

## Explanatory Notes to the Resource Update of Indochine's Mt Kare Gold/Silver Project, PNG

**Resource 42.5 Mt at 1.5 g/t Au for 2.1 Moz gold, 18 Moz silver  
120% Increase in Measured and Indicated Resource category**

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Indochine Mining Limited (ASX: IDC) ("Indochine") announces improved project confidence via an updated Mineral Resource for Mt Kare gold/silver deposit, PNG.

The total Mineral Resource is estimated at 42.5 million tonnes (Mt) at 1.54 g/t gold (Au) and 13.5 g/t silver (Ag) for 2.11 million ounces (Moz) gold, 18.4 Moz silver, or 2.45 Moz gold equivalent<sup>(1)</sup>, a 20% increase in gold ounces compared with the prior 2011 resource estimate (Table 1).

The higher confidence Measured and Indicated Resource categories have increased to 28.4 Mt grading 1.68 g/t Au and 17.2 g/t Ag for a total of 1.53 Moz gold, 15.7 Moz silver, or 1.82 Moz gold equivalent<sup>(1)</sup>, a 120% increase in gold ounces compared with the Indicated category in the prior 2011 resource estimate (Table 1).

**Table 1: Mt Kare Project - JORC Mineral Resource Statement (July 2013)** *Cut-off 0.5g/t gold*

Resource Classification	Million Tonnes	Gold g/t	Silver g/t	Gold Moz	Silver Moz	Gold Equivalent Moz <sup>(1)</sup>
Measured Resource	20.2	1.84	20.9	1.19	13.5	1.44
Indicated Resource	8.3	1.29	8.1	0.34	2.2	0.38
Measured and Indicated Resource <i>(Combined)</i>	28.4	1.68	17.2	1.53	15.7	1.82
Inferred Resource	14.1	1.27	6.0	0.57	2.7	0.63
<b>Total Mineral Resource</b>	<b>42.5</b>	<b>1.54</b>	<b>13.5</b>	<b>2.11</b>	<b>18.4</b>	<b>2.45</b>

### Notes

- 1) Gold equivalent grades (AuEq) are calculated based on a gold price of US\$1200/oz and a silver price of US\$22/oz, or 54.55 silver ounces per 1 gold ounce; this does not consider metallurgy recovery factors.
- 2) Cut-off grades and capping: A lower cut-off of 0.5 g/t Au was used based on the data distribution. Capping strategy utilised: In low grade domains, analyses capped at 30 g/t Au, 250 g/t Ag; Upper Zone and high grade domains at 50 g/t Au, 500 g/t Ag.
- 3) Material classified as Measured and Indicated Resources are wireframed gold mineralisation based on the 2013 block model considering an average distance between drilling of 25m and 50m among other criteria. It is considered that this category material has a high probability of being economically extracted, including comparisons with a previously modelled PFS open pit shell based on various assumptions including the prior 2011 resource. Mineralisation beyond an average distance between drilling of 80m was not included within the lowest category of Inferred Resource.
- 4) Rounded estimates are used, which may cause apparent discrepancies in totals. Significant figures do not imply precision.
- 5) The resources have been reported in compliance with the JORC (2004) code.

## Key Outcomes

The key outcomes of the Mineral Resource update were:

- A major increase in confidence when compared with the prior 2011 Resource estimate with 73% of the total gold resource now reporting into the Measured and Indicated Resource categories and 27% in the lower confidence Inferred category.
- The definitive identification of two high grade zones totalling 400,000 oz gold at 5.4 g/t Au in 2.3 Mt, in the Measured and Indicated category, within the WRZ and BZ Zones; 46% increase in grade compared with the Indicated category in the 2011 resource estimate.
- An increase in the Upper Zone of near surface oxidised material with 380,000 oz gold at 1.2 g/t Au in 10 Mt across all resource categories, an approximate 40% uplift when compared with the 2011 Resource estimate.
- A decrease in the grade of the total Mineral Resource in comparison to the 2011 Resource estimate arising from an increase of lower grade material near the fringes of the resource zones, tighter domains for the higher grade mineralised zones, (which reduced smearing of grades) and more rigorous geostatistical analysis.

The key reasons for these outcomes are:

- New geological and structural models for estimation based on re-logged drill holes and a fully integrated dataset.
- An improved data quality of assays, density and related historical data reassessment.
- An improved model of oxidation boundaries together with constrained wireframes around 11 mineralised domains (including 2 high grade domains) versus 5 domains previously.
- Definition and confirmation of two significant high grade zones averaging 5 to 6 g/t gold.
- Detailed geostatistical analysis and validation by AMC Consultants Pty Ltd, who have significant experience in similar deposits, including at the adjoining Porgera mine.

## Summary and Key Features

The Mt Kare gold-silver project is located within Exploration Licence EL1093, an area of 220 km<sup>2</sup> in western Enga Province, close to the border with Hela Province, in the highlands of PNG (Figure 1). The Mt Kare deposit is situated 15 km south west of the world-class Porgera gold mine, with which it shares many similarities. The updated Mineral Resource (Table 1) of the Mt Kare gold-silver deposit is based on data from 454 diamond drill holes (73,639 metres) by Indochine and preceding explorers. The cut-off date for drilling data which contributed to this update was 10th June 2013. The resources have been reported in compliance with the JORC (2004) code.

The company has consolidated and validated data collected over 25 years by prior explorers and Indochine to deliver an integrated database and a coherent geological model for resource estimation and further exploration. Since the conversion of the former Foreign Resource Statement (Canadian NI43-101) to JORC compliance in December 2011, the company has drilled a total of 79 diamond drill holes (10,706 metres), mostly PQ diameter, predominantly in and around the previously defined resource zones in the project. This has been done in order to improve modelling and resource estimation to increase confidence in the quality of the deposit and also to define the extent of high grade/bonanza mineralisation within these zones. Drilling between December 2011 and August 2012 was aimed at twinning historical drill holes, and infilling within these resource zones. Drilling from December 2012 to May 2013 has been focused on defining the extent of high grade/bonanza mineralisation within these zones, to improve their modelling and resource estimation.

Mineralisation is defined within 11 wire-framed domains: the Western Roscoelite Zone (WRZ) North and South, the Black Zone (BZ) and BZ North, the Central Zone (CZ) North, Mid and South, the C9 Zone and the Upper Zone, with two higher grade domains within the BZ and WRZ North respectively.

This process has significantly constrained the data, after the employment of a new and substantially improved geological and structural model, following re-logging of 170 historic holes and fully integrating this data with surface information. Data quality issues that were previously highlighted in the JORC Resource Statement of December 2011 and the Foreign Resource Statement (Canadian NI43-101), of 2007 have been largely resolved. Those specifically commented on included assay QAQC, density measurements, topographic control, geological interpretation and variography.

Measured and Indicated Resources, those categories with a high probability of being economically extractable, were classified within the eleven wire-framed domains based on the 2013 block model. These utilised average drilling distances of 25 m and 50 m, among other criteria, and were compared with the pre-feasibility modelled open pit shell, which was based on various assumptions including the prior 2011 resource and a gold price of US\$1500/oz. Prior pit shells at US\$1250/oz gold price displayed similar volumes. Mineralisation beyond an average distance of 80m from drill holes was not included within the lowest category of Inferred Resource. This modelling has resulted in a substantial portion of the total Mineral Resource now being classified in the Measured and Indicated categories (1.53 Moz gold) compared with 0.70 Moz gold in the prior 2011 resource estimate.

The analysis provided an improved assessment of the Upper Zone, a near surface weathered/oxidised layer, and assisted in the definition of two higher grade zones within the WRZ and BZ totalling 400,000 ounces (at 5.41 g/t gold in 2.3 Mt). A decrease in the grade of the total Mineral Resource occurred due to tighter domains for mineralised zones with reduced spatial distribution of higher grade material and to more detailed geostatistical analysis. An improved bulk density model was used, derived by interpolation of 10,656 measurements, which reduced the tonnage factors applied to the three oxidation material types (oxidised, transitional and primary) in comparison to the 2011 Resource model.

Drilling is continuing at the project, testing potential extensions to the known mineralisation. Beyond these, there are also 14 priority targets for further exploration within the Mt Kare Exploration Licence, including 2 targets within 1500 m of the resource, which have been subject to only limited rock chip, stream sediment and soil sampling. None of these targets have been drilled.

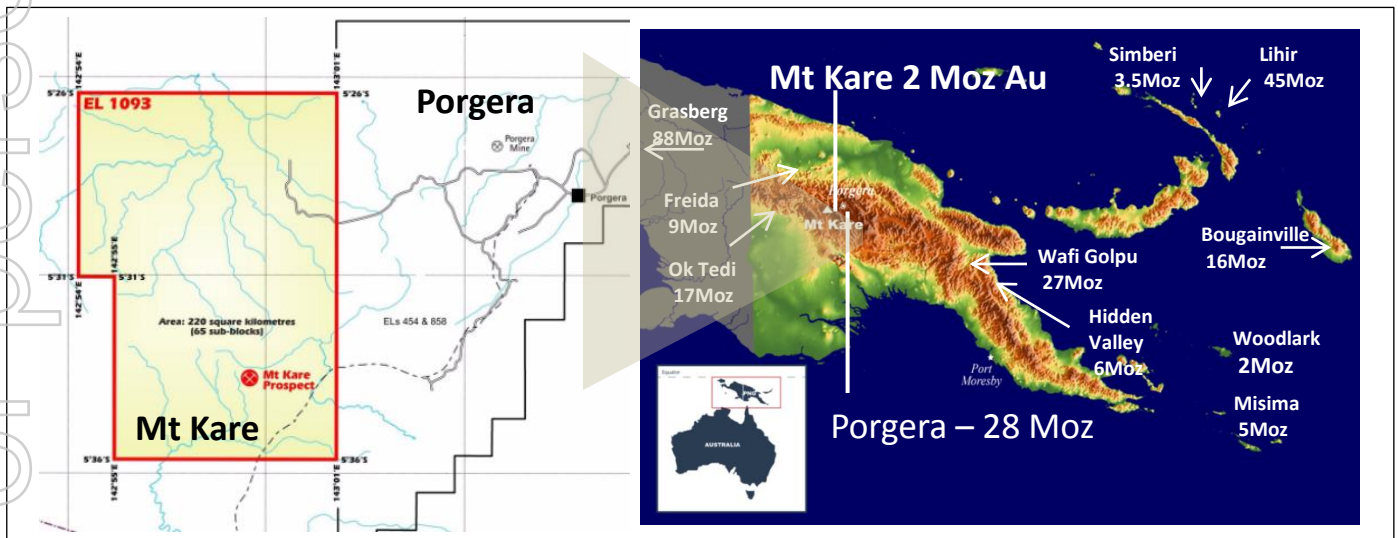


Figure 1: Location of Mt Kare together with the adjoining Porgera gold mine in the PNG Highlands.



Figure 2: Location of the Mt Kare deposit (blue) and Exploration Licence EL1093 (red) together with the adjoining Porgera gold mine and associated infrastructure (road, power).

## Geostatistics, Modelling and Sensitivity Analysis

Geostatistical analysis, including the validation of wireframed domains, compositing of assay data to 2.5 m intervals, estimation methodology, grade capping strategy, bulk density modelling, variograms, swath plots and resource classification, was performed by Sonia Konopa and Mark Sweeney, who are employees of AMC Consultants Pty Ltd and who have significant experience in similar deposits, including the adjoining Porgera mine.

Various gold and silver grade capping strategies were assessed with a cap of 30 g/t Au and 250 g/t Ag being utilised for the lower grade domains while the Upper Zone and two high grade domains had caps applied of 50 g/t Au and 500 g/t Ag. Bulk density modeling of the extensive dataset was trialed with various interpolation methods with ID<sup>2</sup> selected because of the realistic result.

Variograms were used to evaluate the continuity of mineralisation for the search ellipses (which required a minimum of 6 and a maximum of 12 composite samples). The ellipses were orientated parallel to topography in the upper zone and vertically or sub-vertical for the other mineralised domains. Block size definition, based on drill data density and likely mining parameters, were set at 15 m x 15 m x 10 m vertically, with sub-cells set to 5 m by 5 m by 3.3 m. Ordinary kriging was used for estimation in the different domains after conducting sensitivity analysis.



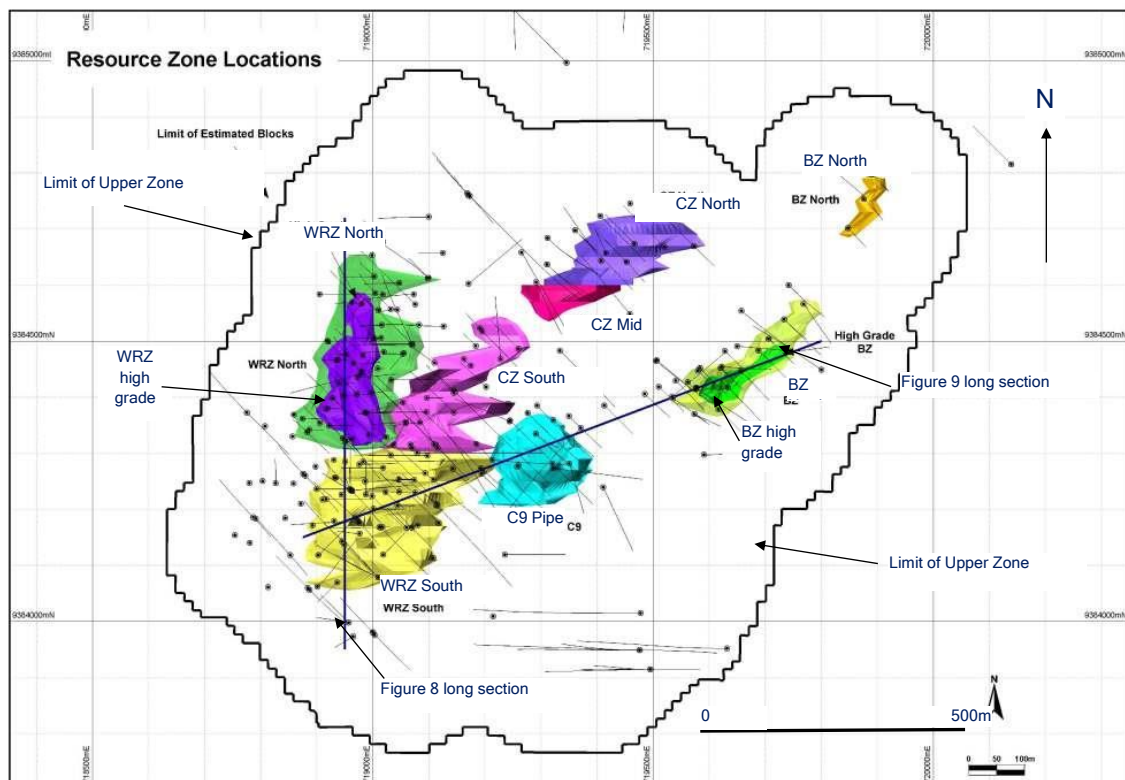


Figure 3: Plan view of the location of eleven Mt Kare resource zones, with the encompassing Upper Zone (black line) and two long section lines (Figure 8 and 9).

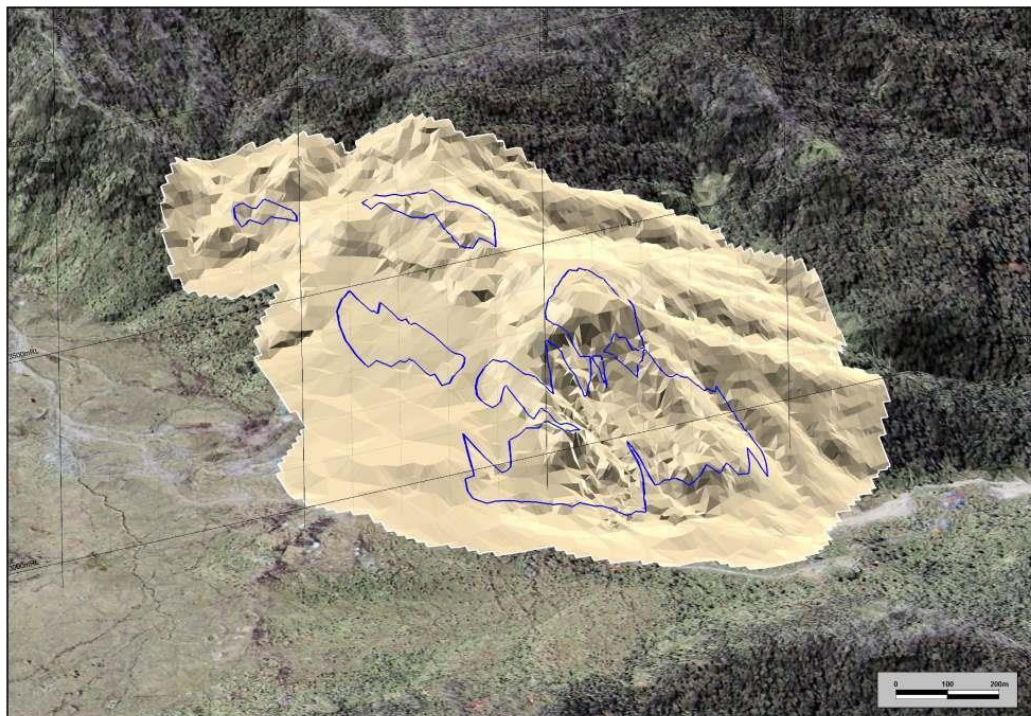


Figure 4: The location of Mt Kare resource zones, with the encompassing Upper Zone (cream colour), looking south east.

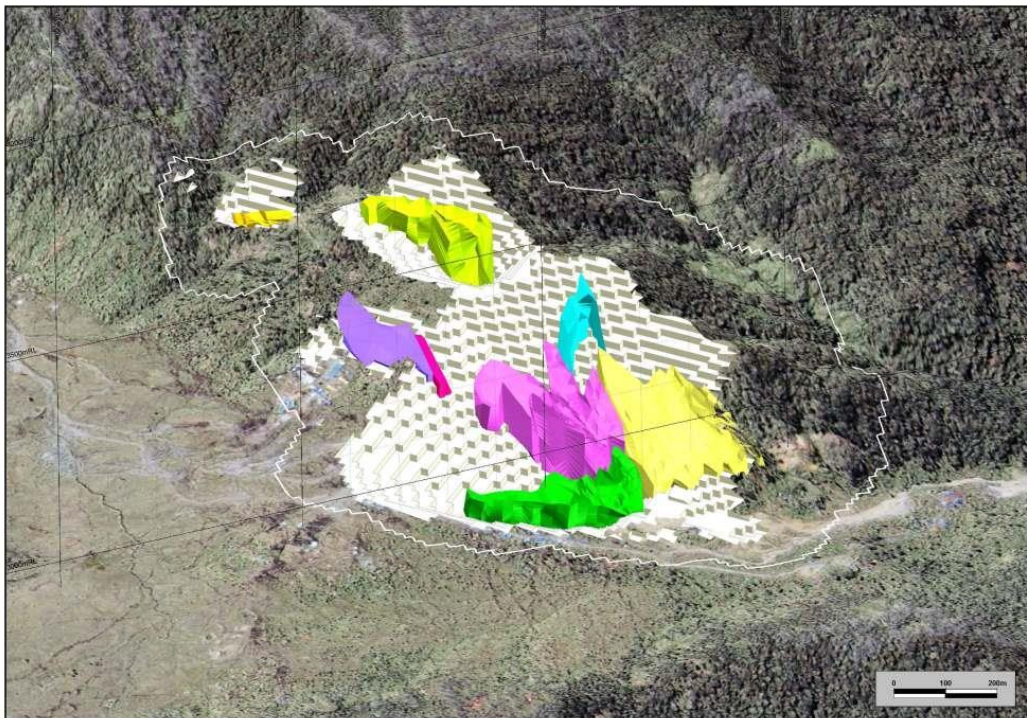


Figure 5: The location of Mt Kare resource zones, with a previously modelled PFS open pit shell, and with the encompassing Upper Zone (white line), looking south east.

### Comparison with the prior December 2011 resource

Indochine has produced the first fully integrated 3D geological model for the Mt Kare deposit as part of the July 2013 resource estimate. The December 2011 estimate had used an initial geological model based on limited historical data at the stage Indochine acquired the project. However, previous resource estimates had relied entirely on interpolation of gold grades for the resource estimate, whereas Indochine considers this new resource model to provide a more realistic estimate of gold and silver grades and their distribution. Since Indochine commenced drilling in December 2011, and completed the retrieval and compilation of prior data, the company has developed a geological model to define domains used for the resource estimation. This has benefited from the addition of the 79 holes drilled by Indochine.

The total contained gold ounces of the mineral resource has increased by 20% (350,000 oz Au) to 2.11 Moz relative to the 2011 resource, with a 50% increase in tonnage to 42.5 Mt and the contained gold equivalent ounces increasing by 15% to 2.45 Moz Au Eq<sup>(1)</sup>. These changes reflect the tighter definition and domains for mineralised zones, especially the higher grade zones (which reduced smearing of grades), an increase of lower grade material near the fringes of the resource zones and rigorous geostatistical analysis.

Two high grade zones have been identified totalling 400,000 oz gold at 5.4 g/t Au in 2.3 Mt, in the Measured and Indicated category, within the WRZ and BZ Zones; a 46% increase in grade compared with the Indicated category in the 2011 resource estimate. An increase in the Upper Zone of near surface oxidised material with 380,000 oz gold at 1.2 g/t Au in 10 Mt across all resource categories, an approximate 40% uplift when compared with the 2011 Resource estimate.



## Potential Impact on PFS project economics

Indochine considers that this Resource estimate provides greater confidence in the Mt. Kare deposit and indicates that the company has multiple staged development options for improved economics and earlier production.

There are two key aspects to the economics of the known Mt Kare mineralisation:

- The two high grade zones identified to date within the deposit, totalling 400,000 ounces gold at 5.4 g/t gold in 2.3 M tonnes, are within 150m of the surface of the hillside and may be amenable to underground development. High grade zones offer an accelerated development option of an underground project at potentially substantially lower capital costs, while continuing the exploration of high grade zones, similar to the original start-up of the adjoining Porgera gold mine
- The Upper Zone contains oxidised material from surface to a depth of 10-25m (with localised deeper zones) for a combined resource of 380,000 ounces at 1.2 g/t Au in 9.8 Mt. The Upper Zone is considered to be predominantly CIL amenable with the potential to establish a scalable start-up open pit mining operation. Metallurgical test work indicates a 94% gold recovery where total Sulphur is less than 0.7%. The high grade zones in the primary and transitional mineralisation potentially provide high grade mill feed from an open pit extending below the Upper Zone.

## Further Targets and Potential Resource Extensions

Drilling is continuing at the project testing potential extensions to the known mineralisation. The Mt Kare deposit has been the focus of Indochine's investigations, leading up to this resource estimate. Apart from the main resource area identified, there are 14 priority targets for further exploration within the Mt Kare Exploration Licence, mainly magnetic targets in attractive structural settings, identified in a magnetic survey carried out by the previous project holder in 2006. These targets have been subject to only limited rock chip, stream sediment and soil sampling. None of these targets have been drilled. Two key targets have returned stream sediment results up to 0.1 g/t to 0.2 g/t Au and pan concentrate results of 0.6 g/t to 292 g/t Au. Also two structural targets within 1500 m of current mineralisation require drill testing now that the geological model has been assembled and applied.



Figure 6: Photo of the Mt Kare deposit (looking south east) with the WRZ Erosion Zone in the foreground, drill pads and the high grade zones (WRZ and BZ).

## Setting and Deposit Style

Mineralisation is essentially epithermal in style. Breccia bodies are developed along fault and lithological contacts where the mafic intrusives are emplaced within them. Mineralisation is developed as sheeted vein sets on the margins of intrusives and in surrounding sediments and as overprinting quartz vein breccias.

The Mt. Kare deposit is hosted by Mesozoic and late Tertiary sandstones, siltstones and limestones originally deposited as marine continental shelf sediments. These sediments have been deformed by thrusting and folding following continental collision, and formation of the Papuan Fold Belt.

In the late Miocene (5.9-6.0 Million years) volatile-rich alkaline intrusive complexes were emplaced at Porgera and Mt Kare. The similarity between intrusion types at Porgera and Mt. Kare is well documented (Richards, and Ledlie, 1993; Ronacher, Richards and others 2004). Similar age dating of intrusives and mineralisation together with comparable geochemical and lithological characteristics suggest the two intrusive complexes and the mineralisation are genetically related.

The Mt Kare and Porgera intrusive complexes are defined by discrete magnetic highs (2.5 km and 5 km diameter respectively), associated with the mafic intrusives. These intrusive complexes occur within what is interpreted as a broad north-northeast or northeast trending structural transfer zone (the Porgera Transfer Zone).

Porgera has well-developed "bonanza" high grade gold-silver zones and there are indications that similar zones may exist at Mt Kare. Geostatistical modelling has the impact of 'smoothing' the impact of high grades, unless tightly constrained and consistent over many close-spaced drill holes. The high grade 'bonanza' gold mineralisation zones already identified at Mt Kare are localised and the grade additions of these zones did not significantly influence the volumetrically larger areas of the model. Further drilling within these high grade zones and the discovery of further high grade zones, as happened over Porgera's history, would affect the high grade data as well as the overall grade.

A weathering horizon occurs in the Mt Kare region with the local occurrence of a "blanket" (Upper Zone) of oxidised bedrock with zones of partial oxidation extending up to 100 m below the surface below this "blanket". On the steeper slopes this material is subject to failure with the resultant incorporation of colluvium and thickening of the material across the valley floor.

## Project History

CRA Exploration (an entity now owned by RioTinto) held an exploration licence around Mt Kare from 1985 and delineated a gold anomalous area centred on Mt Kare. In late 1987, anomalous gold was discovered in the drainage areas to the north and northeast of Mt Kare. This is the area that became the focus for a gold rush and from 1988 to 1990 it is estimated that  $\pm 1$  Moz of gold was extracted from alluvial and colluvial deposits by  $\pm 10,000$  artisanal miners from the valley floor and lower slopes of the current resource zones. Between 1988 and 1992, CRA completed 32 diamond holes and started small scale production of gold within an alluvial mining lease. However, relations between CRA and the landowners deteriorated and CRA abandoned the property in 1993, allowing the exploration licence to lapse.

A new exploration licence was issued to Carpenters Pacific (Matu Mining) in 1993. In 1996, Madison Minerals Inc. joint ventured into the asset and from 1998 completed 38,144 m of diamond drilling in 245 holes. In late 2005, Buffalo Gold entered into a JV with Madison Minerals, under which Buffalo could earn up to 60% of Mt Kare and fund ongoing exploration. A further 16,165 m was drilled in 98 holes. Over C\$60 M was spent by Madison (2/3) and Buffalo (1/3). In 2009, Buffalo returned its interest to Madison during the Global Financial Crisis, and this event then triggered Madison's PNG entity going into liquidation in June 2009.



In February 2011, the PNG Government approved the transfer of the Mt Kare licence to Summit Development Limited. In April 2011, Indochine exercised an option to acquire 100% of Summit Development which included the Mt Kare gold and silver project and assumed control of Summit Development Limited from June 2011. The cost of the acquisition was A\$27 M payable in cash (37%) and shares (63%), which was finalised in Q3 of 2011. The acquisition comprised a foreign resource (Canadian NI43-101) of 1.7 Moz gold and 12.3 Moz silver (24.6 Mt @ 2.1 g/t Au & 15.5 g/t Ag), which was not JORC compliant, plus an historical database of 375 drill holes. This was converted into a JORC compliant resource by Indochine in December 2011. Indochine's subsidiary Summit has drilled 79 diamond holes to date (10,706 m).

### The Exploration Data Set

The project contains a total of 454 diamond drill holes (73,639 m) of PQ to NQ diameter of which Indochine has drilled 15%. These 79 diamond drill holes (10,706 m) are predominantly PQ diameter, in order to obtain more representative samples for analysis. A detailed breakdown of drilling is as follows:

1988-1991	CRA Exploration: 32 holes totalling 8624 m
1996-2004	Madison Minerals: 245 holes totalling 38144 m
2006-2007	Buffalo Gold: 98 holes totalling 16165 m
2011-2012	Indochine: 62 holes totalling 8317 m
2013	Indochine: 17 holes totalling 2389 m (to hole 200SD13) with assays to hole 198SD13

Extensive geochemical data sets have been collected over the Mt Kare resource zones and surrounding area. These consist of auger soil grid sampling (Figure 7), pit sampling, wacker sampling, and rock chip sampling. These data define a zone of elevated geochemistry 2500m x 1300m overlying the magnetic highs coincident with outcropping intrusives and also intrusives intersected in drilling.

A heli-magnetic geophysical survey was completed in 2006 and 14 priority targets were identified around the known Mt Kare mineralisation. These targets have had limited stream sediment, rock chip and soil sampling with no drilling to date - despite being highly attractive targets associated with intrusives emplaced in preferential structural settings. The emphasis has been on improving the confidence in the resource, establishing a geological model and integrating all surface and downhole data prior to drilling potential extensions and additional separate anomalies.

### The Geological Model

The first integrated geological model has been completed on the Mt Kare deposit with lithology, structure and mineralisation, incorporating surface geology, geochemistry and geophysics, after re-logging drill holes for consistency. Geological mapping and core logging has established the stratigraphy, as being a sequence of sandstone, bioturbated calcareous sandstone to siltstone, local conglomerate, siltstone and limestone. Mineralisation is best developed in hydrothermal breccia zones above a listric fault (the Brown Mudstone Fault) and along the sandstone-limestone contact.

Fault movement through the Porgera Transfer Zone is interpreted to have essentially pre-dated emplacement of the Mt Kare and Porgera intrusives and the associated mineralisation. Similarly folding of the sediments is interpreted to pre-date and control emplacement of the mafic intrusives. Indochine has determined that NE and NW trending faults cross the deposit and these have localised higher grade mineralisation, with later N-S faults showing minor displacement.

Geological re-logging of 170 drill holes was undertaken in order to improve the consistency of logging codes between Indochine and historical logging and to increase the confidence in geological correlation.

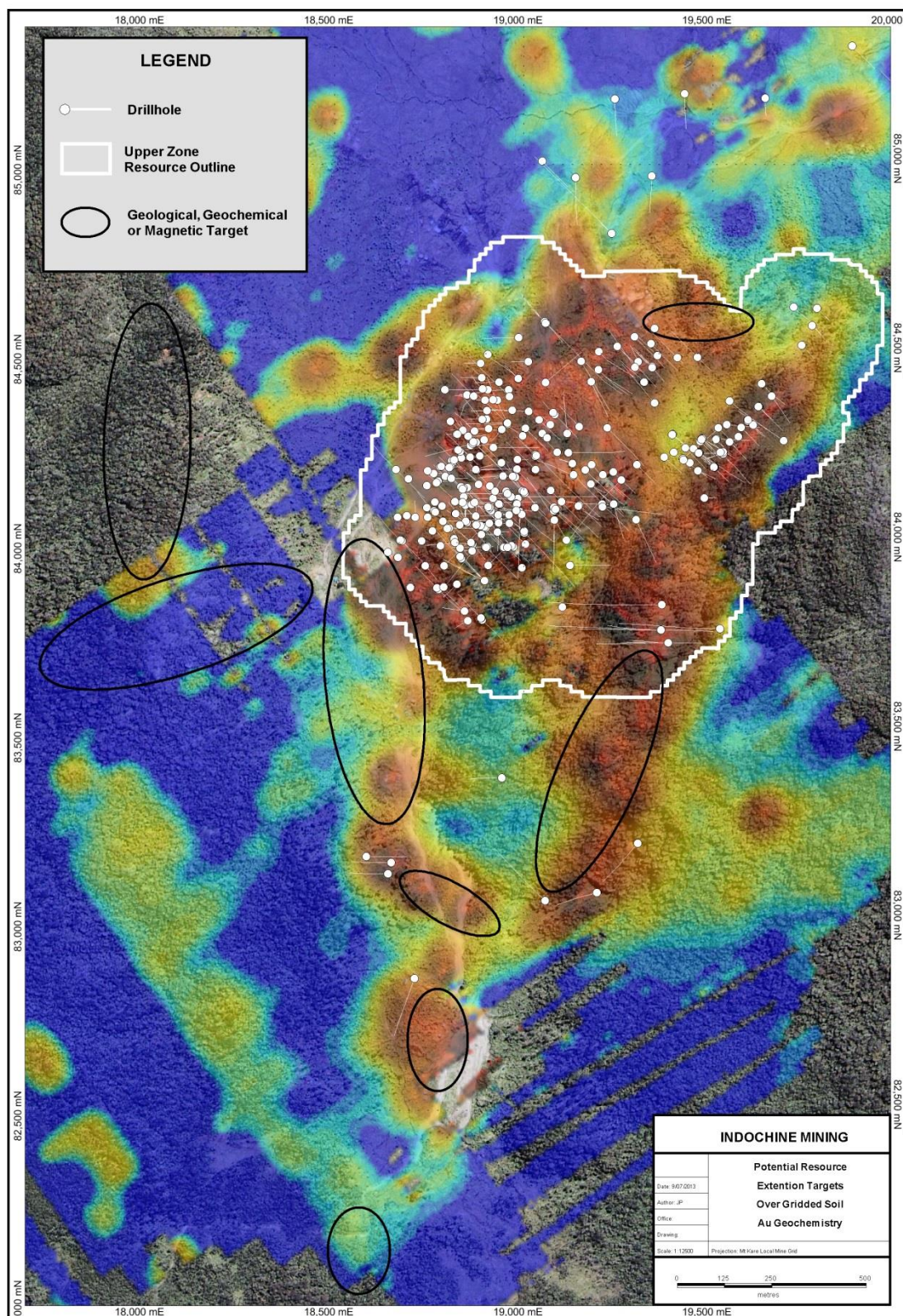


Figure 7: The location of potential resource extension targets with respect to the Upper Zone of the Mt Kare resource zones and drill hole traces, overlain on the surface gold-in-soil.



## The Resource Model

The resource model has been developed applying the geological interpretation described above, assessed via cross-sections, with the parameters and data validation listed in Table 3.

A 0.5 g/t Au cut-off grade was used within a new resource envelope (at 0.2 g/t Au) prepared to define the dataset in which de-clustering weights were calculated. Where drill hole samples form the bulk of the estimation dataset, de-clustered weights were used when calculating distribution statistics.

Figures 8 and 9 are typical long-sections through selected resource zones showing the configuration of the Upper Zone (light grey), the 0.5 g/t Au mineralised (dark grey) and the higher grade (light green) estimation zones. The various ranges of composited gold grades are represented by different colours and diameters of solids about each drill hole. The section locations are shown in Figure 3.

## Alternate Modelling of High Grade Zones

Alternative modelling of the two wireframed high grade zones (WRZ North and BZ) was conducted using uncapped 1 m - 1.5 m analytical sample results and a lower cut-off grade of 2.0 g/t Au (instead of 0.5 g/t Au). Results for the high grade zones showed almost twice the grade compared with using the lower cut-off grade and a 50 g/t Au cap, with 1.43 Mt grading 10.1 g/t Au, 52 g/t Ag, for a total of 466,000 oz Au and 2.2 Moz Ag, with a 40% reduction in tonnage and a 17% increase in total gold ounces or 507,000 oz gold equivalent. A higher cut-off grade of 6.0 g/t Au indicates modelled grades of nearly 20 g/t Au and 70 g/t Ag over reduced tonnage, using uncapped analytical sample results. The resource model showed 2.3 Mt at 5.4 g/t Au and 36 g/t Ag (with a lower cut-off grade of 0.5 g/t Au) and a top cut of 50 g/t Au.

This was considered a useful comparison given the high grades intersected at Mt Kare and the very high grade nature of the adjoining Porgera gold mine high grade/bonanza zone mineralisation, which has been shown to be similar. Porgera has previously identified populations of 100's of grams of gold and used a top cut of 1500 g/t Au in resource modelling. Sampling theories (Pitard 1992) and modelling methodologies are challenged by these high grades and may not be the best representation of the contained gold.

	Lower Cut-off Au grade (g/t)	Mt	Gold g/t	Gold oz	Silver g/t	Silver Moz	Gold Equivalent <sup>(1)</sup> Oz
Top Cap 50g/t Au; 500g/t Ag	0.5	2.31	5.4	400,000	36	2.7	449,000
Uncapped	0.5	2.31	6.6	493,000	49	3.3	553,000
Uncapped	2.0	1.43	10.1	466,000	52	2.2	507,000

Table 2: The effect of different modelling parameters on the two high grade zones (BZ & WRZ North)

## Surficial Upper Zone mineralisation

The Upper Zone comprises in-situ oxidised mineralisation and down slope transported material derived from mineralised zones further up slope i.e. C9, upper WRZ, CZ, BZ. The grade in this zone has been estimated based on drill hole information, within the area enclosing the other mineralised zones. This comprises material which would be mined in the early stages of an open pit mine operation and considered to be amenable for processing through a CIL plant.



## WRZ Erosion Zone

A slip developed in the WRZ circa year 2000. This removed approximately 3.2 Mt of gold mineralised material, depositing this in the upper Maratane Creek drainage, west and south west of the WRZ. This material has been worked by artisanal miners. Although deposited in a chaotic manner, this provides additional material, as yet unquantified in grade, which could be processed in the future. Similar surface material also exists on the lower slopes north of the Central zone in the Pinuni creek drainage.

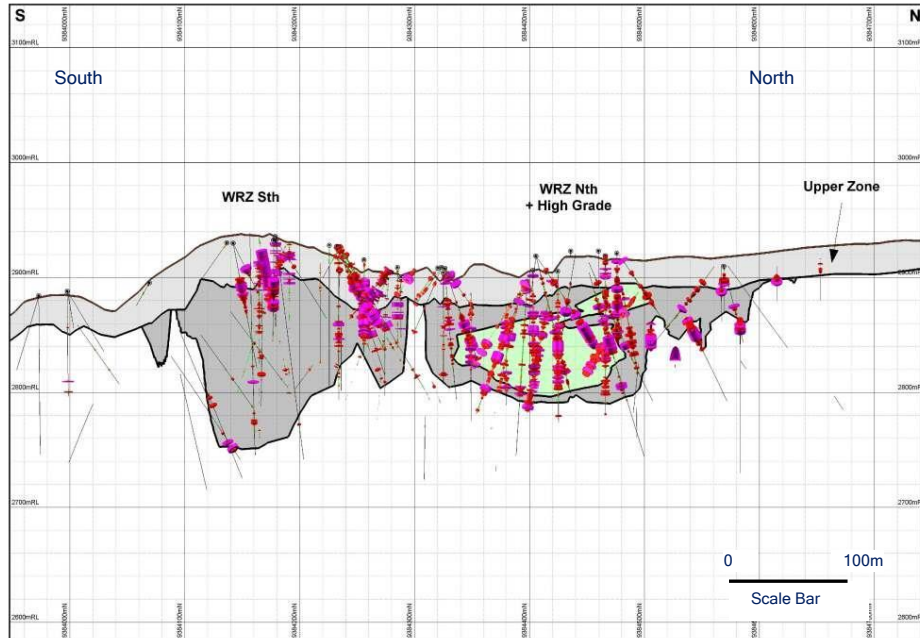


Figure 8: Long section (looking west) of the WRZ and high grade domain in the WRZ North (green).

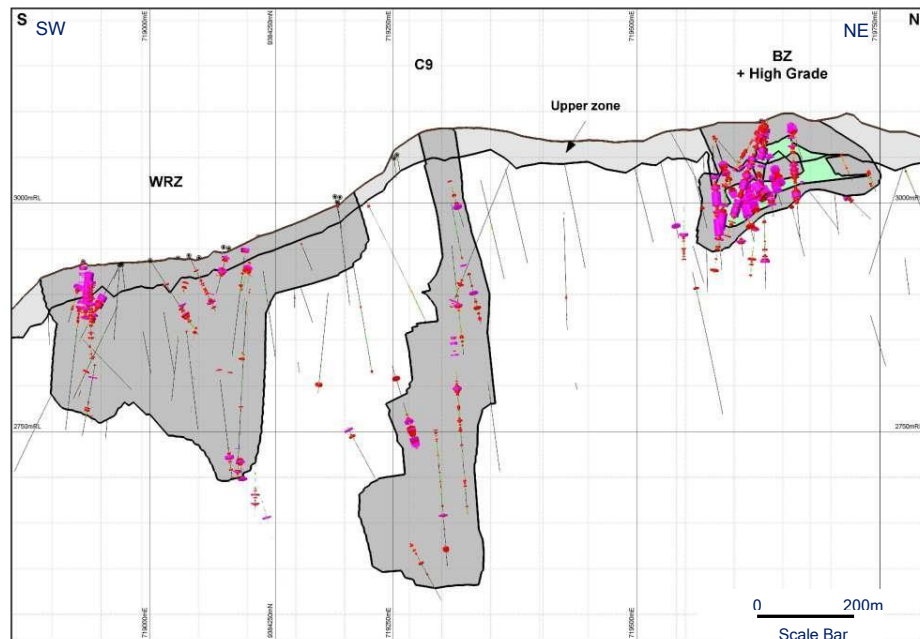


Figure 9: Long section (looking northwest) of the WRZ, C9 and BZ, with the high grade BZ domain (green).

## Stages to development

A Feasibility Study and an Environmental Impact Statement are required for approval of a Mining Lease, together with a Landowner Study and a Memorandum of Agreement on benefits sharing of statutory royalties and taxes between the federal and provincial government and local landowners.

## Landowner Identification Study and Local Community Interaction

The company considers that successful long-term access and resource development in PNG depends on appropriate landowner identification, engagement and benefits sharing, together with PNG government participation. Therefore the company has spent considerable time and effort on structuring and completing a Landowner Identification Study which has used a customary landownership identification method based on solid anthropological concepts/studies, conducted by a national team with assistance from the Local/Provincial Government and the regulators. The approach has engendered considerable local support. The physical location of land claims on the ground still requires completion which will result in a Landowner Identification Report, to be lodged under the Lands Act. This should also allow for the remaining 7-10 km of access road to site to be completed.

The objective is to secure a binding landowner agreement during the Mining Lease process, which involves the government, with a benefits sharing agreement of statutory royalties and social infrastructure structured to reflect traditional systems.

**Table 3: Sampling techniques, data collection, validation and modelling parameters for the Mt Kare estimation dataset.**

Criteria	Commentary
<b>Sampling Techniques and Data</b>	
Drilling technique	<ul style="list-style-type: none"> <li>All diamond drilling, with Indochine drilling triple tube and predominantly PQ diameter</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Average core recovery in primary &gt;90% across all zones except 85% within the BZ. Lower recovery (70-75%) in the Upper Zone and the partially oxidised portion of the BZ which extends up to 100 m below surface.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Core geologically and geotechnically logged on site into electronic logging system with validation controls</li> <li>Loaded to database by external consultant database manager</li> <li>Photographed prior to geological logging and splitting of core</li> <li>Substantial portion of drill holes re-logged (170 holes) for consistency</li> </ul>
Sampling techniques	<ul style="list-style-type: none"> <li>2011-2012 core crushed to 25 mm and riffle split, before pulverising, with ¼ core assayed and ½ core for planned metallurgical test work.</li> <li>2013 core split with a core saw where competent and with a bolster chisel when soft, clayey or strongly broken</li> <li>Nominal sample length of Indochine core is 1 m</li> <li>Most pre-Indochine drill holes have a sample length of 1 m, except for a phase of drilling between 1996-1999 at nominal 1.5 m intervals (18,976 samples) and between 1988-1992 at nominal 2 m intervals (4,228 samples).</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>Samples were dried, crushed and pulverised to a nominal 90% passing 75 microns, with statistics maintained on performance</li> <li>A total of 10,656 density samples have been taken throughout the deposit, with 2,152 of these by Indochine - a minimum of one sample per core tray</li> <li>Indochine measurements were made by immersion of wax coated samples with sample lengths a nominal 20 cm long, to minimise measurement uncertainties</li> <li>Pre-Indochine drill hole density samples were on 10 cm samples from mineralised and unmineralised core intervals using a standard immersion method</li> </ul>

Sampling Techniques and Data (continued)	
Criteria	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>Gold assays were by ALS laboratories analytical method Au25, Ore grade Au 30 g fire assays with AA finish, with ME-ICP61 33 element ICP-AES suite and 4 acid digest. A significant number of drill holes were also assayed by SGS Laboratories.</li> <li>Over-range re-assays carried out for gold and silver (gravimetric) values with high grade standards</li> <li>Certified standards, blanks and duplicates at a frequency of 1 in 10 samples, in addition to lab QA/QC controls</li> <li>Pre-Indochine drill hole client and laboratory assay quality control data was supplied for 88 holes (13,372 m) from 2006-2007, which are the last 27% of the samples analysed before Indochine's drilling.</li> <li>The available laboratory blanks and standards show no issues relating to the last 27% of samples analysed before Indochine's drilling. Limited data on other pre-Indochine drilling indicates that variance attributed to the 1000g crusher split sub-sampling process is within acceptable limits. Check sampling indicates high variance associated with the 250 g crusher split sub-sampling procedure.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>Extensive verification assaying program carried out between ALS and SGS laboratories (674 paired samples) showed excellent correlation (<math>&gt;0.99 R^2</math>) with primary assay values <math>&gt; 0.25</math> g/t Au</li> <li>Indochine twinning of historical holes and Indochine holes showed good to moderate grade homogeneity between holes for Au and Ag.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Indochine drill holes located with total station</li> <li>Indochine survey points tied in to PNG LNG surveying with differential GPS survey</li> <li>Indochine surveyed in historical drill collars and pads, where preserved. Collars were previously surveyed by a number of means, with differential GPS location of survey reference points.</li> <li>WGS84 zone 54S is used by IDC for survey data, with the WGS84 ellipsoidal height</li> <li>Down hole surveying with Reflex surveying equipment every 30 metres</li> <li>Historical holes were surveyed down hole by a variety of survey mechanisms</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Holes are drilled in a variety of orientations, with the dominant azimuths 315 and 135 degrees grid north, along NW-SE drill sections</li> <li>Holes have an average collar spacing of 30 m x 30 m within the resource domains, locally at 20 m x 20 m within the two high grade domains and 50 m x 50 m within the perimeters of the Upper Zone</li> <li>The majority of holes are drilled with dips of 60 degrees or steeper</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Drill holes predominantly in an East-West and NW-SE orientation, perpendicular to the interpreted stratigraphy, while some NW trending faults are interpreted.</li> <li>Broad controls on mineralisation vary between mineralised zones, with mineralisation having a strong NE continuity overall, with some North-South zones.</li> <li>The intersection angle of drill holes and mineralisation is variable between mineralised zones</li> </ul>
Review (and Audit)	<ul style="list-style-type: none"> <li>Conducted by Indochine, specifically Anthony Burgess, and AMC Consultants Pty Ltd with final review by Peter Stoker of AMC Consultants Pty Ltd. No audit conducted.</li> </ul>
Domaining strategy	<ul style="list-style-type: none"> <li>High and lower grade domains were defined using assays and structural and geological information.</li> <li>The Upper Zone domain was defined based on the interpreted thickness of total oxidation, incorporating some partial oxidation, based on drilling, wacker drilling, trenching and topography</li> </ul>



Estimation and Reporting of Mineral Resources	
Criteria	Commentary
Database integrity	<ul style="list-style-type: none"> <li>The project data is stored in an SQL database</li> <li>Data collected in a portable logging scheme into laptops is imported to the database and subject to additional validation checks</li> <li>Historical data was validated to the extent possible before being loaded to the database</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Mineralisation is developed in a sequence of Tertiary marine sediments</li> <li>The listric Brown Mudstone Fault (BMF) forms the western limit to the current mineralisation, with mineralisation developed in the hanging wall</li> <li>To the east mineralisation is largely bounded by limestone</li> <li>Breccias are developed in the hanging wall to the BMF and along the limestone contact</li> <li>Mafic intrusives are emplaced into these breccias</li> <li>Two phases of mineralisation are developed as vein sets on the margins of intrusives and in structurally prepared zones</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>Ten mineralized zones occur over an area of 1200m by 700 m, overlain by an Upper Zone with an area of 1600m by 1100 m.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>The mineralisation was modelled following the controls outlined in the description of the geological model.</li> <li>The resource estimate has been carried out with ordinary kriging into a blocked model of 15 mx15 mx10 m with internal boundaries reducing sub-blocks to 5 mx5 mx3.3 m</li> <li>Statistical de-clustering was based on lower cut-off grade of 0.2g/t Au.</li> <li>High grade cuts and restrictions were applied to the 2.5 m composites generated to inform the model.</li> <li>Search orientations and sample selection criteria were designed to best fit the different geometries, drilling and apparent plunge of mineralisation. The Upper Zone used a search ellipse sub-parallel to topography.</li> <li>The Bulk density model of 10,656 measurements was trialled with various interpolation methods and ID<sup>2</sup> selected because it appeared to be the most realistic result and applied to the three oxidation material types with assigned values on the fringes of the detailed drilling data.</li> </ul>
Cut-off parameters and Capping strategy	<ul style="list-style-type: none"> <li>Geostatistics, geology and grade capping strategies were evaluated for each individual domain with a final selection of grade capping considered reasonable for the two high grade domains and the Upper Zone of 50 g/t Au and 500 g/t Ag, the remaining domains of 30 g/t Au and 250 g/t Ag.</li> <li>A lower gold cut-off of 0.5 g/t was applied</li> </ul>
Mining factors and assumptions	The PFS open pit used various assumptions including a 15 m x 15 m x 15 m blocks, based on the prior 2011 resource model and a US\$1500/oz gold price which produced an average strip ratio of 1:3.8, discussed in the September 2012 PFS report
Metallurgical factors and assumptions	<ul style="list-style-type: none"> <li>The Upper Zone, where intersected by Indochine drilling with Total Sulphur analysis &lt;0.7% has been considered to be CIL amenable material</li> <li>Test work is pending to evaluate the extent of transitional material that is CIL amenable</li> <li>Only preliminary test work has been completed on primary mineralisation to date, discussed in the September 2012 PFS report</li> </ul>
Bulk density	Bulk density was evaluated in detail, with a total of 10,656 within the deposits and surrounding rock used to build a bulk density model for applying values to individual blocks

**Estimation and Reporting of Mineral Resources (continued)**

Criteria	Commentary
Classification	<ul style="list-style-type: none"> <li>Material classified as Measured and Indicated Resources are wireframed gold mineralisation based on the 2013 block model considering an average distance between drilling of 25 m and 50 m among other criteria. It is considered that this category material has a high probability of being economically extracted, including comparisons with a previously modelled PFS open pit shell based on various assumptions including the prior 2011 resource. Mineralisation beyond an average distance between drilling of 80m was not included within the lowest category of Inferred Resource.</li> </ul>
Review and audit	<ul style="list-style-type: none"> <li>Conducted by Indochine, specifically Anthony Burgess, and a peer review by Peter Stoker of AMC Consultants Pty Ltd. No audit.</li> </ul>

**Competent Person Statement**

*Anthony W. Burgess, a qualified consultant for Indochine Mining Ltd, is a member of the Australasian 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 undertaken, being reported herein as Mineral Resource estimate, 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 (The JORC Code, 2004 Edition). Anthony W. Burgess has consented to the public reporting of these statements and results and the form and context in which they appear.*

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