

**ANNOUNCEMENT TO THE AUSTRALIAN SECURITIES EXCHANGE: 21 MARCH 2012**

## **Nalesbitan Hill - Mineral Resource Estimate**

The Board of Sierra Mining Limited (“the Company” or “Sierra”) is pleased to advise the results of the Company’s initial mineral resource estimate for the Nalesbitan Hill deposit, acquired in November 2011. Key points:

- The resource estimate was prepared by independent geological consultants, H&S Consultants Pty Ltd (H&SC), whose staff have consulted to the owners of the property since 2006 (previously as Hellman and Schofield).
- The Inferred Mineral Resource at a 0.5g/t gold cut-off totals 5.0 Mt at 1.1 g/t Au (170k oz) and 4.0 g/t Ag (645k oz).
- At a 0.3 g/t cut-off, the Resource increases to 7.7 Mt at 0.8 g/t Au (204k oz) and 4.0 g/t Ag (986k oz).
- The Resource extends approximately 130m below the surface of Nalesbitan Hill.
- The deposit remains open at depth and along strike in a number of areas.
- The Resource does not include any of the known mineralised areas outside the Nalesbitan Hill deposit (see Figure 5).
- The Resource is all contained within Sierra’s 100% owned Mining Lease Contract.
- Sierra plans to mobilise drilling on the Project in Q2 2012, to upgrade and increase the resource at Nalesbitan Hill, as well as to begin testing the other prospects in the Nalesbitan Project.

*Enquiries: Matt Syme, Managing Director, +61 8 9322 6322*



## **RESOURCE ESTIMATE**

H&S Consultants Pty Ltd (H&SC) staff have acted as independent geological consultants to the owner of the Nalesbitan Project since 2006. After acquisition of the Project in late 2011, Sierra retained H&SC to provide an estimate of resources contained within the Nalesbitan Hill deposit. H&SC's estimate is reported in accordance with the JORC Code and is all within the Inferred Mineral Resource category under the Code.

At this stage, exploration of the other areas of known mineralisation within the Project (see Figure 5) is too preliminary for resource estimations. A full description of the Project is included below.

Resources were estimated using the Multiple Indicator Kriging method. Grades are estimated into panels with dimensions 25m (east) by 25m (north) by 5m (elevation).

The estimates of (inferred) gold and silver resources at a range of gold cut-off grades are set out in Table 1 below\*.

<i>TOTAL</i>	<i>Tonnes</i>	<i>Grade Au g/t</i>	<i>Grade Ag g/t</i>	<i>Au Oz</i>	<i>Ag Oz</i>	<i>Ag:Au ratio</i>
<b>0.3</b>	7,734,892	0.82	3.96	204,014	985,929	4.83
<b>0.4</b>	6,257,085	0.93	3.96	187,444	795,967	4.25
<b>0.5</b>	5,032,135	1.05	3.99	169,797	645,306	3.80
<b>0.6</b>	4,028,397	1.17	4.20	152,157	544,375	3.58
<b>0.7</b>	3,273,884	1.30	4.47	136,440	470,409	3.45
<b>0.8</b>	2,687,023	1.42	4.71	122,320	406,859	3.33
<b>0.9</b>	2,220,860	1.53	4.96	109,599	354,211	3.23
<b>1.0</b>	1,846,633	1.65	5.21	98,175	309,554	3.15
<b>1.1</b>	1,544,130	1.77	5.46	87,962	271,067	3.08
<b>1.2</b>	1,297,042	1.89	5.69	78,818	237,149	3.01
<b>1.3</b>	1,094,733	2.01	5.95	70,677	209,333	2.96
<b>1.5</b>	790,061	2.24	6.41	56,988	162,818	2.86
<b>1.8</b>	496,802	2.60	7.14	41,487	114,103	2.75
<b>2.0</b>	370,540	2.83	7.50	33,752	89,311	2.65

**Table 1 – Nalesbitan Hill Inferred Mineral Resource Estimates (H&SC 2012)**

\* (significant figures used are to avoid rounding errors and do not imply precision)

Resources have been categorised as Inferred at this time as the data is generally of a historical nature. Quality control measures have varied over time with different phases of exploration however, based upon Sierra's investigations, sufficient quality control data have been collected by the previous operators and analysed by their independent consultants to conclude that the data from all phases of exploration is essentially reliable and that the data is suitable as input for estimation of an Inferred Resource. Similarly, a substantial amount of geological analysis and interpretation has previously been undertaken, which Sierra considers sufficient to support the estimation parameters used by H&SC and the resulting Inferred Resource classification.

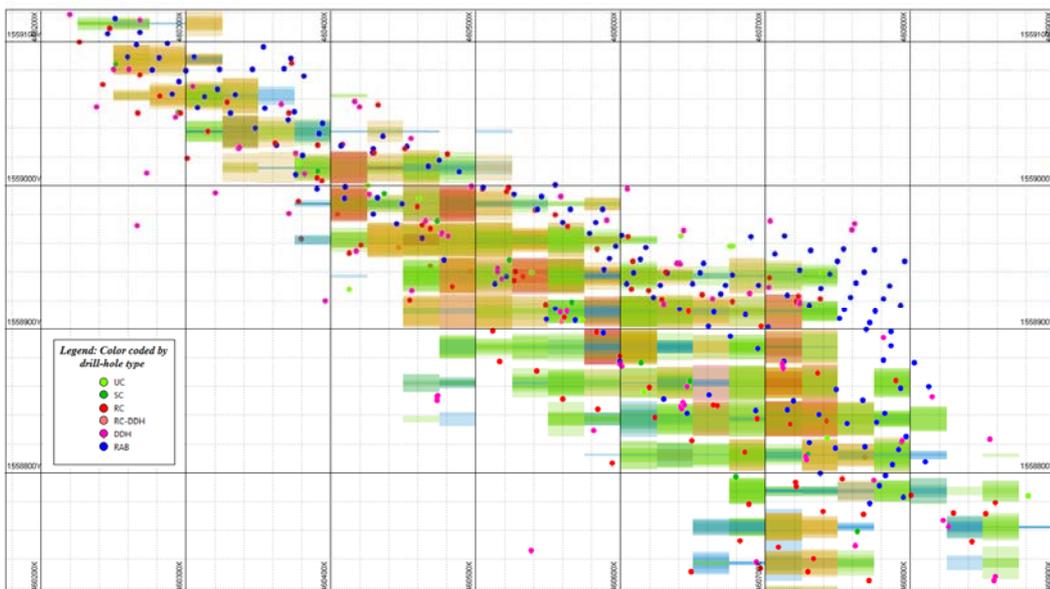


Additional verification drilling, geological interpretation and further validation of the historical data will be required to support higher levels of resource classification.

Sierra have not yet carried out any drilling at the Project and the data utilised in the estimate was all collected by previous owners, prior to 2008.

The estimate utilises a total of 8,116 two metre composite grades drawn from a database of 114 diamond drill holes (12,462m), 131 reverse circulation holes (7,295m) and 10 reverse circulation holes with diamond tails (1,635m). Samples from rotary air blast drilling, costeaning, tunnel sampling and other methods were not utilised in the estimate.

Drill hole spacing varies from 5-35m across strike and 12.5-30m along strike (see Figure 1).



**Figure 1 – Nalesbitan Hill block model and drill plan**

The resource models were estimated by Multiple Indicator Kriging. No top cut was applied as the influence of high grades is adequately controlled by indicator thresholds during the estimation process.

A standard value for density of 2.40gm/cc has been applied across the oxidation ranges. The resource was truncated at the current mined ground surface as at November 2008 however, no adjustment has been made for remaining mined voids, of which tunnels would be the most significant.

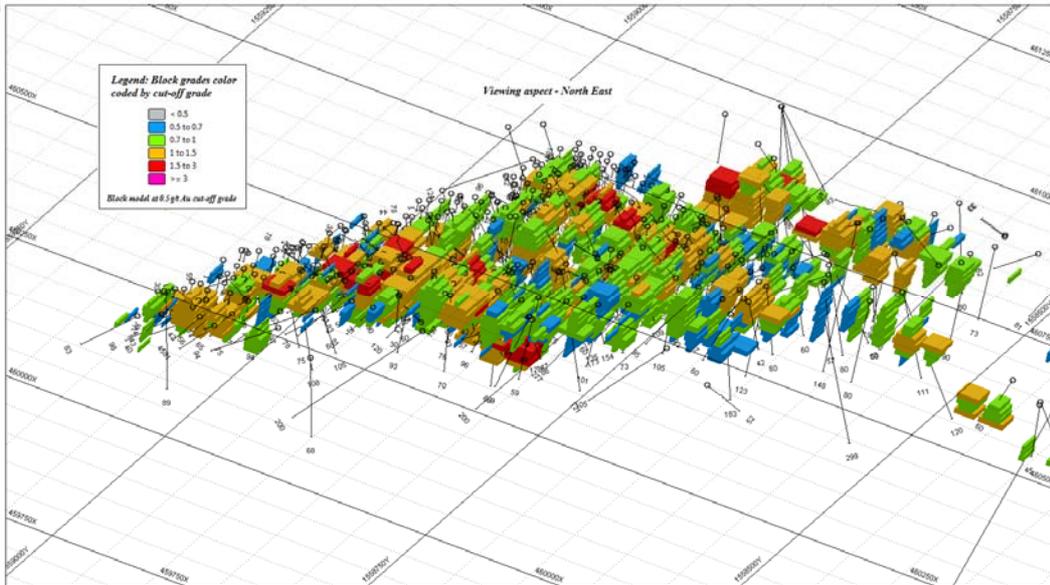


Figure 2 – Nalesbitan Hill Block Model looking north east (0.5g/t cut-off grade)



## NALESBITAN PROJECT (100% Sierra Mining)

### Location

The Philippines is one of the world's largest porphyry copper-gold and related epithermal gold-silver provinces. The majority of Cu-Au mineralisation is spatially related to the Philippine Fault System which passes from northern Luzon to eastern Mindanao. Mineralisation is hosted in secondary structures and splays in areas where the fault system multi-furcates and horsetails such as in Luzon, the Paracale Mineral District and eastern Mindanao.

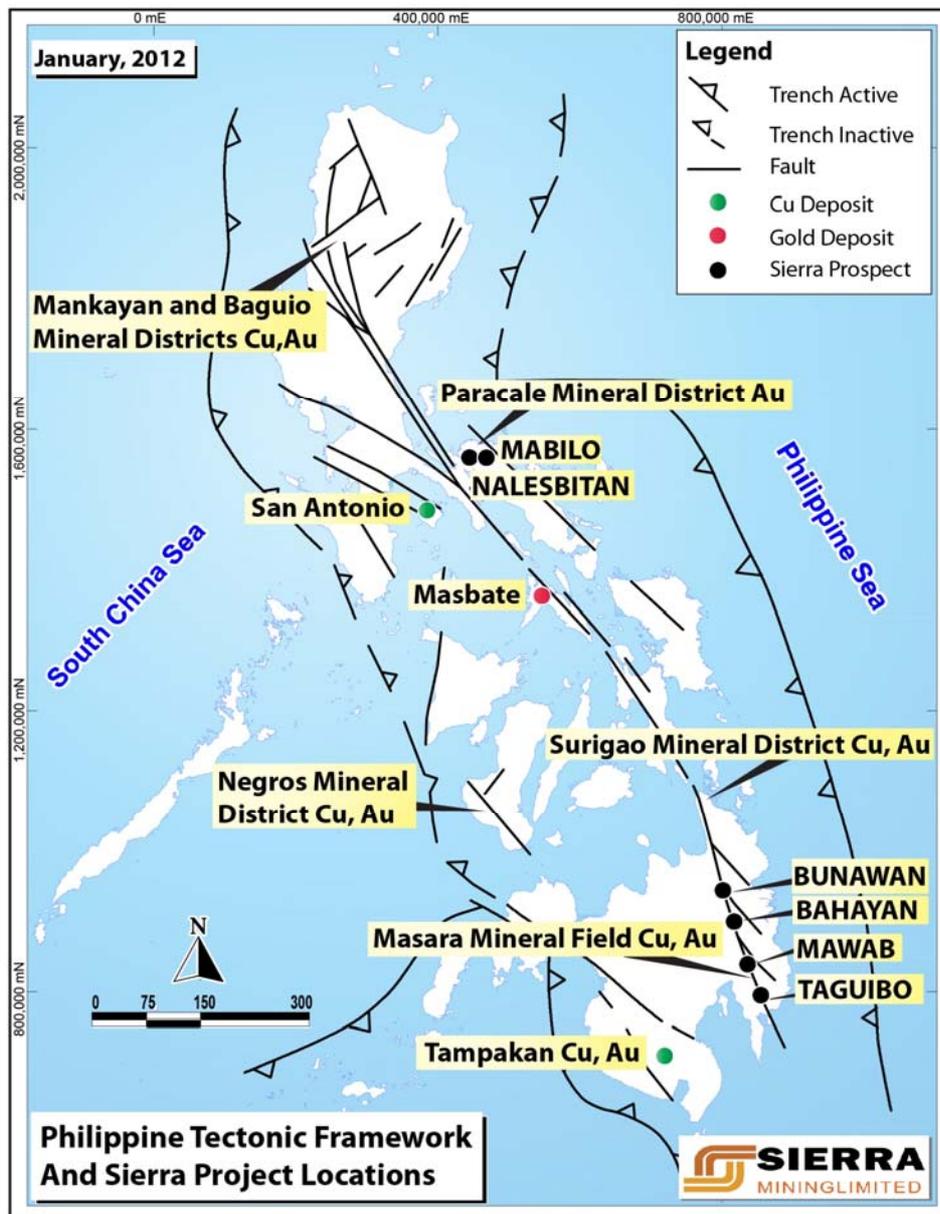


Figure 3 - Showing the tectonic framework of the Philippines and the location of Sierra's Nalesbitan Project



## Background

The Nalesbitan Project comprises Mining Lease Contract MRD-459 of 497Ha and MPSA Application APSA-V-0002 of 637Ha. The Project is located in Camarines Norte Province on the Bicol Peninsular in southern Luzon approximately 200 km ESE of Manila [Figure 4]. Access from Manila is by 300 km of sealed highway to the town of Exiban and then by 13 kilometres of unsealed road to Nalesbitan.

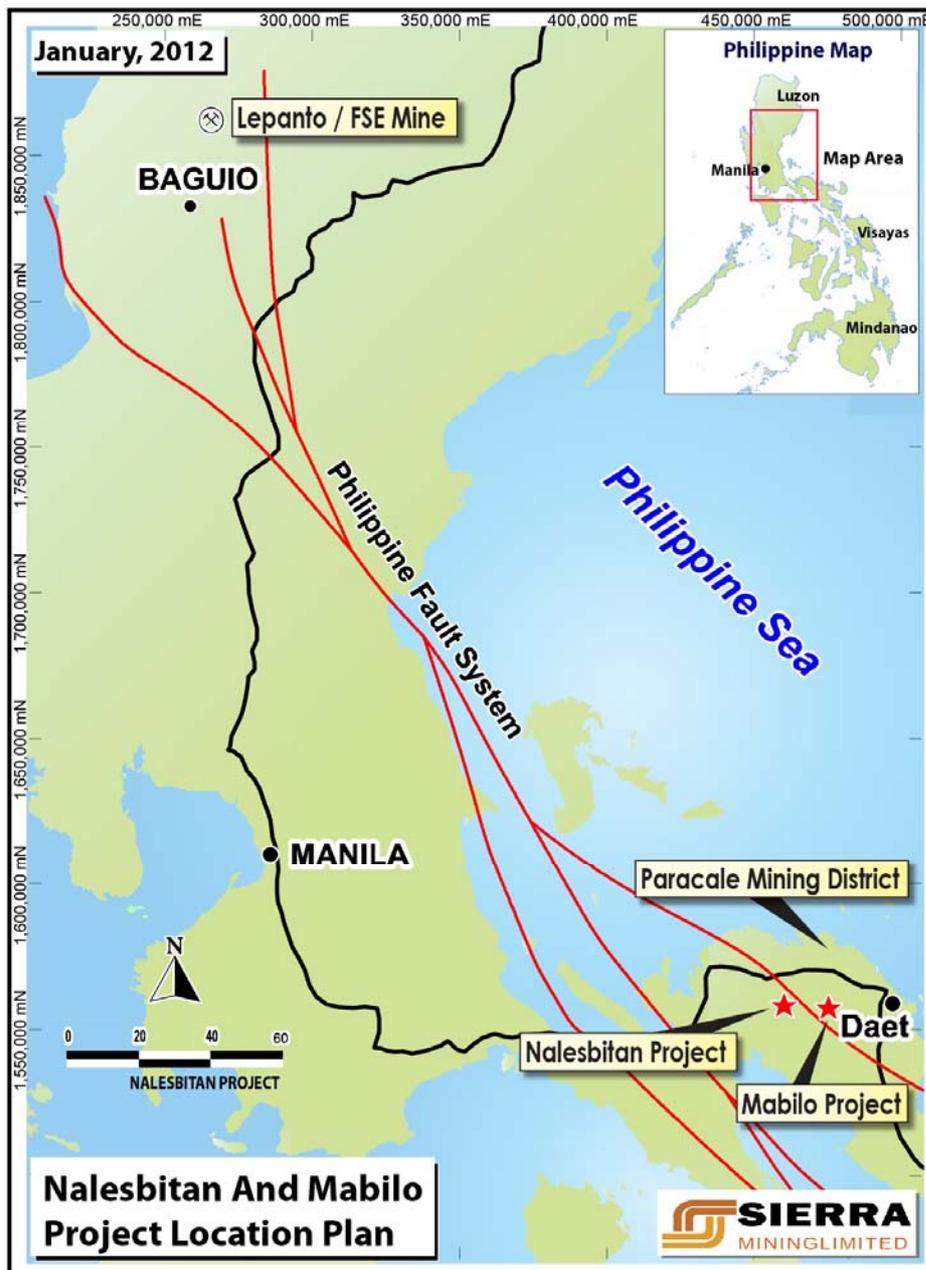


Figure 4 - Showing location of the Nalesbitan Project within the Philippine Fault System

The area is sparsely populated and is not subject to any indigenous land owner claims. The terrain is moderately rugged with elevations of 200-250m ASL rising to the inactive Mt Lobo volcano at an elevation of 1572m ASL approximately 20km to SE.



Nalesbitan is approximately 25 kilometres south west of the Paracale Mining District, where gold production dates to the 12<sup>th</sup> century and was first reported by the Spanish in 1571. Historical gold production in the Paracale district is estimated to have been 5 million ounces of gold.

The Nalesbitan area was first worked for gold in the 1800's by artisanal miners but systematic mining only commenced at the prominent ridge of Nalesbitan Hill in the 1930's. A 200 tpd plant was commissioned in 1938 and underground mining was conducted by a Filipino-American company on five levels between 1938 and 1941 producing ore at an average grade of 5.3 g/t Au. The mining operation did not re-commence after the second world war although artisanal mining continued in the area.

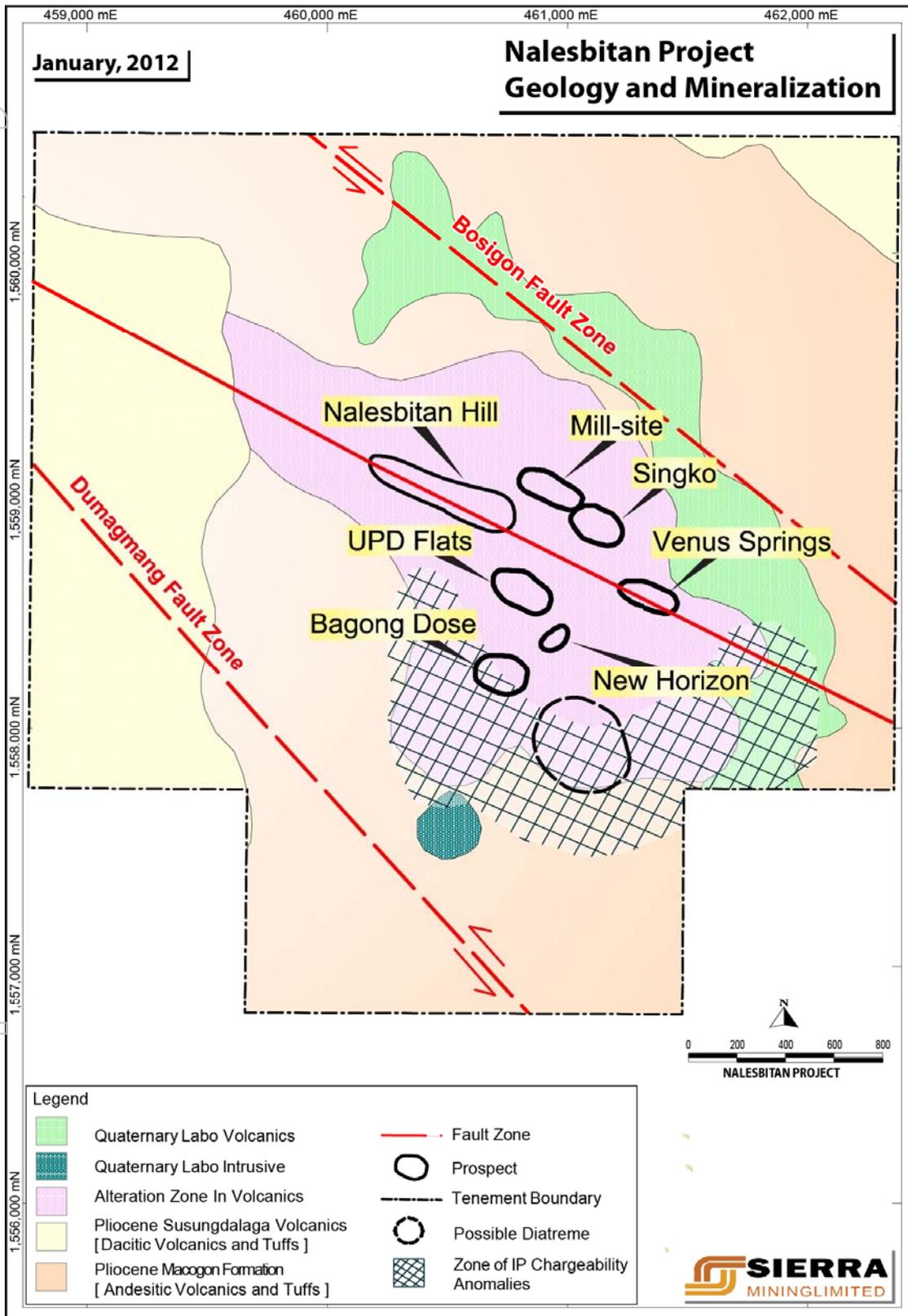
In the 1970's Renison Goldfields Consolidated (RGC) of Australia explored and systematically drilled Nalesbitan Hill. RGC commissioned a 250,000 tpa open pit mine and heap leach operation in 1990 which closed within 12 months due to poor results attributed to mining and heap leach recovery problems.

The area has subsequently been explored by other companies leading to a number of areas of mineralisation being outlined within the alteration zone around Nalesbitan Hill. Most of the historical exploration data [including that of RGC] remains available, although all drill core has been lost or degraded to the extent it is un-useable. Comprehensive soil, rock chip, tunnel and trench sampling generated in excess of 4,000 samples. Over 400 diamond, RC and percussion drill holes, totaling over 24,000m, have been drilled in the area by previous explorers. Two Induced Polarisation [IP] geophysical surveys were conducted outlining significant chargeability zones to the south of Nalesbitan Hill which have been interpreted to indicate sulphide rich zones associated with a buried porphyry copper deposit.

### **Geology**

The geology within the tenements is dominated by andesitic pyroclastics and tuffs of the Pliocene Macogon Formation. Dacitic lava, tuff and pyroclastics attributed to the regional Pliocene Susungdalaga Volcanics unconformably overly the Macogon Formation [Figure 5] although it has alternately been proposed that the dacitic volcanics are part of a more localised diatreme dome complex emplaced into the Macogon Formation in the Nalesbitan area. Structurally and lithologically controlled alteration and mineralisation occurs in both volcanic units and both are overlain and intruded by un-altered and un-mineralised Pleistocene-Quaternary andesite volcanics and intrusions of the Labo Volcanics.

The alteration and mineralisation is located between two major NW-trending sinistral strike slip faults, the Bosignon and the Dumagmang Faults of the regional Philippine Fault system. Mineralisation at Nalesbitan Hill is controlled by a WNW trending fault termed the Nalesbitan Hill Fault which is a link fault or dilational jog between the two major regional faults. A number of NE trending faults have been mapped but the structural framework and the structural controls of mineralisation at all prospects at the Nalesbitan Project are still poorly understood.



**Figure 5 - Summary map of the geology and mineralisation at the Nalesbitan Project**



## Alteration and Mineralisation

Mineralisation in the Nalesbitan area occurs in an extensive alteration zone predominantly in Macogon Formation andesite volcanics and tuffs. The large zoned alteration system is multi-phased and hosts both high and low sulphidation epithermal mineralisation at surface which is indicative of a large long-lived hydrothermal system. Silicification and advanced argillic alteration associated with Au-Ag-Cu mineralisation at Nalesbitan Hill and the adjacent Mill-site and Singko prospects are typical of high sulphidation epithermal mineralisation which is commonly spatially associated with porphyry copper mineralisation. A buried porphyry Cu source responsible for the Nalesbitan alteration and epithermal mineralisation has been proposed by a number of independent consultants including Richard Sillitoe [as a consultant to RGC] and the late Terry Leach who proposed a porphyry source below the Venus Springs prospect with lateral outflow of fluids forming the mineralisation at the Singko, Mill-site and Nalesbitan Hill prospects as shown in Figure 6 below. This model is analogous to the large Lepanto [high sulphidation epithermal] - Far South East [copper-gold porphyry] mineralisation system in Luzon.

Evidence for porphyry copper mineralisation includes biotite, epidote and K feldspar alteration in andesite and dacite clasts interpreted to have been erupted in a diatreme complex which “sampled” a porphyry at depth and sub-surface chargeability anomalies from two IP surveys interpreted to reflect the presence of sulphides associated with a porphyry body.

Lower temperature low sulphidation epithermal alteration and textures [banded colloform and crustiform quartz veins] are associated with bonanza gold grades at the Bagong Dose prospect indicating a long-lived hydrothermal system and a distinct new zone of high grade gold mineralisation.

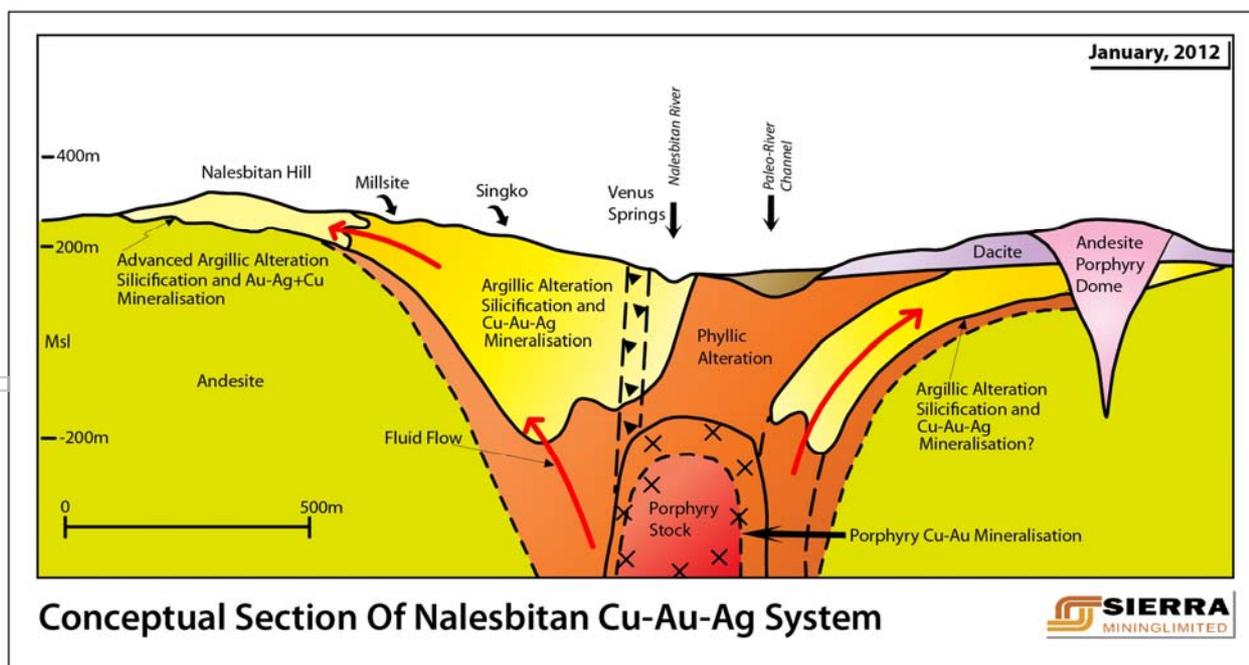


Figure 6 - Conceptual NW-SE cross-section [looking north east] through the Nalesbitan Cu-Au-Ag alteration system showing postulated porphyry source below the Venus Springs prospect and lateral fluid outflow forming the alteration and high sulphidation epithermal mineralisation at Singko, Mill-site and Nalesbitan Hill.



### **Nalesbitan Hill Deposit**

The Nalesbitan Hill gold deposit is hosted by andesite volcanics and tuffs within a northwest-striking fault zone (Nalesbitan Fault) in which steeply south west dipping silicified mineralized structures and breccias occur over widths of up to 300 metres and along strike for at least 800 metres, forming a prominent ridge. Mineralisation is late stage and occurs as matrix to the breccias, and in chalcedonic veins predominantly hosted by two parallel bodies of hydrothermal breccias within an envelope of advanced argillic alteration transitional to a halo of intermediate argillic alteration. The mineralisation flares upward and pinches out approximately 200 metres below surface.

Gold and silver mineralisation is supergene enriched and closely associated with copper sulphides including chalcocite, bornite, covellite, chalcopyrite and enargite. The high sulphidation mineral assemblage along with the presence of anomalous molybdenum suggest the deposit formed from fluids derived from a porphyry copper bearing intrusion at depth.

The Nalesbitan Hill deposit has been extensively drilled and sampled and was briefly mined by RGC in 1990. Further drilling was conducted subsequent to the mining operation and results from all drilling programs were used in the H&SC resource estimate.

Sierra will investigate the potential for establishing a small open pit mining operation based on the near surface Nalesbitan Hill deposit, possibly in conjunction with a local partner, while continuing to explore for additional near surface epithermal mineralisation at the adjacent prospects as well as deeper porphyry copper mineralisation.

Sierra is currently planning to commence drilling at the Nalesbitan Project in Q2 2012. Drilling will initially focus on upgrading and extending the Nalesbitan Hill resource, securing metallurgical samples and then testing the other prospects in the area.



## Competent Persons Statements

The information in this report relating to mineral resource estimation of the Nalesbitan Hill gold deposit is based on work completed by Mr Rob Spiers, who is a Director of H&S Consultants Pty Ltd. Mr Spiers is a member of The Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Spiers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report relating to data quality, geological interpretation, and structural context for the mineral resource estimation of the Nalesbitan Hill gold deposit is based on work completed by Mr Stuart Love of Resource Analytics and Management, who is an independent consultant geologist to Sierra Mining Limited. Mr Love is a member of the Australian Institute of Mining and Metallurgy and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Love consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report relating to exploration results is based on information provided to Mr Robert McLean by Sierra Mining Limited. Mr McLean is an independent consultant geologist and is a corporate member of the Australian Institute of Mining and Metallurgy. Mr McLean has the relevant qualifications, experience, competence and independence to be considered an "Expert" under the definitions provided in the Valmin Code and "Competent Person" under the JORC Code. Mr McLean consents to the inclusion in the report of the matters based on the information he has been provided and the context in which it appears.