

10 February 2015

# Nyota Minerals Limited ('Nyota' or 'the Company') Acquisition of Italian Nickel Project

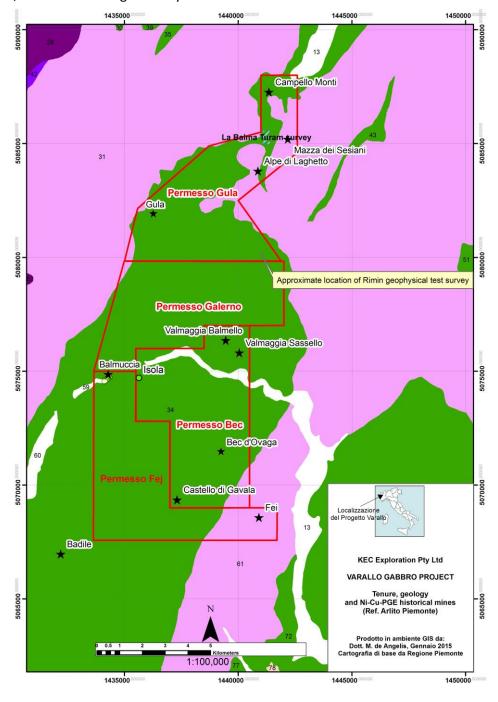
Nyota Minerals Limited (ASX/AIM: NYO) is pleased to announce that it has entered into a binding agreement for the acquisition of 70% of KEC Exploration Pty ('KEC') which owns 100% of an exploration permit for nickel and associated base and precious metals in the Piemonte Region of Italy ('the Ivrea Project') and has three applications pending for exploration permits in the same area (Figure 1).

# Highlights:

- Previously producing, yet underexplored project area represents a strong opportunity in line with Nyota's strategy to pursue new prospective mineral opportunities
- Permitted land position of 31.3 sq km with a further 85.5 sq km under application across the northern part of the Ivrea Gabbroic Complex in northwest Italy, which is prospective for gabbro-related nickel – copper deposits with associated platinum group metals
- The current permit includes at least five underground historic nickel mines
  - Grab samples from these five by Nyota returned metal contents of up to 0.6% nickel and 3.8% copper
- Annual production for the district was 30-40 tonnes of nickel from ore with nickel grades typically ranging from 0.3-1.5% nickel
  - Grab samples by Nyota from other historic mines in permits under application returned metal contents of up to 2.9% nickel
  - Historical data indicates the potential for Platinum Group Metals (PGM), gold and cobalt credits
- Exploration upside potential almost no modern exploration has been conducted in the vicinity of the old mines or for possible hidden orebodies associated with the gabbroic complex
- Nyota will focus on an airborne geophysical survey and the compilation of all available data on a geographic information system (GIS) during the first year:
  - Electromagnetic survey will investigate the potential for depth and strike extensions of known sulphide rich orebodies and indicate the presence of previously undiscovered near-surface mineralisation
  - This will enable a rapid and well-informed assessment of the need to either dewater and make safe some of the old mine workings for underground drilling, or to prioritise from-surface drilling of new anomalies and extensions of known mineralisation
- Initial Consideration of 75 million new ordinary shares in Nyota and A\$100,000 (of which A\$75,000 is for licence-related costs) to acquire 70% of KEC

Richard Chase, Chief Executive Officer, said "This acquisition represents an exciting opportunity in a prospective mineral jurisdiction and having considered a number of new opportunities, we are confident that the Ivrea Project meets our requirements due to the excellent geological profile of the region and the strong upside potential.

"Exploration can lead to significant and rapid value creation for shareholders. The Ivrea Gabbroic Complex is underexplored and has never been subject to a modern geophysical survey, despite the presence of sufficient metal sulphide mineralisation to have justified mining over an extended period at multiple localities. In addition, the entry costs are realistic and the vendors, who are our new colleagues, can contribute significantly and retain a sufficient interest so as to want do so."



# **The Acquisition**

Nyota has agreed to pay a consideration of 75 million new ordinary shares in Nyota ("Ordinary Shares") and cash of A\$100,000 to acquire 70% of the issued share capital of KEC ("Consideration"). Based on the closing mid-market price of an Ordinary Share of 0.04p on 9 February 2015, the date prior to publication of this announcement ("Closing Price"), the Initial Consideration amounts to approximately A\$158,534 (equivalent to approximately £81,252). The A\$100,000 comprises a fee of A\$25,000 and A\$75,000 of licence-related costs. The cash amount due under the Consideration is being funded from existing resources.

37.5 million shares and A\$37,500 of the licence-related costs (i.e. half of the Consideration, excluding the fee) is payable immediately and the balance is payable upon the issue to KEC of the Galerno permit; which was applied for at the same time as the Bec permit but a request for additional information resulted in its delay.

There is no further consideration payable if and when a further two licences that have been applied for by KEC are issued ('Gula' and 'Fei' in Figure 1).

Nyota will immediately fund 100% of KEC's expenses and continue to do until such time as either it decides not to continue with the Ivrea Project, or a JORC-Compliant Mineral Resource of 50,000 tonnes of contained nickel at an average grade of not less than 0.75% (or a metal equivalent) is defined anywhere within the Ivrea Project area (the "Project Hurdle Rate"). Nyota and KEC have therefore agreed an initial and non-binding exploration work program and budget for the next 12 months with a target spend of at least A\$150,000; further details of which are given below. Should Nyota decide to spend less than this amount the vendors would be entitled to a payment of A\$50,000 (equivalent to approximately £26,000), payable in cash or shares at Nyota's discretion.

Following satisfaction of the Consideration, the Vendors will own in aggregate 7.8% of the enlarged share capital of the Company. The new Ordinary Shares to be issued to the Vendors will rank *pari passu* with the existing Ordinary Shares and an application will be made for the first tranche of 37.5m new Ordinary Shares to be admitted to trading on the ASX and AIM, which is expected to occur on or around 17 February 2015.

In the event that the Project Hurdle Rate is met (and Nyota has not withdrawn from the Ivrea Project) a deferred consideration will become payable to the vendors comprising a further cash payment of A\$250,000 and 150 million new Ordinary Shares (subject to shareholder approval at the time of issuance); in aggregate amounting to approximately A\$367,000 (equivalent to approximately £188,000) based on the Closing Price ("Deferred Consideration"). Following payment of the deferred consideration KEC's shareholders will be required to contribute to KEC's funding pro-rata their respective shareholding.

Each of Nyota and the vendors has a pre-emptive first right to acquire the other party's interest in KEC, including by matching any third party offer for the other's equity interest. In addition, an area of exclusivity has been agreed that prevents both parties from carrying on any exploration, consultancy or advisory work in competition with KEC.

KEC was incorporated in 2007 and other than its interests in the Ivrea Project licence applications has not traded and has not to date prepared any accounts.. Nyota will have the right to appoint up to three new directors to the board of KEC and the existing directors and vendors Chris Reindler and Marcello de Angelis, who prior to the acquisition controlled 100% of KEC, will remain on the board.

Mr. de Angelis is an Italian national, a geologist with over 40 years' experience in uranium, base and precious metal exploration and development and a former Executive Vice President of Agip Resources Ltd in which capacity he was responsible for the discovery and fast-track development of the Radio Hill nickel-copper deposit in Western Australia. He recently introduced Energia Minerals Ltd to the Gorno zinc project in northern Italy.

Mr. de Angelis will have a consultancy agreement with Nyota to provide exploration management services in Italy.

Mr. Reindler has been active in the exploration industry for over 40 years, primarily in Australia. He has been involved in several new concept projects and has completed joint ventures with a significant number of major exploration and mining companies.

#### The Assets

KEC has so far applied for four exploration permits (Figure 1). The Bec permit has been issued; the Galerno permit has been recommended by the requisite meeting of interested parties that is called to consider the application and is therefore pending issuance; and a further 2 licence applications (Gula and Fei) have been submitted. Nyota has no reason to believe that these applications will not be recommended and subsequently issued.

The licence applications cover a total of 117 km<sup>2</sup> at the northern end of the Ivrea Gabbroic Complex that is the host to known nickel mineralisation. Details of the licences are presented in the table, below, and they are shown in Figure 1. Exploration licences in Italy have an initial two year term and are renewable at least twice for a further two years each time subject to work requirements and developments.

The license areas are located in the foothills of the Italian Alps, approximately 100km northwest of Milan. The area is well connected by paved roads, many of which run along the incised valleys and

connect with the Autostrada A26 on the Po valley. Villages of tens to a few thousands of inhabitants constitute the main population centres outside of the town of Varallo, in the province of Vercelli.

Rugged topography characterises the area. Peaks rise 1,500 metres above the valley floors and vegetation on the lower slopes is dominated by deciduous woodland. Dirt or gravel roads provide access to hydroelectric facilities, inactive mines and some small villages and inhabited mountain huts.

The existing licence and the adjacent application areas include at least nine nickel mines and exploratory workings that have been inspected by Nyota prior to the acquisition (these are marked on Figure 1).

The mines operated primarily between the mid-1800s and early 1900s, with some being brought back into operation between 1937 and 1949. All of them are typical of the lode type, high grade underground style of the time and annual production for the district was 30-40 tonnes of nickel from ore with nickel grades typically ranging from 0.3-1.5% nickel. Ores were smelted locally to a matte containing nickel, copper and cobalt (one reference from 1898 citing matte containing 24% nickel, 12% copper and 6% cobalt) some of which was processed locally and the remainder exported primarily to Germany for refining.

A combination of factors means that virtually no systematic exploration has taken place since the mines closed, which represents a strong opportunity to build value rapidly.

Whilst a number of academic papers published on the intrusion and related geology since the 1980's and the USGS published a new geological map of the Southern Ivrea-Verbano Zone and accompanying notes in 2003, none of these deal explicitly with the economic potential of the intrusive complex. Several do however cover some of the historic mines and specifically one style of mineralisation referred to as "ultramafic pipes". Most pertinent is Garuti et al, 2001 which includes whole rock analyses for samples collected at the Bec, Fei, Castelo di Gavala and Valmaggia mines (see Geological Background, below).

Solid Resources Ltd (TSXV: SRW) was granted an exploration licences over a similar area in 2005. SRW noted that at least 42 mines operated in the area, of which 6 were gold mines. Only one set of results appear to have been published by SRW (10 October, 2006) and in 2009 the company relinquished the area apparently having never progressed exploration any further due to financial and corporate difficulties.

In late 2014 Nyota undertook a site visit and collected samples from a number of localities as part of its project due diligence and concept study. Table 1 summarises the location and analyses for these samples; all of which are grab samples intended solely to confirm the presence of nickel and associated metals and cannot be claimed to be either representative of the whole or to give any indication of the average grade of mineralisation (see also JORC (2012) Table 1 as appended to this announcement).

The most anomalous samples come from the Alpe di Laghetto, CampelloMonti and Castello di Gavala prospects. The first two are located in a licence area that has been applied for but has not yet been awarded and are not listed in Garuti et al (2001) as being consistent with the ultramafic pipe-style of mineralisation, which is supported by Nyota's field observations including a marked gossan at surface and more pervasive alteration.

Access to the Gula mine workings is limited due to topography and the number of samples collected is disproportionately large compared with the known historic workings because they are arranged in a linear pattern along an incised river valley. Conversely, the Isola and Valmaggia Sassello workings are shown on historic plans to have been developed over at least 100m vertical extent and with even limited access to the old workings and the evident remnant mine infrastructure it is apparent that this conflicts with the very low metal contents of the samples collected.

**Table 1:** Whole rock metal and sulphur analyses for samples collected by Nyota from a number of historic mines in the Ivrea Gabbroic Complex.

	Sample	N	Ji	С	u	Zn	Co	Cr	S
		ppm	%	ppm	%	ppm	ppm	ppm	%
Gula	GUL-01	750	0.08%	500	0.05%	100	100	1500	2.44
Gula	GUL-02	1310	0.13%	402	0.04%	68	260	810	4.93
Gula	GUL-03	600	0.06%	750	0.08%	50	260	200	0.00
Gula	GUL-03 Rpt	600	0.06%	750	0.08%	100	260	200	0.00
Gula	GUL-04	700	0.07%	850	0.09%	100	260	150	0.00
Gula	GUL-04 Rpt	700	0.07%	850	0.09%	50	280	150	0.00
Gula	GUL-05	98	0.01%	90	0.01%	136	40	190	0.35
Gula	GUL-06	50	0.01%	116	0.01%	134	35	100	0.54
Gula	GUL-07	140	0.01%	30	0.00%	60	60	350	0.10
Gula	GUL-08	324	0.03%	88	0.01%	82	70	440	0.13
Gula	GUL-09	672	0.07%	218	0.02%	28	265	120	6.64
Alpe di Laghetto	LAG-01	14800	1.48%	1100	0.11%	-50	600	750	9.59
Alpe di Laghetto	LAG-02	15500	1.55%	2100	0.21%	50	1160	400	21.4
Alpe di Laghetto	LAG-03	3780	0.38%	408	0.04%	156	280	810	4.56
Alpe di Laghetto	LAG-04	464	0.05%	134	0.01%	54	100	770	0.56
Castello di Gavala	CDG-01	3350	0.34%	9050	0.91%	50	80	400	2.79
Castello di Gavala	CDG-01 Rpt	3550	0.36%	9150	0.92%	50	80	400	2.91
Castello di Gavala	CDG-02	5700	0.57%	30000	3.00%	-50	160	200	8.26
Castello di Gavala	CDG-03	6100	0.61%	37900	3.79%	-50	200	350	7.81

Castello di Gavala	CDG-04	4690	0.47%	19000	1.90%	36	205	90	7.15
Isola	ISO-01	50	0.01%	52	0.01%	84	40	90	0.13
Isola	ISO-02	1470	0.15%	528	0.05%	188	180	1130	2.85
Isola	ISO-03	582	0.06%	276	0.03%	122	105	1020	0.98
Fei	FE-01	1890	0.19%	496	0.05%	110	125	480	1.08
Fei	FE-02	54	0.01%	42	0.00%	118	20	80	0.02
Fei	FE-03	68	0.01%	4	0.00%	140	25	90	0.01
Fei	FE-04	416	0.04%	66	0.01%	62	75	390	0.20
Campello Monti	CDM-01	3190	0.32%	298	0.03%	250	145	25900	1.25
Campello Monti	CDM-02	13100	1.31%	620	0.06%	68	305	1200	5.54
Campello Monti	CDM-03	28900	2.89%	2200	0.22%	100	940	3600	21.1
Campello Monti	CDM-04	560	0.06%	82	0.01%	78	75	1320	0.45
Campello Monti	CDM-04 Rpt	554	0.06%	82	0.01%	80	70	1290	0.45
Bec d'Ovaga	BE-01	32	0.00%	54	0.01%	80	20	20	0.07
Valmaggia Sassello	VAL-01	1550	0.16%	434	0.04%	62	80	530	0.63
Valmaggia Sassello	VAL-02	1540	0.15%	258	0.03%	72	100	580	1.05
Valmaggia Sassello	VAL-03	3500	0.35%	372	0.04%	82	180	660	3.00
Valmaggia Sassello	VAL-03 Rpt	3560	0.36%	380	0.04%	90	175	690	3.01
Valmaggia Sassello	VAL-04	3350	0.34%	1000	0.10%	400	140	1250	2.69
Valmaggia Sassello	VAL-04 Rpt	3650	0.37%	1100	0.11%	350	160	1300	2.88

# Note:

The Isola, Fei, Castello di Gavala, Bec and Valmaggia historic mines are located within the licences currently owned by KEC.

The Gula, Alpe di Laghetto and Campello Monti historic mines are located within the licences that are under application.

Gold and PGM credits are not included in the tables above as they are generally at a low level in whole rock analysis. Garuti et al report the highest grades to be 6.6 g/t Pt, 2.3 g/t Pd and 2.9g/t Ru at Valmaggia and 3.3g/t Pt, 1.2g/t Pd and 23g/t gold at Castello di Gavala. Nyota's grab samples are an order of magnitude less than this with peaks of 0.19g/t Pt, 0.13g/t Pd and 1.5g/t gold at Castello di Gavala. Historic gold mines are recorded in the surrounding host rocks, not the gabbroic complex, and have not been visited (see also Geological Background, below).

# **Exploration and Initial Work Programme**

Nyota and the vendors have agreed on two exploration priorities:

- 1) The assimilation of all historic data in a geographical information system ("GIS"), and
- 2) An airborne electro-magnetic survey ("EM survey") to trace any extensions to the mineralisation previously mined and to identify possible new mineralisation associated with the gabbroic complex.

The prioritisation of these two activities reflects their importance to systematic exploration and determining which is the next step: (i) dewatering and making-safe some (or all) of the historic mine workings to conduct detailed analysis of the style of mineralisation and any resources that may remain therein, or (ii) the evaluation, including drilling, of any new geophysical targets and possible extensions to known mineralisation.

Current access to the mine workings is, in all cases, limited to the upper levels and / or the main drives. Detailed mapping and sampling of these will be undertaken as appropriate in the first year and added to the GIS. However, Nyota is unaware as to whether there is a short-term opportunity to re-open any of the historic mines and its investment decision was not predicated on there being one.

Given the physical location, field work will be possible between about early April and early December each year. An Environmental Impact Assessment must be included with all work programmes and changes to the programme, especially where it might impact the assessment, require a new submission to the licencing authorities. Those for the two licences that have been granted are approved.

As described below, it appears that the necessary ingredients are present in the Ivrea zone to have produced significant concentrations of gabbroic-related Ni-Cu (+/- PGM) mineralisation.

### **Geological Background**

The Ivrea Gabbroic Complex is considered prospective for gabbro-related nickel-copper deposits with associated platinum group metals whilst the surrounding geological formations are prospective for gold mineralisation; as evidenced by gold shows which were also mined in the past.

The geological context of the known deposits is the Ivrea-Verbano Zone of the Southern Alps. The zone comprises of strongly metamorphosed sediments ("Kinginzite") of Ordovician age intruded by a complex of igneous mafic and ultramafic rocks that includes the Ivrea Gabbroic Complex with distinct blocks or rafts set in it that are interpreted to be remnant pieces of the earth's mantle.

The structure of the Ivrea Gabbroic Complex is essentially a basin shape with the main axis oriented NE-SW and extending for more than 50 km. The Complex is about 10-15 km wide in the median portion and it has been compressed and modified by subsequent mountain building cycles.

The main metal sulphide occurrences and mineral associations that have been distinguished are:

- 1) Cyclic units: iron nickel (copper) in layers of the lowermost cyclic units, frequently near or at the contact with the Kinzingite meta-sediments and mainly exposed on the western margin of the complex.
- 2) Main gabbro: iron nickel copper in layers of the main gabbro and also associated with sulphide remobilisation in the form of stringer and massive concentrations. PGM and gold concentrations are found in the Gabbro and in the adjacent Kinzingite.
- 3) Ultramafic pipes: iron- nickel copper (PGM) in ultramafic pipes apparently intruded into the main gabbro.

Nickel and copper are strictly correlated with sulphides that are most commonly in the form of droplets and nodules, interstitial with the rock forming minerals, and are interpreted as having segregated from the melt in the early stages of magmatic segregation. In their academic paper, Garuti et al (2001) sampled and analysed the ore and host rocks of the ultramafic pipes. The results are reproduced in Table 2 and demonstrate the metal – sulphide correlation.

**Table 2:** Whole rock nickel, copper and sulphur analyses for a number of historic mines exhibiting the "ultramafic pipe" style of mineralisation; from Garuti, Bea, Zaccarini and Montero (2001). Age, Geochemistry and Petrogenesis of the Ultramafic Pipes in the Ivrea Zone, NW Italy. Journal of Petrology. Vol.2, No.2, 433-457

	Description	Ni	Cu	S
		ppm*	ppm*	%
Bec D'Ovaga	Core	3,781	517	1.98
	Pod in the core	5,733	536	3.76
	Core	1,142	4,333	1.33
	1m from contact	906	52	0.12
	1m from contact	107	84	0.19
	core	4,475	2,987	4.13
Fei	Dump	3,099	754	1.74
	Dump	6,043	744	11.40
	Dump	9,299	578	17.50
	1m from contact	1,578	381	1.66
	10m from contact	837	81	1.34
Castello Di Gavala	Marginal pod	12	28	0.09
	Marginal pod	98	38	0.09
	Core	2,291	1,259	0.99
	Wall rock	13,040	9,126	13.70
	Marginal pod	39	22	0.08
	Core	2,737	1,921	1.53
	dump	7,525	9,858	8.30

Valmaggia	Core main body	2,724	1,182	3.39
	Core main body	2,587	1,031	2.89
	Margin main body	1,917	1,804	2.05
	Core small body	3,415	1,086	1.88
	Pod in the core	2,750	893	0.85
	Pod in the core	2,361	2,190	2.33
	Margin small body	1,964	790	1.61

<sup>\*</sup>ppm = parts per million; 1% = 10,000ppm

The metal paragenesis is typical of Ni-sulphide deposits: pyrrhotite-pentlandite-chalcopyrite, with minor cubanite, mackinawite and pyrite. In several mineralised occurrences, remobilisation of pre-existing mineralisation is evident.

PGMs and gold are reported primarily within the Main Gabbro and the Ultramafic Pipes, with values in the latter of up to 6.6 g/t platinum, 2.3 g/t palladium and 2.9g/t ruthenium reported at Valmaggia and 3.3g/t platinum, 1.2g/t palladium and 23g/t gold reported at Castello di Gavala (Garuti et al (2001)).

Nyota has not conducted any studies to assess the extractive metallurgy of the metals from the sulphides but based on the mineralogy that it has observed and analysed, and on the basis of past production it does not anticipate there being significant impedance.

#### **Total Voting Rights**

Following the issue of the first tranche of 37,500,000 new Ordinary Shares, the total number of Ordinary Shares in issue with voting rights will be 919,649,127. This figure may be used by shareholders in the Company as the denominator for the calculation by which they will determine if they are required to notify their interest in, or a change of interest in, the share capital of the Company under the Financial Conduct Authority's Disclosure and Transparency Rules.

For further information please visit <a href="www.nyotaminerals.com">www.nyotaminerals.com</a> or contact:

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Neither the contents of the Company's website nor the contents of any websites accessible from hyperlinks in the Company's website (or any other website) is incorporated into or forms part of, this announcement.

#### **ENDS**

# **Competent Person**

The technical exploration information contained in this announcement has been reviewed and approved by Mr R. Chase, Chief Executive Officer of Nyota Minerals Limited. Mr Chase has sufficient experience which is relevant to the activities and results that he is reviewing to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results and as a qualified person under the AIM Note for Mining, Oil and Gas Companies. Mr. Chase is an employee of Nyota Minerals Limited and is a Member of the Institute of Materials, Minerals and Mining and a Fellow of the Geological Society of London. Mr Chase consents to the inclusion in this announcement of such information in the form and context in which it appears.

# **Glossary**

Airborne geophysical survey

A survey of relevant physical phenomena of the earth that is conducted from the air, usually involving a helicopter or aeroplane. Common airborne geophysical surveys include magnetics, radiometices and various electrical techniques.

Electromagnetic ('EM') A geophysical survey that uses the principle of induction to measure the

electrical conductivity of the earth's subsurface. Commonly used to survey

for the presence of conductive metal sulphides.

Gabbro A coarse grained igneous rock that is basic in composition (i.e. it contains no

quartz and comprises of plagioclase feldspar and the mafic minerals pyroxene and olivine). Frequently seen as a dark polished facing stone on

buildings.

Gabbroic Complex A large geological feature comprising of one or more intrusion and whose

dominant rock type is Gabbro, or whose rocks that have the major

characteristics of Gabbro.

Grab Sample A sample that is collected without specific consideration or allowance for

the occurrence of what is being sampled. Grab samples cannot, therefore,

be said to be representative.

g/t Abbreviation of grams per tonne. A unit of concentration. Equivalent to 1

part per million.

Igneous One of the three main groups of rocks that make up the earth's surface; the

others being sedimentary and metamorphic. Igneous rocks have crystalized

from a melt or molten magma.

Interstitial The narrow spaces or gaps between particles. Sulphides commonly occur in

the interstitial spaces between the rock-forming minerals.

Intrusion A body of igneous rock that has forced itself into pre-existing rocks.

Mafic A general term used to describe minerals comprised mainly of magnesium

and iron ("Ferromagnesian" minerals); this includes the common minerals olivine, augite, biotite and hornblende. Mafic rocks are those rich in

ferromagnesian minerals and have an absence of quartz.

Magmatic segregation The concentration of particular minerals in different parts of a molten body

of rock. The process of segregation may result from a number of physical and chemical processes such as differences in melting point, gravity settling

of the heavier minerals and immiscible compounds.

Mantle That part of the earth that separates the core from the outer crust. The

outer mantle, or lithosphere, comprises of rigid rock between 50 and 120

km thick on top of which sits the crust.

Matte The metal sulphide phase formed as a result of the smelting of ore. Matte is

the phase in to which the metal sulphides are recovered and which is then

converted to produce crude metal.

Ordovician A geological period from 500 – 435 million years before present

Paragenesis The relationship between minerals expressed in terms of a time sequence or

the mode of origin of a rock or mineral.

Ppm Parts per million. 1ppm = 1g/t. 10,000ppm = 1%.

Ultramafic An igneous rock that contains no quartz and very little or no feldspar and in

which the main minerals are those comprising mainly of iron and

magnesium such as olivine, hornblende and biotite (i.e. "ferromagnesian"

minerals). Also referred to as Ultrabasic.

# **Chemical Symbols**

Au Gold

Co Cobalt

Cr Chromium

Cu Copper

Ni Nickel

Pd Palladium

Pt Platinum

Ru Ruthenium

S Sulphur

Zn Zinc

# **JORC Code, 2012 Edition – Table 1 report**

# **Section 1 Sampling Techniques and Data**

# NOTE:

- Analyses reported in Table 1 are for chip samples and grab samples collected by Nyota. Further information on these samples is contained in the Table 1 report, below.
- Analyses reported in Table 2 of the announcement are for samples in a published academic paper: Garuti, Bea, Zaccarini and Montero (2001). Age, Geochemistry and Petrogenesis of the Ultramafic Pipes in the Ivrea Zone, NW Italy. Journal of Petrology. Vol.2, No.2, 433-457.

Nyota includes this data as part of the Geological Description of the project area. The analyses are not exploration results.

All the samples reported in the published academic paper are included in Table 1; none have been excluded by Nyota.

- None of the sample analyses quoted in the announcement are intended to convey any indication of average grade or representivity.
- Nyota does not consider it appropriate to refer to an "Exploration Target" as defined by the JORC Code (2012) and has therefore avoided making any comment on dimensions, grade or economic factors in the announcement.

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Nyota's samples are rock chip and grab samples.</li> <li>They are intended to test the presence of nickel, copper and other metals in order to validate the historic information that Nyota had received.</li> <li>They are in no way intended to be representative of the whole body of mineralisation.</li> </ul>
Drilling techniques	Drill type and details	Not applicable. No drilling is reported.
Drill sample recovery		Not applicable. No drilling is reported.
Logging	Whether core and chip samples have been geologically and	The samples reported have been described but not logged.

Criteria	JORC Code explanation	Commentary
	geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  • The total length and percentage of the relevant intersections logged.	This section is not applicable to drill samples as no drilling is reported.
Sub-sampling	If core, whether cut or sawn and     whether greater, helf or all core.	This section is not applicable to drill
techniques and sample preparation	<ul> <li>whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Nyota's samples were hand sorted prior to shipment to reduce the weight of each sample to an acceptable level (roughly 3 – 5kg each).</li> <li>A general attempt was made to reduce each piece of the sample rather than to dispose of one or two pieces entirely; however sampling bias may have occurred.</li> <li>Sample Preparation:</li> <li>The samples have been sorted and dried. Primary preparation has been by crushing the whole sample. The whole sample has then been pulverised in a vibrating</li> </ul>
		disc pulveriser.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Nyota's samples were prepared and analysed by Bureau Veritas Australia Pty Ltd, Western Australia</li> <li>Analytical Methods:</li> <li>AU, Pt &amp; Pd</li> <li>The samples have been analysed by Firing a 40 gm (approx) portion of the sample. Lower sample weights may be employed for samples with very high sulphide and metal contents. This is the classical fire assay process and will give total separation of Gold, Platinum and Palladium in the sample. Metal contents are determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry.</li> </ul>
	John John John John John John John John	All other elements The samples have been fused with Sodium Peroxide and subsequently the melt has been dissolved in dilute Hydrochloric acid for analysis. Because of the high furnace temperatures volatile elements are lost. This procedure is

Criteria	JORC Code explanation	Commentary
		particularly efficient for determination of major element composition (including Silica) in the samples or for the determination of refactory mineral species. Analysis is by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry or Mass Spectrometry depending on the element.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Standards appropriate to the elements being analysed were added by the laboratory and reported to Nyota.</li> <li>Sample duplicates were taken after sample preparation and the analyses reported to Nyota.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Data points are general. No co-ordinates or other specific geographic information was recorded.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	Not applicable.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Not applicable. Non-directional grab samples only.</li> <li>No claim is made as to the samples being at any specific orientation (favorable or unfavorable) to the mineralization.</li> </ul>
Sample security	The measures taken to ensure sample security.	The samples were taken by Nyota and were transported by Chris Reindler as checked-in luggage for the flight to Australia.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	None.

# **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	Nyota is acquiring 70% of KEC Exploration Pty.  KEC has been issued an exploration permit in the province of Vercelli, Piemonte region, northwest Italy. Referred to as the Bec permit.  The permit is for:  a) nickel, copper, platinum group metals, gold and associated; and b) a period of 1 year, automatically extending to a second year subject only to the payment of the annual fee.  This permit includes the Valmagia Sassello, Valmaggia Balmello, Isola, Bec and Gastello di Gavala sites of historic mining.  KEC has applied for 3 more permits referred to as the Galerno, Gula and Fei whose locations are shown on Figure 1 of the announcement.  These permit applications include the Fei, Campello Monti, La Balma, Alpe di Laghetto, Balmuccia and Gula sites of historic mining.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Not applicable. No exploration by other parties is reported.
Geology	Deposit type, geological setting and style of mineralisation.	The nature of the Ivrea Gabbroic Complex and its mineralisation is described in the announcement.
Drill hole Information	A summary of all information material to the understanding of the exploration results.	Not applicable. No drill results reported.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	No aggregation was used.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this</li> </ul>	<ul> <li>Not applicable. No widths or intercepts are reported.</li> <li>Samples reported are un-orientated rock chip and grab samples.</li> </ul>

Criteria	JORC Code explanation	Commentary
	effect (eg 'down hole length, true width not known').	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Figure 1 in the announcement shows the locations of the historic mines that are discussed
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All of the samples collected by Nyota have been analysed and are reported in the announcement.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No substantive exploration has been undertaken by Nyota and no data is therefore available.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The planned initial work programme includes geophysical survey, data assimilation from the archives of the mines department and surface mapping and sampling.</li> <li>The importance of the initial work programme to determining the nature and location of further work is described.</li> </ul>