

Subsidiary Companies

NORNICO Pty Ltd ACN 065 384 045 | Oresome Australia Pty Ltd ACN 071 762 484 | Greenvale Operations Pty Ltd ACN 139 136 708 Lucky Break Operations Pty Ltd ACN 126 272 580 | Scandium Pty Ltd ACN 138 608 894 | Phoenix Lime Pty Ltd ACN 096 355 761

ASX Release

19th January 2011

MAJOR RESOURCE UPGRADE AS QUEENSLAND

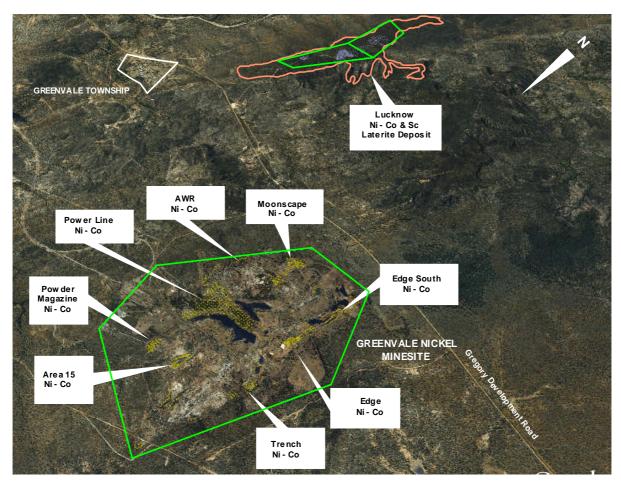
TRI-METAL PROJECT CELEBRATES MILESTONE

- Metallica will now focus on detailed technical & metallurgical studies after completing all necessary resource exploration drilling across its core NORNICO nickel-cobalt-scandium deposits in North Queensland
- No further exploration drilling on its core NORNICO deposits is required
- Focus now on detailed studies and development assessment programs aimed at maiden production in 2013
- Mining studies to commence next month
- Enhanced NORNICO scoping study due end of March

Final drilling & Resource outcomes

- Assays from NORNICO's final drill programs boost the Ni Co resource by 87% to 8Mt @ 1.04% Ni and 0.08% Co (1.20% Ni Eq) using a 0.70% NiEq COG at Greenvale, see Table 1.
- Greenvale contains estimated 83,000t of nickel (inc. 49,000t high grade) & 6,400t of cobalt (inc. 3,800t of high grade) / Refer tables
- Approx. 90% of Greenvale Ni-Co resource in either Measured and Indicated category - sufficient for mining / reserve studies
- Upgrade means proposed tri-metal (nickel (Ni),cobalt (Co) & scandium (Sc) processing plant at Greenvale can underpin first 10 years of NORNICO (even without high grade Scandium resources) and processing at a rate ranging from 180,000–220,000 tpa
- Updated scandium resource of 6.24Mt @ 169 g/t Sc for nearby Lucknow deposit / 54% Measured & Indicated.

Ariel View of the Greenvale and Lucknow Deposits





NORNICO - GREENVALE NICKEL MINE PROJECT DRILL LOCATIONS GREENVALE & LUCKNOW DEPOSITS

KEY FIGURES - NEW JANUARY 2011 NORNICO DEPOSIT ESTIMATES

Greenvale

Measured, Indicated and Inferred Resource of 8.0Mt @ 1.04% Ni, 0.08% Co (1.20% NiEq) at a 0.70% NiEq COG, containing 83,000t of nickel and 3,800t of cobalt metal

Previous resource estimate announced September 8, 2010

Indicated and Inferred Resource of 4.5Mt @ 1.12% Ni, 0.08% Co (1.28% NiEq¹) at a 0.70% NiEq COG

¹ The NiEq value equates to Ni+2Co, this is based on a Nickel values of \$9/lb and a Co value of \$18 / lb, scandium (Sc) has **not** been used in the equivalency equation



Lucknow

Global Measured, Indicated and Inferred resource of 2.42Mt @ 0.57% Ni, 0.20% Co and 97 g/t Sc (0.97% NiEq), using a 0.70% NiEq COG

Measured, Indicated and Inferred Lucknow scandium resource of 6.24Mt @ 169 g/t Sc (using 70 g/t Sc COG), including a higher grade zone of 4.15Mt @ 205g/t Sc (at a 120 g/t Sc COG)

Previous maiden resource announced September 8, 2010

Global Indicated and Inferred resource of 2.4Mt @ 0.57% Ni, 0.20% Co (0.97% NiEq), 96 g/t Sc, using a 0.70% NiEq COG

Indicated and Inferred Lucknow high grade scandium resource of 6.10 @ 169 g/t Sc using a 70 g/t sc COG) including a higher grade zone of 4.1Mt @ 205 g/t Sc (using 120 g/t Sc COG)

SUMMARY

Metallica Minerals Ltd (MLM) is pleased to announce that the Company is planning to move to fulltime technical and metallurgical development of its 100%-owned NORNICO cobalt, nickel and scandium project northwest of Townsville in North Queensland.

The project milestone follows the completion by Metallica in recent weeks of the final stages of ALL exploration drilling (and subsequent receipt of all assays outstanding) from across the entire NORNICO project, as necessary to establish a sufficient resource base on which to now progress mining studies aimed at supporting Feasability Studies for developement.

No further exploration drilling on the projects core deposits is required.

Significantly, assays from the final round of drilling, on the Greenvale nickel-cobalt laterite deposit at the southern end of the NORNICO project area, have boosted resource estimates, further enhancing the prospect of a new tri-metal processing plant being established in north Queensland. (Results from an initial scoping study (refer ASX Release, September 20th, 2010) found that a proposed A\$132 million Stage 1 (approximately 180,000t pa) mining and processing operation based around the Greenvale-Lucknow deposits would be "economically and technically robust".)

Future work

The enhanced resource estimate for Greenvale and Lucknow (details follow) is expected to be sufficient to support a 10 year, 180,000 to 220,000tpa processing operation (NORNICO Stage 1) on the old Greenvale Nickel Mine site and which will treat high grade Ni-Co & Sc ore.

This would maximise margins by recovering the three metals together. As the scandium oxide market grows, scandium rich ore could be incorporated into the Ni-Co-Sc ore feed to increase scandium oxide (99.9% purity) production.

The proposed resource input would be sourced from Greenvale, Lucknow and possibly supplemented in later years with high grade ore within the Kokomo deposit located north of Greenvale and within the southern NORNICO project area (see Kokomo Resource Update ASX Release 27th January 2010).

Further metallurgical testwork and beneficiation work is ongoing with results expected in February 2011.

Early 2011 work program

A list of activities planned for the next few months to progress the NORNICO Stage 1 project is as follows:-

- Ongoing acid leaching and pressure acid leach metallurgical testwork on representative PQ core from Greenvale
- Ongoing metallurgical testwork to investigate the possibility of treating high grade scandium ore (>200 g/t Sc which is mostly higher in iron) in the proposed NORNICO Stage 1 plant.
- Beneficiation testwork on PQ core to further investigate and confirm the expected upgrade of the nickel and cobalt content of the Greenvale ores by simple screening
- Resource mining studies including initial pit designs and mine schedules
- Wet season flora and fauna study
- Mining lease applications over the Greenvale and Lucknow resources
- Progressing the enhanced scoping study for completion in March.

Greenvale Ni-Co laterite deposit

The significantly higher Greenvale resource estimate, prepared independently by Golder Associates of Brisbane, was compiled using data from Metallica's recently completed (Phase 2) drilling program at Greenvale of 362 Reverse Circulation (RC) holes (RC418 to 779) for 7,693m.



In addition to this, bulk density data from three diamond holes (GVMDDH-001 to 003) was also incorporated into the resource along with a detailed topographic model for Greenvale obtained from drill collar surveys and satellite imagery completed in December.

Golders also revised the Lucknow Ni – Co and scandium resource estimates based on new bulk density data and more detailed topographic data. No additional drilling was included in these resource updates.

The Greenvale Resource was estimated using data from 779 Reverse Circulation (RC) holes and Aircore holes. Holes GVM 142 to GVM 779 were drilled by Metallica between March 2010 to December 2010 (comprising approximately 17,000m of drilling) and holes GVM-001 to GVM 142 were drilled by Straits Resources Ltd between May 2007 and August 2008 (comprising approximately 6,000m of drilling).

The Greenvale resource has predominantly been drilled out on a 40m by 40m grid with some infill drilling to 20m by 20m. This is sufficient to classify approximately 90% of the Greenvale resource as either Measured or Indicated.

The Measured, Indicated & Inferred Greenvale resource is summarised in Table 1 and 2. Grade tonnage data for the Greenvale resource at various cut off grades (COG) is shown in Table 3 and the distribution of the Measured, Indicated and Inferred resources at Greenvale and drill hole locations are shown on Figure1.

Table 1: **Greenvale Ni-Co Resource (Using a 0.70% NiEq COG)**

Classification	Mt	Ni %	Co %	NiEq ² %	Fe %	Sc g/t
Measured	2.63	1.08	0.09	1.26	22	33
Indicated	4.47	1.03	0.08	1.19	21	33
Inferred	0.90	0.99	0.07	1.12	19	30
Total	8.00	1.04	0.08	1.20	21	33

The above resource conforms to JORC guidelines for the reporting of mineral resources, the resources have been classed as either Measured, Indicated or Inferred based on geological continuity, sample intervals and drill hole spacing, The Measured and Indicated resources are sufficient for preliminary pit design and scheduling. The Mineral resource estimate is appropriate for a selective open pit mining scenario, but does not account for mining dilution or mining losses.

² The NiEq value equates to Ni+2Co, this is based on a Nickel values of US\$9/lb and a Co value of US\$18 / lb, scandium (Sc) has **not** been used in the equivalency equation

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Figure 1: Greenvale Project Resource Categories and Drill Hole Locations

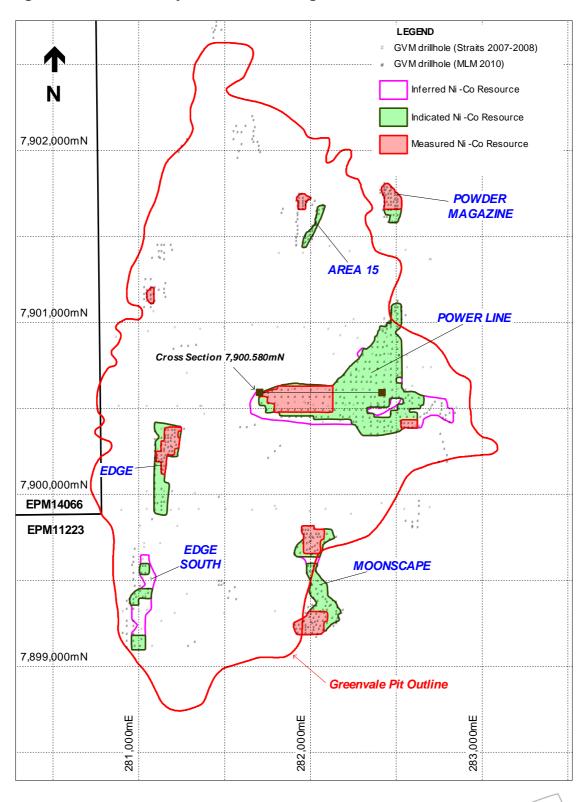






Table 2: Greenvale Ni-Co Resource (Using a 1.20% NiEq COG)

Classification	Mt	Ni %	Co %	NiEq %	Fe %	Sc g/t
Measured	1.4	1.33	0.10	1.53	21	31
Indicated	2.13	1.24	0.10	1.43	21	33
Inferred	0.34	1.23	0.08	1.40	19	28
Total	3.87	1.27	0.10	1.46	21	32

Table 3: Greenvale grade tonnage table at different COGs

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COG	Tonnes	Ni %	Co %	NiEq %	Sc g/t
(NiEq)	(Mt)				
0.5	13.43	0.83	0.06	0.95	32
0.6	10.30	0.94	0.07	1.08	32
0.7	8.00	1.04	0.08	1.20	33
0.8	6.95	1.10	0.08	1.27	32
0.9	6.43	1.14	0.08	1.31	32
1.0	5.78	1.18	0.08	1.35	32
1.1	4.90	1.22	0.09	1.40	32
1.2	3.87	1.27	0.10	1.46	32
1.3	2.86	1.33	0.11	1.54	32
1.4	1.99	1.40	0.11	1.62	32
1.5	1.47	1.47	0.12	1.71	32

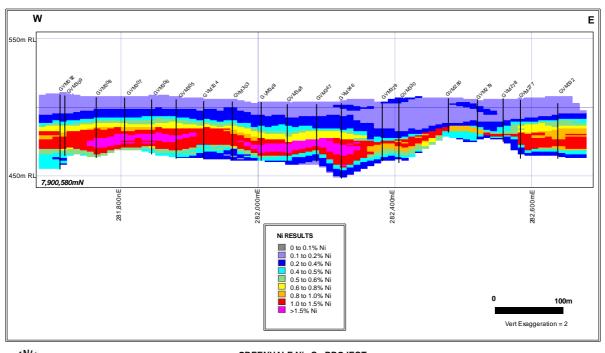
A section of the resource block model through the Power Line zone is presented in **Figures 2**.

Lucknow Ni-Co and Scandium (Sc) laterite deposit

No additional drilling has been completed at Lucknow since the maiden resource estimate in August 2010. However, three diamond holes, LKRC-001 to LKRC-003 were drilled to provide bulk density data for Lucknow and a detailed topographic survey of the area was obtained using processed data from satellite imagery flown in December. Incorporating this data into the initial resource model has led to the reclassification and revision of the Lucknow resource.

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Figure 2: Block Model on Line 7,900, 280N through the Power Line



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GREENVALE NI - Co PROJECT NICKEL RESOURCE DRILL CROSS SECTION 7,900,580mN (looking North)

The Lucknow Ni-Co & Sc resources were completed by using data from 298 RC drill holes comprising 7,036m of drilling. The resources have been drilled out on either a 20m (N-S) by 20m (E-W) grid or a nominal 40m (N-S) by 40m (E-W) grid which is sufficient to classify approximately 55% of the resource as either Measured or Indicated. Where the drilling has been completed on an 80m (N-S) by a 40m (E-W) grid, the resource has been classed as Inferred. (See **Figure 3**)

The combined Indicated and Inferred resource for the Lucknow Ni–Co laterite deposit based on the drilling to date is 2.42Mt @ 0.57% Ni, 0.20% Co (0.97% NiEq) and 94 g/t Sc, at a 0.7% NiEq cut-off grade (COG), A breakdown of the resource categories for Lucknow is included in **Table 4.**

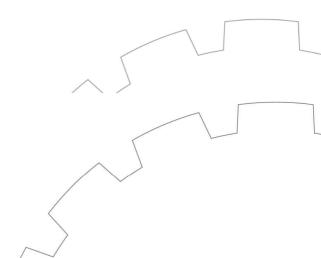




Table 4: Lucknow Ni-Co Resource (Using a 0.70% NiEq COG)

Classification	Mt	Ni %	Co %	Ni Eq %	Sc g/t	Fe %
Lucknow						
Measured	0.86	0.66	0.17	1.00	64	24.3
Indicated	0.82	0.52	0.23	0.98	107	22.5
Inferred	0.75	0.54	0.19	0.93	115	23.1
Totals	2.42	0.57	0.20	0.97	94	23.5

The scandium resource within the Lucknow laterite deposit is subject to a Joint Venture (JV) agreement with Straits Resources Exploration Limited (Metallica 80%, Straits 20%). Under the terms of the JV, all scandium ore is to be mined or stockpiled separately from the Nickel – Cobalt ores and kept for later processing by the JV. Laterite resources are classified as either Ni - Co ore or Sc ore under a formula agreed by the JV. As a result of this, the combined Lucknow resource is sub-divided into two separate parts - a **Ni-Co resource** and a **Scandium resource** and each are quoted exclusively. **Table 5** shows the Lucknow Ni-Co resources which is affected by the Straits JV - i.e. excludes the scandium ore (high scandium and low grade nickel – cobalt), and Tables 6 and 7 detail the scandium resource at a 70 g/t Sc COG and a 120 g/t COG excluding the nickel – cobalt resource.

Table 5: Lucknow Ni-Co Resource – Not Subject to the Scandium Joint Venture (Using a 0.70% NiEq COG)

Classification	Mt	Ni %	Co %	Ni Eq %	Sc g/t	Fe %
Lucknow						
Measured	0.74	0.66	0.17	1.00	38	24.1
Indicated	0.55	0.55	0.22	0.99	47	22.5
Inferred	0.47	0.55	0.19	0.93	50	20.2
Totals	1.76	0.60	0.19	0.98	44	22.5



The Lucknow Measured, Indicated and Inferred **scandium resource** now stands at 6.24Mt @ 169 g/t Sc with a higher grade zone comprising 4.12Mt @ 206 g/t Sc using a 120g/t Sc COG, containing over 1.2 million Kg of scandium oxide. Within the Lucknow scandium resource, there is a lower iron portion of 1Mt at 206 g/t Sc at 18% Fe.

Table 6: Lucknow Sc Resource subject to the Straits JV (Using a 70g/t Sc COG)

Classification	Mt	Sc g/t	Ni %	Co %	NiEq %	Fe %
Lucknow						
Measured	0.72	197	0.26	0.05	0.34	30.8
Indicated	2.67	171	0.19	0.04	0.27	35.4
Inferred	2.85	159	0.20	0.04	0.27	35.1
Totals	6.24	169	0.20	0.04	0.28	34.7

The above resources conforms to JORC guidelines for the reporting of mineral resources, the resources have been classed as either Measured, Indicated or Inferred based on geological continuity, sample intervals and drill hole spacing. The Indicated and Measured Resources are sufficient for initial pit design and scheduling.

Table 7: Lucknow Sc Resource subject to the Straits JV (Using a 120g/t Sc COG)

Classification	Mt	Sc g/t	Ni %	Co %	NiEq %	Fe %
Lucknow						
Measured	0.51	239	0.25	0.06	0.37	21.8
Indicated	1.77	209	0.20	0.05	0.31	35.4
Inferred	1.84	194	0.21	0.05	0.31	36.1
Totals	4.12	206	0.21	0.05	0.32	35.2

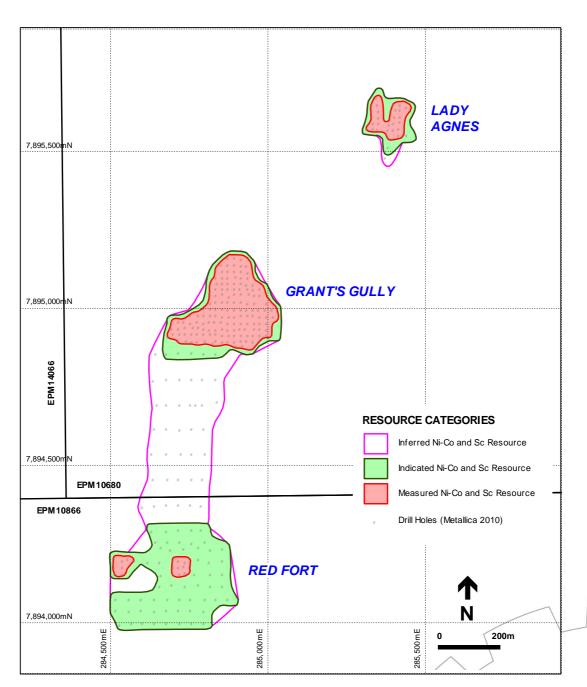
Resource Modelling technique

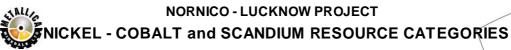
The resource estimate was undertaken on Greenvale and Lucknow by Golder Associates of Brisbane, using block modelling Ordinary Kriging (OK) techniques. The estimate was completed using unfolding techniques to make a wire framed model to represent the paleolaterite surfaces between drill holes, and was further refined by incorporating data from sectional interpretations of the considered logged geology and scandium, nickel, cobalt, iron, magnesium and manganese assays. A nominal 0.80% Ni-only mineralised envelope was used to constrain the mineralisation and grade estimates at Greenvale, and a nominal 0.5



%NiEq was used at Lucknow. The wireframe was then filled with 10m by 10m by 1m blocks, with the grades of the various elements estimated by ordinary kriging using a three pass search strategy and a maximum of 3 composites selected from any one drill hole. Mineralisation was extrapolated at nominal 20m from drill hole intercepts, depending on supporting information. Further details of how the Greenvale and Lucknow Resources were estimated are set out at the back of this report.

Figure 3; Outline of Lucknow Measured, Indicated + Inferred Resource Categories







Queensland Floods

In response to shareholder and external queries, Metallica Minerals Limited advises that this month's tragic and overwhelming Brisbane and regional floods in Queensland have had no direct impact on our staff and employees, on the company, our office, project facilities or wet season (minimized) exploration activities. However some of our groups exploration tenements landowners will have been affected.

Our deepest sympathies are, however, extended to the many thousands of people affected. While we recognise the challenges ahead for them, Metallica joins the many expressions of public support that those affected can rebuild as quickly and as safely as possible.

Andrew Gillies

Managing Director Metallica Minerals Limited (07) 3249 3000 **Kevin Skinner**

Partner Field Public Relations (08) 8234 9555 / 0414 822 631

Technical information and exploration results contained in this report has been compiled by Metallica Minerals Ltd full time employees Andrew Gillies in the position of Managing Director and Metallica Minerals Ltd Exploration Manager, Mr Pat Smith MSc. B.Sc (Hons). Mr Gillies and Mr Smith are members of the Australasian Institute of Mining and Metallurgy and have relevant experience to the mineralisation being reported on to qualify as Competent Persons as defined by the Australasian Code for Reporting of Minerals Resources and Reserves. Mr Gillies and Mr Smith consent to the inclusion in this report of the matters based on the information in the form and context in which it appears

This Mineral Resource estimate is based upon and accurately reflects data compiled, validated or supervised by Mr John Horton, Principal Geologist, who is a Member of the Australasian Institute of Mining and Metallurgy and a full time employee of Golder Associates Pty Ltd. Mr Horton has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Horton consents to the inclusion of this information in the form and context in which it appears in this letter.

Key features of the resource estimate for Greenvale

- Detailed topography was derived from recent WorldView-2 satellite imagery.
- Collars of holes drilled by Metallica were surveyed by PES surveyors of Cobar using a differential GPS with a stated accuracy of ±20 mm.
- Previous data collated by Straits in local grid were converted to MGA using local and AMG coordinates surveyed by Straits. The Straits topography and drilling were lowered by approximately 4 m RL as part of the grid conversion to best match the Metallica survey locations.
- Drill holes used for resource estimation were drilled by the previous project owner Straits (141 holes in 2007/8) and Metallica (641 holes in 2010).
- All drill holes used for resource estimation were drilled vertically. Visual inspection of some drill holes indicated no significant down-hole deviations. Due to the relatively shallow nature of the drilling (98.5% of holes ≤60 m) it is unlikely that material drill hole deviations would have occurred.
- Sample recovery in the mineralised zone by Metallica is believed to be good to excellent.



- Drilling used for resource estimation by Metallica was face-sample RC. 121 of Straits drill holes were by RC, with the remaining 20 by aircore.
- Drill holes were sampled predominantly over 1 m intervals. Some 3 m intervals are present in overburden and non-mineralised material. Observed RC sampling by Metallica employed a multi-stage on board riffle splitter. Straits used a grab sample approach due to the wet puggy nature of their samples.
- ALS Chemex and SGS Laboratories (SGS) in Townsville were used for assaying Metallica and Straits drill holes respectively. Both ALS Chemex and SGS used a four acid digest method with an ICP finish.
- The QAQC programs for Straits and Metallica drilling involved intra-laboratory pulp duplicates and blind field duplicates and some certified reference material. The QAQC results indicated that the assays for both the Straits and Metallica drilling programs were satisfactory for resource estimation purposes.
- The mineralisation has a surface expression that was observed in places during a field visit by Mr Horton. There has also been substantial mining at Greenvale. The areas estimated by Golder appear to be remnant laterite blocks that have not been not previously mined.
- Golder undertook basic validation checks of the drill hole database.
- Drill hole data was composited to 1 m, which was the dominant sample interval in mineralised material.
- Appropriate high-grade cuts to Ni, Co and Sc outlier values were applied on a zone by zone basis.
- A wireframe of the paleo-laterite (enrichment) horizon between drill holes was constructed based on sectional interpretations. A nominal 0.8% Ni was the underlying basis of a Ni mineralised wireframe. A nominal 0.05 or 0.1% Co was the underlying basis of a Co mineralised wireframe. Laterite profile wireframes were also constructed to constrain major material types based on either geochemistry or logging.
- The mineralised envelope wireframes included a nominal 20 m horizontal extrapolation from the drill holes at the margins of the mineralised zone.
- A computer block model was constructed by filling the mineralised wireframes with 10 m by 10 m by 1 m blocks. Additional blocks were retained to the topography and base of drilling as well as peripheral to mineralisation to permit open pit optimisation. Sub-blocking was not employed, with whole blocks assigned to mineralised/geological domains on a maximum proportion basis.
- Grades of Ni, Co, Fe, Mg, Mn, Al, Ca, Cr, Cu and Sc were estimated by ordinary kriging using a three pass search strategy with a maximum of 12 composites, including a maximum of 3 composites selected from any one drill hole. A minimum of 10, 8, and 1 composites were used for Pass 1, 2, and 3 respectively.
- Hard boundaries were used between the mineralised envelopes and the laterite domains for Ni and Co. All other elements used hard boundaries between different laterite horizons.
- Unfolding methods were employed during variogram analysis and block grade estimation to represent adequately the paleo-laterite (enrichment) horizon between drill holes.
- Validation included visual observation, statistical checks, and swath plots.
- Internal dilution has been accounted for, but not dilution at the margins of the mineralised wireframe.
- In the majority of the resource areas, drilling was mostly on a reasonably regular pattern of 20 m by 20 m, 20 m by 40 m (Measured) or 40 m by 40 m (Indicated). Inferred Mineral Resources were mostly drilled on a reasonably regular pattern of 80 m (NS) by 40 m (EW), with some small areas at irregular spacings due to access issues.
- Dry bulk densities (DBD) were assigned to blocks according to nearest neighbour estimates of lithology. Bulk density values applied were derived from 137 samples from Greenvale and other results from the NORNICO project.



- Metallica advises that the 0.7% NiEq (Ni+2*Co) cut-off grade is considered appropriate for large-scale mining based on ongoing feasibility studies at the nearby Bell Creek nickel laterite deposit. The suitability of this cut-off grade is to be confirmed as economic evaluation and metallurgical test work as part of feasibility studies at Greenvale. Metallica have indicated that it is likely that initial small-scale mining will be at a higher NiEq cut-off grade in the order of 1.2% NiEq.
- Resource classification is based on target drill spacing of 20 m by 20 m (or around 20 m by 40 m in the Powerline area of the deposit, adjacent to the central historic mining area and where strong geological and grade continuity exists) for Measured, 40 m by 40 m for Indicated and larger or irregular for Inferred Mineral Resources. This classification is based on the continuity of the principal Ni-Co mineralisation.

Key features of the resource estimate for Lucknow:

- Detailed topography was derived from recent WorldView-2 satellite imagery.
- Collars of holes drilled by Metallica were surveyed by PES surveyors of Cobar using a differential GPS with a stated accuracy of ±20 mm.
- All drill holes used for resource estimation were drilled by Metallica in 2010.
- All drill holes used for resource estimation were drilled vertically. Visual inspection of some drill holes
 indicated no significant down-hole deviations. Due to the shallow nature of the drilling (<40 m) it is
 unlikely that material drill hole deviations would have occurred.
- Sample recovery in the mineralised zone is believed to be good to excellent.
- All drilling used for resource estimation was by face-sample RC.
- The drill holes were sampled by spearing, predominantly over 1 m intervals.
- SGS Laboratories (SGS) in Townsville were used for assaying. SGS used a four acid digest method
 with an ICP finish.
- The QAQC program for Metallica drilling involved intra-laboratory pulp duplicates and blind field duplicates and inter-laboratory check samples. The QAQC results indicated that the assays for the Metallica drilling program were satisfactory for resource estimation purposes.
- The mineralisation has a surface expression that was observed in places during a field visit by Mr Horton.
- Golder undertook basic validation checks of the drill hole database, including checks between digital assay certificates and the supplied database.
- Drill hole data was composited to 1 m, which was the dominant sample interval.
- Appropriate high-grade cuts to Ni, Co and Sc outlier values were applied on a zone by zone basis.
- A wireframe of the paleo-laterite (enrichment) horizon between drill holes was constructed based on sectional interpretations. A nominal 0.3% Ni was the underlying basis of a Ni-Co mineralised wireframe. A nominal 60 ppm Sc was the underlying basis of a Sc mineralised wireframe. Laterite profile wireframes were also constructed to constrain major material types based on either geochemistry or logging.
- The mineralised envelope wireframes included a nominal 20 m horizontal extrapolation from the drill holes at the margins of the mineralised zone.
- A computer block model was constructed by filling the mineralised wireframes with 10 m by 10 m by 1 m blocks. Additional blocks were retained to the topography and base of drilling as well as peripheral to mineralisation to permit open pit optimisation. Sub-blocking was not employed, with whole blocks assigned to mineralised/geological domains on a maximum proportion basis.
- Grades of Ni, Co, Fe, Mg, Mn, Al, Ca, Cr, Cu and Sc were estimated by ordinary kriging using a three pass search strategy with a maximum of 15 composites, including a maximum of 3 composites selected from any one drill hole. A minimum of 10, 8, and 1 composites were used for Pass 1, 2, and 3 respectively.



- Hard boundaries were used between the mineralised envelopes and the laterite domains for Ni, Co and Sc. All other elements used hard boundaries between different laterite horizons.
- Unfolding methods were employed during variogram analysis and block grade estimation to represent adequately the paleo-laterite (enrichment) horizon between drill holes.
- Validation included visual observation, statistical checks, and swath plots.
- Internal dilution has been accounted for, but not dilution at the margins of the mineralised wireframe.
- Dry bulk densities (DBD) were assigned to blocks according to nearest neighbour estimates of lithology. Bulk density values applied were derived from 70 samples from Lucknow and other results from the NORNICO project.
- Metallica advises that the 0.7% NiEq (Ni + 2*Co) cut-off grade is considered appropriate based on ongoing feasibility studies at the nearby Bell Creek nickel laterite deposit. The suitability of this cut-off grade is to be confirmed as economic evaluation and metallurgical test work as part of feasibility studies at Lucknow.
- High Sc and high Ni-Co mineralisation overlap in places and for practicality Resource classification was maintained though Ni-Co displays less lateral continuity. It should be noted that some additional infill drilling maybe required to convert Resources based on Sc alone to Reserves. This is partly related to the economics of Sc that may only be fully defined during feasibility assessment.
- Resource classification is based on target drill spacing of 20 m by 20 m for Measured, 40 m by 40 m for Indicated and 80 m by 40 m for Inferred Mineral Resource. This classification is based on the continuity of the principal Ni-Co mineralisation. Sc displays greater continuity in places but cannot be practicably classified separately for Ni-Co as the two mineralisation zones largely overlap.