RESOURCE ESTIMATION UPDATE REVISED FOR THE TEPAL GOLD-COPPER PROSPECT, MICHOACÁN, MEXICO

for GEOLOGIX EXPLORATIONS INC. SUITE 1753, 595 BURRARD STREET VANCOUVER, BC, V7X 1K8

by ACA HOWE INTERNATIONAL LTD

4th November 2009 Berkhamsted Hertfordshire, UK

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EXECUTIVE SUMMARY

At the request of Mr. Dunham Craig, President and Chief Executive Officer of Geologix Explorations Inc. ("Geologix"), geological consultants ACA Howe International Limited ("Howe") were employed to undertake issuing to Geologix the 24 September 2008 independent NI 43-101 compliant resource update of the Tepal gold-copper prospect ("the Deposit") for disclosure requirements, which is under option to Geologix from Arian Silver Corporation ("Arian") specific to the standards dictated by National Instrument 43-101 ("NI 43-101") and Form 43-101F1 (Standards of Disclosure for Mineral Projects) with respect to the Tepal deposit located in Michoacán, Mexico. Howe understands that Geologix will be filing this report electronically on SEDAR pursuant to NI 43-101. Howe is not qualified to comment on the legality of the corporate agreements between Arian and Geologix and takes no responsibility for the validity of the option agreement.

This resource update follows on from the initial resource estimation study undertaken by Howe in 2007-08 which is detailed in the report "Resource Estimation Study on the Tepal gold-copper Prospect, Michoacán, Mexico" dated April 25th 2008 (the "April 2008 report"), prepared by Howe and filed on SEDAR.

The resource estimate update incorporates all data collected during the completed Phase 1 drilling campaign undertaken by Arian over the project during 2007 and 2008 and includes collar data from an additional 7 holes, and geological and assay data from 19 holes not included in the initial Howe resource study.

In addition, this report details exploration work undertaken by Arian since the April 2008 report by Howe, including work undertaken to address several recommendations and resource sensitivities set out by Howe in April 2008.

Prior to the completion of the updated resource estimate for the project, Howe recommended the following work be undertaken by Arian at the Tepal Project, to further improve the reliability of the updated resource estimate:

- Completion of Phase 1 drilling activities. Improved data coverage will improve the geological and grade model for the deposit as well as facilitating the development of more robust geostatistical analyses during resource estimation work.
- More accurate surveying of Phase 1 collar locations via Total Station surveying techniques.
- Interpretation of a more refined 3D geological model and grade envelope in order to improve the robustness of grade domains used in resource estimation. To include 3D geological modelling and possible multi-element grade domain modelling.
- Further development of data capture systems in preparation for Phase 2 drilling. To include logging systems that capture pertinent weathering data, additional bulk density sampling of different ore types and host lithologies, the introduction of downhole orientation to facilitate the capture of important structural data and ensure unbiased core sampling from future drilling.
- A thorough review of Phase 1 QA/QC data and re-assay for copper, of all Phase 1 pulp samples at a different, internationally accredited laboratory, in response to significant issues relating to the reliability of copper assay data, which came to light during the preliminary resource estimation work.

Mr Galen White, visited the project between the 18th and 20th June 2008 as an ACA Howe Senior Geologist, in order to see the project first hand, review data collection methodologies, review sampling techniques and assay QA/QC protocols, and to review and verify project data. In addition time was spent discussing the recommendations to come out of the initial resource estimation study by Howe and reviewing the Phase 2 resource development and exploration strategy.

From the cut-off date for data contained in the Howe April 2008 report (December 2007) until the time of reporting (September 2008), Arian completed the following work which has been reviewed by Howe and incorporated into the resource update where appropriate;

- Drilling of an additional 7 holes over the project.
- Collected geological and assay data from a total of 19 holes.
- Surveying of all Phase 1 collars via Total Station surveying.
- Preliminary development of a 3D geological model using Micromine software.
- Continual monitoring of assay QA/QC results from the Phase 1 drilling and reassaying of all pulps samples for copper, at a different laboratory.

All of this data was reviewed prior to updating the resource estimate for the project.

Addressing issues outlined in the April 2008 report resulted in more reliable input data to estimation such that the classification of indicated resources as well as inferred resources has been considered. The current drill data spacing over the project is still not adequate to define measured resources since grade continuity in three dimensions at current data spacings cannot be demonstrated with the required level of confidence to define measured resources, even considering the nature and geometry of this style of deposit.

Classification of interpolated blocks has been undertaken considering the following criteria:

- Interpolation criteria based on sample density, search and interpolation parameters.
- Assessment of the reliability of geological, sample, survey and bulk density data.
- Robustness of the geological model.
- Drilling and sample density.
- Grade continuity confidence

The following has been taken into account when classifying resources at Tepal;

- A review of all assays QA/QC for the phase 1 drilling suggests that the assay data used in resource estimation is robust for this purpose.
- Density values applied to blocks in the model have been more accurately calculated using the weighted average of logged lithological intervals within the mineralised north and south zones. Assigning density on this basis has increased the overall confidence in the tonnage estimate.

• Weathering zones over the deposit have been defined by capturing the position of the oxide-mixed and mixed-sulphide boundary in each Arian drill hole. This information should continue to be captured during Phase 2 drilling activities in order to build up a more accurate picture of the weathering profile across the deposit.

All blocks captured in modelled runs that were less than the range in all directions have been classified as "Indicated" resources. All other blocks have been classified as "Inferred" resources. The September 2008 classified CIM compliant resource estimate for contained gold and copper within the Tepal Deposit is detailed in the following table;

	CIM	INDICATE) RESOUR	RCES	CIM INFERRED RESOURCES			
Material	Density	Tonnes	Au (g/t)	Cu (%)	Density	Tonnes	Au (g/t)	Cu (%)
Domain								
ALL*	2.78 24,995,000 0.544		0.267	2.78	54,964,000	0.405	0.219	
Tepal South	2.74	11,734,000	0.513	0.228	2.74	23,582,000	0.407	0.200
Tepal North	2.81	13,261,000	0.578	0.303	2.81	31,361,000	0.407	0.232

Note: * domains constrained by a 0.18ppm Au envelope honour the geological model tonnage figures have been rounded up or down to the nearest 1,000t.

The objective of the Phase 1 program was as follows;

- Confirm the results of historical drilling over the Tepal Project.
- Collect drilling data to; improve the understanding of geological and structural controls of mineralisation, gather additional information relating to mineralisation characteristics of the various zones over the deposit, and facilitate the development of a resource model for the project.
- Identify new zones of mineralisation via step-out drilling, to be the focus of continued exploration and resource development.

Howe has reviewed the results of the entire Phase 1 program and believes the program was successful in meeting its objectives.

Following QA/QC issues identified in the April 2008 report, the initial sample assay methodology was changed. Copper Certified Reference Materials ("CRMs") assayed at Inspectorate using the 3 acid digestion and ICP finish method returned results that were generally erratic and higher than expected. To remedy this, re-analysis for copper and gold for all Phase 1 holes was be undertaken.

While CRM results for gold were greatly improved, copper values remained poor. All Phase 1 copper assays were reanalysed by ALS Chemex laboratories Canada. To ensure an adequate level of confidence in assay results for use in resource estimation the majority of samples received beyond the cut-off date for data contained in the Howe April 2008 report, were sent to ALS Chemex for gold and copper analysis in place of Inspectorate Labs.

On the whole, it is considered that the QA/QC results do not demonstrate a systematic sample bias. Results of this work indicate that the analytical techniques employed by Inspectorate and Chemex are generally reliable in producing assay data that demonstrates a good level of accuracy and precision. Howe thus considers that the assay results from the drilling and sampling programs implemented during 2006-2007 may be regarded as representative of the samples collected.

Raw data incorporated in to this resource update study consists of all diamond drilling data from the recently completed Phase 1 program, one hole drilled by INCO and all historical Teck holes. Arian have also collected weathering data and interpreted geological wireframe solids for the Tepal Project. This data has been forwarded to Howe, reviewed and modified where appropriate and used in the resource update study.

Howe has reviewed and discussed the sample collection methodologies adopted by Arian and is satisfied that data collection methodologies are of a satisfactory standard.

For the defined and modelled zones developed using a 0.18ppm Au envelope, and which honour the current geological and structural model for the deposit, total resources are estimated to be **79.90Mt @ 0.448 ppm Au and 0.234% Cu for approximately 1.15Moz Au and 412.39Mlbs Cu**.

Total "indicated" resources are estimated to be 24.99Mt @ 0.544 ppm Au and 0.267% Cu for approximately 0.44Moz Au and 147.13Mlbs Cu.

Total "inferred" resources are estimated to be 54.96Mt @ 0.405 ppm Au and 0.219% Cu for approximately 0.72Moz Au and 265.37Mlbs Cu.

Total "indicated" resources amount to 31% of total resource tonnage, 38% of contained gold ounces and 36% of contained copper pounds.

This updated resource estimate predicts a marginal 1.4% increase in total resource tonnage, a 3.7% decrease in gold and copper grades as compared to the preliminary estimate undertaken by Howe in April 2008, for a 2.5% decrease in contained gold ounces, and 2.2% decrease in contained pounds of copper. The slight increase in overall tonnage is due to a 5.6% extension of the southern zone which has offset a 2% decrease in tonnes in the northern zone.

It is Howe's opinion that resources estimated as part of this study meet with CIM 'inferred' and "indicated" category classifications based upon consideration of the quality of input data, modelling and estimation methodology, interpolation criteria based on sample density, search and interpolation parameters, understanding and robustness of the geological model, drilling and sample density, and completion of property visit for procedural auditing and data verification purposes.

The geological model allows for the extrapolation of the mineralised zones along strike and at depth to provide excellent resource augmentation targets in these areas.

A review of the Phase 1 drilling suggests the following;

- There is still further exploration potential at the Tepal deposit. The deposit is open to the south at increasing depth and open to the northwest in the north of the deposit. There is also some potential to further define the extent of mineralisation at depth.
- Overall grade and therefore contained metal is probably understated as indicated by the lower block means compared to the composite sample means. This suggests that grades in parts of the block model have been over-smoothed due to the sparse drilling and sample density and the large distances over which block grades have been interpolated.
- Phase 1 drilling has indicated the potential to further define higher grade (+1 g/t) gold and (+0.5%) copper zones within the cores of the North and South Zones.

• Significant potential to explore and develop peripheral zones of mineralisation identified to the east of the North and South Zones, which have not been included in this resource estimation.

Realisation of additional resources as well as the upgrading of currently defined resources to higher categories can only be achieved by a committed resource development and exploration strategy to infill the current 50-100m drill spacing and test the potential strike extents to the known mineralised zones.

Following a review of project data and the recently completed resource block model, Howe recommends the following be undertaken during the Phase 2 program currently underway, in order to improve the quality and reliability of future resources estimates and develop additional resources for the project:

- At the current drill spacing over the deposit, mineralised zones are shown to be continuous, however there can be significant grade variability within the Tepal North and South zones and further infill drilling is warranted both to provide additional sample data to facilitate more meaningful geostatistical analysis and to upgrade currently defined inferred resources to indicated resources.
- Ensure logging procedures are maintained during Phase 2 activities so as to have consistency with Phase 1 practices.
- Develop the delineation of the weathering profile over the deposit in order to more reliably domain the geological model into zones of oxide, mixed and sulphide material.
- Following Phase 2 activities, the characteristics of gold and copper grade distribution should be assessed in the light of new data, and modelled separately if required.
- Implement the practise of orientated drill core for improved geotechnical and structural logging measurements, particularly as controls on mineralisation are considered structural. Consistency of geotechnical measurements is improved with the use of the orientation reference line. A system such as EzyMark provides a reliable easy to use means of obtaining oriented drill core.
- Ensure non biased core sampling through routine submittal of same half of core, achievable through use of orientation reference line.
- Develop the use of QA/QC samples, ensuring that adequate field duplicates and CRMs are submitted.
- Continued bulk density determination of half core samples to build up the density database for use in future estimations.
- Multi-element grade domain modelling for improved single element domain geostatistical analysis and restricted grade interpolation.
- Improved geological modelling to include the interpretation of host geology, breccia, stockwork and alteration zones to domain assay data for improved geostatistical analysis and wireframe restricted grade interpolation.

Future work should also involve detailed metallurgical test work of the various ore types, preliminary optimisation and sensitivity studies using conceptual mining and processing methods, mining costs and pit slope parameters to evaluate the economic viability of the deposits.

1. INTRODUCTION AND TERMS OF REFERENCE

At the request of Mr. Dunham Craig, President and Chief Executive Officer of Geologix Explorations Inc. ("Geologix"), geological consultants ACA Howe International Limited ("Howe") were employed to undertake issuing to Geologix the 24 September 2008 independent CIM compliant resource update of the Tepal gold-copper prospect ("the Deposit"), which is under option to Geologix from Arian Silver Corporation ("Arian") for disclosure requirements specific to the standards dictated by National Instrument 43-101 ("NI 43-101") and Form 43-101F1 (Standards of Disclosure for Mineral Projects) with respect to the Tepal deposit located in Michoacán, Mexico. Howe understands that Geologix will be filing this report electronically on SEDAR pursuant to NI 43-101. Howe is not qualified to comment on the legality of the corporate agreements between Arian and Geologix and takes no responsibility for the validity of the option agreement.

Arian was incorporated on December 8, 2004 for the purpose of exploring for silver in the state of Zacatecas in central Mexico. The Company's principal place of business is 43 North Audley Street, London, W1K 6WH, United Kingdom and their registered address is Nevine Chambers, P.O. Box 905, Road Town, Tortola, British Virgin Islands. Arian's Mexican properties are held by its wholly-owned subsidiary, Arian Silver de Mexico S.A. de C.V. The Mexican subsidiary was incorporated on March 14, 2005 and is located at Mina el Edén, Number 15, Fracción Lomas de Bernardez, CP 98610, Guadalupe, Zacatecas, Mexico. Arian holds interests in several exploration projects located in Zacatecas and Michoacán in central Mexico (Priesmeyer, 2007).

This resource update follows on from the initial resource estimation study undertaken by Howe in 2007-08 which is detailed in the report "Resource Estimation Study on the Tepal gold-copper Prospect, Michoacán, Mexico" dated April 25th 2008 (the "April 2008 report"), prepared by Howe and filed on SEDAR.

The resource estimate incorporates all data collected from the completed Phase 1 drilling campaign undertaken by Arian over the project during 2007 and 2008 and includes geological and assay drill hole data from the latter part of the campaign totalling an additional 34 holes (56% of the program) not included in the initial Howe resource study.

This independent technical study report has been prepared by Senior Geologist Mr. Galen White BSc, FGS MAusIMM, for ACA Howe International Limited. Mr White visited the project between the 18th and 20th June 2008 as an ACA Howe Senior Geologist, in order to see the project first hand, review data collection methodologies, review sampling techniques and assay QA/QC protocols, and to review and verify project data. In addition time was spent discussing the recommendations to come out of the initial resource estimation study by Howe and reviewing the Phase 2 resource development and exploration strategy.

1.1. ACA HOWE INTERNATIONAL LIMITED

ACA Howe International Limited is an internationally recognised, independent geology and mining consultancy with offices in Canada where it was established in 1961 and in the United Kingdom where it has operated since 1978. Howe, its directors, employees and associates neither have nor hold:

- any rights to subscribe to Arian Silver Corporation either now or in the future;
- any vested interests in any concessions held by Arian Silver Corporation;
- any rights to subscribe to any interests in any of the concessions held by Arian Silver Corporation, either now or in the future;
- any vested interests in either any concessions held by Arian Silver Corporation or any adjacent concessions;
- any right to subscribe to any interests or concessions adjacent to those held by Arian Silver Corporation, either now or in the future.

Howe's only financial interest is the right to charge professional fees at normal commercial rates, plus normal overhead costs, for work carried out in connection with the investigations reported here. Payment of professional fees is not dependent either on project success or project financing.

1.2. UNITS

All units of measurement used in this Report are metric unless otherwise stated. Tonnages are reported as metric tonnes ("t"), precious metal values (gold) in grams per tonne ("g/t") or parts per million ("ppm") and base metal values (copper) are reported in weight percent ("%") or parts per million ("ppm"). Other references to geochemical analysis are in parts per million ("ppm") or parts per billion ("ppb") as reported by the originating laboratories.

Universal Trans-Mercator grid coordinates ("UTM") are based on the NAD 27 datum. The Property is located in UTM zone 13.

1.3. MEXICAN MINING LAW

The following section is modified from Priesmeyer, 2007.

Mineral exploration and mining in Mexico are regulated by the Mining Law of 1992, which establishes that all minerals found in Mexican territory are owned by the Mexican nation, and that private parties may exploit such minerals (except oil and nuclear fuel minerals) through mining licenses, or concessions, granted by the Federal Government.

Concessions may be granted to (or acquired by, since they are freely transferable) Mexican individuals, local communities with collective ownership of the land known as ejidos and companies incorporated pursuant to Mexican law, with no foreign ownership restrictions for such companies. While the Constitution makes it possible for foreign individuals to hold mining concessions, the Mining Law does not allow it. This means that foreigners wishing to engage in mining in Mexico must establish a Mexican corporation for that purpose, or enter into joint ventures with Mexican individuals or corporations.

Maintenance obligations which arise from a mining concession, and which must be kept current to avoid its cancellation are the performance of assessment work, the payment of mining taxes and the compliance with environmental laws. The Regulations of the Mining Law establish minimum amount of assessment work that must be performed during exploration and/or exploitation. Because of the recent changes in the mining law, new payment schedules for assessment work are being developed and are not available for inclusion in this Report.

2. RELIANCE ON OTHER EXPERTS

The main sources used in the compilation of this report were the following:

- Hogg J., 2008; Resource Estimation Study on the Tepal Gold-Copper Prospect, Michoacán,, Mexico, April 2008; Technical Report by ACA Howe International Ltd.
- Priesmeyer S.T., 2007; Technical Report on the Tepal Property, Michoacán, Mexico, 2007; Independent Technical Report by ACA Howe International Ltd.

Howe also reviewed available digital maps and cross-sections, company documentation relating to the project and other public and private information as listed in the "References" section at the end of this Report. Howe has assumed that all of the information and technical documents reviewed and listed in the "References" section are accurate and complete in all material aspects.

Howe is not legally qualified to comment on the agreement between Arian and Geologix, but has relied upon information provided by the two companies in this regard.

3. PROPERTY DESCRIPTION AND LOCATION AND MINERAL RIGHTS

The following sections are taken from Priesmeyer, 2007.

3.1. PROPERTY DESCRIPTION AND LOCATION

The following sections modified from Priesmeyer, 2007.

The Tepal Property is located in the municipality of Tepalcatepec, Michoacán state in southwestern Mexico near the town of Tepalcatepec (Figure 1). The Property is 70 km west of Apatzigán and 170 km south of Guadalajara, one of the largest cities in Mexico. The Property is centred at the approximate UTM grid coordinates of 2,116,995N and 716,594 E at an average elevation of 550 meters ("m").

The Property consists of six contiguous concessions totalling 13,843.2 Hectares ("Ha") (Figure 3, Table 1). Arian recently acquired a concession called Tepal 2, which was permitted over free ground and completely surrounded the fiver smaller concessions. The area of the Tepal 2 concession is 12,437.2 Ha.

NAME OF CONCESSION	TITLE NUMBER	AREA (Ha)	DATE OF TITLE	EXPIRATIO N DATE	OWNER
La EsperanzaFracción 1	216873	120.00	5 June 2002	4 June 2052	Minera Tepal S.A. de C.V.
Tepal	219924	986.00	7 May 2003	6 May 2053	Minera Tepal S.A. de C.V.
Tepal Fracción 1	216874	140.00	5 June 2002	4 June 2052	Minera Tepal S.A. de C.V.
Tepal Fracción 2	216875	70.00	5 June 2002	4 June 2052	Minera Tepal S.A. de C.V.
Tepal Fracción 3	216876	90.00	5 June 2002	4 June 2052	Minera Tepal S.A. de C.V.
Tepal 2	229354	12,437.2	4/12/2007	4/12/2057	Arian Silver de Mexico S.A. de C.V.
TOTAL		13,843.2			

TABLE 1. CONCESSION TITLES FOR TEPAL

The six concessions listed in Table 1 would have been surveyed in order for the titles to be issued as this is a requirement under Mexican law. Arian has not surveyed the concessions independently.

3.2. MINERAL RIGHTS

Arian signed an agreement with Minera Tepal S.A. de C.V. ("Minera Tepal") for the rights to the concessions described in Table 2. Under the agreement, Arian must pay a total of US \$5,000,000 over a five year period for a 100% interest in the Property. Arian can exercise the option or terminate the agreement at any time. The payment schedule is outlined in Table 2.

On September 24, 2009 Geologix signed an agreement with Arian Silver Corporation for the exclusive rights to purchase Arian's 100% interest in the concessions described in Table 2. Under the terms of the agreement, Geologix can complete the purchase of 100% of the rights to the concessions by delivering to Arian US\$3.0 million in staged payments before February 23, 2011, and assuming the balance of Arian's obligations under the terms of its underlying property option agreement with Minera Tepal S.A. de C.V. ("Minera Tepal"). The payment schedule is outlined in Table 2.

The principal terms of the transaction are as follows:

Geologix advanced to Arian the sum of US\$517,500 which has been used by Arian to complete an outstanding underlying option payment due to the property vendor (US\$450,000 plus the applicable IVA of US\$67,500). The advance was made by the Company to Arian as an interest free loan and becomes due for repayment on April 23, 2010 unless Geologix elects to proceed with the option to purchase the property, in which case the sum of the loan will be applied against the eventual purchase price as described in the following paragraphs.

In consideration for the loan, Arian has granted Geologix a five month exclusivity period during which Geologix shall undertake due diligence of the property. Following completion of its due diligence review of the property, Geologix may elect, at any time within the five-month exclusivity period, to acquire the property from Arian on an option basis for a total consideration of US\$3-million, payable to Arian in two installments:

- 1. An initial payment of US\$1.0 million, plus forgiveness of the property option payment of US\$450,000, for a total of US\$1.45 million on or before February 23, 2010;
- 2. A payment of US\$1.55 million on or before February 23, 2011;
- 3. At Geologix's election, each such payment may be made in cash, or up to 50% in Geologix shares valued at the 10-day average closing price of the Company's shares immediately prior to the time of each payment.

Geologix will also assume the balance of Arian's obligations under the terms of an underlying property option agreement whereby Geologix will be responsible for completing payments to the underlying property vendor in order to earn its 100% interest in the property.

If Geologix elects not to acquire the property, Arian will repay the initial advance (including the IVA, if not already repaid) to Geologix in cash, no later than the repayment date of April 23, 2010, and Geologix's interest in the property will thereupon terminate. If Arian fails to repay the advance in cash:

- 1. Geologix may elect to form a joint venture with Arian in respect of the property. The agreement regulating the joint venture shall include the following terms:
 - (a) Geologix's contribution shall be forgiveness of the US\$450,000 property option payment and delivery to Arian of an equivalent of US\$1.08-million in cash or Geologix shares valued at a 10-day average closing price immediately prior to the time of the transaction (for a total contribution of US\$1.53-million value consideration) for a 51-per-cent earned interest in a Tepal joint venture.
 - (b) Geologix will be the operator of the joint venture.
 - (c) Joint venture participation will be subject to a dilution formula using a base valuation of US\$3-million (deemed contributions of US\$1.53-million for Geologix and US\$1.47-million for Arian).
 - (d) Joint venture work programs and property payments will be made on a contribute-or-dilute basis such that each joint venture party will have an interest equal to its deemed and actual contributions divided by the deemed and actual contributions of both parties.
 - (e) Geologix shall have the option to make 100 per cent of the remaining property option payments, and the parties' interests in the joint venture shall be adjusted accordingly.
 - (f) The operator of the joint venture shall have the right to propose a feasibility study to the joint venture. If the joint venture partner does not elect to participate in the feasibility study, completion of the feasibility study will earn an additional 10-per-cent interest in the joint venture by the operator.
 - (g) The operator of the joint venture has the right to propose production project financing. If the joint venture partner does not elect to participate in the financing, arrangement of the financing will earn an additional 10-per-cent interest in the joint venture by the operator.
 - (h) This includes other operational provisions customary for a mineral exploration joint venture.

Or:

2. Geologix may elect to require Arian to repay Geologix the equivalent value of the advance (including, if not already repaid, the IVA refund of US\$67,500) by way of an issue of units of Arian in full satisfaction of the advance. Each unit shall be priced at the 10-day average closing price of Arian's shares immediately prior to the repayment date of April 23, 2010, and shall consist of one common share and one-half of one common share purchase warrant, with each whole share purchase warrant entitling Geologix to purchase one common share for a period of two years. The Arian common shares to be issued pursuant to the units shall be priced equal to the unit price.

Upon the commencement of production, there is a 2.5% Net Smelter Royalty ("NSR") due Minera Tepal payable on the 20th of each month. Arian's agreement with Minera Tepal has a first-right-of-refusal on this royalty should Minera Tepal elect to sell the royalty. A 15% value-added tax ("IVA") is to be paid by Arian for each option and royalty payment.

In December 2007, Arian located an additional concession (Tepal 2) totalling 12,437.2 hectares, for Mx\$30,000.

AMOUNT	DUE DATE
\$100,000	Paid upon signing
\$150,000	Paid December 6, 2006
\$250,000	Paid June 6, 2007
\$300,000	Paid December 6, 2007
\$500,000	Paid June 6, 2008
\$500,000	Paid June 6, 2009
\$900,000	June 6, 2010
\$2,300,000	June 6, 2011
\$5,000,000	
\$2,900	Paid upon signing

TABLE 2. PAYMENT SCHEDULE FOR TEPAL PROPERTY

The surface rights for the Property are owned by one individual. While Arian does not have a formal agreement with the surface owner, they have a verbal agreement allowing them access to the Property. Arian is in the process of negotiating a formal agreement with the surface owner.

Mining taxes, or holding fees for mining concessions, in Mexico are based on the amount of time elapsed from the date the title was issued and the number of Ha covered by the concessions (Table 1). These taxes are paid twice per year and the resulting tax liabilities for the Tepal Property total Mx\$184,022 or US\$17,525 for 2007 and 2008.

Assessment work is calculated on the same basis as property taxes. The assessment work commitment for the Property for 2008 is estimated to be Mx\$585,530 or US\$57,323. It should be noted that these amounts are estimated and will change when new rate schedules are issued by the Mexican government.

Howe is not aware of any environmental issues currently relating to the Property.



Figure 1: Location Map for the Tepal Property (taken from Priesmeyer, 2007).





Figure 2: Map of the Tepal Property (taken from Priesmeyer, 2007).





Figure 3: Map of the Tepal Concession Boundaries (taken from Priesmeyer, 2007).



4. ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES AND INFRASTRUCTURE

The following section is modified from Priesmeyer, 2007.

Access to the Property is good. The nearest town is Tepalcatepec, located 15.5 kilometres ("km") to the northeast of the Property. Tepalcatepec is reached by paved highway from Morelia, en-route from Mexico City. The final 7.5 km of access to the property are over unimproved dirt roads (Figure 2). Total driving time to Tepalcatepec from Morelia is about three-and-a-half hours. Total driving time to the property from Tepalcatepec is about 30 minutes.

The climate of the region consists of a rainy season extending from June into October and a dry season extending from late November to May. Heavy rains during the rainy season can turn the dirt access roads to deep mud and produce wash outs making access difficult at times. Average annual precipitation ranges from 500 millimetres ("mm") to 700 mm. Daytime high temperatures range from 27°C in the December to February period to 38°C or 40°C in May and June. Average annual temperature is 28°C to 30°C.

The Property lies in the steep hills on the northeast side of the Mexican Coastal Range at elevations between 500 to 700 m. The elevation of the primary area of mineralisation on the Property ranges from around 550 m to around 650 m. Vegetation consists of thorny brush, small trees and occasional cactus.

The Property is large enough but some topographically suitable locations for the development of facilities such as waste dumps and tailings disposal areas may be limited by the presence of mineralisation, whose extent is presently unknown (South Zone on Figure 2). Further study will be required to determine the suitability of the present land position for the development of all the mining-related facilities but at the present level of knowledge, the site appears to be adequate.

Tepalcatepec is the town nearest the Property. It has a population of approximately 30,000. Services available in Tepalcatepec include lodging, a number of small restaurants, gasoline stations, a variety of small hardware, grocery, and retail stores, and an open air market, making it a suitable base for operations.

Apatzingán, located approximately 55 km east of Tepalcatepec, has a population of around 90,000. It is the closest town with scheduled air service and can be reached via daily commuter flights from Guadalajara.

Morelia is the capital of Michoacán State and has a population of around 550,000. There are daily air connections with Mexico City and the United States. Morelia is connected to the nation's motorway, or highway system, with Guadalajara and Mexico City within half-a-days drive.

There is a three-phase power line of unknown capacity located seven km east of the main mineralised area. There is also a power line of unknown capacity located three km north of the Property. There is no power on the Property.

There are numerous reservoirs in the region. The water feeds a system of canals and is used primarily for irrigation purposes. Water may be available to the Property from this reservoir system. If not, water appears to be shallow since it was encountered during both previous reverse-circulation programs (Personal Communication, Luis Gonzáles Barragán). There is a

well in a small valley near the South Zone and the water table there is located approximately three meters below the surface.

The dominant land use on the Property consists of cattle and goat grazing but sorghum and corn are raised in areas suitable for arable farming.

5. HISTORY

The following section is modified from Priesmeyer, 2007.

The presence of a few small surface workings and several old generations of punto de partido, or concession survey monuments (beacons) in the area of the North and South Zones provide evidence of past exploration on the Property. However, there is no anecdotal or written evidence of any production and nothing is known of this early period.

In 1972 the International Nickel Company of Canada, Ltd ("INCO") recognized the Tepal and the Tizate gossans (Tizate is located approximately 1,400 m east of the North Zone) and associated copper mineralisation (Copper Cliff, 1974). INCO worked through its Mexican subsidiary DRACO although the sole surviving report from this time period was prepared by Copper Cliff. Limited data remains from the INCO period.

INCO explored the property during the period 1972-1974 by means of surface geochemistry, IP geophysics and drilling.

INCO developed a small non NI43-101 compliant resource of 27 Mt averaging 0.33 % Cu and 0.65g/t Au but ultimately abandoned the Property. INCO stressed that more drilling was required to further define the width of the mineralised zone.

Teck Resources Inc. ("Teck") acquired the Property in late 1992. Work completed by Teck includes geologic mapping, the collection of over 200 rock samples for multi-element analysis, the construction of more than 60 km of grid line, the collection of 1,268 soil samples and 50 rock chip samples from the grid, the construction of 15 km of access road and the completion of 50 reverse-circulation holes totalling 8,168 m in four phases. Teck also undertook some metallurgical testing, which is described in Section 12.2 of the Report.

In 1994, Teck completed a non NI43-101 compliant resource estimate for the Property. Results of the resource calculations are presented in Section 13.2 of this report. The resource estimate is a polygonal block estimate based on the manual definition of polygonal blocks on computer drafted drill sections using manual composited intercept intervals. The total for all categories is 78.82 Mt grading 0.4 g/t Au and 0.249 % Cu with drill indicated resources totalling 55.84 million tonnes grading 0.514 g/t Au and 0.261% Cu. Of the 55.84 million tonnes drill indicated resource, 24.28 Mt averaging 0.545 g/t Au and 0.251 % Cu are in the South Zone and 31.56 Mt averaging 0.489 g/t Au and 0.269 % Cu are in the North Zone. It should be noted that the resource categories defined by Teck were drill indicated, drill inferred and projected which are broadly correlative with, but not the same as, measured, indicated and inferred resource categories as defined in CIM Definition Standards on Mineral Resources and Reserves (Canadian Institute of Mining, Metallurgy and Petroleum, 2004).

In late 1996 Minera Hecla S.A. de C.V. ("Hecla") visited the Property and initiated a work program in the spring of 1997. Work by Hecla included the creation of a 1:2,000 scale topographic map from aerial photographs, a geologic mapping program, the collection of nearly 900 rock ship samples on a 50 m by 50 m grid, the re-analysis of 298 pulps from the Teck reverse-circulation drilling program, the completion of 17 reverse-circulation drill holes

totalling 1,506 m and the completion of a resource estimate (Gómez-Tagle, 1997 and 1998). Hecla's expenditures on the Property are unknown.

Hecla's primary focus on the Property was as a large tonnage, low-grade gold target. Although all samples were analyzed for copper and gold, Hecla did not include copper in its resource estimate.

The work completed by Hecla is the best documented of all previous work and is described in Section 8.3.1 of the report.

In 1997, Hecla completed a non CIM compliant resource estimate for the Property. The resource estimate is a polygonal block estimate based on manual definition of polygonal blocks on computer drafted drill sections using manual composited intercept intervals.

The results of the resource calculation for the North and South zones are detailed in Section 13.3 of the report. The total resource for oxide and sulphide material is 9.063 Mt averaging 0.90 g/t Au and containing 262,359 ounces of gold.

In addition to the resource for the North and South Zones, Hecla estimated a combined resource for the East and West Zones of 5.055 Mt averaging 0.36 g/t gold and containing 58,512 ounces of gold.

6. GEOLOGICAL SETTING

The following section is taken from Priesmeyer, 2007.

6.1. **REGIONAL GEOLOGY**

The Property is located within the Costal Ranges of south-western Mexico south of the Neogene Trans-Mexican Volcanic Belt. Basement rocks consist of Cretaceous to early Tertiary (?) intermediate plutons, stocks and plugs intruding weakly metamorphosed sedimentary and volcanics of probable Jurassic to Cretaceous age. The Jurassic to Cretaceous sedimentary and volcanic rocks are part of an accreted Mesozoic island arc volcanosedimentary assemblage. At least some of the intrusive rocks are probably coeval with the volcanics. Neogene basalts locally overly basement rocks and represent outliers of the Trans-Mexican Volcanic Belt.

The Property lies just south of the Huacana batholith (Figure 4), a Cretaceous to early-Tertiary batholith that ranges from quartz diorite to tonalite and granodiorite in composition. The mineralised hypabyssal intrusives at the Tepal prospect are thought to be marginal phases of this batholith (Shonk, 1994).

6.2. **PROPERTY GEOLOGY**

Little is known of the INCO geologic interpretation of the Property. Teck geologists identified three layered units and ten distinct intrusive rocks, some with multiple variations. The layered units include a mixed unit of andesitic volcanics and interlayered volcaniclastic sediments, an andesitic to dacitic volcanic unit with minor interlayered volcaniclastic sediments (greywackes and siltstones) and a predominantly sedimentary unit of greywacke, shale, minor limestone and subordinate flows, tuffs and lahars.

Intrusive rocks on the Property are only known north of a major east-northeast-trending fault on the southern part of the Property. Nearly all fall in the tonalite/low-K dacite compositional

range with the exception of post-mineralisation and post-alteration andesite dikes. Intrusive rocks also display a wide variation in texture and phenocrysts abundance indicating diverse cooling histories and suggest multiple intrusive events and relatively high levels of emplacement. A detailed discussion of these lithologic units is presented in Shonk (1994).

Several inferred north-northwest-trending and east-northeast-trending faults cut the Property dividing it into several parallelogram-like blocks. The southernmost east-northeast-trending fault separates two different domains of pre-intrusive rocks. The rocks to the south form a homoclinal south-dipping sequence which displays only weak thermal metamorphism, no alteration, and includes no intrusive rocks. North of the fault, the units are folded, faulted, more strongly thermally metamorphosed, and extensively intruded. The central northnorthwest-trending fault appears to juxtapose two different erosional levels and is parallel to a prominent structural grain seen in Landsat images of the property. The evidence for different erosional levels lies in the characteristics of the intrusive rocks. Intrusives east of the fault are typically large, equigranular, and medium-grained while porphyritic tonalite porphyry is virtually restricted to the western block south of the northern east-northeast-trending fault. All of the defined resource is also located within this block. The deeper drilling in this area also shows a transition in the three small stocks in this area from tonalite porphyry and intrusion breccia near the surface to equigranular, medium grained tonalite at depth similar to those to the east of the fault. The presence of coarsely crystalline sericite north of the northern east-northeast-trending fault also supports the interpretation that deeper structural levels are exposed to the north and east.

Thermal metamorphism has converted andesitic volcanics to gray biotite hornfels and limestones to marbles and skarn peripheral to the intrusive rocks. Development of chlorite, clay, and carbonate in the volcanics and volcaniclastics may be due to weak regional metamorphism.



Figure 4: Geological Map of the Tepal Property including major concession boundaries (adapted from Priesmeyer, 2007).



6.3. DEPOSIT TYPE

The following section is taken from Priesmeyer, 2007.

Mineralisation on the Property is characteristic of porphyry copper-gold mineralisation. Panteleyev (1995) characterizes porphyries as large masses of hydrothermally altered rock containing quartz veins and stockworks, including sulphide-bearing veinlets and dissemination, covering areas up to 10 km² in size. These altered zones are commonly coincident with shallow intrusives and/or dike swarms and hydrothermal or intrusion breccias. Deposit boundaries are determined by economic factors, which outline ore zones within larger areas of low-grade concentrically zoned, mineralisation.

Important geological controls on porphyry mineralisation include igneous contacts, cupolas and the uppermost, bifurcating parts of stocks and dike swarms. Intrusive and hydrothermal breccias and zones of intensely developed fracturing due to coincident or intersecting multiple mineralised fracture sets commonly coincide with the highest metal concentrations.

Surface oxidation commonly modifies the distribution of mineralisation in weathered environments. Acidic meteoric waters generated by the oxidation of pyrite leach copper from soluble copper minerals and re-deposit it as secondary chalcocite and covellite immediately below the water table in tabular zones of supergene enrichment. The process results in a copper-poor leached cap lying above a relatively thin higher-grade zone of supergene enrichment that in turn overlies a thicker zone of lower-grade primary hypogene mineralisation at depth.

Porphyry systems may also exhibit hypogene enrichment. The process of hypogene enrichment may relate to the introduction of late hydrothermal copper-enriched fluids along structurally prepared pathways or the leaching and re-deposition of hypogene copper, or a combination of the two. Such enrichment processes result in elevated hypogene grades.

Copper-gold porphyries differ slightly from copper ±molybdenum porphyries in the following ways:

- They can be associated with alkaline intrusive suites;
- Copper-gold porphyries do not typically contain economically recoverable Mo (< 100 ppm) but do contain elevated gold (> 0.3 g/t) and silver (>2 g/t);
- They are commonly associated with abundant hydrothermal magnetite, which is commonly associated with higher gold grades;
- Copper and gold may or may not be associated with zones of quartz veining (depending on degree of silica saturation), in contrast to most "normal" porphyry systems where quartz veining is the norm, and;
- Supergene enrichment can be restricted due to the general sulphide-poor nature of the alteration and they often lack an extensive peripheral hypogene alteration "footprint"

Porphyry copper-gold deposits range from very large low-grade deposits such as Bingham Canyon in the United States which contains 3,228 Mt averaging 0.88 % Cu and 0.50 g/t Au (Cooke and others, 2004) to small high-grade deposits such as Ridgeway in Australia which contains 54 Mt averaging 0.77 % Cu and 2.5 g/t Au (Wilson and others, 2003). The average of 112 deposits from around the world is 200 Mt averaging 0.44 % Cu, 0.4 g/t Au, 0.002 % Mo and 1.4 g/t Ag (Singer and others, 2005).

It should be noted that mineralisation on these or any other properties in this class of deposit around the world is not necessarily indicative of the mineralisation on the Tepal Property.

7. MINERALISATION AND ALTERATION

The following section is modified from Priesmeyer, 2007.

7.1. MINERALISATION

Mineralisation on the Property consists of structurally controlled zones of stockwork and disseminated copper sulphide with elevated gold values. Mineralisation occurs along a line of three small tonalite stocks just west of the north-northwest-trending fault that trends through the centre of the Property. All three stocks are composed of multiple intrusive phases with tonalite porphyry and tonalite porphyry intrusion breccia phases hosting the highest grade mineralisation. Most of the historic resource is hosted by these lithologies in the northern and southernmost stocks (North Zone and South Zone respectively). Both the North and South zone are crudely zoned from a gold-rich core with the highest gold and copper values and highest Au:Cu ratios to a copper dominant periphery with lower Au:Cu ratio to a barren pyritic halo (Shonk, 1994).

Primary sulphide mineralisation within the historic resource area consists dominantly of disseminated and stockwork-controlled chalcopyrite and pyrite with minor, locally significant pyrrhotite, bornite, sphalerite, molybdenite and galena. The highest grade mineralisation is associated with low total sulphide contents and low pyrite:chalcopyrite ratios. Micron-sized native gold is usually associated with the chalcopyrite either as grains attached to the surface or fracture fillings within copper sulphides (Duesing, 1973) although free grains can also occur. Hypogene sulphide mineralisation typically occurs as irregular individual sulphide grains or interstitial patches of pyrite-chalcopyrite-bornite within the granular, altered tonalite porphyry groundmass, often associated with growth of granular quartz in the groundmass, as chalcopyrite-pyrite veinlets and as quartz-hydrobiotite/Fe-chlorite-pyrite-chalcopyrite veinlets associated with sericite-hydrobiotite/Fe-chlorite-pyrite-quartz alteration (Shonk, 1994). The depth of oxidation ranges from 20 m to 40 m on the hilltops and 0 to 20 m in the

drainages. Minerals in the oxidized zone include malachite, chalcocite, minor azurite, tenorite and minor chrysocolla. Thin supergene-enriched zones do exist locally at the base of the oxide zone and consist of chalcocite and covellite coatings on sulphide grains and local areas of poddy, massive chalcocite (Shonk, 1994).

Several different generations of quartz veining, quartz replacement, and silicification are prominently associated with copper-gold mineralisation. Quartz vein types include early granular quartz veins with no alteration envelope consisting of quartz-sulphide-biotite of probable late magmatic age. Locally late magmatic veining is so closely spaced that vein material comprises the majority of the rock. Chlorite-quartz-sulphide-calcite and prismatic to comb quartz-sulphide veins are later. Veins of all generations display a prominent 325°-350° orientation parallel to the central fault zone. Dips are generally vertical to steep either east or west. Other orientations are also present with a near east-west orientation and moderate south dip of secondary prominence. Granoblastic growth of granular subhedral to euhedral quartz in the groundmass and "patchy, finer grained, blue-gray quartz flooding of the groundmass (colour due to very fine grained disseminated sulphides) are often associated with granular quartz veins and are also inferred to be of late magmatic age. This quartz is typically associated with disseminated chalcopyrite and bornite (Shonk, 1994).

Mineralisation on the Property is consistently hosted by tonalite porphyry intrusions with at least the local presence of tonalite intrusion breccia showing chilled porphyritic to glassy porphyritic textures indicative of a near-surface environment. Intensity of mineralisation is strongly related to the presence of late magmatic quartz and the density of late magmatic veining. The strong preferred orientation of these veins and evidence of shearing suggests development of a late magmatic age structure is required to focus mineralizing fluids. Fracturing of the carapaces of the intrusive tonalite porphyries is likely related to continued movement on the north-northwest-trending structure controlling emplacement rather than volatile release (Shonk, 1994).

Mineralisation on the Property is characterized by strongly anomalous Cu, Au, Ag, Zn, and Mo and more erratic and weakly anomalous Pb, Mn, Bi, and As. Inter-element relationships and zoning have not been systematically analyzed because all soil samples and most drill samples were only analyzed for Cu and Au. Cu and Au are strongly correlated with the highest Au:Cu ratios present in core of the North and South Zone resource areas. Au:Cu ratios appear to decline toward the periphery of these zones. Mo, Zn, and Ag are also elevated within the cores of the resource areas but the highest Zn and Ag values appear to occur on the periphery. The highest Pb and As values tend to occur in veins and mineralised structural zones outside of the resource areas. Sporadic high As values are most common in altered sediments (Shonk, 1994).

7.2. ALTERATION

Tonalities hosting the mineralised zones display alteration features typically associated with immature island arc-type porphyry systems. Potassic alteration is poorly developed and represented dominantly by secondary biotite when present. It is restricted to the core of the system in both the North and South Zones where it occurs as late magmatic biotite replacement of hornblende phenocrysts and in hydrothermal quartz-biotite-sulphide-magnetite veins. It is closely associated with copper-gold mineralisation and the best grades. Hydrothermal potassium feldspar is locally present but uncommon to rare. It occurs in quartz veins and after plagioclase. Hydrothermal amphibole has also been recognized. Both secondary biotite and amphibole are almost always strongly to completely chloritized.

The most visible and conspicuous alteration assemblage consists of sericite-pyrite-claysilica/quartz±tourmaline in veins and veinlets. This alteration assemblage is best developed in dacite volcanics and domes adjacent to the mineralised zones and locally overprints mineralisation. Associated sericite-clay-pyrite alteration also affects post-mineralisation dacite dikes which cut the North Zone, reflecting overprinting of this alteration on earlier alteration types. Anomalous gold and copper values are often associated with this type of alteration but higher grade mineralisation is absent. Associated quartz veins are generally uncommon but when present are typically pale gray and chalcedonic to cherty in appearance.

In the dacite this alteration type is characterized by sparsely vegetated, red-brown to red colour outcrops of argillised rock as a consequence of supergene argillisation due to oxidation of the 3-15 % disseminated pyrite. Supergene minerals include kaolinite, illite, diaspore, pyrophyllite, and silica. Structurally controlled quartz-sericite-pyrite alteration is present locally elsewhere on the Property.

Coincident chlorite-sericite-pyrite-quartz alteration, granular quartz flooding of the groundmass, and quartz-Fe-chlorite-sulphide veining are also closely associated with coppergold mineralisation. The Fe-rich chlorites have been interpreted as indicating formation temperatures just below the stability limit of biotite, so that Fe-rich chlorites form contemporaneously with the hydrothermal biotite. Other alteration minerals sporadically associated with these assemblages include albite, calcite, epidote, clinozoisite, leucoxene, hematite, tourmaline, apatite, rutile and gypsum after anhydrite.

Whole rock analyses of altered and unaltered rocks available in the INCO data demonstrate significant addition of potassium 68 associated with mineralisation and alteration in spite of

the scarcity of potassic alteration phases such as potassium feldspar or biotite. Potassium addition is probably reflected by the abundance of sericite.

Veinlets and replacements of quartz-chlorite-pyrite-epidote-calcite were noted in several drill holes peripheral to the South Zone and interpreted as peripheral to mineralisation in location and post-mineralisation in timing. This alteration type is associated with only very weakly anomalous gold and copper values. It often overprints assemblages more closely related to mineralisation.

Chlorite-calcite-epidote with calcite and/or epidote veining or fracture coatings is the main alteration type in the post-mineralisation andesite and diorite dikes. Propylitic alteration of this type is also pervasive in the andesitic volcanics. It is probably related to regional, low grade metamorphism (Shonk, 1994).

8. EXPLORATION

The following section is modified from Priesmeyer, 2007.

8.1. INCO

In 1972 the International Nickel Company of Canada, Ltd ("INCO") recognized the Tepal and the Tizate gossans (Tizate is located approximately 1,400 m east of the North Zone) and associated copper mineralisation (Copper Cliff, 1974).

The Tepal and Tizate gossans were originally considered as separate entities but were eventually evaluated by a single soil grid. Soil samples were analyzed for Cu, Mo, Zn and Au and anomalous copper zones were identified. In early 1973 six diamond drill holes (57001 – 57006) were drilled in the Tepal gossan. Geologic mapping and an Induced Polarization ("IP") survey were completed during the winter of 1973-74. IP anomalies were found to be generally confined to geochemically anomalous copper zones. According to Shonk (1994) both a summary map showing extent and strength of interpreted anomalous IP response along each line in conjunction with molybdenum in soil anomalies and drill hole locations and photocopies of contoured IP sections were available. The summary map indicated a strong to moderate IP response over and peripheral to the North Zone, a moderate IP response just South of the South Zone, and a number of lines with weak to strong IP anomalies coinciding with the broad zone of soil geochemical anomalies on the east side of the Property. At the time Shonk (1994) prepared his report, many of the IP anomalies had not been drilled.

8.1.1. INCO DRILLING

In early 1973 INCO drilled six diamond drill holes (57001 - 57006). Drilling continued through the winter of 1973-74 with seven widely spaced holes (57007 - 57013) on what was formerly known as the Tizate portion of the Property and another seven holes (57014 - 57020 and 57026) were drilled on the Tepal gossan (Figure 5). There is some discrepancy as to the number of holes drilled by INCO as collar details and assays are available for only 21 holes but according to Shonk (1994) it is possible that 26 diamond drill holes were actually completed. Howe has found nothing to support Shonk's contention that 26 holes were drilled by INCO.

Diamond drilling was conducted by Boyles Brothers drilling using a Longyear 38 core rig. Core was NX-sized (diameter = 54.7 mm) to 50 m and BX-sized (diameter = 42.0 mm) below

50 m. Sample interval for the INCO diamond drilling program ranged from 0.2 to 3.0 m but averaged about 2.0 m. This sampling length is acceptable when exploring for disseminated mineralisation which, in this case, can reach thicknesses of over 50 m. The orientation of the mineralisation is unknown as core was un-orientated.

INCO's drilling was confined to the North Zone and the Tizate area (Figure 5). The South Zone was unknown at the time. A summary of INCO drill hole results is presented below.

DD HOLE	AREA	FROM	TO (m)	THICKNESS	Au	Cu
NUMBER		(m)		(m)	(g/t)	(%)
57001	Tepal	0.0	11.4	11.4	0.19	0.51
		55.5	60.2	4.7	0.13	0.41
57002	Tepal	0.0	180.0	180.0	0.80	0.34
57003	Tepal	10.2	17.0	6.8	1.23	0.34
57004	Tepal			NONE		
57005	Tepal	20.0	40.4	20.4	0.47	0.41
57006	Tepal			NONE		
57007	Tezate	0.0	6.0	6.0	0.42	0.37
		24.0	36.0	12.0	0.45	0.14
		146.0	160.0	14.0	0.57	0.05
57008	Tezate	0.0	30.0	30.0	0.23	0.18
57009	Tezate	30.0	40.0	10.0	0.11	0.24
57010	Tezate	36.0	74.6	38.6	0.11	0.17
57011	Tezate	43.0	49.0	6.0	0.09	0.26
57012	Tezate	100.0	128.0	28.0	0.23	0.11
57013	Tezate	0.0	11.0	11.0	0.06	0.38
		20.2	32.0	11.8	0.43	2.30
57014	Tepal	0.0	12.0	12.0	0.23	0.24
57015	Tepal	0.0	112.0	112.0	0.68	0.38
		122.0	142.0	20.0	0.27	0.12
57016	Tepal	0.0	17.7	17.7	0.48	0.16
57017	Tepal	0.0	50.0	50.0	0.68	0.24
		96.0	108.0	12.0	0.25	0.18
57018	Tepal			NONE		
57019	Tepal	0.0	68.2	68.2	0.17	0.27
57020	Tepal	21.0	150.0	129.0	0.55	0.30
57026	Tepal	194.0	200.1	6.1	0.47	0.40

TABLE 3. SUMMARYOFINCODIAMONDDRILLINGRESULTS

8.2. **TECK**

Teck Resources Inc. ("Teck") acquired the Property in late 1992. Work completed by Teck includes geologic mapping, the collection of over 200 rock samples for multi-element analysis, the construction of more than 60 km of grid line, the collection of 1,268 soil samples and 50 rock chip samples from the grid, the construction of 15 km of access road and the completion of 50 reverse-circulation holes totalling 8,168 m in four phases. Total expenditure by Teck was approximately \$875,000 (Shonk, 1994). Teck also completed metallurgical testing, which will be described in Section 12.2 of the Report.

Only very limited data remains from the Teck period on the Property. There is one report, a variety of hand-drafted maps, drill logs and sample pulps from the drilling program. No duplicate samples or coarse rejects are available for review or analysis and there are no original assay certificates for data verification purposes.



Figure 5: Tepal Historical Drill Plan.



Initial mapping on the Property was conducted by Richard L. Nielsen, a Denver-based consultant. Nielsen mapped the Property at a scale of 1:5,000 and collected 165 samples for multi-element analysis. The west side and portions of the east side of the Property we subsequently remapped by another consultant at scales of 1:2,000 and 1:1,000 on a grid base. The early grid covered the western part of the mineralised area and part of the eastern half with a line spacing of 100 m and a station spacing of 50 m over areas of known mineralisation and alteration and a station spacing of 100 m outside areas of known mineralisation and alteration.

In late 1993 and early 1994 Tech completed a soil sampling program. Grid lines were spaced 200 m apart and sample spacing was 100 m and over anomalous areas, line spacing was reduced to 100 m and sample spacing to 50 m. A total of 1,268 soil samples and 50 rock chip samples were collected from all phases of soil sampling. Soil samples were analyzed for Cu and Au and most rock chip samples were analyzed using multi-element Inductively-Coupled Plasma ("ICP"). According to Shonk (1994), values from both soil and rock samples showed a strong positive correlation.

While the North Zone was known from previous INCO drilling, soil geochemistry as well as geologic mapping by Teck delineated the South Zone as a new target. Both the North and South Zones occurs as well defined coherent anomalies. A broad zone of less coherent anomalous Cu values covers a 1.5×2.0 km area on the east side of the Property with three poorly defined highs. Au values show the same general pattern though anomalies are more subdued on the east side of the sampling grid.

There is no surviving contoured soil geochemistry maps of the Property based on the Teck data. There is a map prepared by Hecla showing the Teck soil sample locations and values in conjunction with their own but the Teck data had not been contoured.

8.2.1. TECK DRILLING

In 1994 Teck drilled 50 reverse-circulation (RC) drill holes totalling 8,168.8 m. The drilling contractor employed by Teck is unknown as are the drilling procedures.

The majority of Teck's drill holes were drilled in the North and South Zones although a few holes were drilled in the Tizate area (Figure 5). A differential GPS survey was conducted in late January, 1994 to locate the INCO holes and the first 24 Teck holes as well as roads, key grid points, concession monuments and planned drill holes. Compass and tape surveys were used to establish coordinates of later drill holes and map access roads constructed after the survey.

Samples were collected every 2.03 meters (3 per 20-foot drill rod) for the first 24 holes and every 1.52 meters (5' intervals) for holes T-25 through T-50. This is acceptable when exploring for disseminated mineralisation which, in this case, can reach thicknesses of over 50 m. The orientation of the mineralisation is unknown due to the nature of the drilling.

A duplicate analytical sample was collected every tenth sample interval. All drill samples were analyzed for Cu and Au at Chemex (now ALS Chemex). An additional 123 samples from selected intervals were analyzed for Ag, Co, Cu, Fe, Mn, Mo, Ni, Pb, and Zn using a multi-element ICP procedure. Given the fact that mineralisation is disseminated or stockwork-controlled, this sample interval is adequate. Results are summarized in Table 4.

Drilling at Tepal generally indicates that the best values are present within 150 meters of the surface. Significant intercepts at greater depths are confined to the cores of the North and South Zone resource areas.

RC HOLE		FROM	TO(m)	THICKNESS	Au	Cu
NUMBER	ARLA	(m)	10 (m)	(m)	(g/t)	(%)
T-1	North	20.0	80.0	60.0	0.20	0.15
		184.0	190.0	6.0	0.19	0.27
T-2	West	6.0	68.0	62.0	0.17	0.46
		88.0	106.0	18.0	0.33	0.23
T-3	North	0.0	156.0	156.0	0.83	0.33
		188.0	194.0	6.0	1.46	0.17
T-4	North	0.0	116.0	116.0	0.56	0.28
incl.		42.0	98.0	56.0	0.95	0.37
T-5	East	6.0	26.0	20.0	0.18	0.47
T-6	North	0.0	36.0	36.0	0.36	.022
		80.0	112.0	32.0	0.27	0.22
T-7	Botwoon	117.0	198.0	86.0	0.32	0.14
T-8	North and	0.0	26.0	26.0	0.44	0.15
	South	54.0	70.0	16.0	0.46	0.14
T-9	South	44.0	154.0	110.0	0.40	0.16
T-10	None	6.0	26.0	20.0	0.46	0.22
		82.0	130.0	46.0	0.65	0.25
		152.0	160.0	8.0	0.40	0.26
T-11	Potwoon	16.0	42.0	26.0	0.41	0.25
T-12	North and	42.0	96.0	54.0	0.47	0.20
T-13	South	24.0	78.0	54.0	0.47	0.18
T-14	South			NIL		
T-15	South	0.0	28.0	28.0	0.40	0.26
T-16	South	44.0	166.0	120.0	0.44	0.20
T-17	South	0.0	116.0	116.0	0.69	0.30
T-18	South	0.0	164.0	164.0	0.76	0.27
T-19	East			NIL		
T-20	East			NIL		
T-21	North			NIL		
T-22				NIL		
T-23	North	0.0	44.0	44.0	0.67	0.53
		56.0	122.0	66.0	0.28	0.22
T-24	North	0.0	188.0	188.0	1.04	0.40
incl.		0.0	114.0	114.0	1.46	0.54
T-25	South	4.6	199.6	195.0	0.82	0.30
T-26	South	7.6	86.9	79.3	0.34	0.15
		100.6	161.5	60.9	0.42	0.20
		172.2	201.2	29.0	0.66	0.32
T-27	South	0.0	32.0	32.0	0.24	0.18
T-28	South	0.0	36.6	36.6	0.67	0.21
		61.0	70.1	9.1	0.28	0.19
T-29	None	1.5	9.1	7.6	0.35	0.03
		48.8	59.4	10.6	0.29	0.23
T-30	North	0.0	182.8	182.8	0.79	0.25
incl.		25.9	65.5	35.6	1.35	0.31
T-31	North	30.5	39.6	9.1	0.22	0.44
		96.0	112.8	16.8	0.25	0.24
		143.3	153.9	10.6	0.26	0.48
T-32	North	59.4	83.8	24.4	0.20	0.24

Preliminary metallurgical tests were also conducted on a few selected intervals of mineralised intercepts from hole 57002. The results of metallurgical testing will be discussed in Section 12.2 of the Report.

RC HOLE		FROM	TO(m)	THICKNESS	Au	Cu
NUMBER	AKLA	(m)	10 (m)	(m)	(g/t)	(%)
		108.2	112.8	4.6	0.23	0.45
		155.5	170.7	15.2	0.23	0.20
T-33	Datwaan			NIL		
T-34	North and	54.9	112.8	57.9	0.29	0.44
	South	131.1	140.2	9.1	0.35	0.30
T-35	South			NIL		
T-36	None			NIL		
T-37	South	48.8	68.6	19.8	0.38	0.16
		79.3	106.7	27.4	0.37	0.10
T-38	None	NIL				
T-39	South	15.2	167.6	152.4	0.43	0.23
T-40	None			NIL		
T-41	None			NIL		
T-42	South			NIL		
T-43	None			NIL		
T-44	Tizate	1.5	16.8	15.3	0.25	0.23
		93.0	152.4	59.4	0.25	0.18
T-45	Tizate	NIL				
T-46	Tizate	0.0	88.4	88.4	0.18	0.17
T-47	Tizate	135.6	144.8	9.2	0.29	0.06
T-48	Tizate	15.2	105.2	90.0	0.33	0.14
T-49	None	0.0 65.8 65.8 0.15 0.17				
T-50	None			NIL		

TABLE 4. SUMMARY OF TECK REVERSE CIRCULATIONDRILLING RESULTS

8.3. HECLA

In late 1996 Minera Hecla S.A. de C.V. ("Hecla") visited the Property and initiated a work program in the spring of 1997. Work by Hecla included the creation of a 1:2,000 scale topographic map from aerial photographs, a geologic mapping program, the collection of nearly 900 rock ship samples on a 50 m by 50 m grid, the re-analysis of 298 pulps from the Teck reverse-circulation drilling program, the completion of 17 reverse-circulation drill holes totalling 1,506 m and the completion of a resource estimate (Gómez-Tagle, 1997 and 1998). Hecla's expenditures on the Property are unknown.

The work completed by Hecla is the best documented of all the previous work. There are two reports prepared by the project geologist, assay data in digital form and limited documentation for the resource estimate. Hand-written drill logs are also available. Most of the maps generated by Hecla remain, at least in electronic form. Sample splits and chip tray remain from the Hecla drilling. Four of the sample splits were resampled by Howe for grade verification purposes for the Report (Section 8.7).

Hecla mapped the Property at a scale of 1:2,000. Mapping was intended to define lithologic units and the type, intensity and extent of mineralisation and hydrothermal alteration. There is no mention in the Hecla reports as to whether geologic mapping was done on the rock chip sampling grid. Roads were located using a compass and tape.

In 1997 Hecla collected 895 rock chip samples from trenches, road cuts and a north-south grid on the Property. The grid covered an area measuring approximately 1,000 m in a north-south direction and 750 m in an east-west direction. Grid lines were spaced 50 m apart.

Hecla defined a large actuate copper anomaly with the concave portion of the anomaly open to the southwest (Figure 6). The anomaly is defined by copper values in excess of 301 ppm copper in rock.

This anomaly measures approximately 1,100 m in length and 125 m in width and is open to the northeast and the south. Within this large anomaly are three strongly anomalous areas defined by copper values exceeding 1,000 ppm. The largest of these strong anomalies measures approximately 300 m by 230 m and generally defines the North Zone.

The gold anomaly defined by Hecla is more restricted in aerial extent. The anomaly is defined by gold values in excess of 200 ppb or 0.2 g/t Au in rock and is open to the south and southeast. The anomaly trends 320° and measures approximately 700 m by 215 m (Figure 7). Within this anomaly is a smaller, very strong anomaly in which all values exceed 910 ppb or 0.91 g/t Au. This anomaly measures approximately 230 m by 80 m and generally corresponds to the North Zone.

In order to confirm the analytical results from the Teck drilling, Hecla reanalyzed 298 pulps from Teck diamond drill holes T-9, T-13, T-23, T-24, T-25 and T-30. Results of the Hecla reanalysis indicated that the values obtained by Hecla were 7% higher than those obtained by Teck. Since Hecla's primary focus was gold, Howe presumes that this difference is for gold values only.

8.3.1. HECLA DRILLING

In late 1997 Hecla conducted a 17-hole reverse-circulation drilling program totalling 1,506 m. All but three of the Hecla holes were drilled in the North Zone. The remaining three were drilled in the South Zone. Results are presented in Table 5, which was taken from Gómez-Tagle (1998).

Sample interval for the Hecla reverse-circulation drilling program was 1.0 meters. This is acceptable when exploring for disseminated mineralisation which, in this case, can reach thicknesses of over 50 m. The orientation of the mineralisation is unknown.

RC HOLE NUMBER	INTERVAL (m)		TYPE OF MINEPALISATION*	Au	Cu (%)	SUBINTERVAL		THICKNESS	Au	Cu
	FROM	то	WIINERALISATION	(g/l)	(70)	FROM	то	(111)	(g/t)	(70)
MHT-1	0	25	0	< 0.01	< 0.01					
	25	125	S	0.02	0.01	104	116	12	0.12	0.05
	125	150	S	0.38	0.14					
MHT-2	2	10	0	0.40	0.22					
	10	13	М	0.44	0.25					
	13	151	S	0.63	0.19	23	33	10	1.19	0.43
						44	49	5	1.00	0.23
						56	65	9	0.88	0.17
						69	92	23	0.88	0.20
						138	151	13	0.93	0.33
MHT-3	2	19	О	0.48	0.23					
	19	23	М	0.46	0.30					
	23	69	S	0.98	0.29	35	45	10	1.51	0.38
	69	86	S	0.38	0.21	69	78	9	0.45	0.23
	86	115	S	0.15	0.07					
	115	140	S	0.04	0.01					
MHT-4	0	59	0	1.19	0.41	0	21	21	1.49	0.48
						45	59	14	1.46	0.31
	59	67	М	2.12	0.43					

RC HOLE	INTERVAL (m)		TYPE OF	Au	Cu	SUBINTERVAL		THICKNESS	Au	Cu
NUMBER	FROM	то	MINERALISATION*	(g/t)	(%)	FROM	то	(m)	(g/t)	(%)
	67	128	S	0.88	0.32	67	71	4	1.34	0.39
						75	97	22	1.39	0.39
	128	150	S	0.09	0.04					
MHT-5	1	27	0	1.24	0.47	17	25	8	2.05	0.56
	27	30	М	1.10	1.02					
	30	108	S	0.78	0.44	30	44	14	1.04	0.52
						53	61	8	1.56	0.96
						76	81	5	1.04	0.51
						98	108	10	0.88	0.39
	108	150	S	0.17	0.12					
MHT-6	1	42	0	0.67	0.20	15	23	8	0.96	0.23
	42	59	М	0.26	0.37	46	53	7	0.51	0.58
	59	150	S	0.23	0.14	80	114	34	0.44	0.16
MHT-7	1	14	0	0.19	0.48	1	4	3	0.44	0.18
	14	16	М	0.23	0.73					
	16	38	S	0.27	0.15					
	38	51	S	0.18	0.12					
MHT-8	0	13	0	0.41	0.09					
	13	16	М	0.37	0.82					
	16	51	S	0.24	0.23	16	23	7	0.33	0.44
MHT-9	0	14	0	0.45	0.07					
	14	15	М	0.30	0.64					
	15	50	S	0.21	0.22	15	27	12	0.33	0.37
MHT-10	0	10	М	0.03	0.03					
	10	51	S	0.03	0.02					
MHT-11	0	12	0	0.05	0.01					
	12	31	М	0.04	0.01					
	31	51	S	0.03	0.03					
	51	81	S	0.40	0.20	77	81	4	0.67	0.28
MHT-12	0	30	0	0.13	0.17					
	30	32	М	0.20	0.19					
	32	80	S	0.21	0.23	41	54	13	0.41	0.25
MHT-13	0	29	0	0.35	0.12	14	29	15	0.48	0.12
	29	35	M	0.56	0.31					
	35	50	S	0.45	0.51	38	50	12	0.49	0.38
MHT-14	0	24	0	0.18	0.20					
	24	26	M	0.10	0.34					
	26	50	S	0.13	0.08	-	11	~	0.44	0.20
MH1-15	0	53	U	0.31	0.93	0	10	5	0.44	0.39
						13	18	5	0.52	0.59
-	22	41	M	0.11	1.05	28	32	4	0.29	2.15
	55 41	41 51	M	0.11	1.05					
MIT 16	41	JI 10	3	0.07	0.21	0	А	Α	0.54	0.06
MIII-10	U	19	0	0.45	0.10	0 6	4	4	0.34	0.00
	10	20	М	0.54	0.42	0	1/	11	0.49	0.11
	19	20	IVI C	0.34	0.43	26	26	10	0 6 4	0.22
	20	50	3	0.43	0.23	20 45	50	10	0.04	0.32
MHT 17	Q	10	0	0.02	0.11	40	50	5	0.43	0.24
1/1111-1/	0 10	21	0	0.02	0.11					
	219	21 50	IVI C	0.01	0.70					
	∠1	50	د	0.00	0.05					

*O – Oxide; M – Mixed oxide/sulphide; S – Sulphide

TABLE 5. SUMMARY OF HECLA REVERSE CIRCULATIONDRILLING RESULTS



Figure 6: Hecla rock chip Cu geochemistry map for Tepal North Zone.




Figure 7: Hecla rock chip Au geochemistry map for Tepal North Zone.



8.4. SAMPLE METHOD AND APPROACH

The following section is taken from Priesmeyer, 2007.

8.4.1. INCO PROGRAM

Little is known of the sampling method and approach employed by INCO for their soil and rock sampling programs. Soil samples were collected on a grid. Sampling methodologies are not discussed in the Copper Cliff report (Copper Cliff, 1973).

Sample interval for the INCO diamond drilling program ranged from 0.2 to 3.0 m but averaged about 2.0 m. Diamond drill core was NX size (diameter = 54.7 mm) to 50 m and BX size (diameter = 42.0 mm) below 50 m. It is not known whether drill core was split, and if so how it was split, or whether whole core was analyzed. Core recoveries ranged from over 90 % in un-weathered rock to between 40 to 90 % in fractured rock. Without a detailed study it is difficult to determine the impact of low recovery on the validity of assay results although, in theory, the results could be affected. No core, duplicate samples, coarse rejects or sample pulps from the INCO drilling remain.

8.4.2. TECK PROGRAM

Little is known of the sampling method and approach employed by Teck for their soil and rock sampling programs. Rock samples were collected as part of Teck's property-wide mapping program. Presumably these samples were rock chip samples, rather than channel samples, collected from outcrops of interest around the Property.

Soil samples were collected on a grid as discussed in Section 8.2 of the Report. The grid covered most of the Property. Sampling methodology is not discussed in the Teck report (Shonk, 1994).

Samples from the reverse-circulation program were collected every 2.03 meters (3 per 20" drill rod) for the first 24 holes and every 1.52 meters (5-foot intervals) for holes T-25 through T-50. A duplicate analytical sample was collected every tenth sample. Recovery was not recorded on Teck drill logs. Property owner Luis Gonzáles Barragán (personal communication, 2006) indicated that Teck encountered problems when trying to drill below the water table with reverse-circulation drilling. This may have affected the recovery of drill cuttings and the results. Sample pulps from Teck's reverse-circulation drilling program have been preserved and are in Tepalcatepec.

8.4.3. HECLA PROGRAM

Little is known of the sampling method and approach employed by Hecla. A rock chip sampling program was completed by Hecla but Hecla did not collect soil samples. A total of 885 rock chip samples were collected from road cuts, trenches and the aforementioned grid. In order to collect representative samples from the grid, samples were collected from outcrops within an area of five or ten meters surrounding each samples point.

Samples from reverse-circulation drilling were collected every meter down the hole. A duplicate analytical sample, or a split of the main sample, was collected from every sample interval. These duplicate samples have been preserved and are in Tepalcatepec. Recoveries were not recorded. Property owner Luis Gonzáles Barragán (personal communication, 2006) indicated the Hecla encountered problems when trying to drill below the water table with

reverse-circulation drilling. This may have affected the recovery of drill cuttings and the results. Chip trays containing representative lithological samples for logging purposes are have also been preserved and are in Tepalcatepec.

8.5. SAMPLE PREPARATION, ANALYSIS AND SECURITY

The following section is taken from Priesmeyer, 2007.

8.5.1. INCO PROGRAM

Nothing is known of the sample preparation, analysis and security methods employed by INCO nor is it known whether INCO employed a quality control/quality assurance program.

8.5.2. TECK PROGRAM

Nothing is known of the sample preparation, analysis and security methods employed by Teck nor is it known whether Teck employed a quality control/quality assurance program. Shonk (1994) indicates that all samples from drilling were analyzed for gold and copper at Chemex. The analytical method is unknown but samples were analyzed for multi-element data using ICP, a common technique.

Howe does not know what certification Chemex had in the mid-1990's but current ALS-Chemex laboratories in North America are registered to ISO 9001:2000 for the "provision of assay and geochemical analytical services" by QMI Quality Registrars. In addition to ISO 9001:2000 registration, the ALS-Chemex Vancouver laboratory has received ISO 17025 accreditation from the Standards Council of Canada under CAN-P-1579 "Guidelines for Accreditation of Mineral Analysis Testing Laboratories". CAN-P-1579 is the Amplification and Interpretation of CAN-P-4D "General Requirements for the Accreditation of Calibration and Testing Laboratories" (Standards Council of Canada ISO/IEC 17025).

8.5.3. HECLA PROGRAM

Nothing is known of the sample preparation, analysis and security methods employed by Hecla nor is it known whether Hecla employed a quality control/quality assurance program. All samples were analyzed by Chemex. Gold content was determined by fire assay with an atomic adsorption finish while copper and 30 other elements were determined by ICP.

Howe does not know what certification Chemex had in the mid-1990's but current ALS-Chemex certification is given above.

8.6. HISTORICAL DATA VERIFICATION

Arian undertook a program of historical pulp duplicate re-analysis on available pulp samples to verify historical drill sample assay results. Pulps were available for a number of Teck and Hecla drillholes.

Pulp duplicate assessment shows repeatability of historical Au assay data is reasonable with correlation coefficients of 0.94 and 0.91 for Teck and Hecla samples respectively. Pulp duplicate assessment of Cu values returned equally satisfactory correlation coefficient values of 0.93 and 0.98 respectively.

As part of the Phase 1 diamond drill program Arian also twinned a number of historical drill holes for data verification purposes (Table 6).

Identification of twin holes by Arian was done by reference to historical collar co-ordinates in the historical database.

Arian was unable to locate evidence on the ground to confirm the accurate location of all but one of the INCO drill holes (IN-57002). Lack of evidence for the INCO drilling on the ground suggests co-ordinates for the INCO drilling listed in the historical database are incorrect. Due to the inability to accurately locate and verify the INCO hole data, these have been removed from the data verification assessment and subsequent resource study.

Arian Drill Hole	Original Drill Hole	Comment	
AS-07-001	MHT-2	Hecla drillhole	
AS-07-004	T-24	Teck drillhole	
AS-07-005	MHT-3	Hecla drillhole	
AS-07-006	IN-57002	INCO drillhole - retained	
AS-07-007	T-25	Teck drillhole	
AS-07-008	T-10	Teck drillhole	
AS-07-012	T-9	Teck drillhole	
AS-07-013	T-16	Teck drillhole	
AS-07-014	IN-57020	INCO drillhole - removed	
AS-07-015	T-18	Teck drillhole	
AS-07-016	IN-57015	INCO drillhole - removed	
AS-07-018	MHT-15	Hecla drillhole	
AS-07-019	IN-57017	INCO drillhole - removed	
AS-07-020	IN-57013	INCO drillhole - removed	

TABLE 6. SUMMARY OF ARIAN TWIN DRILL HOLES

A verification study of twin drill hole data conducted by Arian geologists indicated poor correlation between Arian diamond drill hole results and historical Hecla (MHT prefix) RC drill grades. DUPLICATED BELOW IN DETAIL

The 'average' difference for Au was 19 % and 16 % for copper (with maximums of 72 % and 142 % respectively). Due to the fact that the variance is so high and irregular indicate a systematic problem with the sampling techniques employed by Hecla. QA-QC work conducted by Arian, which included samples of pulp material from the Hecla samples has showed that their data to be unreliable. To Arian's knowledge, Hecla didn't have a QA-QC procedure, and therefore it is impossible to know if the problems identified by Arian are a result of poor drilling practices, or by poor sample preparation and analysis of the samples by ALS Chemex. As Arian twinned 6 out of 17 of Hecla's RC holes (or 35 %), Following discussion with Arian, Howe has decided that the historic assay results provided by Hecla are inaccurate and has removed all Hecla assay data from the Tepal database. A review of geology in the Hecla drill-holes does indicate a good correlation with Arian's drill-holes, and this data has been included to aid Arian with their modelling of geology in the North and South Resource areas (M. Booth pers. comm.).

8.7. PREVIOUS HOWE VERIFICATION SAMPLING

During previous studies on the Tepal project by Priesmeyer in 2007, Howe collected a total of eleven samples from the Property (Table 7). All samples were collected under Howe's direct supervision and were placed in appropriately numbered sample bags and sealed at the project site. These samples were sealed in sacks and transported by Howe to the ALS-Chemex sample preparation facility in Guadalajara, Mexico.

The Howe samples were crushed to 75 % passing 2 millimetres followed by the pulverization of a 250 gm split in chromium steel to 85 % passing 75 microns. The gold content of these samples was determined by means of atomic adsorption on a 50 gm sub-sample. Each sample was also analyzed for 32 other elements by inductively coupled plasma preceded by an aqua regia digestion.

Seven rock chip samples were collected from the Property for the purpose of data verification. Due to the fact that samples collected by previous operators were all collected nearly 10 years ago or more, it was difficult to identify sample locations from previous operators. Howe collected five samples from areas in which the metal content was unknown and two from locations that had been previously samples by Arian. For the two locations sampled by both Arian and Howe, Howe's copper values were slightly higher. For one of the samples Howe obtained a significantly higher gold grade and for the other a significantly lower gold grade. The inconsistency probably results from discontinuous chip samples being collected from slightly different areas than the originals. In addition, in Howe's experience it is common to have a high degree of variability in the reproducibility of gold assays. Howe is satisfied that its check samples have confirmed the presence of copper and gold in the selected samples.

There are no known coarse rejects or pulps that remain to be sampled for the purpose of verifying the data from the Hecla drilling, however core duplicates and sample splits from the Hecla drilling programme have been preserved by the property owner in Tepalcatepec. The samples are stored in the original sample bags and for the most part are clearly marked. In some cases, the sample bags are stacked by drill hole and in others they are grouped by hole number and sample number in large sacks. Chip trays are also present and available for review.

Howe selected a further four samples from three drill holes to verify the original drill assays based on electronic files of analytical results from the Hecla drilling (Table 7). Results from all four samples are very close to the original results, with two copper assays from the Howe sampling being higher and two being lower. Three of Howe's samples returned higher gold values that the Hecla results.

On the basis of Howe's data verification sampling, Howe is satisfied that its check samples have confirmed the presence of gold in the selected samples (Priesmeyer, 2007). However the study highlights significant discrepancy in assay grades between original analyses and verification analyses.

Sample Number	Arian Sample Number or Drill Hole	Sample Width/Length (m)	UTM Co o From (r	ordinates or 1 – To n)	Original Copper Value (%)	Howe Copper Value (%)	Original Gold Value (g/t)	Howe Gold Value (g/t)
70258	37902	4.2	2116945	0716547	0.25	0.52	1.24	3.33
70259	NA [*]	4.3	2116992	0716644	NA	0.24	NA	0.97
70260	NA	4.0	2117040	0716624	NA	0.47	NA	1.32
70261	NA	3.0	2117002	0716326	NA	0.11	NA	0.50
70262	NA	3.0	2116994	0716594	NA	0.44	NA	1.17
70263	NA	3.8	2116847	0716695	NA	0.11	NA	0.32
70264	37904	3.0	2115643	0716760	0.04	0.06	0.41	0.13
70265	MHT-12	1.0	33	34	0.99	0.94	0.14	0.17
70266	MHT-3	1.0	39	40	0.85	0.91	3.00	3.37
70267	MHT-12	1.0	6	7	0.34	0.32	0.33	0.40
70268	MHT-6	1.0	109	110	0.18	0.19	0.67	0.66

TABLE 7. HOWE'S PREVIOUS DATA VERIFICATION SAMPLING

9. EXPLORATION BY ARIAN

Exploration by Arian was initiated in April 2007. Exploration to date has consisted of the Tepal Phase 1 diamond drill program.

9.1. ARIAN DRILLING

The Phase 1 diamond drilling (DD) campaign was completed in June 2008, consisting of 42 holes totalling 7,180 metres (Figure 8).

Drilling has been carried out using two Boart Longyear 38 drill rigs owned and operated by GICSA (Geotechnica, Igenieria y Construction, S.A. de C.V.), of Paseos de Taxquena, Mexico, D.F.

The majority of the initial diamond drilling was carried out using HQ sized drill rods (core diameter = 63.5 mm) except where, due to technical problems, the rod size was reduced to NQ (core diameter = 47.6 mm). Drill core is not being oriented for the Phase 1 program.

9.1.1. DRILL HOLE SUMMARY

Summary details of Arian drill hole data for the Tepal project are contained in Table 6 below. Detailed input data listing for estimation are presented in Table 17.

Database Name	Micromine Tepal Drill hole DH Database				
Date Created	February 2008				
Number of		42			
Holes					
Average Hole	150-170	m × 50-100m wi	thin mineralised zones		
Spacing					
DD Hole ID	Depth (m)	Hole	Hole Dip (Collar)		
		Azimuth			
AS-07-001	200.1	045	-45		
AS-07-002	151.45	000	-90		
AS-07-003	101.65	000	-90		
AS-07-004	200.4	000	-90		
AS-07-005	150.9	045	-45		
AS-07-006	200.85	000	-90		
AS-07-007	250.05	000	-90		
AS-07-008	152.75	000	-90		
AS-07-009	150.7	000	-90		
AS-07-010	100.3	000	-90		
AS-07-011	151.3	000	-90		
AS-07-012	60.1	000	-90		
AS-07-012a	165.85	090	-50		
AS-07-013	185.8	090	-50		
AS-07-014	201.65	000	-90		
AS-07-015	180.85	270	-80		
AS-07-016	151.4	000	-90		
AS-07-017	201.4	000	-90		
AS-07-018	75.9	270	-45		
AS-07-019	75.4	000	-90		
AS-07-020	75.35	000	-90		

Database Name	Micromine Tepal Drill hole DH Database				
Date Created	February 2008				
Number of		42			
Holes					
Average Hole	150-170	m × 50-100m wi	thin mineralised zones		
Spacing					
DD Hole ID	Depth (m)	Hole	Hole Dip (Collar)		
		Azimuth			
AS-07-021	101	000	-90		
AS-07-022	150.25	000	-90		
AS-07-023	200.6	000	-90		
AS-07-024	150.35	000	-90		
AS-07-025	161	000	-90		
AS-07-026	250.1	270	-80		
AS-07-027	172.95	090	-80		
AS-07-028	201.1	000	-90		
AS-07-029	201	000	-90		
AS-07-030	151.3	140	-45		
AS-07-031	200.55	090	-50		
AS-07-032	200.1	220	-45		
AS-07-033	240.5	090	-60		
AS-07-034	171.3	000	-90		
AS-07-035	200.5	000	-90		
AS-07-036	250.4	000	-90		
AS-07-037	200.4	090	-70		
AS-07-038	150.1	000	-90		
AS-07-039	220.5	000	-90		
AS-07-40	220.65	270	-50		
AS-07-41	200.65	270	-80		

9.2. SAMPLING METHOD AND APPROACH

Procedures for the Tepal drillhole sampling method and approach are similar to those employed at Arian's San Jose property near Zacatecas, and taken from discussions with Arian staff geologists Mr. M. Booth and Mr. H. Parker and from internal documents 'San Jose – Sampling Methodology and QA/QC.doc' and 'San Jose Exploration by Arian.doc' provided to Howe for review. Arian's QA/QC and sampling methodology and procedures were developed following Howe's recommendations in the previous technical study for the project reported in Priesmeyer, 2007.

HQ drill core is retrieved in approximate 2.4 m runs where possible and 3.05m runs for NQ core. Run length is less where broken ground is encountered.

All drill-core was stored in plastic core boxes (with lids) that were able to hold 3m of core. The plastic core boxes were transported (by Arian personnel) with a large elastic band wrapped around them so to prevent the lids from blowing away when they were being transported (Booth, 2007a).

Drill-core was collected from the drill-rig(s) at the end of each day. The core was transported by Arian to the logging shed for storage, where it was cleaned and marked up (highlighting lithological and structural features), and then it was photographed. The photographs were saved, every day onto a computer at the property.



Figure 8: Location Plan- All Arian Phase 1 Drill Holes and Mineralised Domains.





Figure 9: Location Plan- All Northern Domain Drill Holes.





Figure 10: Hole Location Plan- All Sothern Domain Drill Holes.



Once the core was photographed, it was logged, with geology, recovery, and RQD information noted on the logs and entered into an Access database on a daily basis (Booth, 2007b).

Where applicable, samples were marked on the core box, with a red mark, and the sample number recorded on the logs and inside the core boxes next to the relevant sample point. An aluminium ticket, on which the sample number was written, was also placed into the core box at the relevant position. The sample information was also entered in the access database.

Once a week, the Access databases are saved on the company's network in the Zacatecas office. The network is backed-up monthly on DVD which is stored in a safe location (Booth, 2007b).

9.2.1. GEOLOGICAL CORE LOGGING

Discussion with site personnel and a review of geological logging procedures and log sheets indicates that detailed geological logging was routinely undertaken during drilling.

Observations are recorded on hardcopy graphical logging sheets and capture pertinent geological information for each deposit including lithology, weathering, facies, texture, structure, mineralogy, colour, and grain size as well as presenting a graphic log. Site specific information such as relevant ore types and alteration assemblage characteristics are being recorded. Based upon review of the logs Howe is satisfied the logging is consistent and conducted to a satisfactory standard.

Geological information recorded as hand written sheets is then transferred to Access database on a daily basis, cross checked with the original sheets and validated by the Project Geologist. Basic geotechnical core recovery and RQD information was captured for all drill holes, including weathering state and oxidation boundaries. These are entered on to the hand written sheets and then entered into an Access database.

The geological logs do capture basic geotechnical and structural information but discussion indicates that the core is not orientated and as such the orientations of potentially important fault and fracture sets remain unknown. No core orientation line referenced structural measurements have been taken. Verification of recorded RQD measurements has not been undertaken by Howe.

9.3. SURVEY

Topographical survey data was acquired in February 2007 from PhotoSat of Vancouver, Canada, taken from IKONOS satellite images dated February 15 2007, and is accurate to 2 metres.

Digital scaled contour topographic maps were produced from this data for the Tepal property. These were subsequently used to generate topographical DTMs in Micromine for use in resource modelling.

Diamond drill holes were positioned using hand held GPS (UTM NAD83), providing +/- 5m accuracy. Once a drill-hole was completed, it was surveyed again with a hand-held GPS (UTM NAD83). The collar was capped and marked with a concrete monument that displayed the drill-hole name, azimuth, angle of dip and length. It is planned to survey drill holes by total station on completion of the Phase 1 program.

Drill hole surveys were routinely taken every 50 m down the hole using a Reflex instrument. Downhole survey results are provided by the drilling company in digital format. Drillhole survey measurements taken by this method can be considered reliable.

9.3.1. CORE RECOVERY

At Tepal, 4,375 recovery measurements have been taken for the "Phase 1" Arian drill core. The average recovery value for all drillhole intervals is 96 % and interval recovery values range from 0 % to 200 % recovery (See PLOT 1).

32 spurious recovery readings of greater than 100 % (inc. 1 reading of 200 % recovery) occur within the database and require follow up. These discrepancies were found to be input errors: these were corrected and the core recovery database file was reviewed and validated prior to the resource estimation update.

975 core recovery measurements occur within the Tepal North mineralised domain. The mean core recovery within the mineralised zones is 93 % with a range of 24 % to 171 %. With spurious values excluded to remove bias from these error values, recovery remains at 93 % which Howe considers satisfactory.

620 core recovery measurements occur within the Tepal South mineralised domain. The mean core recovery within the mineralised zones is 96 % with a range of 24 % to 200 %. Again spurious results require follow up. With spurious values excluded to remove bias from these error values, recovery remains at 95 % which Howe considers satisfactory.

The core recovery through the mineralised zones is considered acceptable so as to be confident that core samples, and the assay values derived from them are representative of the material drilled and suitable for inclusion in resource estimation studies.



PLOT 1. ARIAN PHASE 1 CORE RECOVERY DATA

Core recovery should continue to be monitored as part of the proposed Phase 2 drilling campaign to ensure acceptable levels of core recovery are maintained, particularly through the mineralised zones.

Core recovery and RQD data for each mineralised zone is presented in Appendix 1.

9.3.1. SPECIFIC GRAVITY

During 2007, a total of 19 samples of core were collected from 13 DD drill holes at the Tepal property to facilitate specific gravity determination for use in the resource estimate and future mine planning. A review of samples taken, indicate a reasonable spatial distribution, variety of ore and litho types and oxidation zones from the North and South Tepal mineralised zones. Specific gravity determination for each sample was performed by ALS Chemex, Vancouver, BC. Specific gravity readings were calculated by gravimetric methods whereby two techniques are employed depending upon the material type.

- For a bulk sample the rock or core section (up to 6 kg) is weighed dry or is covered in a paraffin wax coat and weighed. The sample is then weighed while it is suspended in water and SG determined by measuring the volumetric displacement of the rock in water and dividing the weight of rock by the volume.
- For a pulverized sample (3.0 g) is weighed into an empty pyncometer. The pyncometer is filled with a solvent (either methanol or acetone) and then weighed. From the weight of the sample and the weight of the solvent displaced by the sample, the specific gravity is calculated by the weight of sample divided by the weight of solvent displaced multiplied by the SG of solvent.

Specific gravity data is tabulated for Tepal core in Table 9. Weighted average bulk density values were calculated for fresh (sulphide) and weathered (oxide) material types for use in the resource tonnage estimations. Bulk densities for transitional zone (mixed) were determined as an average of fresh and weathered. Details pertaining to bulk density determination are contained in Appendix 2.

Rock Type	Oxidation	No of samples	DD Drill Holes	Average Specific Gravity
Andesite	Oxide	2	AS-07-011	2.745
Andesite Dyke	Oxide	2	AS-07-011	2.695
Rhyolite Tuff	Fresh	2	AS-07-011	2.805
Quartz Vein	Oxide	1	AS-07-011	2.800
Tonalite (North	Oxide	3	AS-07-008,010,012	2.783
Zone)	Fresh	3	AS-07-006,012A,019	2.827
Tonalite (North	Oxide	3	AS-07-007,009,022	2.807
Zone)	Fresh	3	AS-07-001,005,017	2.727

¹ Weighted average value

TABLE 9. TEPAL BULK DENSITY DATA

Domain	Weighted S.G. Value
All	2.74
Tepal North	2.81
Tepal South	2.74

TABLE 10. DOMAIN BULK DENSITIES

9.4. SAMPLING PREPARATION, ANALYSIS AND SECURITY

Samples have been prepared in accordance with NI 43-101 requirements and similar to those employed at Arian's San Jose property. In January 2007, Mr. S. Priesmeyer of ACA Howe reviewed Arian's sampling and QA/QC procedures and recommended a number of modifications that were implemented for the exploration programs.

Arian geologists typically use 2 metre sample intervals within the mineralised zones apart from where broken ground and/or specific geological conditions determine otherwise.

Sampling intervals ranged from 0.25m to 5.95m (which represents an inter zone waste composite sample), with most intervals in the 1.5 to 2m range.

Core is transported from site to the processing facility, housed in the grounds of the house that the company currently occupies in Tepalcatapec, 15kms northeast of the Tepal Project. In the warehouse, the areas of core that had been marked for sampling were cut in half using a diamond-bladed core-saw. One half of the core was replaced into the core-box, and the other half was bagged. Inside the bags were placed sample tickets (with a unique sample ID), and the same sample number was written the same number. The bag was then sealed on site. After the core has been logged and photographed, all information was entered into an Access Database (Booth, 2007b).

The samples (in groups of 10 samples) are placed inside nylon rice-bags and sealed with a cable-tie to prevent access (Booth, 2007b).

Details of sample type for the Tepal drilling are contained in Table 10 below;

Prospect	Sample Type	Number of Samples	Sample Length
Topol	HQ (NQ)	3 537	Non-uniform
repar	half core	5,552	(commonly 2 m)*

* Sample lengths vary between 0.25m and 5.95m, constrained to mineralised and/or geological and geotechnical boundaries.

TABLE 11. TEPAL SAMPLE TYPES

9.4.1. PREVIOUS ANALYTICAL TECHNIQUES

Following QA/QC issues identified in the April 2008 ACA Howe International Tepal Resource Estimation Study, the initial sample Assay methodology was changed as copper CRMs assayed at Inspectorate using the 3 acid digestion and ICP finish method returned results that were generally erratic and higher than expected.

To remedy this, a full review of Inspectorate analytical techniques was undertaken. It was recognised through this study that sample preparation for the 3 acid digestion and ICP finish method was inadequate. Based on these findings it was agreed that re-analysis for copper and gold for all Phase 1 holes must be undertaken, using the more reliable method of Aqua Regia digest with Atomic Adsorption finish.

Once re-analysis was complete the CRM and duplicate results were greatly improved for gold and are presented in the April 2008 report. It was found that the gold re-assay results undertaken at Inspectorate were sufficient to be, on the whole, suitable for confident use in resource estimation.

Copper control results remained poor and it was agreed that all Phase 1 assays would have to be reanalysed by ALS Chemex laboratories Canada. To ensure an adequate level of confidence in assay results for use in resource estimation the majority of samples beyond Sample 143422, hole AS-07-023, were sent to ALS Chemex for gold and copper analysis in place of Inspectorate Labs. The sampling preparation methods and the final methods of analysis employed by each lab are presented in the following sections.

9.4.2. SAMPLE PREPARATION

9.4.2.1. Inspectorate Labs

Initially samples sent to Inspectorate Labs for analysis, were collected from Arian's warehouse on a fortnightly basis by Inspectorate, who transported the samples to their preparation facility in Durango, Durango, Mexico.

The entire half-core is crushed to 75 % passing 2 millimetres followed by the pulverization of a 150gm split in chromium steel crusher to 85 % passing 75 microns. The pulp samples are then air freighted to Inspectorate's analytical laboratories in Reno, Nevada, for analysis.

9.4.2.2. ALS Chemex

Samples analysed by ALS Chemex were collected from Arian's warehouse and transported the samples to the sent to ALS Chemex's sample preparation facility in Guadalajara, Mexico.

Once the sample is received by ALS Chemex the entire half-core is crushed and pulverized to 85 % passing 75 micron mesh. The pulp samples are then air freighted to the ALS Chemex analytical laboratories in Vancouver, Canada, for analysis.

At no time after the sample bags are sealed, are the samples handled by Arian personnel or contractors working for Arian.

9.4.3. SAMPLE ANALYSIS

A summary of samples analysed and methodologies used is contained in the following table;

Analyte	Sample Range	Lab	# of	Assaying	Limits of
			Samples	Methodology	Detection*
Au	142001-143419, 145501-	Inspectorate	1,700	<3ppm: Aqua Regia	LLD:<0.005 ppm
	146000			digest with AAS finish.	ULD:>10 ppm
				>3ppm: Fire Assay	LLD:<0.005 ppm
				with Gravimetric	ULD:>100 ppm
-		~	1.0.00	finish.	
	143420-145500, 212251-	Chemex	1,829	<3ppm: Aqua Regia	LLD:<0.005 ppm
	217350			digest with AAS finish.	ULD:>10 ppm
					LLD:<0.005 ppm
				>3ppm: Fire Assay	ULD:>100 ppm
				with Gravimetric	
				finish.	
Cu	142441-142445, 142465-	Inspectorate	142	Aqua Regia digest with	LLD:<0.2 ppm
	142473, 142480-142485,			AAS finish.	ULD >10000 ppm
	143032-143050,				
	143306-143335, 143344-				
	143419				
	142001-142440, 142447-	Chemex	3,342	<10,000: 3 Acid	LLD:<0.2 ppm
	142464, 142474-142479,			digestion with ICP	ULD:>10,000 ppm
	142487-143031, 143051-				
	143304, 143336-			>10,000: Aqua Regia	LLD:<0.01 %
	143342,143420-144350,			Digest with AAS	ULD >3 %
	144401-146000, 212251-				
	217350,				

*LLD: Lower Limit of Detection. ULD: Upper Limit of Detection.

TABLE 12. TEPAL SAMPLE ANALYSES

Details pertaining to lab preparation, assay techniques and reporting for Inspectorate and ALS Chemex labs are presented in Appendix 3.

Results are received from the labs via email and hardcopy certificate. For each laboratory used, the sample dispatch routines, security, preparation and analysis are considered consistent with satisfactory working practices for this type of deposit and type of exploration work.

9.4.3.1. Inspectorate Labs

Samples were assayed for gold by Aqua Regia digest with AAS finish in a 30 g sample. High grade gold (>3 ppm) samples were re-analyzed using fire assay with a gravimetric finish. Copper was analyzed using an Aqua Regia digestion and an AAS finish.

9.4.3.2. ALS Chemex

Samples were assayed for gold by Aqua Regia digest with AAS finish in a 30 g sample. High grade gold (>3 ppm) samples were re-analyzed using fire assay with a gravimetric finish. The majority of copper assays were undertaken at ALS Chemex using a 3 Acid digestion with ICP finish. High grade (>10,000 ppm) copper samples were re analysed using an Aqua Regia Digest with AAS finish.

10. DATA VERIFICATION

During the recent Howe site visit, the author selected 25 representative pulp samples from the Phase 1 drilling which were to be submitted to ALS Chemex Laboratories for check assay. At the time of reporting these assay results are pending. Although Howe has been unable to verify drill hole samples grades from the Phase 1 drilling via verification sample assays, Howe have reviewed raw and certified QA/QC data and verified sample grades returned from the laboratory.

10.1. QA/QC

A quality assurance and quality control program was implemented during the 2007 and 2008 drilling campaign at Tepal, in an attempt to provide adequate confidence that sample and assay data could be used in resource estimation. Procedural documentation pertaining to sample collection, field preparation, sample dispatch, assay lab sample preparation, sample analysis and collation of assay results was presented and reviewed prior to resource estimation.

An assessment of QA/QC samples submitted to Inspectorate laboratories was completed in the report 2008 ACA Howe International Resource Estimation Study on the Tepal, Gold-Copper Prospect, Michoacán, Mexico. Inspectorate gold results were sufficient to be, on the whole, confident in assay precision and accuracy. This QA/QC report will seek to assess ALS Chemex assays completed since that report, and the copper re-assays.

The review of sampling and assaying procedures indicates that an adequate system is in place to maximise the quality of drill hole samples and to assess the reliability, accuracy and precision of subsequent assay data for use in resource estimation.

The QA/QC program consisted of;

- The inclusion of Certified Reference Material standards (CRM's) in sample batches sent to both Inspectorate and Chemex laboratories, to assess analytical accuracy. (4 per 100 samples).
- The inclusion of field blanks and pulp blanks to assess laboratory sample preparation and analytical accuracy (3 per 100 samples).
- The inclusion of field duplicates and externally assayed pulp duplicates to asses sample preparation and precision (3 per 100 samples).

Details of the QA/QC program are contained in the table below;

QA/QC Sample/Assay Type	# of Samples	% of total samples*	Ratio
Standard Samples	60	2%	1:60
Field Blank Samples	33	1%	1:107
Pulp Blank Samples	33	1%	1:107
Coarse Reject Duplicates	35	1%	1:104
Pulp Duplicates	34	1%	1:101

*Total number of samples submitted = 3532

TABLE 13. ASSAY QA/QC DETAILS

Approximately 6 % of all samples submitted to the laboratory were quality control samples. QA/QC data is contained in Appendix 4 along with basic statistics.

10.1.1. BLANKS

Field blanks were prepared from samples of un-mineralised Tonalite taken from a quarry near Arian's San Jose property and submitted along with the core samples. All Pulp Blanks were prepared from the un-mineralised Tonalite at the Inspectorate Laboratories sample preparation facility.

Blanks were typically inserted at the end of an expected high grade run, after vein intersections that contained significant sulphides. Blanks will monitor the calibration of analytical equipment and potential sample contamination during sample handling and preparation. Blanks were inserted with core samples at a ratio of 1:54 and totalled 2 % of all samples. A total of 144 Blanks were submitted including 33 Field Blanks and 33 Pulp Blanks.

Gold grades in Field Blanks submitted to ALS Chemex showed that only 3 results returned values marginally greater than the lower limit of detection 0.5ppm Au and were well within tolerance limits, returning values of up to 0.009 ppm Au. Copper grades in Field Blanks were on the whole acceptable with 67 % returning values below 1 standard deviation of 0.00 2 % Cu based on all samples. There are two outliers of 0.007 % and 0.008 % however these are considered insignificant and within tolerance limits.

As part of the Phase 1 quality control sample resubmission 33 pulp blanks, prepared by Inspectorate, were submitted for reanalysis. Gold grades for Pulp Blanks show that 67 % of returned grades are below the limit of detection. Of the remaining samples 8 returned values greater than 0.01 ppm Au, including one outlier, sample 145521 at 0.08 ppm Au. Copper values were much more variable with only 52 % returning values below 1 standard deviation of 0.007 % Cu based on all samples, with the majority of samples returning grades of 0.009 % Cu. There is one outlier, again sample 145521, which returned a grade of 0.04 % which is considered beyond acceptable limits.

On the whole the results of Blank Sample Analysis are acceptable; however there are some anomalous assays for both field and pulp Blanks. Field Blanks are acceptable indicating that is no significant contamination issues in field sample preparation. Pulp samples demonstrate limited but significant values over acceptable limits for gold and copper, indicating a potential error in the numbering of sample 145521 or contamination during sample preparation. This anomalous value should be investigated.

10.1.2. STANDARD SAMPLES

Certified Reference Material samples were prepared from mineral matrices that contain Gold and Copper values similar to the grade of the Tepal deposit, which are uniformly distributed throughout the pulverized rock. Standard statistical techniques are used to assign a recommended assay value with associated 95 % confidence interval (see Table 14). CRM's were prepared by WCM Minerals, Burnaby, British Columbia and Rock Labs, New Zealand.

CRM samples were routinely submitted for assaying with core at a ratio of up to 1:60, totalling 2% of all samples. Three CRM samples were used CU139, to assess lower grades, CU150 and OX14 for higher grades. A total of 60 CRM check samples were undertaken to check lab accuracy. Error plots for each CRM for gold and copper are presented in the following pages.

CRM ID	Recommended Values		Standard Deviation		No of CRM's submitted
	Au ppm	Cu %	Au ppm	Cu %	
CU139	0.550	0.430	0.031	0.007	34
CU150	0.790	0.590	0.033	0.012	11
Ox14	1.220	NA	0.057	NA	15

TABLE 14. TEPAL CRM ASSESSMENT LIST



PLOT 2. CONTROL PLOT FOR CRM CU150 - GOLD



PLOT 3. CONTROL PLOT FOR CRM CU150 - GOLD



PLOT 4. CONTROL PLOT FOR CRM OX14 - GOLD



PLOT 5. CONTROL PLOT FOR CRM CU139 - COPPER



PLOT 6. CONTROL PLOT FOR CRM CU150 - COPPER

The error plots for gold CRM assays show that 96.4 % are within \pm 2SD of the expected value. All samples fall within \pm 10% of the expected grade aside from CRM CU150 sample 144892 assayed at 0.900 ppm, 13.924 % higher than the expected CRM value of 0.790 g/t.

For copper 77.3 % of samples were within +/- 2SD of the expected CRM grade. All samples were within +/-10 % excluding CRM CU139 sample 142897 which returned an assay of 0.384 % Cu, 10.7% lower than the CRM expected value of 0.430 %.

In general, submitted standard samples showed good repeatability for both copper and gold at both low and high grades. There are only few significant outliers, however those identified should be investigated. Gold results for CRM CU139 are over reported by a mean value of 7.5 % however on the whole there appears to be no evidence of a strong systematic bias to either over or under reporting for either copper or gold, with results being generally well distributed around the expected grade.

It should be noted that the sample number on the (x) axis of the control plots also represent a time axis and analysis of the control plots suggests some analytical drift, resulting in cyclic peaks and troughs. This is acceptable given that the majority of assays fall within acceptable limits, but erroneous outliers may be caused by re-calibration of analytical equipment.

The use of only one medium and one higher grade CRM type limits this assessment to one specific grade range for each analyte. It is highly recommended that a broader range of CRM's are used for any further work to identify bias in analysis, particularly for lower grade ranges for gold. It is also considered that an insufficient number of CRM samples have been taken to ensure a reliable determination of analytical bias. It is recommended that a minimum of 2% CRM samples are inserted for any further work.

10.1.3. DUPLICATES

69 Duplicate samples were re-analysed and compared, accounting for 2 % of all samples. Duplicates were either obtained from a Coarse Reject sample comprising a 1kg or 25 % split taken from a randomly selected coarse reject sample that had been returned from Inspectorate or from a Pulp Reject sample comprising a 100 gram sample taken from a randomly selected pulp reject sample that had been returned from Inspectorate after analysis.

There is a good correlation for pulp and coarse reject duplicates for gold, indicated by the correlation coefficients of 0.9319 and 0.9717 respectively. There is good level of precision between original assays and duplicate assays. 44 % of gold duplicate assays were within +/-10% of the original assay value.

A lesser level of precision between original and duplicate assays is shown for copper analysis. There appears to be some significant overestimating of coarse duplicates particularly at higher grades with one anomaly indicating a 102 % difference in copper grade. The sample has been flagged for reassessment. Correlation coefficients of 0.8112 and 0.867 indicate a reasonable level of precision.



PLOT 7. INSPECTORATE COARSE AND PULP DUPLICATES - GOLD



PLOT 8. ALS CHEMEX COARSE AND PULP DUPLICATES - COPPER

Duplicate analysis shows a good level of precision for both gold and copper. However it is noted that there have been no field duplicates submitted for reanalysis during the analysis of holes beyond borehole AS-07-23. For future drilling operations it is essential that duplicates are continuously submitted throughout the drilling campaign. It is recommended that a minimum of 2 % of samples should be duplicates.

10.1.4. QA/QC CONCLUSIONS

On the whole, it is considered that QA/QC results do not demonstrate a systematic sample bias. Results of this work indicate that the analytical techniques employed by Inspectorate and Chemex are generally reliable in producing assay data that demonstrates a good level of accuracy and precision. However the occurrence of significant errors in a limited number blank samples show that there has been a potential miss-numbering or contamination of samples. CRM and duplicate analysis indicate that there is no significant bias to over or underreporting of assay results, although the presence of some erratic results indicates that there has been a limited potential for inaccuracies, this must be investigated.

The use of only three CRM types limits the assessment of bias in analysis. It is considered that a greater number of CRM samples and blanks should be submitted in any future work to ensure a more robust determination of analytical bias. It is recommended that CRM and blank samples are inserted at a minimum ratio of 1:40, concurrent with industry best practice.

Assay results from drilling and sampling programs implemented during 2006-2007 may be regarded as representative of the samples collected. Raw QA/QC data from the Phase 1 drilling program is contained in Appendix 4.

10.1.5. ANALYTICAL LABORATORIES

Inspectorate Laboratories are accredited to relevant national and international standards and ISO 9001:2000 registration ISO 17025 quality assurance accreditation.

ALS Chemex laboratories in North America are registered to ISO 9001:2000 for the "provision of assay and geochemical analytical services" by QMI Quality Registrars. In addition to ISO 9001:2000 registration, ALS Chemex's North Vancouver laboratory has received ISO 17025 accreditation from the Standards Council of Canada under CAN-P-1579 "Guidelines for Accreditation of Mineral Analysis Testing Laboratories". CAN-P-1579 is the Amplification and Interpretation of CAN-P-4D "General Requirements for the Accreditation of Calibration and Testing Laboratories" (Standards Council of Canada ISO/IEC 17025).

Laboratory Accreditation Certificates are presented as part of Appendix 3.

11. ADJACENT PROPERTIES

There are no adjacent properties of interest.

12. MINERAL PROCESSING AND METALLURGICAL TESTING

Howe is not aware of any recent metallurgical test work having been completed by Arian.

The following historical information is taken from Priesmeyer, 2007.

12.1. INCO METALLURGICAL TESTING

INCO conducted flotation and grinding tests on one composite sample from 0 to 88 m of drill hole 57002 in the North Zone (von Cruyningen and Thorndyke, 1973). The sample averaged 0.43 % Cu, 1.3 g/t Au and 1.25 g/t Ag.

INCO determined that Tepal mineralisation consists chiefly of fine-grained disseminated pyrite, chalcopyrite, chalcocite, covellite, copper oxide, and malachite. The sulphide particles measure less than one micron up to several hundred microns in diameter. The average particle size is 30-40 microns. The copper oxides occur in particles measuring from one micron to 20 microns. Gold was observed as micron sized inclusions in chalcopyrite, and may also occur in pyrite or as free gold (von Cruyningen and Thorndyke, 1973).

Grinding tests were carried out to evaluate copper liberation and assess the distribution of values over the size fractions. A mineralogical examination revealed that grinding to minus 325-mesh would be required to achieve sulphide liberation.

The copper minerals, gold and silver responded well to flotation with xanthate at pH - 11. In the locked cycle flotation test, 75% of the copper was recovered after rougher flotation followed by three cleaning stages. The gold recovery was approximately 76%. The silver and molybdenum assays of the concentrate were 39 ppm Ag and 260 ppm Mo. Most of the copper minerals present in the tailings were copper oxides (von Cruyningen and Thorndyke, 1973).

12.2. TECK METALLURGICAL TESTING

In early to mid-1993 Lakefield Research conducted cyanide soluble gold and dilute sulphuric acid soluble copper studies on six samples of outcropping oxidized mineralisation for Teck. Lakefield's tests indicated that cyanide leaching of oxidized ore recovered 95% of the gold but only 5%. Dilute sulphuric acid leaching recovered 63% of the copper in seven days (Elliot and Ackerman, 1993).

Acid soluble copper analyses conducted on the first 11 drill holes indicated recoveries of 50 % to 80 % in the oxide zone, 30 % to 50 % in a probable supergene enriched, possibly mixed oxide/or and sulphide zone at the base of the oxidized zone, and recoveries of 5 % to 10 % in hypogene sulphide material. The tests were subsequently suspended because of the dominance of sulphide ore with poor acid leaching characteristics (Shonk, 1994).

In late 1993 Chemex conducted head assays and simple bottle roll cyanide leach tests of eight composited samples of high-grade sulphide mineralisation including representative composites from both supergene enriched/mixed sulphide-oxide and primary sulphide mineralisation. The samples were ground to -10-mesh. Gold recoveries ranged from 5 % to 4 0% with the worst recoveries in the supergene enriched material (Shonk, 1994).

In early 1994 Lakefield Research conducted cyanide extraction and flotation testing of one high-grade composited sulphide material from drill hole T-24 on Teck's behalf. The tests were performed on drill cuttings ground to 80 % -200-mesh. Tests showed bottle roll cyanide leach recovery of 86 % for gold and 8 % for copper in 48 hours. Flotation tests showed excellent recoveries of both Au and Cu with 89.9 % recovery for Cu and 79 % for gold in a concentrate of 3.4 % of the weight. The concentrate grade was 13.9 % copper and 40.9 g/t Au. Ag and Mo grades and recoveries were not determined though Chemex analyzed a split of the sample for 32 elements using ICP analytical techniques (Shonk, 1994).

13. HISTORICAL MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

To the best of Howe's knowledge historical NI43-101 estimates do not exist for the property. Previous explorers did undertake a number of non-CIM compliant resource estimations for the property. (A note of caution NI-2A was the 43-101 precursor and could be acceptable).

The following sections are taken from Priesmeyer (2007).

13.1. INCO HISTORICAL RESOURCE ESTIMATE

In 1974, INCO completed a resource estimate for the Property. This resource is not NI 43-101-compliant, primarily since it does not use resource categories as defined in the CIM Definition Standards on Mineral Resources and Reserves (Canadian Institute of Mining, Metallurgy and Petroleum, 2004) and is therefore reported as an historic resource. This resource should not be treated as a current resource as defined in Section 1.2 of NI 43-101 and should not be relied upon as such. Furthermore, INCO did not define resource categories as required by NI 43-101 but rather estimated a global resource, which is not acceptable under NI 43-101.

Of the thirteen diamond drill holes drilled in and around the Tepal gossan, seven were used in the INCO resource estimate (Table 15). These holes defined a northwest-trending zone approximately 500 m long and 250 m wide.

INCO estimated the Tepal resource using polygonal methods. The outer limit of the mineralisation was drawn using the limit of the copper soil anomaly and drilling results. Polygon volumes were calculated assuming no topographic relief (Copper Cliff, 1974). Although the topographic relief is not great, integrating topographic relief into the estimate would likely have reduced the volume of the blocks to some degree.

DD HOLE NUMBER	THICKNESS OF MINERALISED INTERVAL (m)	Cu Grade (%)	Au Grade (g/t)
57001	60.2	0.21	0.14
57002	180.0	0.35	0.80
57005	20.4	0.41	0.53
57015	112.0	0.385	0.83
57017	50.0	0.25	0.70
57019	57.5	0.32	0.20
57020	131.0	0.29	0.54

TABLE 15. DDH INTERCEPTS USED IN INCO ESTIMATES

INCO estimated a resource of 27 Mt averaging 0.33 % Cu and 0.65 g/t Au. INCO stressed that more drilling was required to further define the width of the mineralised zone.

INCO observed that mineralised sections are confined to the upper parts of each drill hole (apparently this is not a supergene effect but rather primary sulphide mineralisation) creating a low stripping ratio with the bottom of the deepest intersection used in their estimate occurring only 180 m below the surface or 115 m below the adjacent valley.

INCO concluded that "in spite of an economic grade, lack of waste stripping and simple open pit mining, the low tonnage will probably render this deposit to be uneconomic to mine". However INCO also indicated that deep mineralised intersections warranted further drilling on 100 m centres to test the depth potential and potentially increase the tonnage of the resource (Copper Cliff, 1974).

13.2. TECK HISTORICAL RESOURCE ESTIMATE

In 1994, Teck completed a resource estimate for the Property. This resource is not NI 43-101-compliant, primarily since it does not use resource categories as defined in the CIM Definition Standards on Mineral Resources and Reserves (Canadian Institute of Mining, Metallurgy and Petroleum, 2004) and is therefore reported as an historic resource. This resource should not be treated as a current resource as defined in Section 1.2 of NI 43-101 and should not be relied upon as such.

The resource estimate is a polygonal block estimate based on the manual definition of polygonal blocks on computer drafted drill sections using manual composited intercept intervals. Intercept intervals were based on combined Au and Cu values calculated to a dollar value equivalent using Au at \$375/oz and Cu at \$0.80/lb. Two cut-off values, > \$4/ton and = \$8/ton over a minimum of 6.0 m were used. These values were chosen as approximations of internal and external waste cut-offs respectively, although no pit design assumptions were incorporated into the resource calculation. Composite intervals were chosen to isolate intervals with a = \$8/ton and to maximize the intercept grade and intercept interval while contained intervals of less than cut-off grade were required to be less than 6 m.

Drill sections were constructed at intervals ranging from 100 m to 75 m. Polygonal blocks enclosing dollar values of = \$4 and < \$8 and = \$8 were interpreted from the composited intercepts on each section. For the drill indicated category, intercept intervals were projected

along section halfway to the next hole or 50 m whichever was less. The drill inferred category includes interpreted mineralised blocks between two drill holes more than 100 m and less than 200 m apart in situations where continuity is apparent and geologically likely. The projected/geologically inferred/possible category includes blocks projected from the section to the north and/or south where available information on the section indicates mineralisation is permissively present. Emphasis was placed on holes closest to the projection distance boundary for the section. Area, volume, and tonnage were calculated for each digitized polygonal block using a specific gravity of 2.6 g/cm³. The grade for the block was the average of all drill hole assays within the block. Grades of drill inferred blocks are averages of grades of the laterally adjacent blocks.

Results of the resource calculations are summarized in Table 13. The total for all categories is 78.82 million tonnes grading 0.48 g/t Au and 0.249 % Cu with drill indicated resources totalling 55.84 million tonnes grading 0.514 g/t Au and 0.261 % Cu. Of the 55.84 million tonnes drill indicated resource, 24.28 Mt averaging 0.545 g/t Au and 0.251 % Cu are in the South Zone and 31.56 Mt averaging 0.489 g/t Au and 0.269 % Cu are in the North Zone. It should be noted that the resource categories defined by Teck were drill indicated, drill inferred and projected which are broadly correlative with, but not the same as, measured, indicated and inferred resource categories as defined in CIM Definition Standards on Mineral Resources and Reserves (Canadian Institute of Mining, Metallurgy and Petroleum, 2004).

ZONE	CATEGORY	TONNES (000)	Au (g/t)	Cu (%)	
South	Drill Indicated	24,275	0.546	0.251	
	Drill Inferred 1,911 (0.575	0.219	
	Projected 4,366		0.430	0.209	
Sub-total		30,552	0.532	0.242	
North	Drill Indicated	31,566	0.489	0.269	
	Drill Inferred	1,871	0.468	0.212	
	Projected	14,833	0.377	0.224	
Sub-total		48,270	0.456	0.254	
South and North	Drill Indicated	55,841	0.514	0.261	
	Drill Inferred	3,782	0.522	0.216	
	Projected	19,199	0.389	0.220	
TOTAL		78,822	0.484	0.249	

TABLE 16. SUMMARY	OF HISTORIC	TECK ESTIMATES
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Table 16 summarizes the estimate for oxide, mixed oxide/sulphide, and sulphide resources (all categories combined) for North and South Zones. The oxide resource totals 14.40 Mt averaging 0.414 g/t Au and 0.247 % Cu. Most of the oxide ore is in the North Zone. Sulphide ore has the highest average Au grade while mixed oxide/sulphide ore has the highest Cu grade, possibly due to local zones of supergene enrichment since drill logs locally noted the presence of chalcocite within mixed oxide/sulphide intercepts.

No work such as variogram analysis was conducted to define the area of influence of the drill holes. Shonk (1994) concluded that additional drilling on more closely spaced centres was required to upgrade the resource.

13.3. HECLA HISTORICAL RESOURCE ESTIMATE

In 1997, Hecla completed a resource estimate for the Property. This resource is also not NI 43-101-compliant, primarily since it does not use resource categories as defined in the CIM Definition Standards on Mineral Resources and Reserves (Canadian Institute of Mining, Metallurgy and Petroleum, 2004) and is therefore reported as an historic resource. This resource should not be treated as a current resource as defined in Sections 1.2 of NI 43-101 and should not be relied upon as such.

The resource estimate is a polygonal block estimate based on manual definition of polygonal blocks on computer drafted drill sections using manual composited intercept intervals. Drill sections were constructed at intervals ranging from 50 m to 90 m. Cut-off grades of 0.5 g/t Au and 0.30 % Cu were used in the estimate although there is no resource for copper in the Hecla material in Arian's possession. Hecla used a specific gravity of 2.2 g/cm³, which is substantially lower than the 2.6 g/cm³ used by INCO and Teck.

The results of the resource calculation for the North and South zones are presented in Table 14 below. The total resource for oxide and sulphide material is 9.063 Mt averaging 0.90 g/t Au containing 262,359 ounces of gold.

In addition to the resource for the North and South Zones, Hecla estimated a combined resource for the East and West Zones of 5.055 Mt averaging 0.36 g/t gold containing 58,512 ounces of gold.

13.4. HOWE MINERAL RESOURCE ESTIMATES (APRIL 2008)

In April 2008, Howe were employed by Arian to complete an initial independent CIM compliant resource estimate for the project which is detailed in the Howe report of April 25th 2008 and filed on SEDAR pursuant to NI 43-101, and to which the reader is referred for details relating to the resource study.

Micromine software was used to generate a wireframe restricted, linear block model resource estimate of contained gold and copper over the project using the inverse distance weighting method of grade interpolation, raised to the third power (IDW³).

For the defined and modelled +0.18 g/t Au mineralised zones at Tepal, total inferred resources at a zero cut off are estimated at 78.8Mt @ 0.47g/t Au and 0.24 % Cu for approximately 1.18Moz Au and 421.5Mlbs Cu.

There are no Mineral Reserves reported for the project.

14. HOWE MINERAL RESOURCE UPDATE (SEPTEMBER 2008)

14.1. DATA SUMMARY

Raw data incorporated in to this resource update study consists of all diamond drilling data from the recently completed Phase 1 program, collected by Arian during 2007 and 2008, Teck historical diamond drill data, Hecla drill geology data, and data from one INCO drill hole. Arian have also collected weathering data and interpreted geological wireframe solids for the Tepal porphyry system delineated by drilling. This data has been forwarded to Howe, reviewed and modified where appropriate and used in the resource update study.

Howe has reviewed and discussed the sample collection methodologies adopted by Arian and are satisfied that data collection methodologies are of a satisfactory standard.

A review of findings pertaining to input data are presented in the report sections below and issues regarding the suitability of this data for inclusion in current and future resource estimates discussed in the Interpretation, Conclusions and Recommendations section of this report.

14.2. DATA VALIDATION

Drill hole collar, assay, survey, geology, recovery and weathering data were presented as Micromine .dat data files. This file data was checked and imported into Micromine software and interrogated via Micromine validation functions prior to constructing a Micromine drill hole database for the deposit. Key fields within these critical drill hole database data files was validated for potential numeric and alpha-numeric errors. Data validation cross referencing Collar, Survey, assay and geology files was performed in Micromine to confirm drill hole depths, inconsistent or missing sample/logging intervals and survey data.

No fatal errors were detected during data validation. Errors contained within the Assay, Geology, and Geotechnical files submitted to ACA Howe were limited and resolved prior to use in resource estimation. Any missing intervals were accounted for by the selective sampling methodology adopted for the sampling of drillholes.

14.3. INPUT DATA

Data selected for use in resource estimation is contained in the drill hole database Tepal Micromine Drill Hole Database using the data generated as part of the Tepal "Phase 1" exploration program. Input data for estimation are outlined in the Table 17.

MM Data Type	No of	No of	Arian	Arian	Teck	Teck	Inco	Inco	Comment
	Records	Holes	Holes	Records	Holes	Records	Holes	Records	
MM Database									
DH Collar	92	92	42	42	49	49	1	1	
DH Geology	3,577	70	42	578	49	632	1	202	
DH Assay	8,229	92	42	3532	49	4505	1	192	
DH Survey	249	70	42	202	49	49	1	1	
DH Recovery	4,375	42	42	4375	0	0	0	0	No Geotechnical Data for Teck and Inco
Specific Gravity	19	13	13	19	0	0	0	0	No Specific Gravity Data for Teck and Inco
Weathering	174	87	38	76	49	98	0	0	Weathering boundary point data
Sample Type									
DH Au assays	8,217								ppm
DH Cu assays	8,214								ppm
Additional input data									
Arian Geology Wireframes									
2007 Topo DTM									

TABLE 17. TEPAL MICROMINE INPUT DATA FILES

Input data files, along with relevant strings and wireframes are provided in the data CD which accompanies this report.

14.4. CLASSICAL STATISTICAL ANALYSIS

Descriptive statistical analysis of Tepal assay data was undertaken in order to understand the characteristics of the assay population. Specifically this analysis was undertaken to estimate the natural gold cut-off grade that defines the mineralised envelopes, to determine the distribution parameters for gold and copper.

Descriptive statistics (unrestricted) were generated for the all gold and copper assays and are presented in Table 18.

Assay histograms from this analysis are contained in Appendix 8.

Descriptive Statistics	All DH Au (ppm)	All DH Cu (%)
Mean	0.25	0.014
Standard Deviation	0.40	0.01628
Number	8,217	8,214
Max	8.73	0.216
Min	0.00	0.00
Variance	0.16	0.00026

TABLE 18. TEPAL DESCRIPTIVE STATISTICS

As in April 2008, Log Histograms generated for unrestricted gold data show sample grades populations to have a boundary at about 0.18ppm Au and are presented in Appendix 5. This can be considered as a natural boundary to gold mineralisation and is generally supported by a visual review of grade and geological relationships undertaken during 3D modelling. The natural boundary for gold only is being used to model mineralisation as part of this study as it is considered the primary economic mineral.

A review of geological interpretations, previous Howe studies and discussion with staff geologists suggests that the local geology and spatial features associated with the mineralisation are well understood in a general sense, and controls on mineralisation and the extent of structural controls at the deposit are also understood. In a general sense, elevated gold grade is accompanied by elevated copper grades however this is not always the case, and so with additional data collected as part of the Phase 2 program, Howe recommends that the geological controls of gold and copper distribution be reviewed and interpreted such that these elements might be modelled separately.

14.5. DOMAIN INTERPRETATION

14.5.1. MINERALISATION AND GEOLOGY

As in the April 2008 report the Au sample assay histogram were generated from the assay database and indicate the presence of two main mixed sample populations separated at a grade of approximately 0.18 g/t Au. This lower cut-off was used to constrain the Tepal mineralised domains.

It is understood from data review and discussions with the Arian geologists that the deposit geology is relatively simple and studies have determined that mineralisation is intimately

associated with Tonalite host rocks, quartz stockwork and brecciation, all easily identified and logged in core.

For the Tepal property two mineralised zones have been interpreted:

- The Tepal North Zone
- The Tepal South Zone

Within these defined zones, a total of 9 separate domains have been interpreted. The six domains in the Northern Zone and three domains in the Southern Zone are constrained by a +0.18 g/t Au envelope and are delimited by individual porphyry zones and alteration haloes which have been defined by Arian drilling, on the basis of any of the following; characteristic geological features, grade population, strike orientation, spatial location and fault or breccia association. Domain details are given in Table 19 and are shown in figures 11 and 12.

Mineralised domains are interpreted fairly conservatively based upon extents of drill hole assay data which constrains the mineralisation reasonably well. Where unconstrained along strike, and in some places perpendicular to strike, extrapolation of mineralised domains equals approximately 50 m beyond mineralised interval. Where constrained by un-mineralised drill holes zones are extended for half the drill spacing distance.

Strike and dip orientations of domains have been determined by drill hole assay and geological data, interpreted as string polygons on perpendicular cross section, and combined to form a 3 dimensional mineralised wireframe. Strings were snapped to drill hole intervals for greatest accuracy.

The overall strike lengths of the +0.18 g/t Au modelled domains which make up the Tepal North and Tepal South mineralised zones are approximately 1,000 m and 400 m respectively (Figure 8), and extend to a depth of approximately 200 m and 250 m below surface based upon a 50 m extension from deepest drill intercept and the extents of a robust geological model.

At this time interpreted mineralised wireframes for preliminary resource estimation include stockwork, breccias, alteration and rock type mineralisation.

14.5.2. WEATHERING BOUNDARIES

Drill hole weathering data was use in interpreting the base of oxidation and base of transitional zone (mixed). The base of the oxide interval, usually corresponding with the base of hematite mineralisation, was used to create a base of oxidisation Digital Terrain Model. The top of the fresh interval was used to determine the top of sulphide depth, from which a sulphide DTM created.

These weathering zones were then used to flag the block model. Blocks above the base of oxidisation were flagged as oxide the blocks below the sulphide DTM were flagged as sulphide. The interval between the two DTMs when applied to the Block Model corresponded to the transitional zone (mixed). Strings and weathering surface DTM was extended to cover the extents of 0.18g/t Au mineralised domains.

On the whole, these DTMs constrain weathering boundaries well, however there are some deviations between historic Teck and Arian boundary depths leading to significant variations in weathering boundaries over relatively short distances. Teck weathering data often includes a transitional zone which is not in included in the Arian database.

An improved interpretation of alteration zones and delineation of the weathering profile over the deposit is required in order to more reliably domain the geological model into zones of oxide, mixed and sulphide material for geostatistical analysis and wireframe restricted grade interpolation. As such figures are not provided for each weathering zone within the resource estimation statement. However a breakdown based on the present weathering boundaries can be found in Appendix 8

Zone	Modelled	Description	Strike (m)	Vertical	Drill Sample	Number of	Volume
	Domain			Extent	Density (m)	holes	(m3)
				(m)			
North	N1	Main North Body	2	25-200	50×50 to	36	
					150×150		12,249,652
	N2	Lower Main	345	5-170	50×50 to	19	
		North Body			100×100		2,945,233
	N3	Mid Northern	345	5-30	50 x 50 to	19	
		Segment			50 x 80		282,406
	N4	Lower Northern	345	5-20	50×50	4	
		Segment					157,344
	N5	Mid Central	345	40-50	80 x 100	3	
		Segment					959,083
	N6	Mid Central	345	20	50×50	1	
		Segment					210,802
South	S1	Main South Body	330	30-260	50 × 50-	21	
					100x150		12,909,974
	S2	Lower South	345	66	100×100	2	
		Segment					75,779
	S3	Eastern South	345	50	-	1	
		Segment					490,975

 TABLE 19. TEPAL DOMAIN WIREFRAMES (SEPTEMBER 2008)



Figure 11: Domain Wireframes (looking southwest from above).


Figure 12: Domain wireframes (looking southwest from below).



14.6. TOP CUTS

Top cut analysis was performed on mineralised domain raw gold and copper data prior to final block model grade interpolation. Top cut analysis is undertaken to assess the influence extreme grade outliers has on the sample population of each domain. Whilst extreme grades are real, their influence in interpolation may overstate the block grades in some parts of the deposits. Excel spreadsheets were prepared to examine the effects of a range of top cuts applied to raw data and the effect these have on the co-efficient of variation (COV) and loss of data from the domain. Tepal North and South mineralised domain assay data were considered together for the purpose of top cut assessment.

After a review of domained gold and copper data, only minimal assay top cuts have been applied. Top cut limits were identified from inflection points on the cumulative frequency plots for both copper and gold in the North and South domains, which denoted outlying high grade samples considered unrepresentative of the population. The limiting of anomalous high grades will ensure a more representative block model. Descriptive statistics were then generated for the topcut. Summary details are contained in the following table and detailed spreadsheet data analysis is contained in Appendix 7.

Domain	Element	No of	COV	Top cut	COV	% data
		Samples			(Cut)	cut
North	Au	1,692	1.02	4 ppm	0.98	0.2
	Cu	1,692	0.78	1.75 %	0.77	0.16
South	Au	1,479	0.89	3 ppm	0.75	0.27
	Cu	1,480	0.56	0.8 %	0.55	0.20

TABLE 20. TEPAL TOP CUT ANALYSIS SUMMARY

14.7. COMPOSITES

Prior to estimation, samples within the mineralised wireframes contained in the Tepal drill hole assay files were composited to a standard length to reduce bias for geostatistical analysis and interpolation. The composite length was determined by considering the histogram for raw drill hole sample intervals. The histogram of drill hole sampling length shows the dominant sample interval length is 2m and has been chosen as the optimum composite length. A composite assay file was created for samples within the domain wireframes for use as input data for block model interpolation (0 ARIAN TEPAL ASS MOD COMPS TOPCUT 200808.DAT).

Descriptive statistics were then generated for the composited data, and the mean values for each domain compared with the mean raw assay grade and top-cut assay grade for each domain

14.8. GEOSTATISTICS

14.8.1. DOMAIN STATISTICS

Descriptive statistics was run for raw uncut data, top cut data and composite data within all the mineralised domains. Mean element values are contained in Table 21;

	No of Au Domained Samples	No of Au COMP Samples	Au ppm Domain Mean	Au ppm Topcut Mean	Au ppm COMP Mean
All Domains	3,171	3,009	0.54	0.54	0.54
North	1,692	1,641	0.57	0.56	0.56
South	1,479	1,368	0.50	0.50	0.50

	TABLE 21.	TEPAL MINERALISED DOMAIN STATISTICS- Au
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	No Cu Domained Samples	No Cu COMP Samples	Cu % Domained Mean	Cu % Topcut Mean	Cu % COMP Mean
All Domains	3,169	3,008	0.026	0.026	0.026
North	1,691	1,640	0.028	0.28	0.028
South	1,478	1,368	0.023	0.023	0.023

TABLE 22.TEPAL MINERALISED DOMAIN STATISTICS- Cu

Full domain descriptive statistical analysis is contained in Appendix 8 and element log histograms for mineralised domain raw assay data, top cut data and composite data are contained in Appendix 6.

14.8.2. VARIOGRAPHY

Spatial data analysis was considered prior to block model grade estimation in an attempt to generate a series of semivariograms that would define the directions of grade anisotropy and spatial continuity of gold grades such that these variogram parameters could be used as input parameters for grade estimation.

At the current drill spacing over the deposit there is insufficient sample data density within all domains to be able to reliably generate directional semivariograms. Nevertheless, variographic analysis was undertaken on drilling data from the two largest modelled domains by sample density (N1 and S1). However the resulting semivariograms are not considered robust enough for the purposes of reliable resource estimation.

Therefore, search range and orientation parameters used in grade interpolation of each domain were interpreted by considering the data spacing within each domain (Table 19), and the strike orientation and dip orientation of the domain wireframes.

Howe recommends that following Phase 2 drilling activities, variographic analysis be undertaken on the expanded sample database in an attempt to generate meaningful semivariograms that may be used as input parameters to Kriging. Reliable grade estimation via more advanced techniques (OK, MIK etc) cannot be undertaken until more data is generated from additional drilling and sampling over the project.

14.9. BLOCK MODELLING

14.9.1. EMPTY CELL BLOCK MODEL

An empty block model was created to cover the extents of mineralised wireframes at Tepal. A parent block size of 25 m \times 25 m \times 20 m was selected. The increase in block size relative to the April 2008 report is due to a reconsideration of the geological model, composite size, and

	Dimension (m)	Origin Block Centre	Spacing (m)	# of Blocks	End Block Centre
Tepal	Easting	716,600	25	29	717,300
North	Northing	2,115,500	25	25	2,116,100
	RL	200	20	19	560
Tepal	Easting	716,200	25	29	716,900
South	Northing	2,116,150	25	25	2,117,200
	RL	350	20	19	650

potential SMU and mining methods. It was decided that an increased block size would be more suitable for a porphyry deposit of this nature.

TABLE 23. TEPAL BLOCK MODEL EXTENTS

The domain wireframes were then assigned to the block model file such that blocks falling inside any given domain were assigned to that domain. All blocks outside the wireframe model were then deleted. During the assigning of wireframes block sub-celling down to a minimum of $5 \times 5 \times 5$ was undertaken to maintain the resolution of the mineralised bodies; however in the interpolation process all sub-blocks receive the interpolated grade of their parent (25 m x 25 m x 20 m) block. The latest topographic DTM provided to Howe in Micromine format (ARIAN_TEPAL_DTM_2M) was used to constrain the block model at the surface along with a DTM surface of logged overburden material. Blocks situated above the overburden surface were then deleted.

14.9.2. GRADE INTERPOLATION

Gold and copper grade was interpolated into the block models on a domain basis. For interpolation both the block model and composite assay file was filtered by domain and blocks within each domain assigned an interpolated grade using only composite data falling within each domain (i.e. wireframe restricted or closed interpolation). For each domain, the parent block IDW³ interpolation technique was used and interpolation performed at different search radii, until all blocks within each domain had received an interpolated grade. The search distances were determined by means of the evaluation of the, geological model and deposit geometries, exploration data spacing and interpreted grade continuity. Interpreted geometries and search ellipse orientations for each modelled domain are tabulated below.

	Modelled Domain	Azimuth°	Dip°	Dir1 (m)	Dir2 (m)	Dir3 (m)
North	N1	345	-90	100	50	100
	N2	345	-90	100	50	100
	N3	345	-90	100	50	100
	N4	345	-90	100	50	100
	N5	345	-90	100	50	100
	N6	345	-90	100	50	100
South	S 1	330	-90	100	50	100
	S2	345	-90	100	50	100
	S3	345	-90	100	50	100

TABLE 24. DOMAINGEOMETRIESANDSEARCHPARAMETERS

Inverse Distance Weighting (IDW³) method of interpolation was used, which is a linear, geostatistical method which uses the inverse of the distance to the value of the selected power as the mechanism to preferentially weight the samples to varying extents in the three defining directions within the deposit. As the power is increased then the weighting on the nearest sample to the point of estimation also increases, the higher the power then the greater the weighting to the nearest samples. A power of 3 was selected for interpolation, which is commonly used for precious and base metals. In addition, the third power is used here to ensure that individual sample grades are not given undue weighting in areas of the resource away from this clustered data. Interpolation weights are only applied to samples found within the block's search neighbourhood.

Model cells were estimated using data from drill hole sampling, the first search radii were selected to be equal to half the range in the strike, dip and across dip directions. Model blocks that did not receive a grade estimate from the first interpolation run were used in the next interpolation run, equal to two thirds of the range in all directions. Subsequent search radii were equal to the range in all directions followed by multiples of the range until all blocks were assigned an interpolated grade.

Where search radii do not exceed the full ranges (i.e. half and equal to the ranges), a restriction of at least three samples from at least two drill holes to estimate the grade of any given block was applied to increase the reliability of the estimates at distances less than or equal to the range.

Data used to interpolate grade into the Tepal block model contains varying sample spatial densities. To ensure that clustered sample groups did not preferentially inform block grades, interpolations included a restriction on the maximum number of samples used in block grade estimation. The search ellipse is divided into four sectors and a constraint of 10 samples per sector applied, essentially de-clustering the data, while allowing an interval of 10 x 2 m samples to fully inform a proximal 20m high block.

Detailed definition of the interpolation parameters used in the Tepal resource estimation update is contained in Table 25 and details of resource volume captured in each interpolation run is contained below in Table 27.

Interpolation Method		IDW ³	
Interpolation Run #	1	2	>2
Search Radii	1/2 range in	Equal to the range	Greater than the
	main directions	in main directions	range in main
			directions
Min no of Samples	3	3	1
Max number of Samples	10	10	10
Min no of Drill holes	2	2	1
Discretisation	5*5*5	5*5*5	5*5*5

TABLE 25. TEPALBLOCKMODELINTERPOLATIONPARAMETERS

14.9.3. BLOCK MODEL ATTRIBUTES

Once the interpolation process for the block model was complete, the resultant block model file was validated to ensure no blocks were empty. Specific values and weathering domains were then assigned to the block model file prior to reporting estimated resources. The final

Tepal	Tepal Wireframe Restricted IDW3 Block Model (September 2008)				
Attribute Field		Description			
East		Block centre EAST coordinate			
East_		Block EAST dimension			
North		Block centre NORTH coordinate			
North_		Block NORTH dimension			
RL		Block centre RL coordinate			
RL_		Block RL dimension			
Domain		Assigned wireframe modelling domain			
Торо		Blocks flagged as situated above (0) or below (1) the topography			
Density		Assigned domain density			
Weathering		Blocks flagged as being above (OXIDE) or below (MIXED) the BOX			
Au ppm cut		Interpolated mean block gold grade using top cut composite data			
Cu % cut		Interpolated mean block copper grade using top cut composite data			
RUN		Interpolation run number (RUN1-RUN6)			
CLASS		CIM compliant block classification (IND or INF)			
Points		Number of data points used to estimate block grade			
SD		Block standard deviation			
Count		Number of holes used to estimate block grade			

block model file (0_TEPAL_IDW3_TOPCUT_BM_100908.DAT) contains a series of block attributes as detailed in the following table;

TABLE 26. BLOCK MODEL ATTRIBUTES

			% of				
Domain	Volume	Interpolation	Domain	% Total	Searc	ch Distance	s (m)
	(m ³)	Run #		Resource	Dir 1	Dir 2	Dir 3
N1_R1	2,979,688	RUN1	26.31	10.36	50	25	50
N1_R2	6,429,213	RUN2	56.76	22.35	100	50	100
N1_R3	1,918,300	RUN3	16.94	6.67	200	100	200
N2_R1	1,291,825	RUN1	43.88	4.49	50	25	50
N2_R2	1,518,888	RUN2	51.59	5.28	100	50	100
N2_R3	133,513	RUN3	4.53	0.46	200	100	200
N3_R1	163,163	RUN1	57.83	0.57	50	25	50
N3_R2	114,738	RUN2	40.67	0.40	100	50	100
N3_R3	4,225	RUN3	1.50	0.01	200	100	200
N4_R1	53,725	RUN1	34.04	0.19	50	25	50
N4_R2	102,925	RUN2	65.20	0.36	100	50	100
N4_R3	1,200	RUN3	0.76	0.00	200	100	200
N5_R1	217,250	RUN1	22.62	0.76	50	25	50
N5_R2	367,738	RUN2	38.29	1.28	100	50	100
N5_R3	375,538	RUN3	39.10	1.31	200	100	200
N6_R1	13,600	RUN1	6.54	0.05	50	25	50
N6_R2	184,713	RUN2	88.83	0.64	100	50	100
N6_R3	9,638	RUN3	4.63	0.03	200	100	200
S1_R1	4,276,338	RUN1	34.68	14.86	50	25	50
S1_R2	6,298,913	RUN2	51.09	21.89	100	50	100
S1_R3	1,754,788	RUN3	14.23	6.10	200	100	200
S2_R1	6,025	RUN1	8.05	0.02	50	25	50
S2_R2	40,225	RUN2	53.77	0.14	100	50	100

Domain	Volume	Interpolation	% of Domain	% Total	Searc	h Distance	s (m)
	(m ³)	Run #		Resource	Dir 1	Dir 2	Dir 3
S2_R3	28,563	RUN3	38.18	0.10	200	100	200
S3_R1		RUN1	0.00	0.00	50	25	50
S3_R2		RUN2	0.00	0.00	100	50	100
S3_R3	484,188	RUN3	100.00	1.68	200	100	200

denotes the domain base search range

TABLE 27.INTERPOLATION RUN DETAILS

14.10. RESOURCE CLASSIFICATION

The CIM Definition Standards on Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Resource Definitions and adopted by the CIM council on December 11, 2005, provide standards for the classification of Mineral Resources and Mineral Reserve estimates into various categories. The category to which a resource or reserve estimate is assigned depends on the level of confidence in the geological information available on the mineral deposit, the quality and quantity of data available, the level of detail of the technical and economic information which has been generated about the deposit and the interpretation of that data and information. Under CIM Definition Standards:

- An "inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological or grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
- An "Indicated Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

In addition, classification methodology follows the Micromine Consulting Resource Modelling Standard Procedures (2001) and ACA Howe Resource Modelling Standard Procedures (2006). Classification of interpolated blocks is undertaken considering the following criteria:

- Interpolation criteria based on sample density, search and interpolation parameters.
- Assessment of the reliability of geological, sample, survey and bulk density data.
- Robustness of the geological model.
- Drilling and sample density.
- Grade continuity confidence

During the preliminary resource estimate undertaken by Howe in April 2008, several issues were highlighted that influenced the confidence that could be applied to the resource estimate, such that blocks did not meet the criteria defining indicated and measured resources and so

were classified only as inferred resources. This information is detailed in the Howe April 2008 report and discussed in earlier sections of this report.

Prior to this resource estimation update, most these issues were addressed by Arian which resulted in more reliable input data to estimation such that the classification of indicated resources as well as inferred resources can now be considered.

The current drill data spacing over the project is still not adequate to define measured resources since grade continuity in three dimensions at current data spacings cannot be demonstrated with the required level of confidence to define measured resources.

The following has been taken into account when classifying resources at Tepal:

- The number of samples within each zone over the deposit has increased since April 2008 as a result of additional drill hole data enabling domain extents to be better defined and resource volumes better informed. However, sample numbers remain relatively low in some domain parts and the sample spacing relatively wide in places. For this reason no meaningful semivariogram have been generated. The average drill hole sample spacing for over half of the defined resource is estimated at between 50m and 100m and warrants closer spaced infill drilling to better establish grade continuity. An arithmetic average SG for all material types has been used.
- Geological domain modelling has been undertaken which has been utilised when defining grade domains. This has improved the geometry of grade domains and ensured interpreted grade domains honour the geological characteristics of the deposit. However there is much more geological interpretation which must be undertaken to identify stratigraphic and structural controls to mineralisation, which can be used to further define geological domains.
- A review of all assay QA/QC for the phase 1 drilling suggests assay data used in resource estimation is robust for this purpose.
- Density values applied to blocks in the model have been more accurately calculated using the weighted average of logged lithological intervals within the mineralised zones. Assigning density on a domain basis has increased the overall confidence in the tonnage estimate.
- Weathering zones over the deposit have been defined, based on the observed base of oxidation boundaries identified in boreholes. These boundary points were used to create a weathering DTM which was applied to the block model. The deposit has been subdivided into fresh (sulphide), mixed and weathered (oxides) zones. Additional weathering data should be captured during Phase 2 drilling activities in order to build up a picture of the weathering profile across the deposit.

All blocks captured in runs that are less than or equal to the range in all directions, have been classified as "Indicated" resources. All other blocks have been classified as "Inferred" resources.

14.11.MODEL VALIDATION

Global and local model validation was undertaken on the Tepal block model prior to resource reporting.

14.11.1.GLOBAL VALIDATION

The development of modelling domains has been influenced by using a 'natural' cut-off of 18 ppm Au to define mineralised envelopes. Composite grade data has then been used to calculate block grades within each domain. A comparison of the mean domain composite grade and mean domain block grade has been undertaken to assess potential over/under estimating during interpolation. This validation is contained in the following tables.

Domain	Comp	Block		Comp	Block	
	Mean	Mean	Diff	Mean	Mean	Diff
	Au (ppm)	Au (ppm)	%	Cu (%)	Cu(%)	%
N1	0.627	0.463	-26.22	0.295	0.252	-26.22
N2	0.419	0.455	8.52	0.244	0.259	8.52
N3	0.446	0.441	-1.04	0.270	0.276	-1.04
N4	0.224	0.238	6.13	0.196	0.219	6.13
N5	0.471	0.425	-9.78	0.258	0.253	-9.78
N6	0.4	0.459	14.74	0.256	0.282	14.74
North All	0.56	0.41	-26.79	0.280	0.248	-11.43
S1	0.503	0.437	-13.08	0.228	0.209	-13.08
S2	0.409	0.421	2.92	0.086	0.082	2.92
S 3	0.438	0.477	8.84	0.222	0.231	8.84
South All	0.50	0.38	-24.00	0.227	0.194	-14.54
All Domains	0.53	0.40	-24.53	0.256	0.234	-8.59

TABLE 28. Au COMPOSITE MEAN VERSUS BLOCK MEAN

A degree of smoothing of grade is inevitable when estimating block grades at the current data spacing of the deposit. However the mean of domain grades compare favourably to the mean of input composite grades used to estimate blocks.

The N1 and S1 domains show a marked decrease in mean grade relative to the input mean composite grade. The decrease in mean grade during interpolation can be attributed to the greater density of holes within mineralised zones relative to the fewer holes, at spacings of 50 m to 100 m informing the majority of domain blocks, resulting in a degree of over-smoothing of higher grade into extrapolated areas with fewer sample points (based on the geological continuity). This is particularly apparent in the Southern tail of the N1 Domain and at the peripheries of the S1 domain.

Model validation also involved the cross reference of block model volume against wireframe volume. Comparison is made between the volume of the entire Tepal block model and the total volume of all domain wireframes. This is undertaken to check that the block model extents honour the wireframe model. Results are presented in the table below. The difference in volumes is considered insignificant.

Domain	Block Model Volume	Wireframe Volume (m3)	% Difference*
All	30,271,987	30,281,248	-0.03

*Block Model and Wireframe Volumes are uncut by the Topo DTM

TABLE 29.BLOCK	MODEL	VOLUMES	VERSUS
WIREFRAME VOLUM	IES		

14.11.2.LOCAL VALIDATION

Once modelling was completed, the block model was displayed in 2-D Slices along with composite drill hole data in order to assess whether block grades honour the general sense of composite drill hole grades, that is to say that high grade blocks are located around high sample grades, and vice versa.

A degree of smoothing is apparent in all linear block model estimations and is to be expected but on the whole block grades correlate very well with input composite sample grades.

14.12. RESOURCE ESTIMATE REPORTING

The September 2008 classified CIM compliant resource estimate for gold and copper at Tepal is detailed in the following table.

Screenshots of the final block model, coloured by gold and copper grade is shown in Figures 11 to 15. The final block model, coloured by resource classification is contained in Figures 16 to 17.

	CIM INDICATED RESOURCES				CIM INFERRED RESOURCES			
Material	Density	Tonnes	Au (g/t)	Cu (%)	Density	Tonnes	Au (g/t)	Cu (%)
Domain								
ALL*	2.78	24,995,000	0.544	0.267	2.78	54,964,000	0.405	0.219
North	2.81	13,261,000	0.574	0.302	2.81	31,361,000	0.406	0.233
South	2.74	11,734,000	0.510	0.228	2.74	23582000	0.403	0.200
N1	2.81	8,373,000	0.639	0.325	2.81	23,457,000	0.400	0.225
N2	2.81	3,630,000	0.480	0.263	2.81	4,643,000	0.435	0.255
N3	2.81	458,000	0.410	0.309	2.81	334,000	0.484	0.230
N4	2.81	151,000	0.231	0.203	2.81	293,000	0.241	0.227
N5	2.81	610,000	0.471	0.246	2.81	2,089,000	0.412	0.255
N6	2.81	38,000	0.412	0.262	2.81	546,000	0.462	0.284
S1	2.74	11,717,000	0.510	0.228	2.74	22,067,000	0.399	0.199
S2	2.74	17,000	0.458	0.073	2.74	188,000	0.418	0.083
S3	-				2.74	1,327,000	0.477	0.231

* domains constrained by a 0.18 ppm Au envelope honour the geological model Note:

Tonnage figures have been rounded up or down to the nearest 1000t Au ounces have been calculated using 31.1035g = 10zCu pounds have been calculated using 1 tonne = 2204.622lbs

TABLE 30. TEPAL DEPOSIT- TOTAL RESOURCE ESTIMATE FIGURES



Figure 13: Block Model – Northern Domain - Au (looking oblique NE).





Figure 14: Block Model – Southern Domain - Au (looking oblique NE).





Figure 15: Block Model – Northern Domain - Cu (looking oblique NE).





Figure 16: Block Model – Southern Domain - Cu (looking oblique NE).





Figure 17: Block Model – Southern Domain – Resource Category (looking oblique NE).





Figure 18: Block Model – Southern Domain – Resource Category (looking oblique NE).



15. OTHER RELEVANT DATA AND INFORMATION

No other relevant data or information is considered at this time.

16. INTERPRETATION AND CONCLUSIONS

Computerized IDW3 wireframe restricted, linear block model resource estimation of contained gold and copper was undertaken by ACA Howe International for the Tepal project, Mexico.

Raw data used in modelling estimations consists of available diamond drill data from Arian's "Phase 1" 2007 exploration programme, Teck historical diamond drill data, and data from one historical INCO drill hole.

For the defined and modelled zones developed using a 18 ppm Au envelope, and which honour the current geological and structural model for the deposit, total resources are estimated to be **79.90Mt** @ **0.448 ppm Au and 0.234% Cu for approximately 1.15Moz Au and 412.39Mlbs Cu**.

Total "indicated" resources are estimated to be 24.99Mt @ 0.544 ppm Au and 0.267% Cu for approximately 0.44Moz Au and 147.13Mlbs Cu.

Total "inferred" resources are estimated to be 54.96Mt @ 0.405 ppm Au and 0.219% Cu for approximately 0.72Moz Au and 265.37Mlbs Cu.

Total "indicated" resources amount to 31 % of total resource tonnage, 38 % of contained gold ounces and 36 % of contained copper tonnes.

This revised resource estimate predicts a marginal 1.4 % increase in total resource tonnage, a 3.7 % decrease in gold and copper grades compared to the preliminary estimate undertaken by Howe in April 2008, for a 2.5 % decrease in contained gold ounces, and 2.2 % decrease in contained copper pounds. The slight increase in overall tonnage is due to a 5.6 % extension of the southern zone which has offset a 2 % decrease in tonnes in the northern zone.

The marginal increase in the tonnage and the slight decrease in grade estimate as compared to the April 2008 estimate is due to the following;

- Additional drilling data which has further constrained and defined the modelled zone envelope and block model, defining:
 - An additional 100 m south extension of the Southern Zone.
 - An additional 100 m³ outlier to the west of Southern Zone.
 - An additional 125 m west extension to the Northern Zone.
 - A decrease in lateral extent of 50 m to the southwest of the Southern Zone.
 - An un-mineralised interval of up to 25 m which horizontally dissects the northwest section of the Northern Zone.
- A more robust approach to extension of the mineralisation envelope, excluding the extension of <5 m thick intervals over distances of >100 m.
- More reliable estimates of domain density

It is Howe's opinion that resources estimated as part of this study meet with CIM 'inferred' and "indicated" category classifications based upon consideration of the quality of input data, modelling and estimation methodology, interpolation criteria based on sample density, search and interpolation parameters, understanding and robustness of the geological model, drilling and sample density, and completion of property visit for procedural auditing and data verification purposes.

At the current drill spacing over the deposit, continuous mineralised zones are shown to be continuous, however there can be significant grade variability within the Tepal North and South zones and further infill drilling is warranted both to provide additional sample data to facilitate more meaningful geostatistical analysis and to upgrade currently defined inferred resources to indicated resources

The robust geological model allows for the extrapolation of the mineralised zones along strike provide excellent resource augmentation targets in these areas.

A review of the Phase 1 drilling suggests the following;

- There is still exploration potential at the Tepal deposit. The deposit is open to the south at increasing depth and open to the northwest in the north of the deposit. There is also potential to further define the extent of mineralisation at depth.
- Overall grade and therefore contained metal is probably understated as indicated by the lower block means compared to the composite sample means. This suggests that grades in parts of the block model have been over-smoothed due to the sparse drilling and sample density and the large distances over which block grades have been interpolated.
- Phase 1 drilling has indicated the potential to further define higher grade (+1 g/t) gold and (+0.5 %) copper zones within the core of the North and South Zones.
- Potential to explore and develop peripheral zones of mineralisation identified to the east of the North and South Zones, which have not been included in this resource estimation.

Realisation of additional resources as well as the upgrading of currently defined resources to higher categories can only be achieved by a committed resource development and exploration strategy to infill the current 50-100 m drill spacing and to test the potential strike extents to the known mineralised zones.

17. RECOMMENDATIONS

Following a review of project data and the recently completed resource block model, Howe recommends the following be undertaken during the Phase 2 program currently underway, in order to improve the quality and reliability of future resources estimates and develop additional resources for the project;

- At the current drill spacing over the deposit, continuous mineralised zones are shown to be continuous, however there can be significant grade variability within the Tepal North and South zones and further infill drilling is warranted both to provide additional sample data to facilitate more meaningful geostatistical analysis and to upgrade currently defined inferred resources to indicated resources.
- Ensure logging procedures are maintained during Phase 2 activities so as to have consistency with Phase 1 practises.
- Develop the delineation of the weathering profile over the deposit in order to more reliably domain the geological model into zones of oxide, mixed and sulphide material.
- Following Phase 2 activities, the characteristics of gold and copper grade distribution should be assessed in the light of new data, and modelled separately if required.
- Implement the practise of orientated drill core for improved geotechnical and structural logging measurements, particularly as controls on mineralisation are structural. Consistency of geotechnical measurements is improved with the use of the orientation reference line. A system such as EzyMark provides a reliable easy to use means of obtaining oriented drill core.
- Ensure non biased core sampling through routine submittal of same half of core, achievable through use of orientation reference line.
- Develop the use of QA/QC samples, ensuring that adequate field duplicates and CRMs are submitted.
- Continued bulk density determination of half core samples to build up the density database for use in future estimations.
- Multi-element grade domain modelling for improved single element domain geostatistical analysis and restricted grade interpolation.
- Improved geological modelling to include the interpretation of host geology, breccia, stockwork and alteration zones to domain assay data for improved geostatistical analysis and wireframe restricted grade interpolation.

Future work should also involve detailed metallurgical test work of the various ore types, preliminary optimisation and sensitivity studies using conceptual mining and processing methods, mining costs and pit slope parameters to evaluate the economic viability of the deposits.

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CERTIFICATE OF AUTHOR

I, Galen R White do hereby certify that:

- 1. I am a Principal Resource Geologist with CSA Global (UK) Ltd.
- 2. I graduated with a Bachelor of Science degree (Hons) in Geology from the University of Portsmouth, UK, in 1996.
- 3. I am a member of the Geological Society of London, and a member of the Australasian Institute of Mining and Metallury (AusIMM).
- 4. I have worked as a geologist for a total of 13 years since graduation from university.
- 5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
- 6. I am responsible for the preparation of all sections of this Technical Report titled "Resource Estimation Update Revised for the Tepal gold-copper Prospect, Michoacán, Mexico" dated 4th November 2009.
- 7. I visited the project between the 18th and 20th June 2008 as an ACA Howe Senior Geologist, in accordance with Section 8.1 2(d) of National Instrument 43-101.
- 8. I am not aware of any material fact or material change with respect to the subject matter of this Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- 9. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
- 10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication, in the public company files on their websites accessible by the public, of the Technical Report.

Dated this day 4th November 2009.

anh. R. white

"Galen R White"

APPENDIX 1

ARIAN TEPAL PHASE 1 RECOVERY DATA



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TEPAL PHASE 1 RECOVERY DATA

Interval_		
Mean	2.719134349	Mean
Standard Error	0.014776756	Standard E
Median	3.05	Median
Mode	3.05	Mode
Standard Deviation	0.972575514	Standard D
Sample Variance	0.945903129	Sample Va
Kurtosis	67.23200149	Kurtosis
Skewness	4.576839298	Skewness
Range	20.2	Range
Minimum	0.1	Minimum
Maximum	20.3	Maximum
Sum	11779.29	Sum
Count	4332	Count

Rec_m	
Mean	1.586222
Standard Error	0.0205
Median	1.35
Mode	3.05
Standard Deviation	1.355946
Sample Variance	1.838588
Kurtosis	1480.963
Skewness	29.50471
Range	70
Minimum	0
Maximum	70
Sum	6939.72
Count	4375

Arian Phase 1 Core Recovery %						
Mean	95.648					
Standard Error	1.328366959					
Median	100					
Mode	100					
Standard Deviation	87.8632156					
Sample Variance	7719.944655					
Kurtosis	4159.31729					
Skewness	63.67414753					
Range	5833					
Minimum	0					
Maximum	5833					
Sum	418460					
Count	4375					

Bin	Frequency	Cumulative %
10	2	0.05%
20	5	0.16%
30	17	0.55%
40	29	1.21%
50	69	2.79%
60	80	4.62%
70	126	7.50%
80	240	12.98%
90	250	18.70%
100	3524	99.25%
More	33	100.00%



RQD_r	n	RQD_% (no)	0's)	_
Mean	0.978950857	Mean	61.88954	N
Standard Error	0.034697652	Standard Error	2.416479	St
Median	0.57	Median	63	N
Mode	0	Mode	95	N
Standard Deviation	2.295033956	Standard Deviation	140.9866	St
Sample Variance	5.267180861	Sample Variance	19877.21	Sa
Kurtosis	2905.845366	Kurtosis	3135.301	K
Skewness	48.73612345	Skewness	54.85342	SI
Range	138	Range	8115	R
Minimum	0	Minimum	3	N
Maximum	138	Maximum	8118	N
Sum	4282.91	Sum	210672	Su
Count	4375	Count	3404	C

RQD_%	
Mean	48.1536
Standard Error	1.919891847
Median	46
Mode	0
Standard Deviation	126.9889093
Sample Variance	16126.18308
Kurtosis	3730.495856
Skewness	58.69389881
Range	8118
Minimum	0
Maximum	8118
Sum	210672
Count	4375

APPENDIX 2

ALS CHEMEX BULK DENSITY METHODOLOGY NOTES SPECIFIC GRAVITY SAMPLES SPECIFIC GRAVITY CALCULATONS



A C A HOWE INTERNATIONAL LIMITED Geological and Mining Consultants ALS Chemex



<u>Specialty Assay Procedure</u> – OA-GRA08 Specific Gravity

Analytical Method: Gravimetric

Two methods of analysis can be used, depending on the nature of the sample.

1. Bulk Samples (OA-GRA08 & OA-GRA08a)

The rock or core section (up to 6 kg) is weighed dry for method OA-GRA08 or is covered in a paraffin wax coat in the case of OA-GRA08a and weighed. The sample is then weighed while it is suspended in water. The specific gravity is calculated from the following equations.

OA-GRA08: Specific Gravity = $\frac{\text{Weight of sample (g)}}{\text{Weight in air (g) - Weight in water (g)}}$

Or

OA-GRA08a: Specific Gravity = $\frac{A}{B - C - [(B - A) / Dwax]}$

where: A = weight of sample in air B = weight of waxed sample in air C = weight of waxed sample suspended in water D = density of wax

2. Pulverized Material (OA-GRA08b & OA-GRA08d)

A prepared sample (3.0 g) is weighed into an empty pyncometer. The pyncometer is filled with a solvent (either methanol or acetone) and then weighed. From the weight of the sample and the weight of the solvent displaced by the sample, the specific gravity is calculated according to the equation below.

ALS Chemex



Specific Gravity = $\frac{\text{Weight of sample (g)}}{\text{Weight of solvent displaced (g)}} \times \text{Specific Gravity of Solvent}$

Method Code	Units	Sample Type	Lower Limit	Upper Limit	Description
OA-GRA08	Unity	Bulk	0.01	20	Specific Gravity – without paraffin coat
OA-GRA08a	Unity	Bulk	0.01	20	Specific Gravity – with paraffin coat
OA-GRA08b	Unity	Pulp	0.01	20	Specific Gravity – pyncometer with Methanol
OA-GRA08d	Unity	Pulp	0.01	20	Specific Gravity – pyncometer with Acetone

Conversion of Specific Gravity to Density

Density = Specific gravity x Density of water (at temperature (t°C))

Factors for converting specific gravity to density are tabulated below:

Temp (°C)	Density (g/cm ³)	Temp (°C)	Density (g/cm ³)
19	0.9984	23	0.9975
20	0.9982	24	0.9973
21	0.998	25	0.997
22	0.9978	26	0.9968

Specific Gravity Samples

HoleID	Domain	From_	To_m	Lithology	Oxidatio	S.G.
		m			n Zone	
AS-07-001	South	188	190	Tonalite	Sulphide	2.74
AS-07-005	South	80	82	Tonalite	Sulphide	2.74
AS-07-006	North	27.05	28.55	Quartz Vein	Oxide	2.80
AS-07-006	North	46	48	Tonalite	Sulphide	2.77
AS-07-007	South	8	10	Tonalite	Oxide	2.86
AS-07-008	North	18	20	Tonalite	Oxide	2.76
AS-07-009	South	2	4	Tonalite	Oxide	2.78
AS-07-010	North	10	12	Tonalite	Oxide	2.77
AS-07-011	South	3.72	6.22	Andersite Dyke	Oxide	2.70
AS-07-011	South	6.22	8	Andersite Dyke	Oxide	2.69
AS-07-011	South	28	30	Andersite	Oxide	2.74
AS-07-011	South	36	38	Andersite	Oxide	2.75
AS-07-011	South	76	78	Rhoylite Tuff	Sulphide	2.86
AS-07-011	South	108	110	Rhoylite Tuff	Sulphide	2.75
AS-07-012	North	10	12	Tonalite	Oxide	2.82
AS-07-012A	North	130	132	Tonalite	Sulphide	2.89
AS-07-017	South	88	90	Tonalite	Sulphide	2.70
AS-07-019	North	58	60	Tonalite	Sulphide	2.82
AS-07-022	South	12	14	Tonalite	Oxide	2.78

SUMMARY OF SPECIFIC GRAVITY VALUES

Rock Type	Oxidation	No of samples	Drill Holes	Average Specific Gravity
Andersite	Oxide	2	AS-07-011	2.745
Andersite Dyke	Oxide	2	AS-07-011	2.695
Rhoylite Tuff	Sulphide	2	AS-07-011	2.805
Quartz Vein	Oxide	1	AS-07-011	2.800
Tonalite (North	Oxide	3	AS-07-008,010,012	2.783
Zone)	Sulphide	3	AS-07-006,012A,019	2.827
Tonalite (North	Oxide	3	AS-07-007,009,022	2.807
Zone)	Sulphide	3	AS-07-001,005,017	2.727

LITHOLOGICALY WEIGHTED SPECIFIC GRAVITY VALUES BY DOMAIN

Modeled Domain	Number of Weathering Intervals	Number of Ox Intervals	Ox Factor	Number of Su Intervals	Su Factor	Number of Mixed Intervals	Mixed Factor	Number of Lithology Intervals with S.G. Values	Tonalite Count	Tonalite Oxide S.G.	Weighed Tonalite Oxide S.G.	Tonalite Sulphide S.G.	Weighed Tonalite Sulphide S.G.	Tonalite Mixed S.G. (Ox/Su Avg)	Mixed Tonalite Mixed S.G. (Ox/Su Avg)	Combined Tonalite Weighted S.G	Weighted Tonalite S.G .	Andesite Count	Andesite S.G.	Weighted Andesite S.G .	Rhoylite Count	Rhoylite S.G.	Weighted Rhoylite S.G.	Quartz Vein Count	Quartz Vein S.G.	Weighted Quartz Vein S.G.	Total Weighted S.G.
N1	1104	332	0.30	700	0.63	72	0.07	1051	988	2.78	0.84	2.83	1.79	2.81	0.18	2.81	2.64	48	2.70	0.12	4	2.81	0.01	11	2.80	0.03	2.81
N2	331	1	0.00	320	0.97	10	0.03	322	293	2.78	0.01	2.83	2.73	2.81	0.08	2.83	2.57	21	2.70	0.18	7	2.81	0.06	1	2.80	0.01	2.82
N3	55	0	0.00	55	1.00	0	0.00	42	34	2.78	0.00	2.83	2.83	2.81	0.00	2.83	2.29	8	2.70	0.51	0	2.81	0.00	0	2.80	0.00	2.80
N4	13	0	0.00	13	1.00	0	0.00	13	11	2.78	0.00	2.83	2.83	2.81	0.00	2.83	2.39	2	2.70	0.41	0	2.81	0.00	0	2.80	0.00	2.81
N5	55	0	0.00	55	1.00	0	0.00	55	54	2.78	0.00	2.83	2.83	2.81	0.00	2.83	2.78	1	2.70	0.05	0	2.81	0.00	0	2.80	0.00	2.82
N6	4	0	0.00	4	1.00	0	0.00	4	4	2.78	0.00	2.83	2.83	2.81	0.00	2.83	2.83	0	2.70	0.00	0	2.81	0.00	0	2.80	0.00	2.83
North All	1562	333	0.21	1147	0.73	82	0.05	1487	1384	2.78	0.59	2.83	2.08	2.81	0.15	2.82	2.62	80	2.70	0.14	11	2.81	0.02	12	2.80	0.02	2.81
S1	1227	99	0.08	1096	0.89	35	0.03	1213	1192	2.81	0.23	2.73	2.44	2.77	0.08	2.74	2.69	12	2.70	0.03	0	2.81	0.00	9	2.80	0.02	2.74
S2	5	0	0.00	5	1.00	0	0.00	5	3	2.81	0.00	2.73	2.73	2.77	0.00	2.73	1.64	2	2.70	1.08	0	2.81	0.00	0	2.80	0.00	2.71
S3	34	0	0.00	34	1.00	0	0.00	34	34	2.81	0.00	2.73	2.73	2.77	0.00	2.73	2.73	0	2.70	0.00	0	2.81	0.00	0	2.80	0.00	2.73
South All	1266	99	0.08	1135	0.90	35	0.03	1252	1229	2.81	0.22	2.73	2.44	2.77	0.08	2.74	2.69	14	2.70	0.03	0	2.81	0.00	9	2.80	0.02	2.74
ALL	2828	432	0.15	2282	0.81	117	0.04	2739	2613	2.81	0.43	2.73	2.20	2.77	0.11	2.74	2.62	94	2.70	0.09	11	2.81	0.01	21	2.80	0.02	2.74

APPENDIX 3

ASSAY LABORATORY EXPLANATORY NOTES AND CERTIFICATES



A C A HOWE INTERNATIONAL LIMITED Geological and Mining Consultants


















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Standards Council of Canada Conseil canadien des normes 200-270, rue Albert St. Ottawa, ON (Canada) K1P 6N7 Tel.: +1 613 238 3222 Fax.: +1 613 569 7808 E-mail/Courriel : info@scc.ca Internet: http://www.scc.ca

Canada

SCOPE OF ACCREDITATION

ALS CHEMEX 212 Brooksbank Avenue North Vancouver, BC V7J 2C1

Accredited Laboratory No. 579 (Conforms with requirements of CAN-P-1579, CAN-P-4D (ISO/IEC 17025))

CONTACT:	Ms. Michele Ramshaw	
TEL:	(604) 984-0221	
FAX:	(604) 984-0218	
EMAIL:	michele.ramshaw@alschemex.com	
URL:	www.alschemex.com	

CLIENTS SERVED: Mining, Exploration and other interested parties

FIELDS OF TESTING: Chemical/Physical

PROGRAM SPECIALTY Mineral Analysis AREA:

ISSUED ON: 2005–05–18

VALID TO: 2009-05-18

METALLIC ORES AND PRODUCTS

Mineral Analysis Testing

Mineral Assaying

AA45/46	Ag, Cu, Pb and Zn by Aqua Regia Digestion and
	Atomic Absorption Spectrometry
AA61/62	Co and Ni by 4-Acid Digestion and Atomic Absorption
	Spectrometry
Au/Ag-GRA	Determination of Au and Ag by Lead Collection Fire
-	Assay and Gravimetric Finish

Standards Council of Canada Accredited Laboratory NO. 579

Au-AA	Determination of Au by Lead Collection Fire Assay and Atomic Absorption Spectrometry
ME-ICP41	Multi-Element (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, U, V, W, Zn) Determination by Aqua Regia Digestion and ICP-AES.
ME-ICP81	Cu, Ni and Co by Sodium Peroxide Fusion and ICP-AES
PGM-ICP	Determination of Au, Pt and Pd by Lead Collection Fire Assay and ICP-AES

Notes:

CAN-P-1579 - Guidelines for the Accreditation of Mineral Analysis Testing Laboratories

CAN-P-4D (ISO/IEC 17025): General Requirements for the Competence of Testing and Calibration Laboratories (ISO/IEC 17025–1999)

P. Paladino, P. Eng., Director, Conformity Assessment

Date: 2005-05-18

Number of Scope Listings: 7 SCC 1003–15/722 Partner File #0 Partner: SCC

ALS Chemex



Quality Assurance Overview

LABORATORY REGISTRATION

ISO 9001:2000



ALS Chemex laboratories in North America are registered to ISO 9001:2000 for the "provision of assay and geochemical analytical services" by QMI Quality Registrars.

In addition to ISO 9001:2000 registration, ALS Chemex's North Vancouver laboratory has received ISO 17025 accreditation from the Standards Council of Canada under CAN-P-1579 "Guidelines for Accreditation of Mineral Analysis Testing Laboratories". CAN-P-1579 is the Amplification and Interpretation of CAN-P-4D "General Requirements for the Accreditation of Calibration and Testing Laboratories" (Standards Council of Canada ISO/IEC 17025). The scope of the accreditation includes the following methods:

- Au and Ag by Fire Assay/Gravimetric Finish .
- Au by Fire Assay/AAS Finish
- Au, Pt, Pd by Fire Assay/ICP Finish
- Ag, Cu, Pb, Zn by Aqua Regia Digestion/AAS Finish
- Co, Ni by 4-Acid Digestion/AAS
- Cu, Ni, Co by Sodium Peroxide Fusion/ICP Finish

Multi-element package by Aqua Regia Digestion/ICP Finish

The ISO 9001:2000 registration provides evidence of a quality management system covering all aspects of our organization. ISO 17025 accreditation provides specific assessment of our laboratory's analytical capabilities. In our opinion, the combination of the two ISO standards provides our clients complete assurance regarding the quality of every aspect of ALS Chemex operations.

Lab%20Accreditation%20%26%20QA%20Overview%20(rev02.00)[1] Revision: 02.00

GEOTECHNICAL STATISTICS

				Solidad			East San	East San	
		Stockwork	Guanajuatillo	All	Santa Ana	Block 450	Jose 1	Jose 2	All
	Total Intervals	14	39	154	103	120	20	16	466
	Recovery (m) Min	85.00	8.00	29.00	10.00	0.00	46.00	82.00	0.00
	Recovery (m) Max	100.00	100.00	100.00	100.00	2.65	100.00	100.00	100.00
	Intervals <100% Recovery	5	18	40	54	120	7	2	198
	Percentage <100% Recovery	35.71	46.15	25.97	52.43	100.00	35.00	12.50	42.49
ery	Meters <100% Recovery	14.05	17.20	78.78	83.00	1.00	10.20	5.50	323.08
COV	Intervals 100% Recovery	9.00	21.00	114.00	49.00	0.00	13.00	14.00	268.00
Re	Percentage 100% Recovery	64.29	53.85	74.03	47.57	0.00	65.00	87.50	57.51
	Meters 100% Recovery	23.50	35.90	301.00	113.20	0.00	28.45	35.55	650.25
	Total length REC	37.55	53.10	379.78	196.20	1.00	38.65	41.05	973.33
	Total length (m)	38.85	72.00	399.30	236.85	6218.80	44.15	41.65	1119.35
	Recovery Weighted Average	96.62	73.79	95.11	74.44	9480.00	87.55	98.54	86.95
	Recovery Mean	97.00	76.21	94.53	83.78	0.64	88.10	98.75	86.56
	RQD Min	13.00	0.00	0.10	0.00	0.00	42.00	43.00	0.00
QD	RQD Max	92.00	89.00	0.83	88.00	1.08	100.00	95.00	100.00
R	RQD Weighted Average	57.33	18.84	0.67	3597.56	3517.00	70.67	71.03	38.39
	RQD Mean	55.64	18.26	0.62	30.91	0.66	71.00	72.44	37.52

QA/QC SAMPLE RESULTS PULP BLANKS COARSE BLANKS CRM SAMPLES DUPLICATES



Blank Samples

<u>Pulp Blanks</u>

		Silver (g/t)	Lead (%)
	Lower Limit of detection	0.10	0.00
Sample			
ID	QA-QC Sample Type	3Acid/*AA	AA
142020	pulp blank	0.000	86
142069	pulp blank	0.006	88
142110	pulp blank	0.000	88
142167	pulp blank	0.000	89
142225	pulp blank	0.000	86
142267	pulp blank	0.007	90
142318	pulp blank	0.000	87
142381	pulp blank	0.000	89
142416	pulp blank	0.000	83
142468	pulp blank	0.000	86
142515	pulp blank	0.000	2
142559	pulp blank	0.000	2
142609	pulp blank	0.000	4
142666	pulp blank	0.000	7
142713	pulp blank	0.000	7
142765	pulp blank	0.000	89
142815	pulp blank	0.000	88
142866	pulp blank	0.000	5
142916	Pulp Blank	0.000	4
142965	Pulp Blank	0.000	4
143014	Pulp Blank	0.000	85
143064	Pulp Blank	0.025	88
143118	Pulp Blank	0.000	2
145521	Pulp Blank	0.080	413
145575	Pulp Blank	0.010	26
145617	Pulp Blank	0.012	24
145674	Pulp Blank	0.000	85
145724	Pulp Blank	0.012	24
145768	Pulp Blank	0.011	26
145815	Pulp Blank	0.008	22
145860	Pulp Blank	0.055	28
145921	Pulp Blank	0.011	26
145964	Pulp Blank	0.007	24
	Mean	0.007	59.303
	Maximum	0.08	413
	Standard Deviation	0.017	73.666
	Total Samples	33	33

<u>Coarse Blanks</u>

		Silver (g/t)	Lead (%)
	Lower Limit of detection	0.10	0.00
Sample			
ID	QA-QC Sample Type	3Acid/*AA	AA
142007	Coarse blank	0	14
142059	Coarse blank	0	83
142104	Coarse blank	0	33
142157	Coarse blank	0	31
142218	Coarse blank	0	23
142259	Coarse blank	0	18
142310	Coarse blank	0	22
142377	Coarse blank	0	24
142408	Coarse blank	0	23
142457	Coarse blank	0	27
142507	Coarse blank	0	19
142555	Coarse blank	0	22
142604	Coarse blank	0	19
142658	Coarse blank	0.009	32
142706	Coarse blank	0	25
142757	Coarse blank	0	10
142807	Coarse blank	0	23
142856	Coarse blank	0.005	32
142904	Coarse Blank	0	22
142957	Coarse Blank	0	19
143004	Coarse Blank	0	66
143057	Coarse Blank	0	27
143107	Coarse Blank	0.005	20
145510	Coarse Blank	0.009	28
145557	Coarse Blank	0	4
145602	Coarse Blank	0	6
145664	Coarse Blank	0	25
145715	Coarse Blank	0.008	17
145761	Coarse Blank	0.005	8
145806	Coarse Blank	0	6
145855	Coarse Blank	0.005	15
145917	Coarse Blank	0.005	15
145954	Coarse Blank	0	12
	Mean	0.002	23.333
	Maximum	0.009	83
	Standard Deviation	0.003	15.433
	Total Samples	33	33

CRM SAMPLES

CRM	CRM	Certifie	d Mean	Certified	Standard	Assave	d Grade	Relative I	Difference	Relative Di	ifference %
Type	Sample	Gra	ade	Deviation		Assayo	d Glade	Relative I	Difference	Relative Di	
Type	ID	Au ppm	Cu %	Au	Cu	Au ppm	Cu %	Au	Cu	Au	Cu
	142046	0.550	0.430	0.031	0.007	0.556	0.417	0.006	-0.013	1.091	-3.023
	142094	0.550	0.430	0.031	0.007	NS	0.441		0.011		2.558
	142138	0.550	0.430	0.031	0.007	NS	0.437		0.007		1.628
	142198	0.550	0.430	0.031	0.007	0.555	0.431	0.005	0.001	0.909	0.233
	142247	0.550	0.430	0.031	0.007	0.532	0.409	-0.018	-0.021	-3.273	-4.884
	142295	0.550	0.430	0.031	0.007	0.576	0.451	0.026	0.021	4.727	4.884
	142346	0.550	0.430	0.031	0.007	0.576	0.421	0.026	-0.009	4.727	-2.093
	142399	0.550	0.430	0.031	0.007	NS	0.395		-0.035		-8.140
	142446	0.550	0.430	0.031	0.007	0.578	0.434	0.028	0.004	5.091	0.837
	142494	0.550	0.430	0.031	0.007	0.537	0.427	-0.013	-0.003	-2.364	-0.698
	142543	0.550	0.430	0.031	0.007	0.558	0.424	0.008	-0.006	1.455	-1.395
	142587	0.550	0.430	0.031	0.007	0.547	0.452	-0.003	0.022	-0.545	5.116
	142645	0.550	0.430	0.031	0.007	0.544	0.441	-0.006	0.011	-1.091	2.558
39	142696	0.550	0.430	0.031	0.007	0.560	0.423	0.010	-0.007	1.818	-1.628
Cul	142744	0.550	0.430	0.031	0.007	0.537	0.430	-0.013	0.000	-2.364	0.000
) pu	142795	0.550	0.430	0.031	0.007	0.557	0.416	0.007	-0.014	1.273	-3.256
Idai	142845	0.550	0.430	0.031	0.007	0.531	0.408	-0.019	-0.022	-3.455	-5.116
itar	142897	0.550	0.430	0.031	0.007	0.535	0.384	-0.015	-0.046	-2.727	-10.698
p S	142943	0.550	0.430	0.031	0.007	0.565	0.443	0.015	0.013	2.727	3.023
Pul	142992	0.550	0.430	0.031	0.007	0.537	0.435	-0.013	0.005	-2.364	1.163
	143097	0.550	0.430	0.031	0.007	0.567	0.429	0.017	-0.001	3.091	-0.233
	143192	0.550	0.430	0.031	0.007	0.587	0.429	0.037	-0.001	6.727	-0.233
	143243	0.550	0.430	0.031	0.007	0.571	0.442	0.021	0.012	3.818	2.791
	143297	0.550	0.430	0.031	0.007	NS	0.436		0.006		1.395
	143449	0.550	0.430	0.031	0.007	0.547	0.420	-0.003	-0.010	-0.545	-2.326
	143498	0.550	0.430	0.031	0.007	0.544	0.434	-0.006	0.004	-1.091	0.930
	144095	0.550	0.430	0.031	0.007	0.563	0.448	0.013	0.018	2.364	4.186
	144196	0.550	0.430	0.031	0.007	0.549	0.423	-0.001	-0.007	-0.182	-1.628
	144244	0.550	0.430	0.031	0.007	0.552	0.410	0.002	-0.020	0.364	-4.651
	144296	0.550	0.430	0.031	0.007	0.558	0.430	0.008	0.000	1.455	0.000
	144343	0.550	0.430	0.031	0.007	0.559	0.403	0.009	-0.027	1.636	-6.279
	144493	0.550	0.430	0.031	0.007	0.555	0.418	0.005	-0.012	0.909	-2.791
	144693	0.550	0.430	0.031	0.007	0.539	0.467	-0.011	0.037	-2.000	8.605

1 1 1 (1 1	0.500	0.500	0.000	0.010	0.051	0.500	0.0(1	0.000	= = = = = =	0.500
144644	0.790	0.590	0.033	0.012	0.851	0.593	0.061	0.003	7.722	0.508
144742	0.790	0.590	0.033	0.012	0.792	0.598	0.002	0.008	0.253	1.356
144798	0.790	0.590	0.033	0.012	0.714	0.586	-0.076	-0.004	-9.620	-0.678
144845	0.790	0.590	0.033	0.012	0.843	0.605	0.053	0.015	6.709	2.542
144892	0.790	0.590	0.033	0.012	0.900	0.580	0.110	-0.010	13.924	-1.695
144944	0.790	0.590	0.033	0.012	0.837	0.609	0.047	0.019	5.949	3.220
144991	0.790	0.590	0.033	0.012	0.799	0.591	0.009	0.001	1.139	0.169
210088	0.790	0.590	0.033	0.012	0.804	0.610	0.014	0.020	1.772	3.390
212298	0.790	0.590	0.033	0.012	0.771	0.600	-0.019	0.010	-2.405	1.695
212340	0.790	0.590	0.033	0.012	0.822	0.600	0.032	0.010	4.051	1.695
216592	0.790	0.590	0.033	0.012	0.786	0.583	-0.004	-0.007	-0.506	-1.186
144050	1.220	NA	0.057	NA	1.255	0.000	0.035		2.869	NA
144143	1.220	NA	0.057	NA	1.235	0.000	0.015		1.230	NA
144447	1.220	NA	0.057	NA	1.195	0.000	-0.025		-2.049	NA
145546	1.220	NA	0.057	NA	1.225	0.000	0.005		0.410	NA
144548	1.220	NA	0.057	NA	1.170	0.000	-0.050		-4.098	NA
145588	1.220	NA	0.057	NA	1.145	0.000	-0.075		-6.148	NA
144592	1.220	NA	0.057	NA	1.265	0.000	0.045		3.689	NA
145641	1.220	NA	0.057	NA	1.195	0.000	-0.025		-2.049	NA
145672	1.220	NA	0.057	NA	1.193	0.001	-0.027		-2.213	NA
145720	1.220	NA	0.057	NA	1.175	0.000	-0.045		-3.689	NA
145800	1.220	NA	0.057	NA	1.175	0.000	-0.045		-3.689	NA
145836	1.220	NA	0.057	NA	1.210	0.001	-0.010		-0.820	NA
145894	1.220	NA	0.057	NA	1.220	0.000	0.000		0.000	NA
145949	1.220	NA	0.057	NA	1.215	0.000	-0.005		-0.410	NA
145998	1.220	NA	0.057	NA	1.215	0.000	-0.005		-0.410	NA
•					Total Samples		55.000	44.000		
				Total Samples Within +/- 2SD			53.000	34.000		
				% Sar	nples within +,	/- 2SD	96.364	77.273		
	144644 144742 144798 144845 144892 144944 144991 210088 212298 212340 216592 144050 144143 144447 145546 144548 144548 144592 145641 145672 145720 145800 145836 145894 145949 145998	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1446440.7900.5901447420.7900.5901447980.7900.5901447980.7900.5901448920.7900.5901449440.7900.5901449910.7900.5901449910.7900.5902100880.7900.5902122980.7900.5902123400.7900.5902165920.7900.5902165920.7900.5902165920.7900.5901440501.220NA1441431.220NA1445461.220NA1445481.220NA1445481.220NA1455881.220NA1455881.220NA1456411.220NA1456411.220NA1458001.220NA1458001.220NA1458001.220NA1458361.220NA1458361.220NA1458361.220NA1458361.220NA1458361.220NA1459491.220NA1459491.220NA1459491.220NA1459981.220NA	144644 0.790 0.590 0.033 144742 0.790 0.590 0.033 144798 0.790 0.590 0.033 144798 0.790 0.590 0.033 14485 0.790 0.590 0.033 144892 0.790 0.590 0.033 144892 0.790 0.590 0.033 144944 0.790 0.590 0.033 144991 0.790 0.590 0.033 210088 0.790 0.590 0.033 212298 0.790 0.590 0.033 212340 0.790 0.590 0.033 216592 0.790 0.590 0.033 2144050 1.220 NA 0.057 144143 1.220 NA 0.057 144447 1.220 NA 0.057 144548 1.220 NA 0.057 144548 1.220 NA 0.057 145672 <t< td=""><td>144644 0.790 0.590 0.033 0.012 144742 0.790 0.590 0.033 0.012 144798 0.790 0.590 0.033 0.012 144892 0.790 0.590 0.033 0.012 144892 0.790 0.590 0.033 0.012 144944 0.790 0.590 0.033 0.012 144944 0.790 0.590 0.033 0.012 144991 0.790 0.590 0.033 0.012 210088 0.790 0.590 0.033 0.012 212298 0.790 0.590 0.033 0.012 216592 0.790 0.590 0.033 0.012 216592 0.790 0.590 0.033 0.012 144050 1.220 NA 0.057 NA 144143 1.220 NA 0.057 NA 144546 1.220 NA 0.057 NA 145546</td><td>144644 0.790 0.590 0.033 0.012 0.851 144742 0.790 0.590 0.033 0.012 0.792 144798 0.790 0.590 0.033 0.012 0.792 144798 0.790 0.590 0.033 0.012 0.714 144845 0.790 0.590 0.033 0.012 0.843 144892 0.790 0.590 0.033 0.012 0.837 144991 0.790 0.590 0.033 0.012 0.837 144991 0.790 0.590 0.033 0.012 0.837 144991 0.790 0.590 0.033 0.012 0.799 21088 0.790 0.590 0.033 0.012 0.771 212340 0.790 0.590 0.033 0.012 0.786 144050 1.220 NA 0.057 NA 1.255 144143 1.220 NA 0.057 NA 1.225</td><td>144644 0.790 0.590 0.033 0.012 0.851 0.593 144742 0.790 0.590 0.033 0.012 0.792 0.598 144798 0.790 0.590 0.033 0.012 0.714 0.586 144845 0.790 0.590 0.033 0.012 0.843 0.605 144892 0.790 0.590 0.033 0.012 0.843 0.605 144892 0.790 0.590 0.033 0.012 0.837 0.609 144944 0.790 0.590 0.033 0.012 0.837 0.609 144991 0.790 0.590 0.033 0.012 0.799 0.591 210088 0.790 0.590 0.033 0.012 0.804 0.610 212340 0.790 0.590 0.033 0.012 0.822 0.600 144131 1.220 NA 0.057 NA 1.255 0.000 145546 1.220</td><td>144644 0.790 0.590 0.033 0.012 0.851 0.593 0.061 144742 0.790 0.590 0.033 0.012 0.792 0.598 0.002 144798 0.790 0.590 0.033 0.012 0.714 0.586 -0.076 144845 0.790 0.590 0.033 0.012 0.843 0.605 0.053 144892 0.790 0.590 0.033 0.012 0.837 0.609 0.047 144991 0.790 0.590 0.033 0.012 0.799 0.591 0.009 210088 0.790 0.590 0.033 0.012 0.799 0.591 0.009 212340 0.790 0.590 0.033 0.012 0.711 0.600 -0.032 216592 0.790 0.590 0.033 0.012 0.783 -0.004 144050 1.220 NA 0.057 NA 1.255 0.000 0.025 144544</td></t<> <td>144644 0.790 0.590 0.033 0.012 0.851 0.593 0.061 0.003 144742 0.790 0.590 0.033 0.012 0.792 0.598 0.002 0.008 144798 0.790 0.590 0.033 0.012 0.714 0.586 -0.076 -0.004 144845 0.790 0.590 0.033 0.012 0.843 0.605 0.053 0.015 144892 0.790 0.590 0.033 0.012 0.843 0.609 0.047 0.019 14494 0.790 0.590 0.033 0.012 0.843 0.609 0.047 0.019 144991 0.790 0.590 0.033 0.012 0.844 0.610 0.014 0.020 212298 0.790 0.590 0.033 0.012 0.824 0.610 0.032 0.010 212340 0.790 0.590 0.033 0.012 0.822 0.600 0.322 0.010</td> <td>144644 0.790 0.590 0.033 0.012 0.851 0.593 0.061 0.003 7.722 144742 0.790 0.590 0.033 0.012 0.792 0.598 0.002 0.008 0.253 144798 0.790 0.590 0.033 0.012 0.843 0.605 0.053 0.015 6.709 144845 0.790 0.590 0.033 0.012 0.843 0.605 0.053 0.019 5.949 144944 0.790 0.590 0.033 0.012 0.837 0.609 0.001 1.1392 144941 0.790 0.590 0.033 0.012 0.799 0.591 0.009 0.001 1.1392 210088 0.790 0.590 0.033 0.012 0.780 0.032 0.010 -2.405 212340 0.790 0.590 0.033 0.012 0.786 0.683 -0.004 -0.007 -0.506 144050 1.220 NA</td>	144644 0.790 0.590 0.033 0.012 144742 0.790 0.590 0.033 0.012 144798 0.790 0.590 0.033 0.012 144892 0.790 0.590 0.033 0.012 144892 0.790 0.590 0.033 0.012 144944 0.790 0.590 0.033 0.012 144944 0.790 0.590 0.033 0.012 144991 0.790 0.590 0.033 0.012 210088 0.790 0.590 0.033 0.012 212298 0.790 0.590 0.033 0.012 216592 0.790 0.590 0.033 0.012 216592 0.790 0.590 0.033 0.012 144050 1.220 NA 0.057 NA 144143 1.220 NA 0.057 NA 144546 1.220 NA 0.057 NA 145546	144644 0.790 0.590 0.033 0.012 0.851 144742 0.790 0.590 0.033 0.012 0.792 144798 0.790 0.590 0.033 0.012 0.792 144798 0.790 0.590 0.033 0.012 0.714 144845 0.790 0.590 0.033 0.012 0.843 144892 0.790 0.590 0.033 0.012 0.837 144991 0.790 0.590 0.033 0.012 0.837 144991 0.790 0.590 0.033 0.012 0.837 144991 0.790 0.590 0.033 0.012 0.799 21088 0.790 0.590 0.033 0.012 0.771 212340 0.790 0.590 0.033 0.012 0.786 144050 1.220 NA 0.057 NA 1.255 144143 1.220 NA 0.057 NA 1.225	144644 0.790 0.590 0.033 0.012 0.851 0.593 144742 0.790 0.590 0.033 0.012 0.792 0.598 144798 0.790 0.590 0.033 0.012 0.714 0.586 144845 0.790 0.590 0.033 0.012 0.843 0.605 144892 0.790 0.590 0.033 0.012 0.843 0.605 144892 0.790 0.590 0.033 0.012 0.837 0.609 144944 0.790 0.590 0.033 0.012 0.837 0.609 144991 0.790 0.590 0.033 0.012 0.799 0.591 210088 0.790 0.590 0.033 0.012 0.804 0.610 212340 0.790 0.590 0.033 0.012 0.822 0.600 144131 1.220 NA 0.057 NA 1.255 0.000 145546 1.220	144644 0.790 0.590 0.033 0.012 0.851 0.593 0.061 144742 0.790 0.590 0.033 0.012 0.792 0.598 0.002 144798 0.790 0.590 0.033 0.012 0.714 0.586 -0.076 144845 0.790 0.590 0.033 0.012 0.843 0.605 0.053 144892 0.790 0.590 0.033 0.012 0.837 0.609 0.047 144991 0.790 0.590 0.033 0.012 0.799 0.591 0.009 210088 0.790 0.590 0.033 0.012 0.799 0.591 0.009 212340 0.790 0.590 0.033 0.012 0.711 0.600 -0.032 216592 0.790 0.590 0.033 0.012 0.783 -0.004 144050 1.220 NA 0.057 NA 1.255 0.000 0.025 144544	144644 0.790 0.590 0.033 0.012 0.851 0.593 0.061 0.003 144742 0.790 0.590 0.033 0.012 0.792 0.598 0.002 0.008 144798 0.790 0.590 0.033 0.012 0.714 0.586 -0.076 -0.004 144845 0.790 0.590 0.033 0.012 0.843 0.605 0.053 0.015 144892 0.790 0.590 0.033 0.012 0.843 0.609 0.047 0.019 14494 0.790 0.590 0.033 0.012 0.843 0.609 0.047 0.019 144991 0.790 0.590 0.033 0.012 0.844 0.610 0.014 0.020 212298 0.790 0.590 0.033 0.012 0.824 0.610 0.032 0.010 212340 0.790 0.590 0.033 0.012 0.822 0.600 0.322 0.010	144644 0.790 0.590 0.033 0.012 0.851 0.593 0.061 0.003 7.722 144742 0.790 0.590 0.033 0.012 0.792 0.598 0.002 0.008 0.253 144798 0.790 0.590 0.033 0.012 0.843 0.605 0.053 0.015 6.709 144845 0.790 0.590 0.033 0.012 0.843 0.605 0.053 0.019 5.949 144944 0.790 0.590 0.033 0.012 0.837 0.609 0.001 1.1392 144941 0.790 0.590 0.033 0.012 0.799 0.591 0.009 0.001 1.1392 210088 0.790 0.590 0.033 0.012 0.780 0.032 0.010 -2.405 212340 0.790 0.590 0.033 0.012 0.786 0.683 -0.004 -0.007 -0.506 144050 1.220 NA

DUPLICATES

Sample Type	Duplicate ID	Aug	opm	Cu	%
		Original	Duplicate	Original	Duplicate
	142035	0.000	0.0025	0.0003	3
	142081	1.100	0.856	0.2558	2680
	142121	0.429	0.371	0.4652	3860
	142179	0.315	0.536	0.0734	1755
	142228	0.402	0.332	0.2575	2400
	142274	0.287	0.255	0.1189	1080
	142327	0.619	0.654	0.2819	2270
	142384	0.406	0.331	0.1535	1340
	142427	0.410	0.328	0.1876	1355
	142475	0.433	0.355	0.2019	1610
	142528	0.010	0.014	0.0011	8
	142569	0.841	0.864	0.2449	2360
	142620	1.471	1.52	0.4788	5610
	142679	1.054	0.974	0.3325	6720
t	142724	1.633	1.665	0.8845	6550
jec	142776	0.045	0.054	0.0473	419
Re	142824	0.252	0.26	0.2336	1785
rse	142874	0.000	0.01	0.0046	37
Coa	142929	0.130	0.11	0.1605	1135
0	142973	1.107	0.929	0.281	3790
	143025	0.115	0.103	0.1983	1560
	143073	0.075	0.098	0.0304	216
	143125	0.538	0.575	0.2128	1725
	143177	0.117	0.125	0.115	1040
	143227	0.070	0.07	0.0178	185
	143277		0.174	0.1382	1095
	145533	0.030	0.01	0.0012	19
	145628	0.010	0.007	0.0031	36
	145686	0.647	0.516	0.1548	1465
	145705	0.060	0.078	0.0071	53
	145779	1.354	1.175	0.0548	650
	145825	0.075	0.055	0.0072	85
	145873	0.045	0.045	0.0106	102
	145933	0.146	0.143	0.3278	3550
	145977	0.0025	0.007	0.0015	14
	142038	0.020	0.025	0.0019	22
	142087	0.498	NSS	0.2719	2760
	142130	0	NSS	0.0033	28
	142186		< 0.005		74
	142238	0.025	0.027	0.0102	137
ct	142285	1.21	1.03	0.4071	4050
eje	142339	0.61	0.64	0.3835	3660
S. R.	142389	0.081	0.132	0.0397	308
ոլե	142435	0.52	NSS	0.4911	3860
Ч	142486	0.014	0.057	0.0429	335
	142536	0.146	0.125	0.0881	673
	142576	0.04	0.042	0.0389	334
	142636	0.368	0.386	0.1451	1355
	142687	0.55	0.484	0.5567	4330
	142732	0.33	0.384	0.2877	2560

DOMAINED ASSAY PROBABILITY PLOTS TOP CUT STATISTICS



A C A HOWE INTERNATIONAL LIMITED Geological and Mining Consultants

Northern Domain

<u>Au</u> Original	<u>Au Top</u> <u>Cut</u>		No Top Cut	4 ppm Au	<u>Cu</u> Original	<u>Cu Top</u> <u>Cut</u>		No Top Cut	17500 ppm Cu
7.193	4	Mean	0.567	0.564	21600	17500	Mean	2810.79	2806.26
5.57	4	Standard Error	0.014	0.013	21050	17500	Standard Error	53.25	52.41
4.13	4	Median	0.377	0.377	17400	17400	Median	2340.00	2340.00
3.94	3.94	Mode	0.343	0.343	16800	16800	Mode	1900.00	1900.00
3.93	3.93	Standard Dev	0.577	0.552	15600	15600	Standard Dev	2190.41	2155.82
3.75	3.75	Sample Variance	0.333	0.305	14600	14600	Sample Variance	4797898.80	4647578.23
3.55	3.55	Kurtosis	18.870	8.375	14400	14400	Kurtosis	11.70	8.78
3.528	3.528	Skewness	3.231	2.497	13800	13800	Skewness	2.54	2.29
3.437	3.437	Range	7.193	4.000	13600	13600	Range	21600.00	17500.00
3.21	3.21	Minimum	0.000	0.000	13200	13200	Minimum	0.00	0.00
3.085	3.085	Maximum	7.193	4.000	13100	13100	Maximum	21600.00	17500.00
3.017	3.017	Sum	959.448	954.555	12700	12700	Sum	4755848.50	4748198.50
2.99	2.99	Count	1692.000	1692.000	12400	12400	Count	1692	1692
2.882	2.882	CV	1.017	0.979	12100	12100	CV	0.78	0.77
2.851	2.851	Metal Lost		4.893	12100	12100	Metal Lost		7650.00
2.742	2.742	% Metal lost		0.513	11900	11900	% Metal lost		0.16
2.721	2.721	% Data Points Lost		0.236	11300	11300	% Data Points Lost	:	0.24
2.66	2.66				10700	10700			
2.66	2.66				10600	10600			
2.654	2.654				10400	10400			
2.61	2.61				10200	10200			
2.603	2.603				10100	10100			
2.569	2.569				10100	10100			
2.517	2.517				10000	10000			
2.459	2.459				10000	10000			
2.4	2.4				10000	10000			
2.4	2.4				9690	9690			
2.4	2.4				9400	9400			
2.4	2.4				9300	9300			
2.384	2.384				9300	9300			
2.329	2.329				9200	9200			
2.326	2.326				9100	9100			
2,295	2.295				9000	9000			

Southern Domain

<u>Au</u> Original	<u>Au Top</u> <u>Cut</u>		No Top Cut	3 ppm Ag	<u>Cu</u> Original	<u>Cu Top</u> <u>Cut</u>		No Top Cut	8000 ppm Cu
8.734	3	Mean	0.505	0.498	9080	8000	Mean	2266.60	2265.15
4.966	3	Standard Error	0.012	0.010	9000	8000	Standard Error	32.70	32.52
4.624	3	Median	0.411	0.411	8070	8000	Median	2100.00	2100.00
3.716	3	Mode	0.308	0.308	7850	7850	Mode	2000.00	2000.00
2.432	2.432	Standard Dev	0.448	0.373	7700	7700	Standard Dev	1258.17	1250.94
2.38	2.38	Sample Variance	0.200	0.139	7610	7610	Sample Variance	1582985.09	1564845.78
2.158	2.158	Kurtosis	90.686	8.001	7030	7030	Kurtosis	1.98	1.52
2.115	2.115	Skewness	6.454	2.228	6960	6960	Skewness	0.99	0.92
2.072	2.072	Range	8.734	3.000	6890	6890	Range	9079.50	7999.50
2.04	2.04	Minimum	0.000	0.000	6680	6680	Minimum	0.50	0.50
2.038	2.038	Maximum	8.734	3.000	6200	6200	Maximum	9080.00	8000.00
1.943	1.943	Sum	746.428	736.388	6150	6150	Sum	3354565.00	3352415.00
1.917	1.917	Count	1479.000	1479.000	6030	6030	Count	1480.00	1480.00
1.901	1.901	CV	0.887	0.750	5900	5900	CV	0.56	0.55
1.901	1.901	Metal Lost		10.040	5760	5760	Metal Lost		2150.00
1.832	1.832	% Metal lost		1.363	5700	5700	% Metal lost		0.06
1.826	1.826	% Data Points Lost		0.270	5650	5650	% Data Points Los	t	0.20
1.815	1.815				5620	5620			
1.747	1.747				5600	5600			
1.73	1.73				5560	5560			
1.73	1.73				5510	5510			
1.715	1.715				5400	5400			
1.713	1.713				5400	5400			
1.708	1.708				5360	5360			
1.695	1.695				5320	5320			
1.66	1.66				5300	5300			
1.648	1.648				5300	5300			
1.644	1.644				5300	5300			
1.644	1.644				5240	5240			
1.644	1.644				5200	5200			
1.628	1.628				5200	5200			
1.627	1.627				5200	5200			
1.627	1.627				5190	5190			

ASSAY DESCRIPTIVE STATISTICS



Au Domain Statistics

	SOUTH ZONE Au nom								
		Top Cut Domained	-	TC Composite					
	Domained Assays	Assavs	Composite Assays	Assavs	Uncut Block Model	Block Model TC	Block Model I.n		
Mean	0.505	0.498	0.504	0.501	0.386	0.383	0.333		
Standard Error	0.012	0.010	0.012	0.011	0.001	0.001	0.001		
Median	0.411	0.411	0.414	0.414	0.365	0.365	0.311		
Mode	0.308	0.308	0.308	0.308	0.414	0.398	0.243		
Standard Deviation	0.448	0.373	0.442	0.420	0.159	0.150	0.135		
Sample Variance	0.200	0.139	0.196	0.177	0.025	0.022	0.018		
Kurtosis	90.686	8.001	100.779	109.969	8.017	3.780	2.227		
Skewness	6.454	2.228	6.853	6.713	1.913	1.390	1.112		
Range	8.734	3.000	8.731	8.731	1.467	1.468	1.459		
Minimum	0.000	0.000	0.003	0.003	0.137	0.137	0.046		
Maximum	8.734	3.000	8.734	8.734	1.604	1.604	1.505		
Sum	746.428	736.388	689.703	685.569	4518.547	4481.451	3894.316		
Count	1479	1479	1368	1368	11695	11695	11695		
cov	0.887	0.750	0.877	0.839	0.412	0.390	0.405		
			1	NORTH ZONE Au por	n				
	Tan Cut Demoired TC Compacing								
	Domained Assavs	Assavs	Composite Assays	Assays	Uncut Block Model	Block Model TC	Block Model I n		
Mean	0 567	0 564	0 565	0 562	0.406	0.406	0 340		
Standard Error	0.01/	0.004	0.014	0.002	0.001	0.001	0.040		
Median	0.014	0.013	0.381	0.015	0.357	0.357	0.001		
Mode	0 343	0 343	0 343	0 343	0 399	0.362	0.235		
Standard Deviation	0.577	0.515	0.571	0.546	0.205	0.203	0.235		
Sample Variance	0 333	0.305	0 327	0 298	0.042	0.041	0.029		
Kurtosis	18 870	8 375	19 892	8 659	5.657	5 738	7 632		
Skewness	3 231	2 497	3 300	2 520	2 072	2 078	2 298		
Range	7,193	4.000	7,193	4.000	1.943	1.968	1.920		
Minimum	0.000	0.000	0.000	0.000	0.138	0.112	0.049		
Maximum	7,193	4.000	7,193	4.000	2.081	2.081	1.969		
Sum	959.448	954.555	926.491	921.598	13303.399	13322.415	11162.631		
Count	1692	1692	1641	1641	32786	32786	32786		
cov	1.017	0.979	1.012	0.973	0.504	0.501	0.499		
				ALL AU PPIII					
		Top Cut Domained		TC Composite					
	Domained Assays	Assays	Composite Assays	Assays	Uncut Block Model	Block Model TC	Block Model Ln		
Mean	0.538	0.535	0.537	0.534	0.401	0.400	0.339		
Standard Error	0.009	0.009	0.009	0.009	0.001	0.001	0.001		
Median	0.399	0.399	0.400	0.400	0.360	0.360	0.302		
Mode	0.343	0.343	0.343	0.343	0.399	0.398	0.235		
Standard Deviation	0.521	0.498	0.518	0.494	0.194	0.191	0.162		
Sample Variance	0.272	0.248	0.268	0.244	0.038	0.036	0.026		
Kurtosis	38.176	31.101	40.664	33.329	6.346	6.139	7.357		
Skewness	4.278	3.678	4.405	3.784	2.099	2.062	2.156		
Range	8.734	8.734	8.734	8.734	1.944	1.968	1.923		
Minimum	0.000	0.000	0.000	0.000	0.137	0.112	0.046		
Maximum	8.734	8.734	8.734	8.734	2.081	2.081	1.969		
Sum	1705.876	1696.677	1616.194	1607.167	17821.946	17803.866	15056.947		
Count	3171	3171	3009	3009	44481	44481	44481		
cov	0.969	0.931	0.964	0.925	0.484	0.477	0.477		

1 There is an insignificant difference in Mean Values between Comp and Domained assays for Au.

2 The Mean Au Value of all blocks within the Block Model is 21% lower than the Mean of the Domained Drillhole Assays. This may be atributed to smearing out of high grade intervals in IDW2 Interpolation.

3 The Mean Au Value of all blocks within the 3rd Parameter Log Normal Block Model is 33% lower than the Mean of the Domained Drillhole Assays. This may be atributed to a reduced weighting of Ln values in the IDW3 interpolation, which may further smear out higher grade assays.

4 The Mean of the 3rd Parameter Log Normal Block Model is closer to the Median of the Domained Assays.

Cu Domain Statistics

	SOUTH ZONE Cu ppm							
	Domained Assays	Top Cut Domained	Composite Assays	TC Composite		Block Model TC	Block Model Ln	
		Assays		Assays	Uncut Block Model			
Mean	2266.60	2265.15	2275.36	2273.79	1947.08	1943.47	1732.72	
Standard Error	32.70	32.52	33.62	33.41	5.92	5.91	5.72	
Median	2100.00	2100.00	2100.00	2100.00	1937.23	1937.23	1714.20	
Mode	2000.00	2000.00	2200.00	2200.00	2334.68	2334.68	2223.42	
Standard Deviation	1258.17	1250.94	1243.53	1235.63	640.69	639.27	619.03	
Sample Variance	1582988.16	1564845.78	1546374.68	1526776.56	410488.09	408660.09	383201.74	
Kurtosis	1.98	1.52	2.14	1.62	0.80	0.81	1.05	
Skewness	0.99	0.92	1.02	0.94	0.36	0.37	0.43	
Range	9080.00	7999.50	9060.00	7980.00	4548.89	4548.86	4267.32	
Minimum	0.00	0.50	20.00	20.00	151.17	151.20	140.78	
Maximum	9080.00	8000.00	9080.00	8000.00	4700.06	4700.06	4408.10	
Sum	3354564	3352415	3112692.69	3110542.69	22771099.18	22728855.3	20264178.85	
Count	1480	1480	1368	1368	11695	11695	11695	
COV	0.555091359	0.552255069	0.546521456	0.543422572	0.329053497	0.328930219	0.357260459	

	NORTH ZONE Cu ppm								
	Domained Assays Top Cut Domained		Composite Assays TC Composite			Block Model TC	Block Model Ln		
	Assays			Assays					
Mean	2810.78	2806.26	2804.90	2800.23	2473.46	2478.60	2077.82		
Standard Error	53.25	52.41	53.82	52.94	6.17	6.11	5.47		
Median	2340.00	2340.00	2332.00	2332.00	2291.34	2310.40	1991.61		
Mode	1900.00	1900.00	1900.00	1900.00	2678.84	2678.61	2365.63		
Standard Deviation	2190.41	2155.82	2179.70	2143.82	1118.08	1105.81	990.34		
Sample Variance	4797900.46	4647578.23	4751098.74	4595953.35	1250100.36	1222814.16	980774.62		
Kurtosis	11.70	8.78	11.95	8.87	8.39	7.45	7.51		
Skewness	2.54	2.29	2.56	2.30	1.99	1.88	1.73		
Range	21600.00	17500.00	21596.00	17496.00	11442.29	11021.35	10255.61		
Minimum	0.00	0.00	4.00	4.00	295.47	295.48	287.21		
Maximum	21600.00	17500.00	21600.00	17500.00	11737.76	11316.83	10542.82		
Sum	4755848	4748198.5	4600027.95	4592377.95	81094893.6	81263450.62	68123550.88		
Count	1692	1692	1640	1640	32786	32786	32786		
COV	0.779288037	0.768218651	0.777106256	0.765586084	0.452030112	0.446142303	0.476623846		

	Domained Assays	Top Cut Domained	Composite Assays	TC Composite		Block Model TC	Block Model Ln
		Assays		Assays			
					Uncut Block Model		
Mean	2556.88	2556.20	2564.07	2560.81	2335.06	2337.90	1987.09
Standard Error	32.60	32.16	33.43	32.96	4.93	4.89	4.36
Median	2200.00	2200.00	2200.00	2200.00	2196.24	2199.08	1907.03
Mode	2100.00	2100.00	2200.00	2200.00	2678.84	2678.61	2365.63
Standard Deviation	1835.93	1810.55	1833.63	1807.73	1040.69	1031.62	920.18
Sample Variance	3370633.64	3278107.94	3362183.93	3267900.60	1083031.26	1064239.47	846728.43
Kurtosis	14.67	11.27	14.99	11.37	9.44	8.40	8.30
Skewness	2.65	2.41	2.69	2.43	2.06	1.94	1.78
Range	21600.00	17500.00	21596.00	17496.00	11586.59	11165.63	10402.04
Minimum	0.00	0.00	4.00	4.00	151.17	151.20	140.78
Maximum	21600.00	17500.00	21600.00	17500.00	11737.76	11316.83	10542.82
Sum	8110412	8100612	7712720.64	7702920.64	103865992.8	103992305.9	88387729.73
Count	3172	3169	3008	3008	44481	44481	44481
cov	0.7180357	0.708298029	0.715123359	0.705922179	0.445678478	0.44125843	0.463078516

1 There is an insignificant difference in Mean Values between Comp and Domained assays for $\ensuremath{\mathsf{Cu}}$

2 The Mean Cu Value of all blocks within the Block Mode is 3% greater than the Mean of the Domained Drillhole Assay

3 The Mean Cu Value of all blocks within the 3rd Parameter Log Normal Block Model is 12% lower than the Mean of the Domained Drillhole Assays. This may be atributed to a reduced weighting of Ln values in the IDW3 interpolation, which may further smear out higher grade assays.

HISTOGRAMS



A C A HOWE INTERNATIONAL LIMITED Geological and Mining Consultants



Histograms of Au Assays





1



























WEATHERING ZONE VOLUME REPORT



A C A HOWE INTERNATIONAL LIMITED Geological and Mining Consultants

		% of total							
	tonnes	(tonnes)	SG	Au (g/t)	Cu (%)	Au (Mozs)	% of Total	Cu (Mlbs)	% of Total
ALL OX	11605809.5	14.52	2.7891	0.48327	0.257	0.18	16	65.86	16
ALL SO	65856371.5	82.38	2.7763	0.44271	0.229	0.94	82	333.07	81
ALL MIX	2476230.5	3.10	2.7913	0.4372	0.241	0.03	3	13.14	3
ALL OX IND	3085107.38	3.86	2.80	0.63	0.33	0.06	5.43	22.32	5.41
ALL OX INF	8520702.13	10.66	2.79	0.43	0.23	0.12	10.25	43.54	10.56
ALL SO IND	21256405.88	26.59	2.77	0.53	0.26	0.36	31.52	120.56	29.23
ALL SO INF	44599965.63	55.79	2.78	0.40	0.22	0.57	49.99	212.51	51.53
ALL MI IND	653252.50	0.82	2.80	0.59	0.31	0.01	1.07	4.53	1.10
ALL MI INF	1822978.00	2.28	2.79	0.38	0.21	0.02	1.96	8.61	2.09
NORTH OX	8206394.25	10.27	2.81	0.50136	0.271	0.13	12	49.07	12
SOUTH OX	3399415.25	4.25	2.74	0.43961	0.224	0.05	4	16.79	4
NORTH OX IND	2473607.88	3.09	2.81	0.65	0.35	0.05	4.51	18.84	4.57
NORTH OX INF	5732786.38	7.17	2.81	0.44	0.24	0.08	7.00	30.23	7.33
SOUTH OX IND	611499.50	0.76	2.74	0.54	0.26	0.01	0.92	3.48	0.84
SOUTH OX INF	2787915.75	3.49	2.74	0.42	0.22	0.04	3.26	13.31	3.23
NORTH SO	34590608.25	43.27	2.81	0.44677	0.249	0.50	43	190.14	46
SOUTH SO	31265763.25	39.11	2.74	0.43821	0.207	0.44	38	142.93	35
NORTH SO IND	10215438.88	12.78	2.81	0.55	0.29	0.18	15.83	65.45	15.87
NORTH SO INF	24375169.38	30.49	2.81	0.40	0.23	0.31	27.37	124.69	30.24
SOUTH SO IND	11040967.00	13.81	2.74	0.51	0.23	0.18	15.69	55.10	13.36
SOUTH SO INF	20224796.25	25.30	2.74	0.40	0.20	0.26	22.61	87.82	21.30
NORTH MIX	1825446.25	2.28	2.81	0.4322	0.252	0.03	2	10.13	2
SOUTH MIX	650784.25	0.81	2.74	0.45124	0.210	0.01	1	3.02	1
NORTHMIX IND	572045.75	0.72	2.81	0.60	0.33	0.01	0.96	4.12	1.00
NORTHMIX INF	1253400.50	1.57	2.81	0.36	0.22	0.01	1.25	6.01	1.46
SOUTHMIX IND	81206.75	0.10	2.74	0.51	0.23	0.00	0.11	0.41	0.10
SOUTHMIX INF	569577.50	0.71	2.74	0.44	0.21	0.01	0.71	2.60	0.63