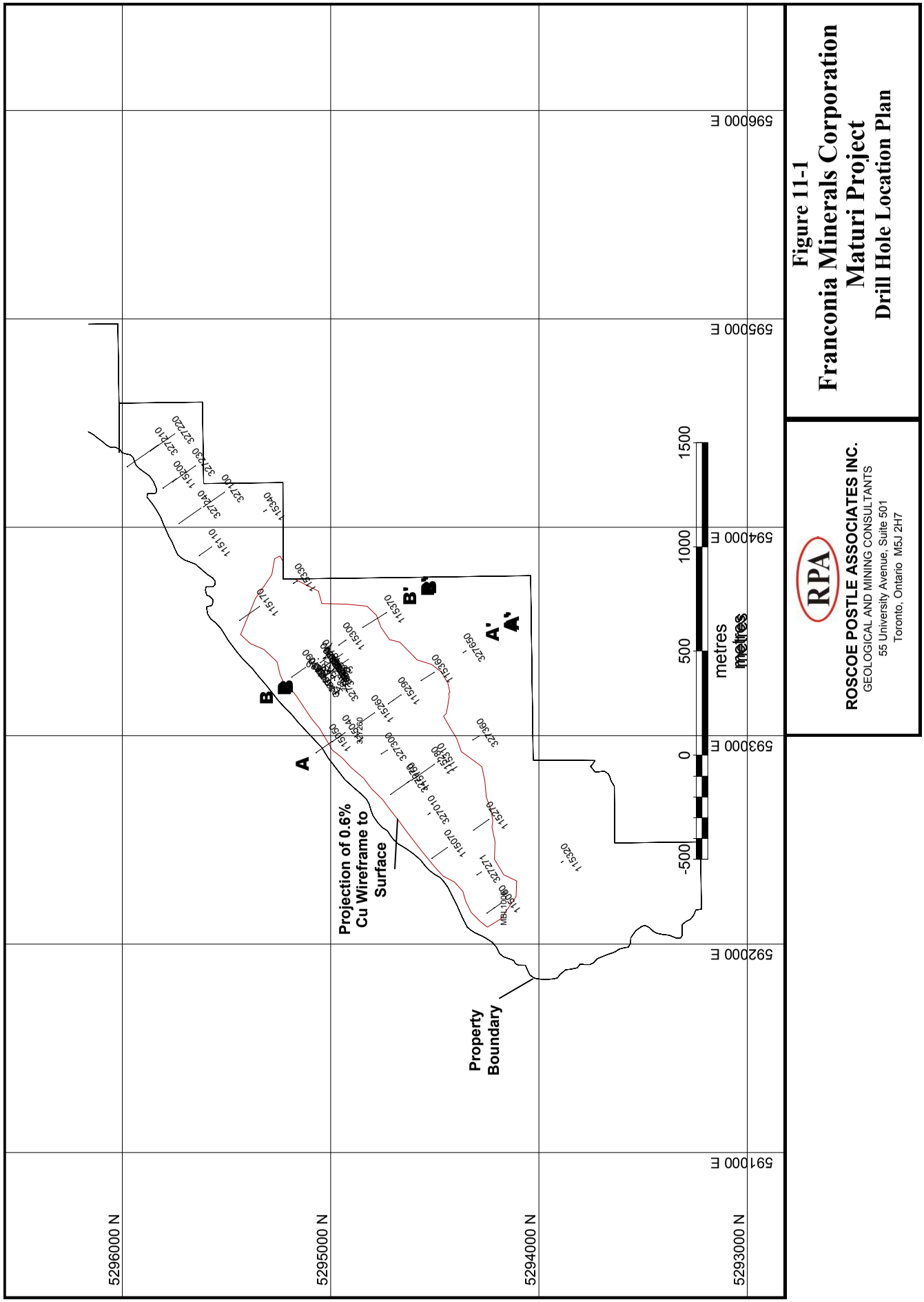
holes (the number of holes captured with the mineralization envelope for resource modeling) totalling 13,580 m (44,554 ft.).

The Maturi holes were drilled on nine cross sections spaced at nominal 365 m (±1,200 ft). At the north and south ends of the deposit, a few single holes test the deposit near surface on nominal 183 m (±600 ft) sections. Collar spacing on section varies from ±60 m (±200 ft) to ±240 m (±800 ft) and up to ±370 m (±1,200 ft). Figures 11-1 to 11-4 show selected cross sections and a vertical longitudinal section.

SURVEYS

WGM converted drill hole collar surveys from the Inco New Minnesota grid system to NAD27, which required a 20.42 m shift west and 42.0 m south and a grid origin correction to 539,980.4E, 5,199,956.8N.

Down hole surveys for deviation were limited to dip tests and as such the position of the toe and analyzed intervals is uncertain. This uncertainty, however, is not important in context with the wide spacing of the holes. Dip tests were taken at 15 m (50 ft.) depth (6%), at 30.48 m (100 ft.) depth (32%), at 60.9 m (200 ft.) depth (32%) and up to 121 m (400 ft.). The short underground holes appear to have a survey entry at 0.3 m (one foot) depth but have no change in azimuth or dip. These are likely unsurveyed. RPA examined dip deviations for possible problems or bad readings.


5296000 N
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1000
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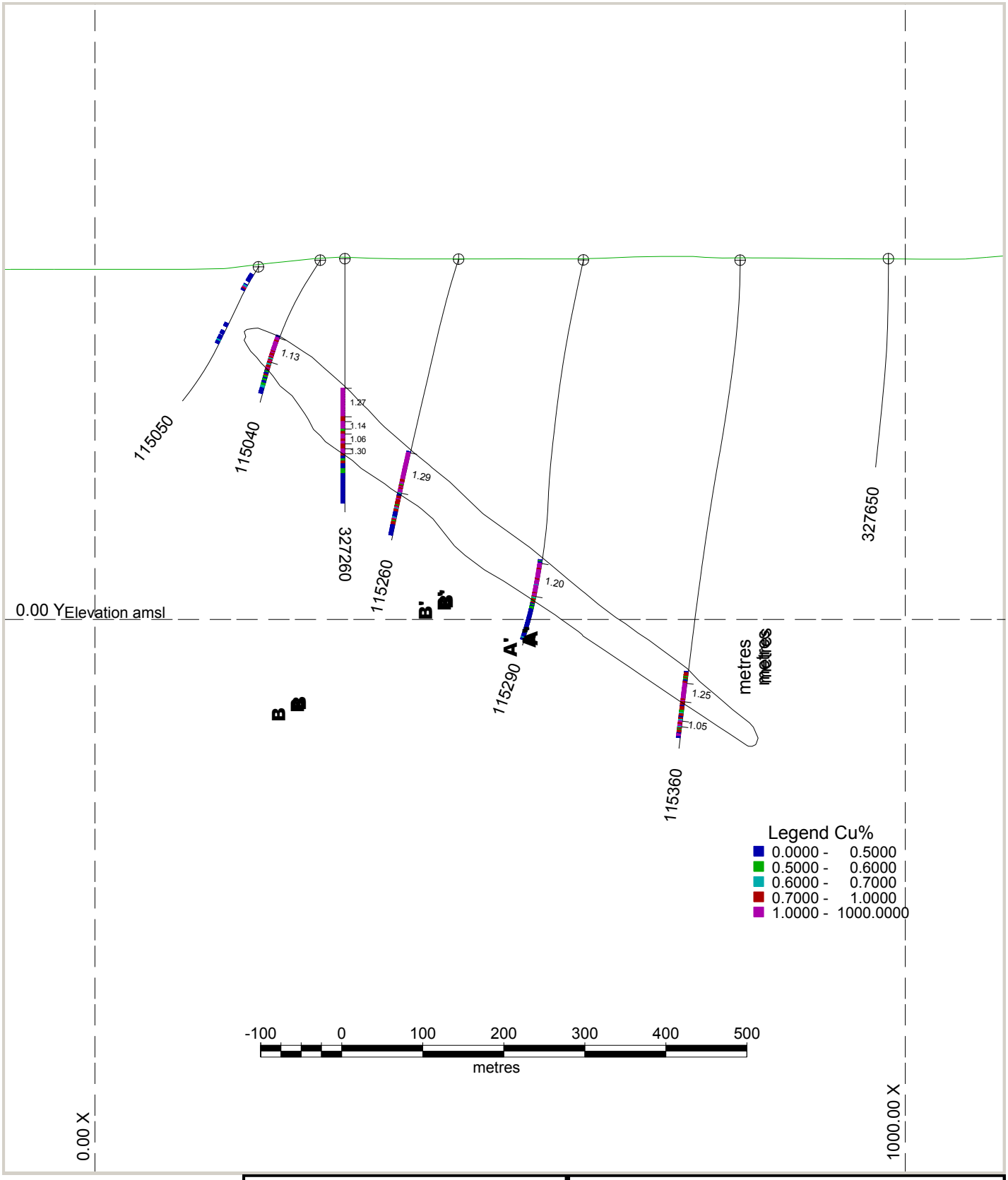
metres
metres
A
A'
B
B'
Projection of 0.6% Cu Wireframe to Surface
Property Boundary
RPA
ROSCOE POSTLE ASSOCIATES INC.
GEOLOGICAL AND MINING CONSULTANTS
55 University Avenue, Suite 501
Toronto, Ontario M5J 2H7
Figure 11-1
Franconia Minerals Corporation
Maturi Project
Drill Hole Location Plan



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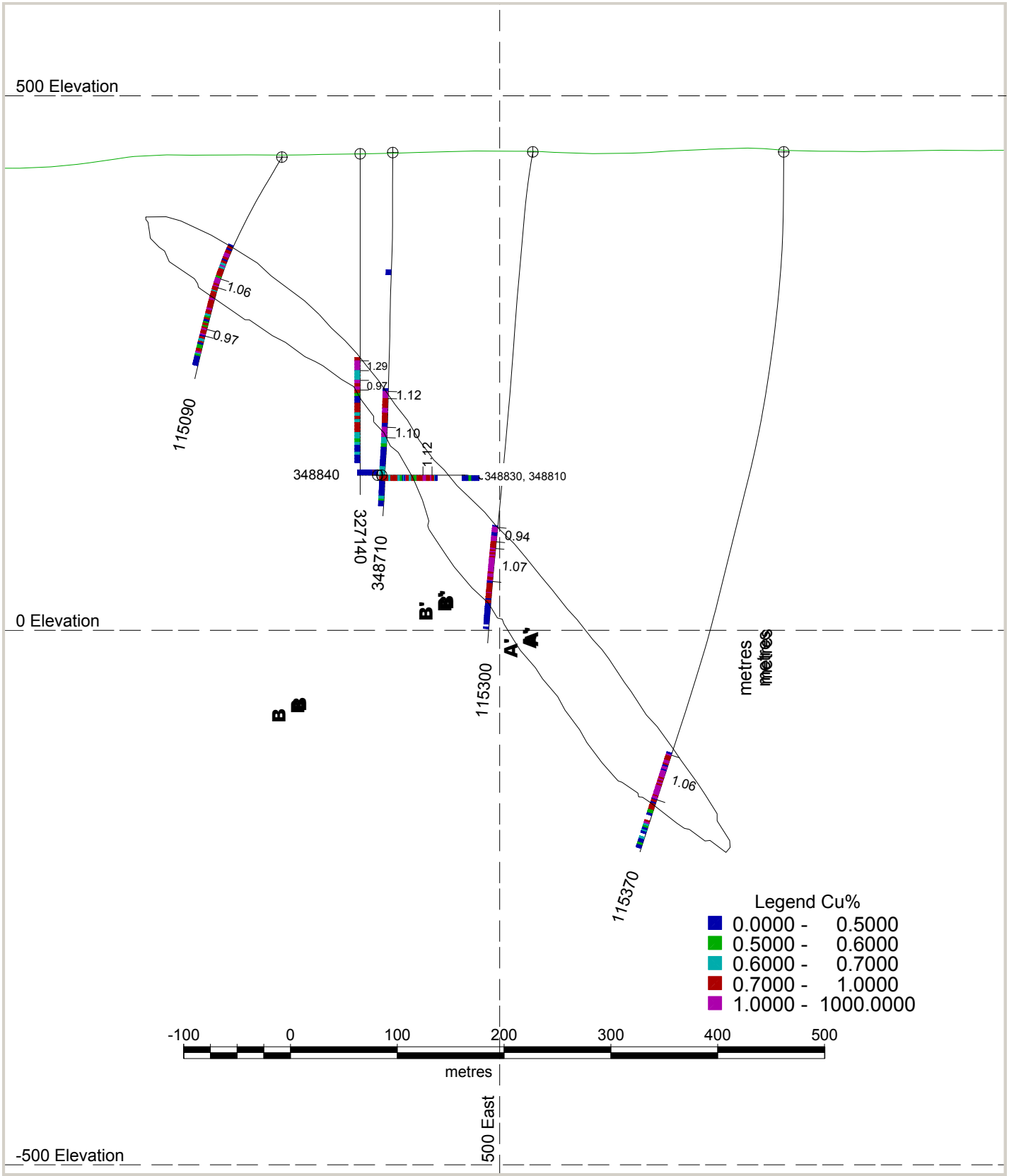
Toronto, Ontario M5J 2H7

Figure 11-2
Franconia Minerals Corporation
Maturi Project
Drill Hole Cross Section A - A'
Looking NE



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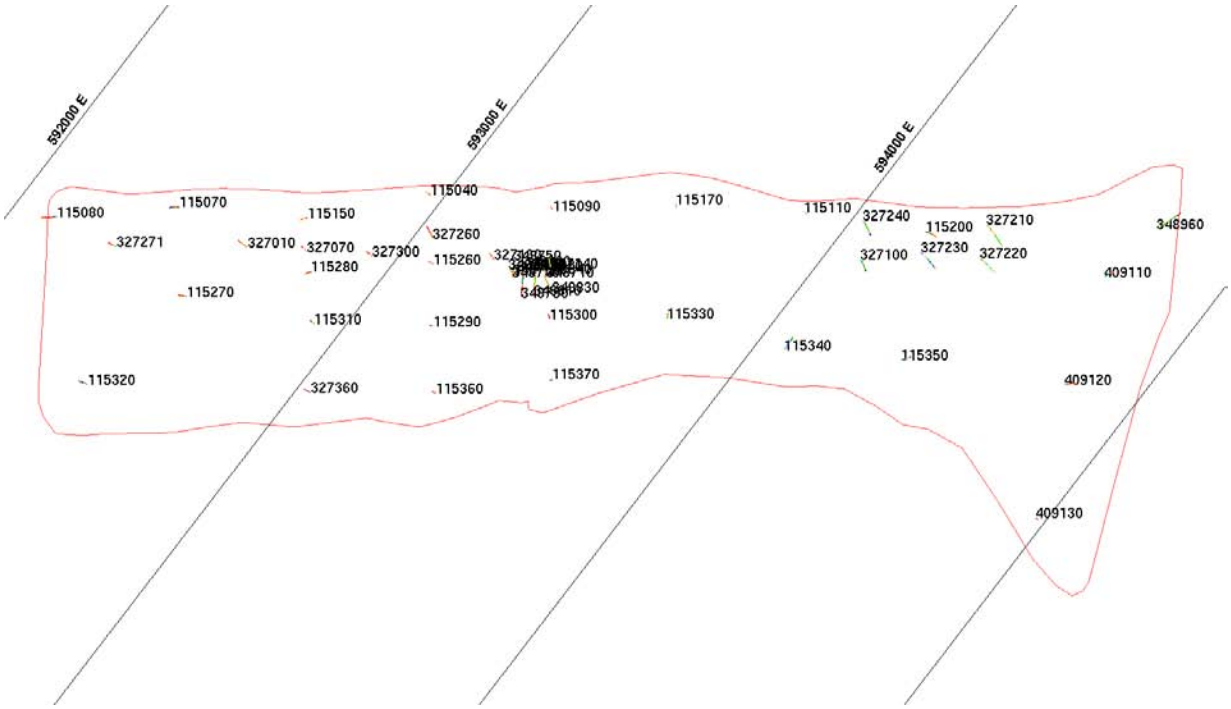
Toronto, Ontario M5J 2H7

Figure 11-3
Franconia Minerals Corporation
Maturi Project
Drill Hole Cross Section B - B'
Looking NE

FIGURE 11-4 VERTICAL LONGITUDINAL SECTION LOOKING NORTH – SHOWING DRILL HOLE DENSITY IN THE MATURI DEPOSIT



The table below indicates that there are five holes with eight readings that deviate more than usual and should be checked.

Deviation	Count	Holes
2°/30m	47	14
3°/30m	28	10
5°/30m	8	5

These holes are:

5°/30m	3°/30m	2°/30m
115050	115040	115040
115090	115050	115050
115150	115090	115070
348710	115150	115090
409130	115170	115110
	115290	115150
	348710	115170
	348930	115280
	409120	115290
	409130	327240
		348710
		348930
		409120
		409130

SAMPLING AND ASSAYING

In early holes (11500 series) mineralized drill core was sampled over nominal 5 ft. (1.52 m) intervals through mineralization and later holes in the 32700 series at nominal 10 ft. to 15 ft. (3 m to 4.5 m) intervals up to 6.1 m. Sample lengths were adjusted to conform to geologic features or mineralization (Soever, 2000). Sample lengths are for the most part independent of grade. Sample length statistics are shown in Figures 11-5 and 11-6. These figures illustrate that most of the core sampling for the Maturi deposit mineralization was in 5 ft. (approx. 1.5 m) and 10 ft. (approx. 3 m) intervals.

FIGURE 11-5 RAW ASSAY SAMPLE LENGTHS

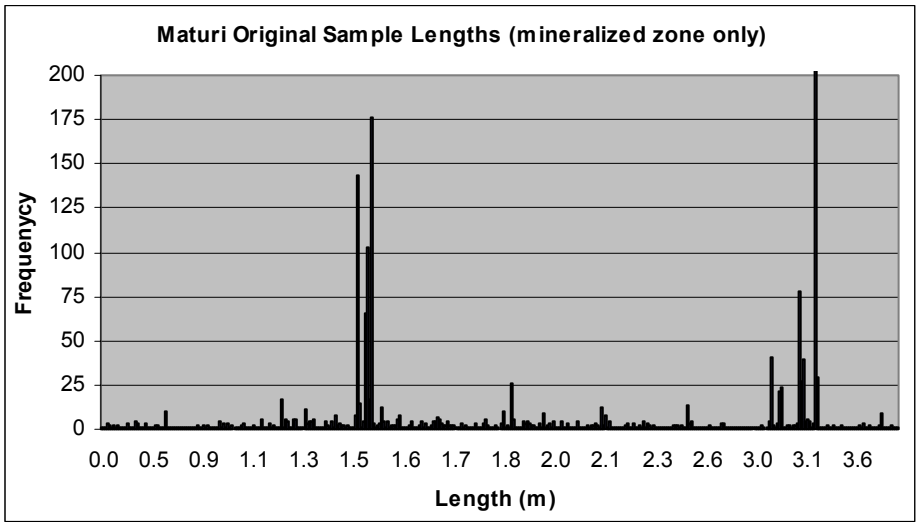
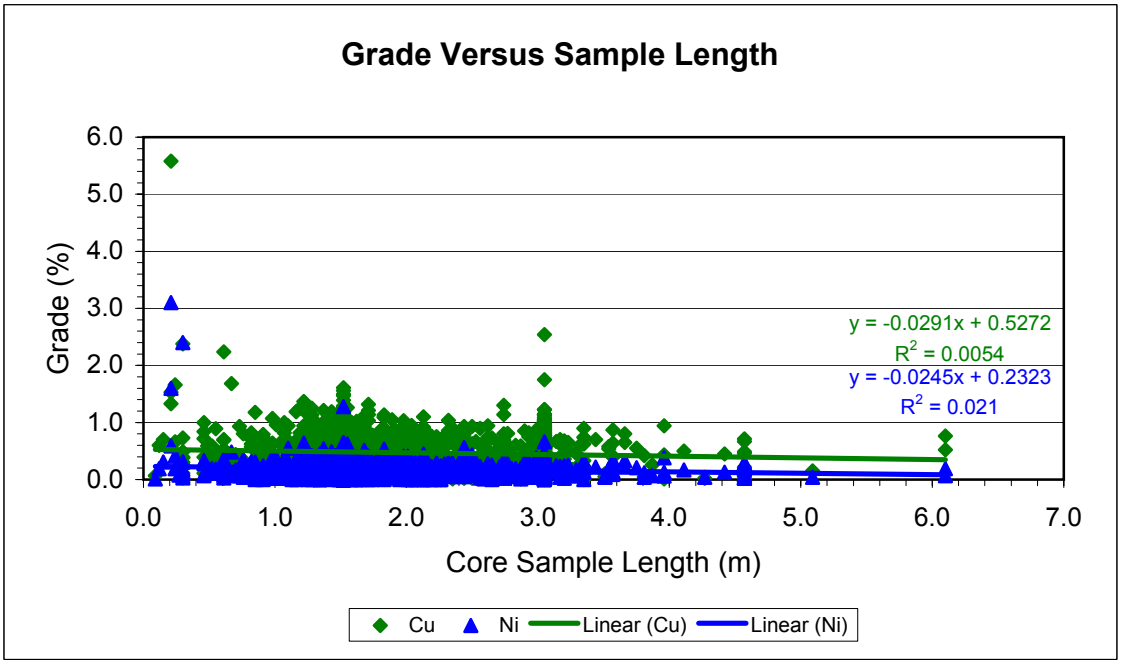
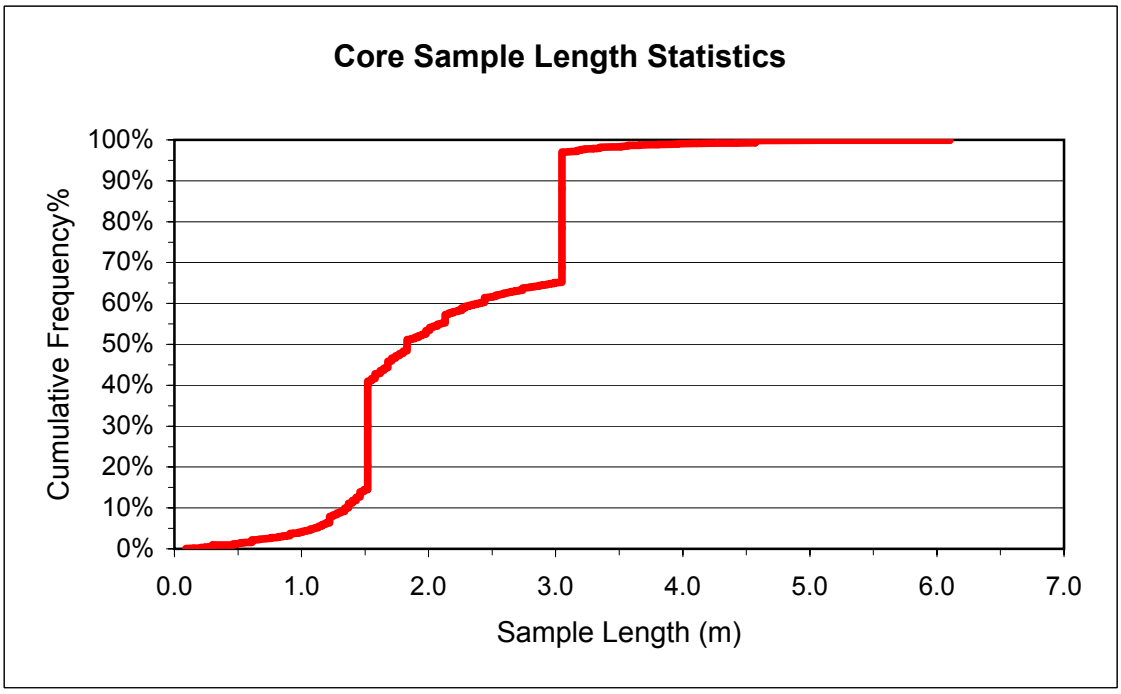


Figure 11-6 Core Sample Length Statistics
Franconia Minerals Corporation Maturi Deposit, Minnesota





Length (m)	%Sampled
0 - 1.52	16.5%
1.52	25.1%
1.52 - 3.0	25.1%
3.0	30.4%
>3.0	2.9%

Samples from the early drilling (11500 series and most of 13600 and 32700 series) were analyzed for copper and nickel only. Starting in 1967, the samples were also analyzed for cobalt (322 analyses). Cobalt analyses are recorded only to two decimal places and are therefore of little utility, since grades are very low (maximum 0.08%). The cobalt detection limit is unknown. . Table 11-1 shows statistics for analyses in the Maturi drill hole database. The database also contains 519 intervals totalling 9,181 m that represent casing and non-analyzed intervals.

TABLE 11-1 STATISTICS OF ANALYSES IN MATURI DATABASE
Franconia Minerals Corporation - Maturi Deposit, Minnesota

Statistic	Length (m)	Cu%	Ni%	Co%
Count	2,070	2,070	2,070	322
Sum (sample length)	4,442.98	-	-	808.44
Minimum	0.09	0.00	0.00	0.00
25th Percentile	1.52	0.22	0.09	0.01
Median	1.83	0.45	0.17	0.01
75th Percentile	3.05	0.65	0.24	0.02
Maximum	6.10	5.58	3.10	0.08
Mean	2.15	0.46	0.18	0.01
Weighted Mean	-	0.46	0.17	0.01
Standard Deviation	0.82	0.33	0.14	0.01
Coefficient Variation	0.38	0.70	0.77	0.51
90th Percentile	3.05	0.85	0.31	0.02
95th Percentile	3.05	0.98	0.36	0.02
97th Percentile	3.05	1.07	0.39	0.03
98th Percentile	3.35	1.13	0.42	0.03
99th Percentile	3.96	1.25	0.50	0.03

Some 1,400 core rejects from in excess of 8,000 m in parts of 26 holes at Maturi were later analyzed by Wallbridge (WGM) for copper, nickel, cobalt, platinum, palladium, gold, and sulphur. WGM's spot checks of the results showed good correlation with the original copper and nickel analyses (Soever, 2000). WGM performed linear regression for Pd on Cu for the reject analyses and found generally good correlation (R^2=66%). Similarly, correlation was done for Pt on Pd and Au on Pd with correlations of R^2=72%) and R^2=55%), respectively.

On the basis of this correlation, WGM applied the metal correlation formulas to the resource copper average grade, as estimated by WGM, to successively estimate PGM and gold average grades for the resource.

12 SAMPLING METHOD AND APPROACH

Although RPA has not seen reports describing the sampling methods for the historic drilling on the property, RPA assumes that major mining companies would follow standard industry practices, as appears to have been the case as described in Item 11 above.

Wallbridge collected duplicate samples of old core at the Hibbing DNR and them prepared and analyzed by Swastika Laboratories (Swastika) in Swastika, Ontario. In addition, core for twin hole 11526R drilled by Wallbridge in 2000 has been sampled conventionally, with quartered core samples analyzed by Swastika.

13 SAMPLE PREPARATION, ANALYSES AND SECURITY

Detailed information in connection with laboratory sample preparation and analytical methods, and any quality assurance/quality control procedures implemented for Inco were unavailable to WGM for its work in 2000. RPA assumes that Inco, Duval Mining Corporation, Newmont Mining Corp., and Kennecott followed standard industry practices in their sample preparation methods and analyses. However, no information or data were available to RPA.

The core samples from twin hole 11526R and duplicate samples from historic core collected by Wallbridge were sealed in plastic bags and then in cardboard boxes and shipped to Swastika Laboratories where the samples were prepared and assayed. Swastika's seven step routine sample preparation is:

1 Dry samples
2 Crust total sample to ½ inch with a jaw crusher
3 Crush total sample to 10 mesh with a rolls crusher
4 Split approximately 350 g using a Jones riffle
5 Remaining reject is placed in a plastic bag and packed in cartons with sample numbers on the outside
6 Pulverized the 350 g sample
7 Homogenize the pulp and it is ready for assay.

Sample preparation quality is ensured by regular inspection and maintenance of crushing equipment. Swastika prepared and analyzed second pulps from stored rejects. The resulting data is compared with original results to verify sample sequence and also that repeatability is within acceptable limits. Dust loss is kept at a minimum to ensure there is no dilution or concentration of various minerals. To prevent cross contamination, the equipment is cleaned with wire brushes and compressed air jets between samples and barren abrasive material is crushed between batches.

Pulps for nickel and copper assaying are digested by HF-HNO_3-$HClO_4$ and HCl leach then analyzed by atomic absorption spectrometry (AAS).

Gold assays begin with a fusion using a flux mixture of litharge, sodium carbonate, borax, silica fluorspar and further oxidants (nitre) or reductants (flour) added as required. The relative concentrations of the fluxing materials are adjusted to suit the type of sample being analyzed. An aliquot of silver is added as a final collection agent. The resultant lead button containing the precious metals is reduced to PbO_2 and absorbed into a cupel in a cupellation furnace. The precious metal collected in the silver aliquot are not ready for either geochemical analysis using an atomic absorption spectrometer or a gravimetric assay finish. The geochemical method involves dissolving the precious metal and analyzing by atomic absorption. Gravimetric assays are completed by dissolving the silver of the doré bead in nitric acid and leaving the gold to be weighed on a micro balance.

Quality control consists of using in-house or Canmet (Natural Resources Canada, Mineral Technology Branch) standards and blanks in each batch and reassaying at least 10% of all the samples. The fire assay supervisor evaluates all results and additional checks, reassaying pulps prepared from rejects may be run on anomalous values. All values obtained are reported.

Platinum and Palladium analyses use the same type of fusion and cupellation process as gold assaying. The resulting bead is dissolved using nitric and hydrochloric acids and is determined by atomic absorption. Blanks, standards, and duplicates are included in each furnace batch.

Swastika has found that samples containing high sulphides and particularly high nickel cause lower recovery of Pt and Pd during the fusion and cupellation process. The lab overcomes this by using a smaller aliquot. This method is also used to get beyond quoted threshold, since samples containing high Pt and Pd usually also contain high

sulphides and some nickel. Inter-element interferences are controlled by using a solution of Cu and La in all samples and standard solutions.

14 DATA VERIFICATION

Data verification was carried out by WGM for the Wallbridge work in 2000. WGM obtained results from University of Minnesota (UMN) surveys of one drill hole at Maturi, 25 holes at Spruce Road, and the vent pipe at the Maturi shaft. WGM validated data for its 2000 resource estimate by the following work.

- WGM located and surveyed hole 11526 on site.
- The converted NAD27 coordinates (i.e., New Minnesota to NAD27) were compared to surveyed locations and then the New Minnesota grid origin was adjusted to 539,980.4E and 5,199,956.8N based on the average shift in the plotted coordinates. The plot of surveyed holes for Spruce Road showed good correspondence to the adjusted locations to ±5 m east-west and ±10 m north-south (Soever, 2000). However, the one surveyed hole, 11526, at Maturi did not correspond.

- WGM used a mathematical transform, using the Maturi baseline of 55.92° azimuth tied to hole 11526, to transform all coordinates to NAD27 and then compared them to DNR surveyed locations and the adjusted NAD27 locations derived from the Inco New Minnesota grid. Soever (2000) reports that resulting locations show generally good correspondence with the values provided by Inco, except for at Maturi:

    - There were significant errors in hole locations in the northeast part of the Maturi grid.

    - Hole 327270/1 reported to be at Spruce Road is at Maturi.

    - Errors were found in underground drill hole elevation data. Errors appear to be related to confusing drift level with elevation on logs, i.e., the use of negative elevation with respect to the shaft collar. Two other implausible elevations were considered as error and all were corrected by WGM.

- WGM spot-checked assay data with computer drill logs and hand drawn sections. No discrepancies were noted between the assay database and the drill logs or sections. The geology on the hand drawn sections, however, did not agree with the geology as depicted on the drill sections. It appears a reinterpretation of the geology has been carried out, subsequent to the plotting of the drill sections.

- Error checking routines in Gemcom software were used to find, check and correct overlapping, out of sequence, and missing intervals.

For further independent verification, RPA cross-referenced the Maturi resource database collar coordinates and lengths for 38 drill holes that could be matched with the DNR database (Table 14-1). The DNR located and surveyed a number of holes on the property in UTM NAD27, UTM NAD83, and the State Plane Coordinate grid systems. For other holes on file that the DNR could not locate in the field, the original Inco exploration grid coordinates were converted to UTM based on vector relationships between the hole collars and the DNR surveyed holes. RPA notes that the resource database hole numbers have had zeros added to them and are 6-digit compared to the DNR and original numbers, which are generally 5-digit (wedges and deepened holes carry an extra digit).

RPA's cross-referencing confirmed that the resource database collar coordinate eastings and northings are in UTM NAD27 after conversion by WGM in 2000. Collar coordinates and hole lengths agreed to ±0.3 m in the two databases. Collar elevations have no variation except for 11 surface holes, of the 38 cross-referenced, where differences are +3.05 m to -3.66 m, with one hole at -17.38 m. RPA recommends that elevations be checked for these holes.

During RPA's site visit, the Inco shaft vent, and the collar of Wallbridge hole 11526R, adjacent to Inco hole 11526, was located by a hand held GPS instrument (Garmin eTREX). The shaft coordinates agree to ±6 m, the limit of accuracy for the GPS instrument in open ground. The hole collar is ±14 m to ±20 m, again the limit of accuracy for the GPS instrument in partial tree cover.

**Table 14-1 Cross Reference of Drill Hole Collar Locations in Resource Database with MNDNR Surveys and Records
Franconia Minerals Corporation Maturi Deposit, Minnesota**

Resource Database (Datamine)					MNDR Database							
BHID	East (m)	North (m)	Elev. (m)	DH Length (m)	BHID	East UTM NAD27	North UTM NAD27	East UTM NAD83	North UTM NAD83	Elev. (ft)	Elev. (m)	DH Length (m)
115080	592,197.5	5,294,180.0	449.58	195.99	11508	592,197.50	5,294,180.00	592,183.75	5,294,388.50	1,480.00	451.10	195.99
115320	592,397.6	5,293,884.1	437.69	563.88	11532	592,397.63	5,293,884.00	592,383.88	5,294,092.50	1,436.00	437.69	563.89
115070	592,463.8	5,294,439.2	437.39	224.03	11507	592,463.75	5,294,439.00	592,450.00	5,294,647.50	1,445.00	440.44	224.03
115270	592,598.7	5,294,239.8	436.17	358.14	11527	592,598.69	5,294,240.00	592,584.94	5,294,448.00	1,431.00	436.17	358.14
327010	592,628.0	5,294,522.7	437.39	249.94	32701	592,628.06	5,294,522.50	592,614.31	5,294,731.00	1,435.00	437.39	249.94
327070	592,779.5	5,294,625.2	440.13	279.20	32707	592,779.50	5,294,625.00	592,765.81	5,294,833.50	1,444.00	440.13	279.20
115150	592,785.5	5,294,616.4	439.22	231.04	11515	592,785.50	5,294,616.50	592,771.75	5,294,824.50	1,450.00	441.96	231.04
115280	592,862.3	5,294,502.8	442.87	352.96	11528	592,862.31	5,294,503.00	592,848.63	5,294,711.00	1,453.00	442.87	352.96
115310	592,879.4	5,294,477.5	442.26	458.72	11531	592,879.44	5,294,477.50	592,865.69	5,294,686.00	1,451.00	442.26	458.73
327300	592,931.0	5,294,727.7	447.45	346.86	32730	592,931.00	5,294,727.50	592,917.25	5,294,936.00	1,468.00	447.45	346.71
115050	592,971.5	5,294,994.2	435.25	190.80	11505	592,971.50	5,294,994.00	592,957.75	5,295,202.50	1,440.00	438.91	190.81
327360	592,998.1	5,294,287.9	443.79	546.81	32736	592,998.13	5,294,288.00	592,984.38	5,294,496.00	1,456.00	443.79	546.82
115040	593,014.2	5,294,931.1	443.48	191.41	11504	593,014.19	5,294,931.00	593,000.44	5,295,139.50	1,460.00	445.01	191.42
327260	593,031.3	5,294,905.9	445.31	312.42	32726	593,031.25	5,294,906.00	593,017.56	5,295,114.00	1,461.00	445.31	312.42
115260	593,109.8	5,294,789.7	444.70	356.31	11526	593,109.81	5,294,789.50	593,096.06	5,294,998.00	1,466.00	446.84	356.32
115290	593,196.1	5,294,662.2	443.79	482.19	11529	593,196.06	5,294,662.00	593,182.31	5,294,870.50	1,456.00	443.79	482.20
327180	593,216.9	5,294,957.8	443.18	368.50	32718	593,216.88	5,294,958.00	593,203.19	5,295,166.00	1,454.00	443.18	368.51
115360	593,304.5	5,294,501.9	443.48	607.47	11536	593,304.50	5,294,502.00	593,290.75	5,294,710.00	1,460.00	445.01	607.47
115090	593,327.4	5,295,120.9	442.57	224.03	11509	593,327.38	5,295,121.00	593,313.69	5,295,329.00	1,452.00	442.57	224.03
327140	593,368.4	5,295,060.3	445.62	318.52	32714	593,368.38	5,295,060.50	593,354.69	5,295,268.50	1,462.00	445.62	318.52
348710	593,375.4	5,295,028.2	446.84	339.85	34871	593,375.38	5,295,028.00	593,361.63	5,295,236.50	1,466.00	446.84	339.86
327650	593,407.0	5,294,350.4	445.31	257.56	32765	593,406.94	5,294,350.50	593,393.19	5,294,558.50	1,461.00	445.31	257.56
115300	593,458.9	5,294,926.5	447.45	461.16	11530	593,458.88	5,294,926.50	593,445.19	5,295,134.50	1,468.00	447.45	461.17
115370	593,590.4	5,294,732.1	447.45	671.78	11537	593,590.38	5,294,732.00	593,576.63	5,294,940.50	1,480.00	451.10	671.79
115170	593,620.1	5,295,341.0	442.87	241.71	11517	593,620.13	5,295,341.00	593,606.44	5,295,549.00	1,453.00	442.87	241.71
115330	593,741.7	5,295,161.2	440.13	402.03	11533	593,741.69	5,295,161.00	593,728.00	5,295,369.50	1,444.00	440.13	402.04
115110	593,906.0	5,295,571.1	436.17	160.02	11511	593,906.00	5,295,571.00	593,892.31	5,295,779.50	1,435.00	437.39	159.72
115340	594,082.6	5,295,310.1	445.31	379.78	11534	594,082.56	5,295,310.00	594,068.88	5,295,518.50	1,461.00	445.31	379.79
327240	594,091.6	5,295,623.1	439.22	198.12	32724	594,091.63	5,295,623.00	594,077.94	5,295,831.50	1,441.00	439.22	198.12
327100	594,168.5	5,295,509.5	439.22	182.88	32710	594,168.50	5,295,509.50	594,154.81	5,295,717.50	1,441.00	439.22	182.88
115200	594,232.9	5,295,740.7	436.78	171.91	11520	594,232.88	5,295,740.50	594,219.19	5,295,949.00	1,423.00	433.73	171.91
327230	594,294.4	5,295,649.8	450.49	232.56	32723	594,294.38	5,295,650.00	594,280.69	5,295,858.00	1,478.00	450.49	232.57
327210	594,394.6	5,295,828.0	442.57	272.80	32721	594,394.63	5,295,828.00	594,380.94	5,296,036.00	1,452.00	442.57	272.80
115350	594,400.9	5,295,492.3	435.25	396.85	11535	594,400.94	5,295,492.50	594,387.25	5,295,700.50	1,485.00	452.63	396.85
327220	594,448.6	5,295,748.2	441.05	254.51	32722	594,448.56	5,295,748.00	594,434.88	5,295,956.50	1,447.00	441.05	254.51
409110	594,701.0	5,296,027.9	443.18	196.90	40911	594,701.00	5,296,028.00	594,687.31	5,296,236.00	1,454.00	443.18	196.90
348960	594,750.0	5,296,281.8	443.79	333.76	34896	594,750.00	5,296,282.00	594,736.38	5,296,490.00	1,456.00	443.79	333.76
409120	594,860.2	5,295,738.1	451.10	534.92	40912	594,860.19	5,295,738.00	594,846.50	5,295,946.50	1,480.00	451.10	534.93

15 ADJACENT PROPERTIES

Some ten, mostly low grade disseminated copper-nickel bearing polymetallic mineral deposits occur at the base of the Duluth Complex over a strike distance of 35 km. The deposits are located mostly southwest of the Maturi property, with the Spruce Road and South Filson Creek deposits to the northwest (Figure 15-1). According to the Department of Natural Resources/Minnesota Geological Survey, the Duluth Complex contains approximately 3.63 billion tonnes (4.4 billion tons) of mineralization grading approximately 0.66% Cu and 0.2% Ni. From northeast to southwest, the deposits are: Spruce Road, South Filson Creek, Maturi and Maturi Extension, Birch Lake, Dunka Pit, Serpentine, Babbitt/Minnamax/Mesaba, Dunka Road/NorthMet, Wetlegs, and Wyman Creek. The Maturi deposit lies at the base of the complex between the Spruce Road and Dunka Pit deposits that are also hosted at the base of the South Kawishiwi intrusive. Table 15-1 summarizes the status of the more significant of the adjacent properties.

TABLE 15-1 SIGNIFICANT DEPOSITS ON PROPERTIES ADJACENT TO, AND IN THE VICINITY OF, THE MATURI PROPERTY
Franconia Minerals Corporation- Maturi Property, Minnesota

Deposit	Owner	Tonnage/Grade	Development
Birch Lake	Franconia Minerals Corporation	39 million tonnes at 0.72% Cu, 0.22% Ni, .01% Co, 0.49 g/t Pt, 1.01 g/t Pd, 0.23 g/t Au (UG)	Surface drilling, metallurgical testing
Mesaba (Babbitt)	Teck Cominco American Inc.	700 million tonnes at 0.46% Cu, 0.12% Ni (OP). 300 m tonnes (UG)	Surface drilling, 520 m shaft, UG development, UG drilling, bulk sampling, metallurgical testing, pre-feasibility studies.
NorthMet (Dunka Road)	Polymet/Nerco Expl.	487 million tonnes at 0.30% Cu, 0.08% Ni, 0.08 g/t Pt, 0.29 g/t Pd, 0.04 g/t Au (OP)	Surface drilling, bulk sampling, metallurgical testing, pre-feasibility study.
Maturi Extension	Wallbridge Mining Company	Du-4 Zone (UG)	Surface drilling Advanced exploration.
Spruce Road	Franconia Minerals Corporation	236 million tonnes at 0.46% Cu, 0.16% Ni (OP); estimated by American Copper & Nickel Co.	Surface drilling, bulk sampling, metallurgical testing, pre-feasibility study.

* OP: open pit; UG: underground

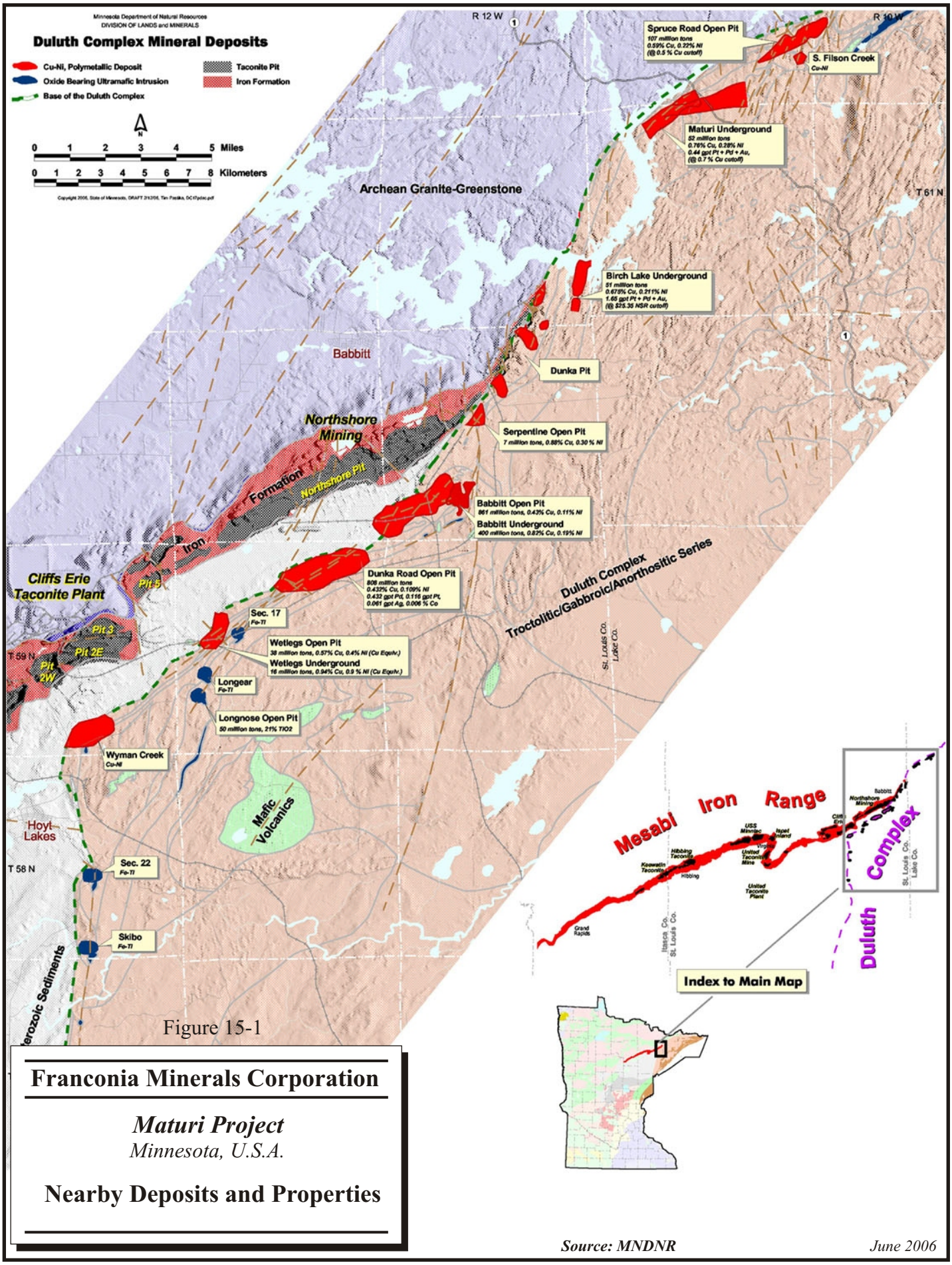


Figure 15-1

Franconia Minerals Corporation

Maturi Project

Minnesota, U.S.A.

Nearby Deposits and Properties

Source: MNDNR *June 2006*

Polymet Mining Corporation's (Polymet) completed a pre-feasibility study in 2001. In late 2005, Polymet purchased the Cliffs Erie, LLC (Cleveland Cliffs) taconite plant and tailings basin near Hoyt Lakes, Minnesota, and is currently preparing an environmental impact statement as part of a final feasibility study due in 2007. Polymet plans to start open pit development in 2008.

Duluth Metals Limited, a subsidiary of Wallbridge Mining Company, has just completed drilling seven holes to test Cu-Ni-PGE mineralization down dip of the Maturi deposit on the Maturi Extension property east adjacent to Franconia's US ES01352 lease.

At the Birch Lake deposit, fill-in drilling of four holes with six wedges (4,022 m) was completed in 2005 by Franconia (Gavin, 2005).

16 MINERAL PROCESSING AND METALLURGICAL TESTING

Metallurical testwork and processing information is taken from a number of sources Soever, (2000), Hayden (2005a, b), Clow and Routledge (2005), Routledge (2004) and Lehmann (2002a, 2003, 2005).

The University of Minnesota conducted concentration tests for Inco in 1967 and found that about 70% of the chalcopyrite occurs as discrete grains and compound grains with pyrrhotite, the compound grains varying from 100 µm to 1,800 µm and averaging 500 µm. Chalcopyrite also occurs as minute inclusions in olivine, pyrrhotite, and magnetite. Pentlandite was reported to occur as compound grains with pyrrhotite and chalcopyrite or included in pyrrhotite.

Inco conducted extensive testwork in 1973 and processed a 9,500 tonne bulk sample from the Spruce Road deposit at Inco's Creighton mill in Ontario (Soever, 2005). Inco noted other copper minerals and native copper in addition to chalcopyrite and reported that some of the nickel is bound in olivine and is not recoverable by flotation. Inco's flotation work produced a bulk concentrate grading 13.4% copper and 2.8% nickel, with recoveries of 89% for copper, 63% for nickel, 28% Co, 65% to 71% for gold and silver, and approximately 65% for PGMs.

SGS Lakefield Research mineralogical work for Wallbridge in 2000 on core from the nearby Spruce Road deposit noted chalcopyrite and cubanite as the main copper minerals with grain sizes ranging from 5 µm to 250 µm and 20 µm to 500 µm, respectively. Nickel was present in pentlandite, with grain sizes from 2 µm to 250 µm and as exsolution flames in pyrrhotite. Soever (2000) reports that SGS Lakefield Research flotation work yielded similar data to that obtained by Inco. Preliminary work by SGS Lakefield Research has shown that a high grade copper (30% Cu) concentrate with nickel contamination (0.4% Ni) can be achieved. Copper recovery, however, is low and a poor

quality nickel concentrate at low copper recovery. Similar flotation results on Duluth Complex Cu-Ni mineralization were experienced by the University of Minnesota and the USBM in the past (Lehmann 2002a, 2003, 2005).

Recent hydrometallurgical advances in treating nickel sulphide ores by leaching have been published and applied to Duluth Complex mineralization and elsewhere. Examples are Cominco Engineering Technical Services (CESL) process at the Teck-Cominco Mesaba deposit and the PLATSOL process that underwent extensive testwork at SGS Lakefield Research on material from Polymet's Northmet deposit from 2000 to 2001. Inco is conducting pilot plant testing for hydrometallurgcal recovery of Voisey's Bay Ni-Cu sulphides. The patented PLATSOL hydrometallurgical process is based on a higher temperature autoclave oxidative pressure leaching method with a chloride additive that is designed to recover precious metals as well as copper and nickel from low grade concentrate. This is in contrast to the Inco process that is focused on higher grade nickel and copper concentrates from Voiseys Bay which lack significant PGMs.

Routledge (2004) provides additional background information and references on hydrometallurgical testing in connection with Duluth Complex sulphide mineralization.

In 2005, Franconia conducted flotation and PLATSOL process testwork on core composites from the Birch Lake deposit that has nickel-copper sulphide mineralization similar to the Maturi but significantly higher PGM content (Hayden, 2005a, b). Good metal recoveries for the Birch Lake deposit offer some promise for application at Maturi.

RPA cautions that none of the CESL, PLATSOL, or Inco processes are commercially proven at the present time. The CESL process for copper–gold concentrates (chalcopyrite/bornite at >28% Cu) is approaching commercial viability. CESL and Companhia Vale do Rio Doce (CVRD) are undertaking a large scale pilot plant (10,000 tpa copper cathode output) test on copper-gold concentrates in Brazil as part of a final feasibility study of Carajas region ore bodies.

It would appear from testwork to date on several of these Duluth Complex Cu-Ni-PGM deposits and recent hydrometallurgy developments, that potential commercial processing of Maturi mineralized material would involve a two stage process: 1) production of a bulk copper-nickel concentrate and 2) hydrometallurgical treatment. The overall recovery is a combination of the two processes. Table 16-1 lists potential concentrator and hydrometallurgical recovery parameters at Maturi arising from testing of similar mineralized materials at other Duluth Complex deposits. There would be three final products – cathode copper, a nickel cobalt hydroxide, and a precious metals precipitate. The copper would be a direct saleable product, and the other two products will be shipped to refiners for processing. RPA used the following overall recoveries for the purposes of this preliminary assessment. It is emphasized that hydrometallurgical testwork on mineralized material from the Maturi deposit itself is required to confirm recoveries.

TABLE 16-1 POTENTIAL METALLURGICAL RECOVERY FOR THE MATURI DEPOSIT
Franconia Minerals Corporation - Maturi Property, Minnesota

	Ni %	Cu %	Co %	Pd %	Pt %	Au %
Concentrator Recovery	72.0	92.0	45.0	75.0	70.0	70.0
PLATSOL Recovery	95.7	95.3	95.7	85.5	90.5	44.5
Total Recovery	68.9	87.7	43.1	64.1	63.4	31.2

Franconia obtained a licence to use the PLATSOL process from International PGM Technologies Ltd. of Peterborough, Ontario in December 2005.

17 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

MINERAL RESOURCES

DATABASE AND APPROACH

The Maturi mineral resource estimate is based entirely on diamond drilling consisting of 41 surface holes and 12 underground holes totalling 14,555 m. The wide drill hole spacing is adequate for classification as inferred resources. RPA verified and accepted the digital drill hole database that was obtained from Wallbridge since no new drilling has been done on the deposit subsequent to Walbridge's preliminary assessment in 2000. RPA is of the opinion that the quality of diamond drill hole data is acceptable for resource estimation.

RPA estimated the mineral resource at Maturi by 3D computer block modelling and geostatistical methodologies available in Datamine Studio® Version 1 software. A wireframe outlining the potentially economic mineralization was constructed in order to constrain resource estimate. Drill hole samples inside the wireframes were captured, and assay composites of equal three-metre lengths were generated to regularize sample support. Grade variogram models of Cu and Ni assay composites were graphed and interpreted. Block model search parameters were established based on the variography results and the geometry of the deposit. A nearest neighbour (NN) block model was generated to declustered sample data for statistics, and ordinary kriging (OK) was used for grade interpolation. Since the smoothing ratios for both Cu and Ni were close to 1, no volume variance corrections to the block model were applied.

Owing to the polymetallic nature of the mineralization, RPA used a net smelter return (NSR) approach to report resources at incremental US dollar NSR cut-offs. In RPA's opinion, this approach best accounts for the impact of co-product metals on the potential project economics.

For determination of cut-off cost ranges, RPA assumed a project scenario consisting of bulk underground mining by sublevel caving and processing by conventional crushing, grinding and flotation to produce a bulk Cu-Ni-PGM concentrate, followed by hydrometallurgical recovery of saleable metals and precipitates utilizing the patented PLATSOL process. Concentrator and PLATSOL plants are assumed to be located on site or nearby e.g. the Dunka Pit site.

Fundamental NSR assumptions are metal prices, concentrator and PLATSOL metal recoveries metal, plant treatment costs and refining costs, and applicable sales deductions (Table 17-1). PLATSOL recoveries are derived from metallurgical testing of mineralized material from Franconia's nearby Birch Lake Cu-Ni-PGM deposit (Clow and Routledge, 2005; Lehmann, 2005; Hayden, 2005a, b). There are no deductions or charges for copper, as the final product is cathode copper, which is assumed to be saleable.

Sale of the products to consumers or distributors for copper and to refiners for the Ni-Co and precious metals products will not be subject to penalties for impurities, and there will be no hindrance in selling the products other than normal market conditions that apply to most metal producers. RPA acknowledges that the PGM content of the Maturi mineralization is lower than that of Birch Lake and PGM recoveries may vary from those used in this report. RPA recommends that Franconia carry out flotation work to optimize metal recoveries of mineralized material from the Maturi deposit and hydrometallurgical (PLATSOL) recovery tests similar to what was done by Franconia for its Birch Lake deposit.

Table 17-1 NSR Assumptions and Payable Metals
Franconia Minerals Corporation Maturi Deposit, Minnesota

Metal	Unit	Long Term Price	Maturi Mill Recovery	Platsol HydroMet Recovery	Total Recovery	Metal Refining $/unit	Price Deduction	Sales Discount	Accountable Metal $/unit	Unit	% of Price	$/Grade Unit	Grade Unit
Copper	lb	$1.20	92.0%	95.3%	87.7%	$0.00	$0.00	0%	$1.05	lb	87.7%	$23.19	%
Nickel	lb	$4.50	72.0%	95.7%	68.9%	$0.35	$0.00	10%	$2.48	lb	55.0%	$54.58	%
Cobalt	lb	$10.00	45.0%	95.7%	43.1%	$0.85	$0.00	10%	$3.11	lb	31.1%	$68.58	%
Gold	oz	$450	70.0%	44.5%	31.2%	$12.00	$0.00	0%	$128.18	oz	28.5%	$4.12	g/t
Platinum	oz	$800	70.0%	90.5%	63.4%	$18.00	$2.00	0%	$487.53	oz	60.9%	$15.67	g/t
Palladium	oz	$300	75.0%	85.5%	64.1%	$18.00	$1.50	0%	$173.41	oz	57.8%	$5.58	g/t

Hydromet Conc. Treatment ($/ton)	$145	
Average Concentrate Ratio (Cu)	16	(Lakefield Research)
Average Treatment Cost/ROMton	$9.06	$9.99 /tonne
Concentrate Freight $/ton	$0.00	
Concentrate Freight/ROMton	$0	

Notes:
1) All dollars in US currency
2) Maturi mill recoveries from Lakefield Research in Soever (2000)
3) Average Concentrate Ratio derived for copper from Lakefield Research in Soever (2000)
4) Platsol hyrdrometallurgical recoveries and treatment costs from Hayden (2005a, b)
5) Refining costs and sales discounts from Lehmann (2005)

NSR CUT-OFFS

NSR cut-offs are based on project operating costs (Table 17-2) that RPA estimates to be ±30%. Mining costs assume an underground sublevel caving mining scenario, and have been compared to other hard rock mining operations that exploit deposits with similar physical characteristics to the Maturi deposit. The project envisions a mine and plant that produces 10,500 tonnes mill feed per day and 750 tonnes per day of waste for 350 days per year, or a total of 3,675,000 tonnes mill feed per year. Direct mine operation costs are US$8.71/tonne including 20% contingency.

TABLE 17-2 OPERATING COSTS FOR NSR CUT-OFF
Franconia Minerals Corporation - Maturi Property, Minnesota

	US$ per tonne milled
Mining	8.71
Exploration	0.50
Concentration	4.80
Hydrometallurical Plant & Marketing	9.99
G&A	1.02
Total	**25.02**

The incremental cost of mining, based on variable costs of 60%, is US$15/tonne and is a minimum NSR RPA applies as a resource cut-off.

ASSAYING AND ASSAY STATISTICS

Prior to block modelling, RPA conducted a statistical review of the drill hole database for both raw assay data and composites.

A statistic query of the various elements in the drill hole database is tabulated in Table 17-3.

TABLE 17-3 ASSAY AND ASSAY COMPOSITES STATISTICS

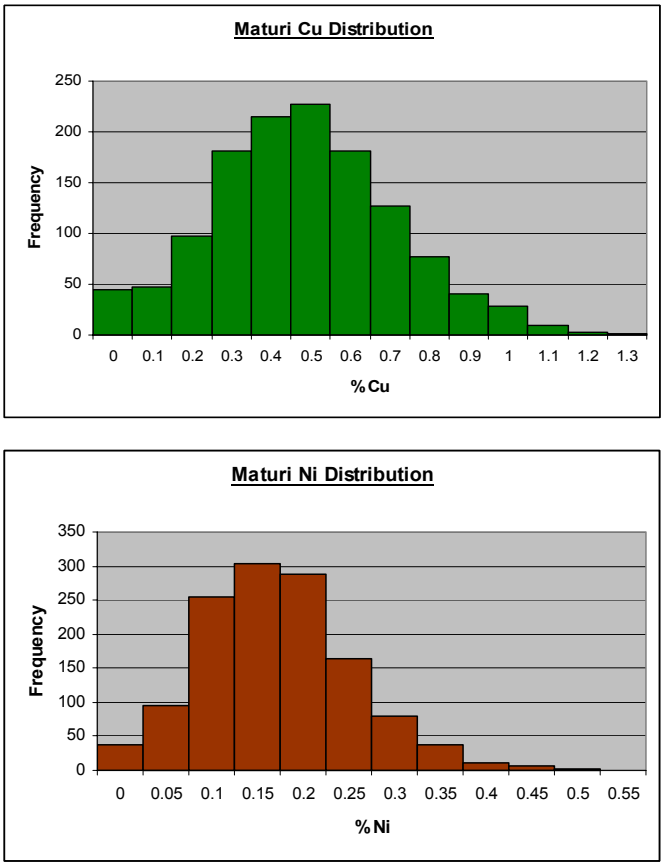
Franconia Minerals Corporation - Maturi Property, Minnesota

FIELD	RECORDS	SAMPLES	MISSING	>TRACE	MINIMUM	MAXIMUM	RANGE	TOTAL	MEAN	VARIANCE
Raw Assay Data										
Length (m)	1,801	1,801	0	1,801	0.00002	11.12	11.12	3,770.65	2.09	0.77581
Cu%	1,801	1,801	0	1,772	0.00000	5.58	5.58	985.80	0.55	0.09385
Ni%	1,801	1,801	0	1,771	0.00000	3.10	3.10	372.95	0.21	0.02040
Co%*	1,801	728	1,073	728	0.01000	0.03	0.02	14.36	0.02	0.00004
Sulphur%	1,801	903	898	903	0.07000	2.65	2.58	1,060.72	1.17	0.11976
Pt g/t	1,801	912	889	583	0.00000	0.48	0.48	85.48	0.09	0.00874
Pd g/t	1,801	912	889	884	0.00000	2.95	2.95	248.79	0.27	0.10312
Au g/t	1,801	912	889	333	0.00000	0.51	0.51	37.35	0.04	0.00575
Density	1,801	1,801	0	1,801	2.80414	3.56	0.75	5,140.87	2.85	0.00120
Composited Assays Data										
Length (m)	1,282	1,282	0	1,282	0.05000	3.00	2.95	3,770.65	2.94	0.11652
Cu%	1,282	1,282	0	1,272	0.00000	1.89	1.89	684.31	0.53	0.05649
Ni%	1,282	1,282	0	1,272	0.00000	0.72	0.72	253.81	0.20	0.00730
Co%*	1,282	503	779	503	0.01000	0.03	0.02	10.13	0.02	0.00004
Sulphur%	1,282	681	601	681	0.14748	2.65	2.50	790.42	1.16	0.12460
Pt g/t	1,282	690	592	424	0.00000	0.41	0.41	56.19	0.08	0.00740
Pd g/t	1,282	690	592	669	0.00000	2.95	2.95	169.89	0.25	0.07195
Au g/t	1,282	690	592	252	0.00000	0.51	0.51	24.55	0.04	0.00429
Density	1,282	1,282	0	1,282	2.80414	2.97	0.17	3,656.49	2.85	0.00043

* The Cobalt values come from early INCO. They may have been calculated as a ratio of Ni content as is commonly done in Sudbury, and was deemed unreliable.

Histograms of the Cu and Ni distributions were plotted to determine optimal grade estimation methods (Figure 17-2).

FIGURE 17-2 DISTRIBUTION OF CU AND NI IN COMPOSITE SAMPLE FILE



From the relatively normal Cu distribution (except for two samples at 1.68% and 1.88% above the 1.3% upper bin), it was determined that Ordinary kriging would be an appropriate method for block model grade estimation. The Ni distribution is slightly more positively skewed, but with low Ni grades contributing little to the value, the same estimation method was used as for Cu. Grade capping was not considered necessary and was not carried out.

SPECIFIC GRAVITY

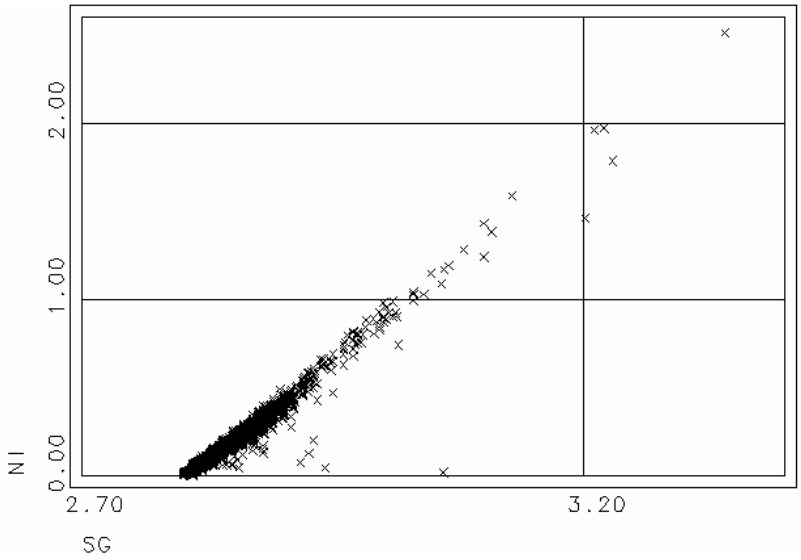
A small number of specific gravity (SG) measurements are available for samples processed after 1972, when the SGs were based on actual XRF results. SG data have been calculated by the Inco borehole system software using an accepted formula based on nickel grades. This results in a close correlation ($R^2 \geq 95\%$) between the SG and Ni grade

(Figure 17-3). Formula derived from linear regression (and applied to the block model) is:

S.G. = 0.24297(Ni) + 2.80414

With a low range of sulphide content, the bulk of which lies within the troctolite, RPA believes that this correlation can be used to derive reasonably confident specific gravity values from the Ni grade. RPA recommends, however, that any future sampling include specific gravity determinations, to confirm and improve the robustness of the SG-Ni grade correlation.

FIGURE 17-3 NI VS SPECIFIC GRAVITY



ESTIMATION METHOLOGY

GEOLOGICAL INTERPRETATION AND WIREFRAMES

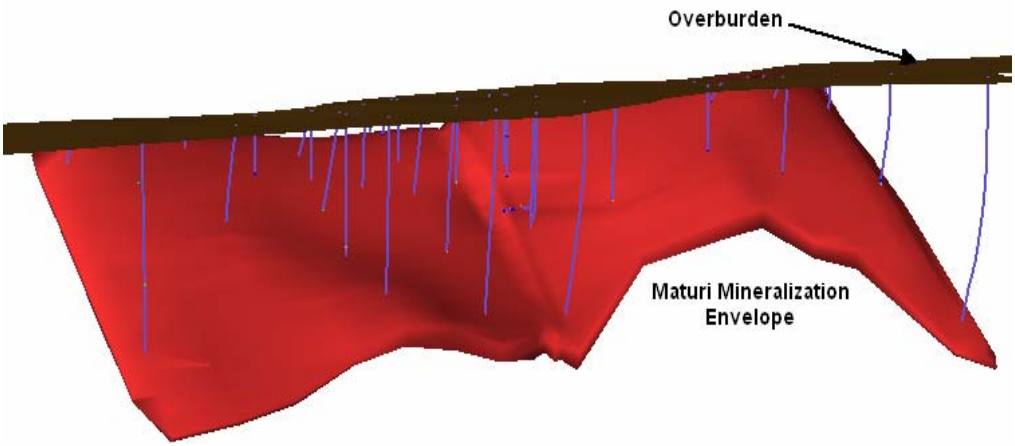
Geological interpretations contain information important to resource estimations. These include the continuity of the mineralization between drill holes, mineral zones, the form and character of the mineralization, contact information, structural features and crosscutting relationships, and geometry of the mineralization and associated lithological units.

The diamond drill data was used initially to construct wireframes of the overburden and the footwall of the SKI. Using these wireframe surfaces as a guide, RPA constructed a wireframe of the mineralization using a rough cut-off grade of 0.4% Cu representing the mainly disseminated sulphide mineralization. Material grading less than 0.4% Cu was included in the wireframe model if it contributed to a better continuity of the zone. The envelope was interpreted as a simple, broad zone and examined to ensure that the estimated grade of the mineralization would not be overstated as could be the case if a more complex interpretation of irregular distribution of higher grade mineralization between holes was modelled. The mineralization model was reviewed to ensure that it was consistent with the interpreted mineralizing process.

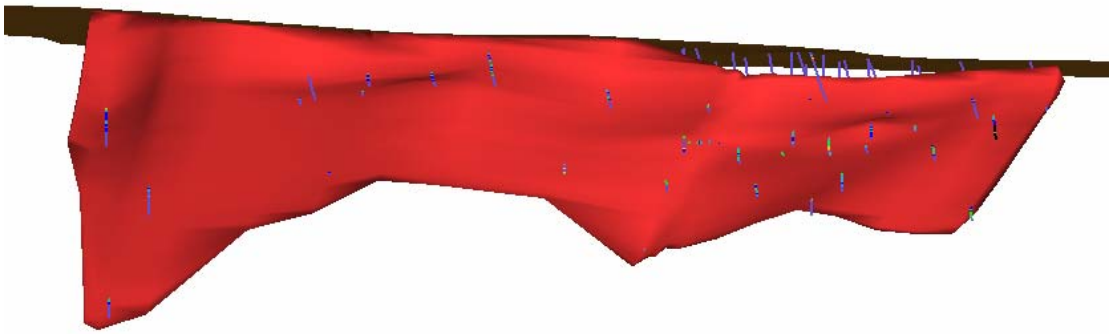
Figure 17-4 shows 3-D isometric views of the wireframe.

FIGURE 17-4 ISOMETRIC VIEWS OF THE MATURI DEPOSIT WIREFRAME

Looking North



Looking South



In the opinion of RPA, the wireframes of the deposit are a reasonable representation of the geology for this type of deposit, and the correct diamond drill hole samples were captured as intended.

The mineralization envelope was used to capture the sample assays for use in assay compositing, statistical analysis, and grade estimation as well as to generate the block model.

BLOCK MODEL

The block model was created in the UTM coordinate system and to better fit the general strike (060° Az.) and dip (-34° southeast), model XYZ axes were rotated to conform to the general plane of the mineralization. As with the rest of the resource modelling data, 5,000,000 was subtracted from the block model northings to eliminate potential problems with single-precision Datamine. The rotated model origin is at 592,348 (0 rotated) east, 5,293,760 (0 rotated) north and -475 (0 rotated) masl elevation.

The appropriate block size for the block model was determined by examination of the drill hole spacing in the orientation of the deposit (370m by 150m by 100m) and with respect to potential bulk mining methods. A block size of 30 m (X direction – strike) x 15 m (Y direction – dip) x 10 m (Z direction – across) was used to represent the smallest possible mining unit that will have reasonable grade resolution. At the maximum extents, the model comprises approximately 113 blocks (X) by 80 blocks (Y) by 10 blocks (Z). The model contains a total of 45,501 blocks, for an enclosed volume of 177,501,383 m^3. The corresponding wire frame volume used to generate the block model and capture the samples has a volume of 177,541,454 m^3. The model extends to -430 masl elevation (900 m depth).

ASSAY COMPOSITING

The samples used were composited on a 3 m interval. This length was based on the histograms of the sample lengths (see Figures 11-5 and 11-6), and consideration of the drilling density and block size.

A comparison of the composite sample file and the original assay sample file shows the same total length of samples (Table 17-4).

TABLE 17-4 VALIDATION OF COMPOSITE SAMPLE LENGTHS
Franconia Minerals Corporation - Maturi Property, Minnesota

Sample File	No. Samples	Min. Length	Max. Length	Total Length
Selsamp.dm	1801	0.00002	11.12	3770.65
Compsamp.dm	1801	0.05	3.00	3770.65

There were no samples in the selected data with null Cu or Ni values (not assayed).

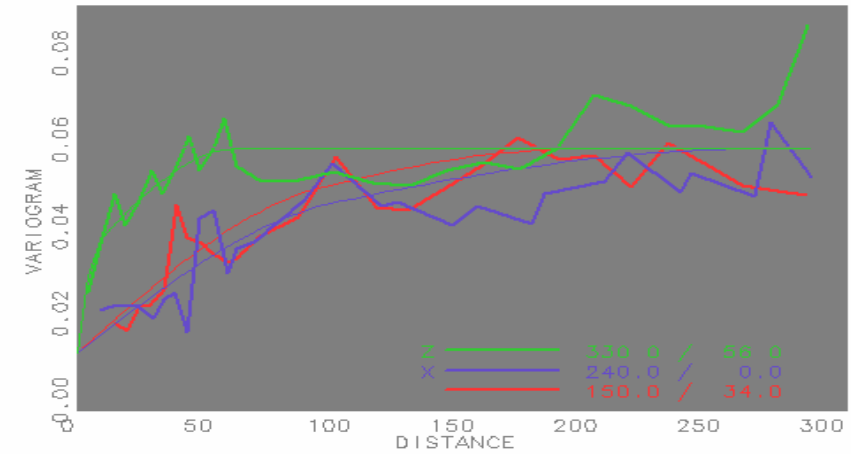
In RPA's opinion, the sample compositing is done correctly and the sample composites are valid for use in block model estimation.

VARIOGRAPHY AND SEARCH ELLIPSE

Semi-variograms were calculated for Cu and Ni, using the axes rotations as noted in Table 17-5. Lag distance was 15 m for a total of 20 lags, with 5 m sub-lags for the first 60 m. The ranges noted below (Structure 2) were used to define the search volume in the block model grade estimation. Variography determinations for cobalt, palladium, platinum, and gold were not possible due to the lack of sample data.

Using these experimental semi-variograms, models were generated for Cu and Ni using the Datamine® process VARFIT.

FIGURE 17-5 CU VARIOGRAM MODEL

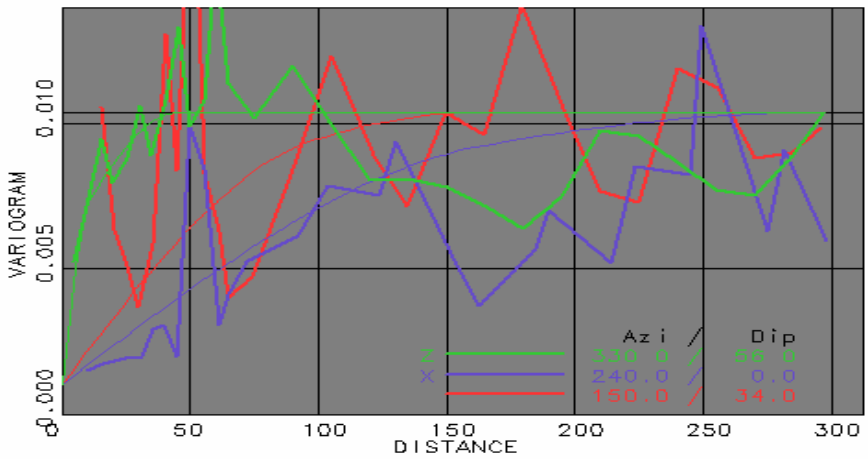


Variogram Grade CU

2 Structure Anisotropic Model, Nugget = 0.0132

Structure	Range X	Range Y	Range Z	C Value	Sill
1	103.5	97.0	8.8	0.0204	0.0336
2	280.0	206.8	84.8	0.0267	0.0802

FIGURE 17-6 NI VARIOGRAM MODEL



Variogram Grade NI

2 Structure Anisotropic Model, Nugget = 0.0010

Structure	Range X	Range Y	Range Z	C Value	Sill
1	163.1	97.0	9.5	0.0047	0.0057
2	291.5	181.6	44.7	0.0047	0.0104

TABLE 17-5 VARIOGRAM MODEL PARAMETERS
Franconia Minerals Corporation - Maturi Property, Minnesota

									1st Structure				2nd Structure			
ELEMENT	VREFNUM	VANGLE1	VANGLE2	VANGLE3	VAXIS1	VAXIS2	VAXIS3	NUGGET	Range 1 (Strike)	Range 2 (Dip)	Range 3 (Across)	ST1PAR4	Range 1 (Strike)	Range 2 (Dip)	Range 3 (Across)	ST2PAR4
Cu	1	150	0	54	3	2	1	0.0132	103.5	97.0	8.8	0.0204	280.0	206.8	64.8	0.0267
Ni	2	150	0	54	3	2	1	0.0010	163.1	97.0	9.5	0.0047	291.5	161.6	44.7	0.0047

These models were used to determine the search ellipse dimensions, apply ordinary kriged weights, and calculate the Datamine FFUNC values required for global variance corrections of the estimated block models. The Ni variogram model was used for the gold, platinum, palladium, cobalt, and density estimations.

PGE ANALYSIS

Variography on the precious metals group was not possible due to insufficient data. Only 116 analyses are available in the database and they are all from a single hole, WM-001, drilled by Wallbridge in 2000 at the Spruce Road deposit. Data from the second hole drilled by Wallbridge on the property (twin hole 11526R), was not added to the resource estimation database. However, there was enough data, generated mainly from Wallbridge analysis of Inco core rejects, to determine inter-element correlations and derive formulae for the Maturi mineralization (Figures 17-7 to 17-9).

FIGURE 17-7 PD VS CU

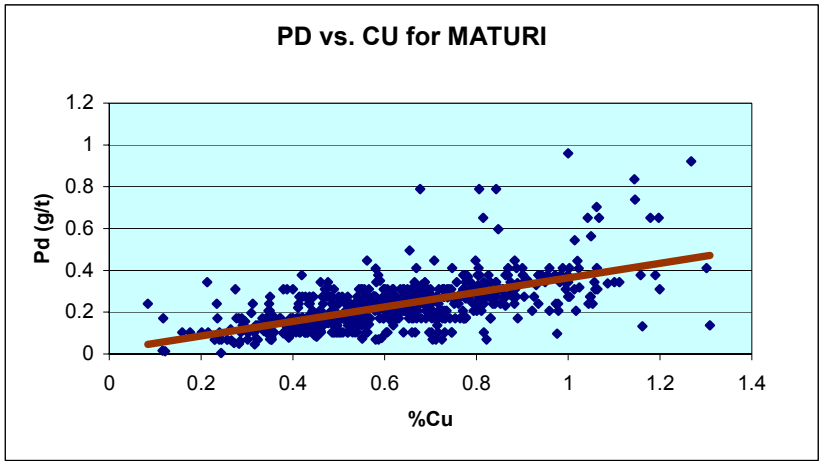


FIGURE 17-8 PT VS PD

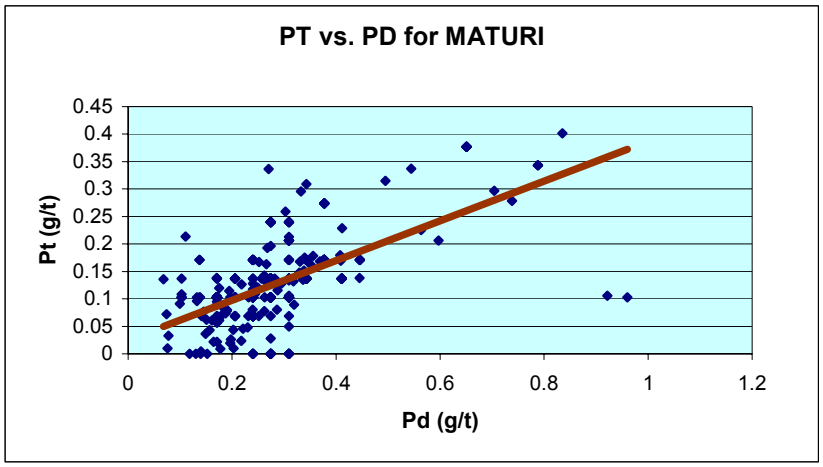
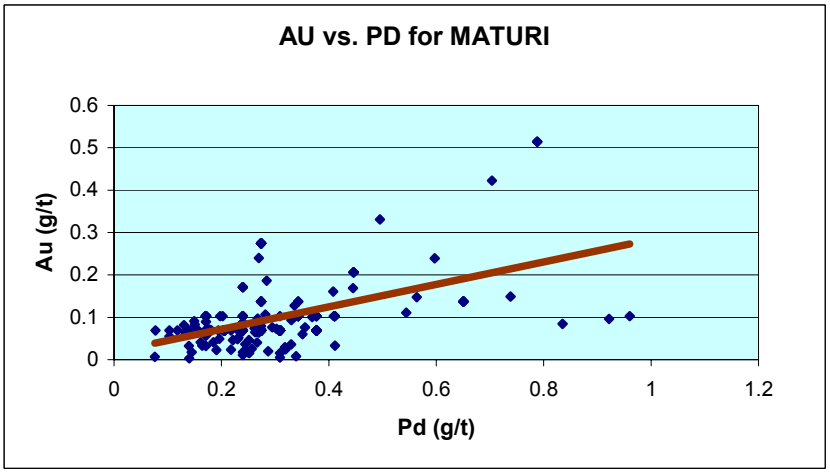


FIGURE 17-9 AU VS PD



RPA considers that correlations for the Maturi PGE grade data are reasonable for derivation of the formulae shown in Table 17-6. These formulae were used to assign Pt, Pd and Au grades to the final kriged block model.

TABLE 17-6 PGE CORRELATIONS AND REGRESSION FORMULAE
Franconia Minerals Corporation - Maturi Property, Minnesota

Correlated Elements	Correlation Coefficient	Regression Formula
Pd on Cu	66%	Pd = 0.36467Cu + 0.00438
Pt on Pd	72%	Pt = 0.47892Pd – 0.02858
Au on Pd	55%	Au = 0.29520Pd – 0.03027

Due to the poor correlation of Co grades with either Cu or Ni and the very low Co grades, which are reported only to two decimal places and thus are not reliable, the mean Co assay grade of 0.02% was assigned to the final kriged model. Cobalt will contribute little to the economics of the project.

RPA recommends that additional diamond drilling and sampling be carried out to acquire representative PGM (and cobalt) analytical data. In RPA's opinion, such data will be necessary for the project to advance to the stage of estimation of indicated resources and, subject to feasibility study, mineral reserves.

GRADE INTERPOLATION

Nearest Neighbour Model

Samples may be taken preferentially from high-grade areas of a deposit based on a drilling strategy focused on confirming the existence and extent of high-grade mineralization. Other data such as twinned drill holes or closely spaced underground drilling results in clustered data that may over represent higher grades locally within the deposit with respect to grade interpolation methods.

RPA carried out declustering of the data for the Maturi resource estimate to determine the relative importance (weight) of each sample. This was achieved through the construction of a nearest neighbour (NN) block model for the 0.4% Cu wireframe, and using anisotropic distances and a search ellipsoid defined from the longest range of the average of the copper and nickel variograms to compute the statistics for declustered data. The NN model was used to validate the kriged global estimates and check the smoothing ratios.

Kriged Block Model

Ordinary kriging is a linear estimation technique that weights unbiased linear combinations of the sample data by attempting to have the mean residual or error equal to zero. OK has advantages with respect to other linear estimation methods such as polygonal and inverse distance that include sample declustering, masking effect and minimization of the estimation variance.

OK can generate negative weights during the interpolation process particularly where samples are clustered and mask one another. The negative weighting can be eliminated by the software, however, for the Maturi resource estimation, RPA allowed negative weights since the drilling is mostly wide spaced and sample composites are not clustered within the search distances used so not many negative kriging weights were generated.

The Datamine® process ESTIMA was used to interpolate Cu and Ni grade into resource blocks utilizing the search ellipsoid defined from grade variography and a search parametric file (Table 17-7). The search parametric file defines minimum and maximum numbers of samples to be used in the various search volumes, minimum and maximum composite samples in a search octant, multiplication factors that are applied to search volumes and maximum number of samples to be used from one drill hole. The Ni variogram models for Cu and Ni were used for the estimations.

All grade estimations were done on a regularized block model (no cell splitting) to minimize the amount of high grade smoothing. For appearance, and to simplify the evaluation process, the final kriged block model was then split along the mineralized boundary.

TABLE 17-7 KRIGED MODEL SEARCH PARAMETERS
Franconia Minerals Corporation - Maturi Property, Minnesota

SREFNUM	SMETHOD	SDIST1	SDIST2	SDIST3	SANGLE1	SANGLE2	SANGLE3	SAXIS1	SAXIS2	SAXIS3	MINNUM1	MAXNUM1	SVOLFAC2	MINNUM2	MAXNUM2	SVOLFAC3	MINNUM3	MAXNUM3	MAXKEY
1	2	300	200	85	-34	-54	0	3	1	3	10	20	2	5	15	0	1	1	6
2	2	300	160	45	-34	-54	0	3	1	3	10	20	2	5	15	0	1	1	6

Block model grades for Co, Pd, Pt, and Au were assigned to the Maturi zone, based on the inter-element correlations as described above. The mean cobalt grade was used, while Pd, Pt, and Au were calculated using the regression formulae.

Specific Gravity values were also applied to the final kriged model using the linear regression formula described in above.

DEFINITION OF THE ENVELOPE OF POTENTIALLY ECONOMIC MINERALIZATION

A Net Smelter Return (NSR) value was applied to the Maturi block model using the following formula:

NSR (US$) =23.19*CU + 54.58*NI + 68.58*CO + 4.12*AU + 15.67*PT + 5.58*PD - $9.99

Datamine Studio's Mine Reserve Optimizer (MRO) was then used to estimate continuous resource envelopes at various NSR cut-offs (Table 17-8). Basically, the MRO application analyses a block model and, using practical mining constraints, delineates optimal potential resources. It creates and evaluates three dimensional envelopes of material, taking into account factors such as the minimum size, shape and orientation of the mining units, and the minimum potential head grade of the resource material.

TABLE 17-8 PARAMETERS USED IN THE DATAMINE MRO SENSITIVITY RUNS
Franconia Minerals Corporation - Maturi Deposit, Minnesota

Optimization Method	maximize grade
Head Grade (same as Cut-off Grade)	$17 to $26 NSR
Maximum dilution allowed	100%
Minimum Mining Unit (MMU) Size	X=30 m (across the zone)
-	Y=60 m (along strike)
-	Z=20 m (vertical)
Increment size*	10 m in each direction

* The Increment size is the amount by which the MMU is 'floated' within the block model to determine if the unit is economic and obtain the optimal results (maximized grade in this case).

The estimated resources resulting from the MRO analysis at incremental NSR cut-offs from US$17 to US$26 are presented in Table 17-9.

Based on RPA's review of current economic factors, including operating costs, metallurgical recovery, metal prices and revenue criteria, the US$25 NSR cut-off is reasonable for resource estimation at the Maturi deposit at this time.

TABLE 17-9 SUMMARY OF INFERRED MINERAL RESOURCES
Franconia Minerals Corporation - Maturi Deposit, Minnesota

NSR Cut-Off (US$)	Tonnes (millions)	Cu%	Ni%	Co%*	Pd** g/t*	Pt*** g/t	Au*** g/t
$17.00	155	0.63	0.24	0.02	0.236	0.084	0.039
$18.00	145	0.64	0.24	0.02	0.239	0.086	0.040
$19.00	134	0.65	0.25	0.02	0.243	0.088	0.041
$20.00	121	0.67	0.25	0.02	0.247	0.090	0.043
$21.00	106	0.68	0.26	0.02	0.252	0.092	0.044
$22.00	90.6	0.69	0.26	0.02	0.257	0.095	0.046
$23.00	76.4	0.71	0.27	0.02	0.262	0.097	0.047
$24.00	63.2	0.72	0.27	0.02	0.268	0.100	0.049
$25.00	**51.2**	**0.74**	**0.28**	**0.02**	**0.274**	**0.103**	**0.051**
$26.00	41.1	0.76	0.28	0.02	0.280	0.106	0.052

* Grade assigned based on average of assays
** Grade estimated by correlation with average copper grade.
***Grade estimated by correlation with average palladium grade.

Selected plans and cross sections of the resource block model are shown in Figures 17-10 to 17-13. Figure 17-14 illustrates grade-tonnage relationships with NSR cut-offs.

REMOVAL OF STERILIZED AND MINED OUT AREAS

Only a small portion of Maturi deposit has been developed by a shaft and a short exploration drift. Due to the very low tonnage in the mined out area, no adjustment was made to the block model.

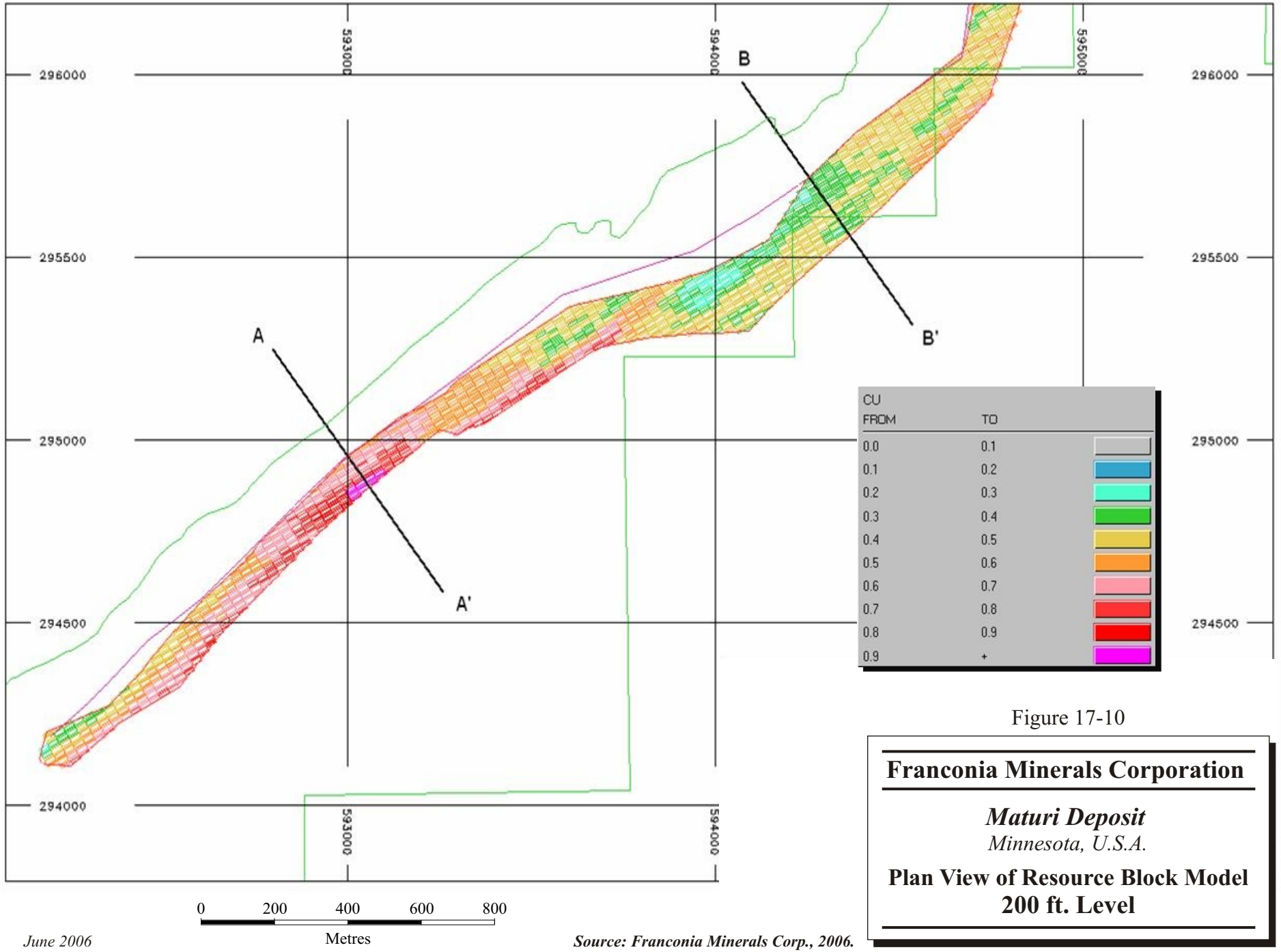


Figure 17-10

Franconia Minerals Corporation

Maturi Deposit

Minnesota, U.S.A.

Plan View of Resource Block Model
200 ft. Level

June 2006

Source: Franconia Minerals Corp., 2006.

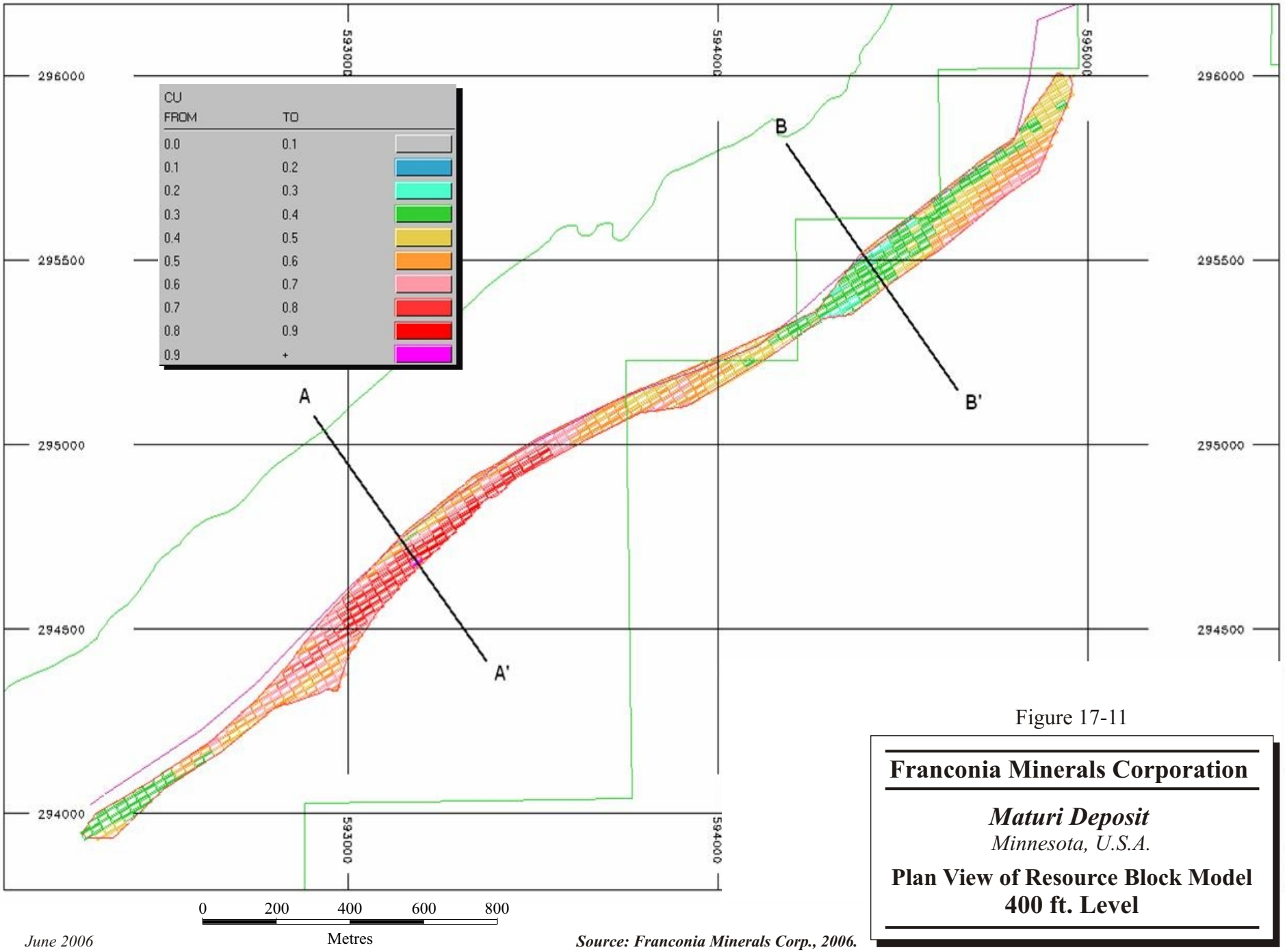


Figure 17-11

Franconia Minerals Corporation

Maturi Deposit

Minnesota, U.S.A.

Plan View of Resource Block Model
400 ft. Level

June 2006

Source: Franconia Minerals Corp., 2006.

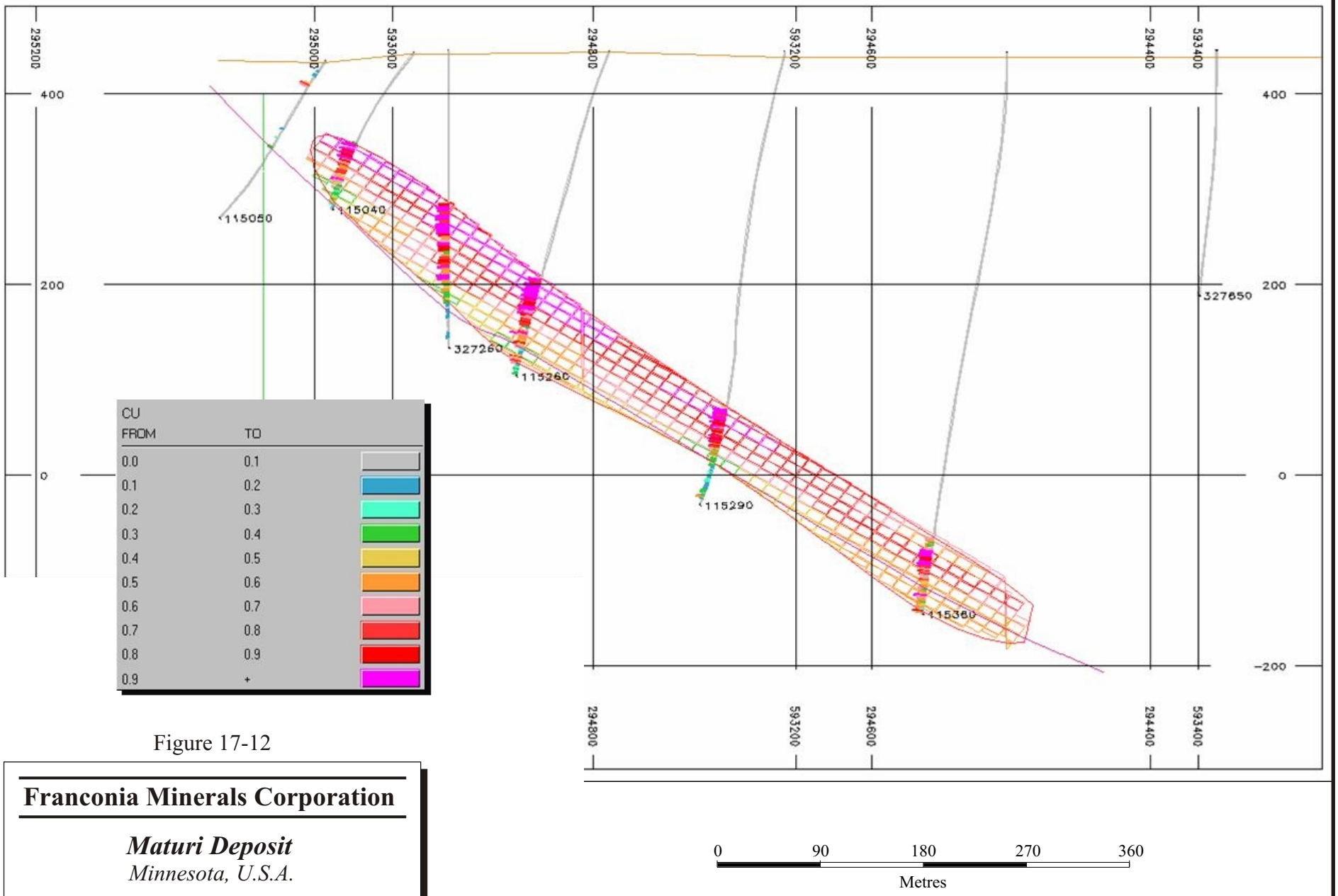


Figure 17-12

Franconia Minerals Corporation

Maturi Deposit

Minnesota, U.S.A.

Resource Block Model
Cross Section A - A'

Source: Franconia Minerals Corp., 2006.

June 2006

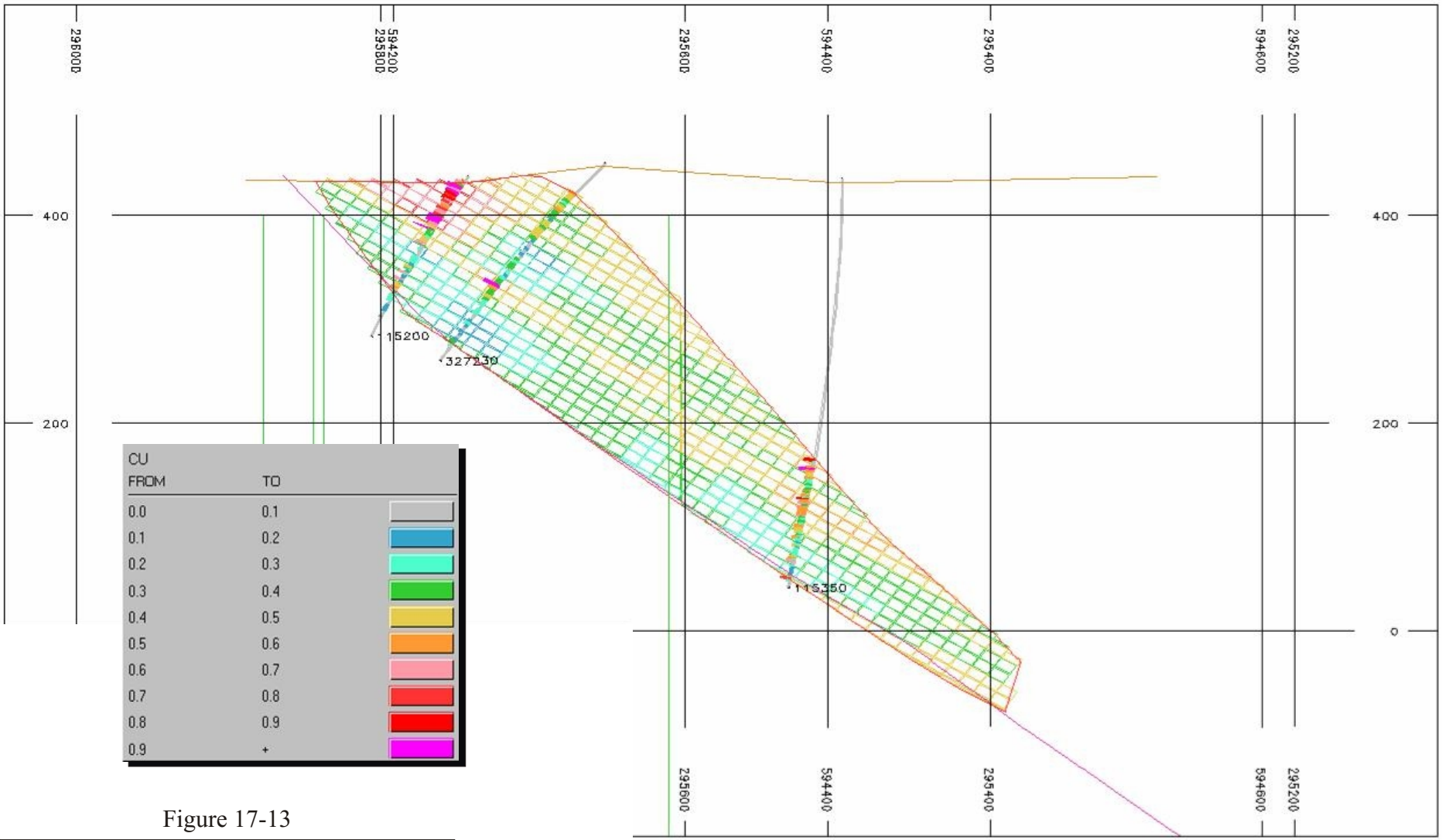


Figure 17-13

Franconia Minerals Corporation

Maturi Deposit

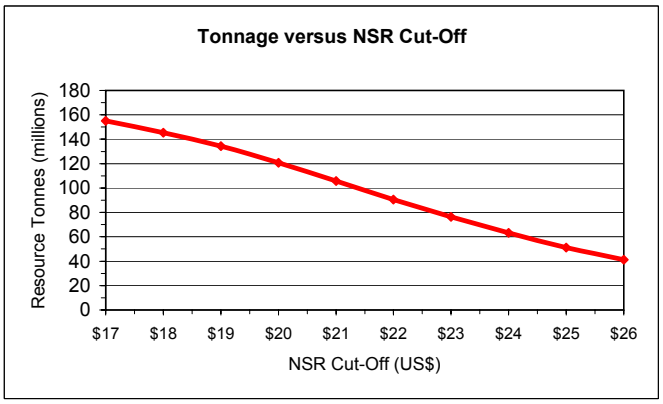
Minnesota, U.S.A.

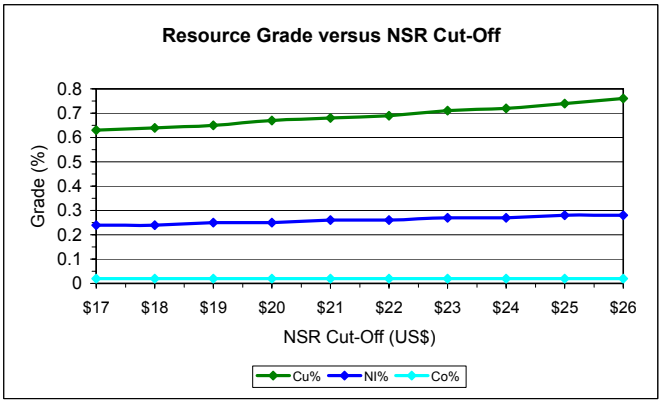
Resource Block Model
Cross Section B - B'

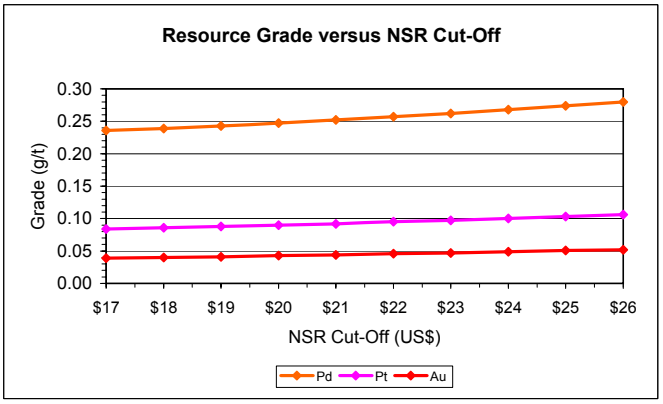
Source: Franconia Minerals Corp., 2006.

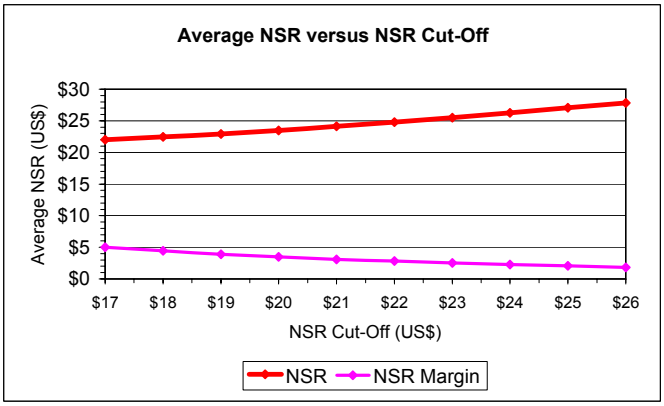
June 2006

Figure 17-14 Tonnage-Grade Profiles for Inferred Resources
Franconia Minerals Corporation Maturi Deposit, Minnesota









RESOURCE CLASSIFICATION

The estimated resources are based on fairly wide spaced drilling. While continuity between holes is generally acceptable, subvertical basement structures are known to offset the footwall and impact on mineralization elsewhere in the SKI. In addition, little is known about the sampling methods and analytical techniques. This work, however, was performed by Inco and on that basis is probably reliable. Very little PGE data exists, and grades for these elements were estimated statistically by correlation with the copper grade. The use of hydrometallurgy underpins the NSR assumptions and, while this has been successful at the pilot stage, commercial use is unproven. Pending confirmation by additional drilling, RPA classifies the resource as an Inferred Resource.

MODEL VALIDATION

Although there has been limited underground development, no reconciliation studies or data are available for the Maturi deposit from which to compare estimated tonnages, grades and contained metal to actual production or to gauge the sensitivity of the grade estimate to drill hole density.

RPA conducted visual and statistical checks to validate the block model. A visual comparison was made of assay and composite grades in drill holes to the surrounding resource block grades on cross section and plan. Cu and Ni block grades show reasonable distribution with respect to the drill hole information.

RPA compared statistics for the composite sample file, the nearest neighbour model, and the kriged block model (Table 17-10). The mean Cu and Ni grades are in agreement and the variances indicate some smoothing, as is expected with kriged estimates.

TABLE 17-10 BLOCK MODEL STATISTICS COMPARISON

Franconia Minerals Corporation Maturi Property, Minnesota

Metal	Records	NSamples	Missing	>Trace	Minimum	Maximum	Range	Mean	Variance
Composite Samples (weighted by Length):									
Cu	1,282	1,282	0	1,272	0.000	1.89	1.89	0.53	0.0570
Ni	1,282	1,282	0	1,272	0.000	0.72	0.72	0.20	0.0073
Nearest Neighbour Model (weighted by Tonnes)									
Cu	45,501	45,500	1	45,305	0.000	1.89	1.89	0.52	0.0488
Ni	45,501	45,500	1	45,373	0.000	0.72	0.72	0.20	0.0074
Kriged Model (weighted by Tonnes)									
Cu	45,501	45,500	1	45,500	0.083	1.07	0.98	0.52	0.0197
Ni	45,501	45,500	1	45,500	0.032	0.40	0.37	0.20	0.0029

Block model grade estimation generally results in a certain amount of grade "smoothing", depending on the drill hole (composites) spacing, block model cell size, the variography (nugget effect), and the variance of the grades involved. This can be quantified by comparing the variance of the grades in the block model to the theoretical variance expected in the blocks, as defined by the cell size and variogram, added to the variance of the declustered samples from the nearest neighbour model. This can be referred to as the smoothing ratio. A smoothing ratio of 1.0 indicates no smoothing has occurred during the grade estimation process.

The smoothing ratios for Cu and Ni grade estimation were calculated and found to be 0.90 for Cu and 0.71 for Ni. In RPA's opinion, no smoothing correction is necessary and none was applied to the resource model.

POLYGONAL ESTIMATE

In 2000, WGM carried out a sectional polygonal estimate for the high grade core (≥0.7% Cu wireframe) of the Maturi deposit as part of WGM's block model validation. The same wireframe and grade interpolation methodology has been employed for RPA's estimate, only the approach to reporting resources by NSR cut-offs differs.

Drill hole assay composites were generated by WGM using Gemcom software based on a 1% combined copper-nickel cut-off grade, a minimum 5 m composite length, and a maximum of 5 m of internal waste. Mineralized zone outlines were drawn as defined by composite intercepts on each of the drill hole cross sections. On sections with few holes, data from adjacent sections was used to define the shape of the zone.

The zone showed good continuity from section to section. The width of the zone ranged from 5 m to 70 m, but typically was between 20 m and 30 m. The grade of the intercepts showed little variance and ranged from 0.94% to 1.28% combined copper-nickel.

A 3D solid was generated from the outlines on section. The length weighted average of the grade of the intercepts was assigned to the solid. A specific gravity of 2.9 was used to assign a tonnage to the solid volume.

Differences between the two models were examined. As expected for a polygonal estimate, it had a slightly higher grade (Table 17-11).

TABLE 17-11 COMPARISON OF WGM POLYGONAL ESTIMATE TO WGM KRIGED ESTIMATE
Franconia Minerals Corporation - Maturi Property, Minnesota

Method	Tonnes (million)	%Cu	%Ni	%Co	Pd (g/t)	Pt (g/t)	Au (g/t)
Block Model at 0.7% Cu cutoff	52.1	0.76	0.29	0.020	0.28	0.11	0.05
Sectional Polygonal at 1% Cu+Ni cutoff	62.3	0.8	0.29	0.021	0.42	0.15	0.06

WGM's opinion in 2000 regarding the difference between model results was:

- The bigger differences in PGE grades are due to the fact that the block model ignores the higher grade secondary PGE mineralization, which cannot be quantified using the current drill spacing.

- The larger volume of the polygonal estimate is likely due to a more aggressive extrapolation of the zone onto sections with few holes.

Generally, the polygonal check confirmed the results of the block modelling.

In RPA's opinion, the Maturi deposit block model is adequately validated and is reasonable for mineral resource reporting.

MINERAL RESERVES

No Mineral Reserves exist on the Maturi property at this time. Fill-in drilling is required for PGM and cobalt sampling and to increase the confidence in resource estimation that will allow the inferred resources to be upgraded to indicated resources. Once resources are upgraded to indicated mineral resources, there is no certainty that all or part of the resources will meet the economic, environmental, and legal criteria necessary to convert them to mineral reserves as would be determined by pre-feasibility or feasibility study.

18 OTHER RELEVANT DATA AND INFORMATION

ENVIRONMENT

Franconia has determined that the environmental issues are fairly straightforward. The underground mine will have a small footprint and the tailings produced will be essentially inert. The project is located in an area of considerable ongoing and historical mining activity. Franconia reports that background work for environmental purposes has been initiated.

19 INTERPRETATION AND CONCLUSIONS

The Maturi deposit is a large low grade deposit with the up dip portion at ±50 m (170 ft.) from surface thus offering mining potential as an open pit and/or bulk underground operation. Inferred Mineral Resources at the Maturi deposit, for an NSR cut-off of US$25/tonne, total 51.2 million tonnes averaging 0.74% Cu, 0.28% Ni, 0.02% Co, 0.27 g/t Pd, 0.10 g/t Pt and 0.05 g/t Au. In RPA's opinion, supported by conclusions reached in a previous reports by Soever (2000), the Maturi deposit resources are appropriately classified as Inferred Mineral Resources at the present time.

Further exploration and work is warranted to further evaluate the mining potential and economics of the Maturi project. Additional drilling is needed to:

- upgrade resources from inferred to indicated
- provide analytical data for PGEs, gold and cobalt.
- collect material for metallurgical investigation to ensure that hydrometallurgical response for the Birch Lake property mineralization also applies to Maturi material and to provide process recovery data specific to it.

The hydrometallurgical treatment of copper-nickel-PGE concentrates is still under development; several alternative treatment strategies are under investigation and there is the potential for one or more plants to be built in the vicinity of the Maturi project by other companies.

Franconia also owns the nearby Birch Lake deposit that hosts an inferred mineral resource of approximately 40 million tonnes at similar copper-nickel grades. This, and the adjacent properties of other companies, may give rise to possible important synergies in terms of economies of scale that could significantly improve the mining potential of the Maturi deposit.

20 RECOMMENDATIONS

RPA makes the following recommendations for further work on the Maturi Project:

- Franconia should investigate the possibility of synergies with its Birch Lake property and other potential projects in the area in order to reduce capital and operating costs and optimize potential economies of scale. In particular, we recommend that Franconia specifically investigate the scenario of a combined Maturi - Birch Lake operation at the level of a NI 43-101 Preliminary Assessment.

- Subject to positive conclusions from the Preliminary Assessment, a fill-in drilling program should be planned and budgeted to upgrade all, or a portion of, the current resources to Indicated Resources.

- RPA recommends that Franconia carry out flotation work, on drill core collected for metallurgical testing, to optimize metal recoveries of mineralized Maturi material and do hydrometallurgical (PLATSOL) recovery tests similar to what Franconia has done for its Birch Lake deposit.

- Future collar and down hole surveying should be undertaken with the most accurate instrumentation available particularly for resource delineation and definition. RPA recommends that elevations be checked for the 11 drill hole collars for with the digital database entries differ from the MNDNR records.

- For future drilling programs on the project, RPA recommends that SG testing on drill core be performed by simple immersion testing within the mineralization and immediate hanging and foot walls. Such data will be useful for rock density modelling in future resource updates.

- RPA recommends that the past laboratory QA/QC data be located if possible, compiled and evaluated during future resource updates. RPA further recommends for future resource delineation and definition drilling that a comprehensive QA/QC program be implemented that complies with Toronto Stock Exchange/Ontario Securities Commission (1999) mining task force guidelines.

- The Maturi mineralization continues down dip to the east onto Duluth Metals Limited ground. The boundaries of the Federal Lease are not well located on the ground and should be surveyed.

21 REFERENCES

Bonnichsen, Bill (1972): Southern part of the Duluth Complex ***in*** Sims, P. K. and Morey, G. B. ***eds*** Geology of Miinnesota: A Centennial Volume, Minnesota Geological Survey, 1972, p. 361-387.

Bonnichsen, Bill (1972): Sulfide minerals in the Duluth Complex ***in*** Sims, P. K. and Morey, G. B. ***eds*** Geology of Minnesota: A Centennial Volume, Minnesota Geological Survey, 1972, p. 388-393.

Cargill, D. George (2005a): Technical report on the Maturi Extension property, Minnesota, U.S.A. prepared for Wallbridge Mining Company Limited. Roscoe Postle Associates Inc. NI 43-101 report filed on SEDAR, December 30, 2005, 52 p.

Cargill D. George (2005b): Maturi Extension property, Minnesota U.S.A. valuation report. Unpublished report prepared by Roscoe Postle Associates Inc. for Wallbridge Mining Company, June 20, 2005, 38 p.

CIM (2000): CIM standards on Mineral Resources and Reserves – definitions and guidelines prepared by the CIM committee on reserve definitions. CIM Bulletin Vol. 93, No. 1044, p. 53-60.

Clow, Graham G. and Routledge, Richard E. (2005): Preliminary assessment of the mineral resources of the Birch Lake property prepared for Franconia Mineral Corporation. SEDAR published NI 43-101 technical report by Roscoe Postle Associates Inc., November 19, 2005, 90 p.

Cole, Steve (2002): Scoping flotation program. Unpublished Lakefield Research Limited letter report, 10 p.

Ferron, C. J., Flemming, C. A., O'Kane, P. T. and Dreisinger, D. (2002): Pilot plant demonstration of the PLATSOL process for the treatment of the NorthMet copper-nickel-PGM deposit. Mining Engineering Vol. 54, No. 12, December 2002, p.33-39.

Gavin, Brian (2005): Drilling reveals higher grade copper-nickel-PGM results at Birch Lake project, Minnesota. Public Release (SEDAR), November 3, 2005, 3 p.

Hayden, A. S. (2005a): Franconia Minerals Corporation Birch Lake Project review of bench scale pressure leaching testwork and preliminary estimates of capital and operating costs. Unpublished EHA Engineering Ltd. report, April 2005, 12 p.

Hayden, A. S. (2005b): Birch Lake Project review of bench scale flotation testwork. Unpublished EHA Engineering Ltd. report, April 2005, 11 p.

Independent Mining Consultants, Inc. (2001): NorthMet Project, Minnesota pre-feasibility study volume 1 project summary prepared for PolyMet Mining Corporation. Published SEDAR technical report, April 2001, 222 p.

Jones, David and Moore, Rachel (2002): CESL process: application to a bulk copper nickel concentrate. Paper published at ALTA 202 COPPER-7 Technical Proceedings, Perth, Australia, May 2002, 15 p.

Lehmann Ernest K. (2005): The Birch Lake Project Lake and St. Louis Counties, Minnesota resource estimate prepared for Franconia Minerals Corporation (US) Inc., Operator and Beaver Bay Joint Venture. Unpublished Lehmann Exploration Management Inc. report, July 2005, 26 p.

Lehmann Ernest K. (2003): The Birch Lake Project; a plan for development of a major platinum-palladium-copper-nickel resource in northern Minnesota. Unpublished Lehmann Exploration Management Inc. report, June 17, 2003, 44 p.

Lehmann Ernest K. (2002a): The Birch Lake Project Lake and St. Louis Counties, Minnesota supplement to 2002 resource estimate prepared for Beaver Bay Joint Venture. Unpublished Lehmann Exploration Management Inc. report, October 28, 2002, 13 p.

Lehmann Ernest K. (2002c): The Birch Lake Project Lake and St. Louis Counties, Minnesota 2002 resource estimate prepared for Impala Platinum Holdings Ltd. and Beaver Bay Joint Venture. Unpublished Lehmann Exploration Management Inc. report, February 20, 2002 revised March 20, 2002, 23 p.

Lehmann Exploration Management Inc. (2001): The Birch Lake Project review and summary of mining environmental review and permitting in Minnesota prepared for Impala Platinum Holdings Ltd. and Beaver Bay Joint Venture. Unpublished report, February 20, 2001, 88 p.

Milbourne, Joe, Tomlinson, Marcus and Gormely, Lynton (2003): Use of hydrometallurgy in direct processing of base metal/PGM concentrates ***in*** Young, C. A., Alfantazi, A. M., Anderson, C. G., Dreisinger, D. B., Harris, B. and James, A. ***eds.*** Hydrormetallurgy 2003-Fifth International Conference in Honor of Professor Ian Ritchie, Volume 1: Leaching and Solution Purification, The Minerals, Metals & Materials Society, 2003, p. 617-630.

Peterson, Dean M. (2002): Shaded relief map of the basal contact surface of the South Kaswishiwi Intrusion Duluth Complex, northeastern Minnesota. Natural Resources Research Institute, March 2002,

Peterson, Dean M. (2001): Development of conceptual models for Cu-Ni-PGE mineralization in the South Kawishiwi Intrusion, Duluth Complex, Minnesota. NRRI paper, 3 p.

Routledge, Richard E. (2004): Review of the mineral resources of the Birch Lake property, Minnesota, U.S.A. prepared for Franconia Minerals Corporation. NI 43-101 technical report filed on SEDAR. January 22, 2004, 92 p.

SGS Lakefield Research Limited (2005a): The recovery of Cu, Ni, Au and PGM's from a Birch Lake flotation concentrate prepared for Franconia Minerals Corporation (US) Inc. Unpublished report LR 10854-003-Report 1, July 27, 2005, 8 p. and appendices.

SGS Lakefield Research Limited (2005b): Copper/nickel PGE flotation on Birch Lake samples prepared for Franconia Minerals Corporation (US) Inc. and Beaver Bay Joint Venture. Unpublished report LR 10854-002-Final Report, April 6, 2005, 23 p. and appendices.

Soever, Alar T. (2000): Mineral resource estimate and assessment of the potential for economic mineralization within the existing resource at the Maturi and Spruce Road deposits, Lake County, Minnesota for Wallbridge Mining Company Limited. SEDAR published report by Watts, Griffis and McQuat Limited. April 26, 2000, 98 p.

Toronto Stock Exchange and Ontario Securities Commission (1999): Setting new standards, recommendations for public mineral exploration and mining companies, Mining Standards Task Force final report. Published report, January 1999, 141 p.

Weiblen, P.W. and Morey, G.B. (1980): A summary of the stratigraphy, petrology and structure of the Duluth Complex. American Journal of Science, v. 280-A, p. 88-133.

22 SIGNATURE PAGE

This report titled "Technical Report on the Resource Estimate for the Maturi Property, Minnesota, U.S.A.", prepared for Franconia Mineral Resources Corporation and dated June 30, 2006, was prepared and signed by the following authors:

(Signed & Sealed)

Dated at Toronto, Ontario
June 30,, 2006

Richard E. Routledge, M.SC., P. Geol.
Consulting Geologist

(Signed & Sealed)

Dated at Toronto, Ontario
June 30, 2006

Gregory F. Greenough B.Sc., P. Geo.
Associate
Consulting Geologist

23 CERTIFICATE OF QUALIFICATIONS

RICHARD E. ROUTLEDGE

I, Richard E. Routledge, M.Sc., P.Geo., as an author of this report entitled "Technical Report on the Resource Estimate for the Maturi Property, Minnesota, U.S.A.", prepared for Franconia Mineral Resources Corporation and dated June 30, 2006, (the Technical Report) do hereby certify that:

1. I am Consulting Geologist with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.

2. I am a graduate of Sir George Williams (now Concordia) University, Montreal, Quebec, Canada in 1971 with a Bachelor of Science degree in Major Geology and McGill University, Montreal, Quebec, Canada in 1974 with a Master of Science degree in Applied Mineral Exploration.

3. I am a Practising Member of the Association of Professional Geoscientists of Ontario (#1354)and I am registered as a licensed Professional Geologist in the Northwest Territories, Canada (L744). I am a Member of the Canadian Institute of Mining, Metallurgy, and Petroleum.

4. I have worked as a geologist for a total of 32 years since my graduation. My relevant experience for the purpose of the Technical Report is:
    - Review and report as a consultant on numerous exploration and mining projects around the world for due diligence and regulatory requirements, including:
        - Tonnage-grade estimate for B4-7 nickel-copper-PGE zone, Armstrong, Ontario.
        - Resource estimate for the Offset Zone (palladium, platinum, nickel, copper, cobalt deposit) at the Lac des Iles Mine, Ontario.
        - Resource and reserves audits for McCready West and Levack nickel and copper mines, Sudbury, Ontario.
        - Resource audit and preliminary assessment for the Birch Lake copper, nickel and PGE deposit, Duluth Complex, Minnesota.
        - Resource audit for Onaping Depth nickel and copper deposit, Sudbury, Ontario.
    - Vice President Exploration for a junior mining company in charge of diamond exploration programs in NWT and property evaluations worldwide for a variety of commodities, including gold, base metals, and diamonds.
    - Senior geologist with a major Canadian mining company in charge of evaluation of advanced properties/projects and acquisitions for a broad variety of commodities.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI43-101.

6. I have visited the Maturi property on May 17-18, 2006 and am familiar with the Duluth Complex geology and the area. I have also visited the Maturi Extension property of Duluth Metals Limited (May 17-18, 2006) west adjacent to the Maturi property as well as Franconia's nearby Birch Lake property (November 2003).

7. I am responsible for items 1 to 13, 15, 16, 18 to 20 and part of item 14 of the Technical Report.

8. I am independent of the Issuer applying the test set out in Section 1.4 of National Instrument 43-101.

9. I have had no prior involvement with the Maturi property that is the subject of the Technical Report.

10. I have read National Instrument 43-101F1, and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

11. To the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated 30th day of June, 2006

(Signed & Sealed)

Richard E. Routledge, M.Sc., P.Geo.

GREGORY F. GREENOUGH

I, Gregory F. Greenough, B.SC., P.Geo., as an author of this report entitled "Technical Report on the Resource Estimate for the Maturi Property, Minnesota, U.S.A.", prepared for Franconia Mineral Resources Corporation and dated June 30, 2006, (the Technical Report) do hereby certify that:

1. I am an Associate Geologist with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.

2. I am a graduate of *Laurentian University* in 1976 with a Hons BSc. degree in Geology.

3. I am registered as a Professional Geoscientist in the Province of Ontario (Lic.# 825).

4. I have worked as a geologist engineer for a total of 30 years since my graduation. My relevant experience for the purpose of this technical report is:
    a. Thirty years of geological experience with INCO Ltd in the Sudbury Basin Cu, Ni PGE deposits, including:
        i. Senior geologist at various mines responsible for exploration projects and resource/reserve estimation.
        ii. Nine years as Chief Evaluation and Design Geologist for the Ontario Division, responsible for the resources and reserves, standards, and auditing of the Sudbury Operations deposits.
    b. The resource modeling of the Spruce Road and Maturi deposits, as an independent in 2000, for Watts, Griffis and McOuat Ltd.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI43-101.

6. I am responsible for all or parts of items 10 to 11, 14 and 17 in this Technical Report.

7. I have not visited the property.

8. I have a prior involvement with the Maturi property during which I estimated resources for a report prepared in 2000 by Watts, Griffis and McOuat Ltd. on behalf of Wallbridge Mining Company Limited.

9. I am independent of the Issuer applying the tests set out in section 1.5 of National Instrument 43-101.

10. I have read National Instrument 43-101F1, and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

11. To the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated 30th day of June, 2006

(Signed & Sealed)

Gregory F. Greenough, B.Sc., P. Geo.