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Date: 27th September 2013
Report No: R267.2013

Competent Persons Report (CPR)

AVOCET MINING PLC

West African Projects

Burkina Faso & Guinea

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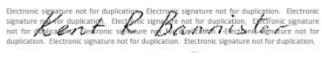
Principal Authors:	Tom Gibbons, Kent Bannister and Gerry Fahey	**Signature:**	  
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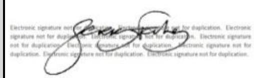
Principal Reviewer:	Gerry Fahey	**Signature:**	
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Revision:

Rev No.	Date	Revisions	Author	Approved
A	12th July 2013	Draft	Tom Gibbons Kent Bannister and Gerry Fahey	Gerry Fahey
B	15th August 2013	Draft	Tom Gibbons Kent Bannister and Gerry Fahey	Gerry Fahey
C	29th August 2013	Final Draft	Tom Gibbons Kent Bannister and Gerry Fahey	Gerry Fahey
D	17th September 2013	Final	Tom Gibbons Kent Bannister and Gerry Fahey	Gerry Fahey
E	27th September 2013	Final	Tom Gibbons Kent Bannister and Gerry Fahey	Gerry Fahey

Executive Summary

CSA Global Pty Ltd ("CSA") has been commissioned by Avocet Mining PLC ("Avocet" or "the Company") to compile an Independent Competent Persons Report ("CPR") for its West African operations and projects located in Burkina Faso and Guinea.

Avocet is a gold mining company that was originally admitted to the Main Market of the London Stock Exchange ("LSE") in 1996. The Company moved its listing to the Alternative Investment Market ("AIM") in July 2002 and in May 2010 dual listed on the Oslo Stock Exchange ("OSE"). In December 2011, Avocet was re-admitted to the Main Market of the LSE, which is now its primary listing. The Company's ticker on the LSE is AVM.L and on the Oslo Børs it is AVM.OL.

The Company's principal activities are gold mining and exploration in Burkina Faso (as 90 per cent owner of the Inata Gold Mine and 100 per cent owner of eight exploration licences in the Bélahouro region surrounding Inata) and exploration in Guinea known at the Tri-K Development Project (Koulékoun, Kodiéran and Kodiafaran gold prospects) (Figure 1).

Inata Gold Mine ("Inata") is part of the Bélahouro Gold Project, situated approximately 220km NNE of Ouagadougou, the capital of Burkina Faso, in the western part of the Birimian Djibo Greenstone Belt. Gold was first poured from Inata in 2009. In addition to Inata, the Bélahouro suite of exploration licences also includes the Souma and Fete Kole prospects. Inata and adjacent deposits lie within the Damba – Inata Volcano Sedimentary Province.

The Tri-K Development Project ("Tri-K") is located within the Mandiana Prefecture in the eastern sector of the Republic of Guinea, northwest of the local centre Mandiana and 90km northeast or about 2½ hours' drive from Kankan, the second largest city in Guinea. The project is located in the Siguiri basin which comprises basin-filled sediment with intercalated turbidites and tuffs of the Birimian formation and followed by granitoid emplacement (granitic / porphyritic rocks). Several phases of deformational events that characterises the Birimian orogeny followed.

The project sites have been visited by Mr Gerry Fahey in April 2009, Mr David Williams in May 2012, Mr Kent Bannister and Mr Tom Gibbons in June 2013. CSA have been accompanied by senior Avocet staff members who provided presentations, data, and guidance through the respective field and mine visits. All of whom contributed geological, mining, and processing information to this report through discussions and observations in the field

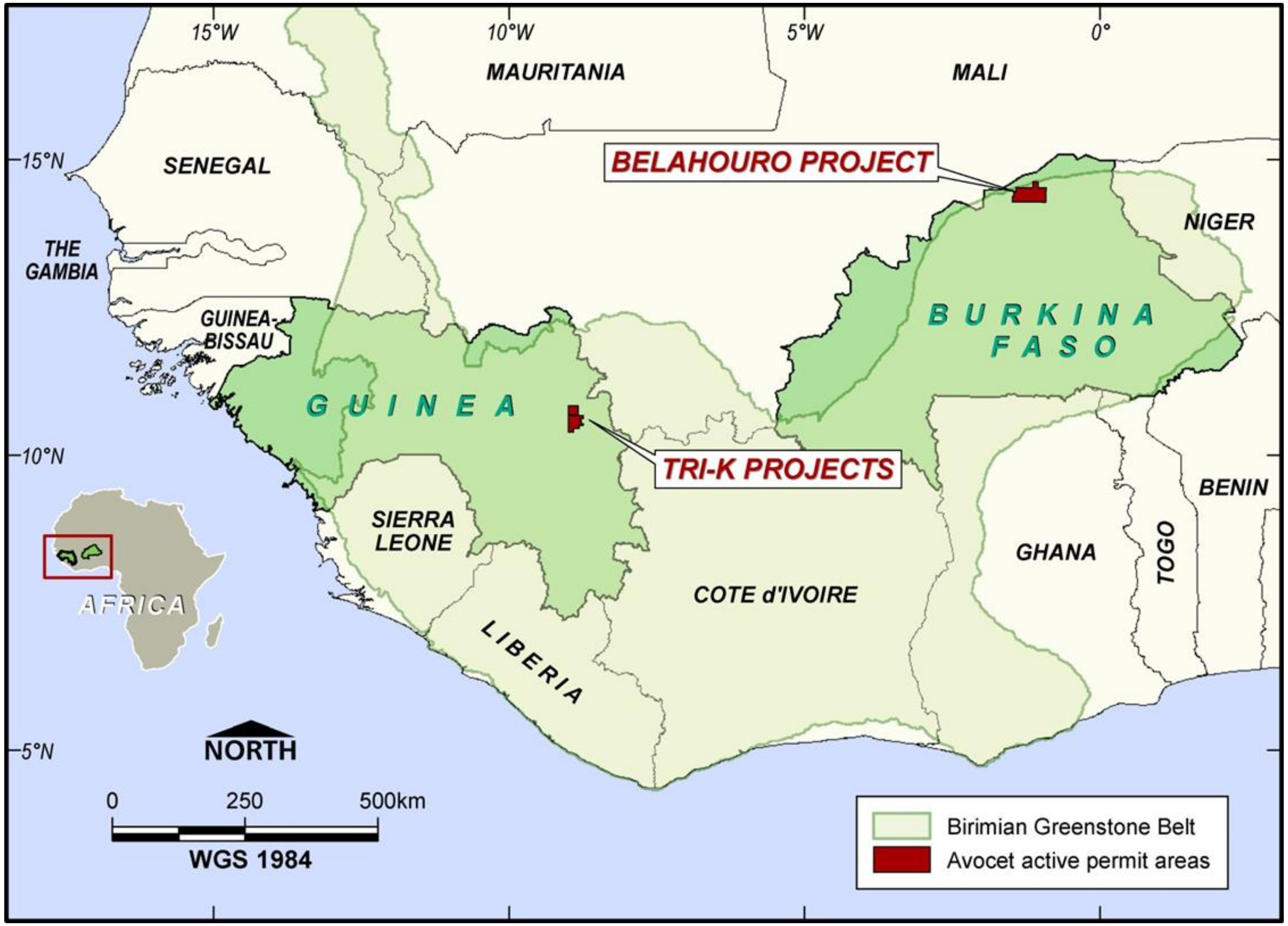

Figure 1: Location Map of Avocet Projects

Burkina Faso Project Overview

Inata

Regionally Inata forms part of the Bélahouro group of licencelicences and is located in the western portion of the Djibo Birimian Greenstone Belt. The belt comprise of intermediate to mafic volcano sedimentary successions and syn to post-kinematic granite and gabbro intrusions that have undergone regional lower greenschist metamorphism and were later intruded by dolerite and felsic-porphyry rocks.

Gold within the Bélahouro Gold Project is generally associated with mesothermal vein style mineralisation which is consistent with the majority of Archaean and Proterozoic terrains worldwide including the Birimian Series of West Africa. This style of mineralisation is generally associated with regionally metamorphosed terrains that have experienced considerable deformation as such the deposits are invariably strongly structurally controlled, with the dominance of structural control increasing proportionally with metamorphic grade.

The Bélahouro Gold Project consists of 9 main project areas which include Inata North, Inata South, Inata Central, Sayouba, Minfo, Pali, Souma, Damba and Ouzeni. Goldbelt Resources West Africa SARL ("Goldbelt") is a 100%-owned subsidiary of Resolute West Africa Ltd, which is owned by Wega Mining AS, which in turn is wholly-owned by Avocet Mining PLC. Goldbelt holds eight exploration permits covering an area of 1,635km^2. Avocet is actively exploring the Bélahouro permits, which are in their final term and will expire in mid-2015. The Goldbelt permits at Bélahouro exclude the 26.025km^2 Inata Mine lease, which was excised from the exploration permits in May 2007. The Mining Permit is owned by Société des Mines de Bélahouro SA ("SMB"), which is 90%-owned by Resolute West Africa Ltd with the remaining 10% being held by the Burkinabé Government as a free carried interest.

Mineral Resource estimates were completed for Inata in September 2012 and depleted using mining surfaces from December 2012. Additional Mineral Resource estimates were updated for Inata South, Minfo and Filio in December 2012 and new Mineral Resource models were created for Pali and Ouzeni Models were estimated using Ordinary Kriging and reported according to the JORC Code 2004 Edition (Table 1).

Table 1: Summary of Inata Mineral Resources as at December 2012.

Inata		Gross			Net Attributable to Avocet Mining			Operator
Area	Classification	Tonnes (Mt)	Au Grade (g/t)	Contained Ounces (x000)	Tonnes (Mt)	Au Grade (g/t)	Contained Ounces (x000)	
Inata mining Licence	Measured	18.2	1.69	991	16.4	1.69	892	Avocet
	Indicated	43.8	1.31	1,851	39.5	1.31	1,666	Avocet
	Meas + Ind	62.1	1.42	2,842	55.9	1.42	2,558	Avocet
	Inferred	33.1	1.29	1,370	29.8	1.29	1,233	Avocet
	Total	95.2	1.38	4,212	85.7	1.38	3,791	Avocet
Inata Surrounds (Filio, Pali and Ouzeni)	Measured	0.6	1.72	136	0.6	1.72	36	Avocet
	Indicated	0.9	1.20	35	0.9	1.20	35	Avocet
	Meas + Ind	1.5	1.42	70	1.5	1.42	70	Avocet
	Inferred	9.7	1.32	409	9.7	1.32	409	Avocet
	Total	11.2	1.33	479	11.2	1.33	479	Avocet

Note: Rounding errors may occur. Mineral Resources are inclusive of Ore Reserves but exclude stockpiles. The cut-off grade used is 0.5g/t gold. The net attributable to Avocet mining licence amounts to 90%.The surrounding areas are 100% attributable. The Inata Mineral Resources were estimated by Mr David Williams of CSA Global. Mr Williams is defined as a Competent Person by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2004 Edition) and consents to the inclusion in this report on the matters based on their information in the form and context in which they appear.

The Inata mine is located in a remote area and the Company has constructed the infrastructure necessary for the operation. Facilities include open cut mines, waste dumps, ore stockpiles, treatment plant, tailings storage and power and water reticulation, administration, workshops, camp accommodation and store buildings.

- The Inata treatment facility has a capacity to treat over 2 Million tonnes per annum.
- The current tailings facility is reaching its design capacity and a new tailings facility is being constructed and is near to completion.
- All power must be generated at the site and distributed as needed to the work places. The primary power is supplied by eight diesel generators.
- The power station is fuelled from the onsite fuel farm which has a total capacity of three million litres.
- The Company has constructed a major dam, the Gomdé Barrage, which is now the only source of permanent water in the area, with a capacity of over 100 million cubic metres, against a yearly mine reqirement of between two and three million cubic metres.
- The heavy duty/light vehicle shop has a work area of 836 square metres with; four service bays, tool store, office facilities, compressor house, light vehicle service bay, and Indoor lubricant dispense points.

- The fixed plant maintenance workshop has the following: indoor works area 440 square metres, outdoor works area 183 square metres, office facilities, tool stores, and machine shop.

- In light of the remote location Inata provides camp facilities for its workers. There are four separate camps within a four kilometres radius of the site. The total accommodation is for 600 persons.

The artisanal workings at Inata are not extensive and have mostly been created by illegal miners. BHP Minerals International Exploration (BHP) and Resolute Mining Ltd (Resolute) established control over artisanal operations from late 1990's in order to restrict any activity over the known Inata resource areas. Avocet has halted any illegal mining taking place on the Inata mining licence (26km^2), and the government assisted in clearing prospective areas of the Pali and Souma exploration licences. However, illegal mining continues elsewhere on Avocet's Bélahouro exploration licences, particularly on the Souma trend and nearby Pali-Damba areas.

Inata is being mined using conventional open pit methods utilising an owner-operated mining fleet. A significant proportion of the Inata Mine operations comprise weathered and transition rocks however, drill and blast activities are conducted to optimise equipment productivities. Only the deeper pits (North and Central) are designed to mine the harder fresh rock.

Mining commenced in March 2009 and initially the mining is free digging as the top benches of the pits are generally considered to be amenable to this mining method. The pits are mined using backhoe excavators in five metre benches which are taken in two 2.5 m flitches. Bench heights are designed to be increased in areas of known waste to more effectively utilise equipment productivity and minimise costs. Interim walls are consistent with geotechnical recommendations at the time of excavation. As geotechnical knowledge increases recommended slope angles have been modified.

Annual Production Summary is displayed in Table 2.

Table 2: Annual Production Summary

Inata Mine Production to Date					
Year	**Total**	**Ore**	**Grade**	**Waste & Marginal**	**Strip Ratio**
2009	5,809,000	530,000	2.57	5,279,000	9.96
2010	13,309,000	1,879,000	2.60	11,430,000	6.08
2011	25,200,419	2,494,297	2.14	22,706,122	9.10
2012	33,127,362	2,652,700	1.88	30,474,663	11.49
2013 to May	16,575,501	1,532,863	1.60	15,042,638	9.81
Total	94,021,282	9,088,860	2.09	84,932,423	9.34

Ore Reserves (Table 3) have been re-estimated in May 2013.

Table 3: Inata Ore Reserves as of 31st May 2013

Open Pits		Gross			Net Attributable			Operator
		Tonnes	Grade (Au g/t)	Contained Ounces	Tonnes	Grade (Au g/t)	Contained Ounces	
Inata	Proved	3,083,000	1.84	182,000	2,774,600	1.84	163,930	Avocet
	Probable	9,445,000	2.41	731,000	8,500,460	2.41	657,550	Avocet
ROM Stockpiles								
Proved		883,000	0.98	27,700	794,800	0.98	24,940	Avocet
Probable		219,000	1.49	10,500	196,800	1.49	9,420	Avocet
TOTAL		13,630,000	2.17	950,900	12,266,690	2.17	855,850	Avocet

Notes: The information in this statement that relates to Ore Reserves, estimated in conformance with JORC 2004 Code, is based on information compiled by Kent Bannister, of CSA Global Pty Ltd. Kent Bannister takes overall responsibility for the Report as Competent Person. He is a Fellow of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the JORC Code The Competent Person, Mr Kent Bannister, has reviewed this Ore Reserve Statement and given his permission for the publication of this information in the form and context within which it appears. Estimates are rounded to nearest significant figure. Rounding Errors may occur.

The Ore Reserves were estimated based on the following factors:

- The Inata Gold Mine is 90% owned by Avocet and 10% owned by the Government of Burkina Faso
- Gold Price US$1200/oz
- Mining Recovery 97.5%
- Mining Dilution 5.0%
- Metallurgical recoveries used for optimisations are based on test work for carbonaceous and refractory ore content.
- Measured Resources for Transition and Fresh Ore are not converted to Proved Ore Reserves due to the metallurgical recovery uncertainty
- Carbonaceous Ore on ROM stockpiles has not been converted to Proved Ore Reserves due to metallurgical recovery uncertainty
- Responsibilities for the various areas involved in deriving the above Ore Reserve were as follow:
    - Mining assumptions and cost estimates developed by Clayton Reeves of SMB with SMB personnel.

- Metallurgical, economic, marketing, legal, environmental, social and governmental factors provided by SMB personnel.
- Geotechnical factors provided by SRK Consulting.
- Whittle optimisations were run by Mr Clayton Reeves, SMB.

The Inata processing plant is a conventional and well-proven carbon-in-leach (CIL) design combined with a gravity recovery circuit. It was initially designed to process 2.25Mtpa of ore and produce gold doré. The plant was purchased second hand from Australia to fast-track development. Major components of this plant, such as the jaw crusher, SAG mill, one Ball Mill, the cyanide mixing and elution system were refurbished and utilised in the new plant configuration. A second refurbished ball mill was purchased from South Africa.

During Q3 2011 the Inata open pit mine encountered issues with processing transitional and fresh material due to the existence of refractory and carbonaceous material in a graphite zone within the mineralisation. The refractory and graphite preg robbing materials reduced recoveries in 2012 compared to the levels previously recorded in 2010 and 2011 of 90-95% in the oxide material.This relates to the carbonaceous material “robbing” a proportion of the leached gold from the slurry within the CIL circuit, and thus impacting adversely on the gold recovery.

Due to the complexity of the Inata ore bodies, the company metallurgical staff has dedicated a great deal of time and resources to developing a gold recovery algorithm/formula. The formula is based upon head grade, sulphur content, arsenic content, preg-robbing index (PRI), mitigation factor and efficiency factor to compensate for treatment route and laboratory versus plant performance. The methodology and calibration of the algorithm is discussed in more detail in Section 11.7.6.

Audited gold production in the year ended 31 December 2012 was 135,189 ounces at an average realized gold price of US$1,491 per ounce and a cash production cost including royalties of US$1,000 per ounce. Un-audited gold production in the quarter ended 31 March 2013 was 30,481 ounces at an average realized gold price of US$1,422 per ounce and a cash production cost of US$1,169 per ounce.

Cash production costs for 2013, Year to Date (May), are US$1,206 per ounce.

CSA Comments on Inata

Mineral Resources and Ore Reserves are reported to JORC 2004 reporting standards.

CSA conclude that the preg-robbing issue within the Inata ore bodies is complex, particularly due to the distribution of the naturally occurring active carbonaceous material within the ore. The geology of Inata has undergone several phases of deformation and ductile shearing. The original geology consisted of interbedded volcanics, siltstones and carbonaceous shales. In the original geology the distribution of carbon was related to the sedimentary conditions that prevailed at the time of deposition and resulted in a predicable distribution of carbon throughout the sedimentary pile. This has undergone significant deformation resulting in complex distribution of the original units. The sequence has been sheared and intruded by small intermediate dykes. Original carbon has been converted by varying degrees to *graphite. This has resulted in a distribution of active carbonaceous material that is very hard to model in three dimensions from the current drillholes. Based on a set of some 5000 measurements from exploration drilling, the PRI (preg robbing index) has been modelled into the resource block model. Due to the complexities of the distribution of active carbon this model is unlikely to be accurate on the local scale but is expected to perform well on more global estimates such as required for LOM studies. This PRI is now a factor incorporated into the Ore Reserve estimation and pit optimisations.*

More details regarding lithological boundaries and geometallurgical properties need to be incorporated into future resource models. This will assist further in the estimation and overall recoverable grade discussed in Section 11.7.

Safety standards are high and the Avocet staff appear very efficient and operations are run to high standards.

Initiatives to improve mining equipment mechanical availability are required to maintain operating costs.

The plant appeared in general to be in good condition.

The Avocet metallurgical, geological and mining teams have done a commendable job in recent months to address the various issues and are better positioned to define the long-term impact for the operation with respect to mine production planning and plant gold recovery.

CSA consider that the technical approach used by the Avocet metallurgical team to develop and utilize a recovery algorithm is well supported. It is acknowledged that some empirical interpretation and iterative analysis has been used by necessity but in general the development and refinement of the recovery algorithm is based upon a sound scientific approach. CSA believes that further fine tuning is required on the algorithm and is freely acknowledged.

Notwithstanding the recovery issues facing the operation, a key vulnerability is the existing Marcy design SAG Mill, possibly dating back to the 1960s. Risks may exist with shell integrity and drive alignment, which site personnel are aware of and an engineering evaluation is scheduled in the coming months.

The CIL circuit appears well-designed and functional, as does the elution and regeneration circuits. However, it is important to note that the CIL circuit will come under increased pressure when diesel or kerosene blanketing is employed on a semi-permanent basis, due to the collateral fouling of the circuit carbon.

This is an issue that is being addressed by a circuit modification to install seprate kersone pre-conditioning tanks followed by an excess kersone scavenging circuit positioned ahead of the main CIL circuit. There are also plans to increase the carbon regeneration capacity. CSA comment that this is a sound concept.

The key ore transport conveyors are covered, as is the Coarse Ore Stockpile. This is good industry practice in regions of heavy seasonal rainfall.

Both the existing and new Tailing Storage Facilities (TSF) were inspected. The current TSF has performed well, with better than anticipated settled densities. The change-over to the new TSF is scheduled for late 2013 or early 2014, depending on deposition rates.

Importantly in an operation facing challenges, plant personnel presented as capable and motivated. The culture of the operation was positive, both from a safety and a production perspective.

Souma

Souma Gold Project (Souma) is an advanced stage gold exploration project that is proximal to Avocet's operational Inata Deposit. Located about 20kms northeast of Inata, the project has the potential to form a strategic operational synergy with existing mine site transport, logistics, and infrastructure.

The project is wholly owned by Avocet, in a relatively politically stable and well-governed country. The company also has favourable relations with the government and local communities.

Recent drilling campaigns have identified the Souma trend to contain five independent prospects: Dynamite, Miilam North, Miilam Central, Miilam South and N'Darga.

At Dynamite, mineralisation is hosted within the sheared and altered gabbro and is associated with minor quartz veining. The distribution of fine grained phases of the gabbro appear to be have some control on mineralisation and the gold is often located close to lithological contacts between fine and coarse grained units. The fine grained units appear to be an alteration product of the coarse gabbro. The original texture has been destroyed by a strong chlorite alteration associated with the mineralising event. Mineralisation is generally patchy but there is a clear trend, striking almost north south and diping steeply to the west, with a very shallow plunge towards the south.

The Miilam prospects (North, Central, and South) are proximal to a sheared contact between sediment volcanic sequences in the west and the Bélahouro granite in the east. Gold mineralisation occurs within boudinaged or sheeted quartz veins that are steeply dipping to the west, containing fine disseminated pyrite. High grade gold concentrations occur within quartz veining although host rocks can locally contain medium and low grade concentrations of gold. The quartz veins at Miilam South contain modest amounts of tourmaline.

Avocet announced a maiden Mineral Resource for Souma in November 2010.

CSA prepared an updated Mineral Resource estimate for Souma in January 2013 which is presented in Table 4 . This Mineral Resource includes additional mineralisation domains for Miilam and Dynamite, and the addition of N'Darga to the Mineral Resource inventory.

The January 2013 Mineral Resource represents a 53% increase in global tonnes and a 38% increase in global contained ounces, since the previous Mineral Resource estimate reported in 2010. The increase in Mineral Resources is attributed to the interpretation of strike extension and additional mineralisation domains for Miilam and Dynamite, and the addition of N'Darga to the Mineral Resource inventory. Separate block models were constructed and estimated for the Souma deposits as presented in Table 4. A full breakdown of results is given in Table 4.

Table 4: Souma Mineral Resource Total Results

Souma		Gross			Net Attributable to Avocet Mining			Operator
Deposit	Classification	Tonnes	Au Grade (g/t)	Contained Ounces	Tonnes	Au Grade (g/t)	Contained Ounces	
Total	Measured	0	0	0	-	0	-	**Avocet**
	Indicated	2,674,000	2.16	185,400	2,674,000	2.16	185,400	**Avocet**
	Meas + Ind	2,674,000	2.16	185,400	2,674,000	2.16	185,400	**Avocet**
	Inferred	13,663,000	1.34	590,600	13,663,000	1.34	590,600	**Avocet**
	Total	16,339,000	1.48	776,000	16,339,000	1.48	776,000	**Avocet**

Note: The Mineral Resource was estimated by David Williams of CSA Global. Mr Williams is a Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). David Williams consents to the inclusion of such information in this Report in the form and context in which it appears. The resource has been estimated within constraining wireframe solids based on a nominal lower cut-off grade of 0.3 g/t Au. The resource is quoted from blocks above 0.5 g/t Au. Differences may occur due to rounding.

CSA Comments on Souma

The project area contains a 16km long soil geochemical anomaly and airborne geophysical surveys indicate the geologic system could continue for a strike length of about 30kms.

The Mineral Resource estimate for Souma is classified as Inferred due to broadly spaced drill sections. The Mineral Resource estimation has been prepared in accordance with the (2004 edition) Joint Ore Reserve Committee (JORC) reporting standards.

The mineralisation style of Souma displays good geological continuity; additional infill drilling would likely enable the resource to be upgraded, thereby potentially providing the geologic foundation for a feasibility study.

Souma's closeness to Inata has the potential to form a strategic operational synergy through the use of the existing mine site transport, logistics, and infrastructure.

Recent drilling has been successful in the upgrading of Inferred material to Indicated resource classifications. A further 500,000 Oz are currently Inferred and future drilling should target these areas to improve the geological confidence, potentially upgrading the classification of the reported Mineral Resources, which can be used for advancing the project to a feasibility stage.

Additional drilling is recommended with a focus on both a resource expansion along strike, as well as increased infill drill spacing around known mineralisation.

Metallurgical and geotechnical test work has been undertaken at Souma and results show favourable conditions for open pit mining.

Guinea Project Overview

The Koulékoun exploration licence forms part of the Tri-K Block located within the Mandiana Prefecture in the eastern sector of the Republic of Guinea, northwest of the local centre Mandiana and 90km northeast or about 2½ hours' drive from Kankan, the second largest city in Guinea.

The total area of the two Koulékoun licence is 205km^2. Koulékoun is one of nine permits that comprise the Tri-K Block with a total area of 797km^2 (Figure 76).

Avocet is committed to pay land taxes amounting to US$10/km^2/year for the first term, US$15/km^2/year for the second term and US$20/km^2/year for the third term. These are paid, in addition to renewal fees, at the time of renewal. There are no set minimum expenditure rates for the permit, but the Government of Guinea does hold companies to the expenditure set forth in their work plan that must be submitted every year.

Following completion of a feasibility study, the Government of Guinea has the right to a 15% free-carried interest in the operating joint venture company, with the right to acquire an additional 20% against payment. The government also charges a 5% royalty on gold sales.

The Koulékoun and Kodiéran Projects are located approximately 90km northeast of Kankan and access is possible via the Kankan-Mandiana road. It is a year round gravel road but is in poor condition after years of no maintenance. The Projects are accessed via the village of Loïla along a 10-km dirt track which is problematic in the wet season. The normal route for personnel travelling to the site is a 5 to 6 hour drive, of approximately 350km, from Avocet's regional office in Bamako, Mali to Kankan, crossing the international border at Kouremale.

The Koulékoun and Kodiéran Projects and surrounding deposits represent a porphyry hosted orogenic disseminated style mineralisation system. This is markedly different to the typical orogenic lode or mesothermal lode style of the Birimian.

The regional geology of the area hosting the Tri-K Block is dominated by sedimentary units of the Siguiri Basin which have been subjected to low greenschist facies metamorphism. The Siguiri Basin covers much of the northeast corner of Guinea and extends into southern Mali. This large basin corresponds to a marine platform filled with turbiditic sediments, predominantly sandstones with subordinate black siltstone. The upper part of the sequence comprises dolomitic limestones and acidic volcanics.

Most of the major gold occurrences are considered to be of metamorphic origin with gold remobilised along fractures and fault zones and derived from auriferous source rocks of the older Birimian volcanic and volcano-sedimentary units.

The dominant geological feature at Koulékoun is a massive, NW-striking and steeply E-dipping, quartz feldspar porphyry typically 20-80m wide and drilled to a maximum vertical depth of 400m and open along strike and at depth. This porphyry unit is the primary host to gold mineralisation, and has intruded along the anticlinal axis of a folded sequence of volcanogenic sedimentary rocks. These have a regional north-west strike and steep easterly dip; and comprise turbidites, pelites, schistose pelites, sandstones, greywackes, and arkose sandstones and tuffs. An auriferous NE-SW trending fault zone also hosts significant mineralisation between the main porphyry unit and parallel units in the northeast. The most significant gold drill intercepts occur at the intersection of this structure and the porphyry.

The above package is intruded by a younger, sub-horizontal dolerite dyke of Mesozoic age. The dyke cuts the mineralised geology and controls the position of the water table. As a result, the rock above the dolerite is highly weathered, whilst rocks in the footwall below the dolerite are fresh.

The weathering profile extends to depths of up to 80 m, typically to the prominent dolerite dyke. This weathering profile is covered by a 2-5m thick blanket of ferricrete that is typically composed of pisolitic gravels, rocks fragments and soil. There is limited exposure of fresh, unweathered rock within the project area.

Kodiéran is located in sediments close to the contact of a large diorite intrusive to the west. Most of the resource is hosted within the oxide zone of up to 80m thick. Where fresh geology is intersected, the gold is hosted within brecciated and fractured sediments and intermediate intrusives. The mineralisation is associated with chlorite alteration and fine grained pyrite localised within fractured rock.

The exploration throughout the region has been source back to 1937. Since this time, work has been conducted by a former Soviet group, a Chinese-Guinean joint venture, a Guinean-German joint venture, and numerous private corporations. More recent works have been conducted by the Ashanti-AGEM Alliance, and Wega Mining.

The Mineral Resource estimate was updated by CSA in December 2012. The details of the updated Mineral Resource are presented in Table 68.

At Koulékoun mineralisation envelopes were constructed using a nominal 0.3 g/t lower limit, based upon a geological interpretation. A total of 31 domains were constructed, striking either 335° or 55°. The NNW striking mineralisation (21 domains) is associated with the porphyry intrusion, although some mineralisation to the footwall and hangingwall of the porphyry is located in the sedimentary rocks. The porphyry mineralisation is open at depth and appears to close along strike. The NE striking mineralisation (10 domains) is hosted by the sedimentary rock.

At Kodiéran, all mineralisation envelopes were constructed by Avocet staff using a nominal 0.3 g/t Au cut-off within the host lithological units and supplied to CSA for use in the block modelling. A total of 61 mineralisation envelopes have been provided. Not all of these envelopes have sufficient across sectional and along strike drill hole support to allow use in the classified portion of the Mineral Resource (Table 5).

The mineralisation zones generally strike north-north west with a predominantly westerly dip of around 60°. Some of the minor lenses in the southern area are interpreted to dip steeply towards the east.

Mineralisation has been depleted by modelled Mesozoic dykes.

Table 5: Tri K Mineral Resource Estimate

Tri K		Gross			Net Attributable to Avocet Mining		
Deposit	Classification	Tonnes	Au Grade (g/t)	Contained Ounces	Tonnes	Au Grade (g/t)	Contained Ounces
Total	Measured	0	0	0	0	0	0
	Indicated	35,812,000	1.43	1,651,000	35,812,000	1.43	1,651,000
	Meas + Ind	35,812,000	1.43	1,651,000	35,812,000	1.43	1,651,000
	Inferred	36,356,000	1.34	1,569,200	36,356,000	1.34	1,569,200
	Total	**72,168,000**	**1.39**	**3,220,200**	**72,168,000**	**1.39**	**3,220,200**

Note: The Mineral Resource was estimated by David Williams of CSA Global. Mr Williams is a Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). David Williams consents to the inclusion of such information in this Report in the form and context in which it appears. The resource has been estimated within constraining wireframe solids based on a nominal lower cut-off grade of 0.3 g/t Au. The resource is quoted from blocks above 0.5 g/t Au. Differences may occur due to rounding.

The region surrounding the project area hosts several favourable exploration targets; these require additional testing.

The Mineral Resource estimation has been prepared in accordance with the recently the current (2004 edition) Joint Ore Reserve Committee (JORC) reporting standards. Drill core density measurements are conducted frequently however; there is a slight discrepancy between recent measurements and the 2008 measurements.

Recent feasibility study drilling on Koulékoun and Kodiéran has been successful in the upgrading of Inferred material to Indicated resource classifications. Additional drill test work focused on geotechnical, metallurgical and hydro test holes. Also included in recent drilling include holes for sterilisation of proposed infrastructure sites.

Continuing work is being done to advance the metallurgical and geotechnical understanding of the deposit. The feasibility study is scheduled to be completed towards the end of 2013.

Contents

Figures

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Appendices

1 Introduction

CSA Global Pty Ltd (CSA) has been commissioned by Avocet Mining PLC (Avocet or "the Company") to compile an Independent Competent Persons‟ Report (CPR) on the projects and operations located in Guinea and Burkina Faso.

Avocet is a gold mining company that was originally admitted to the Official List of the London Stock Exchange in 1996 and moved its listing to AIM in July 2002 and dual listed in May 2010 to the Oslo Stock Exchange (OSE) In December 2011; Avocet was re-admitted to the official list of the LSE, which is now its primary listing (Ticker: AVM.L) and the Oslo Børs (Ticker: AVM.OL).

The Company's principal activities are gold mining and exploration in Burkina Faso (as 90 per cent owner of the Inata Gold Mine and 100 per cent owner of eight exploration licences in the Bélahouro region surrounding Inata) and exploration in Guinea, including 100% ownership of the Koulékoun permit (Figure 1). Gold was first poured from Inata in 2009.

The report has been prepared to provide a summary of the scientific and technical information relating to Avocets West African projects. The objectives of this report are to:

- Provide an overview of the geological setting of Avocets project areas and associated mineralisation
- Present an overview on the recent Mineral Resource estimates
- Comment on the exploration potential
- Provide an outline of the current mining techniques
- Provide an overview of current metallurgical processes

The project sites have been visited by Mr Gerry Fahey in April 2009, Mr David Williams in May 2012, and Mr Kent Bannister and Mr Tom Gibbons in June 2013. CSA have been accompanied by senior Avocet staff members who provided presentations, data, and guidance through the respective field and mine visits. All of whom contributed geological, mining, and processing information to this report through discussions and observations in the field.

Avocet's project areas may be described as:

Operating Project: Current mining has commenced and in operation.

Near Operating: Projects are currently in preparation for production.

Advanced Exploration: These are areas actively being explored and have a Mineral Resource estimate but for which no economic viability assessment has yet been made.

Early Exploration: Drilling targets have been identified and further interpretation is needed (Figure 2).

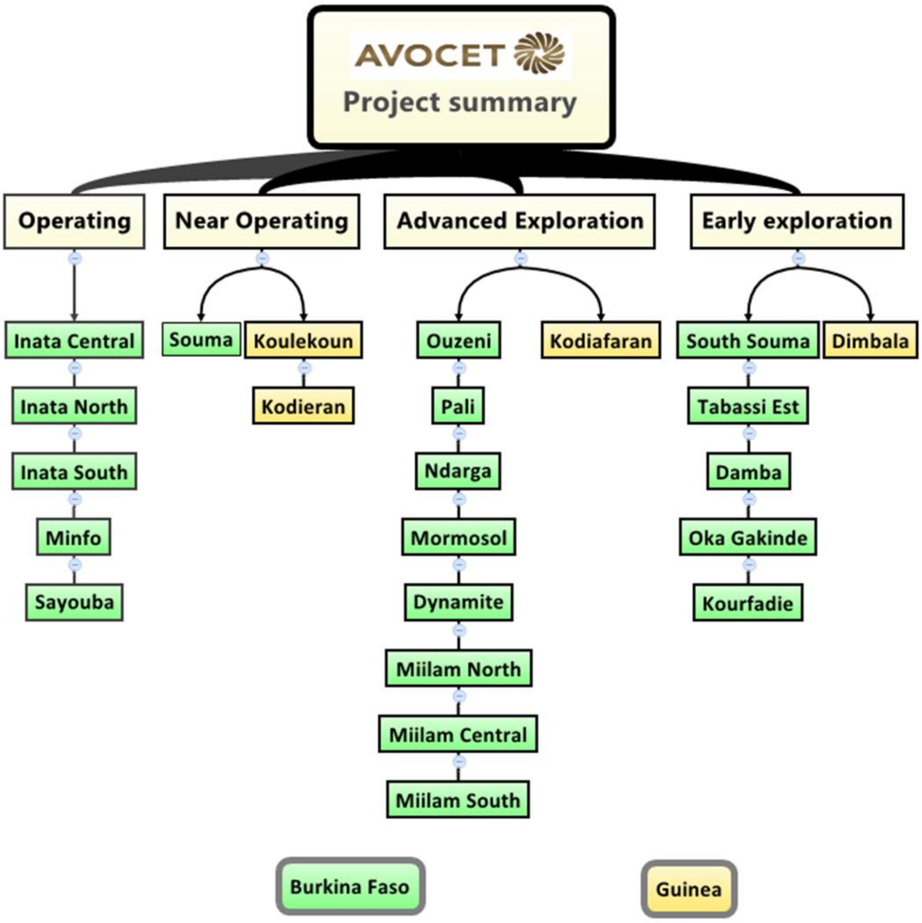


Figure 2: Avocet Project Summary

2 Sources of Information

This document has been prepared for Avocet by CSA in accordance with the JORC Code (2004 Edition) reporting standards of disclosure for mineral projects, which is binding upon Members of the Australian Institute of Geoscientists (AIG), the Australasian Institute of Mining and Metallurgy (AusIMM) and Recognised Professional Organisations (RPOs) and the rules and guidelines issued by such bodies as the Australian Securities and Investments Commission (ASIC) and the London Stock Exchange (LSE), which pertain to Independent Expert Reports or Mineral Expert Reports.

Certain information enclosed herein is based on assumptions as identified throughout the text and upon information and data supplied by others. CSA is not in a position to, and does not, verify the accuracy of, or adopt as its own, the information and data supplied by others. While CSA has compiled the overall report on Avocet's behalf, it has not audited nor undertaken a technical review of contributions by others.

Unless otherwise stated all views expressed herein (including estimates or forecasts) are solely those of CSA and are subject to change without notice. Whilst this document is based on information and assessments CSA believe to be current at the date of publication, CSA has no obligation to provide revised assessments in the event of changed circumstances.

CSA is an exploration, mining, and resource consulting firm, which has been providing services and advice to the international minerals industry and financial institutions since 1987. Neither CSA, nor the authors of this report, have any material present or contingent interest in the outcome of this report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence in the preparation of this report.

The report has been prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report. No member or employee of CSA is, or is intended to be, a director, officer or other direct employee of Avocet. No member or employee of CSA has, or has had, any shareholding in Avocet. There is no formal agreement between CSA and Avocet as to CSA providing further work for Avocet.

Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will carry an element of risk.

3 Burkina Faso Project Overview

3.1 Inata Gold Mine

3.1.1 Location and Tenure

Inata Gold Mine (Inata) is part of the Bélahouro Gold Project (Bélahouro), situated approximately 220kms NNE of Ouagadougou, the capital of Burkina Faso, in the western part of the Birimian Djibo Greenstone Belt (Figure 3). In addition to the Inata Gold Mine, the Bélahouro Gold Project also includes the Souma and Fete Kole prospects. Inata and adjacent deposits lie within the Damba – Inata Volcano Sedimentary Province.

Burkina Faso is a landlocked country in West Africa, bordered by Benin, Togo, Ghana, and Côte d'Ivoire to the south; by Mali to the west and north, and by Niger to the east. The country has an area of approximately 274,200km^2 and a population of over 15 million.

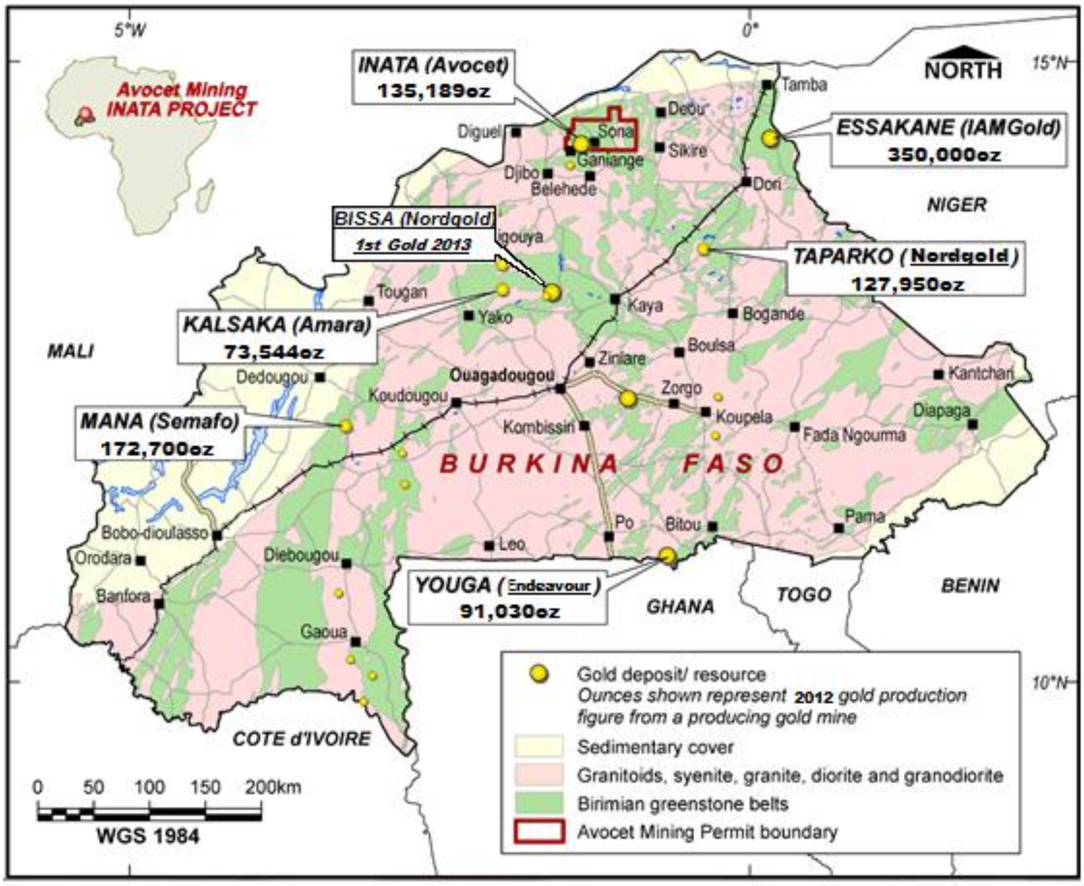


Figure 3: Deposit Locations in Burkina Faso

Burkina Faso, Guinea and Mali are all members of the 15-state Communauté Économique Des États de l'Afrique de l'Ouest (CEDEAO), known in English as Economic Community of West African States (ECOWAS). ECOWAS was founded on May 28, 1975 to achieve "collective self-sufficiency" for the member states by means of economic and monetary union creating a single large trading bloc. As a consequence, there is a drive to develop a common legal system among member countries. Guinea was suspended from ECOWAS following the coup d'état in 2008.

The following describes the mining laws for Burkina Faso and Guinea.

Burkina Faso adopted a new Mining Code in 1997, which was subsequently modified in 2003. Under the Code, mineral resources are the property of the State with mineral rights being granted by the Ministère des Mines, des Carrières et de l'Energie. The Code identifies two types of title for large operations, the exploration and exploitation permits, respectively.

SMB is committed to pay annual land taxes at a rate of FCFA 7,500,000/km2/year for the first five years, FCFA 10,000,000/km2/year from the 6th year and FCFA 15,000,000/Km2/year from the 11th year, upon reception of the clearance bulletin, set up by the General Direction of Mines.

Royalties are paid at a fixed rate of three to five per cent of the value of all gold sold, as follows:

3% when the price of the ounce of gold is less than or equals to $1,000

4% when the price of the ounce of gold is comprised between $1,000 and $1,300

5% when the price of the ounce of gold is higher than $1,300

There is also a further 2.5% royalty paid to Royal Gold as part of previous lease conditions.

SMB is committed to comply with the environmental commitments detailed in the Environmental Impact study (EIS) and its amendments. SMB opened a trust account in order to cover the cost of preserving and restoring the mine site at the end of the exploitation. The amount of the annual contribution to the Closure Fund is equal to the total provisional rehabilitation budget (US$4,684,988 divided by the life of mine operations in years) as referred to in the closure plan submitted to the competent authorities.

The granting of the exploitation licence and the approval of the EIS and its amendments were the necessary permits for building all mine facilities. All members of the local populous that were affected by the project and required to relocate were properly compensated, as stipulated by the mining code.

Figure 4 and Table 6 presents the Inata Mining Permits.

Goldbelt Resources West Africa SARL (Goldbelt) is a 100%-owned subsidiary of Resolute West Africa Ltd, which is owned by Wega Mining AS and is now wholly-owned by Avocet Mining PLC. Goldbelt holds eight exploration permits covering an area of 1,635km^2. Avocet is actively exploring the Bélahouro permits, which are due to expire in mid-2015. However, the mechanism is in place where Avocet can retain part or the entire permit after expiry for another term period.

The above Goldbelt permits at Bélahouro exclude the 26.025km^2 Inata Mine lease, which was excised from the exploration permits in May 2007. The Mining Permit is owned by Société des Mines de Bélahouro SA (SMB), which is 90%-owned by Resolute West Africa. The Burkinabé Government holds a 10% free carried interest.

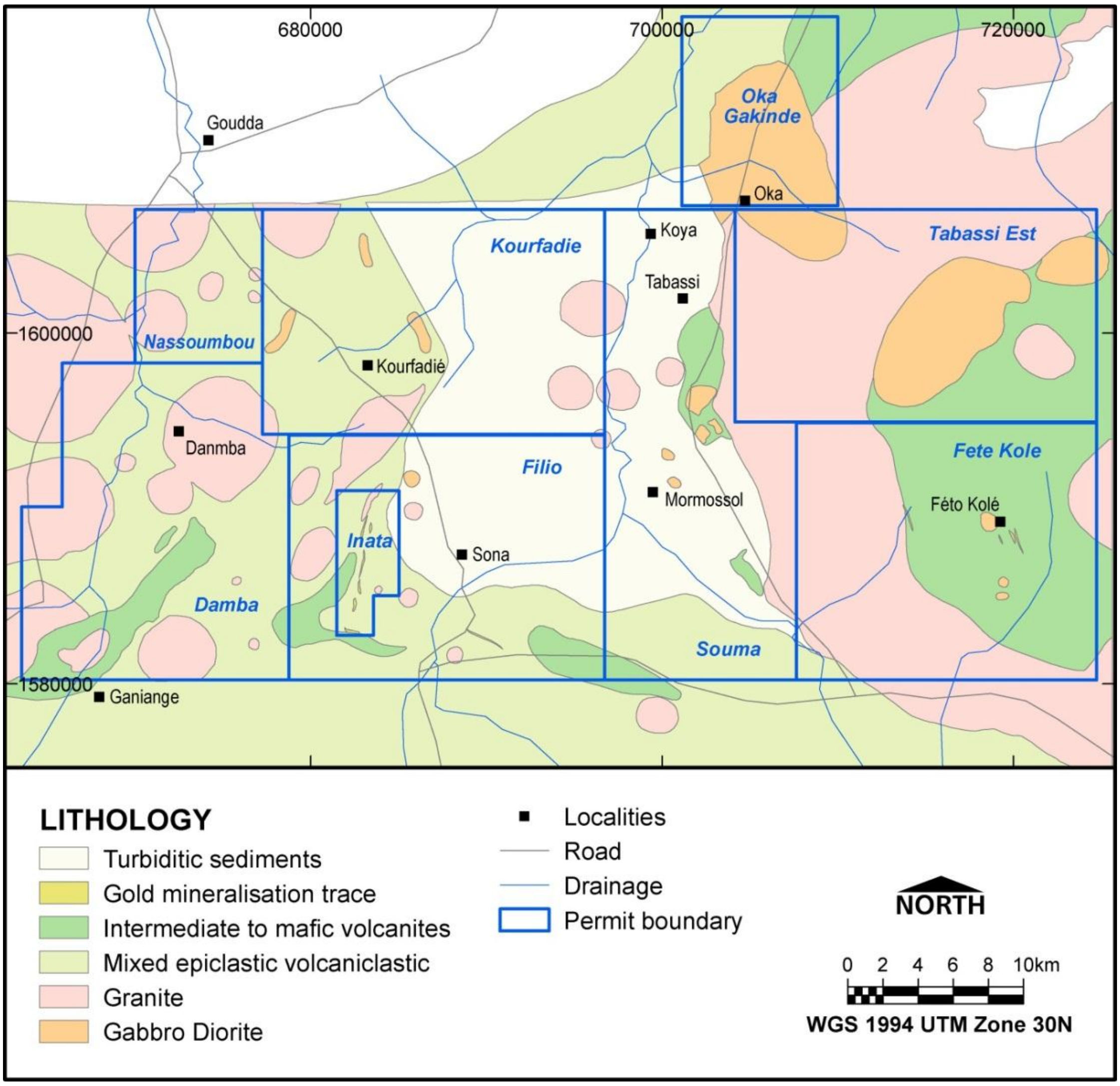


Figure 4: Inata Mining Permits

Table 6: Inata Tenements Details

Asset	Licence No.	Registered Holder (or Applicant in respect of Applications)	Interest (%) Equity being earned	Status	Licence Expiry Date	Licence Area (km^2)	Comments (Licence status notes)
Inata	2007-339	Société des Mines de Bélahouro S.A.	90%	Mining		26.025	Annual renewal fees for $33,710[†]
Filio	2012/12/223	Goldbelt Resources West Africa	100%	Exploration	18-Jul-2015	224	permit cannot be renewed
Souma	2012/12/229	Goldbelt Resources West Africa	100%	Exploration	18-Jul-2015	250	permit cannot be renewed
Damba	2012/12/230	Goldbelt Resources West Africa	100%	Exploration	18-Jul-2015	250	permit cannot be renewed
Fete Kole	2012/12/227	Goldbelt Resources West Africa	100%	Exploration	18-Jul-2015	250	permit cannot be renewed
Kourfadie	2012/12/224	Goldbelt Resources West Africa	100%	Exploration	18-Jul-2015	250	permit cannot be renewed
Nassoumbou	2012/12/226	Goldbelt Resources West Africa	100%	Exploration	18-Jul-2015	64.05	permit cannot be renewed
Oka Gakinde	2012/12/204	Goldbelt Resources West Africa	100%	Exploration	13-Mar-2015	96.47	permit cannot be renewed
Tabassi Est	2012/12/228	Goldbelt Resources West Africa	100%	Exploration	18-Jul-2015	250	permit cannot be renewed

3.1.2 *Accessibility, Climate, Local Resources, Infrastructure and Physiography*

The Inata Gold Mine can be accessed via 180km of sealed road from the capital to Kongoussi followed by 170km of unsealed road to site. The nearest major town to Inata, Djibo, is situated approximately 60km to the southeast of the project area.

The mine site lies within the Sahel Zone of western Africa. It is described as a hot scrubby land that borders the Sahara Desert, semi-permanent river systems, and vegetation consisting of sparse acacia tree and shrubs. The climate is generally dry with an average rainfall of between 300mm to 600mm, all of which falls during the wet season from July to September. Temperatures range from 5-50°C with the hottest time of the year being the months of March to June.

Greater than 80% of the population are engaged in subsistence agriculture. Thirty-two per cent of the GDP is derived from agriculture. Cereal crops (sorghum, millet, maize, peanuts and rice) occupy 88% of the cultivated area per year; but cotton is the main export crop and accounts for an average of 50% of net export income.

Tracks in the project area are not maintained, and local accommodation comprises mud and straw huts. The low-lying nature of the area and seasonal flooding results in periodic inaccessibility via local tracks. The Company has constructed a major dam, the Gomdé Barrage, which is now the only source of permanent water in the area, with a capacity of over 100 million cubic metres, against a yearly mine reqirement of between two and three million cubic metres. The Inata Gold Mine uses 4 million cubic metres a year, which is less than the amount lost to evaporation. These losses are more than replenished in an average wet season. Diesel powered generators are the only source of power in the area.

3.1.3 *History*

The Bélahouro area was first explored in the early 1980’s. Initially, the Bureau des Mines et de la Geologie du Burkina (BUMIGEB) undertook site exploration between 1984 and 1991, identifying mineralised quartz veining in the Souma, Fete Kole and Inata areas.

- BHP Minerals International Exploration (BHP) was granted tenure over Bélahouro in 1994. BHP conducted mapping, rock sampling, soil sampling and limited drilling before entering into a joint venture agreement with Resolute Mining Limited (Resolute) for the period from 1998 to 2001.

- Resolute was the sole operator of the project between 2001 and 2004 and conducted soil sampling, airborne/ground geophysics and more detailed drilling. Goldbelt entered into an agreement to acquire the project as well as Resolute’s other interests in Burkina Faso; with the final sale taking place in March 2005.

- Goldbelt focussed on drilling out the Inata ore body and conducting feasibility studies to accelerate the project to mining.

- Wega Mining acquired Goldbelt in 2007 and subsequently conducted additional feasibility-level studies before moving the Inata project into construction in 2008.

Avocet Mining PLC (Avocet) acquired the Inata Gold Mine and Wega’s exploration portfolio as a result of the acquisition of Wega Mining in June 2009. Avocet completed construction of the Inata

mine and plant leading to the first gold pour in December 2009.
Artisanal workings in the area of the resource have been limited to very small scale shallow workings; with the area protected under government regulations. More extensive workings have developed in a local gold rush style at Pali and Damba, to the west of Inata, and Souma and Fete Kole, in the east of the project area. Artisanal mining has traditionally used air panning and gravity sluicing methods to recover gold, but crude cyanide vat leaching has been introduced in the last year. The Government of Burkina Faso is working with local companies, including Avocet, to educate the local mining communities and eradicate the unprotected use of cyanide.

3.2 Inata Geological Setting and Mineralisation

3.2.1 Regional Geology

Regionally Inata is part of the Bélahouro group of licences and is located in the western portion of the Djibo Birimian Greenstone Belt. The belt comprise of intermediate to mafic volcano sedimentary successions and syn to post-kinematic granite and gabbro intrusions that has undergone regional lower greenschist metamorphism and lately intruded by dolerite and felsic-porphyry rocks.

Gold within the Bélahouro Project is generally associated with mesothermal vein style mineralisation which is consistent with majority of Archaean and Proterozoic terrains worldwide including the Birimian Series of West Africa. This style of mineralisation is generally associated with regionally metamorphosed terrains that have experienced considerable deformation as such the deposits are invariably strongly structurally controlled, with the dominance of structural control increasing proportionally with metamorphic grade.

The Inata trend is located at the western edge of the Sona sedimentary basin and strike along north north east direction. Regional geology is outlined by a crustal scale structure located at the sheared contact of granite plutons within the basin. The basin dominantly comprises epiclastics in the central and western area and volcaniclastics at the south of the area. Gabbro with minor intermediate to mafic volcanic is mapped along the Minfo-Filio-Ouzeni mineralized trend.

3.2.2 Local Geology

The Inata Gold Deposit is localised within a NS-striking shear zone with an overall strike extent of 6 kilometres from Inata North to Inata Far South with additional sub-parallel shears hosting ore bodies in the eastern footwall at the northern end (Sayouba extending 350m). The southern Minfo East West trend is now extending over 1.5 km from main Minfo main to Minfo East and continues further East with the Filio and Ouzeni trend.

The shear zone is localised within a steeply dipping, foliated and isoclinally-folded sequence of carbonaceous shales sandwiched between similarly foliated mafic volcanic rocks and non-carbonaceous siltstones. Contrary to the regional distribution of rocks, the mafic volcanic occur in the east toward the Sona Basin, while the siltstones occur in the west toward the Damba volcanic belt.

The zone of shearing is intruded by fine-grained quartz-feldspar porphyry dykes that have been emplaced during the mineralising event, as evidenced by the shearing of some porphyries and the stoping of shear veins by the intrusions. Dyke widths are highly erratic from centimetres to metres wide and are oriented along the shear structure and in flat zones cutting across the shear.

Graphitic shears have been mapped striking parallel to the shear zone. These mark the boundary between ore and waste in the upper part of the Inata North pit, but dip at a shallower angle to the west than the shear zone and, therefore, cut across mineralisation.

The project area is extensively weathered with complete oxidation occurring down to depths of 60m, although in zones of fracturing or faulting, the depth of oxidation may be greater. A transitional zone of weak to moderate oxidation extends down to more than 150m depth. Weathering has oxidised the carbonaceous shales to a tan colour and concealed the potentially preg-robbing character of the carbonaceous host rock.

Widths of mineralisation appear to be consistent between fresh and oxidised zones suggesting little or no depletion of and supergene enrichment.

A geological map for the Inata Gold Mine is presented in Figure 5.

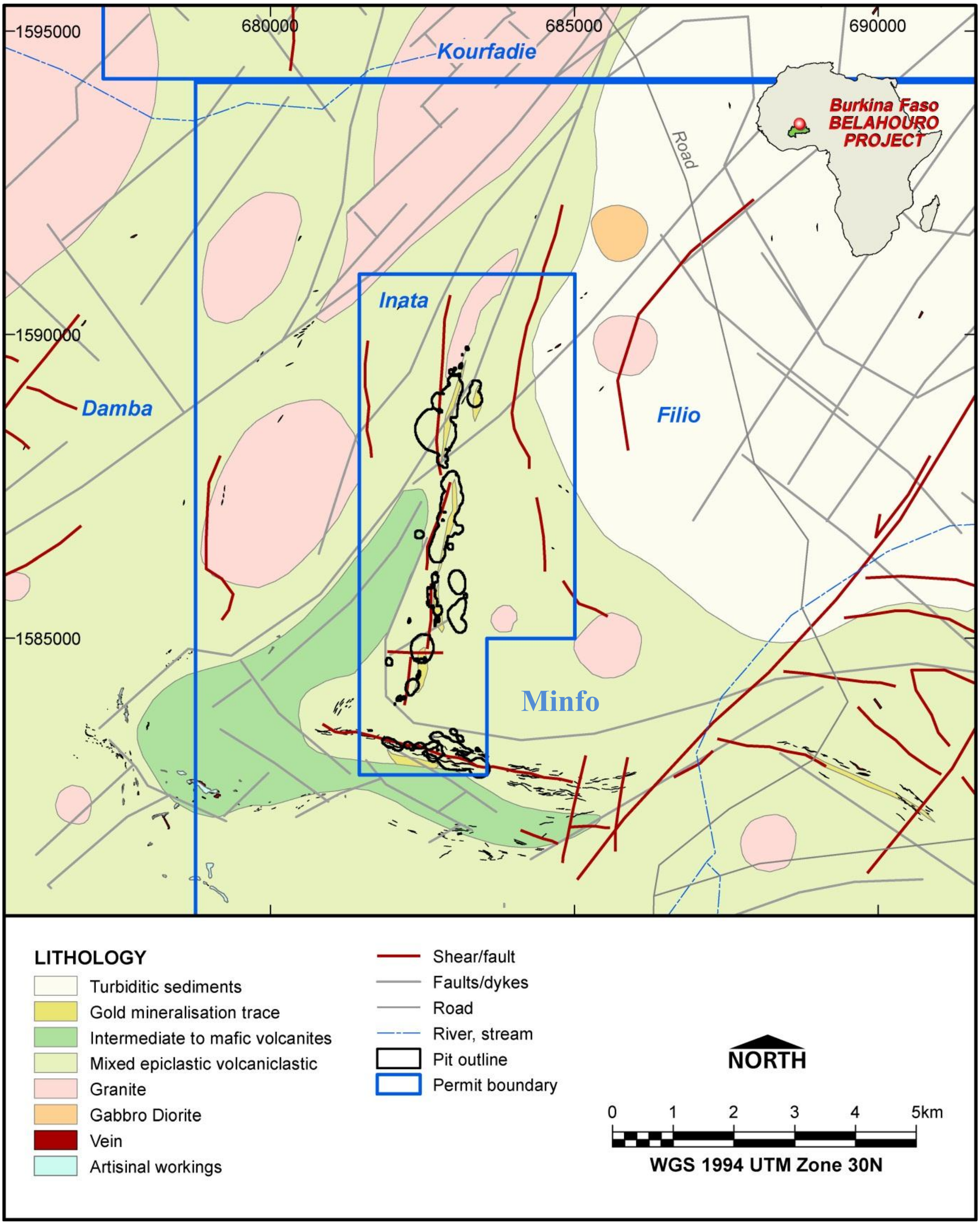


Figure 5: Local Geology of Inata Area with Current Optimised Pits in Black

3.2.3 Mineralisation

Gold mineralisation is commonly associated with sheeted and sheared quartz–carbonate–sulphide veining, albite-carbonate-sulphide veinlets and extensional quartz-sulphide veins. Earlier quartz-carbonate veins can be boudinaged, folded, or brecciated. Gold is also associated with sulphide-haematite breccia. There are two main structural directions that control gold mineralisation; steep west dipping NNE-SSW trending faults and flatter NE-SW trending bedding directions.

Gold is present as free grains and inclusions in pyrite disseminated in the alteration halo around quartz-carbonate-albite veins. Pyrite is the dominant sulphide present as veins, fracture fillings and localized disseminations adjacent to veins although minor amounts of chalcopyrite, galena, pyrrhotite, arsenopyrite, bornite, and tennantite are also present. Gold associated with pyrite is largely developed within fractures in pyrite grains, rarely larger than 50 microns, and is non-refractory.

3.3 Exploration

Successive exploration programmes have been conducted by BUMIGEB, BHP, Resolute, Goldbelt and Wega between 1984 and 2007 (Table 7). Avocet commenced exploration in early 2010 after the completion of the mine build at Inata. The following is a summary of exploration activities undertaken at and around the Inata Gold Mine prior to Avocet's entry, most of which is taken from Haywood 2007.

BUMIGEB focussed on defining mineralised areas of quartz veining at Fete Kole, Souma and Inata between 1984 and 1991 with mapping, chip sampling of outcrop, trenching and limited drilling. BHP commenced work in 1994, conducting mapping and geological interpretation using available regional-scale airborne magnetic data. Soil geochemical sampling was used to identify numerous anomalies, with follow-up trenching and widely spaced reverse circulation (RC) and diamond drilling conducted predominantly at Fete Kole, Souma and Inata.

Resolute took over as operators of the joint venture with BHP in 1998. Their work concentrated on Inata. Further soil geochemistry was followed by RAB, RC and diamond drilling. BHP then entered into a joint venture agreement with Resolute Mining Limited (Resolute) from 1998 to 2001, who became sole operator of the project until February 2004. In 2001, Resolute acquired full ownership of the project and undertook further geological mapping, ground geophysics (TEM and magnetometer) surveys, and additional soil and rock sampling. The Detailed Transient Electromagnetic (TEM) data was acquired over selected targets (Souma and targets surrounding Inata) in 2002/2003 utilising SiroTEM MkII equipment via a 200m square loop, with 200m steps between stations and 400m between traverses. This data enabled better delineation of shear zones, as targets for potential mineralisation. Goldbelt then entered into an agreement to acquire the project as well as Resolute's other interests in Burkina Faso; with the final sale taking place in March 2005. Wega Mining then acquired Goldbelt in 2007 and subsequently Avocet Mining PLC (Avocet) acquired the Inata Gold Mine and Wega's exploration portfolio as a result of the acquisition of Wega Mining in June 2009.

Artisanal workings in the area of the resource have been limited to very small scale shallow workings; with the area protected under government regulations. More extensive workings have developed in a local gold rush style at Pali and Damba to the west of Inata, and Souma and Fete Kole in the east of the project area. Artisanal miners have used crude cyanide vat leaching in the past, but this practice was banned by the government in 2010. The exploration activities of previous explorers are summarised in Table 7.

Goldbelt's approach from 2004 was to increase confidence in, and extend the Inata area deposits by a substantial increase in the drilled metres; with less intensive work in the Souma and Fete Kole areas. Details of these drilling programs are listed in Table 7.

Exploration drilling in 2012 – 2013 Mainly focused on the Souma project.

3.3.1.1 Auger Drilling

As part of a program to evaluate numerous targets identified by airborne geophysics and field mapping an extensive auger program was undertaken by Avocet across large areas of the Bélahouro Project. The program was design to sample in situ saprolite below the thin veneer of transported material developed over much of the permit. Recent results have led to the discovery of additional mineralisation on the Inata mine lease and on the Souma trend. (Figure 6). In conjunction with airborne geophysics, field mapping and these auger results it is possible to define two broadly North West trending mineralised corridors one running through Souma and the other the Minfo/Inata deposits. The Minfo/Inata tend can be followed for more than 50km. Enters the project area in the South East corner, there is flexures through Minfo and Inata and leaves the project area in the North Western corner.

Table 7: Bélahouro Project Exploration History Summary (after Haywood 2007)

Work Completed	Comments	Total
Drilling		
DD (Diamond Drilling)	BUMIGEB and BHP	10 holes / 1,271m
DD	Resolute – BHP JV	11 holes / 1,185m
DD	Resolute	2 holes / 1,025m
DD	Goldbelt 2004-2006 Inata	21 holes / 3,119m
DD	Avocet 2010-2011	68 holes / 19,205.63m
DD	Avocet 2011-2012	10 holes/1,992.30m
DD	Avocet 2012-2013	16 holes/3,279.50m
RC (Reverse Circulation)	HP	326 holes / 22,972m
RC	Resolute - BHP JV	451 holes / 30,830m
RC	Resolute	10 holes / 1,145.5m
RC	Goldbelt 2004-2006 Inata	574 holes / 66,574m
RC	Goldbelt BFS Infill 2007	74 holes / 6,582m
RC	Avocet 2010-2011	796 holes / 97173m
RC	Avocet 2011-2012	353 holes/35,008m
RC	Avocet 2012-2013	56 holes/6,175m
RD	Avocet 2010-2011	95 holes / 21,686.77m
AC	Avocet 2010-2011	280 holes / 18,322m
AC	Avocet 2011-2012	254 holes/16,096m
RAB (auger)	BHP	473 holes / 3,783m
RAB(Rotary Air Blast)	Resolute - BHP JV	903 holes / 23,253m
Auger	Goldbelt 2007-2008	6075
Geochemistry		
Soil samples	Reported only BHP	3461
Soil samples	Resolute - BHP J-V	6792
Rock chip	Reported only BHP	407
Rock chip	Resolute - BHP JV	85
Rock chip	Resolute	1301
MMI	Resolute	262
Soil samples	Resolute	1019
Rock samples	Resolute	118
Rock samples	Avocet 2010-2011	87
Termite	Avocet 2010-2011	21
Trenching		
No of trenches	BUMIGEB and BHP	167
Inata (25 trenches)	Linems (Inata only)	3295
Samples	Inata only	1674
Pits	Souma, Inata, Pali West- Resolute	53
Samples	Souma, Inata, Pali West-Resolute	122
Geophysics		
Aeromagnetic	Line spacing 200m by 85m height	
VLF – EM/Max-Min	Bélahouro permit area	
VLF – Max Min	Inata area	
Ground mag	Resolute	3021.7 line km
TEM	Resolute	777.6 line km
Surveying	Local grid – Four geodesic stations established	No statistics
	Base lines detailed -Inata	6.5 line km
Mapping	Local prospect area mapped	1600km^2
Metallurgy	Leach test work on Inata and Souma	
	Gravity leach test work, Inata	
Remote Sensing	Landsat TM and aerial photography acquired by BHP	
	Landsat TM and SPOT Imagery	

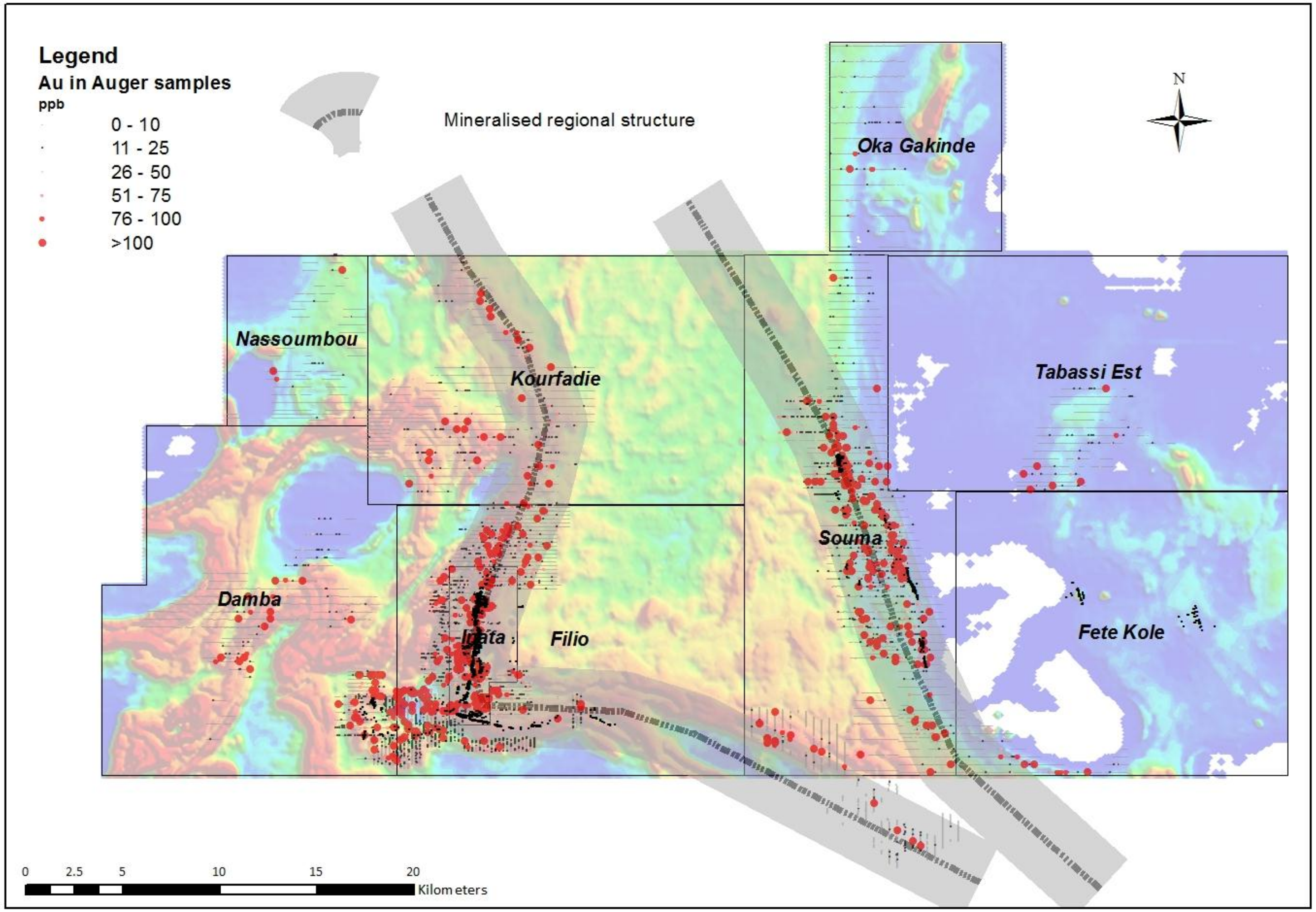


Figure 6: Auger Sampling Results Samples in July 2013.

3.3.1.2 Geophysical Survey

The 2011 regional VTEM geophysical survey covered the Avocet interests in the Bélahouro region in their entirety. The survey was flown at 200m – line spacing over most of the property with 100m line spacing over the mine lease, a total of 9117.7km. The aim of the survey was to map the underlying geology. The dominant rock units of the area, volcanics, granite, carbonaceous shales and siltstones were found to respond well to the VTEM. The different signals returned from the different lithologic units made it possible to accurately map the geology through the thin transported cover developed at Inata. The results of the survey exceeded expectations and have added greatly to the geological knowledge of the area.

Results from the survey demonstrated a correlation between conductive black shales and the distribution of gold in the western portion of the Bélahouro licence. The reducing nature of the carbonaceous units is thought to have played a part in localising gold mineralisation. Haematite is a common alteration mineral associated with the gold mineralisation. The VTEM has been able to map out large areas of carbonaceous shale within a complex structural environment in the western portion of the project area. Much of this area has not had any drilling and the coverage of surface geochemistry is poor. As part of the VTEM survey a DTM of the Bélahouro permits was also produced. What is evident on this DTM is the fact that the vast majority of known gold mineralisation is located on topographic highs.

CSA Comments:

CSA considers that further exploration potential does exist at Inata. Although not every VTEM anomaly is a mineralised system, it is a focus for auger geochemical surveys, which to date have not covered all of the potential targets the area. There appears to be considerable untested exploration upside. Continued auger sampling and infill drilling between the current pits has the potential to increase the current interpretation of the mineralisation.

CSA have not been supplied a detailed exploration program or budget. However it is likely that future discoveries in the area will likely be of a similar nature to the current deposits at Inata.

Monthly drilling reports are well documented and budget monitoring is of a high standard.

3.4 Drilling

Initial drilling included 23,253m RAB drilling completed by Resolute-BHP and used to locate zones of mineralised bedrock. RAB drilling is excluded from the following discussion (Figure 7).

The Inata Gold Project has been drilled out on a 20m by 50m spacing. The spacing has been closed down to 12.5m by 10m in the area of grade control drilling at Inata North. Excluding this programme, the majority of the drilling (>90%) has been conducted using reverse circulation (RC) methods with <10% being drilled with diamond core.

Table 8 summarises the drilling history. The major RC drill programme in 2007 (244 holes for 10,468m) is for grade control purposes at Inata North, which was drilled at a 12.5m by 10m spacing to a depth of 35 to 45m. RC grade control drilling continued through 2011 and 2012 for all active pits.

Table 8: Inata Drilling History

Year	Company	Holes				Metres			
		AC	RC	DD	RD	AC	RC	DD	RD
1997	BHP		136				10,743.50		
1998	BHP		16				1,130		
1998	BHP		104				6,680		
1999	BHP			6				1,069.50	
1999	BHP-RES		251	9	6		18,287	841.45	1,110
2004	RESOLUTE		142	3			14,516	290.90	
2005	GOLDBELT		194	13			22,830	2,213.20	
2006	GOLDBELT		180	5			24,010	615	
2007	GOLDBELT		318	3			17,051	935	
2007	WEGA		19				2,268		
2010	AVOCET		321	20	8		43,934	6,202.28	2,413
2011	AVOCET	161	276	58	87	11948	34,341	15017.25	19273.27
2012	AVOCET		386	52			38,664	8314.75	
2013	AVOCET			16				2,201.60	
	TOTAL	161	2343	185	101	11948	234,454.50	37,700.93	22,796.27

Avocet exploration program for 2012 - 2013 has been follow up drilling of 2011 - 2012 drilling program that identified potential targets in both green fields and brown fields in the Bélahouro region focusing on infill drilling to classify ore categories and metallurgical drilling for variability and comminution test work.

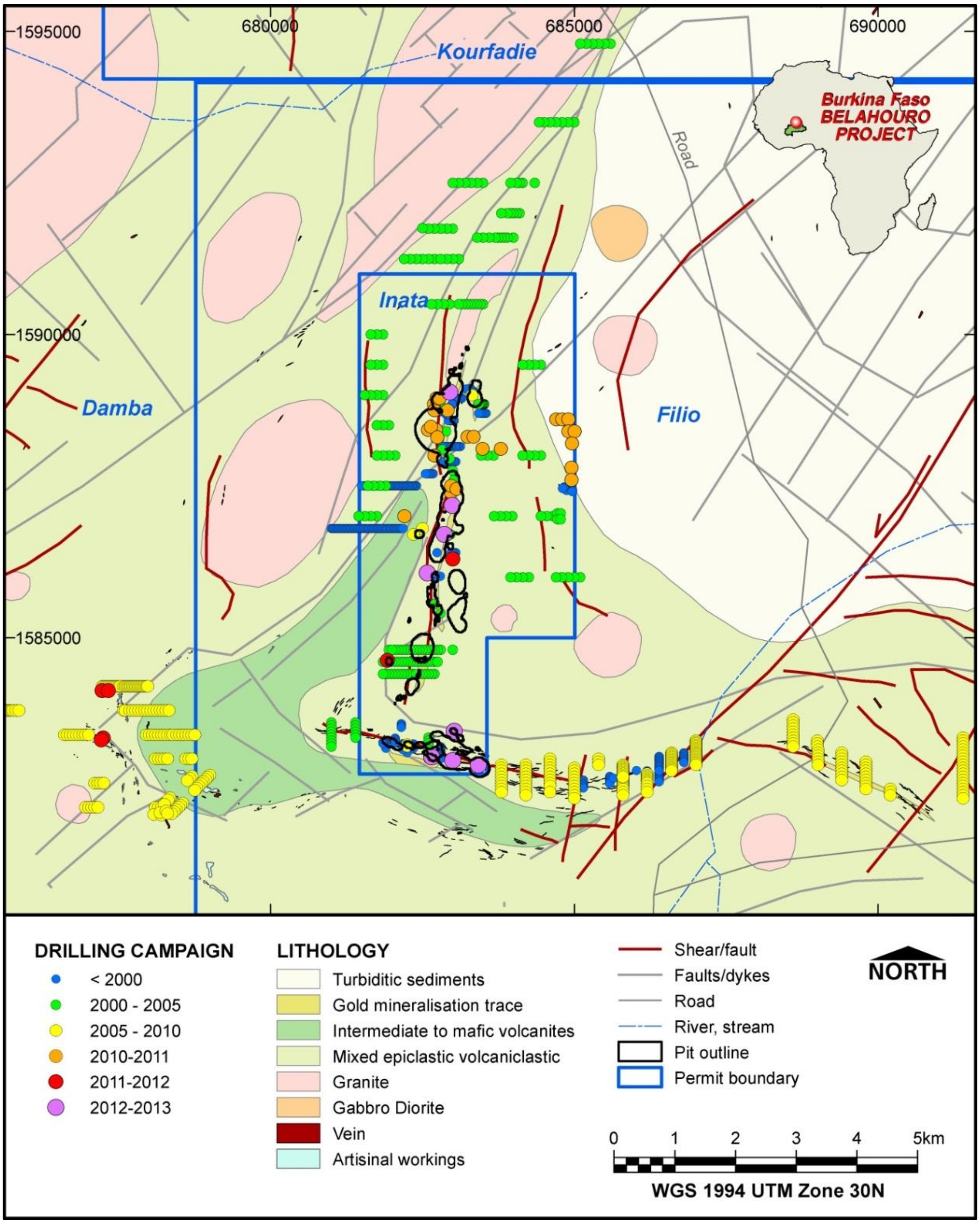


Figure 7: Drilling Programs at Inata

The intended objectives of the 2012 exploration programmes include (but are not limited to):

- Conduct exploration in and around the current resources/pits with the aim of ensuring all available oxide resources are identified (Far South, West and Parallel Zones), and resources are at the correct level of classification (Minfo East, Far South).

- To drill test the surface mapped prospective quartz veining associated with high conductive geophysical anomalies within the mining lease (Pali East, Pali West, and Minfo West).
- Undertake extension and infill drilling on the Inata targets of Pali, Filio – Filio East, Ouzeni, Minfo North and Inata Far South, to define additional resources for the Inata mine plan by the end of 2012.
- In 2013 a limited exploration programme was planned to drill metallurgical test holes in the Inata active pits and Minfo for variability and comminution test work.
- A summary of drilling between 2011 and 2013 is in Table 9 and Table 10.

Table 9: Inata Mining Licence Extension Drilling Statistics, 2011 to 2013

Hole Type	No. Of Holes	Total Metres	Comment
RC	662	73,005	Additional 120 holes along the e-w Minfo – Filio trend, particularly Filio East. Excludes Ouzeni
RD	87	19,273.27	
DD	126	25,533.60	All DD within the current licence.
AC	16	863	Majority of holes outside this area.
Total	891	118,674.87	Excludes Damba, Minfo West and Souma drilling.

Table 10: Filio Drilling Statistics, Excluding the Mining Licence Drilling Reported in Previous Table, Sterilisation and Regional. 2011 to 2013

Hole Type	No. Of Holes	Total Metres	Comment
AC	358	21,759	Aircore drilling at Minfo South and Ouzeni – outside the Inata licence.
Auger	1,544	9,576	areas Auger drilling in mining licence, sterilization/target generation
RC	528	52,817	Everything in mining lease reported in Table 8
DD	26	5,271.8	Including metallurgical drill holes
Total	2,456	89,423.8	

3.5 Sampling Techniques.

Procedures related to sample collection for the years 1999 to 2007 are described in Heywood (2007). The following relates to the 2010 to 2011 drill programmes.

3.5.1 RC, RAB and Aircore

Two RC drill diameters have been used in the drill program, namely 133mm and 114mm diameter face-sampling bits. These rigs generate approximately 38 and 28 kilograms respectively from 1m samples. Samples are collected through the cyclone at 1m intervals into labelled plastic bags and weighed using graduated balance. CSA noted during the May 2012 site visit that a sample drop box was not used on the head of the riffle splitter, but was noted in use during the 2010 site visit. A sample drop box ensures an even spread of sample across the top of the three tier splitter, allowing a higher probability of getting a correctly proportioned split of sample through the splitter. CSA recommend Avocet use sample drop boxes on all their splitters.

Each sample is then passed through a 3-stage riffle splitter on site. Approximately 2-3kg of RC samples is taking from each meter into plastic bag after splitting and abandoned the rest in the field. Each sample is well labelled with pre-determined number from a standard sample book and a ticket is put in the sample before clipping it with stable machine. The individual 1m samples were then put together, 10 in each plastic bag and sent to the camp for subsequent checks and standard inserted.

RAB or Aircore sampling procedure is the same as RC but rather, 2m composite are collected and sent for analysis.

3.5.2 Diamond

The diamond core sizes utilised for the program consisted of mainly HQ (63mm) and a little over NQ 250m (48mm) being. Core sample intervals were based on mainly lithology, quartz vein density and distribution, and alteration. Unless otherwise restricted by a unique lithology, alteration and or quartz vein, 1m sample interval were taken in the ore zones and 2m sample interval in the hanging and footwall zones(waste zone), The minimum sample interval was 0.5m, while the maximum sample interval was 2m. The geologist marked out the sample intervals and a line of symmetry on the core with a red marker pen. Splitting is done along the line of symmetry using a core saw or manual splitting is done in the oxide zone. Half core of the marked interval was subsequently washed and then bagged. The rest of the half core was kept in a well labelled box. A ticket bearing each sample was put in the respective sample bag and the individual sample numbers were written on both the box and an aluminium tag. The tag was then put at an appropriate place for future identification.

A standardised sampling program was conducted throughout the exploration activities. Special attention was paid to contamination and sample recovery in the RC; hence most of the holes were diamond tailed as soon as water was encountered. The mineralised intervals are moved from the drill sites for storage at designated areas.

3.5.3 Core Recovery

Core recovery was also very high. Most of the holes were precollared into the primary rock before coring. With coring from the surface, HQ3 is utilised until the primary rock is encountered before switching to NQ. The average recoveries in the oxides and the primary rocks are 85% and 98% respectively. The half-cores are kept in labelled core boxes and arranged in racks for storage. Photographs of the core are taken as visual information for storage and future reference.

3.6 Logging

Representative one- meter RC chips were prepared by washing about two handfuls of the sample and placing them in corresponding numbered plastic tray compartments. A powder and chips are prepared for the oxide zone. Chips are logged by a geologist who records his observations in a log sheet under the following criteria: Hole Identification Number, Collar coordinates, Azimuth and dip, Name of person logging and Date, Name of Driller and Hole Diameter, Oxidation State, Lithology, Foliation, Alteration & Intensity, quartz and sulphide content and any other general description.

Core samples are placed in well-labelled partitioned galvanized boxes as they are recovered from the ground. A geological technician on site measures the recovered length and calculates the recovery and RQD. The technician marked the meter interval on the entire core recovered in the field before transporting them to the core yard for logging. The core orientation was done at every run (three metres interval) in where intervals where core recovery is bad by utilizing EZY- mark reflex and spear provided by the drilling company. The cores were then fitted together or arranged in an angle iron and the orientation mark is drawn through the reliable marks for alpha/beta measurements by utilising a goniometer.

Logging entails the same information as in the RC in addition to structural, geotechnical and other geological features of importance.

All of the drilling has been logged onto computer data entry style logs. These have been inconsistently compiled and do not have the comprehensive and easy-to-understand format of Avocet's standard logging sheets. The lack of information on carbon, in particular, and the inconsistent distribution of lithologies on drill sections highlight problems with the geological logging database. This caused Avocet to conduct a re-logging campaign in the fourth quarter of 2009 using Avocet's standard logging system, which includes the semi-quantitative logging of carbon content. CSA Global has reviewed hard copies of logs retained in Avocet's Ouagadougou office.

3.7 Sub-Sampling Techniques and Sample Preparation

3.7.1 Sample Preparation and Analyses

The sampling procedures adopted for drilling are consistent with current industry "best practise" standards; and sample recovery is good. Samples from diamond coring within the highly weathered zones are generally of low quality.

RC field duplicate samples were routinely collected (at a rate of 1 in 20 samples) to allow assessment of the field sampling error (or bias) once the laboratory error, determined from analysis of pulp duplicates, has been subtracted. CSA assessed RC field duplicate data, and considers that the data can be reproduced acceptably, and no distinct bias is immediately evident.

Samples are stored at the secure Inata exploration compound and from there the sample batches are transported by road to the laboratory. Several different laboratories have been utilised over the course of exploration at Inata, prior to 2010. Haywood (2007) describes these as follows:

- BHP utilised the SGS laboratory at Tarkwa, Ghana. This data represents 10% of total RC data used, and 18% of the diamond drilling data. Digital quality control data associated with this dataset is not available.

- Resolute utilised Intertek Testing Service (ITS) laboratory situated in Ouagadougou. This data represents 26% of the RC drill chip assays and 28% of the diamond drill core assays.

- Goldbelt have used both the Transworld laboratory in Tarkwa, Ghana (2004 for 19% of total RC assays), the SGS laboratory in Tarkwa, Ghana (2005 for 22% of total RC assays), and the SGS laboratory in Ouagadougou (2006 for 23% of total RC assays).

3.8 Pre 2010 Drilling

The following assay methods were used for drilling Pre 2010.

3.8.1 Intertek Testing Service (ITS), Ouagadougou

The assay method applied by ITS is summarised below (Haywood 2007).

- The sample is dried, crushed, and pulverised (95% passing -200 micron);

- Two 180g pulps are taken for analysis and pulp storage;

- 30g charge, Fire Assay fusion, lead collection, AAS determination to 8ppb; and

- Gravimetric analysis completed on Au>10g/t.

QA/QC included the submission two international standards, one international blank and two duplicates per batch of 30 samples. In addition, random checks were completed on spurious results.

3.8.2 Transworld and SGS Laboratories, Tarkwa

The assay method employed by both Transworld (Tarkwa) and SGS Tarkwa was as follows (Haywood 2007):

- 2kg to 3kg field splits are oven dried at 105°C.

- Over dried samples are crushed in a jaw crusher to a nominal 3mm;

- A 1.5kg sub-sample is collected via a riffle splitter;

- The 1.5kg sub-sample pulverised in a homogenizing mill (LM2) to 90% -75µm;

- A 50g portion of pulverized sample is weighed;
- The sample is fused in a fusion furnace to produce a lead button;
- A lead button is cupelled in a cupellation furnace; and
- The resulting prill is subjected to acid dissolution.

The resulting solutions are then read on an AAS, with a stated detection limit of 0.01g/t gold.

3.8.3 2010 to 2012

Samples were dispatched to the Intertek Laboratory Ghana (Intertek) and SGS laboratory Ouagadougou in batches and in plastic bags with an accompanied sample submission sheets containing all the records on the samples.

All the exploration samples were analysed for gold using fire assay method at a detection limit of 0.01ppm.

The SGS and Intertek laboratories protocol sheets for fire assay are the same and are outlined below.

1. Sample receive and sorting, (2 to 3kg)
2. Dry entire sample at 105°C
3. Jaw crush entire sample to –6mm. Riffle split to <3.5kg if the sample is more than 2kg.
4. Keep the residual split in original sample bag.
5. Pulverize the < 1.5kg in Cr steel bowl, min 90% passing 75µm.
6. Mat roll and bag 200g sub-sample and retain the residual pulp in a pulp bag.
7. Fuse a 50g sample with a litharge based flux cupel.
8. Dissolve the prill in aqua regia
9. Determine gold by flame AAS – detection limit 0.01ppm.

3.9 Quality Assurance and Quality Control June to December 2012

3.9.1 Summary

Quality control and quality assurance is an essential regime as far as exploration activities are concerned. This section describes the quality control and quality-assurance (QAQC) steps taken for RC and DD sampling that has been used to verify or determine grades used in the estimation of mineral resources, including standards submissions within sample batches, and preparation and submission of field duplicates samples during the Inata Resource upgrade drilling campaign.

This includes insertion of three control samples (1 standard, 1 blank and 1 replicate) in every batch of samples (25) dispatched to the laboratory for analysis. Two independent laboratories, SGS laboratory, Ouagadougou and Intertek laboratory, Ghana were used. A few samples were analysed at Avocet's on-site laboratory (SMB Inata).

A total of 70,495 samples were submitted to SGS and Intertek for assaying. During this period, 8,249 control samples (standards and blanks) have being introduced into the RC and the diamond samples. Twenty two different standard samples have been used with Au grade between 0.39gandt – 10.01g/t. In addition, a total of 3,769 field duplicates were submitted for analyses. All were inserted into the sample stream at an approximate rate of 1 in 20. Time variation graphs are plotted to monitor the day-to-day performance of the laboratories. A summary of QAQC sample statistics is presented in Table 11.

Table 11: QAQC Sample Summary, June to December 2012

LABCODE	PROJECTCODE	SAMPLES	DUPLICATES	STANDARDS	BLANKS	TOTAL
Intertek	FILIO	31874	1802	1858	1870	37404
Intertek	INATA	24143	1173	1406	1403	28125
SGS_Ouaga	FILIO	4107	178	239	240	4764
SGS_Ouaga	INATA	8994	529	530	530	10583
SMB_LAB	INATA	1377	87	87	86	1637
Total	All	70495	3769	4120	4129	82513

Generally, there are no significant differences between the two laboratories for all the analysis done on the various control samples introduced into the sample stream. The number and distribution of standards that fell above or below the expected value indicate that they were random occurrences such as, misallocated samples, rather than a systematic failure of the standards.

3.9.2 Certified Reference Materials (CRM)

Performance of certified reference standards as CRMs for monitoring the accuracy, precision and reproducibility of the gold assay results received from SGS and Intertek laboratories during the resource upgrade drilling were monitored. Although the laboratories could easily identify standard samples, the actual grade of the standard would be difficult to determine due to the large number of different type of standards used during the drilling campaign.

Certified reference standards from Geostats Pty Ltd have been used for the RC and DD samples. In all, 22 different standard samples (CRM) have been used for Inata drilling program with Au grades ranging between 0.39 – 10.01/t.

The standards that were considered to have failed, falling outside the two standard deviation limits, were critically examined by Avocet staff. It was determined that for the majority of the failed standards, misallocation at the time of sample submission to the assay laboratory was the key fault. This is demonstrated in Figure 8 which shows the performance of all standards over time, and clearly shows the misallocated standards. Avocet have consequently reviewed the procedures for insertion of standards, and implemented a revised set of procedures.

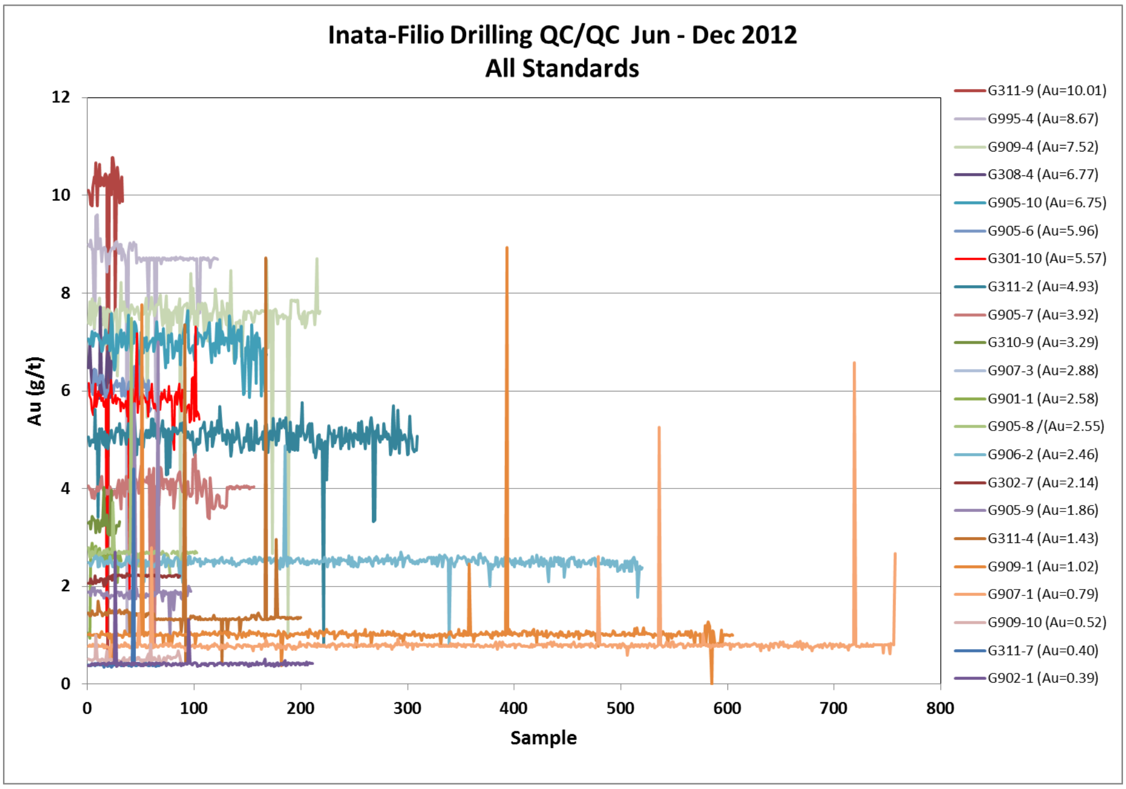


Figure 8: Time Series Plot of All Standards, June to December 2012

3.9.3 Blanks

Barren granite chips were used as 'blank' CRMs to check the possibility of gold contamination during the analytical procedure. These were inserted at specific regular intervals into the sample stream. A total of 7 out of the 4,129 blank standards submitted to the assay laboratories reported values in excess of 0.1g/t, being an upper tolerance limit. Figure 9 demonstrates the performance of the blanks over time for both the Intertek and SGS laboratories. Most of the failures occurred at the Intertek laboratory. This was attributed to either contamination at the laboratory or during preparation of the blank standard. The results of the blank standards are considered acceptable overall, and results should be analysed in conjunction with other QAQC analyses, such as standards and duplicates.

Avocet have put in place procedures to reduce the possibility of contamination, such as ensuring blanks are packaged at a separate place from drilled samples.

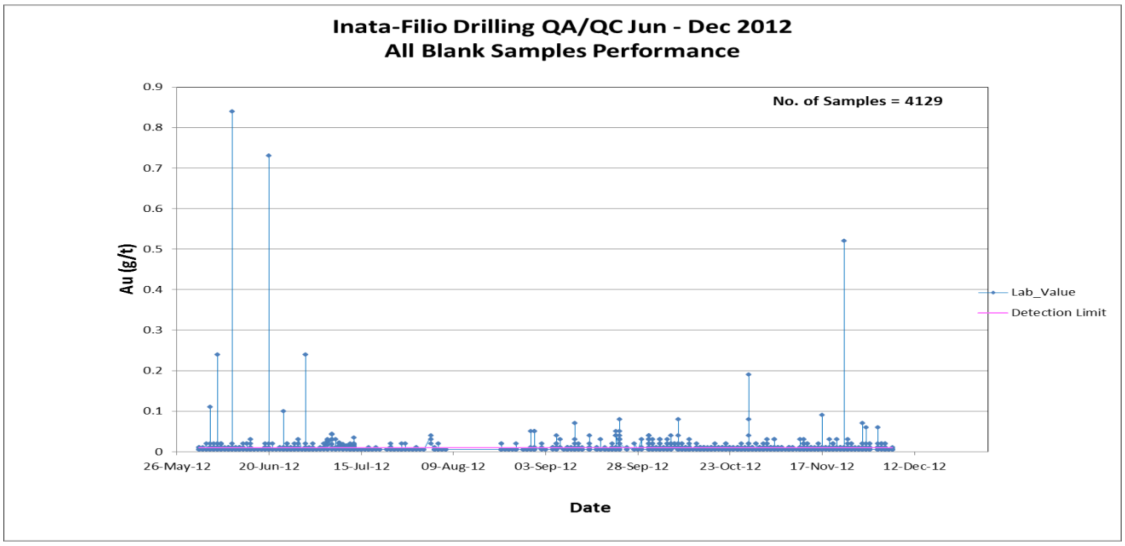


Figure 9: Blank Standard Performance, All Labs. June to December 2012

3.9.4 Field Duplicates

For the drilling program, every 20th sample was replicated. Replicate samples for the RC chips were prepared by re-splitting the coarse-rejects at the drill site and then inserting the replicate sample into the sample stream. No diamond replicate samples were sent to the laboratory. A total of 3,769 field duplicates were submitted to the laboratory for processing. A correlation coefficient of 96% was obtained for the data set, indicating good correlation between original samples and their field duplicates.

A plot of all field duplicates where Au > 0.3g/t is presented in Figure 10 and demonstrates the duplicate assays correspond quite well to the primary assay, which demonstrates a good correlation of 97%. This suggests the sampling procedures are employed in the field and monitored routinely by the site geologist.

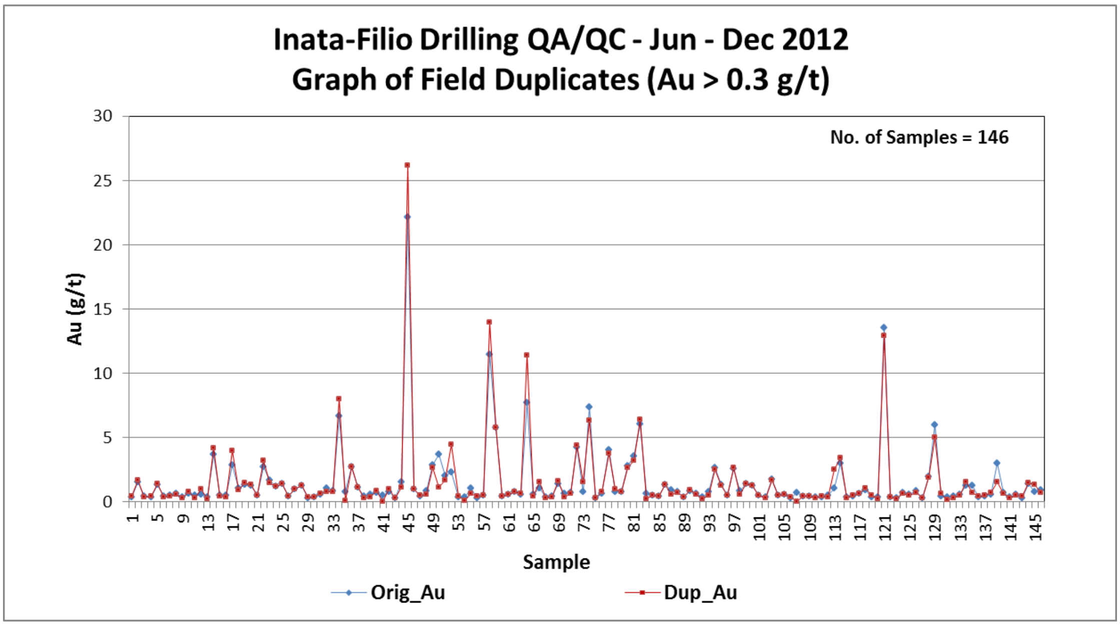


Figure 10: Time Series Plot, Primary versus Duplicate Assay, Au>0.3g/t.

Precision can be commonly measured using a sample database of paired sample values. A common approach is to calculate the half absolute relative deviation (HARD) of each sample pair and to sort these values in ascending order plotted against the rank of the pair. Such a format allows one to gauge the fraction of the data that report precision better than a specified tolerance.

Avocet analysed data where Au >=0.3g/t, which cancels out the noise at the lower grade end of the scale. Results from the field duplicate data are presented in Figure 11.This demonstrates sample repeatability issues, which may be attributed to high nugget effect and sampling methodology at the drill rig. No laboratory duplicate results from sample pulps were provided for analysis. It is anticipated that these would indicate much better precision than the field duplicates given the greater homogenisation of the pulp sample, and the lower nugget effect expected.

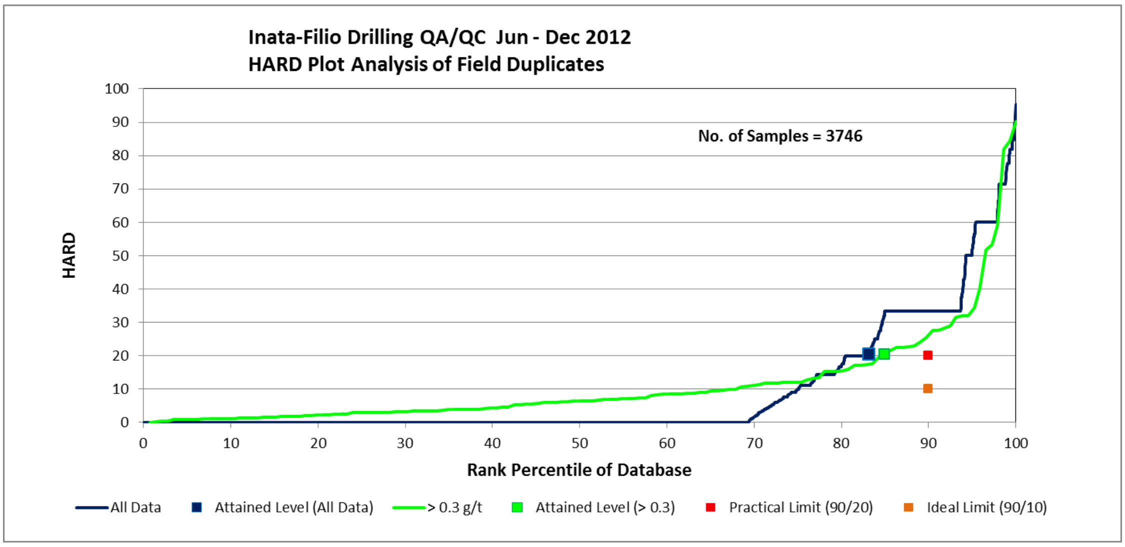


Figure 11: Half Absolute Relative Deviation (HARD) Plot from Field Replicate RC Samples

3.10 Database

All drill hole data are stored in a secure “AcQuire” SQL database, located at Avocet’s Ouagadougou office. The database is maintained by a dedicated operator, who is responsible for the database functionality, security and data backups. Avocet had previously used “Datashed’ as the preferred SQL database, but they migrated their data to AcQuire in early 2012.

4 Inata Mineral Resource Estimate

Mineral Resource estimates were initially completed for Inata in 2011. Additional Mineral Resource estimates were updated for Inata South, Minfo and Filio in September 2012 and December 2012.

New Mineral Resource models were created for Pali and Ouzeni in December 2012.

Inata North, Inata Central and Sayouba were not updated in December 2012 but the June 2012 models were depleted with mining surfaces from December 2012.

The December 2012 Mineral Resource represents a 13% increase in global tonnes and a 14% increase in global contained ounces when compared to the previous Mineral Resource estimate reported in September 2012. The increase in Mineral Resources, compared to September 2012, is attributed to the interpretation of additional mineralisation domains for Inata South, Minfo and Filio; and the inaugural reporting of the Pali and Ouzeni deposits.

The Mineral Resource estimate was completed based upon the following:

- Mineralisation wireframe solids based upon a nominal 0.3g/t Au lower cut off.
- Wireframe surfaces representing weathering profiles.
- Validated drill hole database.
- Datamine drill hole files derived from the database.
- Bulk density values per weathering domain.
- QAQC report for exploration drilling, 2010 to 2012.

The results are displayed in Table 12.

4.1 Block Models

Eight block models were constructed for each of the resource models documented. The model for Sayouba remained unchanged from that built in August 2011. Parent block sizes were based upon approximately half the typical drill spacing. Sub - blocks were used to ensure the block model honoured the mineralisation zone geometries. The block models were not rotated.

The volume block models were validated on screen to ensure blocks were coded correctly according to the input wireframes.

Table 12: Mineral Resource Report, AU (OK) >0.5g/t.

Inata		Gross			Net Attributable to Avocet Mining			
		Tonnes	Au Grade	Contained Ounces	Tonnes	Au Grade	Contained Ounces	
Deposit	Classification		(g/t)			(g/t)		Operator
Inata North	Measured	8,915,000	1.74	498,300	8,023,500	1.74	448,470	Avocet
	Indicated	24,220,000	1.28	996,200	21,798,000	1.28	896,580	Avocet
	Meas + Ind	33,135,000	1.4	1,494,500	29,821,500	1.4	1,345,050	Avocet
	Inferred	11,294,000	1.36	494,300	10,164,600	1.36	444,870	Avocet
	Total	**44,429,000**	**1.39**	**1,988,800**	39,986,100	**1.39**	1,789,920	Avocet
Inata Central	Measured	5,372,000	1.66	286,400	4,834,800	1.66	257,760	Avocet
	Indicated	5,814,000	1.54	286,900	5,232,600	1.54	258,210	Avocet
	Meas + Ind	11,186,000	1.6	573,300	10,067,400	1.6	515,970	Avocet
	Inferred	5,319,000	1.19	203,000	4,787,100	1.19	182,700	Avocet
	Total	**16,505,000**	**1.46**	**776,300**	14,854,500	**1.46**	698,670	Avocet
Inata South	Measured	1,186,000	1.33	50,800	1,067,400	1.33	45,720	Avocet
	Indicated	6,850,000	1.29	284,300	6,165,000	1.29	255,870	Avocet
	Meas + Ind	8,036,000	1.3	335,100	7,232,400	1.3	301,590	Avocet
	Inferred	5,551,000	1.36	242,200	4,995,900	1.36	217,980	Avocet
	Total	**13,587,000**	**1.32**	**577,300**	12,228,300	**1.32**	519,570	Avocet
Sayouba	Measured	431,000	1.43	19,800	387,900	1.43	17,820	Avocet
	Indicated	2,250,000	1.12	80,800	2,025,000	1.12	72,720	Avocet
	Meas + Ind	2,681,000	1.17	100,600	2,412,900	1.17	90,540	Avocet
	Inferred	781,000	1.1	27,600	702,900	1.1	24,840	Avocet
	Total	**3,462,000**	**1.15**	**128,200**	**3,115,800**	**1.15**	**115,380**	**Avocet**
Minfo	Measured	2,332,000	1.81	135,800	2,098,800	1.81	122,220	Avocet
	Indicated	4,704,000	1.34	202,600	4,233,600	1.34	182,340	Avocet
	Meas + Ind	7,036,000	1.5	338,300	6,332,400	1.5	304,470	Avocet

Inata		Gross			Net Attributable to Avocet Mining			
		Tonnes	Au Grade	Contained Ounces	Tonnes	Au Grade	Contained Ounces	
Deposit	Classification		(g/t)			(g/t)		Operator
	Inferred	10,190,000	1.23	403,000	9,171,000	1.23	362,700	Avocet
	Total	**17,226,000**	**1.34**	**741,400**	15,503,400	**1.34**	667,260	Avocet
Filio	Measured	641,000	1.72	35,500	576,900	1.72	31,950	Avocet
	Indicated	905,000	1.2	34,900	905,000	1.2	34,900	Avocet
	Meas + Ind	1,546,000	1.42	70,400	1,546,000	1.42	70,400	Avocet
	Inferred	2,623,000	1.18	99,100	2,623,000	1.18	99,100	Avocet
	Total	**4,169,000**	**1.26**	**169,400**	**4,169,000**	**1.26**	**169,400**	Avocet
Pali	Measured	0	0	0	0	0	0	Avocet
	Indicated	0	0	0	0	0	0	Avocet
	Meas + Ind	0	0	0	0	0	0	Avocet
	Inferred	3,089,000	1.52	150,800	3,089,000	1.52	150,800	Avocet
	Total	**3,089,000**	**1.52**	**150,800**	**3,089,000**	**1.52**	**150,800**	Avocet
Ouzeni	Measured	0	0	0	0	0	0	Avocet
	Indicated	0	0	0	0	0	0	Avocet
	Meas + Ind	0	0	0	0	0	0	Avocet
	Inferred	3,946,000	1.25	159,000	3,946,000	1.25	159,000	Avocet
	Total	**3,946,000**	**1.25**	**159,000**	**3,946,000**	**1.25**	**159,000**	Avocet

Differences may occur due to rounding. The Mineral Resource was estimated by Mr David Williams (MAusIMM, MAIG) of CSA. Mr Williams is a Competent Person as defined by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2004 Edition) and consents to the inclusion in this report on the matters based on his information in the form and context in which it appears. The above figures have been depleted for mining operations as of 31 December 2012. The resource was estimated within constraining wireframe solids based on a nominal lower cut-off grade of 0.3 g/t Au. The resource is quoted from blocks above 0.5 g/t Au. Differences may occur due to rounding.

4.2 Topography

Topographic DTMs were provided by Avocet covering the project area. Surfaces provided represented original surface, and ‘end of month (EOM)’ depletion surfaces resulting from open pit mining. The end of December 2012 open pit survey was provided as a base to deplete the final resource model against.

4.3 Geological Interpretation

Interpretations of geology, alteration, weathering and mineralisation in 3D space, were created using Datamine software. The interpretations for geology, weathering and alteration were digitised onto Northing sections for Inata South and Pali and onto Easting sections for Minfo, Filio and Ouzeni.

Mineralisation orientations varied from a NE-SW orientation for the Inata central, Inata North, Pali and Inata South to an E-W orientation in Filio and Ouzeni.

Block model orientation are displayed in Figure 12.

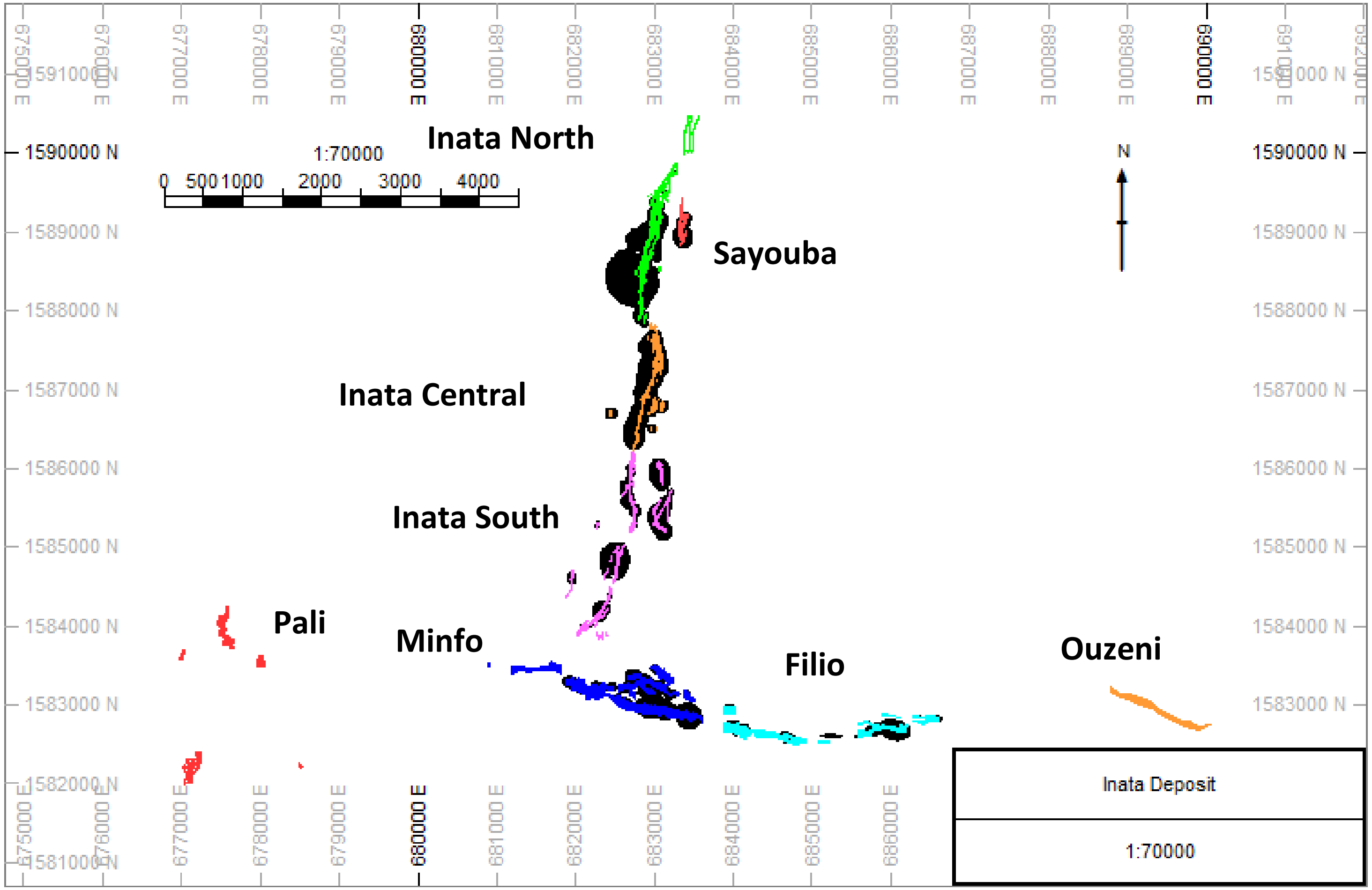


Figure 12: Inata Block Model Area

4.4 Estimation and Modeling Techniques

The Mineral Resource was completed by Mr Davis Williams of CSA. The following methodologies were used in the estimations.

4.4.1 Block Size Generation

Parent blocks were generated within mineralized envelopes. Cell sizes were based on half the typical drill spacing, with sub-blocks used to ensure the block model honoured the mineralized zone geometries.

4.4.2 Top Cuts

Statistical analysis of the mineralized envelopes was examined to determine grade top cuts and composite values. Applying top or upper cuts to composited sample assays are a necessary step prior to grade estimation, when the sample population exhibits high grade "tails". These high grade outliers may result in the smearing of the higher grades during grade estimation, with resulting unreasonable high block grades.

4.4.3 Variograms

Grade continuity was examined using Supervisor™ software and variograms were created and grade continuity ranges modelled. A variogram is a graph of the variability between pairs of samples against the distance between them in a specific direction. A model is calculated for a particular variogram, which provides parameters known as the nugget, sills and ranges. These parameters are used by the kriging algorithm during grade estimation. Weights are applied to each sample used for any one block estimate based upon the variogram model. The nugget effect is the variability between the closest spaced samples available, which are usually two adjacent samples from the same drill hole. The objectives of the variographic analyses were:

- establish the directions of major grade continuity for gold in the mineralisation domains; and
- provide variogram model parameters for use in geostatistical grade interpolation

4.4.4 Search Ellipse

Search neighbourhood parameters were evaluated for each deposit, with varying search radii. The search ellipses were aligned along strike and down dip, measured for each wireframe solid. Cognisance of variogram directions were taken into account and the ellipse directions were modified to account for plunging mineralisation shoots.

Applying a search ellipse to 'fit' a domain exhibiting significant variations in strike and / or dip will result in circumstances where the search ellipse obliquely cuts the local orientation of the domain. One way to circumvent this is to break a flexed domain into two search zones, where a search ellipse is applied to each zone. Inata South exhibits multiple flexures in the strike of the mineralisation domains for which the above solution will be too cumbersome to implement. Datamine offer a solution through the use of 'Dynamic Anisotropy', which applies a unique search ellipse to every block centroid. The search radii are pre-defined, but the orientation of the search ellipse is defined by the average of the dip and strike of the adjacent wireframe facets.

4.4.5 Estimation Methods

Block grades were estimated using two geostatistical interpolation methods ordinary kriging (OK) and inverse distance weighting squared (IDS).

4.4.6 Density Assignment

Density measurements were assigned to different block according to different lithological boundaries.

4.4.7 Block Model Validation

Model validations were carried out graphically and statistically to ensure that block model grades reflect the tenor of grade from adjacent drill hole data. Drill hole cross sections were examined to ensure that model grades honour the local composite drill hole grades. A number of statistical methods were employed to validate the block model, including:

- Comparison of Kriged model and composite populations
- Comparison of block grade with nearest composites
- Comparison of Kriged model and composite populations

4.4.8 Reporting Guidelines

The Mineral Resource estimates were classified according to the JORC Code (2004 Edition) reporting guidelines. Geological and grade continuity were assessed per deposit.

Mineral resource parameters are outline in Table 13.

All exploration drill data as discussed in Section 3.4 was used to estimate the volume block models with gold grades. Grade was estimated into the model using OK and inverse distance weighting (IDW). Blocks were estimated on a domain by domain basis, whereby only those samples flagged for a particular domain were available to estimate a block of the same domain.

The eight deposits were statistically assessed to have a population split for Au at the transitional / fresh rock weathering interface. However, it was only practical to estimate the models with this strategy for the most populated domains. The majority of mineralisation domains had insufficient numbers of samples to adequately estimate grades into the domains when a population split was applied.

If a block was informed by insufficient number of samples within the search ellipse, then the ellipse radii were doubled then trebled until the block was estimated. A maximum of 4 top cut and composited samples per drill hole were used in any one block estimate. Octant based search was not used.

The OK estimation used variogram parameters with varying search ellipses. The search ellipsoids were aligned along strike and down dip of the mineralisation domains. Cell Discretisation of 5 x 10 x 12 was used. Kriging efficiencies (KE) and slope of regression were calculated from the block estimates.

The IDW estimate mirrored the OK estimate, using the same sample selection criteria.

Table 13: Outline of Parameters used for Inata

Deposit	Method	Mineralisation Envelopes	g/t gold cut off for Mineral envelopes	Densities	Top Cuts	Cell Size	Discretisation	Search	Composites
Inata North	OK	A total of 33 domains were constructed, striking 020° and dipping 70° W.	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	30, 25,22	10m (2m) X 25m (5m) X 5m (1m)	2 x 5 x 1	50m x 50m x 10m	1 M
Inata South	OK	A total of 36 domains were constructed, striking 010° and dipping 70° W (with some variation)	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	30,60,uncut	10m (2m) 25m (5m) 5m (1m)	2 x 5 x 1	50m x 50m x 10m	1 M
Inata Central	OK	A total of 28 domains were constructed, striking 020° and dipping 70° W.	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	30	10m (2m) 25m (5m) 5m (1m)	2 x 5 x 1	50m x 50m x 10m	1 M
Sayouba	OK	A total of 5 domains were constructed, striking 010° and dipping 60° W.	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	30	10m (2m) 25m (5m) 5m (1m)	2 x 5 x 1	50m x 50m x 10m	1 M
Filio	OK	A total of 18 domains were constructed, striking 090° and dipping 70° S.	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	30	20m (2m) 10m (1m) 25m (2.5m)	5 x 2 x 5	50m x 40m x 10m	1 M
Pali	OK	A total of 14 domains were constructed, striking 010° and dipping 80° E.	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	10	10m (2m) 25m (5m) 10m (2m)	2 x 5 x 2	50m x 50m x 10m	1 M

Deposit	Method	Mineralisation Envelopes	g/t gold cut off for Mineral envelopes	Densities	Top Cuts	Cell Size	Discretisation	Search	Composites
Minfo	OK	A total of 7 domains were constructed, striking 110° and dipping 75° S.	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	20,20,16	25m (5m) 10m (2m) 5m (1m)	5 x 2 x 1	50m x 40m x 12m	1 M
Ouzeni	OK	Only one domain was constructed, a recumbent synform striking 115°.	0.3	Oxide1.95,Transition 2.35, Fresh 2.70	10	50 (5m) 25 (2.5m) 20 (2m)	5 x 2 x 1	50m x 40m x 12m	1 M

4.5 Bulk Density

Bulk density data has been collected routinely by Avocet staff for the entire 2010 – 2012 diamond drilling program. Bulk density determinations were carried out on non-split core to ensure representative sampling existed for the entire drilling programme. Samples for bulk density determinations were marked up during the logging/sampling phase and 20cm long samples were marked, labelled and then cut by diamond saw. The sample selection was at a nominal 3 metre down-hole interval to ensure a large number of samples were available for each drill-hole. Selection was based on core quality to ensure a competent sample was available. The bulk density determinations were based on a water immersion technique and this was further enhanced by taking several measurements with the core initially wrapped in thin plastic (gladwrap) to obtain dry weights and then repeated to obtain wet weights. This technique provides a qualitative indication of the porosity/permeability characteristics. Quality control on the scales was maintained using known weights and calibration was carried out routinely to ensure results passed the strict criteria.

Bulk density results are displayed in Table 14.

Table 14: Assigned Bulk Densities, All Deposits

Deposit	Weathering Domain	Bulk Density (t/m^3)
All	Oxide	1.95
	Transition	2.35
	Fresh	2.70

The core used for the bulk density determinations was also logged to record the oxidation state, lithology and core size. A total of 8582 samples were measured from 130 diamond drill holes.

4.6 Classification

All Mineral Resource estimates were classified according to JORC Code (2004 Edition) guidelines.

Classification of the Mineral Resource estimates was carried out taking into account.

- the geological understanding of the deposits,
- QAQC of the samples,
- density data and
- drill hole spacing.

A screen shot of the classification scheme for Inata North deposit is presented in Figure 13.

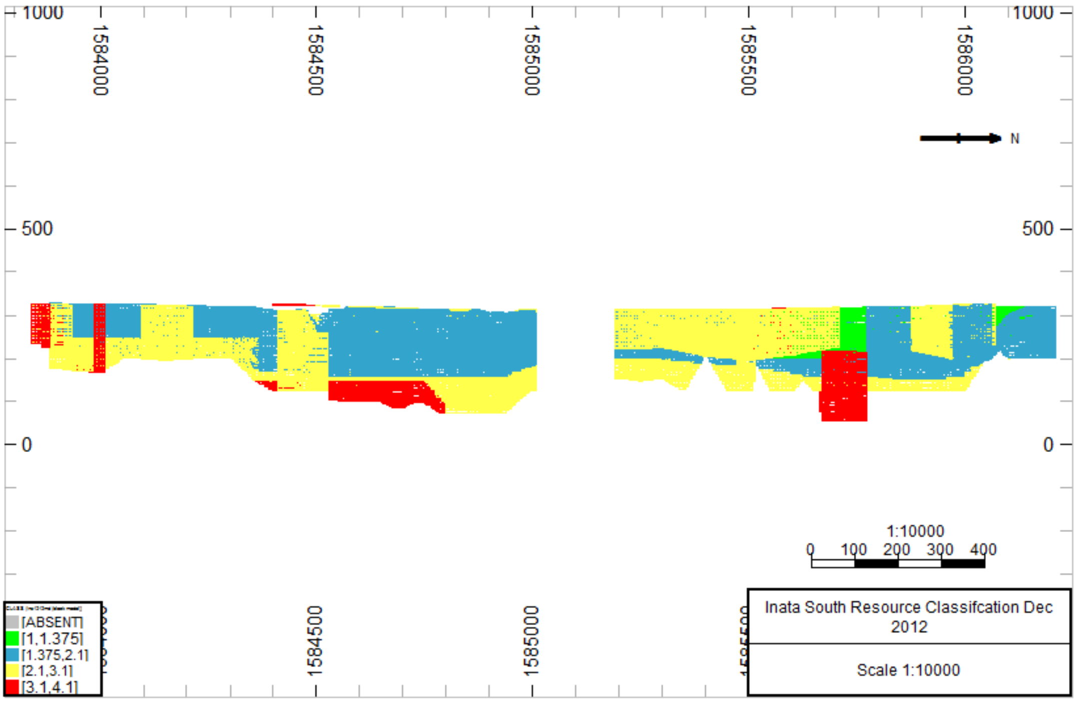


Figure 13: Inata North, Classification. Green = Measured, Cyan = Indicated, Yellow=Inferred, Red = Unclassified. View to East. Gaps and Overlaps in Blocks due to Wireframe Models.

CSA Comments:

CSA is satisfied that the Mineral Resources for Inata are appropriately estimated and classified.

Resources are reported to the JORC Code (2004 Edition) reporting standards.

More details regarding lithological boundaries and geometallurgical properties need to be incorporated into future resource models. This will assist further in the estimation and overall recoverable grade discussed in Section 11.7.

5 Inata Operations

5.1 Safety and Health

The mine operates a comprehensive Safety and Health system which is not currently accredited to any international standard (e.g. ISO 18001). The system is of a high standard and would, based on the review carried out, achieve certification. All employees are provided with Safety and Health training relevant to their role and records of training received are kept. Refresher training is provided as necessary. All employees are issued with a Safe Work Procedure Manual as an aide memoire. People employed in a driving role are required to hold a driving licence, undergo a driving assessment and in some cases specific driver training. The mine also has an Occupational Health Committee which meets regularly and includes departmental representatives and elected representatives from the workforce.

The Safety Department is headed by a Safety Manager, who oversees three safety co-ordinators and a trainer (theory) for mining, processing and maintenance.

There also are two doctors and two nurses who run the site paramedic clinic. They deal with the health and wellbeing of all site personnel, including immunization programs and malaria management.

5.2 Safety Status as of May 2013

There was no LTI in May 2013. SMB and contractors worked 397 LTI free days to the end of May. A total of 327,056 hours worked in May / 3,742,991 hours since the last LTI. The LTI frequency was 0.00 for the month, and YTD frequency was 0.00. The Injury frequency rate YTD was 1.79 and 4.89 for the month. Zero working days lost in May. The LTI severity is 0.00 for the month. Rolling 12 month LTI frequency is 0.00 and LTI severity is 4.82. Five near misses with loss potential were investigated and corrective actions are being taken.

The last LTI occurred on April 28, 2012, when a maintenance supervisor was struck by a light vehicle. The driver was not carrying a valid driver licence. The supervisor was injured at the pelvis and rib.

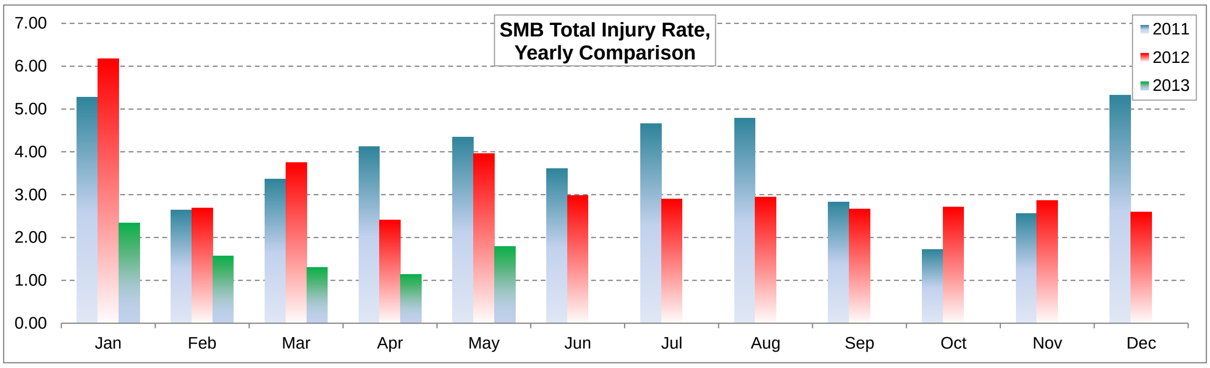


Figure 14: Total Injury Rate per Year

The injury rate for the month has gone up with 7 (Figure 14) first aid treatments incidents which occurred with SMB and contractors. They were minor injuries that were caused by poor judgments, lack of communication, lack of training and supervision. The majority of these incidents happened in maintenance where helpers perform the work without any background and theoretical trainings (Figure 15).

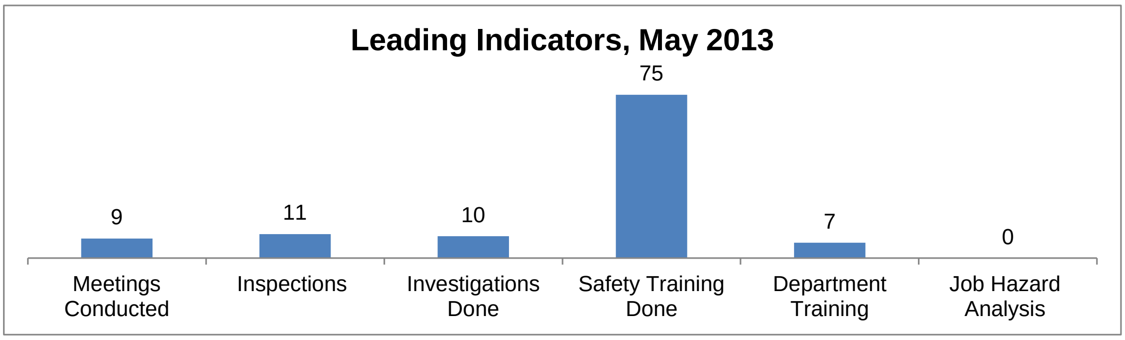


Figure 15: Leading Safety Indicators May 2013

5.3 Human Resources

5.3.1 Manpower

At the end of 2012, there were 788 direct employees and 486 indirect employees. Compared to 2011, the number of employees at site has increased by 20.25%. This is explained by the progressive increase of activities.

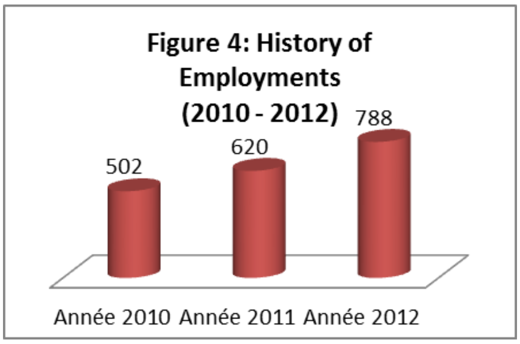
Local employment is an important factor in the company's management policy. In 2012, the number of employees recruited in the Soum province has reached 28% of the total number of SMB employees, i.e. 224 persons.

This increase in nationals and local represents a success for SMB's nationalisation programme for its work force. It should be noted that many of the people originally recruited locally have relocated to Ouagadougou or other main centres.

Table 15 and Figure 16 show the characteristics of employment at the mine over three years of production.

Table 15: Statistics of Employment at Inata Site

Year		2010	2011	2012
SMB Total Employees	Locals	117	168	224
	Nationals	329	394	502
	Expatriates	56	58	62
	Total	**502**	**620**	**788**
Total Employees of Contracting Companies		_	396	486



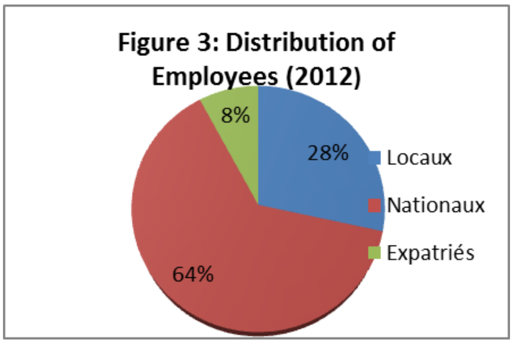


Figure 16: Distribution of Employees

5.3.2 *Burkina Faso Mining Law*

The Burkina Faso Mining Code was adopted in 1997 and subsequently modified in 2003. Under the Code, mineral resources are the property of the State with mineral rights being granted by the Ministère des Mines, des Carrières et de l'Energie. The Code identifies two types of title for large operations, the exploration and exploitation permits, respectively.

An Exploration Permit is granted by the Minister of Mines and is restricted to a total area of 250 km^2 for all minerals. A company cannot hold or apply for more than 7 licences. Permits have a duration of three years and may be renewed twice for a period of three years each, bringing the total exploration period to 9 years. The relinquishment of 25% of the Permit area is optional for the first renewal and mandatory for the second relinquishment. A fee of FCFA 1,000,000 is payable once the Permit has been granted. First renewal charges are FCFA 1,500,000 and FCFA 2,000,000 for the third and final renewal. A surface fee of FCFA 2,500/km^2 per year is charged for the first period, FCFA 3,000/km^2 per year for the second and FCFA 4,500/km^2 per year for the third period. The fee payable to transfer a Permit is FCFA 3,000,000. Companies are required to meet an annual minimum expenditure requirement of FCFA 270,000/km^2.

An Exploitation Permit is granted by the Council of Ministers based on recommendation by the Minister of Mines. The State automatically obtains a 10% participation in the venture. The Permit is valid for a period of 20 years and is renewable at periods of five years over the life of the mine. A fee of FCFA 5,000,000 is payable upon granting of the permit with an additional FCFA 12,500,000 payable per renewal. A surface fee of FCFA 7,500,000/km^2 is payable each year from the 1st to the 5th year, 10,000,000/km^2/year from the 6th year and 15,000,000/km^2/year from the 11th year.

The Burkinabe Government recently introduced the above increased tariffs for Exploitation Permits to bring into line with neighbouring ECOWAS States.

A number of guarantees and tax allowances are included in the legislation. The State guarantees the right of ownership, freedom of management, free transfer of capital and returns and stability of agreements made under this law. Also included are exemptions from customs duties on temporary import of equipment, although bank guarantees have to be posted against re-export. Exemptions are also granted on the Industrial and Commercial Professions Tax, Value Added Tax and on the Employers and Apprenticeship Tax in the exploration stage. A variety of tax reliefs, including accelerated depreciation, are conceded to mining projects depending on whether it is for an exploitation permit or a mining concession. The Tax on Industrial Profits and Commercial Tax is reduced to 17.5% (from 27.5%) and the Revenues des Valeurs Mobilières is reduced to 6.25% from

12.5%, for half the duration of the mine as stated in the feasibility study. From thereon normal rates are applied.

In recent years the country has experienced changes in its mining law and infrastructure and under the present mining code a prospecting authorisation, in the form of a renewable one-year prospecting licence can be issued.

5.3.3 Taxes

There is a state royalty paid to the Burkina Faso Government of 3% to 5% of gold produced. There is also a further 2.5% royalty paid to Royal Gold as part of previous lease conditions.

There is a Value Added Tax (VAT) of 18% that is chargeable on all materials and services. VAT is reimbursed after 6 months. VAT on diesel fuel is not reimbursable.

5.4 Environment

Avocet recognises that its exploration and mining activities have the potential to impact directly and indirectly on the environment and communities neighbouring these activities. The Company is committed to carrying out all its activities in a manner that is sustainable and that will have a long-term positive impact.

The granting of the exploitation licences and the approval of the Environmental Impact Study (EIS) and its amendments provided the necessary permits required for building all mine facilities, including the Gomdé Barrage and the associated access road. The EISs prepared for the project are:

- For the mine itself: Etude d'impact sur l'environnement du projet de la miner d'or d'Inata (Socrege 2008a);
- For the Gomdé dam: Etude d'impact sur l'environnement du projet de construction du barrage de Gomdé (Socrege 2008b); and
- For the access road: Etude d'impact sur l'environnement du projet de construction de la route Belehede-Inata & de la conduite d'eau Gomdé-Inata (Socrege 2008c).
- TMF2 Addendum a l'étude d'impact environnemental et social du projet de construction d'un nouveau parc a résidus minier (Bureau Performance, 2013).

These environmental assessments have all been approved by the national Government. Where appropriate, the assessments and supporting documentation were prepared with reference to relevant international conventions, standards and guidance. No issues are known with respect to environmental issues which are considered to materially impact on the operations of Inata.

In addition, Avocet has completed the EIS in support of the extension to the mine permit area and is currently involved with the Burkinabe authorities with stakeholder engagement and the EIS approval process.

The EIS for the Souma project has also been started, with the Terms of Reference report drafted for submission to the authorities and preliminary baseline data being collected.

No other environmental licences or permits with respect to its operations, for example, water is abstracted from the Gomdé Barrage which was constructed specifically for that reason. The approval for the mining EIS (Ministry of Environment and Life Quality, 24th August 2006) notes that the approval also incorporates reference to, for example, discharge limits and water management.

Potential environmental and social impacts of Avocet's exploration and mining activities at Inata are managed through an Environmental and Social Management System (ESMS) that was established in 2010.

The ESMS is not currently accredited to any international standard (e.g. ISO 14001) but was prepared in accordance with the principles of recognised international requirements. The ESMS is under continuous internal review and improvement by the mines environmental management team.

The ESMS contains a legal register and an extensive aspects register which identifies environment impacts and allocates responsibility for managing them to specific departments. The ESMS also contains an Action Plan which identifies key actions for environmental performance improvement, allocates responsibility, sets validation criteria and allows progress towards completion to be monitored.

This system ensures compliance with all relevant national regulations and international best practice. To this end, Avocet continues to maintain close working relationships with the Ministries of Environment in Burkina Faso and Guinea as well as other regulatory authorities. Avocet's subsidiary in Burkina Faso that manages the Inata Gold Mine, Société des Mines de Bélahouro SA ('SMB'), regularly reports on its on-site activities and environmental performance to the Ministry of Environment and Ministry of Mines, as well as receiving site inspections from these departments. To date no significant problems or areas of concern pertaining to the Inata Gold Mine have been raised.

The ESMS is considered to be consistent with the general requirements of IFC Performance Standard 1 (Assessment and Management of Environmental and Social Risk and Impacts).

Environmental monitoring is carried out in accordance with the approved Environmental Management Plan. Monitoring includes surface water quality at the Gomdé Barrage, borehole water quality, and dust and noise emissions. Water quality in boreholes around the tailing storage facility (TSF) and in those that supply potable water in local communities are monitored.

During 2012, approximately 350 routine water samples were collected and analysed in the on-site environmental laboratory. In addition, some 200 other routine water samples and over 100 dust samples were collected and analysed by accredited external laboratories. These externally analysed samples included quality assurance duplicates of samples tested on-site. A review of the data identified no significant environmental issues with results constantly meeting the guideline values given in the IFCs Environmental, Health and Safety General Guidelines (IFC 2007). For example, drinking water in village wells and boreholes around the tailing storage facility (TSF) typically recording very low concentrations of cyanide and other potential contaminants, often lower than detection limits.

In addition, water and dust samples have been collected and analysed in the Souma to provide baseline data in support of the EIS that will be necessary to apply for a mine licence over this deposit.

Chemical analysis of environmental samples is undertaken at the mine's' in-house laboratory. Some duplicate samples are sent to a Government approved laboratory for cross checking. Site staff report problems with the approved laboratory, both in terms of speed of turn around and quality of the results, and are actively seeking a solution to this problem.

Avocet recognises the importance of training and education to maintaining a continued high level of environmental and social performance. All employees and contractors undertake an environmental induction programme at both operations, and an ongoing programme of training is in place to cover environmental issues. Training is based on a fixed syllabus for all employees as well as bespoke training developed where requested by departmental managers. This training addresses areas for improvement that are identified during regular internal inspections.

During 2012, water conservation and fuel usage awareness campaigns were instigated to reduce both the carbon emissions of the mine as well as the costs associated with the use of both.

In 2011, Avocet became a signatory to the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold ('Cyanide Code'). The Cyanide Code is a voluntary industry code of best practice for gold mining companies using cyanide. During 2012 an initial internal audit of all of the Inata Gold Mine's activities against the requirements of the Cyanide Code was undertaken, and it was determined that the mine was in general compliance. Following this comprehensive review, work has been ongoing to consolidate the entire mine's existing cyanide management procedures into an over-arching cyanide management plan. Avocet's mining operations in Burkina Faso will undergo an independent audit towards the end of 2014 to measure compliance against the Cyanide Code.

The company operates a community engagement programme which has been in place since before the start of construction at Inata. The programme is subject to continuous review and improvement.

The Inata mine is in a remote area of Burkina Faso and close to the Mali border. In recent months this has brought a significant increase in security awareness and importantly these have inevitably affected "outside the fence activities" which have impacted on the intensity of community engagement activities. Despite this community engagement still remain an important activity and mine staff continues to maintain existing and develop new links with the community.

In 2010, Avocet created a foundation to act as the vehicle for its community-based projects in Burkina Faso. The Fondation Avocet pour le Burkina ('FAB') is governed by representatives of Avocet, Avocet's local subsidiary SMB and local community leaders. SMB's Community Relations department manages the day-to-day running of FAB, including all communication with local communities and the promotion of these communities' sustainable social and economic development. FAB's mandate is to provide funding for select educational, health and other developmental projects submitted by local communities and jointly identified as priorities by SMB and community representatives. FAB is funded by SMB and following an initial contribution of 70 000 000 CFA (US$140,000) by Avocet, ongoing payments are made by SMB at a rate of US$1 per ounce of gold produced. In addition, Inata's fuel suppliers, TOTAL, donate 0.50 CFA per litre of diesel sold to SMB to FAB. This has resulted in TOTAL making a contribution of 19 000 000 CFA this year.

In 2012 FAB focused on consolidating the US$120,000 worth of projects initiated in 2011. Detailed plans for the delivery of key sustainable development projects in 2013 were developed. The result of this planning was that at the end of 2012 contracts for projects totalling in excess of 130 000 000

CFA (US$260,000) were signed with local companies for the building of three new schools and a clinic. The inclusion of local community leaders in the FAB has ensured that these new facilities are located where they can deliver maximum benefit to local communities. The facilities became operational in mid-2013.

Community engagement ensures that Inata management are able to work with local communities to achieve their own community goals. The communities surrounding Inata have identified a goal of reforestation in and around their villages. SMB partnered with them in 2012 for the design, construction and planting of six community reforestation areas. These community forests are part of focused efforts within the mine licence area to increase tree cover in the area around the mine site. The Inata tree-planting initiatives have resulted in over 18,000 native trees being planted in 2012, covering an area of approximately 23 hectares. This is a significant increase on the 11,000 planted in 2011.

During 2012 a major review of Inata's mosquito control programme was undertaken. With the assistance of international experts, the malaria control strategy was overhauled and new control techniques introduced at the end of the rainy season. Negotiations are ongoing with local communities to roll-out the internal spraying programme to their households. Training in this regard has been completed and new mosquito control equipment has been purchased. Avocet hopes to see a dramatic reduction in malaria in both its workforce and neighbouring communities in 2013.

In order to facilitate the development of the mine and Gomdé dam, three villages were relocated. A Displacement, Resettlement and Compensation Plan (Socrege, May 2008) was prepared for the relocation of these villages. This relocation involved a total of 959 households (5126 individuals). As part of the site visit the village of Gomdé was visited. The village chief reported that they were satisfied with the standard of replacement accommodation provided and the provision of other services (e.g. water pumps). Currently there is ongoing consultation with all those communities relocated through monthly Communication Meetings. These meetings include traditional village chiefs, senior administrators and other key individuals from the communities. Records of these meetings (minutes) are kept.

In addition quarterly meeting are held with provincial High Commissioners, regional Governors and town Mayors. These higher level meetings are the forum in which decisions are made relating to projects which will be supported by the Avocet Foundation. The Avocet Foundation is a fund which has been set up to provide support and funding for chosen community projects.

6 Infrastructure

6.1 Mining Infrastructure

The Inata mine is located in a remote area and has constructed the infrastructure necessary for the mine. Facilities include open cut mines, waste dumps, ore stockpiles, treatment plant, tailings storage and power and water reticulation, administration, workshops, accommodation camps and store buildings.

6.1.1 Treatment Plant

The Inata treatment facility has a capacity to treat over 2 Million tonnes per year (Figure 17).

Figure 17: Inata Treatment Plant

6.1.2 Tailings Dams

The current tailings facility is nearing its design capacity. A new tailings facility is being constructed and is near to completion (Figure 18).

6.1.3 Electrical Power

All power must be generated at the site and distributed as needed to the work places. The primary power is supplied by eight Cummins C2250 D5 diesel generators. These are three phase 400 VAC 50Hz units capable of providing 2250kVA (1800 kW) as standby power units (running 1 hour) or 2000kVA (1600 kW) prime power units. The units are now 5 years old and have reached an age where they require major rebuilds. Avocet has decided to rebuild the units at site. One unit at a time will be overhauled.

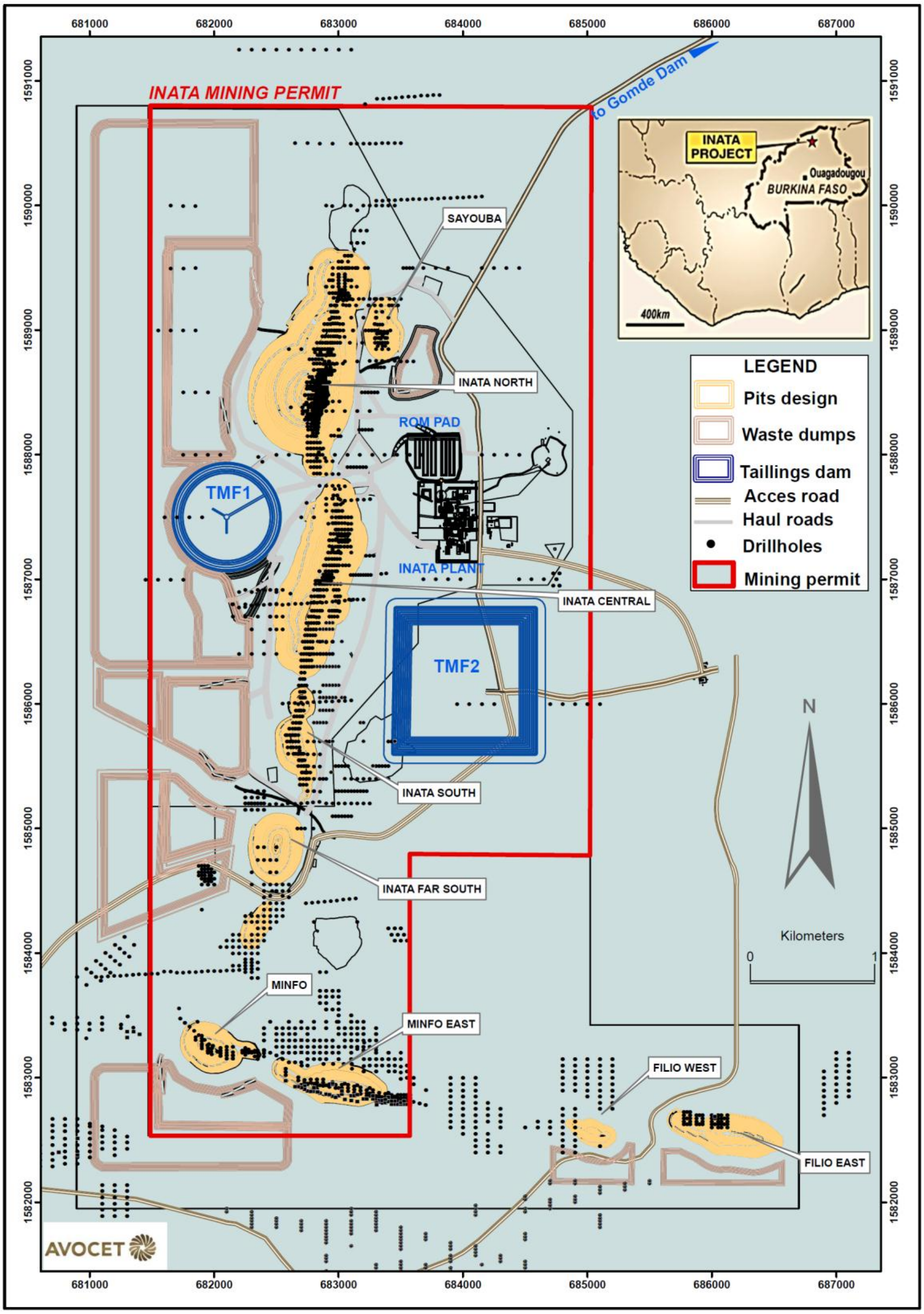


Figure 18: Site General Arrangement Plan

6.1.4 Diesel Storage

The power station is fed from the onsite tank farm via day tanks with storage of 25,000 litres each. The fuel farm has a total capacity of three million litres.

The fuel system has primary and secondary filtration system, a service bay, auto-fuel control system with proximity ID reader and a waste oil storage facility. To secure fuel supplies during the wet season additional storage is provided by the fuel supplier.

6.1.5 Process Water

Water for process plant use is drawn from the Gomdé Barrage, supplemented by water reclaimed from the tailings dam. Water reclaimed from the tailings dam is used as process water supplying the SAG and ball mills and various screens around the plant. Raw water is used for make up if the quantity of process water reclaimed from the tailings dam is insufficient during the dry season. Raw water is stored near the plant in a reservoir with a capacity of 15,000m^3, enough for 24 hours of plant operation.

6.1.6 Potable Water

Potable water is produced by treating the raw water from the Gomdé Barrage in the water treatment plant. Potable water is distributed throughout the plant for drinking, washing and for safety showers.

6.1.7 Administration Security and Warehouse

The facilities for management of the operations are well set out and adequate for the operation

6.1.8 Maintenance Work Shops

The heavy duty/light vehicle shop has a work area of 836 square metres with; four service bays, tool store, office facilities, compressor house, light vehicle service bay, and Indoor lubricant dispense points.

The fixed plant maintenance workshop has; Indoor works area 440 square metres, outdoor works area 183 square metres, office facilities, tool stores and machine shop.

The general services workshop has facilities for; air conditioner repairs, plumbing, carpentry, and building repairs (painting, roofing civils etc.).

6.1.9 Camp Accommodations

In light of the remote location Inata provides camp facilities for its workers. There are four separate camps within a four kilometres radius of the site.

- New Camp (117 persons)
- Old camp (170 persons)

- Sona camp (304 persons)
- CMA camp (76 persons)

The total accommodation is for 600 persons. There is a water supply borehole and a new water treatment plant has been ordered. There is a waste water treatment plant, diesel generating plant and a standby diesel generator.

CSA Comments:

Safety standards are high and the Avocet staff appears very efficient and operations are run to high standards.

The current infrastructure is adequate for the current operations.

7 Mining

7.1 Historical Mining

The historic production derived from the Bélahouro artisanal workings is unknown. Evidence of artisanal workings comprising small “manhole” shafts down 15 to 20 metres can be seen to the west and outside of the Inata Central resource. This represents an insignificant amount of material removed from the current or any future potential in-situ resources.

The artisanal workings at Inata are not extensive and have mostly been created by illegal miners. BHP and Resolute established control over artisanal operations from late 1990’s in order to restrict any activity over the known Inata resource areas.

Avocet has halted any illegal mining taking place on the Inata mining licence (26km^2), and the government assisted in clearing prospective areas of the Pali and Souma exploration licences. However, illegal mining continues elsewhere on Avocet’s Bélahouro exploration licences, particularly on the Souma trend and nearby Pali-Damba areas.

7.2 Mining Methods

Inata is being mined by conventional open pit methods utilising an owner-operated mining fleet supplemented with contractor mining equipment as required.

A significant proportion of the operations comprise weathered and transition rock however, drill and blast activities are conducted to optimize equipment productivities. Only the deeper pits (North and Central) are designed to mine the harder fresh rock.

Ore and waste are being excavated by backhoe excavators in two discrete flitches, each nominally of 2.5m height. Bench heights are designed to be increased in areas of known waste to more effectively utilise equipment productivity and minimise costs.

Initially, the mining was free digging as the top two benches of the pits are generally considered to be amenable to this mining method. The pits are mined in five metre benches which are taken in two 2.5 m flitches. Interim walls are consistent with geotechnical recommendations at the time of excavation. As geotechnical knowledge increases recommended slope angles have been modified.

The mining sequence consists of:

- Grade control drilling is completed with reverse circulation drills
- Blast holes are drilled to a depth of 5.5m. The holes are 140mm to 155mm diameter
- Explosives are ANFO and slurry explosives.
- Ore and waste are excavated by either a front end loader (FEL) or a hydraulic excavator.
- The haulage fleet consists of 90 tonne capacity dump trucks.

- Ore from the open pits is delivered to a ROM stockpile.

7.3 Hydrogeology Studies.

Information from groundwater levels encountered in drill holes during exploration drilling has been collated by Inata Mine and used to model the groundwater surface in the vicinity of the active pits. The starter pits show no signs of ground water and are mined in dry ground conditions.

Ground water elevations around the open pit are reported to be deeper than 80m, with most RC drilling ground water intersections occurring between 110m and 160m below surface. Groundwater inflows are expected to be channelled by geological structures such as faults and or shears.

The model indicates that a significant portion of the Inata North final wall will be under the groundwater table, and to a lesser extent, the final wall of Inata Central Pit.

The final slope stability in both North and Central pits will be significantly reduced if ground water is present. It is important that the final slopes are dewatered. Slope dewatering is recommended by SRK in the 2011 and 2013 reports.

The slope dewatering will need to be in place in the north pit as fresh ore mining recommences in 2014.

7.4 Geotechnical Studies

7.4.1 George Orr Associates 2011 Report

The initial geotechnical design basis was carried out in 2007 by George Orr & Associates and based on pits that were planned to depths of 160m and 120m deep in Inata North and Inata Central respectively. The planned depths are now 290m and 180m respectively. The original planned mining was expected to be in dry areas. The mining is now planned to extend below the forecast depth so pit dewatering will be required.

In mid-July 2011, there was a failure in the east wall of the stage pit of the Inata North Pit. The failure extended over a 60m vertical distance from the pit floor. The failure was wedge shaped and at the pit floor the failure toe was 60-80m long. The failure appeared to follow intersecting structural features.

7.4.2 SRK Geotechnical 2011 Report

At the time of the 2011 SRK geotechnical report, the pit designs of Inata North and Central Pits had maximum depths of 270m, and 170m respectively. Figure 19 is a section, showing the pit survey at the end of August 2011, of the starter pit design, the existing final pit design, groundwater profile, and material boundaries. Unlike the starter pits, a significant portion of the final pit slopes will be under the groundwater table. It was therefore necessary to assess the final pit slope designs to ensure that the slope angles are appropriate for the rockmass and groundwater conditions expected to be encountered.

In August 2011 Inata engaged SRK (Ghana) to:

- Review of geotechnical feasibility report
- undertake pit wall mapping of geological structures
- complete a visual assessment of rockmass quality
- prepare geotechnical evaluation of Inata North and Central final pit slope designs, and
- Report on these matters.

The planned expansion of these pits resulted in a substantial increase in the slope heights of the Inata North and Central Pits. The design assumption of completely dry slopes therefore no longer held valid. At that point, mining had predominantly comprised weathered material, and further geotechnical investigations were required with increasing pit depth.

At the time, the operated pits had been designed using the 2011 mining and processing costs. The optimisation also assumed a gold price of USD1, 200/oz and was based on the 2011 CSA Mineral Resource estimate.

Pit wall designs were modified based on geotechnical conditions and stability of the previous design pit walls. A review of the geotechnical considerations was initiated as part of the pit redesign and partially in response to a failure in the phase one east wall of the Inata North Pit. The failure occurred in July 2011 and extended over a height of approximately 50 m and a length of approximately 50 metres. At about the same time there were cracks noted in berms in the west wall of the Inata Pit. The failure did not endanger personnel or equipment but it delayed access to higher grade ore in the lower benches of the Inata North initial pit phase.

The wall design parameters for the revised pit design include:

- In the weathered rocks the face angles were set to 60 degrees for 10m high benches. To flatten the eastern walls, 10m berms were introduced after 40m depth.
- In the fresh rock areas the face angles were set to 65 degrees for 20m high benches, separated by 10.7m berms.
- The overall wall slope angle was less than 45 degrees.

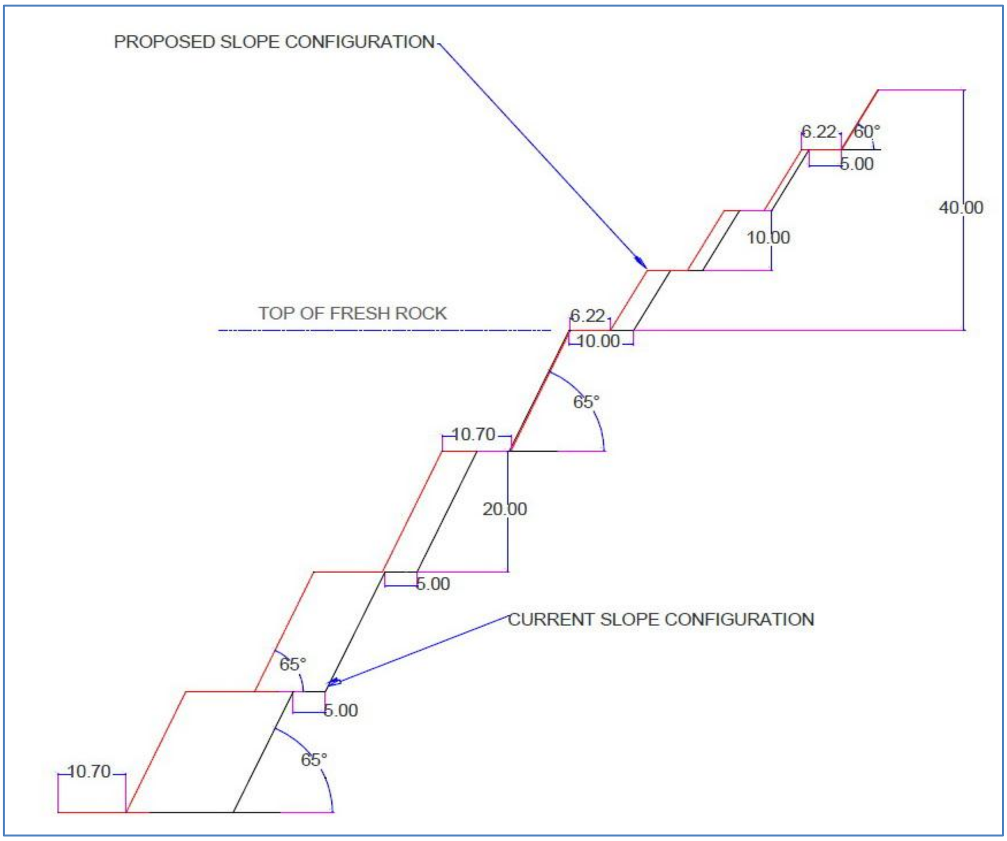


Figure 19: Pit Design Parameters Ref SRK 2011

The approximate size and depth of the planned pits are shown in Table 16.

Table 16: Approximate Size of Inata Open Pits at the time of the study

Pit	Length (m)	Width (m)	Depth (m)
North	1500	630	289
Central	1,500	500	180
Sayouba	280	280	93
South	700	300	87
Far South	370	370	128
Minfo	300	300	90

Pits were designed in stages (cutbacks) (Figure 20 and Figure 21). Pit slopes were designed on the available geotechnical reports; therefore a range of slope angles evolved in time. As new cut backs were developed the most recent slope recommendations were incorporated in the design. The cutback strategy enabled waste mining to be balanced with available mining equipment capacity at Inata North Pit.

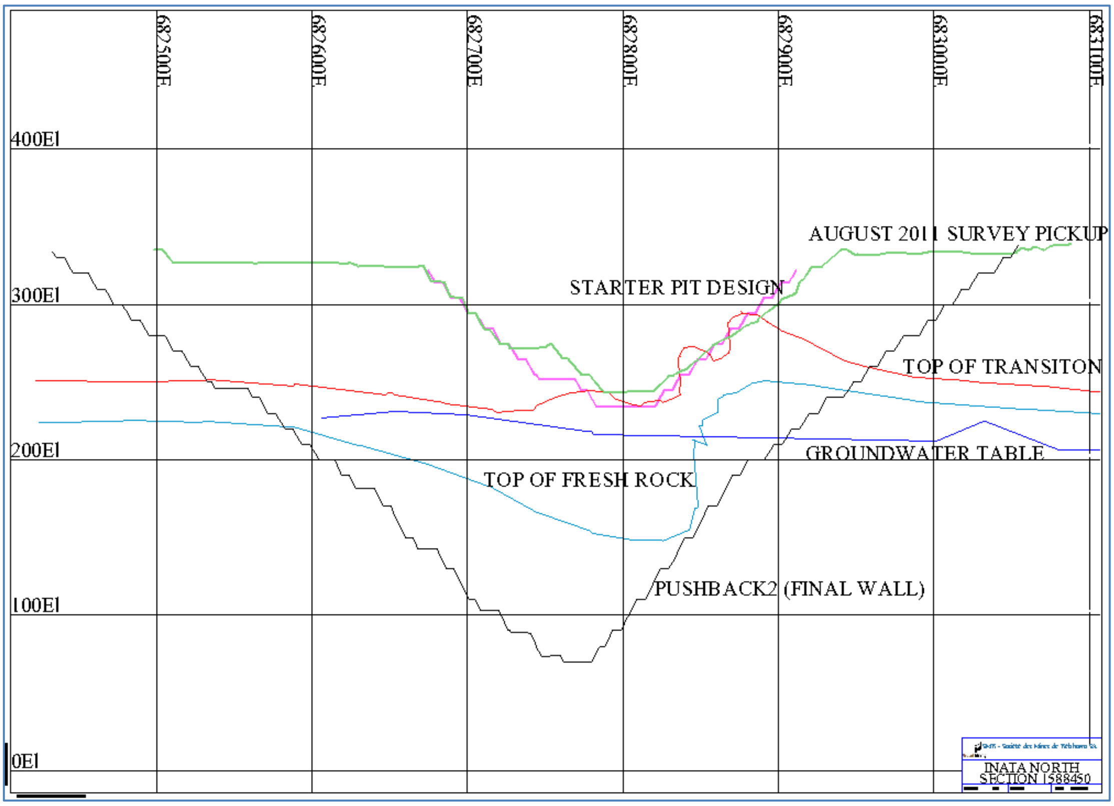


Figure 20: Cross Section through Inata North Pit

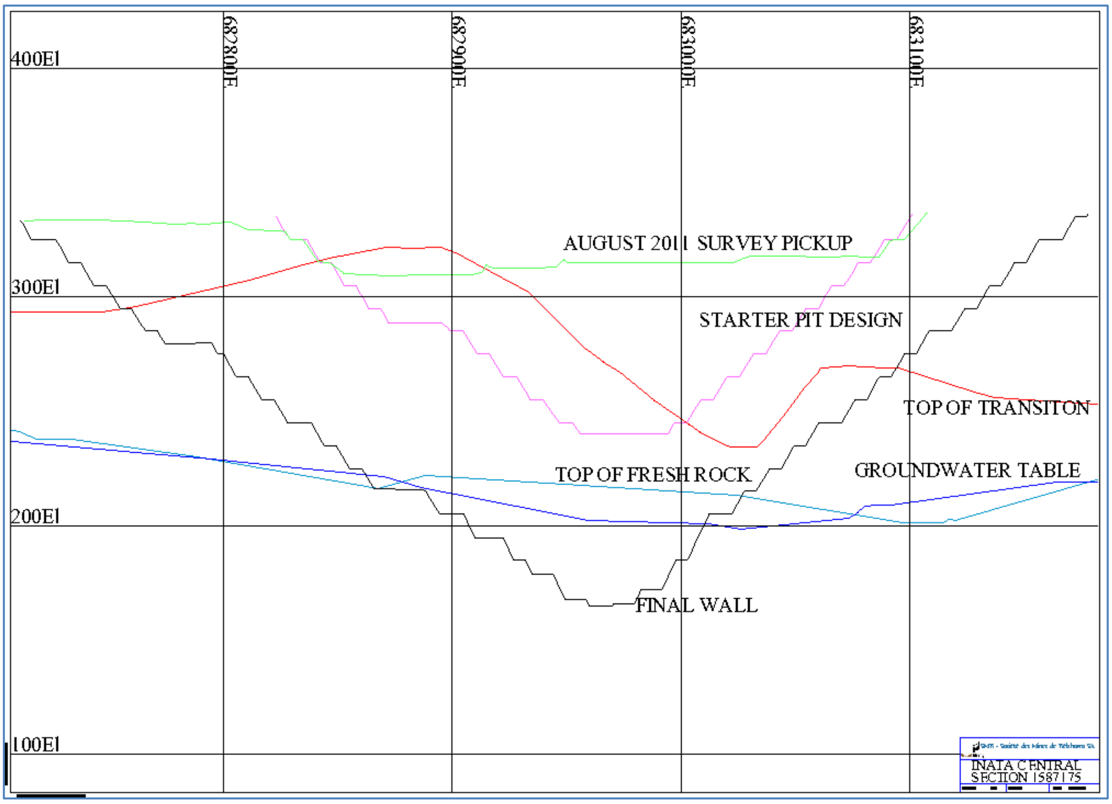


Figure 21: Cross Section through Inata Central Pit

7.4.3 SRK Geotechnical 2013 Report

In February 2013 SRK consulting Ghana Ltd (SRK) provided a geotechnical study for the final pit slope designs of Inata North and Central pits. The report concluded that:

"It has been shown in the limit equilibrium analysis that the rock mass has sufficient strength to form slopes at reasonably steep angles however, the orientation of geological structures in the east wall imposes a limitation on the slope angles that can be mined safely".

"The starter pits were designed with an inter-ramp angle of 43 degrees in the weathered zone and 54 degrees in the fresh rock zone. However, the North Pit starter pit starter pit could not be mined to the ultimate depth due to a slope failure which occurred in the weathered zone of the east wall. During the SRK review of October 2011, inter-ramp angles of approximately 40 and 45 degrees were recommended for the design of the weathered and fresh rock zones of the interim cut which is the on-going cutback slope preceding the final cut. Inata Mine has reported that the east wall of the Inata North Pit interim cut has already shown signs of multiple bench failure".

Based on the results of the kinematic and limit equilibrium analysis, as well as the performance of the pit slopes to date, the rslope angles recommended in 2011 for the Inata North and central Pits are as presented in Table 17.

Table 17: SRK 2011 Design Parameters

		Pit Design				
Parameter	**Unit**	**North**	**Central**	**South**	**Far South**	**Sayouba**
Batter Angle						
Oxide	deg.	60	60	60	60	60
Transitional	deg.	65	65	65	65	65
Fresh	deg.	65	65	65	65	65
Batter Height						
Oxide	m	10	10	10	10	10
transitional	m	10	10	10	10	10
Fresh	m	20	20	20	20	20
Berm Width						
Oxide	m	6.22	6.22	6.22	6.22	6.22
Transitional	m	6.22	6.22	6.22	6.22	6.22
Fresh	m	10.7	10.7	10.7	10.7	10.7
Ramp Width*						
Oxide	m	22	18	18	18	18
Transitional	m	22	18	18	18	18
Fresh	m	18	18	18	18	18
Ramp Gradient	1 : x	10	10	10	10	10

** For South, Far South and Sayouba Pit designs the final ramp to the pit base has been reduced to 12m in width (for single traffic).*

The 2013 report recommended new slope recommendations in Figure 18.

Table 18: SRK 2013 Slope Recommendations

Design Element		Inata North Pit		Central Pit	
		East Wall	West Wall	East Wall	West Wall
Maximum Slope Height		270	270	170	170
Weathered Zone	Bench Height	10	10	10	10
	Batter Angle	50	50	50	55
	Berm Width	6	6	6	5
	Interim Ramp Angle	34.8	34.8	34.8	39.8
Transition Zone	Bench Height	10	10	10	10
	Batter Angle	50	60	50	70
	Berm Width	6	5.5	6	5
	Interim Ramp Angle	34.8	41.58	34.8	49.2
Fresh Rock Zone	Bench Height	10	10	10	10
	Batter Angle	70	75	70	75
	Berm Width	5.5	5	5.5	5
	Interim Ramp Angle	47.6	52.5	47.6	52.5
At the recommended slope angles bench-scale and multi-bench instabilities releasing slivers of rock materials are still possible					

CSA Comments:

Slope stability for deeper pits is a significant risk to the project.

CSA recommends SRK's 2013 geotechnical design recommendations be adopted for future slope designs:

- The orientation of geological structures, especially in the east wall, is critical to the stability of the pits. It is therefore recommended that geological mapping of exposed discontinuities in the pit walls be carried out on all benches during the on-going mining of the interim cut. This data will be used to re-evaluate the recommended design parameters and make modifications if required.

- Consideration should be given to installing a slope monitoring system for both North and Central Pits

- The groundwater regime in the vicinity of the pit is still unknown. It is recommended that at least two boreholes be installed in the hanging-wall and foot wall of each pit.

CSA recommends establishing groundwater level monitoring bores behind deeper pit east and west walls.

7.5 Mine Plans

All of the pits have been re-designed using actual 2012 mining and processing costs. The revised optimisation also assumed a gold price of US$1,200/oz and is based on the December 2012 CSA Mineral Resource estimate. The pit design followed the optimized pit shell design and follows on the established designs which were underway at the time of the resource re-estimation.

Mining is conducted from the following pits:

- Inata North
- Central
- Central South Starter Pit
- South Pit
- Far South Pit
- Minfo East Pit
- Sayouba Pit

Pit wall designs will be modified based on the review of the geotechnical conditions and stability of the previous design pit walls.

7.5.1 North Pit

The Inata North Pit has haul roads established on the west wall to manage risks associated with localised slope instability of the east wall. Production benches are well established with sufficient area for grade control to be efficiently completed (Figure 22).

Figure 22: Inata North looking west

7.5.2 Central Pit

The initial cutback of the central pit has been completed. Multiple bench failure on the East wall occurred after the cut back was completed (Figure 23).

Figure 23: Photo of Central Pit looking north

7.5.3 Central South Starter pit

In Central South Starter pit sections of the east wall have failed after mining was completed. These failures prompted a redesign of east wall batters for future pits to be slightly flatter overall slope angle. Development of the Central south pit is underway and displayed in Figure 24.

Figure 24: Photo of Central South Pit June 2013 looking South West

7.5.4 South pit

The initial cutback of the South pit has been completed. Multiple bench failure on the East wall occurred after the cut back was completed (Figure 25).

Figure 25: Photo of South Pit looking North East

7.5.5 Far South Pit

As mining has been completed in the Far South Pit it is currently used as a water storage dam for construction water. The water has been used for compaction of earth walls for the new tailings storage facility (Figure 26).

Figure 26: Far South Pit looking north

7.5.6 Minfo East pit

Minfo East pit is currently providing a large proportion of the oxide ore feed to the treatment plant. Mining intensity in this pit will be high until additional oxide ore sources can be developed (Figure 27).

Figure 27: Minfo Pit looking south

7.5.7 Minfo West

Minfo West pit is currently not being mined, however will provide oxide ore feed in 2013/14.

7.5.8 Sayouba pit

The Sayouba pit is currently in development as is planned as an oxide ore source in 2013 (Figure 28).

Figure 28: Sayouba Pit looking south

Mine design plans for the pits are in Appendix 4.

7.6 Mine Production Equipment

Mine production equipment is owned by Avocet and supplemented with contractor mining supplied equipment. Over the last 12 months AMS contractors have provided additional equipment that has raised mining capacity to 110,000 tonne per day of material movement.

Recent mine planning has indicated that total movements can be reduced to 85,000 tonne per day, thus AMS equipment was demobilised at the end of July 2013. Avocet owned mining equipment mechanical availabilities follow.

Mine equipment availability is tracked in both the mine and maintenance sections of the monthly reports.

It is evident that sourcing and supply of replacement parts is an ongoing problem for the operation.

7.6.1 Blast Hole Drills

Extended low mechanical availability of Roc L8 1101 drill has been addressed with the use of a contract blast hole drill rig (Table 19).

Table 19: Blast Hole Drill Availabilities

EQUIPMENT	May-13		YEAR TO DATE		
CODE	AVAILABILITY (%)	BUDGET (%)	AVAILABILITY (%)	BUDGET (%)	VARIANCE
ROC L8 - 1101	36%	92%	65%	92%	-27%
ROC L8 - 1102	98%	92%	89%	92%	-3%
ROC L8 - 1103	96%	92%	88%	92%	-4%

7.6.2 Excavator and Loader Fleet

The availability of Front End Loaders was low early this year however availabilities in May have returned to acceptable levels (Table 20). The availability and supply of parts is sometimes problematic for the operation.

Table 20: Excavator and Front End Loader Availabilities

EQUIPMENT	May-13		YEAR TO DATE		
CODE	AVAILABILITY (%)	BUDGET (%)	AVAILABILITY (%)	BUDGET (%)	VARIANCE
PC 2000-1202	97%	92%	94%	92%	2%
PC 2000-1205	98%	92%	98%	92%	6%
PC1250-1201	94%	92%	86%	92%	-6%
PC1250-1203	90%	92%	88%	92%	-4%
CAT-345CL - 1204	42%	85%	41%	85%	-44%
WA 800-1301	96%	85%	35%	85%	-50%

EQUIPMENT	May-13		YEAR TO DATE		
Cat 988H-1302	0%	92%	65%	92%	-27%
Cat 988H-1303	98%	92%	54%	92%	-38%
Cat 993K	97%	92%	95%	92%	3%

7.6.3 Haul Truck Fleet

The availability of the 17 trucks in the owner's fleet is summarised in Table 21. There are 6 Komatsu HD 785 and 11 Cat 777 in the fleet (Figure 29).

Figure 29: Truck Fleet Parked Up During the Firing of a Blast at Minfo East Pit

As seen in Table 21 Komatsu and Caterpillar fleet availabilities are significantly below budget. Appropriate preventative maintenance programs and major rebuilds are required to avoid aging truck fleet mechanical availabilities continuing to fall below expectations. Budgets need to be realistic. It is understood that production planning is undertaken based on previous quarters availabilities and the budget number is more of a target.

Table 21: Truck Fleet Availabilities

EQUIPMENT	May-13		YEAR TO DATE		
CODE	AVAILABILITY (%)	BUDGET (%)	AVAILABILITY (%)	BUDGET (%)	VARIANCE
Total HD 785 (6)	73%	90%	64%	90%	-26%
Total Cat 777F (11)	80%	95%	86%	95%	-9%
HD 465 WC-1	68%	92%	74%	92%	-18%
HD 465 WC-2	99%	95%	72%	95%	-23%

7.6.4 Dozers and Grades

Availability of replacement parts has adversely impacted on the availability of some equipment. While this equipment does not necessarily directly impact on the ability of the fleet to meet production targets it is important in maintaining the quality of haul roads and thus maximizing tyre life and operating costs (Table 22).

Table 22: Bull Dozers and Grades

EQUIPMENT	May-13		YEAR TO DATE		
CODE	AVAILABILITY (%)	BUDGET (%)	AVAILABILITY (%)	BUDGET (%)	VARIANCE
D 375 A	97%	90%	90%	90%	0%
834H	97%	90%	50%	90%	-40%
D6R	0%	90%	45%	90%	-45%
D9R-1502	99%	90%	59%	90%	-31%
D9R-1505	23%	90%	72%	90%	-18%
GD 825 A	43%	92%	27%	92%	-65%
Cat 16M	15%	92%	58%	92%	-34%

7.6.5 Blasting Facilities and Equipment

Blasting services are provided by A.E.L blasting contractor providing a down the hole service. Explosives are stored in magazines in a secure compound. Some improvements to the "bund" around detonator magazine are required to bring them up to acceptable standards.

CSA Comments

Mechanical availability of equipment has been significantly impacted by the reliability of spare parts supply. As the projects equipment matures the situation may deteriorate further.

CSA recommends continuing negotiations with parts suppliers to provide a more reliable parts supply, thus improving equipment availability and reduce operating costs.

7.7 Mine Production Planning

Production plans are created by firstly updating the life of Mine plan. An annual plan is then created for annual budget purposes. The annual plans are further dissected into Quarterly plans which are updated each quarter. Monthly plans are then created conforming to the quarterly plans.

The mining cut off grades used for directing ore to the ROM for treatment lower grade ores to stockpiles are reported as (Figure 30):

When hauled to the ROM stockpile the ore is stockpiled into fingers according to the following definitions.

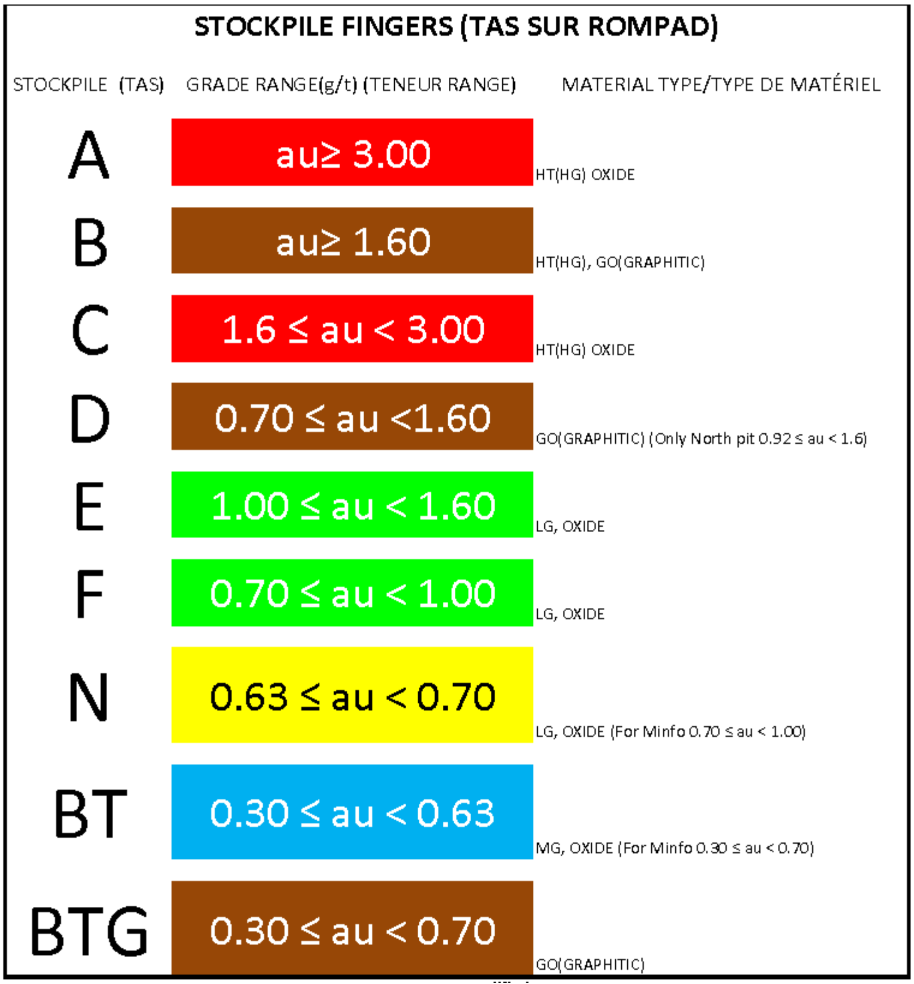


Figure 30: ROM Ore Stockpile Grade Definitions

7.8 Mine Production Summary

The summary of mine production since the beginning of the operation is in Table 23.

Table 23: Annual Production Summary

Inata Mine Production to Date					
Year	Total	Ore	Grade	Waste & Marginal	Strip Ratio
2009	5,809,000	530,000	2.57	5,279,000	9.96
2010	13,309,000	1,879,000	2.60	11,430,000	6.08
2011	25,200,419	2,494,297	2.14	22,706,122	9.10
2012	33,127,362	2,652,700	1.88	30,474,663	11.49
2013 to May	16,575,501	1,532,863	1.60	15,042,638	9.81
Total	**94,021,282**	**9,088,860**	**2.09**	**84,932,423**	**9.34**

The 2012-2013 mining has been negatively affected by a number of factors including:

- Mining issues regarding deferral of carbonaceous ore mining and

- Continued mechanical availability problems relating to parts availability.

In 2011 additional loading and haulage equipment was added to the mine fleet provided additional mining capacity. Mining rates were increased during 2012 and 2013. The hire fleet has now been stood down.

7.1 Grade Control

Grade control for the Inata operation is based upon a system of drilling close spaced RC drill holes from a given pit floor level to cover the successive three benches. The information from this close spaced drilling is used for short term production planning.

Quality control procedures were implemented during sampling by introducing international standard, field duplicates, and blank samples at a ratio of 5% (i.e., 1 in 20 samples). Drilling was conducted on a nominal 12.5m x 6m regular pattern at an inclination of 60^0 toward 090^0, with a consistent hole diameter of 123mm. Approximately two kilograms of sample was collected at two metre intervals using a single stage splitter. A 50 gram charge was prepared from this split for fire assay (FA) analysis for gold determination at the mine site laboratory. Every second sample of pulp reject submitted to the laboratory was analysed for carbon content.

Pit floor mapping has been conducted to better understand the pit geology and optimise ore block boundary interpretation, with focus on the location and morphology of carbonaceous shales and graphitic schist units.

Block models are estimated using OK methods for the grade interpolation. The GC block model for Inata North is created in cognisance of anticipated pit expansion and possible merger of the Inata North and Sayouba Pits. The block sizes are 6.25m x 2.5m x 2.5m, which is effective for minimising edge dilution and ore loss. These block dimensions are also a multiple of the Mineral Resource model, permitting the grade control (GC) and the Mineral Resource models to be merged for more reliable short and medium term forecasting by mine planning.

No drilling activity took place during May due to unavailability of GC pit floors. A grade control drilling campaign was underway at the time of the site inspection.

The last batch of 479 assay results from previous drilling was received during May. 121 Preg Robbing Index (PRI) and 29 grab sample results were also received in May.

Feed and mining grade control results are good and within acceptable mining standards.

CSA Comments:

CSA consider the grade control systems and procedures to be of industry standard. The variable nature of the deposits required close attention by the project geologists ensure mining dilution is minimised. Reconciliations support the long term historic mining loss and dilution estimates used as modifying factors for the Ore Reserve estimates.

7.2 Ore Reconciliation – Life of Mine

Plant ore feed estimates are compared to mine tonnage estimates from January 2011 to May 2013. The reconciliation shows variation but a reasonable overall reconciliation.

Plant feed and mining grade control results are good and within acceptable mining standards. Plant feed reconciliation data is outlined in Table 24 Reconciliation for grade and ounces are displayed in Figure 31 and Figure 32.

Table 24: Plant Feed Data Reconciliation

PLANT FEED DATA RECONCILIATION						
Months	*Mining(GC) Values*			*Plant Values*		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
Jan-10	80,985	2.45	6,382	80,985	2.57	6,697
Feb-10	92,187	2.49	7,369	92,187	2.87	8,492
Mar-10	63,810	2.83	5,812	63,810	2.93	6,012
Apr-10	102,287	2.84	9,324	102,287	2.88	9,465
May-10	134,928	3.01	13,058	134,928	2.78	12,060
Jun-10	167,398	2.86	15,368	167,398	3.06	16,457
Jul-10	190,412	2.34	14,310	190,412	2.52	15,428
Aug-10	199,989	2.58	16,568	199,989	2.56	16,454
Sep-10	197,746	2.62	16,629	197,746	2.21	14,079
Oct-10	172,009	2.49	13,751	172,009	2.63	14,522
Nov-10	225,270	2.95	21,354	225,270	2.61	18,882
Dec-10	238,539	3.16	24,235	238,539	2.79	21,404
Jan-11	232,868	2.40	17,933	232,868	2.26	16,958
Feb-11	195,408	2.88	18,110	198,463	2.36	15,031
Mar-11	228,824	2.81	20,653	228,217	2.49	18,239
Apr-11	226,484	2.46	17,945	204,910	2.30	15,134
May-11	184,534	2.52	14,941	182,356	2.31	13,566
Jun-11	184,973	2.33	13,860	207,224	2.11	14,039
Jul-11	145,083	2.25	10,511	160,805	1.91	9,881
Aug-11	192,863	2.13	13,191	212,170	2.36	16,075
Sep-11	195,466	2.06	12,952	219,359	2.19	15,428
Oct-11	248,848	2.16	17,295	233,251	2.21	16,602
Nov-11	164,860	2.07	10,963	195,664	2.19	13,762
Dec-11	238,919	2.30	17,698	218,476	2.36	16,566
Jan-12	262,813	2.74	23,161	202,737	2.38	15,499
Feb-12	177,911	2.25	12,876	200,977	2.40	15,502
Mar-12	202,292	2.52	16,381	204,305	2.30	15,108
Apr-12	209,792	2.14	14,443	219,705	1.92	13,568
May-12	221,310	2.28	16,201	231,388	1.80	13,371

PLANT FEED DATA RECONCILIATION						
Months	*Mining(GC) Values*			*Plant Values*		
	Tonnes	**Grade**	**Ounces**	**Tonnes**	**Grade**	**Ounces**
Jun-12	201,012	1.70	10,955	200,302	1.74	11,217
Jul-12	186,918	1.73	10,378	219,578	1.53	10,801
Aug-12	165,410	1.89	10,042	211,925	1.69	11,545
Sep-12	206,445	1.60	10,642	211,588	1.65	11,215
Oct-12	223,056	1.62	11,595	223,798	1.68	12,059
Nov-12	192,185	1.65	10,202	200,951	1.71	11,072
Dec-12	224,340	2.59	18,695	229,152	2.65	19,523
Jan-13	224,955	1.49	10,752	217,728	1.56	10,898
Feb-13	179,843	1.83	10,575	180,160	1.74	10,095
Mar-13	226,067	1.87	13,595	218,081	1.67	11,734
Apr-13	193,313	1.85	11,522	216,766	1.72	11,983
May-13	176,590	1.67	9,497	191,974	1.87	11,514
Jun-13	173,739	2.07	11,548	211,105	1.94	13,170
Jul-13	174,551	2.22	12,453	207,033	1.84	12,228
Total	**8,127,232**	**2.28**	**595,727**	**8,358,576**	**2.17**	**583,334**

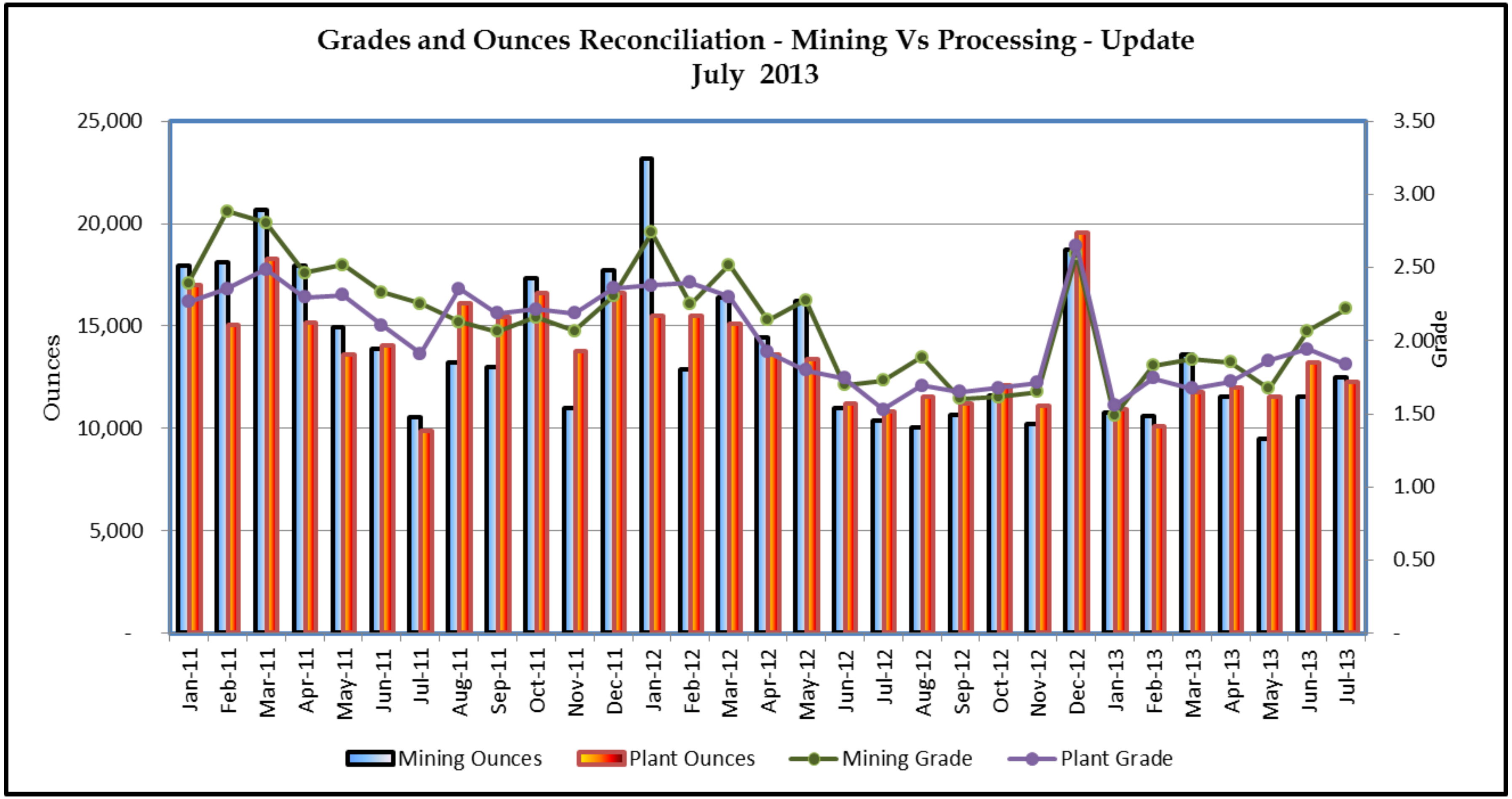


Figure 31: Grade and Ounces Reconciliation

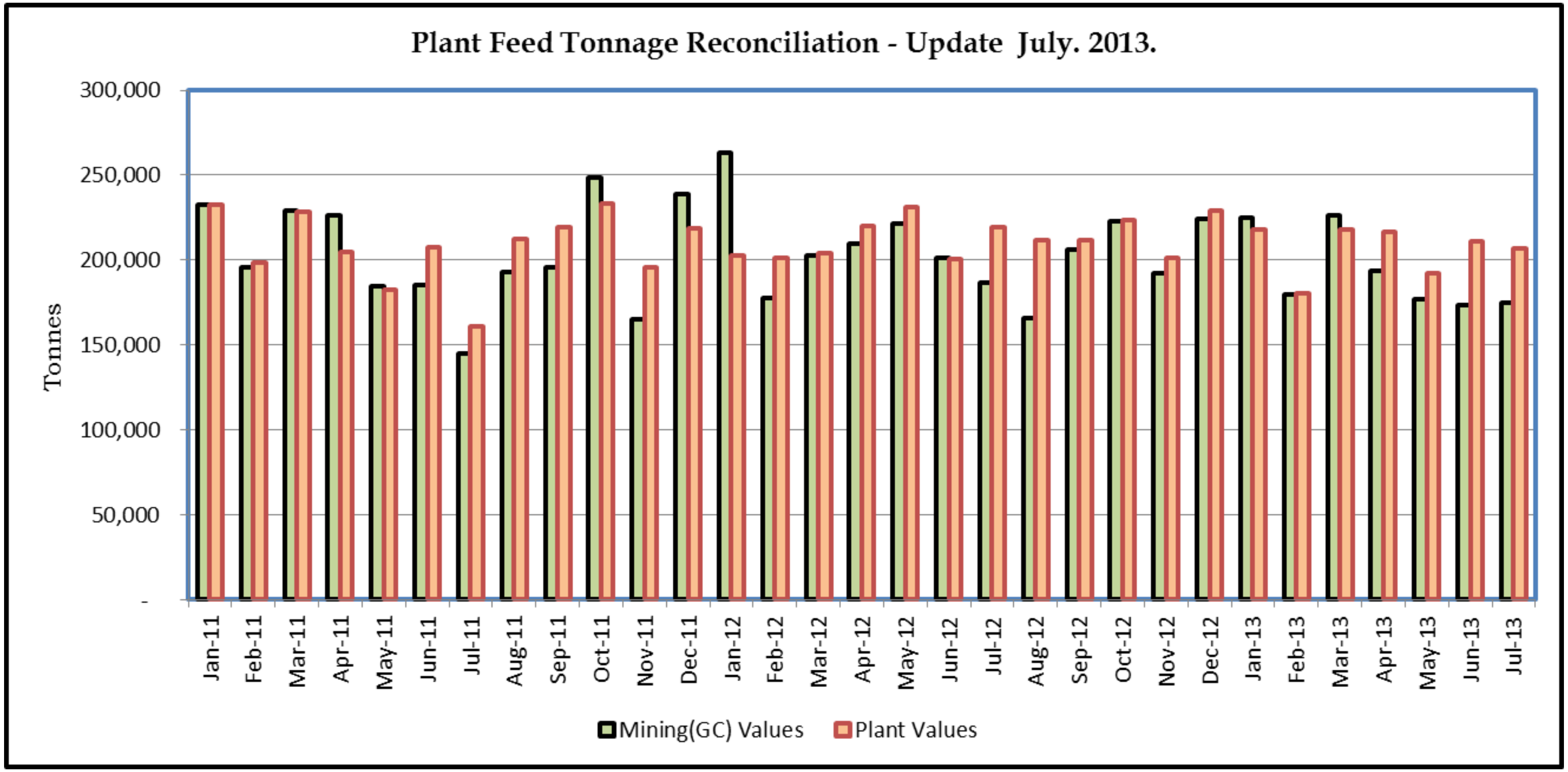


Figure 32: Plant Feed Tonnage Reconciliation

7.3 Reconciliation for Ore Mined 2013

In terms of year to date tonnages: declared ore mined (DOM) is 13% above grade control (GC) tonnage predicted. DOM tonnes have been lower than Ore Reserve (OR) tonnes bringing year to date variance to 9% lesser than predicted in OR. GC tonnes show 19% lesser tonnes than OR predicted. The starting of the Minfo pit in April 2013 where surface depositional material and laterites were encountered could account for the high variance for that particular month and the overall year to date value.

For year to date grade, DOM grade is 8% less than GC predicted. DOM grade versus OR grade show no difference. GC predicted grade is 8% higher than OR grade. Year to date ounces shows DOM is 4% higher than GC predicted ounces. DOM is 9% lesser than OR. GC ounces is 12% lesser than OR ounces (Table 25). The cumulative year to date comparison between models and production data is shown in Figure 33 to Figure 35.

In terms of ore, eight benches were mined in the North, Central (pushback south), and Minfo East pits. The figures show a better correlation in term of tonnes at the lower benches, inversely to the grade that show good correlations at the upper benches (Figure 36).

Table 25: Reconciliation for Ore Mined 2013

Overall Mine YTD2013												
	Reserve Model			Grade Control Model			Declared Ore Mined			Ore Loss/Dilution		
	Tonnes	Grade	Metal (oz)	Tonnes	Grade	metal (oz)	Tonnes	Grade	Metal (oz)	Tonnes (%)	Grade (%)	Metal (%)
January	309,462	1.39	13,799	239,764	1.63	12,571	258,269	1.56	12,960	8	(4)	3
February	336,121	1.62	17,509	255,383	1.71	14,079	276,544	1.65	14,648	8	(4)	4
March	329,861	1.51	15,997	247,162	1.74	13,827	282,370	1.57	14,216	14	(10)	3
April	347,957	1.71	19,093	320,012	1.77	18,256	396,210	1.51	19,260	24	(15)	6
May	352,053	1.76	19,933	295,532	1.78	16,893	319,470	1.73	17,799	8	(3)	5
Total	1,675,455	1.60	86,331	1,357,853	1.73	75,624	1,532,863	1.60	78,882	13	(8)	4

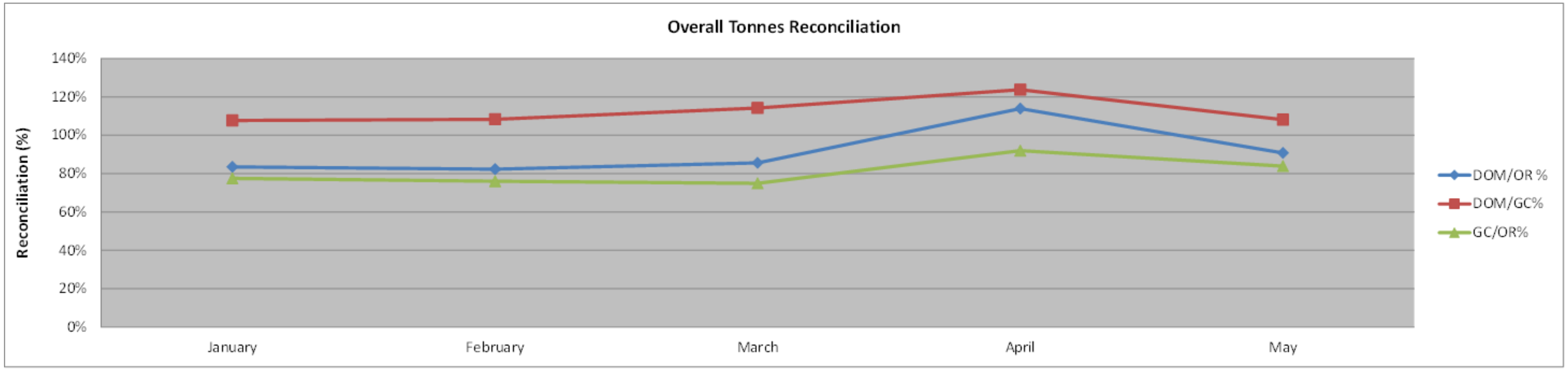


Figure 33: Cumulative Year to Date Comparison between Models and Production Data

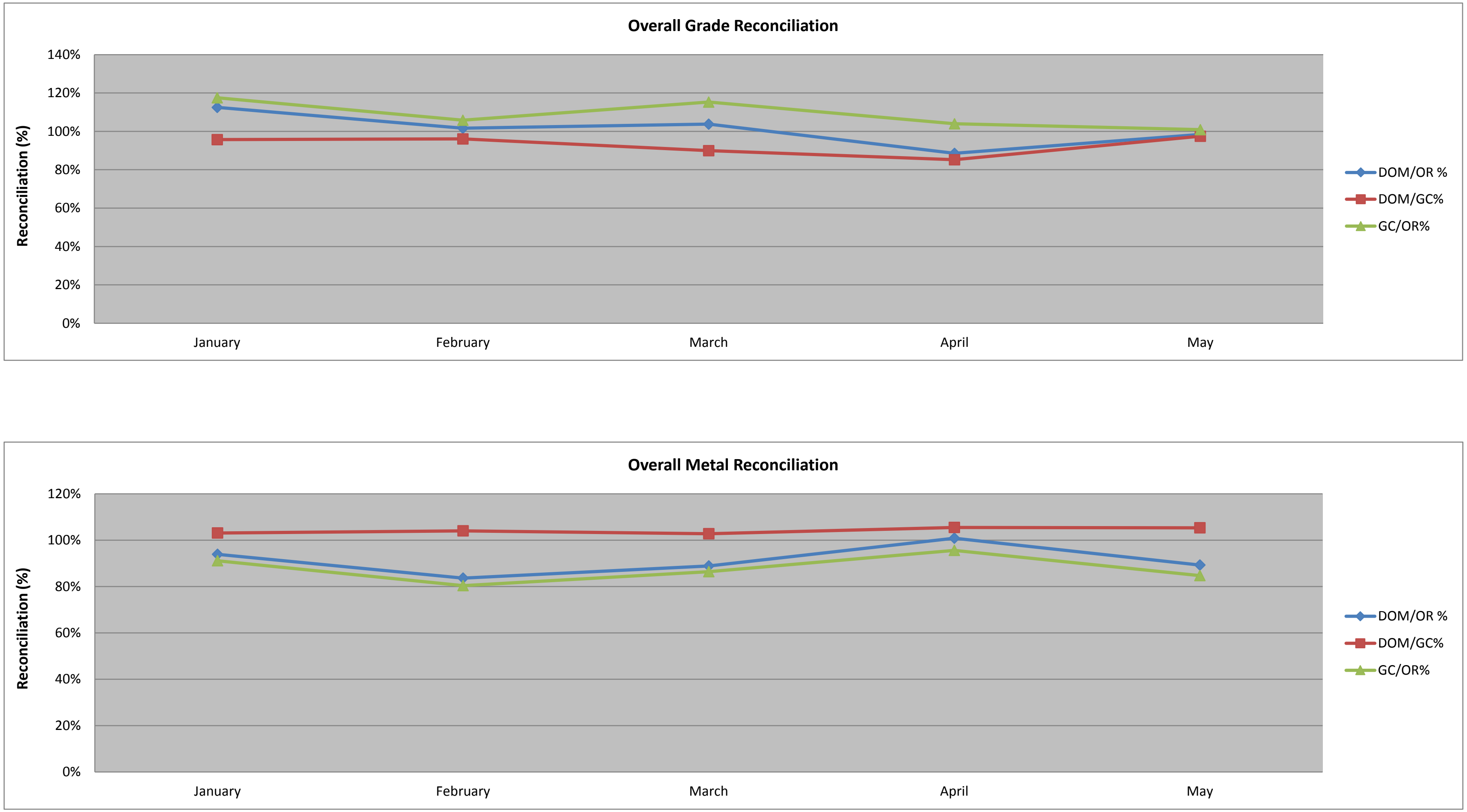


Figure 34: Overall Metal Reconciliations

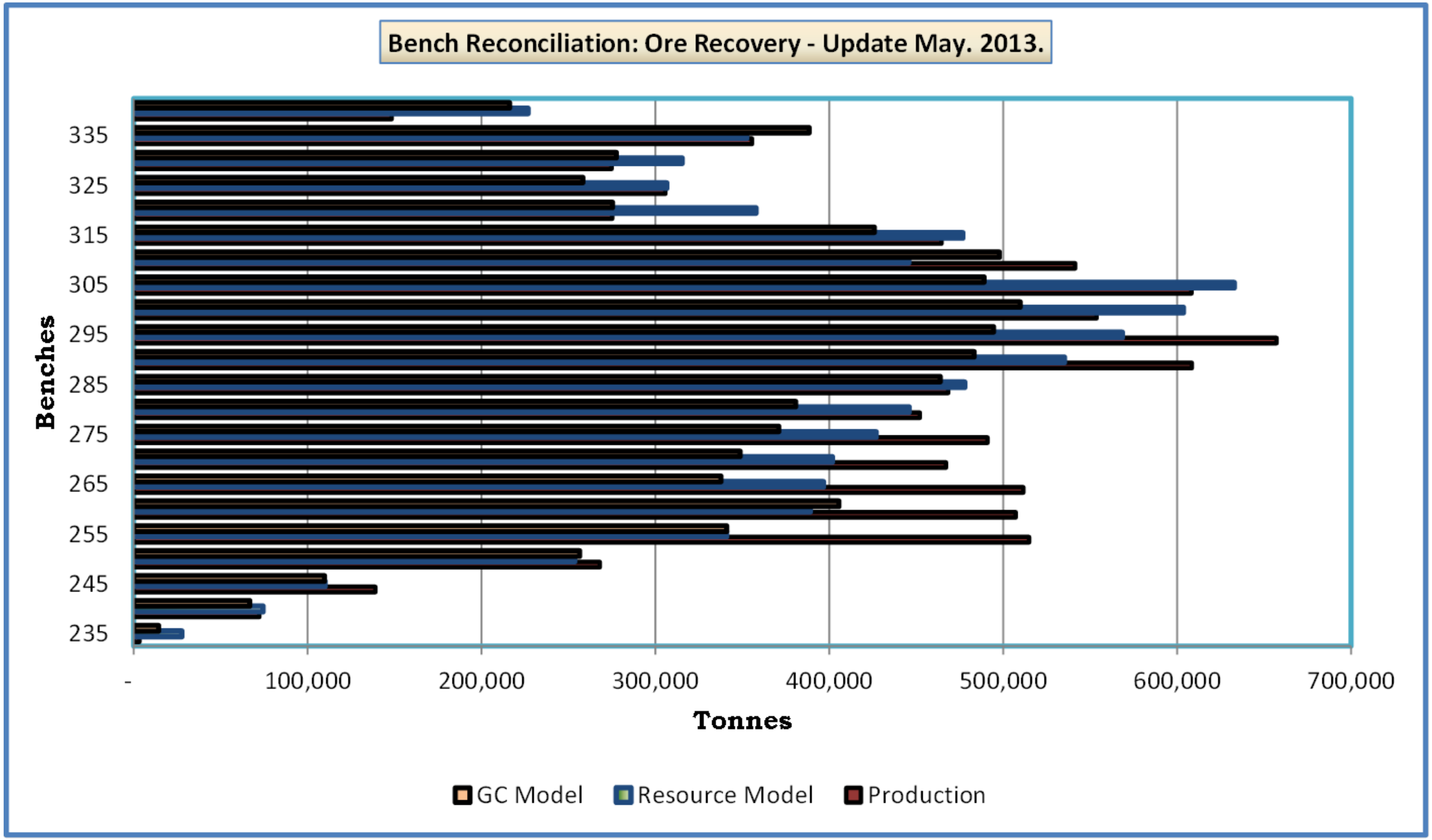


Figure 35: Tonnage Reconciliations by Bench

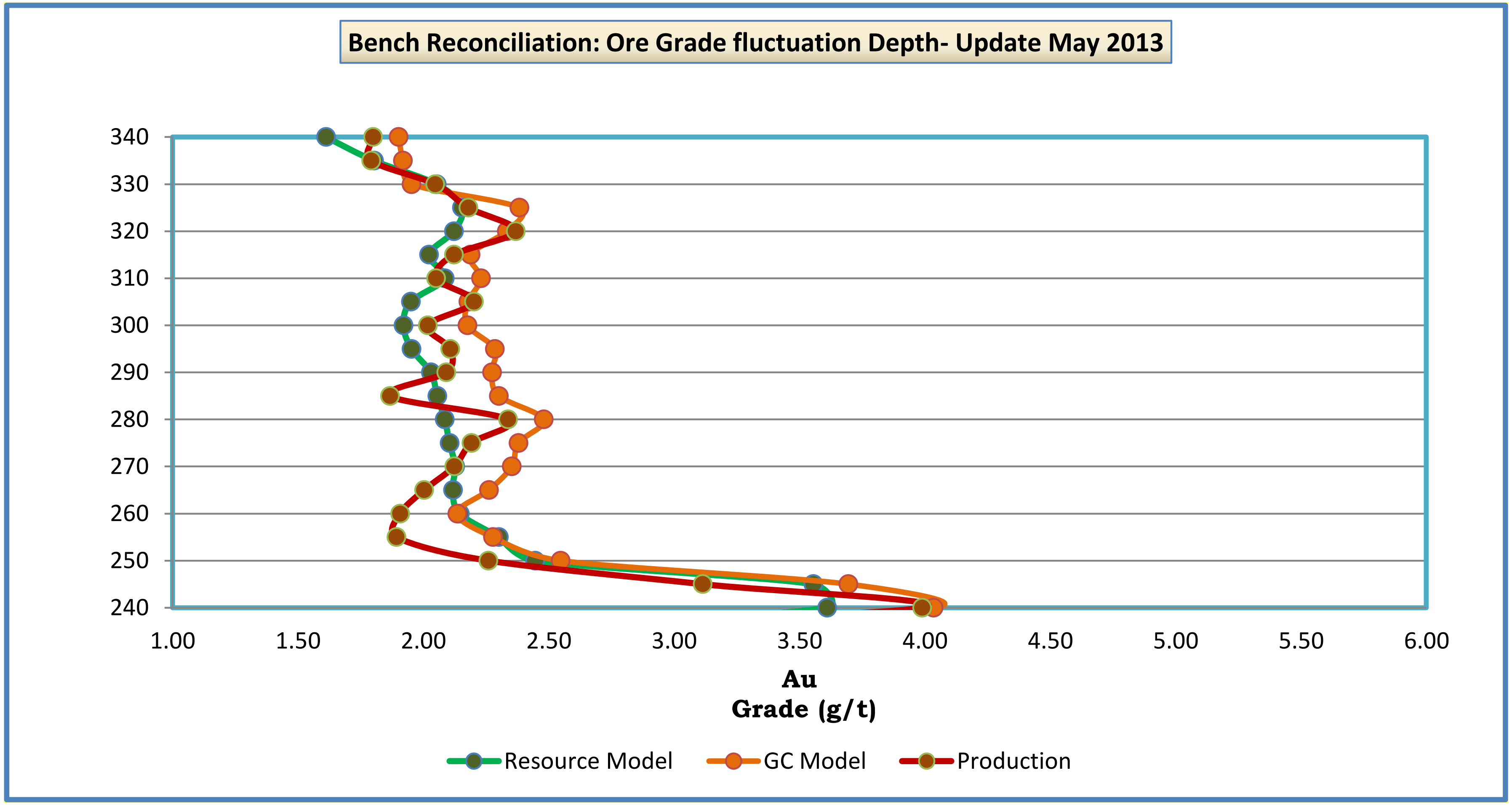


Figure 36: Grade Reconciliations by Bench

7.4 Ore Reconciliation - May 2013

The total monthly variance between mined production and resource model indicates 5% less tonnes and 4% lower grade than predicted. The variance for recovered ounces was 9% lower than predicted.

Reconciliation between Ore Reserve and GC models for all three pits in May 2013 indicated a variance of -12% in terms of tonnes, -2% in terms of grade and -13% in terms ounces. However, the grade control drill pattern is closely spaced compared to the resource drill pattern.

Grade control predicted tonnage compared to mined production tonnage for all pits shows 8% more tonnes produced than predicted. Extra low grade ore salvaged outside dig plans during mining could be a reason for such a difference (Table 26).

Central Pit production versus GC realised the best variance; 0%, -2%, and -2% respectively in terms of tonnes, grade and Ounces.

Minfo Pit production versus GC recorded 8%, -3%, and 5% in term of tonnes, grade and Ounces respectively.

Inata North recorded the worse variances for the month; 30%, -3% and 27% in term of tonnes, grade and ounces respectively (Table 26). Portions of the southern part of the pit were mined using resource model blocks due to the lack of GC data arising from pit constraints during sampling. This could be a contributing factor.

Table 26: Pit By Pit Reconciliation May 2013

Pit by Pit Reconciliation: May 2013										Difference, Percentages								
PIT AREA	**2011 Resource Model**			**Grade Control Model**			**Actual Mine Production**			**Diff. % Resource GC Model**			**Diff. % GC Model Production**			**Diff. % Resource Production**		
Cut-off Grade	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
NORTHPIT	85,362	1.53	4,185	66,691	1.63	3,495	86,984	1.59	4,437	(18,671)	0.11	(690)	20,293	(0.04)	942	1,622	0.06	252
										-22%	7%	-16%	30%	-3%	27%	2%	4%	6%
SAYOUBA PIT	-																	
CENTRAL PIT	111,092	1.76	6,268	125,704	1.83	7,396	125,365	1.79	7,217	14,612	0.08	1,128	(339)	(0.04)	(179)	14,273	0.04	949
										13%	4%	18%	0%	-2%	-2%	13%	2%	15%
SOUTHPIT	-																	
MINFO PIT	138,835	2.02	9,017	103,137	1.81	6,002	107,120	1.78	6,144	(35,698)	(0.21)	(3,015)	3,983	(0.03)	142	(31,715)	(0.24)	(2,872)
										-26%	-10%	33%	4%	-1%	2%	-23%	-12%	-32%

7.4.1 Reconciliation: ROM Feed Grade vs. Plant Head Grade May - 2013

The variance (expected grade versus actual) for the month of May 2013 was 12% (1.87g/t reported mill against 1.67g/t expected though mining). Current ore supply from the Minfo Pit is believed to be associated with relatively higher grade coarse gold which is not uniformly distributed within samples (nugget effect) and may account for the high positive variance. The year to date variance is -2%.

Grade Control Model Reconciliations and Plant Feed Tonnage Reconciliation History are displayed in Table 27 and Figure 37 and show good correlation for the year to date.

Table 27: May and YTD Grade Control Model Reconciliations

Kpi	May 2013			Year to Date		
	Mill activity	ROM Estimate	Variance	Mill Actual	ROM Estimate	Variance
Grade (g/t)	1.87	1.67	0.19	1.17	1.74	-0.03

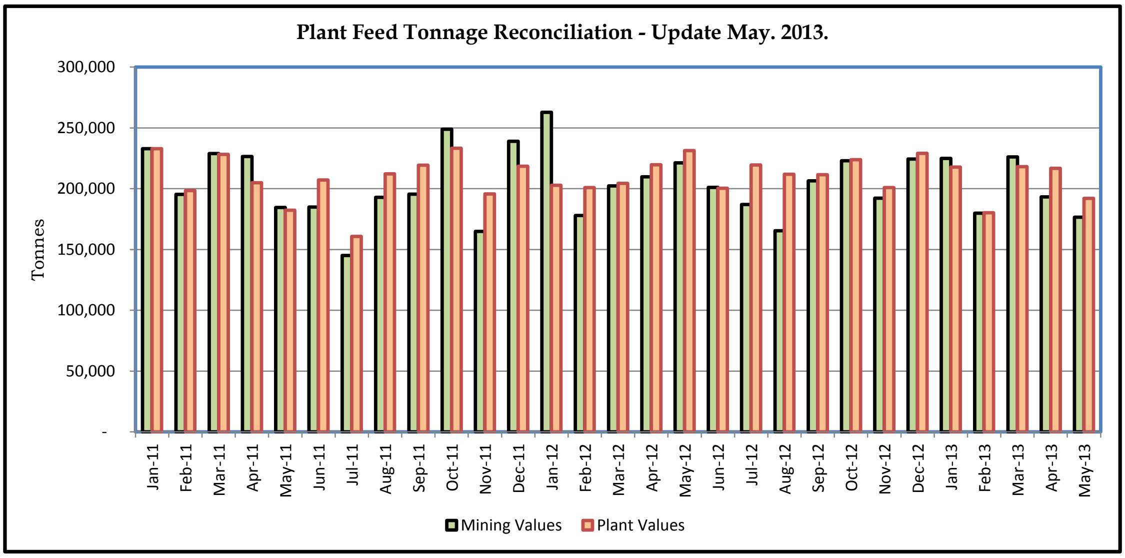


Figure 37: Plant Feed Tonnage Reconciliation History

CSA Comments:

Reconciliations support the long term historic mining loss and dilution estimates used as modifying factors for the Ore Reserve estimates.

8 Ore Reserves

The following reserves are estimated as of May 2013 (Table 28).

Table 28: Inata Ore Reserves as of 31st May 2013

Open Pits		Gross			Net Attributable			Operator
		Tonnes	Grade (Au g/t)	Contained Ounces	Tonnes	Grade (Au g/t)	Contained Ounces	
Inata	Proved	3,083,000	1.84	182,000	2,774,600	1.84	163,930	Avocet
	Probable	9,445,000	2.41	731,000	8,500,460	2.41	657,550	Avocet
ROM Stockpiles								Avocet
Proved		883,000	0.98	27,700	794,800	0.98	24,940	Avocet
Probable		219,000	1.49	10,500	196,800	1.49	9,420	Avocet
TOTAL		13,630,000	2.17	950,900	12,266,690	2.17	855,850	Avocet

Notes: The information in this statement that relates to Ore Reserves, estimated in conformance with the JORC Code (2004 Edition), is based on information compiled by Kent Bannister, of CSA Global Pty Ltd. Kent Bannister takes overall responsibility for the Report as Competent Person. He is a Fellow of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the JORC Code (2004 Edition). The Competent Person, Mr Kent Bannister, has reviewed this Ore Reserve Statement and given his permission for the publication of this information in the form and context within which it appears. Estimates are rounded to nearest significant figure.

- Rounding Errors may occur
- The Inata Gold Mine is 90% owned by Avocet and 10% owned by the Government of Burkina Faso
- Gold Price US$1200/oz
- Mining Recovery 97.5%
- Mining Dilution 5.0%
- Metallurgical Recovery used for optimisations are based on test work for carbonaceous and refractory ore content.
- Measured Resources for Transition and Fresh Ore are not converted to Proved Reserves due to metallurgical recovery uncertainty

- Carbonaceous Ore on ROM stockpiles has not been converted to Proved Reserves due to metallurgical recovery uncertainty
- Responsibilities for the various areas involved in deriving the above Ore Reserve were as follow:
    - Mining assumptions and cost estimates developed by Clayton Reeves of SMB with SMB personnel.
    - Metallurgical, economic, marketing, legal, environmental, social and governmental factors provided by SMB personnel.
    - Geotechnical factors provided by SRK Consulting.
    - Whittle optimisations were run by Mr Clayton Reeves, SMB.

8.1 Optimisations Inputs 2012

The life of mine plan (LOMP) 2012 was derived from optimisations, with the inputs as below.

The following work was undertaken based on the 2012 Ore Reserve estimate:

- Mineral resource estimation (CSA Global);
- Metallurgical test work (Lycopodium);
- Comminution test work (Lycopodium);
- Financial and physical inputs for pit optimisation (in house);
- Pit optimisations (in house);
- Pit designs based on the selected pit shells (Riaan Herman Consulting);
- Reporting of inventories within engineered pit designs (Riaan Herman Consulting)
- Mining and processing schedules (Riaan Herman Consulting)
- Mining equipment and labour requirements (in house);
- Process plant (in house); and
- Financial modelling (in house).

8.2 Optimisation Inputs 2013

The 2013 optimisations have been undertaken based on new inputs particularly geotechnical slope recommendations and metallurgical recoveries.

The following Table 29 shows the slope angles used for the 2013 optimisation compared to the recommendations from geotechnical consultants.

Table 29: Geotechnical Slope Angle for Optimisations

North Pit							
Slope	George Orr	SRK 2011		2013	SRK 2013		
	Oxide	Oxide	Fresh	Optimisation	Weathered	Transition	Fresh
Nth	37	34.5	45	43	-	-	-
East	37	34.5	45	32	34.8	34.8	47.6
South & West	37	34.5	45	34	34.8	41.5	52.5
Central							
Slope	George Orr	SRK 2011		2013	SRK 2013		
	Oxide	Oxide	Fresh	Optimisation	Weathered	Transition	Fresh
Nth	37	34.5	45	44	-	-	-
East	37	34.5	45	42	34.8	34.8	47.6
South & West	37	34.5	45	36	39.8	49.2	52.5
South							
Slope	George Orr	SRK 2011		2013	SRK 2013		
	Oxide	Oxide	Fresh	Optimisation	Weathered	Transition	Fresh
Nth	37	34.5	45	39	-	-	-
East	37	34.5	45	39	-	-	-
South & West	37	34.5	45	39	-	-	-
Far South							
Slope	George Orr	SRK 2011		2013	SRK 2013		
	Oxide	Oxide	Fresh	Optimisation	Weathered	Transition	Fresh
Nth	37	34.5	45	36	-	-	-
East	37	34.5	45	36	-	-	-
South & West	37	34.5	45	36	-	-	-
Sayouba							
Slope	George Orr	SRK 2011		2013	SRK 2013		
	Oxide	Oxide	Fresh	Optimisation	Weathered	Transition	Fresh
Nth	37	34.5	45	36	-	-	-
East	37	34.5	45	36	34.8	34.8	47.6
South & West	37	34.5	45	36	39.8	49.2	52.5

CSA Comments:

CSA consider the optimisations have generally complied with geotechnical recommendations.

8.2.1 Mining Costs

The mining costs for ore and waste vary for the different pits at Inata. The costs for mining have been directly calculated in the engineering block model and used in the optimisation. The following Table 30 (Inata Mining Costs) displays the mining costs for each pit:

Table 30: Optimisation Mining Costs

Inata Optimisation			NORTH FINAL	CENTRAL FINAL	SAYOUBA	SOUTH PIT	FAR SOUTH L	FAR SOUTH S	FAR SOUTH AVE
Waste	Oxide	US$/t mined	1.63	1.47	1.35	1.45	1.35	1.31	1.33
	Trans	US$/t mined	1.63	1.47	1.35	1.45	1.35	1.31	1.33
	Fresh	US$/t mined	1.63	1.47	1.35	1.45	1.35	1.31	1.33
Ore	Oxide	US$/t mined	1.81	1.65	1.53	1.63	1.53	1.53	1.53
	Trans	US$/t mined	1.79	1.63	1.51	1.61	1.51	1.51	1.51
	Fresh	US$/t mined	1.78	1.62	1.50	1.60	1.50	1.50	1.50

8.2.2 Processing Recoveries

The calculations used in the optimisations (Inata, Minfo & Filio) use either Option 1 (Eq. 1) or Option 2 (Eq. 2). Option 1 utilises an efficiency factor of 0.52 with option 2 utilising an efficiency factor of 0.54. The process recovery equations, expressed as a function of tailing grade, can be seen below:

- $(0.072 \times \sqrt{(\text{Head Grade})}) + (0.09 \times \%\text{Sulphide}) + (0.005203 \times \sqrt{(\text{ppm As})}) + [(1 - e\hat{}(-\text{PRI})) \times (\text{Head Grade} - ([\![\text{HG}]\!]\hat{}' + \text{S} + \text{As})) \times (1 - (1 + e\hat{}(-0.331 \times \text{PRI})) \times 0.52)]$

- $(0.072 \times \sqrt{(\text{Head Grade})}) + (0.09 \times \%\text{Sulphide}) + (0.005203 \times \sqrt{(\text{ppm As})}) + [(1 - e\hat{}(-\text{PRI})) \times (\text{Head Grade} - ([\![\text{HG}]\!]\hat{}' + \text{S} + \text{As})) \times (1 - (1 + e\hat{}(-0.331 \times \text{PRI})) \times 0.54)]$

The process recovery in Table 31 below shows the equation used in the respective optimisations.

Table 31: Optimisation Process Options

Inata, Minfo & Filio Optimisations		Only Measured and Indicated Material						Measured and Indicated Material including Inferred Material at South and Central Zones					
Scenario Runs:		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Optimisation Input	**Option**												
Process Recovery Option	1 or 2	1	1	2	1	1	1	1	1	2	1	1	1

8.2.3 Processing Costs

The following process costs in Table 32 were used:

Table 32: Processing Optimisation Processing Costs

Processing Costs:		
Oxide	**US$/t Ore**	23.50
Transitional	**US$/t Ore**	31.97
Fresh	**US$/t Ore**	38.13

8.3 Inata Pit Optimisations

The optimisations for Inata were conducted using Whittle 4x. The resource model imported into Whittle was 'import_9.mod'. The following scenarios have been optimised.

- Scenario 1: Measured & Indicated Material, using a Gold Price of US$1,100 and incorporating Option 1 for process recovery.
- Scenario 2: Measured & Indicated Material, using a Gold Price of US$1,200 and incorporating Option 1 for process recovery.
- Scenario 3: Measured & Indicated Material, using a Gold Price of US$1,200 and incorporating Option 2 for process recovery.
- Scenario 4: Measured & Indicated Material, using a Gold Price of US$1,250 and incorporating Option 1 for process recovery.
- Scenario 5: Measured & Indicated Material, using a Gold Price of US$1,300 and incorporating Option 1 for process recovery.
- Scenario 6: Measured & Indicated Material, using a Gold Price of US$1,400 and incorporating Option 1 for process recovery.
- Scenario 7: Measured, Indicated & Inferred Material, using a Gold Price of US$1,100 and incorporating Option 1 for process recovery.
- Scenario 8: Measured, Indicated & Inferred Material, using a Gold Price of US$1,200 and incorporating Option 1 for process recovery.
- Scenario 9: Measured, Indicated & Inferred Material, using a Gold Price of US$1,200 and incorporating Option 2 for process recovery.
- Scenario 10: Measured, Indicated & Inferred Material, using a Gold Price of US$1,250 and incorporating Option 1 for process recovery.
- Scenario 11: Measured, Indicated & Inferred Material, using a Gold Price of US$1,300 and incorporating Option 1 for process recovery.
- Scenario 12: Measured, Indicated & Inferred Material, using a Gold Price of US$1,400 and incorporating Option 1 for process recovery.

8.4 Selected Optimisation

Inata - Scenario 8: Measured, Indicated & Inferred Material, using a Gold Price of US$1,200 and incorporating Option 1 (RM1) for process recovery was selected for the Reserve Estimate (Table 33).

Table 33: Whittle Inputs for Inata North Pit

INATA WHITTLE INPUTS		Only Measured and Indicated Material						Measured and Indicated Material including Inferred Material					
	Scenario Runs:	1	2	3	4	5	6	7	8	9	10	11	12
Optimisation Input	**Units**												
Market Gold Price	**US$/oz.**	1100	1200	1200	1250	1300	1400	1100	1200	1200	1250	1300	1400
Process Recovery	**%**	See Process Recovery Table (Same for Inata, Minfo & Filio)											
Discount Rate	**%**	10	10	10	10	10	10	10	10	10	10	10	10
Government Royalty	**%**	6.5	6.5	6.5	6.5	6.5	7.5	6.5	6.5	6.5	6.5	6.5	7.5
Net Optimisation Price	**US$/g Metal**	33.07	36.07	36.07	37.58	39.08	41.64	33.07	36.07	36.07	37.58	39.08	41.64
North Pit Slope Angles:													
North	**deg.**	43	43	43	43	43	43	43	43	43	43	43	43
East	**deg.**	42	42	42	42	42	42	42	42	42	42	42	42
South & West	**deg.**	34	34	34	34	34	34	34	34	34	34	34	34
Central Pit Slope Angles:													
North & South	**deg.**	44	44	44	44	44	44	44	44	44	44	44	44
East	**deg.**	42	42	42	42	42	42	42	42	42	42	42	42
West	**deg.**	36	36	36	36	36	36	36	36	36	36	36	36
South Pit Slope Angles:													
North, East, South & West	**deg.**	39	39	39	39	39	39	39	39	39	39	39	39
Far South Pits Slope Angles:													
North, East, South & West	**deg.**	36	36	36	36	36	36	36	36	36	36	36	36
Sayouba Slope Angles:													
North, East, South & West	**deg.**	36	36	36	36	36	36	36	36	36	36	36	36
Ore Loss	**%**	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dilution	**%**	5	5	5	5	5	5	5	5	5	5	5	5
Processing Costs:													
Oxide	**US$/t Ore**	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
Transitional	**US$/t Ore**	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97
Fresh	**US$/t Ore**	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13
Reference Mining Cost	**US$/t Mined**	See Inata Mining Costs Table											
MCAF	**US$/t per 10m Depth**	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Process Capacity	**Mtpa**	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Mining Capacity	**Mtpa**	40	40	40	40	40	40	40	40	40	40	40	40

8.5 Minfo & Filio Optimisations

The optimisations for Minfo and Filio were conducted using Whittle 4x. The resource model imported into Whittle was 'import_10.mod'. The following scenarios have been optimised for Minfo and Filio.

- Scenario 1: Measured & Indicated Material, using a Gold Price of US$1,100 and incorporating Option 1 for process recovery.
- Scenario 2: Measured & Indicated Material, using a Gold Price of US$1,200 and incorporating Option 1 for process recovery.
- Scenario 3: Measured & Indicated Material, using a Gold Price of US$1,200 and incorporating Option 2 for process recovery.
- Scenario 4: Measured & Indicated Material, using a Gold Price of US$1,250 and incorporating Option 1 for process recovery.
- Scenario 5: Measured & Indicated Material, using a Gold Price of US$1,300 and incorporating Option 1 for process recovery.
- Scenario 6: Measured & Indicated Material, using a Gold Price of US$1,400 and incorporating Option 1 for process recovery.
- Scenario 7: Measured, Indicated & Inferred Material, using a Gold Price of US$1,100 and incorporating Option 1 for process recovery.
- Scenario 8: Measured, Indicated & Inferred Material, using a Gold Price of US$1,200 and incorporating Option 1 for process recovery.
- Scenario 9: Measured, Indicated & Inferred Material, using a Gold Price of US$1,200 and incorporating Option 2 for process recovery.
- Scenario 10: Measured, Indicated & Inferred Material, using a Gold Price of US$1,250 and incorporating Option 1 for process recovery.
- Scenario 11: Measured, Indicated & Inferred Material, using a Gold Price of US$1,300 and incorporating Option 1 for process recovery.
- Scenario 12: Measured, Indicated & Inferred Material, using a Gold Price of US$1,400 and incorporating Option 1 for process recovery.

The Minfo and Filio Optimisation table below illustrates all the inputs used for the Whittle 4x optimisation at Minfo and Filio.

8.6 Selected Optimisation

Minfo & Filio - Scenario 8: Measured, Indicated & Inferred Material, using a Gold Price of US$1,200 and incorporating Option 1 (RM1) for process recovery was selected for the Reserve Estimate (Table 34)

Table 34: Whittle Inputs for Minfo and Filio Pits

MINFO & FILIO WHITTLE INPUTS		Only Measured and Indicated Material						Measured and Indicated Material including Inferred Material					
	Scenario Runs:	1	2	3	4	5	6	7	8	9	10	11	12
Optimisation Input	Units												
Market Gold Price	US$/oz.	1100	1200	1200	1250	1300	1400	1100	1200	1200	1250	1300	1400
Process Recovery	%	See Process Recovery Table (Same for Inata, Minfo & Filio)											
Discount Rate	%	10	10	10	10	10	10	10	10	10	10	10	10
Government Royalty	%	6.5	6.5	6.5	6.5	6.5	7.5	6.5	6.5	6.5	6.5	6.5	7.5
Net Optimisation Price	US$/g Metal	33.07	36.07	36.07	37.58	39.08	41.64	33.07	36.07	36.07	37.58	39.08	41.64
Minfo Slope Angles:													
North, East, South & West	deg.	37	37	37	37	37	37	37	37	37	37	37	37
Ore Loss	%	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dilution	%	5	5	5	5	5	5	5	5	5	5	5	5
Processing Costs:													
Oxide	US$/t Ore	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
Transitional	US$/t Ore	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97	31.97
Fresh	US$/t Ore	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13	38.13
Mining Cost													
Waste	US$/t Mined	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Ore (Oxide)	US$/t Mined	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
Ore (Transitional)	US$/t Mined	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
Ore (Fresh)	US$/t Mined	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
MCAF	US$/t per 10m Depth	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Process Capacity	Mtpa	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Mining Capacity	Mtpa	40	40	40	40	40	40	40	40	40	40	40	40

9 Life of Mine Plan

The most recent Life of Mine schedule (LOM) for the operation is INA_RES_1200_1305_v) 7a_ finetune.xls which was completed in July 2013.

The schedule consists of a monthly breakdown by pit of ore and waste mining activities for the life of the project. It includes estimates of Oxide, Transition and Fresh ore, each classified by PRI value. The predicted treatment plant metallurgical recoveries and gold production are also scheduled monthly. ROM stockpile additions and depletions and balance are also included.

9.1 LOM Mining Schedules

The life of Mine mining schedule is the plan for mining the deposits through to 2020 when mining is completed and the treatment plant feed is from stockpiled materials (Table 35).

Table 35: LOM Mining Schedule

LOM Schedule Year	Unit	2013	2014	2015	2016	2017	2018	2019	2020
Total Material	Mt	18.19	31.02	28.27	27.37	30.12	31.02	23.74	0.00
PRI Less than 1	Mt	1.98	1.80	1.56	1.47	1.51	1.32	0.85	0.00
Grade	g/t	1.81	2.03	2.03	1.82	1.70	1.81	1.69	0.00
PRI Greater than 1	Mt	0.06	0.51	1.28	0.05	0.06	0.72	2.15	0.00
Grade	g/t	2.26	2.85	2.92	2.21	2.19	2.67	3.14	0.00
Total Ore	Mt	2.04	2.31	2.84	1.52	1.57	2.04	3.00	0.00
Grade	g/t	1.82	2.21	2.43	1.83	1.72	2.11	2.73	0.00
Waste	Mt	16.15	28.71	25.43	25.84	28.55	28.98	20.75	0.00
SR	t/t	7.93	12.43	8.96	16.96	18.14	14.20	6.92	0.00

Note: Schedule contains both Proved and Probable Reserves and Inferred Mineralisation

Total material movement is maintained below 40mtpa and in line with the current mining fleet capacity. The 2012 annual mining rate of 33mtpa is not exceeded. Longer hauls for deeper pits may require additional haulage capacity later in the project life.

High waste to ore ratios in years 2016 and 2017 are buffered by the stockpiling of ore in 2015.

9.2 The LOM Processing Schedule

The life of mine processing schedule has slightly more ounces produced than that estimated in the Mining Reserve due to the inclusion of Inferred Mineralisation in the schedule. Avocet plan to up-grade the Inferred material to the Indicated Resource Category through further infill drilling programs (Table 36).

Table 36: LOM Processing Schedule

LOM Schedule Year	Unit	2013 (Jun - Dec)	2014	2015	2016	2017	2018	2019	2020
Plant Feed	Mt	1.47	2.04	1.93	2.06	2.29	2.19	1.69	1.51
Grade	g/t	2.04	2.19	2.22	2.17	1.86	2.10	2.11	2.72
Ounces	Oz	96,140	143,359	138,187	143,822	136,872	147,786	114,302	132,548
Recovered Ounces	Oz	85,425	123,496	114,331	120,944	117,423	124,301	93,046	102,458
Recovery	%	88.9%	86.1%	82.7%	84.1%	85.8%	84.1%	81.4%	77.3%

Note: Schedule contains both Proved and Probable Reserves and Inferred Mineralisation

Plant capacity ranges between 2.29mtpa to 1.69mtpa.

Processing metallurgical recoveries have been estimated based on ore classified by the PR Index. Recoveries reduce from a predicted 88.9% in 2013 to 77.3% in 2020. Gold production is maintained through higher feed grades.

To ensure appropriate allowances for preg-robbing carbonaceous and refractory mineralisation the LOM schedule has assigned the following ore classifications (Table 37).

The recently developed preg-robbing index (PRI) values for each ore type have been incorporated into the LOM scheduling to better predict metallurgical recoveries and gold production. The ore classification for PRI values includes the main ore types of Oxide, Transition and Fresh, high and low grade ore as well as PRI greater or less than 1.

The following table (Table 37) summarises the annual production forecasts.

Table 37: Treatment Plant Feed by Ore Type and Grade Classification

LOM Schedule Year	Unit	2013	2014	2015	2016	2017	2018	2019	2020
Oxide pri<=1 LG	Kt	770.48	738.65	453.43	453.68	520.94	253.57	145.56	0.00
Oxide pri<=1 HG	Kt	425.51	403.66	389.75	626.99	1069.62	304.79	400.46	450.85
Transition pri<=1 LG	Kt	136.70	178.48	170.64	354.18	411.52	593.45	203.68	42.36
Transition pri<=1 HG	Kt	36.18	135.36	89.42	123.37	68.86	309.17	108.56	1.61
Fresh pri<=1 LG	Kt	0.00	3.75	8.42	27.56	11.01	7.59	46.96	20.10
Fresh pri<=1 HG	Kt	0.00	2.66	0.39	3.05	0.26	1.31	19.46	1.11
Transition pri>1 LG	Kt	97.70	440.65	532.90	428.78	178.88	598.28	483.43	499.54
Transition pri>1 HG	Kt	1.61	77.68	196.38	12.08	20.37	110.28	104.47	40.78

LOM Schedule Year	Unit	2013	2014	2015	2016	2017	2018	2019	2020
Fresh pri>1 LG	Kt	0.32	59.29	90.77	32.16	11.08	9.19	167.03	449.68
Fresh pri>1 HG	Kt	0.00	0.19	1.27	0.00	0.00	0.00	6.58	7.42

Note Schedule contains both Proved and Probable Reserves and Inferred Mineralisation

CSA Comments:

Establish groundwater level monitoring bores behind deeper pit east and west walls.

Adopt all geotechnical recommendations in 2013 SRK report.

Continue to negotiation with parts suppliers to provide a more reliable parts supply, thus improving equipment availability and reduce operating costs.

10 Metallurgy

The Inata Gold Project Processing Plant (Figure 38) is a conventional and well-proven carbon-in-leach (CIL) design combined with a gravity recovery circuit (Figure 38). It was initially designed to process 2.25Mtpa of ore and produce gold doré. The plant was purchased second hand from Australia to fast-track development. Major components of this plant, such as the jaw crusher, SAG mill, one Ball Mill, the cyanide mixing and elution system were refurbished and utilised in the new plant. A second refurbished Ball Mill was purchased from South Africa.

Where required, new equipment was selected on the basis of the mass balance and in conjunction with equipment vendors and service providers. The CIL area was all new construction with new tanks, agitators, inter-stage screens, carbon transfer pumps, classifying, and dewatering screens. The control system is robust with minimal automation, and the plant has typical industry-standard instrumentation.

The ROM bin is fed via Front End Loader, where ore passes through an 800mm parallel bar grizzly before entering the primary crushing circuit, where it is crushed via a Jaw crusher to minus 150mm. The crushed ore is fed via conveyor to a covered Crushed Ore Stockpile.

Crushed ore is reclaimed from the Crushed Ore stockpile by two belt feeders, and fed to the grinding circuit. Ore is fed initially to the primary SAG mill. The SAG mill discharges into a sump from where it is pumped to another sump which also accepts the discharges from the two parallel secondary ball mills. The slurry is then pumped to a cyclone cluster for classification.

The cyclone underflow will nominally comprise of particles larger than 75µm, and is returned to the ball mills for further grinding. Approximately 30% of cyclone underflow is diverted to the Falcon centrifugal concentrator for gravity concentration. The gravity concentrate is processed via a Gekko In-line Leach Reactor (ILR), whilst the gravity tailing gravitates to the ball mills. The ILR tailings report to the milling circuit, whilst the pregnant solution is electrowon through dedicated electrowinning cells in the gold room. The cyclone overflow will nominally comprise of slurry particles less than 75µm, and reports to the CIL circuit for cyanidation. The gravity circuit was not initially installed at plant start-up and was commissioned in April 2012.

The cyclone overflow is first screened to remove foreign matter (trash), which might otherwise blind the inter-stage screens. The trash screen undersize is sent to the first of the CIL tanks. Control of pH is achieved via addition of powdered lime to the SAG mill feed, thus providing alkaline slurry required for leaching with cyanide. Liquid cyanide solution is added to the head of the CIL train to initiate dissolution of gold. Dissolved oxygen, also essential for dissolution of gold, is controlled via either air sparging of the CIL tanks, or addition of hydrogen peroxide where required.

The slurry flows down the tank train through the inter-stage screens, which are sized to prevent carbon exiting the tank. As the gold is dissolved as the slurry flows down the circuit, it is adsorbed onto carbon. Counter current to the slurry flow, the loaded carbon is pumped up the train from back to front. This process results in the carbon in the first CIL tank having the highest gold loading and the carbon in the final tank having the lowest gold loading.

A batch of loaded carbon is removed daily from the first CIL tank by pumping the appropriate volume of carbon bearing slurry from the first CIL tank to the loaded carbon screen. The screen undersize slurry gravitates back to the first CIL tank, whilst the screen oversize (loaded carbon) reports to the elution section.

The loaded carbon is initially acid-washed in dilute hydrochloric acid to remove carbonate coatings. Gold is then recovered from the loaded carbon by a Pressure Zadra elution system, using a dilute caustic soda and cyanide solution as the eluate. The pregnant eluate is recycled through electrowinning cells within the gold room until the grade of the solution discharged from the cell is nominally less than 10 ppm.

The gold-loaded cathodes within the electrowinning cells are calcined to oxidize iron content. The resulting calcine is mixed with fluxes and smelted in a barring furnace to form doré gold bars.

At the completion of the elution cycle, the barren carbon is treated in a regeneration kiln to thermally restore its activity in terms of its capability to adsorb gold. The regenerated carbon is screened to remove fines, and then returned to the final CIL tank.

It is important to note that in April, 2011, both the elution and regeneration capacity were doubled from a 4 tonne batch system to an 8 tonne system, via installation of an equivalent parallel circuit.

The plant is designed to be largely self-sufficient and accommodate the particular operating conditions within the country of Burkina Faso and to operate nominally at 90% availability for 24 hours per day, 7 days per week.

A conventional tailing storage facility (TSF) is utilised, and will be at full capacity in late 2013. A second TSF has been constructed with a design capacity of 10 years at current production rates, with changeover occurring once the existing facility has been fully utilised.

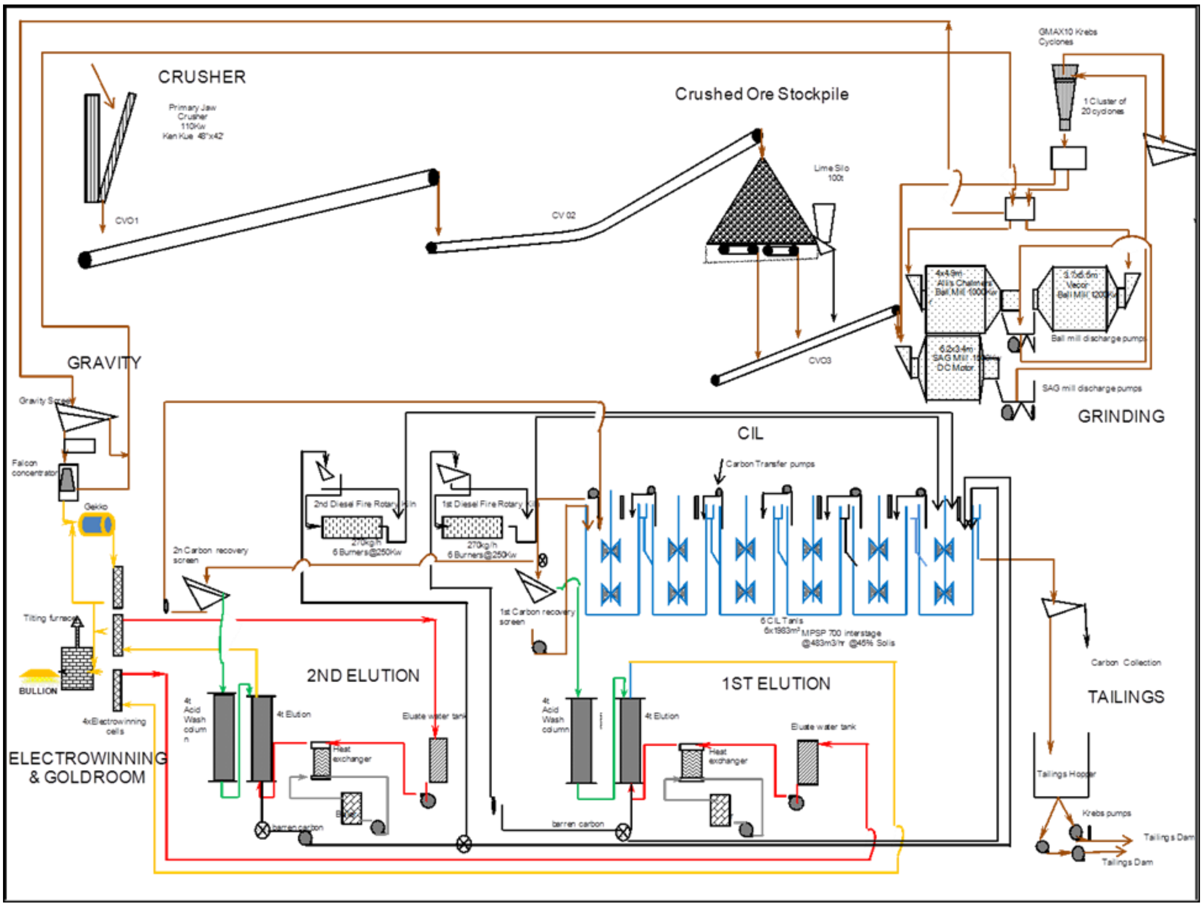


Figure 38: Processing Plant Flow Sheet

10.1 Processing Plant Performance

The Inata Processing Plant commenced milling operations in late November 2009. The annual operating data is shown in Table 38.

Table 38: Inata Annual Processing Plant Performance Project-To-Date

Processing Plant Key Performance Indicators					
	2009	2010	2011	2012	May 2013 YTD
Mill Throughput (t)	51,778	1,759,123	2,469,764	2,556,401	1,024,709
Head Grade (g/t)	2.50	2.66	2.26	1.95	1.71
Tailing Grade (g/t)	0.105	0.161	0.194	0.261	0.295
Gold Recovery (%)	95.8	94.0	91.4	86.7	82.7
Operating Time (%)	47.7	80.0	88.3	91.9	91.9
Throughput (dtpoh)	145	251	319	317	308
Operating cost (US$/t)	Not avail.	$16.74	$16.75	$16.39	$17.52
Gold Recovered (oz)	3,982	141,603	164,094	139,060	46,503

CSA Comments:

The key Processing challenges for Avocet are reduced recovery, reduced throughput, and increased unit processing costs as the operation moves from oxide to transitional and fresh ore. Key to the metallurgical recovery is the clearly identified organic carbon content in the deposit, which has adversely impacted recovery as identified in the above table.

Avocet is aware and has strategies in place in order to address the above issues.

If the 2013 throughput is annualised, projected upon YTD performance, the outcome approximates to a 2.48Mtpa processing rate, which is consistent with an ongoing small proportion of transitional ore treatment.

10.2 Process Description

10.2.1 Crushing & Conveying

ROM (run-of-mine) ore is recovered from the ROM pad and loaded into the 200 tonne capacity ROM bin which is fitted with an 800mm fixed grizzly. Oversize ore is periodically removed from the grizzly and stored on a separate stockpile for breaking by mobile breaker. Ore is directed to the Kue Ken 48" x 42" jaw crusher, where it is crushed to -150 mm. Crushed ore is stored in a covered 20,000 tonne capacity stockpile.

Ore is conveyed from crushed ore pile to the SAG mill. The SAG mill feed belt has a belt scale which is used to monitor feed to the SAG mill. Lime is added to the ore on this conveyor from a 75 tonne lime silo fitted with a rotary valve.

ROM ore is recovered from the ROM pad and loaded into the ROM bin which is fitted with an 800 mm fixed grizzly sloping at 20 degrees. Oversize ore is periodically removed from the grizzly and stored on a separate stockpile for breaking by mobile breaker. The ROM bin has a live capacity of 200 tonnes and ore is extracted from the bin by a heavy duty apron feeder. The apron feeder discharges ore to the crusher feed fixed grizzly which is fitted with a 150mm aperture.

Oversize ore is directed to the Kue Ken 48" x 42" jaw crusher, where it is crushed to -150 mm and the undersize ore bypasses the crusher and deposited directly on the sacrificial conveyor. The sacrificial conveyor accepts the product from the jaw crusher as well as the fixed grizzly undersize. The sacrificial conveyor is designed to be as short as possible to minimise replacement cost of the belt which may be damaged by ore and tramp metal falling onto the belt. The sacrificial conveyor is fitted with a tramp iron magnet and metal detector to remove tramp iron from the ore prior to being fed to the main conveyor that feeds the crushed stockpile from where the SAG Mill feed conveyor is fed. The conveyor feeding the Crushed Ore Stockpile is covered for elemental protection (Figure 39).

Figure 39: Crushing Circuit with Rom Pad in Background

10.2.2 Crushed Ore Reclaim

The Crushed Ore Stockpile has a total capacity of 13,900t, and a live capacity of 1692t. Crushed ore is reclaimed via two belt feeders located in the reclaim tunnel beneath the Crushed Ore Stockpile. There is also an Emergency Feed Hopper to allow direct feeding to the SAG Mill feed conveyor via Front End Loader.

The SAG Mill Feed Belt Conveyor has covers for elemental protection, and is fitted with a belt scale. A signal from the belt scale is sent to the belt feeder control system to control the feed rate to the SAG mill. Lime is added to the ore on this conveyor for pH control in the CIL process via a 75 tonne lime silo fitted with a rotary valve. A signal from the belt scale on the conveyor to the rotary valve controls the lime dosage rate.

The lime is delivered in 1 tonne bulk bags, which are fed into a bin and pneumatically conveyed to the top of the silo.

10.2.3 Grinding

Crushed ore and water are fed into the 20’ diameter x 11’ long SAG Mill, driven by a 1500 kW variable speed DC motor and gearbox. The SAG mill operates in open circuit, and is fitted with a discharge trommel. Trommel undersize discharges into the SAG Mill sump where additional water is added if required. The SAG mill discharge pumps (one duty, one standby) deliver slurry to the ball mill feed sump (Figure 40). The ball mill sump is serviced by two slurry pumps (one duty, one standby). The ball mill discharge sump delivers the combined slurry discharges of all three mills to the cyclone cluster for classification at a nominal cut size of 75µm.

Ball Mill 1 is a 16' diameter x 13' long Allis Chalmers Ball Mill complete with a 1000 kW slipring motor and gearbox. Ball Mill 2 is a refurbished 12' diameter by 18' long Vecor unit, complete with 1200kW slipring motor and gearbox. A trommel is fitted to each mill to screen out the ball scats from the mill discharge. The ball mills discharge into the Ball Mill sump.

A nominal 30% proportion of the cyclone underflow is directed to the gravity circuit scalping screen. The scalping screen underflow reports to the Falcon centrifugal concentrator for gravity concentration. The balance of the cyclone underflow is recycled to the ball mills. The cyclone overflow reports to the trash screen, with the screen underflow reporting to CIL tank 1.

The Falcon gravity concentrate is processed via a Gekko In-line Leach Reactor (ILR), whilst the gravity tailing gravitates to the ball mills. The ILR tailings report to the milling circuit, whilst the pregnant solution is electrowon through dedicated electrowinning cells in the gold room. Facility exists for the installation of a second centrifugal concentrator.

The mill area is serviced by a tower crane which is used for maintenance.

Figure 40: Overhead View of SAG and Ball Mills

Figure 41: Grinding Circuit Classification Cyclones

10.2.4 Leaching and Adsorption

A conventional carbon in leach circuit, comprising six adsorption tanks with associated screens, pumps and steel work, is employed to adsorb gold from solution. Each CIL tank has a live volume of 1,983m^3, with a total CIL live volume of 11,898m^3.

Cyclone overflow from the classification tower reports to a single deck trash screen. This screen removes any unwanted wood fragments and other fibrous matter that could blind the inter-stage screens in the CIL tanks. The underflow from the screen is sampled by use of a cross-cut sampler before being directed into CIL tank 1.

The six CIL tanks provide a total residence time of 24 hours at the design instantaneous throughput of 283dtph (Figure 42). An air sparge system is incorporated into the tanks for providing dissolved oxygen. Hydrogen peroxide is periodically used as a supplemental oxidant. The slurry flows sequentially from individual tank to tank through the inter-stage screens, beginning at Tank 1 through flowing through each tank until the final tank (CIL Tank 6). Carbon is pumped counter-current from the final tank (Tank 6) and advanced in reverse sequence until the first tank (CIL Tank 1).

As the slurry passes though the tanks, gold is dissolved by the cyanide solution and then adsorbed onto carbon. Due to the counter-current system employed, the carbon in the first CIL tank has the highest gold loading, and the carbon in the final tank has the lowest gold loading.

A system of plug valves and inter tank pipes allow single tanks to be bypassed and taken off line for maintenance and servicing. The tanks are furnished with suitable walkways, stairways and access platforms to ensure safe access to each piece of equipment.

Loaded Carbon from CIL Tank 1 is pumped to the Loaded Carbon Screen located above the acid wash/elution column (Figure 43). This screen is equipped with water sprays to remove slurry from the carbon. The washed loaded carbon reports to the acid wash/elution column, whilst the slurry is pumped back to CIL Tank 1.

The CIL area is enclosed in a bund with sumps and pumps to reclaim spillage. Normally the spillage is pumped to the first or second CIL tank, but if pumping to these tanks adversely affects the slurry density because of the amount of water in the bund, the spillage can be pumped to the carbon safety screen.

A tower crane covers the CIL section for maintenance purposes. The crane is used primarily for periodic removal of the inter-stage screens for cleaning and maintenance. A high pressure pump is utilised for cleaning the surfaces of the inter-stage screens.

Figure 42: Process Plant CIL Train

Figure 43: CIL Carbon Safety Screen

10.2.5 Elution and Acid Wash

The acid wash/elution circuit originally consisted of a 4 tonne carbon capacity, but was upgraded in April, 2011, via installation of a duplicate parallel 4 tonne system, thus providing a total capacity of 8 tonnes. Each column receives a four tonne batch of loaded carbon from the loaded carbon screen. After acid washing with dilute hydrochloric acid, the loaded carbon is stripped of the adsorbed metal species using a Pressurized ZADRA Strip scheme. The pregnant strip solution exiting the top of the Strip Vessel is routed to the Electrowinning Cell, where the metal values are electrowon onto the steel wool cathodes (Figure 44).

Figure 44: Acid Wash/Elution Circuit with Carbon Regeneration Kilns at Rear

10.2.6 Carbon Regeneration

The spent carbon is pumped from the elution area onto the dewatering screen above the carbon regeneration kiln feed hopper. A horizontal carbon regeneration kiln is employed to regenerate the carbon for reuse in the CIL tanks. The carbon is heated to a suitable temperature and allowed to "soak" before being discharged into the quench tank. As with the elution circuit, the capacity of the carbon regeneration circuit was doubled by the installation of a duplicate parallel 4tpd system, providing a total regeneration capacity of 8tpd.

10.2.7 Electrowinning and Smelting

Loaded gold cathodes are removed from the electrowinning cell to recover the gold sludge. The cathodes are cleaned in the cathode wash table, with the resulting precious metal sludge reporting to the precious metal filter press for dewatering.

A calcine oven is utilised to dry the filter cake prior to smelting. The dry filter cake is mixed with suitable fluxes before being added to the smelting furnace, with the resulting molten metal/slag mix being poured into moulds to produce doré gold bars.

10.2.8 Goldroom Building

The Goldroom building is a steel framed and concrete block structure located within the plant area and founded on a concrete slab and footings (Figure 45). Equipment within the building includes:

- The electrowinning equipment;
- Calcining furnace and smelting kiln;
- Bullion preparation area and safe;
- Clean in/dirty out facilities.

Figure 45: Electrowinning and Gold Room Building

10.2.9 Tailing Discharge and Storage

A conventional tailings discharge system is utilised for the Inata Gold project. After passing through a carbon safety screen to recover any escaping carbon, the tailing slurry is pumped to the tailing storage facility (TSF) located just north of the ROM pad (Figure 46). Tailing deposition is controlled via a multi-spigot distribution system. Process water is reclaimed from the TSF by a floating submersible pump. The process water is pumped back to the process water tank at the plant site.

The TSF consists of an embankment prepared from mine waste rock. Initially it was 7m high and built up as required to a height of 40m. Based on current deposition rates, the TSF will be full by late 2013.

A second TSF has been constructed and is essentially complete (Figure 47). The new TSF is designed for ten (10) years of tailing deposition at current production rates. The changeover to the new TSF will occur in late 2013 or early 2014, depending on deposition rates and the settled density of the tailing, which to date has been more favourable than anticipated.

Figure 46: Existing Tailing Storage Facility

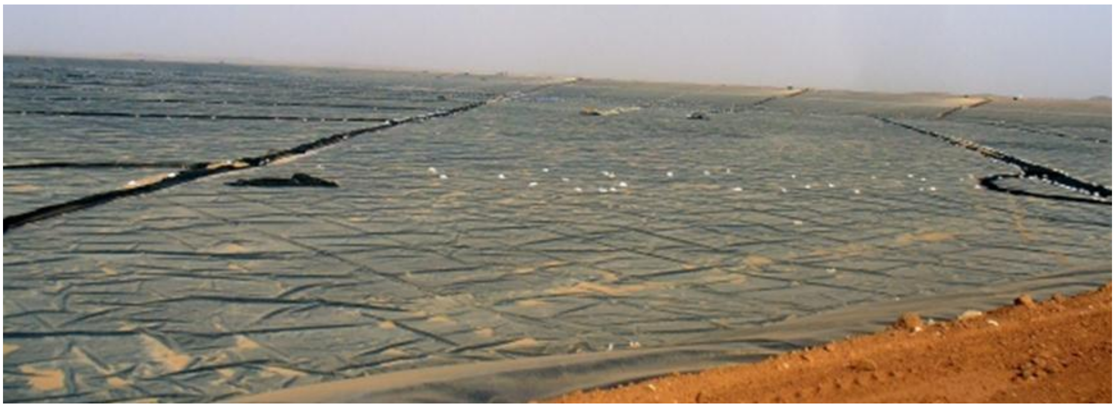


Figure 47: Newly Constructed Tailing Storage Facility (TSF 2)

CSA Comments:

The Inata Gold Project Processing Plant is a conventional and well-proven carbon-in-leach (CIL) design combined with a gravity recovery circuit. It was initially designed to process 2.25Mtpa of ore and produce gold doré. The plant was purchased second hand. Major components of this plant, such as the jaw crusher, SAG mill, one Ball Mill, the cyanide mixing and elution system were refurbished and utilised in the new plant. A second ball mill was also purchased second-hand and refurbished.

New equipment has been selected on the basis of the mass balance and in conjunction with equipment vendors and service providers. The CIL area is an all new construction area with new tanks, agitators, inter-stage screens, carbon transfer pumps, classifying, and dewatering screens. The control system is robust with minimal automation, and the plant has typical industry-standard instrumentation.

The plant appeared generally to be in good condition. The house-keeping of the plant is also generally good, although dust and accumulated fines are an issue at the crushing circuit. There would appear to be a lack of concrete bunding in this area, which compounds the task of clean-up.

The key ore transport conveyors are covered, as is the Coarse Ore Stockpile. This is good industry practice in regions of heavy seasonal rainfall.

Notwithstanding the recovery issues facing the operation, a key vulnerability is the existing SAG Mill. This is a line item with no redundancy, as is the case with most SAG circuits. The existing SAG Mill is a Marcy design, and Plant personnel commented that it was made in the 1960's. CSA's experience of such mills suggest that risks may exist with shell integrity and drive alignment, which site personnel are aware of and an engineering evaluation is scheduled in the coming month.

The CIL circuit appears well-designed and functional, as does the elution and regeneration circuits. However, it is important to note that the CIL circuit will come under increased pressure when diesel or kerosene blanketing is employed on a semi-permanent basis, due to the collateral fouling of the circuit carbon. This is an issue that needs to be considered now, as it may require circuit modifications, or at the very least, alterations to existing plant practices.Avocet have commenced work on these isues and by installing an excess kerosene scavenging tank as part of the carbonaceous material processing circuit.

There are current process plans to install a kerosene pre-treatment contact tank, a second tank containing activated carbon to scavenge excess kerosene following initial ore contact and increasing the carbon regeneration capacity. CSA comment that this is a sensible concept.

Both the existing and new Tailing Storage Facilities (TSF) were inspected. The current TSF has performed well, with better than anticipated settled densities. The change-over to the new TSF is scheduled for late 2013 or early 2014, depending on deposition rates.

Importantly, it is CSA's opinion that in an operation facing challenges, the onsite plant personnel presented as capable and motivated. The culture of the operation was positive, both from a safety and a production perspective.

11 Processing Inputs for Ore Reserve Estimation

The key Processing challenges for Avocet are reduced recovery, reduced throughput, and increased processing unit costs as the operation moves from oxide to transitional and fresh ore.

Avocet is aware and has made allowance in their Production Plans for the above issues.

11.1 Ore Processing Rate

Avocet has derived annualised processing rates from plant performance, ore comminution testwork, and third-party throughput modelling.

The annual throughput rates for the three ore types are designated as follows:

- Oxide ore: 2.7Mtpa
- Transitional ore: 1.2 / 1.6 / 2.7Mtpa*
- Fresh Ore: 1.2Mtpa

**The transitional ore is divided into three throughput rates, based upon measured ore density values within the Transitional zone.*

11.2 Gold Recovery

Due to the complexity of the Avocet ore bodies, metallurgical staff has dedicated a great deal of time and resources to develop a gold recovery algorithm/formula. The formula is based upon head grade, sulphide sulphur content, arsenic content, preg-robbing index (PRI), and a mitigation factor and efficiency factor to compensate for treatment route and laboratory versus plant performance. The methodology and calibration of the algorithm is discussed in more detail in Section 11.7.5.

11.3 Processing Operating Costs

Avocet metallurgical staff has derived processing operating costs based upon actual costs project-to-date, reduced processing rates for harder ore types, and a number of additional cost factors required for future processing.

The unit processing operating costs, expressed in US dollars per tonne processed, are as follows:

- Oxide ore: US$23.50/t
- Transitional ore: US$31.97/t

- Fresh Ore: US$38.13/t

11.4 Plant Production Capacity

Avocet personnel have designated three ore types for the deposit – Oxide, Transitional, and Fresh. The Operation is approaching maturity, with a little over three years operating experience on oxide ore.

The plant is designed to treat 2.25Mtpa and has exceeded this capacity since 2011, as evidenced in Table 39.

Table 39: Inata Annual Processing Plant Throughput Project-To-Date

Processing Plant Key Performance Indicators					
	2009	**2010**	**2011**	**2012**	**May 2013 YTD**
Mill Throughput (Mtpa)	0.05	1.76	2.47	2.56	1.02
Operating Time (%)	47.7	80.0	88.3	91.9	91.9
Throughput (dtpoh)	145	251	319	317	308

The low values for 2009 are due to commissioning commencing effectively in December 2009, thus only one month of data made up the full year production.

The production and maintenance trends are encouraging, showing steady improvement towards current steady state on oxide ore.

11.5 CSA Comments on Processing Inputs for the Ore Reserve Estimation

The key processing challenges for Avocet are reduced recovery, reduced throughput, and increased processing costs as the operation moves from oxide to transitional and fresh ore.

Avocet is aware and has made allowance in their Production Plans for the above issue, but some residual risk remains on the input values.

Of concern are the modelling projections for throughput under current operating conditions. However, it is conceded that, as Avocet point out, the modelling conducted by Orway Mineral Consultants (OMC), the comminution consultants may be conservative. Further modelling of the circuit with oxide and transitional ore parameters will provide more accurate and reliable throughput estimates for these ore types, and also provide a useful calibration of the OMC prediction against actual plant performance. CSA understand that Avocet is already in the process of carrying out this work.

CSA are of the opinion that further refinement is required to the current recovery algorithm, as will be discussed further.

CSA consider that the operating cost allowances are reasonable but require minor refinement as discussed in Section 11.9.

11.6 Mill Throughput Modelling

In order for Mine Production Planning, throughput estimates have been calculated for Transitional and Fresh Ore types.

The most recent and detailed comminution testwork and modelling have been carried out by Orway Mineral Consultants (OMC), who are recognised as an industry leader in this field. Avocet personnel supplied representative sample composites, comprising of 10 Fresh ore composites, 10 Transitional ore composites, and 4 Oxide ore composites.

Detailed comminution testwork was carried out on all composites as follows:

- Abrasion Index (Ai)
- Bond Rod Mill Work Index (RWI)
- Bond Ball Mill Work Index (BWI)
- Specific Gravity (SG)
- Crushing Work Index (CWI)
- JK A value
- JK b value
- SMC Coarse Ore Index (M_{ia})

OMC's conclusions from their analysis of the current circuit are reproduced verbatim below:

"Based on the operating data, it appears that the existing milling equipment is being operated at reduced power draw. Although the existing SAG mill should be capable of drawing 1,130 kW at the pinion, operating data indicates that only 880 kW of pinion power is being used in the SAG mill.

Ball Mill #1 and Ball Mill #2 are currently only drawing 590 and 615 kW at the pinion respectively. This represents a combined pinion power of 1,205 kW. This is less than the combined theoretical pinion power of 1,710 kW which these mills should be capable of achieving."

Avocet metallurgical staff advises that the current power draw is lower than capacity due to softer oxide material being processed. Further, the mills have never been pushed to full capacity due to volumetric constraints through the stockpile and CIL circuit. The milling circuit has only seen a few short stints of transitional ore that have some competency.

Avocet metallurgical staff further advises that they are of the opinion that the modelling is conservative, particularly in relation to the use of 85 percentile values, as this is more related to engineering equipment calculations.

This is illustrated by only 3 out of 24 samples having power consumptions higher than the 85th percentile in the Inata case. The Inata LOMP simulates average throughput, and the volumetric constraint will not be applicable as the plant has proven that volumetrically it can handle up to 340tph. Avocet advise that this is higher than the mill's capacities for even the softer transitional/fresh ore. Avocet thus advocates the use of the average values.

The OMC predictions for circuit throughput with fresh ore are reproduced verbatim below in Table 40.

Table 40: OMC Inata Mill Throughput Projections (August 2012)

		Existing Mill	**Specifications**	**Plant Operating Data**	
Parameters	**Units**	**85th Percentile Fresh**	**Average Fresh**	**85th Percentile Fresh**	**Average Fresh**
Bond Ball Work Index	kWh/t	17.1	13.8	17.1	13.8
Bond Rod Work Index	kWh/t	20.5	16.6	20.5	16.6
SAG Mill					
SAG Mill Pinion Power	kW	1,130	1,110	880	774
Ball Mills					
Ball Mill Pinion Power - Total	kW	1,550	1,710	1,205	1,205
Circuit Power					
SAG Mill Specific Energy	kWh/t	9.5	7.2	9.5	7.2
Ball Mill Specific Energy - Corrected	kWh/t	13.1	11.2	13.1	11.2
Circuit Parameters					
Feed F_{80}	mm	105	105	105	105
Product P_{80}	µm	75	75	75	75
Predicted Throughput	**tph**	**119**	**153**	**92**	**107**
Predicted Throughput	**Mtpa**	**0.9**	**1.2**	**0.7**	**0.9**

CSA Comments:

The production and maintenance trends are encouraging, showing steady improvement towards current steady state on oxide ore.

A more pressing concern is the lack of power draw from the existing SAG and Ball mills, and this matter should be investigated as a priority.

Comminution consultant projections for throughput under current operating conditions are shown above to be 0.7Mtpa and 0.9Mtpa, and if the mills are fully utilised with respect to power draw, 0.9Mtpa and 1.2Mtpa respectively for 85th Percentile and Average values.

The OMC report goes on to suggest 6 upgrade options, but to be fair to OMC, they were tasked to look at the potential for upgrading the circuit to treat 2.7Mtpa, including Transitional and Fresh Ore.

It would seem that OMC, driven by the scope of work, focused on a design for 2.7Mtpa for hard fresh ore i.e. worst case scenario.

It is unfortunate that no such through put modelling for transitional and oxide ore appears in the report, despite the data being available. Avocet have informed CSA that this work has been initiated.

11.6.1 Residual Risks for Mill Throughput

- Whilst it is conceded that the comminution consultant modelling may be conservative, the question of attaining planned throughput should be tested by the running of further modelling on Transitional and Oxide parameters.

- The OMC report (August 2012) has no modelling for oxide and transitional ore, despite comminution data being available to carry out the task. Undertaking this work would provide more accurate and reliable throughput estimates for these ore types, and also provide a useful calibration of the OMC prediction against actual plant performance. CSA understand that Avocet is already in the process of carrying out this work.

- The primary SAG mill is a key vulnerability. It is a line item with no redundancy, as is the case with most SAG circuits. It was reportedly fabricated in the 1960's, and risks exist with the integrity of the shell, drive alignment, and potentially with availability of spare components. Site maintenance personnel are aware of the risks, and NDT testing has historically been carried out to evaluate shell integrity. An engineering evaluation of the Mill is scheduled in the coming month.

- The primary crusher is also vulnerability, being a line item without redundancy. It is also a crusher design that is generally considered less robust than industry standard equivalents.

11.7 Metallurgical Recovery

11.7.1 Historical Recoveries

The gold recovery results for the project overachieved expectations for the first two years of production, with recoveries of 95.8% and 94.0% respectively (Table 41). The recovery dropped steadily for the following two years, attributable to dropping head grades, and the mineral complexity of the ore increasing with depth, with increased gold loss associated with sulphide mineralisation and organic carbon content. The problem has become significantly worse in the last six months, as evidenced in the 2013 Year-to-Date recovery of 82.7%. The monthly recovery graphs below (Figure 48 to Figure 50), reproduced verbatim from the corresponding Inata Mine Monthly Reports for 2011, 2012, and 2013, illustrate the steadily declining recovery in greater resolution, with sporadic improvements in recovery attributed to mining efforts to deliver low carbonaceous ore to the Plant.

Table 41: Inata Annual Processing Plant Gold Recovery Project-To-Date

Processing Plant Gold Recovery					
	2009	2010	2011	2012	May 2013 YTD
Mill Throughput (t)	51,778	1,759,123	2,469,764	2,556,401	1,024,709
Head Grade (g/t)	2.50	2.66	2.26	1.95	1.71
Tailing Grade (g/t)	0.105	0.161	0.194	0.261	0.295
Gold Recovery (%)	**95.8**	**94.0**	**91.4**	**86.7**	**82.7**

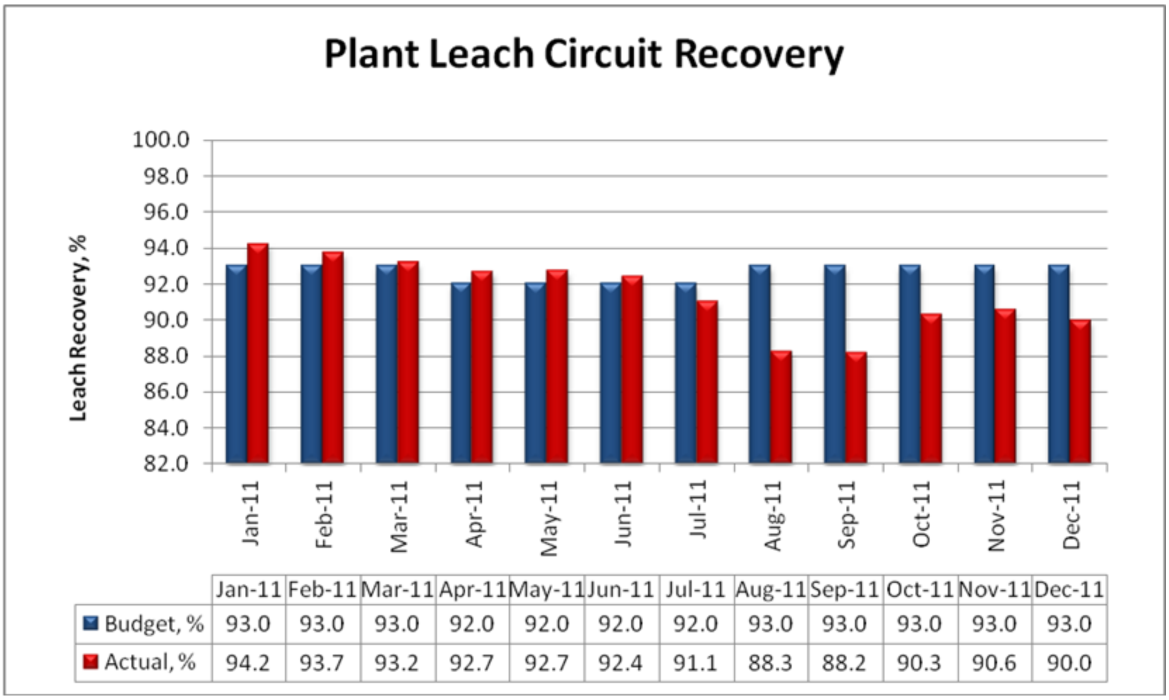


Figure 48: Plant Leach Circuit Recovery Full Year 2011

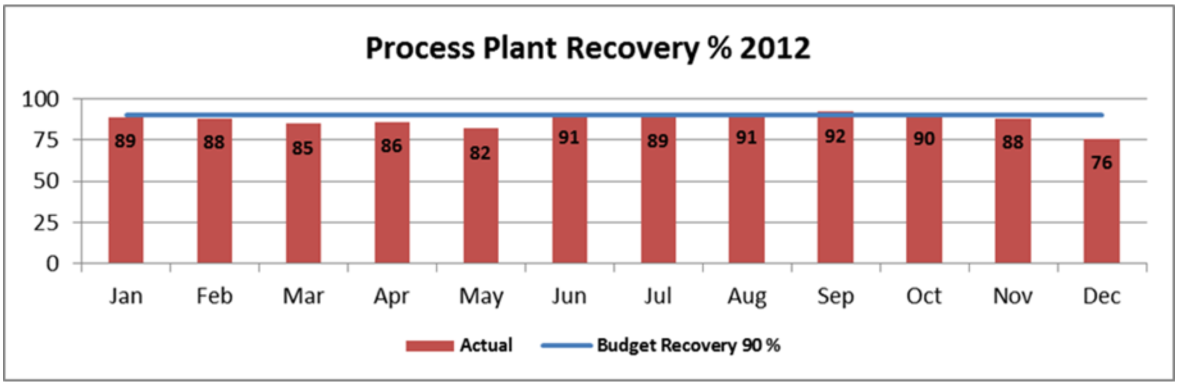


Figure 49: Process Plant Recovery Full Year 2012

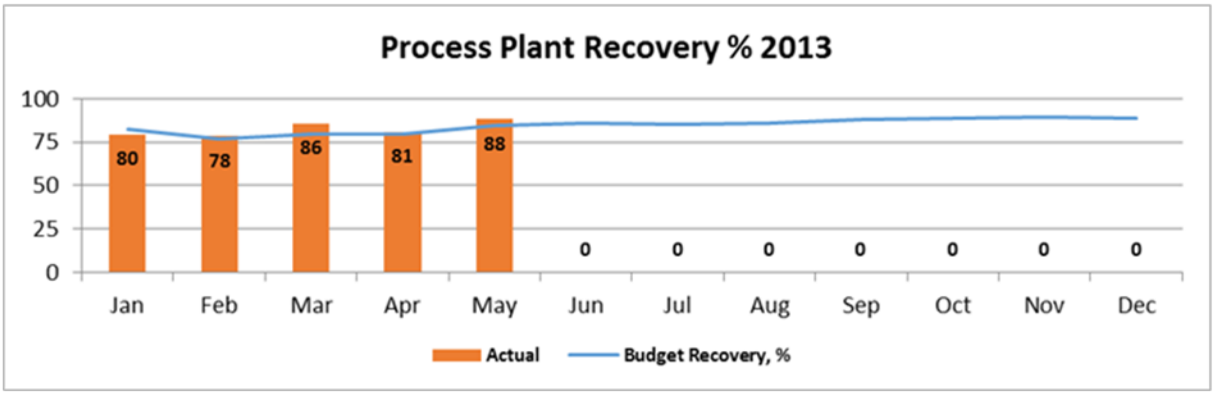


Figure 50: Process Plant Recovery YTD May 2013

11.7.2 General Impact of Carbonaceous Ore

The issue with the carbonaceous material within gold ore is such that if the material is organic and active, and thus preg robbing, it behaves somewhat in the same fashion as the activated carbon added to the circuit and therefore adsorbs gold that would otherwise have been collected by the circuit carbon. The carbonaceous material then exits the circuit and is deposited in the TSF, and is effectively lost. This then leads to the preg-robbing issue, this explains the preg robbing terminology which relates to the active carbonaceous material “robbing” a proportion of the leached gold from the slurry within the CIL circuit, and thus impacting adversely on the overall gold recovery. It is noted that the preg robbing tendency is variable and thus weakly preg robbing ores can be treated successfully in a CIL circuit, whilst strongly preg robbing ores can require other treatment such as blanketing with kerosene.

Figure 51 shows carbonaceous material the photo was taken during active mining of the North pit. Note the pervasive distribution of the carbonaceous material.

Figure 51: North Pit Showing Carbonaceous Ore as Black Areas of Rock

11.7.3 Operational Response to Pre-Robbing Issue

The installation of a gravity circuit in April 2012 has provided some improvement, presumably by removing a proportion of the gold physically, thus preventing it from entering the CIL circuit and being subject to potential preg-robbing. However, recoveries have continued to steadily drop as the proportion of carbonaceous material has increased in the mill feed.

In order to minimise the effect of preg-robbing, ore designated as having high potential for preg-robbing has been stockpiled on the ROM pad, allowing metallurgical staff additional time to develop a more effective processing regime.

The treatment regime referred to in pre-operational literature is for blanketing of the carbonaceous material with kerosene. In theory, the kerosene partially deactivates the active organic carbon in the ore, allowing the circuit activated carbon to more effectively compete for gold adsorption. However, the kerosene will also, to some extent, deactivate the circuit carbon, reducing stage efficiency and likely precipitating the need for changes to inter-tank carbon movements, elution schedules and carbon reactivation operating parameters and schedules. CSA has been informed that existing projects are underway to carry out plant modifications which would allow for sustained kerosene blinding.

The site metallurgical laboratory site routinely tests ore to produce a "Preg-Robbing Index", or PRI, which is a published methodology of estimating the preg-robbing effect of an ore sample.

Avocet metallurgists have also obtained a large data set (approx. 5000 samples) from assay pulps and tested them for PRI. The coordinates and pit locations were provided by Avocet and modelled by CSA; the data set is well distributed throughout the deposit.

The distribution of PRI ranges within the ore body is shown in Figure 52.

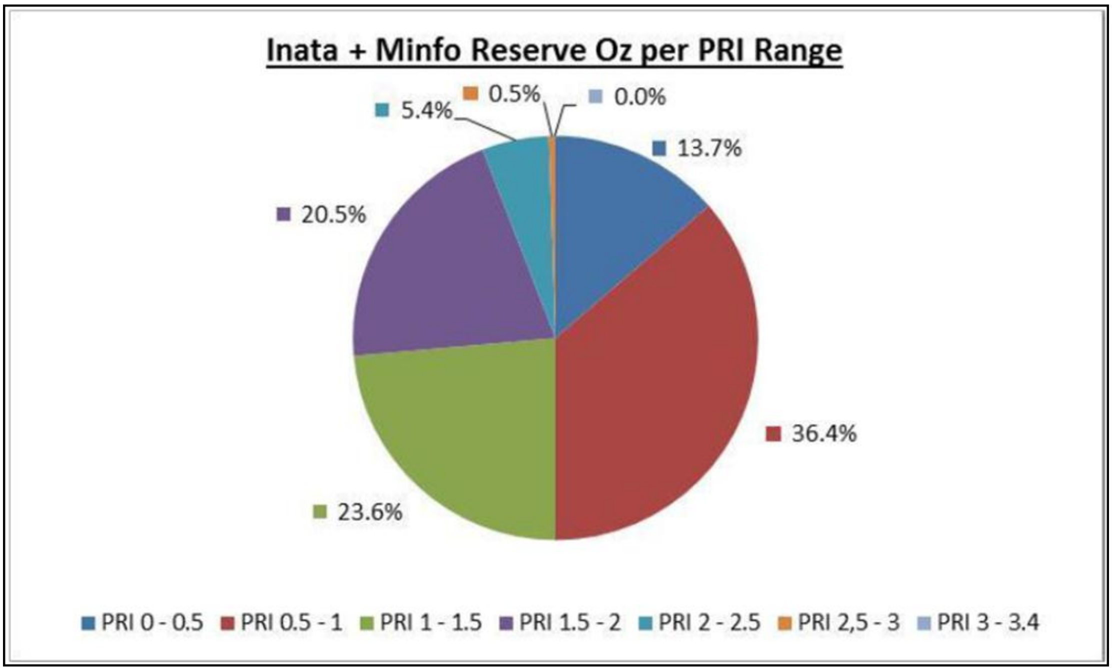


Figure 52: Preg-Robbing Index (PRI) Distribution – Internal LOMP December 2012

The plant has conducted two circuit trials, using diesel rather than kerosene as an alternate blanketing agent. The results are displayed in Table 42.

Table 42: Diesel Blanketing Plant Trials December 2012

	Trial 1 (5 Dec – 12 Dec)	Trial 2 (25 Dec – 30 Dec)
Total Days of Trial	8	6
Average Ore PRI	1.0	2.1
% Recovery	75.0%	65.3%

11.7.4 Technical Response to Pre-Robbing Issue

CSA note that the Avocet metallurgical staff have devoted significant time and resources in recent months to gaining an understanding of the preg-robbing issue, including also gaining an understanding of other factors affecting gold recovery (Figure 53).

The driving force for this initiative is twofold – firstly to maximise gold recovery in the immediate operating period, and secondly to develop a recovery algorithm for use in resource/reserve estimation, and for developing selective mining and stockpiling strategies to minimise the effect of preg-robbing ores.

The metallurgical team have taken a number of actions to address the issue, including but not limited to:

1. Initiating plant trials with diesel blanking.

2. Introducing the PRI test for all assaying, including plant feed, ROM stocks and grade control.

3. Initiating targeted testwork in 2012 on selected high PRI sample composites.

4. Obtaining in excess of 5,000 samples (assay pulps), which provide a good representation of the Inata ore body and existing pits, and testing all samples to provide a PRI value.

5. Statistically integrating the knowledge from historical and current testwork programs, including the large data-set from the recent PRI campaign.

6. Developing, through a series of iterations and mathematical approaches, an algorithm for gold recovery, or in actual fact, plant tail grade, which is more appropriate.

Figure 53: Preg-Robbing Index (PRI) Testing at Inata Plant Metallurgical Lab

11.7.5 Development of Recovery Algorithm

The development and iterations of the recovery algorithm are described in detail in a technical paper written by Avocet metallurgists Neels van Niekerk and Cameron Talbot, and reproduced in Appendix 1.

Although the PRI values showed a correlation to the recovery of gold, the accuracy of the prediction algorithm against available testwork indicated that there were other contributing factors that influence recovery.

The authors sought to develop an algorithm that includes these aspects into the recovery estimation. Most fundamental to this approach was to target an algorithm that predicts tail grade rather than recovery, as Head grade is inherently an input into the algorithm. Such an approach allows recovery to be back-calculated, whilst allowing head grade to be incorporated into the algorithm.

After a series of statistical analyses, the inputs to the algorithm were:

- Head Grade (HG) of sample
- Sulphide Sulphur concentration
- Arsenic (As) concentration
- Preg-robbers (measured using PRI)

Complicating the algorithm is the fact that the PRI factor only applies to the gold that is dissolved from the ore, and thus must be appropriately accounted for.

The initial set of dissolved gold equations was as follows:

$$Tail\ Grade\ (HG) = 0.07\ x\ \sqrt{Head\ Grade}$$

$$Tail\ Grade\ (Sulphide) = 0.09\ x\ \%Sulphide$$

$$Tail\ Grade\ (As) = 0.05203\ x\ \sqrt{ppm\ As}$$

It was determined that the impact of PRI requires a different approach. As PRI gives an indication of the amount of gold dissolved being re-adsorbed by preg-robbers, it was necessary to take into account the gold unavailable for re-adsorption owing to the above three parameters. The amount of dissolved gold available for re-adsorption was therefore calculated by subtracting the sum of the gold losses due to the first three parameters from the head grade. The amount of dissolved gold re-absorbed by the preg-robbers was then evaluated using this “dissolved gold factor”, and was found to follow the following equation:

$$Tail\ Grade\ (PRI) = (1 - e^{-PRI})\ \ x\ Dissolved\ Au$$

Once the previously developed equations have been executed, a total tail grade may be calculated by the following equation:

$$Tail\ Grade\ Total\ = Tail\ Grade\ (HG) + \ Tail\ Grade\ (Sulphide) + \ Tail\ Grade\ (As) + \ Tail\ Grade\ (PRI)$$

The recovery can thus be calculated by the following formula:

$$\%\ Recovery = (Head\ Grade - Tail\ Grade\ Total) \div Head\ Grade$$

11.7.6 Recovery Algorithm Iteration and Refinement

An initial calibration approach was to compare the direct leach testwork from the 2006 and 2012 testwork campaigns with the algorithm, as shown below in Figure 54. These tests have no mitigating factors; hence the preg-robbing nature of the ore was shown to be potent. It should be pointed out that the 2012 testwork was conducted on selected high PRI samples.

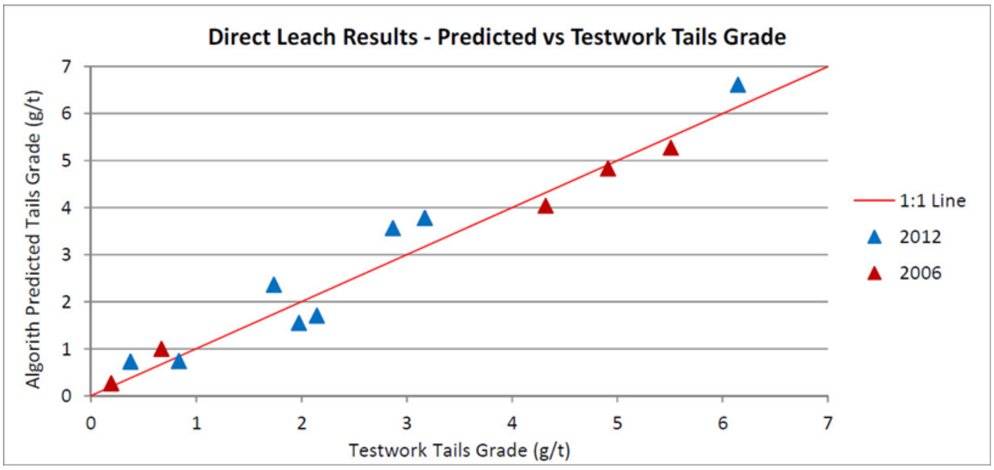


Figure 54: Direct Leach Comparison – Testwork vs. Algorithm

The next phase in the algorithm calibration was to quantify the effect of mitigating actions that improve recovery, such as CIL and blanketing with organic liquids such as diesel and kerosene. The algorithm was modified to account for such mitigation as follows:

$$Tail\ Grade\ Total\ = Tail\ Grade\ (HG) + Tail\ Grade\ (Sulphide) + Tail\ Grade\ (As) + +(\ Tail\ Grade\ (PRI)$$

Tail Grade Total = Tail Grade (HG) + Tail Grade (Sulphide) + Tail Grade (As) + ((f_m *x Tail Grade (PRI))*

Where f_m is the PRI mitigation factor.

Using existing plant and testwork data, the following values in Table 43 were calculated for f_m:

Table 43: PRI Mitigation Factors

	Description	Reduction	f_m
1	Direct Leaching (Laboratory results)	0%	1.00
2	CIL (Plant results)	60%	0.40
3	CIL (Laboratory results)	65%	0.35
4	CIL and “ineffective” blanketing (Plant)	72%	0.28
5	CIL and blanketing (Laboratory results)	85%	0.15

However, using a percentage base for the mitigation factor, a tendency to over-predict tail grade at lower PRI values and under-predict tail grade at higher PRI values in laboratory testwork was observed.

The Avocet metallurgical team is currently engaged in an on-site testwork program to further refine the algorithm. Due to mine planning requirements, the team were required to develop an interim relationship which would improve accuracy.

As the original PRI effect was an exponential function, it was assumed that the mitigation of PRI would follow a similar relationship. Given the circumstances, CSA consider this a reasonable approach.

A new mitigation factor algorithm was proposed, using the following equation:

$$f_m = 1 - (1 + e^{-b \times PRI}) \times f_e$$

Where: b = constant,
f_e = efficiency factor based on process route, and
f_m = mitigation factor

If the mitigation of PRI mirrors that previously established for the PRI algorithm, the value of *b* should equate to 1. The authors also optimised the value of b by establishing the best fit of the 2012 AMMTEC laboratory results, which returned a *b* value of 0.331.

Efficiency factors were calculated for the two new scenarios, and are listed in Table 44 below.

Table 44: PRI Efficiency Factors

	Description	*b* = 1	*b* = 0.331
1	Direct Leaching (Laboratory results)	0	0
2	CIL (Plant results)	0.510	0.452
3	CIL (Laboratory results)	0.528	0.452
4	CIL and “ineffective” blanketing (Plant)	0.577	0.497
5	CIL and blanketing (Laboratory results)	0.798	0.601*

** Further refinement has resulted in this value being updated to 0.54.*

Figure 55 below shows the actual/predicted recovery relationship compared to PRI for all 3 scenarios i.e. percentage based, b = 1 and b = 0.331.

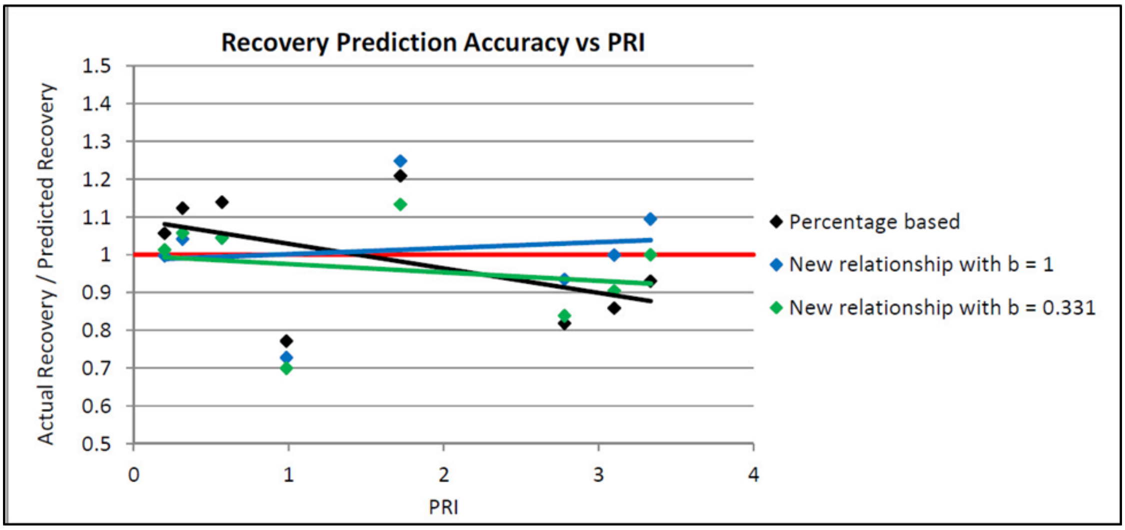


Figure 55: Recovery Prediction Accuracy with Various PRI Mitigation Algorithm Approaches

Due to the small data set and the erratic results, it was difficult to conclude which approach was appropriate. To determine which of the three prediction methods is more accurate; the authors reverted to an empirical approach.

The 5000 geology samples are considered the most comprehensive sample set for the Inata ore body. The predicted recoveries of these samples were plotted against PRI. The plots indicated a “cloud” of recoveries with a semi hard upper limit boundary, driven by PRI. It was concluded that plant recoveries should normally fall within this “cloud”, and will only be able to exceed the upper boundary in exceptional circumstances.

When plotting actual recoveries obtained at the Inata plant from the 1st of December 2012 to the 13th of January 2013 (when the plant had steady production), onto the same graphs, it was found that only one mitigation algorithm matched this criteria, that being the one where b = 0.331. It is significant that this period captures relatively steady-state plant operation both with and without diesel blanketing.

The various plots mentioned above are shown below in Figure 56 to Figure 58.

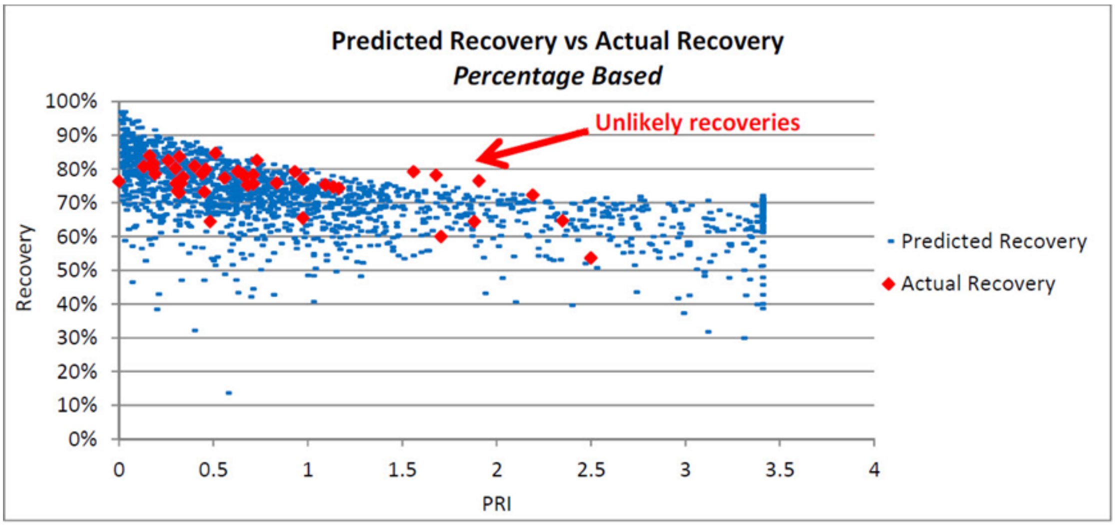


Figure 56: Algorithm-Predicted Recovery vs. Actual Plant Recovery (Dec 2012)

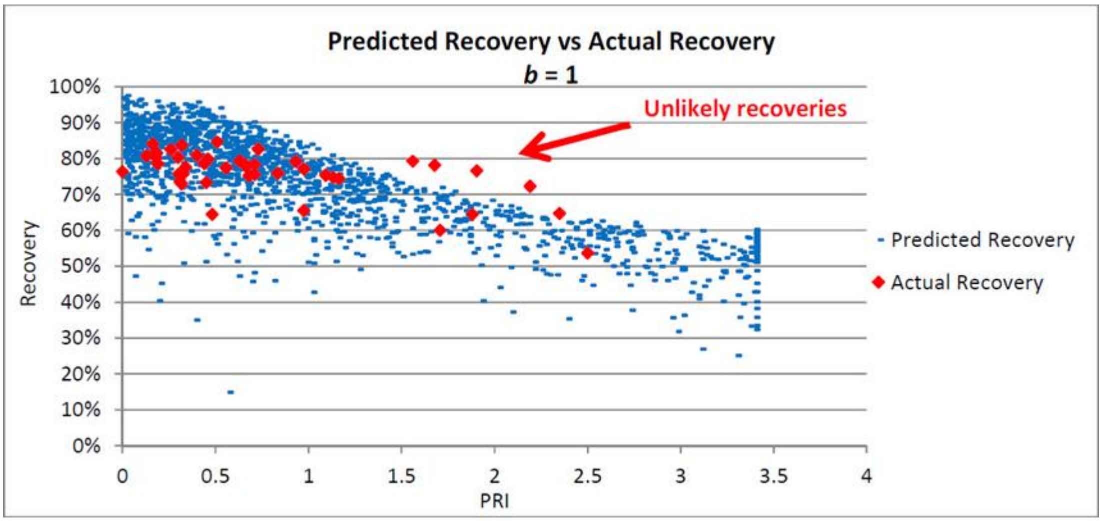


Figure 57: Algorithm-Predicted Recovery vs. Actual Plant Recovery (Dec 2012): b=1

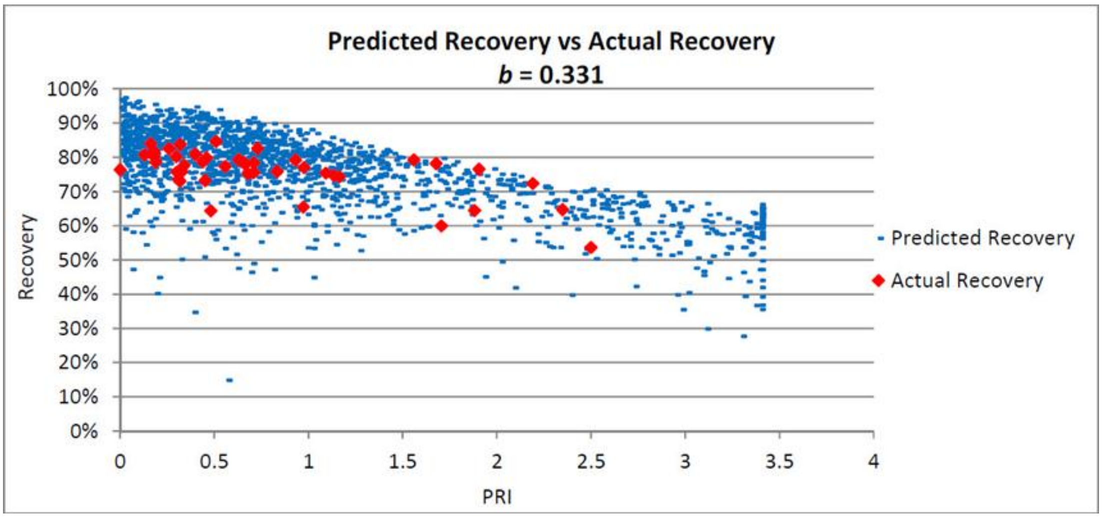


Figure 58: Algorithm-Predicted Recovery vs. Actual Plant Recovery (Dec 2012): b=0.331

Avocet metallurgists therefore concluded that the mitigation factor can be calculated using the following formula:

$f_m = 1 - (1 + e^{-0.331 \text{ x } PRI}) \text{ x } f_e$

Thus, the complete expanded recovery algorithm currently used in the Whittle Life-of-Mine optimisations is:

$$Tail\ Grade\ Total = \left(0.07\ x\ \sqrt{Head\ Grade}\right) + \ (0.09\ x\ \%Sulphide) + \left(0.005203\ x\ \sqrt{ppm\ As}\right) + [\left(1 - e^{-PRI}\right)\ x\ \left((Head\ Grade - \left((0.07\ x\ \sqrt{Head\ Grade}\right) + \ (0.09\ x\ \%Sulphide) + \left(0.005203\ x\ \sqrt{ppm\ As}\right)\right)x\ \left(1 - \left(1 + e^{-0.331 \text{ x } PRI}\right)\ x\ fe\right)]$$

Avocet metallurgists have derived two values for f_e as follows:

- Upside scenario (testwork-based): 0.54
- Baseline (reserves calculation): 0.52

11.7.7 Recovery Algorithm Calibration against Plant Performance

To test the algorithm, ideally it needs to be compared to a sample set which was not used during the development of the algorithm, and had a reasonable range of data for the various inputs to the algorithm. The most appropriate sample set available was the transitional ore trial conducted during December 2012 at the Inata mine site, as it was specifically designed to test plant performance over a range of conditions, and with diesel blanketing. Site metallurgists do point out that the sample set does have some restriction as follows:

- Sulphide concentration: During the plant trials the sulphide concentration was not analysed. Total sulphur was analysed, and using the correlation between total sulphur and sulphide established in the geology sample campaign, the sulphide concentration was calculated as 0.8736 x total sulphur.
- Arsenic (As) concentration: The arsenic concentration was not measured. For the analysis, an arsenic value of 50 ppm was assumed. This assumption were based on the predicted As concentrations for the area where the trials ore was mined.

During the month of December 2012, the plant had a steady run with 98.2% run-time.

Analysis of production data by site metallurgists did not identify any specific upset conditions, and therefore no external influence on recovery was considered.

The key process data values are shown below in Table 45.

Table 45: Data for December 2012 Plant Calibration Trials

Date	Head Grade g/t	PRI	% Sulphide	Predicted Tail g/t	Actual Tail g/t
5-Dec-12	2.91	1.135	1.78	0.721	0.737
6-Dec-12	3.21	0.656	2.21	0.594	0.692
7-Dec-12	2.66	0.932	2.27	0.637	0.554
8-Dec-12	2.64	0.976	1.77	0.615	0.606
9-Dec-12	2.21	0.974	7.89	0.962	0.762
10-Dec-12	3.70	1.164	2.92	0.949	0.949
11-Dec-12	4.61	1.093	1.78	0.994	1.137
12-Dec-12	3.74	0.835	2.59	0.769	0.903
25-Dec-12	1.67	1.706	2.29	0.635	0.635
26-Dec-12	2.44	2.191	2.27	0.946	0.946
27-Dec-12	2.63	2.500	3.74	1.148	1.148
28-Dec-12	3.55	1.881	2.30	1.181	1.181
29-Dec-12	3.09	2.349	0.64	1.100	1.100
30-Dec-12	2.88	1.905	0.99	0.928	0.928
Mean	3.00	1.450	2.53	0.870	0.877
Median	2.91	1.164	2.27	0.928	0.903
Maximum	4.61	2.500	7.89	1.181	1.181
Minimum	1.67	0.656	0.64	0.594	0.554

Analysing the results, the effect of diesel blanking and CIL operations indicated a mitigation factor of 0.72 to be used. This is in line with what Avocet metallurgists had expected, as laboratory trials indicated factors of 0.65 and 0.85 for CIL and blinding followed by CIL, respectively, under laboratory conditions.

The calibration results are displayed below in Figure 59.

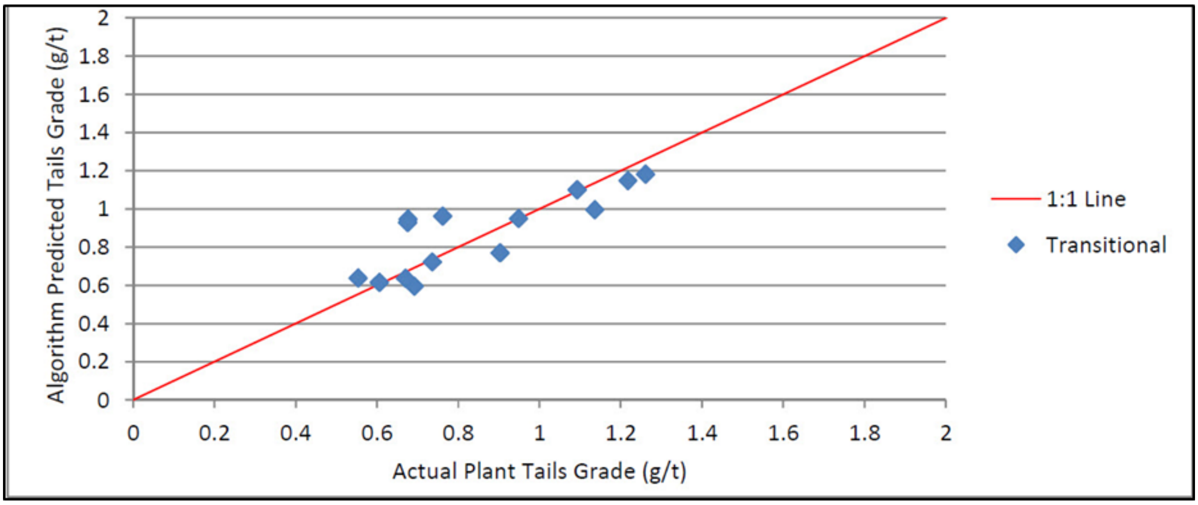


Figure 59: December 2012 Plant Trial – Actual vs. Predicted Plant Tailing Grade

During the development of the algorithm, oxide ore test results were not considered, as it was believed that they will have different dependencies compared to the transitional and fresh zones. The analysis of the QLT results gave indication that the oxidation state and depth of the ore does not have a significant impact on the tailing grade. Therefore it could be concluded that the oxide ore recovery may have similar dependencies to that of the transitional/fresh ore. To test this hypothesis, the comparison for the plant trials was expanded to include the days oxide ore were treated. Figure 60 and Figure 61 show the expanded correlation.

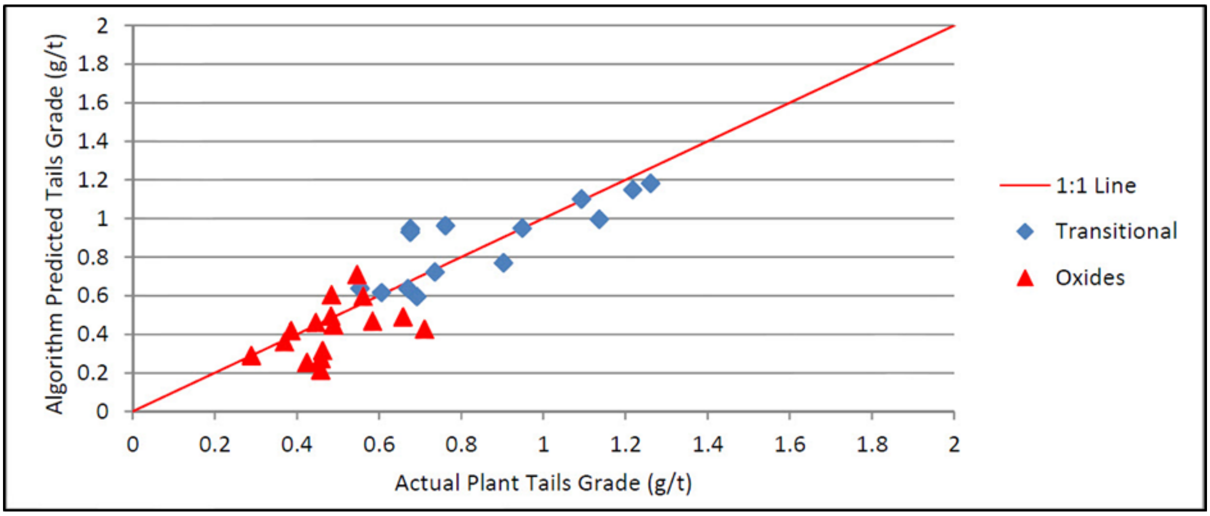


Figure 60: December 2012 Plant Trial – Actual vs. Predicted Plant Tailing Grade for All Ore

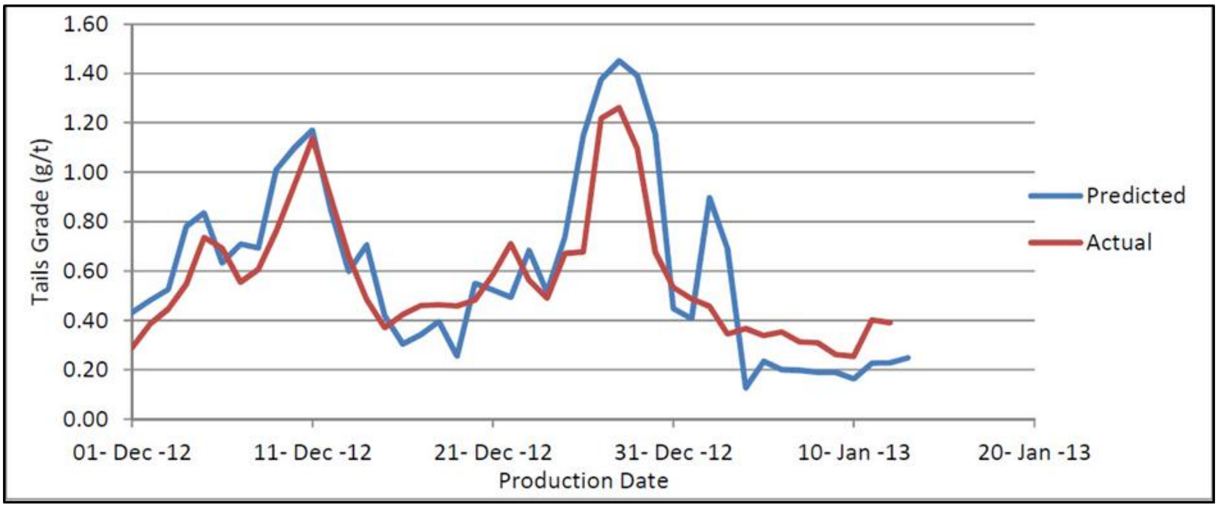


Figure 61: Dec 2012 – Jan 2013 Actual and Predicted Plant Tailing Grade

These figures show that the algorithm has reasonably accurately predicted the tailing grade for the transitional as well as oxide material fed through the plant during December 2012. Site metallurgists report that similar results were obtained for January and February when oxide ore was the predominant feed source for the plant. Although more in-depth analysis is required, the Avocet metallurgical team believe it is a reasonable assumption that the algorithm holds true for the entire Inata ore body.

11.7.8 Discussion on Diagnostic Leaching

Diagnostic leaching is an analytical sequence of chemical and thermal procedures, and is typically conducted on Plant tailing samples to calculate inferred gold deportment in various mineral fractions. Diagnostic leach analyses of Inata samples were conducted at both Mintek and ALS Metallurgy. Results are shown below in Table 46 to Table 48.

Table 46: Diagnostic Leach Analysis of Inata Ore Samples - Mintek Testwork May 2012

Area	Inata North Fresh Composite		Inata North Transition Composite		Inata North Fault Breccia Composite		Inata Central Transition Composite		Minfo-E-Fresh Composite		Minfo-E-Transition Composite	
Grind (Passing 75µm)	80		80				80		80		80	
Association	Gold grade (g/t)	Gold dist'n (%)	Gold grade (g/t)	Gold dist'n (%)	Gold grade (g/t)	Gold dist'n (%)	Gold grade (g/t)	Gold dist'n (%)	Gold grade (g/t)	Gold dist'n (%)	Gold grade (g/t)	Gold dist'n (%)
Gold available to direct cyanidation	2.517	52.55	2.073	91.72	1.266	24.44	0.723	44.63	0.671	80.88	0.657	62.55
Gold that is preg robbed (CIL)	1.106	23.09	0.020	0.90	2.548	49.20	0.302	18.63	0.029	3.53	0.000	0.00
Gold associated with HCI digestble minerals	0.271	5.66	0.044	1.93	0.191	3.68	0.101	6.22	0.056	6.80	0.092	8.75
Gold associated with HNO_3 digestible minerals	0.431	9.00	0.052	2.29	0.336	6.48	0.105	6.51	0.028	3.40	0.195	18.54
Gold associated with carbonaceous matter	0.033	0.69	0.000	0.00	0.127	2.45	0.055	3.38	0.000	0.00	0.023	2.17
Gold associated with quartz (balance)	0.431	9.00	0.071	3.16	0.712	13.75	0.334	20.63	0.045	5.39	0.084	7.98
Total	4.79	100	2.26	100	5.18	100	1.62	100	0.83	100	1.05	100

Table 47: Diagnostic Leach Analysis of Inata Ore Samples – ALS Metallurgy Testwork Summary November 2012

Diagnostic Stage (sequentially)	Description	INN_RC Chip_ IDR CIL Residue	INC CIL Residue	INC_ RC Chip_ cbn_SSH CIL Residue
			Au Distribution (%)	
Dil HCI Digest + Cyanidation	Carbonate Mineral Locked Gold Content	5.78	10.23	6.49
Dil HNO_3 Digest + Cyanidation	Arsenical Mineral (Arsenopyrite) Locked Gold Content	21.07	12.34	36.93
Ash	Organic/Graphitic Carbon Locked Gold Content	42.17	18.22	41.52
Aqua Regia Digest	Pyritic Sulphide Mineral Locked Gold Content	3.26	1.33	1.16
Total Fire Assay	Silicate (Gangue) Encapsulated Gold Content	27.72	57.88	13.90

The ALS Metallurgy method employs the roasting or ashing procedure prior to strong and hot acid treatment, whilst the Mintek procedure employs the roasting or ashing procedure as the final step in the diagnostic process.

No PRI data exists within the Mintek testwork report, , and the PRI data in the ALS Metallurgy report is difficult to reconcile with the diagnostic leach results, primarily due to conflicting sample nomenclature.

Avocet metallurgical staff advises that the composites sent to both laboratories were specifically targeted for their high complexity (high PRI and high Sulphur) and thus potential to adversely affect Plant performance. Two PRI values were reported for ALS testwork for a sequence of samples is shown below in Table 48.

Table 48: PRI Values for Inata Samples – ALS Metallurgy Testwork November 2012

Sample	PRI1	PRI2
INN COMPOSITE	3.17	3.03
INC COMPOSITE	1.03	0.94
IDR COMPOSITE	0.55	0.59
INN_BFT_A Gravity Tail	2.89	2.67
INN_cbn_H Gravity Tail	1.86	1.58
MIN_cbn_A Gravity Tail	3.36	3.31
INC_cbn_L Gravity Tail	0.38	0.25
MIN CORE Gravity Tail	0.22	0.18

The ALS Metallurgy comments on the diagnostic leach testwork results shown in Table 45 are reproduced verbatim below:

- "For the INN_RC Chip_IDR Composite, the largest proportion of gold was associated with organic/graphitic carbon minerals, which accounted for 42.17% of the total gold. A significant proportion of gold in the composite was locked in arsenical and silicate minerals, which combined accounted for 48.79% of the total gold.

- For the INC Composite, the largest proportion of gold was associated with silicate minerals, which accounted for 57.88% of the total gold. A significant proportion of gold in the composite was locked in arsenical and organic carbon minerals, which combined accounted for 30.56% of the total gold.

- For the INN_RC Chip_cbn_SSH Composite, the largest proportion of gold was associated with organic/graphitic carbon minerals, which accounted for 41.52% of the total gold. A significant proportion of gold in the composite was locked in arsenical minerals, which combined accounted for 36.93% of the total gold."

- A detailed discussion on the above is available in Appendix 2- Recovery Algorithm Accuracy when compared to Diagnostic Leach Results.

11.7.9 Discussion on Mineralogy

Mineralogical investigations have been carried out in 2006 by Roger Townend and Associates and in 2012 by ALS Metallurgy.

The Roger Townend and Associates procedure utilised optical and SEM polished section examination. The report found both free gold and finer gold particles locked in sulphide or silica minerals. The gold particle sizes ranged from 0.5µm to nugget-size, the largest being 280µm by 65µm.

Graphite was identified at accessory quantities in several Transitional and Fresh ore fractions.

The ALS Metallurgy procedure utilised a QEMSCAN instrument for quantitative mineralogy and a Zeiss SEM Particle Scanner for the gold minerals search. Unfortunately, due to graphite being the background matrix for this technique, no effective quantification of graphitic minerals was possible.

The Au-Ag mineral phases were classified as follows:

- Native Gold (95- 100% Au and 0 - 5% Ag)

- Argentian Native Gold (80- 95% Au and 5 - 20% Ag)

- Electrum (20 - 80% Au and 20 - 80% Ag)

- Petzite Ag3AuTe2

The detected gold grains and Back-scattered Electron Images of selected gold associations are show in the following Table 49 and Figure 62. The ALS Metallurgy images were selected due to their superior quality of reproduction. The information shows examples of both encapsulated gold and liberated gold particles.

Table 49: ALS Metallurgy Gold Association Summary

DETECTED GOLD-SILVER MINERAL GRAINS SUMMARY							
Gold-Silver Mineral Grain Aspects					Estimated Content (host mineral signal excl) (norm. wt %)		
Particle No.	Grain No.	Gold Grain Size (µm)	Liberation	Au-Ag Mineral/ Host Mineral Assoc.	Au	Ag	Te
				IDR Composite: *Knelson* Concentrate			
1	1	7 x 45	Exp	Argentian Native Gold/Pyrite	90.4	9.6	--
2	2	12 5	Lib	Argentian Native Gold	92.0	8.0	--
3	3	5.5 x 4.5	Lib	Argentian Native Gold	87.6	12.4	--
4	4	6.5 x 1.5	Enc	Native Gold/Pyrite	~100	--	--
	5	2 x 1	Exp	Native Gold/Pyrite	~100	--	--
	6	1 x 1	Enc	Native Gold/Pyrite	~100	--	--
5	7	1 x 1	Exp	Native Gold/Pyrite	~100	--	--
	8	1 x 1	Enc	Native Gold/Pyrite		Not Analysed	
	9	10.5 x 4.5	Enc	Argentian Native Gold/Pyrite	92.6	7.4	--
	10	4.2 x 3.9	Enc	Argentian Native Gold/Pyrite	91.8	8.2	--
6	11	9 x 2	Enc			Not Analysed	
	12-26	~2 x ~2	(Enc)	Argentian Native Gold/Pyrite		Not Analysed	

DETECTED GOLD-SILVER MINERAL GRAINS SUMMARY							
	27-29	˜1 x ˜1	Enc			Not Analysed	
7	30	6 X 4.5	Exp	Petzite/Pyrite	24.5	41.0	34.5
	31	4.2 x 2.5	Enc	Native Gold/Pyrite	˜100	--	--
8	32	2.6 x 2.3	Enc	Native Gold/Pyrite	˜100		--
	33-35	˜5 x ˜1	(Enc)	Native Gold/Pyrite		Not Analysed	
9	36	7.5 x 2	Exp	Native Gold/Pyrite-(Chlorite)	˜100	--	--
10	37	26 x 2	Exp	Argentian Native Gold/Pyrite	88.8	11.2	--
	38	4.5 x 1.5	Exp	Argentian Native Gold/Pyrite	89.6	10.4	--

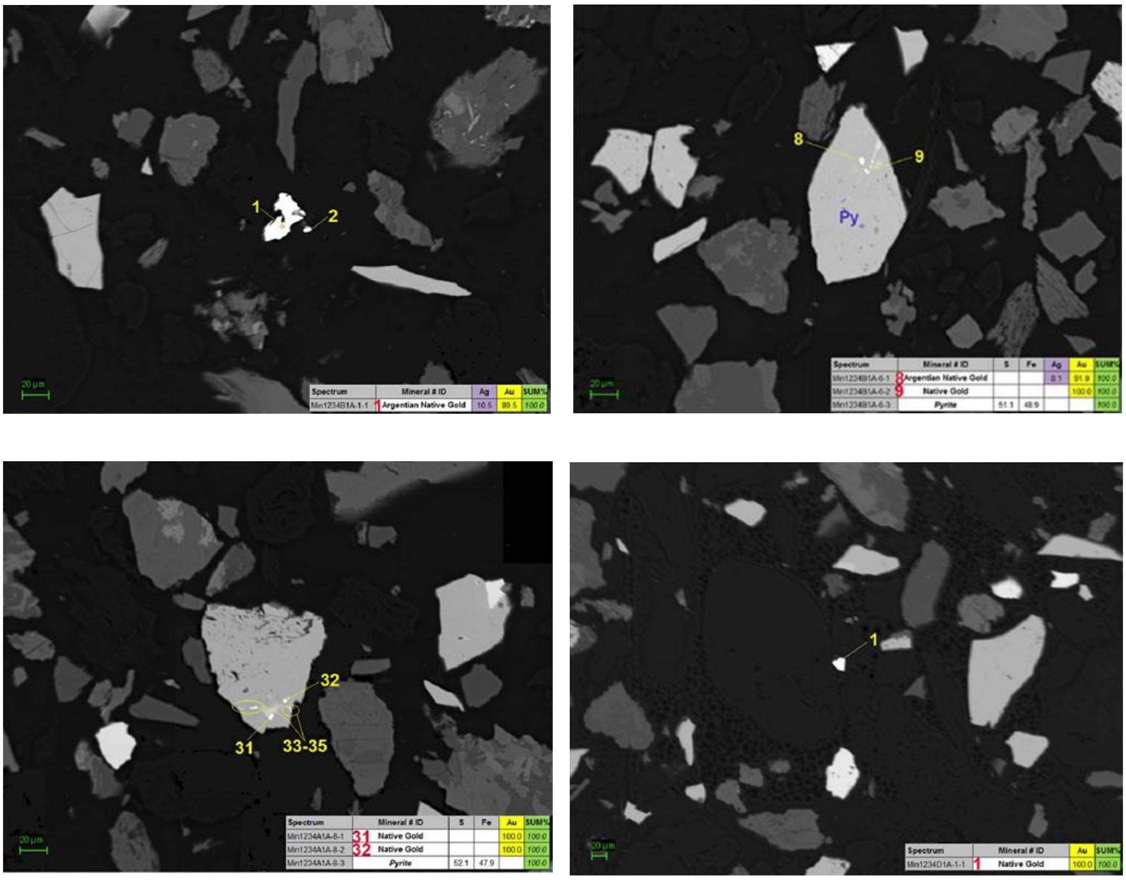


Figure 62: ALS Metallurgy Images

CSA Comments:

What is very important to understand is that carbonaceous material is not a contaminant, but more a "recovery poison", in that blending carbonaceous ore with non-carbonaceous ore results in the carbonaceous ore "poisoning" the non-carbonaceous ore via preg-robbing.

There are some inconsistencies regarding the proportion of gold lost to tailing that is preg-robbed and that which is locked within sulphides and gangue.

The presence of carbonaceous ore and the potential for preg-robbing has been known long before the commencement of the Project, with literature viewed on site from as far back as 2002 identifying the issue. Comments in subsequent reports note the preg-robbing issue, but would seem to underestimate the potential extent and adverse impact of the issue.

In defence of prior analysis, many existing operations have a component of carbonaceous preg-robbing ore, but it tends to occur in discrete layers that can be selectively mined and stockpiled for separate treatment towards the end of mine life. In the case of the Inata ore bodies, the geology has been described to CSA such that the carbonaceous material exists in swirls within the ore, or as described by an Avocet geologist, like "raspberry ripple in ice-cream". Such distribution of the carbonaceous material results in a large proportion of the ore body being subject to preg-robbing. Whilst this negates the option of stockpiling carbonaceous ore for treatment towards the end of mine life, there does exist the opportunity to stockpile the carbonaceous ore and non- carbonaceous ore *separately and campaign treat the ores separately, which allows plant conditions to be optimised for each ore type.*

The Inata site approach of tailing grade estimation, including a factor for PRI has been successfully applied at several gold processing facilities.

CSA conclude that the preg-robbing issue within the Inata ore bodies is complex, particularly due to the distribution of the naturally occurring active carbonaceous material within the ore. Avocet have been working on solving the issues in regards to the preg-robbing issues by using a recovery formula. CSA considers the formula appropriate, however further work is needed due to the complex nature of the Inata ore.

The Avocet metallurgical, geological and mining team has done a commendable job in recent months to address the issue and better define the long-term impact for the operation with respect to Mine production planning and Plant gold recovery.

CSA considers that the technical approach that the Avocet metallurgical team to the development of a recovery algorithm is soundly based. It is acknowledged that some empirical interpretation and iterative analysis has been used by necessity but in general the development and refinement of the recovery algorithm is based upon a logical scientific approach.

There remains further work to be done on the algorithm, as freely acknowledged by the Avocet metallurgical team.

CSA are of the opinion that the diagnostic leach data and the mineralogy findings are significant, as it indicates that the refractory nature of some tailing samples correspond more or less to equivalent proportions of mineral locking (arsenopyrite, pyrite and silica combined) to that of preg-robbing by carbonaceous material, sometimes referred to as "double-refractory ore".

11.7.10 Residual Risk Pertaining to the Current Recovery Algorithm

CSA conclude that, whilst some commendable work has been carried out on this issue, some risk remains on gold recovery. The basis of this conclusion is as follows:

- The 5000 pulps used for PRI estimation and recovery utilise a one hour "quick leach" methodology, utilizing elevated cyanide levels and an oxidant to accelerate leach kinetics. This may underestimate or overestimate gold leached in comparison to a standard bottle roll test or plant performance. This risk has been mitigated by further investigation and discussion with the Avocet Metallurgical team, who have confirmed that the data from the 5000 pulp dataset was used only for developing initial relationships, with all ongoing algorithm work being conducted on data from metallurgical testwork, conducted at more typical plant grind sizes.
- Plant Trials have only been conducted with diesel and not kerosene. Whilst kerosene has proven to be a more effective blanketing agent than diesel in laboratory testwork, its effect under plant conditions has yet to be tested and calibrated within the algorithm.
- Whilst a plant trial has been conducted on transitional ore, albeit with some relatively high PRI values, a trial is yet to be done on fresh ore.

- Some diagnostic leach testwork and mineralogical testwork suggest that gold locking in sulphide and silica fractions of tailing samples is significant to the extent of being equivalent to that of preg-robbing. It is recognized via by further investigation and discussion with the Avocet Metallurgical team that the results are variable, and that this behaviour has occurred in selected difficult ore samples, rather than representative ore body samples. This will require further clarification and potentially refinement of the existing recovery algorithm.

- The long-term effect of organic blanketing on circuit carbon activity has not been quantified, nor the likely requirement for additional elution and regeneration utilization or the possibility of increased solution loss to tail. This can be addressed by modelling and by a long-term trial of higher PRI ore.

11.8 Processing Operating Costs

The history of Inata processing operating costs is shown in Table 50 below.

Table 50: Inata Annual Processing Plant Operating Costs Project-To-Date

Processing Plant Key Performance Indicators					
	2009	2010	2011	2012	May 2013 YTD
Mill Throughput (Mtpa)	0.05	1.76	2.47	2.56	1.02
Operating cost (US$/t)	Not avail.	$16.74	$16.75	$16.39	$17.52

The data is indicative of impressive cost control in the current market.

The most recent monthly cost breakdown for May 2013 is reproduced below in Figure 63.

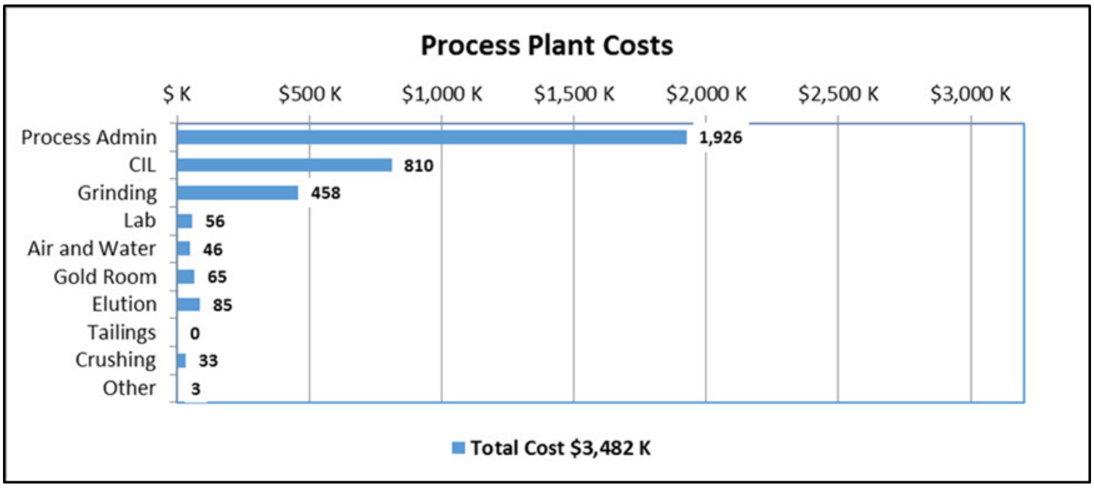


Figure 63: May 2013 Inata Processing Plant Operating Costs

The unit processing operating costs for the Mine Plan optimisation, expressed in US dollars per tonne processed, are as follows:

- Oxide ore: US$23.50/t

- Transitional ore: US$31.97/t
- Fresh Ore: US$38.13/t

The Avocet rationale for the cost estimates is shown below in Table 51.

Table 51: Avocet Rationale for the Cost Estimates

Avocet Mining PLC
Inata Gold Mine - 2013 LOMP 2
Open Pit Optimisation Parameters, April 2013

"Processing" Costs (CIL - Oxide)	**per DRY tonne**		**Source of Information**
Processing	US$/t	11.24	Average 2012 Avocet processing costs as oxide was predominantly processed.
Processing Power	US$/t	5.15	Average 2012 Avocet processing costs as oxide was predominantly processed.
General and Administration	US$/t	6.67	$18M of G&A/yr
Re-handling	US$/t	0.44	
Ore margin (Haulage costs)	US$/t		See Pit table
Replacement Capital Costs	US$/t		
Total Processing Cost (US$/t)	***US$/t proc.***	*23.50*	
"Processing" Costs (CIL - Transitional	per DRY tonne		
Processing	**US$/t**	11.44	
Processing Power		9.46	Oxide power costs increased by 15% and adjusted for lower Transition throughputs.
General and Administration	**US$/t**	10.63	$17M of G&A/yr
Re-handling	**US$/t**	0.44	
Ore margin (Haulage costs)	US$/t		See Pit table
Replacement Capital Costs	**US$/t**		
Total Processing Cost (US$/t)	***US$/t proc.***	*31.97*	
"Processing" Costs (CIL - Fresh)	per DRY tonne		
Processing	**US$/t**	11.74	
Processing Power		12.62	Oxide power costs increased by 15% and adjusted for lower Fresh throughputs.
General and Administration	**US$/t**	13.33	$16M of G&A/yr
Re-handling	**US$/t**	0.44	
Ore margin (Haulage costs)	US$/t		See Pit table
Replacement Capital Costs	**US$/t**		
Total Processing Cost (US$/t)	***US$/t proc.***	*38.13*	

CSA Comments:

The key reason for the large increase in unit operating costs is the decrease in mill throughput as the operation treats the transitional as fresh ore types.

CSA comment that the oxide cost seems high, given that it has historically been in the range $16.74 - $17.52/t for the last three years. CSA have been informed that the G&A cost are included in the current estimates, thus contributing significantly to the higher estimates.

CSA calculate that the cost projections have a variable cost component of approximately 75-80%, which is typical of industry Processing Costs.

CSA note that an allowance has been made for power unit cost increases with changing ore types.

Other variable costs seem to be captured in the categories of 'Processing' and 'General and Administration' categories. It would be advantageous to view a break-down of costs by cost element rather than area. This would allow a view to be made on important cost items, be they fixed or variable, such as labour and reagents.

11.8.1 Residual Risks for Operating Costs

- Unit operating costs share a common (not additive) risk directly linked to plant throughput, as discussed in detail in Section 11.8.

- The operating costs provided for review were not detailed enough to interpret for such items as plant reagents and other variable costs, and whether allowance has been made for potential unit cost changes when treating Transitional and Primary ores.

- It is unclear whether the allowance for unit power increase is based upon current plant conditions or for an optimised circuit. This again is linked to the power consumption discussion in section 11.6.1.

11.9 Overall Processing Recommendations

CSA recommend the following:

- Ongoing revision of the existing recovery algorithm, with particular emphasis on a better understanding of gold lockup in the sulphide and silica fractions of the tailing, and with a focus of capturing this information for representative ore samples rather than specific troublesome samples.

- In the short term, increase the carbon concentration in CIL 1 to 30-40ppm and increase elution frequency, whilst monitoring recovery, PRI and other variables. This higher concentration in the first CIL tank, combined with advancing the carbon at the maximum rate that the elution and regeneration circuits can cope with, has proved beneficial at other CIL operations with preg-robbing ore.

- Conduct a software modelling campaign (e.g. SIMCIL) to determine the optimum carbon concentration and carbon movement within the circuit, and also to evaluate the capacity requirement for the elution and regeneration circuits.

- The Avocet metallurgical team has plans to install a kerosene contact tank prior to the CIL circuit and a second tank containing activated carbon to scavenge excess kerosene following initial ore contact. CSA consider this a sound practice.

- CSA further recommend that the carbon used for this scavenging process be coconut chip carbon, such that it is visually distinguishable from the circuit Norit carbon. Plant metallurgist will need to calculate an acid washing and regeneration regime for the scavenger carbon. It should also be checked for gold content, as residual cyanide in process water may cause some limited leaching. If so, a periodic elution will be required for gold recovery.

- Dispatch monthly composite samples (or as required) of scavenger, loaded, acid-washed, eluted, and regenerated CIL carbon to a recognised institution with strong experience in this field (e.g. Curtin University Gold Technology Group) for detailed activity analysis.

- It is understood that an engineering evaluation of the SAG mill, and in particular, the drive assembly, is imminent. The recommendations of this evaluation should be given diligent consideration, due to the age of the Mill, its inefficient power draw, the difficulty in sourcing spare components, and the inherent difficulty in drive alignment.

- The re-alignment of the SAG mill drive assembly should be given priority, as the OMC comminution report (August 2012) found that although the existing SAG mill should be capable of drawing 1,130 kW at the pinion, operating data indicates that only 880 kW of pinion power is being used in the SAG mill. Site maintenance personnel commented that the current alignment was poor; thus an effective realignment may provide an immediate throughput improvement.

- The OMC report (August 2012) found that all three mills were drawing significantly less power at the pinion than theoretically capable, with the balls mills offering even more incentive for improvement than the SAG mill. This matter should be investigated as a priority.

- The OMC report (August 2012) only modelled plant throughput for fresh ore. The comminution testwork results are available to model both transitional and oxide ore, and CSA recommend that this be done immediately. This will provide an improved estimate for transitional throughput than the current assumption based upon ore density. It will also provide a useful calibration for the OMC-predicted mill throughput compared to actual plant performance, as it is not uncommon to find conservatism built into comminution circuit design.

- Consideration should be given to the installation of a second centrifugal concentrator, with the object of recovering additional gravity gold, and allowing one unit to be taken off-line for maintenance without eliminating gravity recovery during the maintenance period.

- Consult with site maintenance personnel and review the critical spares list for the SAG Mill and the Primary Crusher, and if gaps are found, purchase critical spares to the extent that project funding allows. If budget constraints do not allow the purchase of all critical spares, allow site maintenance personnel to prioritise the list, such that the most vulnerable spares are obtained initially.

- Include a table in the monthly reports that breaks down the costs by commodity rather than process section. This would give a much better indication of fixed and variable costs, and allow key individual cost elements to be tracked.

- Check existing unit operating cost estimates to ensure that items such as reagent consumptions, kerosene, and other elements that may vary with Transitional and Fresh ore have been adequately allowed for.

12 Marketing and Contracts

12.1 Contracts

The Inata operation has a range of supply and service agreements the 20 Major Service agreements are listed in Table 52.

Table 52: Major Supply Contracts 2013

No	Name of Supplier	Starting Date	Ending Date	Purpose	Type
1	A.E.L	12/4/09	10/1/13	Explosives supply	local
2	ADAM'S	6/1/10	-	PPE for the mine	local
3	AIR LIQUIDE	2/2/10	2/1/14	Consignment Welding Acc.	local
4	AIRTEL	5/1/12	4/30/14	E1 link	local
5	AMS	9/26/11	7/4/13	Hiring of mining equipment	local
6	ASTRIUM	10/26/11	10/26/13	Satellite communication services	foreign
7	BURKINA EQUIPEMENTS	9/27/10	9/26/13	Parts supply Agreement	local
8	C.I.S	6/14/12	6/13/15	CATERING	local
9	CARMEUSE	1/29/09	1/29/14	Lime stock consignment	foreign
10	HYSPEC AFRICA	5/1/12	4/30/14	Supply and repairs Hyd. Hoses & fittings	local
11	JINAN	1/1/13	4/2/14	Grinding balls supply 2013	foreign
12	MAJOR	4/1/13	6/30/13	Drill Holes Contract	local
13	PPI MINING	8/1/12	7/1/13	Geotech drilling	local
14	RAND REFINERY LTD	3/25/10	-	Gold refinery	foreign
15	RPFL	6/14/11	6/14/13	Catering at Sona Camp	local
16	SAMSUNG	1/1/13	12/31/13	Sodium cyanide Supply 2013	foreign
17	SDV BURKINA	4/21/10	-	Transport - Transit - Logistic Agreement	local
18	TOTAL BURKINA	12/4/09	12/3/16	Supply of fuels and oils	local
19	TPS SECURITY GUARDS	7/31/12	8/1/13	Site, office and houses security	local
20	WEST AFRICA TYRE SERVICES	1/1/11	12/1/14	Tyres stock consignment	foreign

13 Economics

The following information was provided to CSA by Avocet staff.

13.1 Historical Operating Costs

The operating costs for the Inata mine to June 2011 were $1.51 per tonne mined and $26.56 per tonne milled for processing and administration (Table 53). In 2011 Roscoe Postle Associates (RPA) considered that the June YTD costs had been negatively impacted by ongoing work in the plant aimed at increasing the through put. Other costs attributed to the start-up and teething had been incurred in the plant and administration areas, the unit costs were also higher due to the lower than forecast tonnage milled in the first six months of 2011.

Table 53: Historic Operating Costs

	Unit	LOM Plan	June 2011 YTD
Mining	US$/t	1.51	1.51
Processing	US$/t	14.59	15.97
Administration	US$/t	8.25	10.29

13.2 Gold Production

Audited gold production in the year ended 31 December 2012 was 135,189 ounces at an average realised gold price of US$1,491 per ounce and a cash production cost including royalties of US$1,000 per ounce. Un-audited gold production in the quarter ended 31 March 2013 was 30,481 ounces at an average realised gold price of US$1,422 per ounce and a cash production cost of US$1,169 per ounce.

Summary operating costs for the year ended 31 December 2012 and for the 5 months ended 31st May 2013 are set out in Table 54 and Table 55.

Table 54: Operating Costs for 2012

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Administration ($'000)	1,349	1,576	1,760	1,502	1,901	1,386	1,806	1,868	1,847	2,188	2,347	2,232	21,763
Royalties ($'000)	1,223	1,215	1,901	1,092	1,120	1,970	1,047	1,322	1,508	638	1,222	1,687	15,946
Mining ($'000)	4,027	4,381	4,299	4,586	4,421	4,218	4,617	3,173	4,565	5,724	5,383	6,265	55,659
Process ($'000)	3,110	3,963	3,754	3,559	3,927	3,428	3,281	2,983	2,955	3,015	3,034	4,763	41,771
Grand Total ($'000)	**9,710**	**11,135**	**11,714**	**10,738**	**11,369**	**11,002**	**10,751**	**9,346**	**10,876**	**11,564**	**11,987**	**14,947**	**135,139**
Ounces poured (oz)	**13,215**	**12,968**	**12,113**	**11,305**	**11,023**	**10,588**	**10,614**	**11,305**	**11,148**	**11,499**	**10,937**	**8,473**	**135,189**
Administration ($/oz)	102	122	145	133	172	131	170	165	166	190	215	263	161
Royalties ($/oz)	93	94	157	97	102	186	99	117	135	55	112	199	118
Mining ($/oz)	305	338	355	406	401	398	435	281	409	498	492	739	412
Process ($/oz)	235	306	310	315	356	324	309	264	265	262	277	562	309
Grand Total ($/oz)	**735**	**859**	**967**	**950**	**1,031**	**1,039**	**1,013**	**827**	**976**	**1,006**	**1,096**	**1,764**	**1,000**

Table 55: Operating Costs YTD for 2013

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Total
Administration ($'000)	1,739	1,559	1,685	1,702	1,739	2,420	1,947	12,791
Royalties ($'000)	846	1,095	1,230	1,187	947	889	1,036	7,230
Mining ($'000)	6,046	5,220	5,229	5,743	6,401	6,049	5,133	39,821
Process ($'000)	3,980	3,185	3,805	3,416	3,483	4,707	3,729	26,305
Grand Total ($'000)	**12,611**	**11,060**	**11,949**	**12,047**	**12,570**	**14,066**	**11,846**	**86,147**
Ounces poured	**13,006**	**7,355**	**10,120**	**9,208**	**10,617**	**11,420**	**11,036**	**72,762**
Administration ($/oz)	134	212	166	185	164	212	176	176
Royalties ($/oz)	65	149	122	129	89	78	94	99
Mining ($/oz)	465	710	517	624	603	530	465	547
Process ($/oz)	306	433	376	371	328	412	338	362
Grand Total ($/oz)	**970**	**1,504**	**1,181**	**1,308**	**1,184**	**1,232**	**1,073**	**1,184**

13.3 Royalty

Avocet Mining PLC (Avocet) through its subsidiary Société des Mines de Bélahouro (SMB) is under obligation to pay royalties based on its sales of gold and silver. SMB has two royalty commitments, one to the Government of Burkina Faso and the other to Royal Gold, formally the International Royalty Corporation (IRC) of Denver, Colorado in the United States of America.

The royalty payable to the Government of Burkina Faso is levied on the actual proceeds of the gold sales and is a statutory obligation for gold production companies mining in Burkina Faso. The royalty is calculated by reference to the actual proceeds received on the sale of the refined gold and is levied at a variable rate dependent upon the gold AM fix price on the trade date that the refined ounces are sold. If the gold AM fix price is greater than $1,300 per ounce the royalty percentage is 5%, if less than $1,000 per ounce the royalty percentage is 3% and between $1,000 and $1,300 the royalty percentage is 4%. Throughout 2012 and 2013 the rate payable has ranged between 3% and 5%. The royalty payment to the Government of Burkina Faso is due and payable 60 days after the shipment date of the gold doré.

The royalty payable to Royal Gold is calculated by reference to the value of the refined gold and silver and is levied at the rate of 2.5% of the gross sales proceeds calculated based on the gold AM fix and the average daily silver fix on the trade date that the refined ounces are sold. The royalty payment to Royal Gold is due and payable by the 15th day following the end of each quarter.

13.4 Hedge Arrangements

Following the acquisition of Wega Mining ASA in June 2009, Avocet Mining inherited a hedge book of 350,000 ounces of forward gold sales at an average price of US$958 per ounce with Macquarie Bank Limited. This forward book was connected with the US$65M project finance agreement originally entered into by SMB in connection with the construction of Inata. Subsequently, this was increased to 400,000 ounces at an average price of US$970 per ounce as a condition of accessing the remaining US$9.2M debt not yet drawn under the facility. By 30 June 2011, deliveries of gold in accordance with the hedging schedule had reduced this to 299,401 ounces.

On 27 July 2011, the Company announced a restructure of this hedge book. Under the restructure, 20 per cent of the hedge book was eliminated at a cost of approximately US$40 million, and the remaining position of 233,733 ounces previously deliverable at approximately 25,000 ounces per quarter through to June 2014 at a price of US$970 per ounce was replaced by a new profile spread over the seven years, with deliveries of 8,250 ounces per quarter through to June 2018 at a price of US$950 per ounce.

In the year ended 31 December 2012 under the forward contract or hedge arrangement Avocet delivered 33,000 ounces of gold into the hedge at a price of US$950.00 per ounce. At 31 December 2012 there remained 181,500 ounces of gold outstanding on the hedge to be delivered quarterly in equal amounts of 8,250 ounces up to 29th June 2018.

In an agreement dated 26th March 2013 between Avocet and MBL, the profile of the hedge was amended once again. The main changes that occurred were that 29,020 hedged gold ounces were bought back for a consideration of US$20 million, the hedge price was reduced to US$937.50 per ounce and the delivery of the remaining hedge gold ounces was accelerated, such that the hedge position was reduced to approximately 100,000 ounces by the end of 2013 and eliminated by the end of 2016. In the year ended 31 December 2013 under the hedge arrangement Avocet is required to deliver a total of 52,480 ounces into the hedge, 8,250 ounces under the previous hedge arrangements at a price of US$950.00/oz and the balance of 44,230 ounces under the new hedge arrangements at a price of US$937.50 per ounce (Table 56).

Table 56: Gold Hedge Arrangements

Delivery Date	Previous Hedge $950/oz	New Hedge $937.50/oz	Totals	
30/03/2012	8,250			
30/06/2012	8,250			
30/09/2012	8,250			
30/12/2012	8,250		**33,000**	**2012 total**
30/03/2013	8,250			
30/06/2013	8,250	8,250		
31/07/2013	-	6,000		
31/08/2013	-	6,000		
30/09/2013	8,250	6,000		
31/10/2013	-	6,000		
30/11/2013	-	6,000		
30/12/2013	8,250	5,980	**52,480**	**2013 total (inc Q1)**
30/03/2014	8,250	8,990		
30/06/2014	8,250	8,990		
30/09/2014	8,250	8,990		
30/12/2014	8,250	8,990	**35,960**	**2014 total**
30/03/2015	8,250	8,440		
30/06/2015	8,250	8,440		
30/09/2015	8,250	8,440		
30/12/2015	8,250	8,440	**33,760**	**2015 total**
30/03/2016	8,250	7,570		
30/06/2016	8,250	7,570		
30/09/2016	8,250	7,570		
30/12/2016	8,250	7,570	**30,280**	**2016 total**
30/03/2017	8,250	-		
30/06/2017	8,250	-		
30/09/2017	8,250	-		
30/12/2017	8,250	-	**-**	**2017 total**
30/03/2018	8,250	-		
29/06/2018	8,250	-	**-**	**2018 total**
Total	214,500	144,230		

13.5 Capital Expenditure

Capital Expenditure on property, plant and equipment in Burkina Faso for the year ended 31 December 2012 totalled US$30.9 million. Significant investments in the year included the purchase of mining equipment and rebuilds (US$14.7 million), tailings storage facility extension works (US$8.1 million), plant capex (US$6.5 million), earthworks and other infrastructure (US$1.6 million).

The original Budgeted Capital Expenditure for 2013 the year ended 31 December 2013 totalled US$21.1 million, however following a capex reduction review mid-way through the year, this was subsequently revised down to US$17.1 million, after including an additional US$3.4m in relation to the carbon blinding plant enhancements.

Table 57: Sustaining Capital Budget - 2013

2013 Capex (US$'000)	***Original Budget***	***Revised Forecast***	***Saving***
Plant blinding circuit	-	3,404	(3,404)
Sustaining capex	4,960	3,664	1,296
HD rebuilds	8,249	7,118	1,131
Tailings dam 2	7,901	2,997	4,904
Total Budget 2013 $M	**21,110**	**17,183**	**3,927**

14 Souma Gold Project

14.1 Location and Tenure

The Souma trend forms a part of the Bélahouro district in Burkina Faso, located approximately 20 kilometres east-northeast of the Company's Inata Gold Mine. The location of Souma relative to Inata, and the distribution of the individual prospects are identified in Figure 64.

Avocet owns 100% of the Souma property through its wholly-owned subsidiary, Goldbelt. The general terms regarding mineral tenure and ownership of the Bélahouro district are detailed in section 3.2.

The 1,660 square kilometres of the Bélahouro tenement portfolio, which includes the Souma property, is subject to the royalties and permitting parameters detailed in section 3.1.1 However, the current EIS strictly covers the Inata project and not Souma.

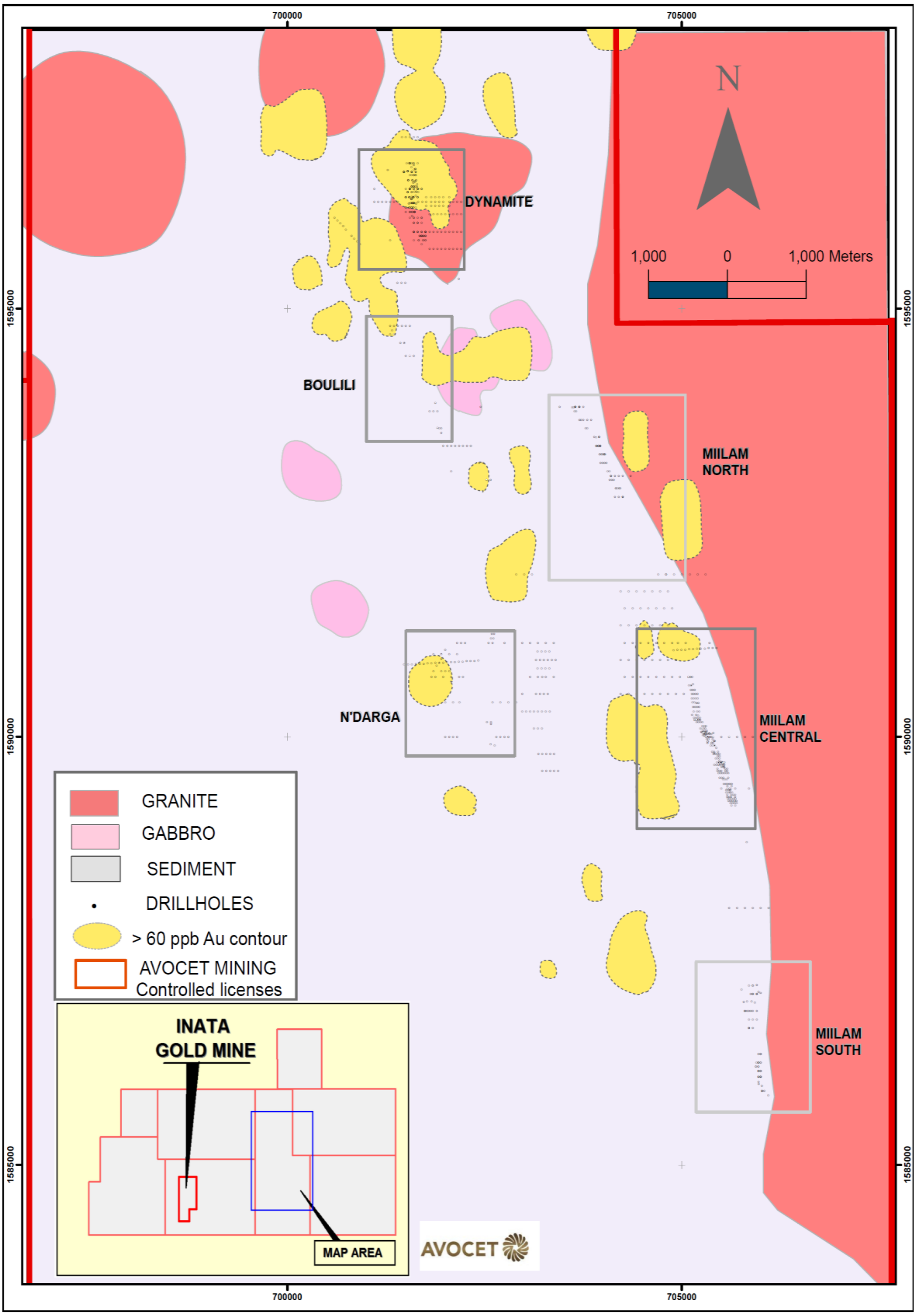


Figure 64: Location of Souma Prospects

14.2 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Souma project is located about 20kms northeast from the Inata Gold Mine, the accessibility; climate, local resources, infrastructure and physiography for which are detailed in section 3.1.2.

Should the Souma Project become a gold producing operation, material from this deposit will either be trucked to Inata for milling and processing or a new onsite CIL or heapleach will be developed on site. To date, no substantive haul roads have been developed between the Inata and Souma project.

14.3 History

In addition to the history of the Bélahouro region defined in Section 0 . Artisanal mining in area was historically extensive however; local workings are now maintained at a more controlled level. There are small numbers of gold diggers at Dynamite, Miilam south, and N'Darga prospects.

There was a gold rush in 2008-2009 with thousands of people mining the Miilam Central high grade quartz vein. A bag of quartz ore taken from artisanal miner was split into 36 samples and assayed. This resulted in an average grade of 15.63 g/t with a maximum of 23.9.g/t and minimum of 4.74 g/t recorded. The site is now monitored to control the amount of artisanal mining at Souma.

15 Souma Geological Setting and Mineralisation

15.1 Regional Geology

The Souma Gold Project is situated within the same regional geologic setting as the Inata Gold Mine (refer section 3.2).

15.2 Local Geology

More locally, Souma is hosted by north-south to northwest-southeast striking shear zones within the turbidite sequence, which is situated on the margin of the Bélahouro-Sona Basin and the Feto Kole Volcanic province (Figure 65).

The Miilam north, central, and south prospects of the Souma trend are shear parallel, massive quartz veins, which dip 60^0–70^0 towards the west. These veins can occur up to 20m in width over a strike length of about nine kilometres. Individually, Miilam north, central, and south are comprised of mineralised segments of 1,300m long by an average of 6m wide, 1,600m long by an average of 12m wide, and 1,200m long by an average of 10m wide respectively.

The Boulili prospect comprises a five kilometre strike length of discontinuous quartz veins that are focused along a sheared contact zone. These veins become thicker and more continuous towards the north of this prospect.

The Dynamite prospect comprises to two sub-parallel, steeply west-dipping structures; with a strike length of at least 600m. The mineralisation is hosted within sheared and altered gabbro that is associated with minor quartz veining. The majority of higher grade intercepts were derived from surficial weathered zones, indicating the possibility of some supergene enrichment above fresh rock. On average, this mineralised weathered zone extends to about 45m below surface.

N'darga prospect comprises one and half kilometre strike length of two discontinuous mineralised segments each with a strike length of 500m in a northwest – southeast trend.

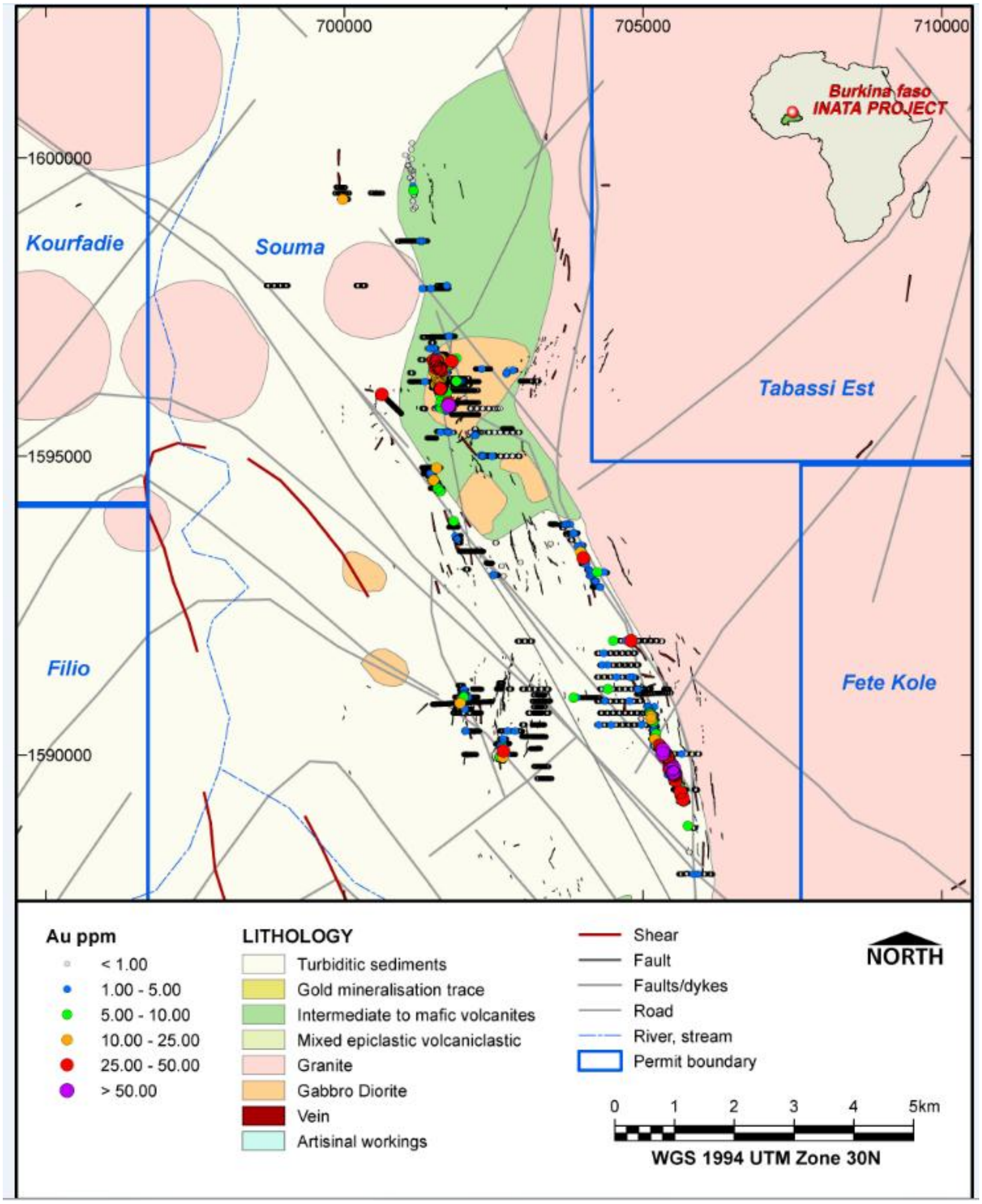


Figure 65: Local Souma Intercepts

15.3 Mineralisation

Recent drilling campaigns have identified the Souma trend to be composed five independent prospects: Dynamite, Miilam North, Miilam Central, Miilam South, and Boulili.

At Dynamite, mineralisation is hosted within the sheared and altered gabbro and is associated with minor quartz veining. The distribution of fine grained phases of the gabbro appear to be have some control on mineralisation and the gold is often located close to lithological contacts between fine and coarse grained units. Mineralisation is generally patchy but there are two clear trends striking almost north south and dips steeply to the west and plunge very shallow towards the south.

The Miilam Prospects (North, Central, and South) are proximal to a sheared contact between sediment volcanic sequences in the west and the Bélahouro granite in the east. Gold mineralisation occurs within boudinaged or sheeted quartz veins that are steeply dipping to the west, containing fine disseminated pyrite. High grade gold concentrations occur within quartz veining although host rocks can locally contain medium and low grade concentrations of gold. The quartz veins at Miilam South contain modest amounts of tourmaline.

At Boulili, mineralisation is hosted within boudinaged quartz veins similar to the Miilam prospects. However, the prospect is hosted solely within the sediment/volcanic pile, distal to the sheared lithological contact of the Miilam Prospects. Boulili mineralisation trends sub-parallel to the Miilam Prospects.

N'darga mineralisation is hosted thin quartz veins/stockworks in sheared volcaniclastics and at the contact of intrusive diorite. Mineralisation sits in a northwest – southeast corridor parallel to Miilam Central Prospect.

Further core drilling is required to increase the understanding of the controls of the mineralisation.

15.4 Exploration

No historical independent exploration programmes have been conducted over the Souma Project; geochemical and geophysical results for the area comprise a broader dataset and have been reported in Section 3.3.

15.4.1 Auger Drilling

Encouraging results have been reported from the 2011 – 2012 auger drilling program (Figure 6). Several anomalies have been identified along the Souma trend. These indicate extensions to known mineralisation and the presence of parallel structures. An infill auger program was planned to infill the original 400m drilled fence lines to better define these anomalies. The auger drilling started in November and is conducted by SAHARA Geoservices with three auger rigs (Avocet Exploration Report, May 2013).

Figure 66 below shows some of the features observed in the field that confirm that the anomalies are located over prospective geology.

Figure 66: Souma South Outcropping

The Souma South Prospect is largely covered by a thin blanket of transported material. Limited outcrop indicates a consistent E-W trending fabric over the area. Intrusives are mainly of dioritic nature. The host rocks are volcano sedimentary units with mainly tuffs, associated epiclastic sediments and minor cherts. Evidence of sulphides and gold bearing veins are observed in the artisanal gold working sites.

Recent Auger survey has also highlighted the potential of other areas with Avocets Inata licences. These include N'Darga and Mormosol (Figure 67 and Figure 68).

N'Darga Prospect is located west of the Miilam Central Prospect and has undergone previous exploration programs including 5k factual map, soil and auger drilling, RC drilling. A regional mapping program at the N'Darga prospect was completed in March 2013. The purpose of this factual mapping phase was to refine the auger geochemical anomalies for subsequent RC drilling (Avocet Exploration Report, May 2013).

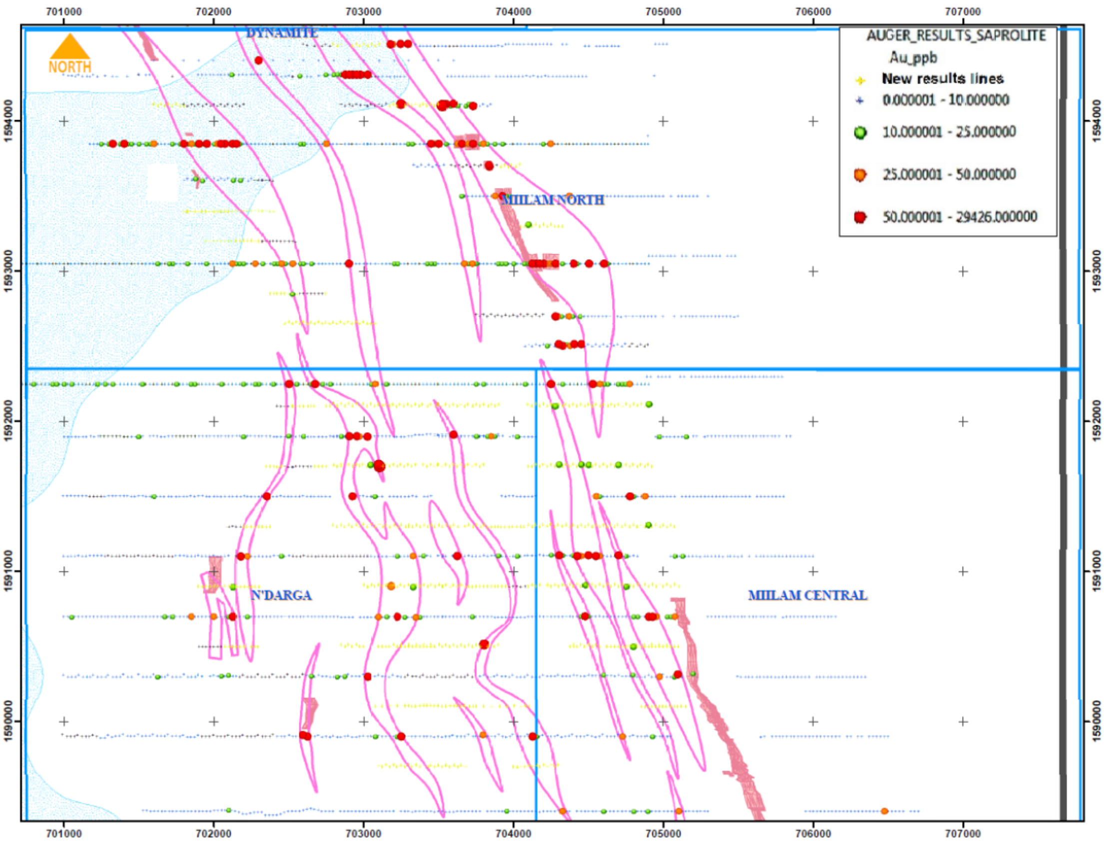


Figure 67: N'Darga Prospect Auger Results with Interpreted Outlines

Aerial photo images were used to delineate the lateritic hill contours and drainage, identify roads, villages and gold washing areas. Previous available data were compiled into a reconnaissance map, used to focus on and quickly interpret anomalous zones and define areas for rock sampling. Rock samples were collected as grab samples (maximum 2m radius), collected with handheld GPS information and given a geological description. A total of 59 rock samples plus 4 QA/QC samples were bagged and sent to the mine lab for analyses. Structural readings were also collected using strike and dip convention. A total of 154 readings were collected (Avocet Exploration Report, May 2013).

The rock results return high grade Au values within the quartz veins and medium to low grade in the host rocks, mainly tuffaceous sediments and fine grained intermediate intrusives host rocks, mainly tuffaceous sediments and fine grained intermediate intrusives.

The Mormosol Prospect is located south of the N'Darga permit. Mormosol has undergone auger drilling program that delineates a NNW anomalous trend. The geology is composed of volcaniclastic sediments with granitoid intrusions outcropping in the centre of the prospect. A quartz veining system similar to N'Darga occurs and mineralisation appears to be related to quartz veins.

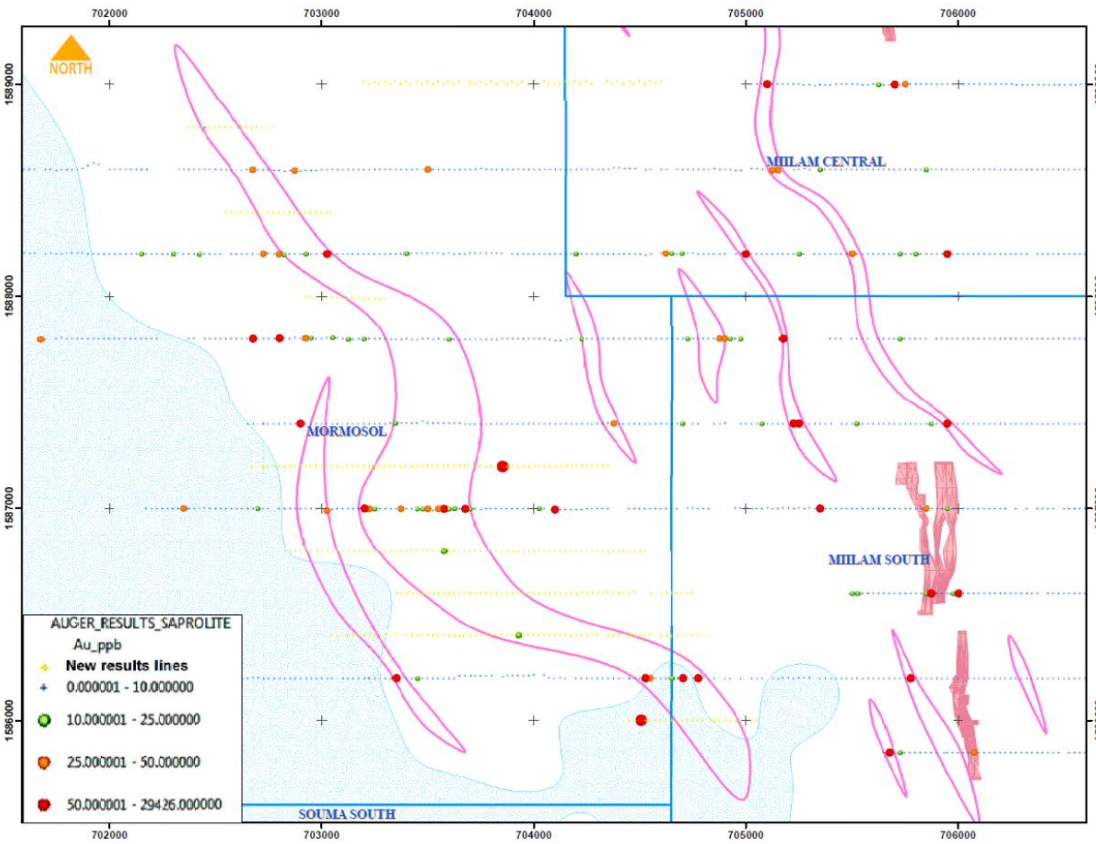


Figure 68: Mormosol Prospect Auger Results

Mormosol prospect field mapping was completed on the 15th of April 2013. An area of 14 km² was traversed and a total of 30 rock samples including 2 QA/QC samples were sent to Inata lab for analysis in April. Thick sandy clay soil cover dominates a large portion of the Mormosol prospect area (approximately 80%). The remaining area is dominantly in situ laterite material with quartz float zones that appears to be the target location for orpaillage activities. However, auger anomalies are not restricted to the laterite and quartz float zones.

Quartz veining has been sampled in the area and results were encouraging. A quartz outcrop similar to those found at Miilam Central and South Prospects was sampled in April 2013 and returned grades up to 7.94g/t Au (Avocet Exploration Report, April 2013).

Figure 69: Mormosol High Grade Quartz Vein Outcrop (7.94g/t Au) Trending N-S.

15.4.2 Aeromagnetic and Radiometric Surveys

Regional aeromagnetic and radiometric surveys have also been conducted over the area, and are detailed by McCuaig (2002).

In 2010 a Versatile Time Domain Electromagnetic (VTEM) survey was conducted by Geotech Airborne Limited SA in the Bélahouro region over Avocet mining permits to locate conductive anomalies and map out resistive rocks. The survey was able to map out geological and structural domains and highlighted controls on mineralisation. Several targets were highlighted to be followed with ground geophysics and drilling.

Drilling during 2012-2013 IP resistivity ground survey using 3D pole dipole techniques was conducted along the Souma trend by an in-house geophysics team. Results are displayed in Figure 70 (Avocet Exploration Report, May 2013).

Results display the continuation of mineralisation along the Souma trend.

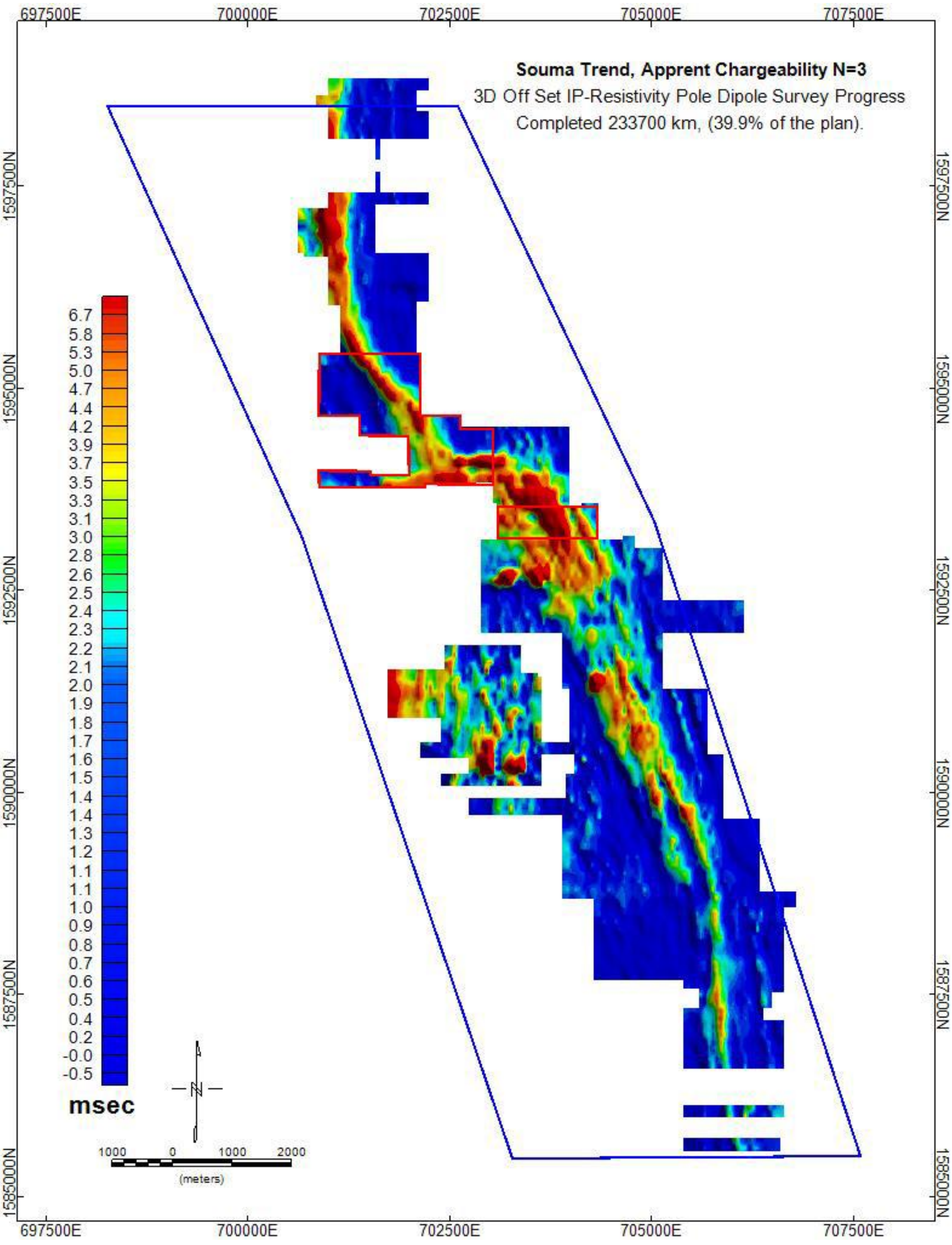


Figure 70: Dipole Survey

15.5 Drilling

Initial drilling included 4,861m RAB drilling completed by Resolute-BHP and used to locate zones of mineralised bedrock. RAB drilling is excluded from the following discussion.

The Souma Gold Project has been drilled out on a 50m by 100m spacing. The spacing has been closed down to 25m by 25m and 25m by 50m in Miilam Central which is the core of the deposit. Drilling comprise both diamond core and reverse circulation drilling. The majority of the drilling

(>90%) has been conducted using reverse circulation (RC) methods with <10% being drilled with diamond core.

The 2013 exploration programme has largely been a continuation of the 2012 programme. The program involved in-filling demarcated continuous mineralised zones (25m by 25m and 50m by 25m) along strike and at depth to raise confidence in the continuity of the mineralisation and also strike extensions to the known deposits. Also in the 2013 drill program is to RC drill test several parallel anomalies defined by Auger drilling to build a pipeline for long term operational security at Souma and also a portfolio of stand-alone operation.

The intended objectives of the 2013 exploration programmes include (but are not limited to):

- Conduct exploration in and around Souma with the aim of upgrading available resources and demarcate extensions to the mineralisation.
- To drill test Auger anomalies delineated from previous campaigns and surface mapped prospective quartz veining.
- To drill test 3D pole dipole conductive targets along the Souma mineralised trend and parallel structures.

16 Sample Preparation, Analysis and Security

16.1 Sample Collection

Two RC drill diameters have been used in the drill program, namely 133mm and 114mm diameter face-sampling bits. These rigs generate approximately 38 and 28 kilograms respectively from 1m samples. Samples are collected through the cyclone at 1m intervals into labelled plastic bags and weighed using graduated balance.

16.2 Sample Preparation and Analyses

The sampling procedures adopted for drilling are consistent with current industry "best practise" standards; and sample recovery is good. Samples from diamond coring within the highly weathered zones are generally of low quality.

RC field duplicate samples were routinely collected (at a rate of 1 in 20 samples) to allow assessment of the field sampling error (or bias) once the laboratory error, determined from analysis of pulp duplicates, has been subtracted. CSA assessed RC field duplicate data and considers that the data can be reproduced acceptably, and no distinct bias is immediately evident.

16.2.1 Field Duplicates

For the drilling program, every 20th sample was replicated. Replicate samples for the RC chips were prepared by re-splitting the coarse-rejects at the drill site and then inserting the replicate sample into the sample stream. No diamond replicate samples were sent to the laboratory. A total of 2,056 field duplicates were submitted to the laboratory for processing. A correlation coefficient of 96% was obtained for the data set, indicating good correlation between original samples and their field duplicates.

CSA recommend that Avocet geologists maintain a process of continual quality assurance at the drilling sites, routinely checking the drill rig sampling equipment for cleanliness and any damage.

17 Mineral Processing and Metallurgical Testing

The following information was sourced from Avocet (2013).

Definitive testwork is underway to facilitate a future feasibility study, but initial testwork indicates that gold mineralisation, in both fresh and oxide, regardless of the degree of oxidation, will yield high recoveries through standard gravity recovery and CIL circuits.

Given that it appears probable that a significant proportion of the Mineral Resource identified will convert to Ore Reserve, either on the basis of transporting the ore to the existing Inata plant, or with the construction of a new standalone plant at Souma, various baseline studies have been commenced which will form part of a feasibility study and the ultimate application for a Mining Licence.

18 Mineral Resource Estimates

Mineral Resource estimates were prepared for Miilam North, Miilam Central, Miilam South, Dynamite and N'Darga.

Avocet was responsible for the interpretation of geology, weathering and mineralisation in 3D space, using Datamin software. The interpretations for mineralisation and weathering were digitised onto Northing sections.

Wireframes were constructed by Avocet using the digitised strings. All historical and current (Avocet) drill holes were used to create the wireframes. All wireframe files comprised an individual wireframe solid.

All wireframes used in the creation of the Mineral Resource estimates are presented in the following sections. Tables are provided which contain the model variables and codes, used as part of the resource model process.

18.1 Estimation Summary

Avocet announced a maiden Mineral Resource for Souma in November 2010.

CSA prepared an updated Mineral Resource estimate for the Souma Gold Project, in January 2013. The Mineral Resource estimate is presented in Table 58 . The increase in Mineral Resources is attributed to the interpretation of strike extension and additional mineralisation domains for Miilam and Dynamite, and the addition of N'Darga to the Mineral Resource inventory. Separate block models were constructed and estimated for the Souma Deposits and results are presented in Table 1. Results are quoted for blocks above a nominated cut-off grade of 0.5g/t Au.

The December Mineral Resource represents a 53% increase in global tonnes and a 38% increase in global contained ounces, since the previous Mineral resource estimate reported in 2010. The increase in Mineral Resources is attributed to the interpretation of strike extension and additional mineralisation domains for Miilam and Dynamite, and the addition of N'Darga to the Mineral Resource inventory. Separate block models were constructed and estimated for the Souma deposits presented in Table 58.

Table 58: Souma Mineral Resource Results

Souma		Gross			Net Attributable to Avocet Mining		
Deposit	Classification	Tonnes	Au Grade (g/t)	Contained Ounces	Tonnes	Au Grade (g/t)	Contained Ounces
Miilam North	Measured	0	0	0	0	0	0
	Indicated	0	0	0	0	0	0
	Meas + Ind	0	0	0	0	0	0
	Inferred	1,340,000	1.02	44,100	1,340,000	1.02	44,100
	Total	1,340,000	1.02	44,100	1,340,000	1.02	44,100
Miilam Central	Measured	0	0	0	0	0	0
	Indicated	1,944,000	2.34	146,100	1,944,000	2.34	146,100
	Meas + Ind	1,944,000	2.34	146,100	1,944,000	2.34	146,100
	Inferred	2,235,000	1.17	83,800	2,235,000	1.17	83,800
	Total	4,180,000	1.71	229,800	4,180,000	1.71	229,800
Miilam South	Measured	0	0	0	0	0	0
	Indicated	0	0	0	0	0	0
	Meas + Ind	0	0	0	0	0	0
	Inferred	4,285,000	1.47	202,200	4,285,000	1.47	202,200
	Total	4,285,000	1.47	202,200	4,285,000	1.47	202,200
Dynamite	Measured	0	0	0	0	0	0
	Indicated	730,000	1.68	39,300	730,000	1.68	39,300
	Meas + Ind	730,000	1.68	39,300	730,000	1.68	39,300
	Inferred	4,076,000	1.53	200,200	4,076,000	1.53	200,200
	Total	4,807,000	1.55	239,600	4,807,000	1.55	239,600
N'Darga	Measured	0	0	0	0	0	0
	Indicated	0	0	0	0	0	0
	Meas + Ind	0	0	0	0	0	0
	Inferred	1,727,000	1.09	60,300	1,727,000	1.09	60,300
	Total	1,727,000	1.09	60,300	1,727,000	1.09	60,300
Total	Measured	0	0	0	0	0	0
	Indicated	2,674,000	2.16	185,400	2,674,000	2.16	185,400
	Meas + Ind	2,674,000	2.16	185,400	2,674,000	2.16	185,400
	Inferred	13,663,000	1.34	590,600	13,663,000	1.34	590,600
	Total	16,339,000	1.48	776,000	16,339,000	1.48	776,000

All exploration drill data as discussed in Section 3.4 was used to estimate the volume block models with gold grades. Grade was estimated into the model using OK and inverse distance weighting IDW interpolation methods. Blocks were estimated on a domain by domain basis, whereby only those samples flagged for a particular domain were available to estimate a block of the same domain.

The three Miilam Deposits were statistically assessed to have a population split for Au at the transitional / fresh rock weathering interface. However, it was only practical to estimate the models with this strategy for the most populated domains. The majority of mineralisation domains had insufficient numbers of samples to adequately estimate grades into the domains when a population split was applied.

A minimum of 8 and maximum of 30 samples were used in any one block estimate. MINZON 201 (Miilam Central) used a maximum of 70 samples per block estimate. If a block was informed by insufficient number of samples within the search ellipse, then the ellipse radii were doubled then trebled until the block was estimated. A maximum of 4 top cut and composited samples per drill hole were used in any one block estimate. Octant based search was not used.

The OK estimation used variogram parameters with a search ellipse of dimensions 50m x 100m x 10m, with the third radius increased to 50m for the more sparsely populated domains. The search ellipsoids were aligned along strike and down dip of the mineralisation domains. Cell Discretisation of 5 x 10 x 12 was used. Kriging efficiencies (KE) and slope of regression were calculated from the block estimates.

The IDW estimate mirrored the OK estimate, using the same sample selection criteria.

18.2 Topography

A topographic DTM was provided by Avocet covering the project area. The surface was created from the surveyed drill hole collars.

18.3 Geological Interpretation

CSA was responsible for the interpretation of geology, alteration, weathering and mineralisation in 3D space, using Datamine software (Figure 71).

The Mineral Resource estimate completed by CSA for the Inata Gold Project was based upon the following data created by CSA:

- Mineralisation wireframe solids based upon a nominal 0.3g/t Au lower cut off.
- Wireframe surfaces representing weathering profiles.
- Validated drill hole database.
- Datamine drill hole files derived from the database.
- Bulk density values per weathering domain.
- Block Models

Five block models were constructed for each of the deposits documented. Wireframe domains and variables are as documented in Table 59. Parent block sizes were based upon approximately half the typical drill spacing. Sub - blocks were used to ensure the block model honoured the mineralisation zone geometries. The block models were not rotated.

The volume block models were validated on screen to ensure blocks were coded correctly according to the input wireframes.

The Mineral Resource has been reported above a lower cut-off of 0.5g/t gold. The Mineral Resource models were also depleted according to open pit mining, using the mine survey as at December 31st 2012.

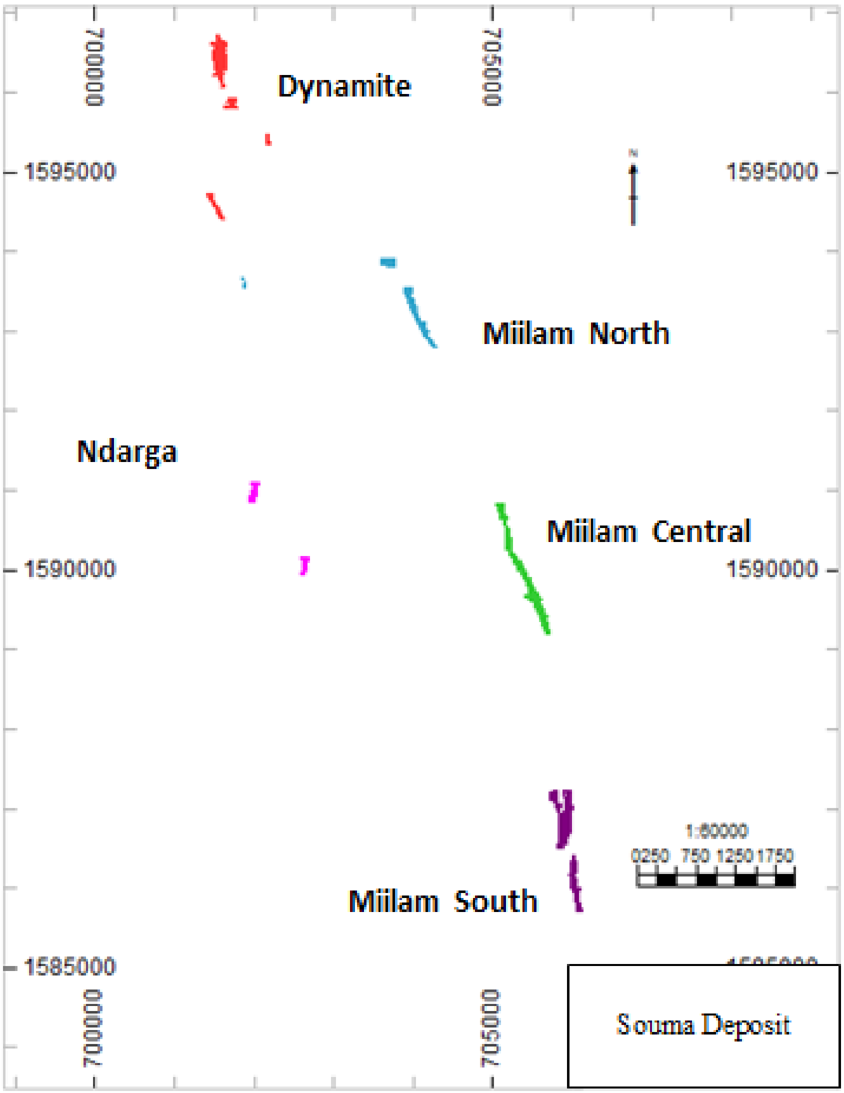


Figure 71: Souma Mineralisation Outlines

18.4 Modeling Techniques

Discussed in Section 4.4.

Table 59: Souma Model Parameters

Deposit	Method	Mineralisation envelopes	g/t gold cut off for Mineral envelopes	Densities	Top cuts	Cell Size	Discretisation	Search	Composites
Miilam North	OK	A total of 7 domains were constructed, striking 337° and dipping 72° W.	0.5	Oxide2.64,Transition 2.71, Fresh 2.80	20	5m (1.25m) X 25m (5m)X 5m (5m)	5 x 10 x 12	50m x100m x 10m	1 M
Miilam South	OK	A total of 9 domains were constructed, striking 350° and dipping 68° W.	0.5	Oxide2.64,Transition 2.71, Fresh 2.80	20	10m (2m) 25m (5m) 5m (1m)	5 x 10 x 12	50m x100m x 10m	1 M
Miilam Central	OK	A total of 11 domains were constructed, striking 337° and dipping 72° W.	0.5	Oxide2.64,Transition 2.71, Fresh 2.80	80	10m (2m) 25m (5m) 5m (1m)	5 x 10 x 12	50m x100m x 10m	1 M
Dynamite	OK	A total of 19 domains were constructed, striking 337° and dipping 72° W.	0.5	Oxide2.64,Transition 2.71, Fresh 2.80	50	10m (2m) 25m (5m) 5m (1m)	5 x 10 x 12	50m x100m x 10m	1 M
N'Darga	OK	A total of 5 domains were constructed, striking 356° and dipping 66° W.	0.5	Oxide2.64,Transition 2.71, Fresh 2.80	15	20m (2m) 10m (1m) 25m (2.5m)	5 x 10 x 12	50m x100m x 10m	1 M

18.5 Bulk Density

18.5.1 Derivation of Densities

Bulk density data has been collected routinely by Avocet staff for the entire 2010 – 2012 diamond drilling program. Bulk density determinations were carried out on non-split core to ensure representative sampling existed for the entire drilling programme. Samples for bulk density determinations were marked up during the logging/sampling phase and 20cm long samples were marked, labelled and then cut by diamond saw.

The sample selection was at a nominal 3 metre down-hole interval to ensure a large number of samples were available for each drill-hole. Selection was based on core quality to ensure a competent sample was available. The bulk density determinations were based on a water immersion technique and this was further enhanced by taking several measurements with the core initially wrapped in thin plastic (gladwrap) to obtain dry weights and then repeated to obtain wet weights. This technique provides a qualitative indication of the porosity/permeability characteristics. Quality control on the scales was maintained using known weights and calibration was carried out routinely to ensure results passed the strict criteria (Table 60).

Table 60: Assigned Bulk Densities, All Deposits

Deposit	Weathering Domain	Bulk Density (t/m^3)
All	Oxide	1.95
	Transition	2.35
	Fresh	2.70

The core used for the bulk density determinations was also logged to record the oxidation state, lithology and core size. A total of 8582 samples were measured from 130 diamond drill holes.

18.5.2 Density Assignments

Bulk density data has been collected routinely by Avocet. Bulk density determinations were carried out on non-split core to ensure representative sampling existed for the entire drilling programme. Samples for bulk density determinations were marked up during the logging/sampling phase and 20cm long samples were marked, labelled and then cut by diamond saw. The sample selection was at a nominal 3 metre down-hole interval to ensure a large number of samples were available for each drill-hole. Selection was based on core quality to ensure a competent sample was available. The bulk density determinations were based on a water immersion technique and this was further enhanced by taking several measurements with the core initially wrapped in thin plastic (gladwrap) to obtain dry weights and then repeated to obtain wet weights. This technique provides a qualitative indication of the porosity/permeability characteristics. Quality control on the scales was maintained using known weights and calibration was carried out routinely to ensure results passed the strict criteria.

The core used for the bulk density determinations was also logged to record the oxidation state, lithology and core size. A total of 1,670 samples were measured from 46 diamond drill holes (or diamond tails).

Histograms were plotted for the three data sets and an appropriate bulk density value was selected from statistical analysis of the data and comparison with the graphs. Avocet advised CSA that the density values were higher at Souma than Inata for the corresponding weathering profiles due to the presence of more quartz veins at Souma within the weathering profiles (I. Krogh, pers. Comm.). Statistics of density by weathering profile are presented in Table 61, and histograms are presented in Table 61. Bulk densities were assigned to each block according to weathering domain.

Table 61: Density Statistics by Weathering Profile

Weathering Profile	Number of Measurements	Minimum	Maximum	Mean Density (t/m^3)
Oxide	52	2.2	2.88	2.64
Transitional	328	2.07	3.17	2.71
Fresh	1153	2.58	3.07	2.80

18.6 Model Validation

Many grade interpolation iterations were run to assess the impact of the various estimation parameters, especially number of samples to use for each block estimation, search radii and cell discretisation.

18.7 Classification

All Mineral Resource estimates were classified according to JORC code (2004) guidelines.

Screen shots of the classification schemes for each deposit are presented in Figure 72.

There were no Measured Mineral Resources classified as such in any of the Souma models. A region of Miilam Central (MINZON 201) has drill hole spacing at 10m x 10m, which in an operating mine would normally be classified as Measured. The Souma Deposits have not been opened up by conventional mining, and as such detailed geological exposures are not available to confirm geological continuity of mineralisation, or to view structural controls first hand. CSA are reticent to classify a resource as Measured until mining has commenced in a new project. As an example, the Minfo and Filio Deposits at the Inata Gold Mine were partially classified as Measured, even though no mining had occurred at these deposits at the time of reporting the Mineral Resources. However the geology of Inata is well documented and mapped, from the open pit mines, resulting in a higher level of confidence in the geological models of Minfo and Filio, even though their models are only based upon drill hole geological logs and sample assay results.

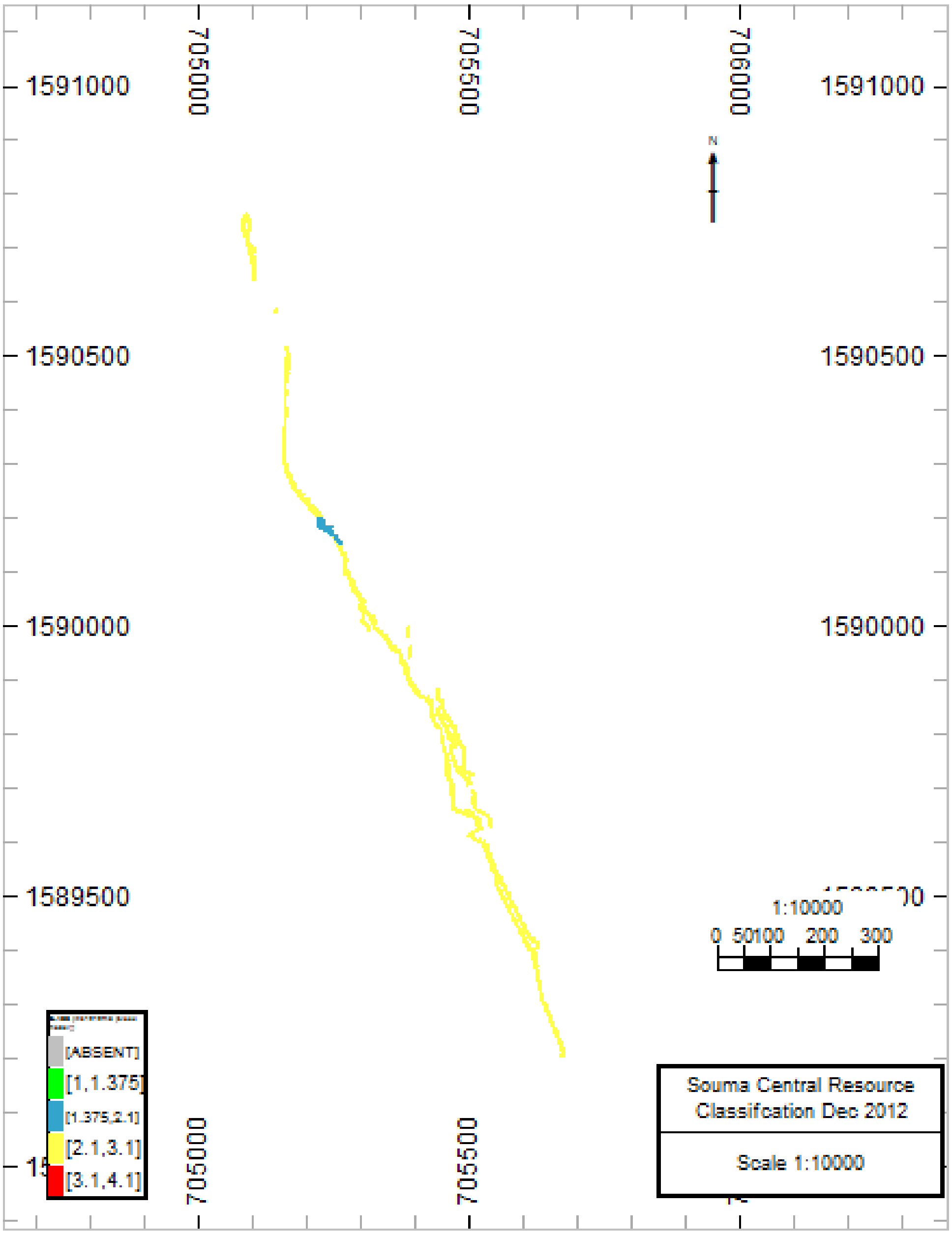


Figure 72: Resource Classification in Souma Central (Blue- Indicated and Yellow Inferred)

18.8 Other Relative Information

No Ore Reserves have been estimated for the Souma Deposit as the project has not yet developed to this stage.

The potential mining methods applicable to Souma have not been investigated as the project has not yet developed to this stage.

The potential project infrastructure has not been investigated for the Souma Deposit as the project has not yet developed to this stage.

No market studies or contracts have been estimated for the Souma Deposit as the project has not yet developed to this stage.

No environmental studies, permitting, or social or community impact analyses have been estimated for the Souma deposit as the project has not yet developed to this stage.

No capital or operating costs have been investigated for the Souma Deposit as the project has not yet developed to this stage.

No economic analysis has been conducted for the Souma Deposit as the project has not yet developed to this stage.

CSA Comments:

Souma's closeness to Inata has the potential to form a strategic operational synergy with existing mine site transport, logistics, and infrastructure. Avocet are also considering the options of onsite treatment.

The project soil geochemical anomaly stretches over 16km, and recent airborne geophysical surveys indicate the geological system could continue for a strike length of about 30kms.

Recent drilling has been successful in the upgrading of Inferred material to Indicated Mineral Resource classifications. A further 500,000 Oz are currently Inferred and future drilling should target these areas to improve the geological confidence, potentially upgrading the classification of reported Mineral Resources, which can be used for advancing the project to a feasibility stage.

The Mineral Resource estimation has been prepared in accordance with the JORC Code (2004 Edition) reporting standards.

Additional drilling is recommended with a focus on both a resource expansion along strike, as well as increased infill drill spacing around known mineralisation.

Continued works are required in advancing the metallurgical and geotechnical understanding of the deposit.

19 Guinea Project Overview

19.1 Property Description and Location

The Tri-K Block also known as the Tri-K Projects are located within the Mandiana Prefecture in the eastern sector of the Republic of Guinea, northwest of the local centre Mandiana and 90km northeast or about 2½ hours' drive from Kankan, the second largest city in Guinea (Figure 73). The Tri-K Projects comprises Koulékoun, Kodiéran and Kodiafaran permits. Koulékoun and Kodiéran are the most advanced projects of the Tri-K Projects.

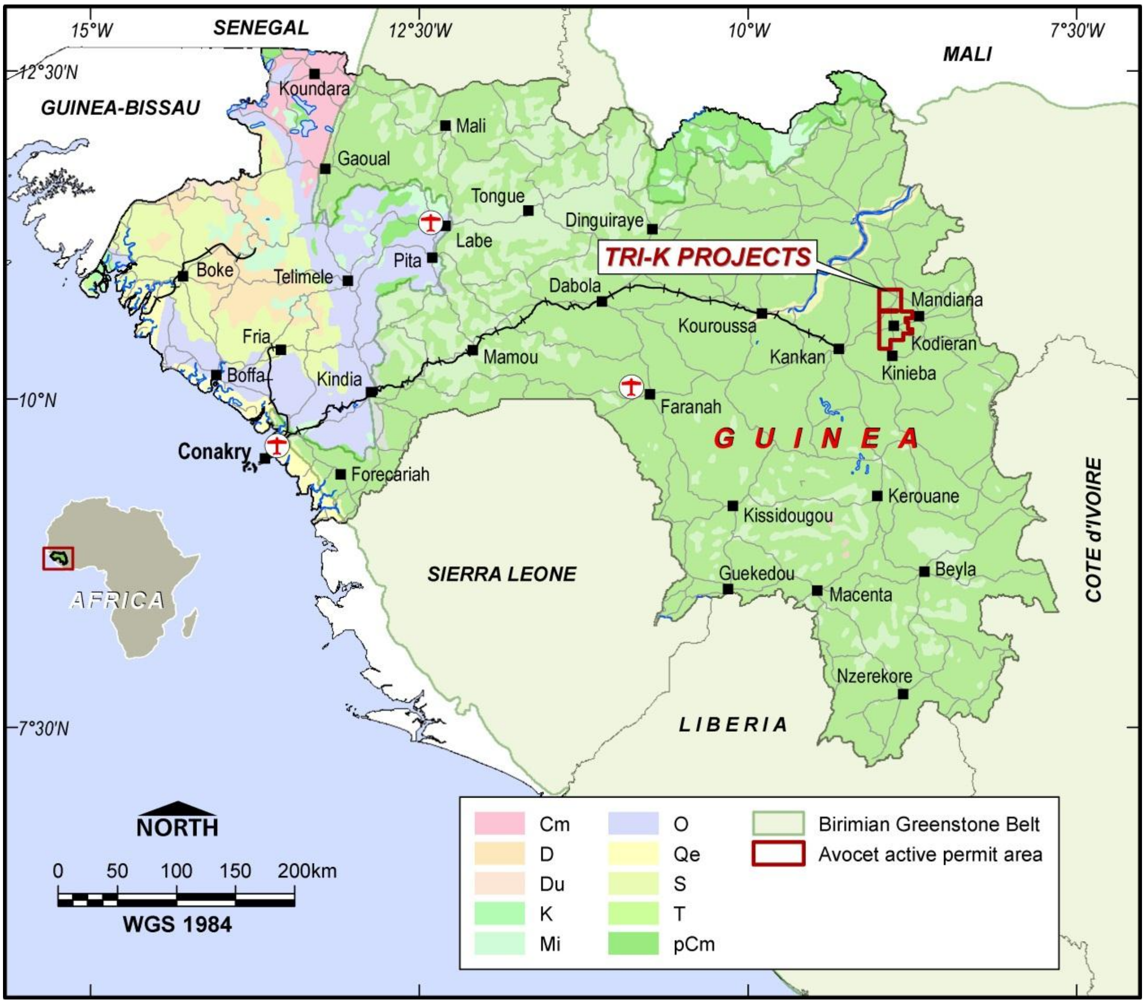


Figure 73: Location of Tri-K Gold Project Area and Avocet's Other Permits in Guinea

19.2 Mineral Tenure, Identification and Ownership

The Koulékoun permit was originally issued to Bureau d'Achat et de Commercialisation Aurifère SARL (BACA) on 15 July 2004 under ArrêtéA2004/7184/MMG/SGG. Wega Mining AS formed a 68:32 joint venture company, Koulékoun Exploration and Mining SA (KEM), with BACA in July 2006. Under the terms of the JV, Wega has earned 68% of KEM by paying BACA US$500,000 and expending US$1,065,000 on exploration. While the intention was for KEM to hold a new permit over Koulékoun, the Government of Guinea issued the permit to Wega Mining Guinée SA (WMG) on 5 September 2006 under Arrêté A2006/4596/MMG/SGG. By decision of the shareholders dated 25 September 2005, it was decided as part of the financial strategy to increase the share capital by issuing 3981 new shares. This new financing was entirely covered by Wega. As a consequence, the repartition of the share capital changed to 90.3% for Wega and 10.7% for BACA. On May 2006, BACA and Wega signed a Head of agreement for the transfer of 340 of BACA shares to Wega, diluting BACA's participation to 5% of the share capital. This was rendered effective by a share transfer agreement of the same day. This Head Agreement of May 2006 set forth terms under which Wega could purchase BACA's remaining 5% for US$200,000 escalating to US$240,000 by May 2010. However, the agreement also gives Wega a right of first refusal to match any offer made for BACA's 5%. In October 2010, Wega purchased BACA's remaining 5% for 300,000 USD and is know 100% of KEM SA (Table 62).

The total area of the two Koulékoun licence is 205km^2. Koulékoun is one of nine permits that comprise the Tri-K Block with a total area of 797km^2 (Figure 74).

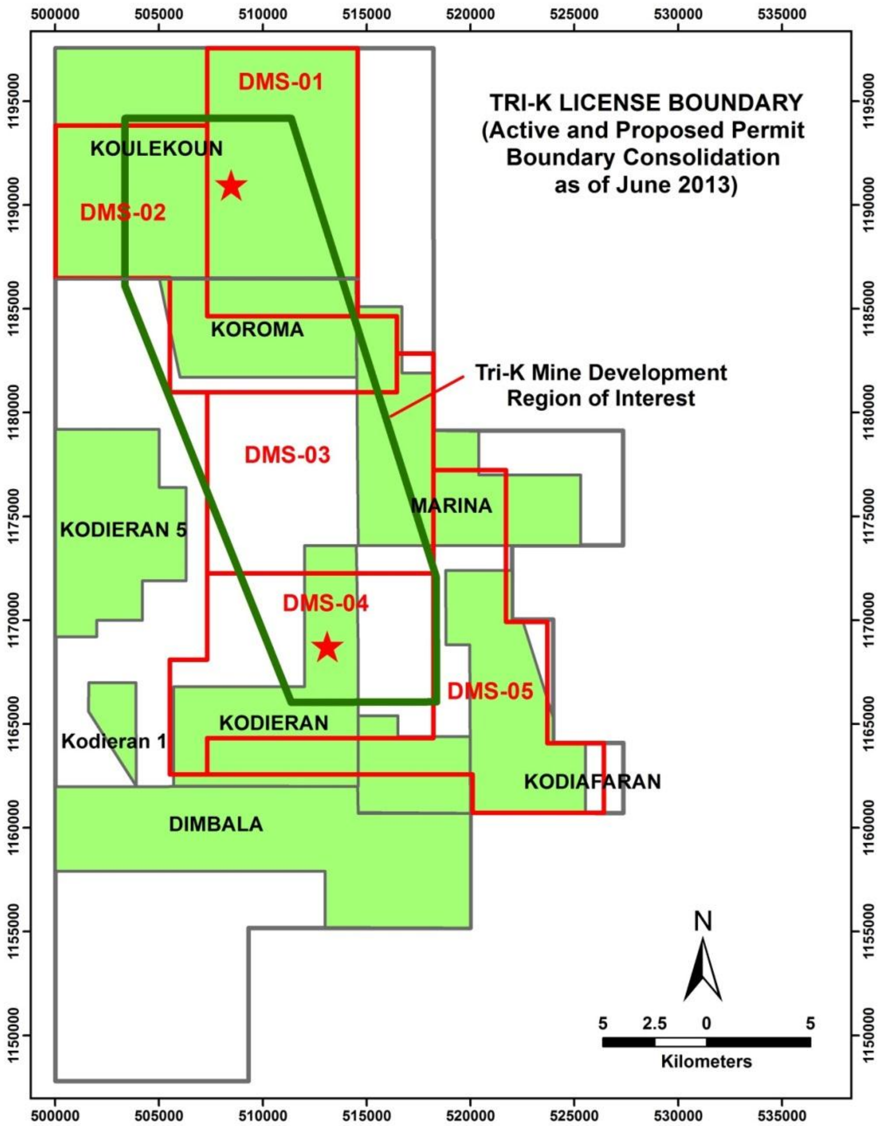


Figure 74: Tri-K area Licence Boundary

Table 62: Guinean Tenement Details

Asset	Licence No.	Registered Holder	Interest (%) Equity	Status	Licence Expiry	Licence Area	Comments
		(or Applicant in respect of Applications)	being earned		Date	(km2)	(Licence status notes)
Balandougou	A2013/794	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	71	permit will not be renewed once expired
Koroma (Koulékoun 1)	A2013/795	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	43	permit can be renewed for a further 2 years
Koulékoun	A2010/4506/232	Wega Mining Guinée SA	100%	Exploration	12-Oct-2013	162	In one year Extension period
Kodiéran	A2013/793	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	56	permit can be renewed for a further 2 years
Kodiéran 1	A2013/796	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	17	permit can be renewed for a further 2 years
Kodiéran 5	A2013/796	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	52	permit can be renewed for a further 2 years
Kodiafaran	A2013/798	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	46	permit can be renewed for a further 2 years
Kodiafaran 1	A2013/796	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	39	permit can be renewed for a further 2 years
Marina	A2013/796	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	60	permit can be renewed for a further 2 years
Dimbala	A2013/797	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	92	permit can be renewed for a further 2 years
Kankan	A2013/799	Wega Mining Guinée SA	100%	Exploration	9-Apr-2015	65	permit can be renewed for a further 2 years
Kolenda	2009/1411	Wega Mining Guinée SA	100%			94	End-application for a year prorogation introduced

19.3 Royalties and Permits

Avocet is committed to pay land taxes of amounting to US$10/km^2/year for the first term, US$15/km^2/year for the second term and US$20/km^2/year for the third term. These are paid, in addition to renewal fees, at the time of renewal. There are no set minimum expenditure rates for the permit, but the Government of Guinea does hold companies to the expenditure set forth in work plan that must be submitted every year.

Following completion of a feasibility study, the Government of Guinea has the right to a 15% free-carried interest in the operating joint venture company, with the right to acquire an additional 20% against payment. The government also charges a 5% royalty on gold sales.

The whole of the surface of the Project area is owned by the local village. As part of the Exploration Licence, WMG has preferential use of the surface but will have to pay compensation to the village for crop disturbance and potential property take.

19.4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Tri-K Project is located approximately 90km northeast of Kankan and access is possible via the Kankan-Mandiana road. It is a year round gravel road which is in poor condition after years of no maintenance. The Koulékoun Projects is accessed via the village of Loïla along a 10-km dirt track which is problematic in the wet season whilst the Kodiéran Projects area is 3-km from Kodiéran village. The normal route for personnel travelling to the site is a 5 to 6 hour drive, of approximately 350km, from Avocet's regional office in Bamako, Mali to Kankan, crossing the international border at Kouremale.

The Fié River is located at the eastern extent of the Project Area, flowing north into the Niger River. The Boumaninko River is a small tributary of the Fié River, flowing eastwards, located in the northern half of the Koulékoun permit and the western part of Kodiéran. The Boumaninko River and its tributaries generally lie within a wide, flat valley gently sloping eastwards.

The Tri-K Projects area lies between 430m and 480m above mean sea level. The topography of the area is characterised by moderate elongated ridges lying above the floodplain of the Fié River covered primarily with wooded savannah and areas of slash and burn agriculture.

The Tri-K Projects area is subject to northern hemisphere seasons with hot and humid; monsoonal-type rainy season between July to October with south-westerly winds; dry season (November to June) with north-easterly hot and dry winds off the Sahara. Maximum temperatures in the summer are typically experienced in May with temperatures often exceeding 36°C during the day and minimum temperatures of 15°C in December nights. Annual rainfall is approximately 1,700mm.

The Tri-K Projects area is in a rural, under developed area of Western Africa with no infrastructure. There are no local services available, including no mobile telephone coverage. The project is self-sufficient in regard to water supply, electricity generation, and satellite communications.

Local people graze their animals in the area and undertake slash-and-burn farming practices growing primarily maize, manioc, cotton, corn and small cashew orchards.

A number of areas within the project area have been identified with artisanal workings, locally called "orpaillage". This is one of the main forms of income for the local population. Artisanal miners typically hand mine shafts up to 15m deep with a diameter of 1m to zones below the ferricrete. Recovered ore (clay and quartz fragments) from the saprolite is washed, crushed and then panned or sluiced to recover the gold.

19.5 History

19.5.1 Artisanal Mining

Gold mining has been one of the main activities of the indigenous population of Guinea for over 1,000 years. The gold has been extracted from various hosts – quartz veins, decomposed bedrock, lateritic soils and gravels, supergene deposits in ferruginous laterite and lateritic clays and stream alluvium.

Artisanal mining occurs throughout the year, moving from high to low ground with the change of season. Visible evidence of artisanal workings can be seen at thousands of sites through the Mandiana Prefecture – varying between a few circular pits to areas of several square kilometres.

There are many ancient gold refining sites throughout the area, where crucibles made from clay lined, hollowed out tree-trunk lengths were fired in clay ovens.

The main target of the local miners is now supergene gold nuggets found under the laterite, usually in decomposed bedrock and between 4m and 10m deep. The largest nugget seen in the last two years weighed 1.4kg.

The impression is that all that the visible evidence of artisanal mining activities date from the last two centuries.

No industrial mining has been undertaken within the (Mandiana) concession.

In 1997, the Ashanti-AGEM Alliance estimated 1,000-2,000 people were working in the artisanal mining sector in the Mandiana Project Area.

19.5.2 Exploration History

The following has been taken from the Ashanti Alliance Report on Fieldwork Summary Report, August 1997 and summarises the exploration history of the project area:

- 1937: 1:500,000 reconnaissance geology map by R. Goloubinow of I.G.N
- 1961: A Soviet Mission studied part of the Mandiana Project Area for alluvial potential
- 1981: Geosurvey 5km line space air photo, magnetic and scintillometer survey
- 1986: A Chinese / Guinean Mission studied part of the Fie Valley for its alluvial potential
- 1990: Visit by J. Meillon on behalf of Cyprus Minerals Co. to various workings

- 1994: Cyprus-Amax examined many workings and drilled 7 diamond drill holes at Daoule and Karakani
- 1995: Ashanti, AGEM and Cluff Resources take up 4 permits in the Project Area
- 1996: Guinean – German mission study of economic potential.

BACA, a Guinean company, acquired the exploration licence to Koulékoun in 1998 and entered into a joint venture in August 2006 with Wega Mining. During the period 1998 until 2006, BACA did not conduct any work on the project. Wega initiated exploration in September-October 2006. This is described more fully in Section 19.6.

19.6 Regional Geology

Guinea is part of the West African Craton that comprises a series of volcanic troughs and sedimentary basins of Lower Proterozoic (Birimian) age with granitic terranes accreted on the Archaean Shield. A geological map of West Africa is presented in Figure 76. The proposed evolution for the Birimian orogenic belt comprises:

- Deposition of the Lower Birimian sediments intercalated with minor volcanic rocks,
- Crustal thickening related to thrusting,
- Formation of the Upper Birimian with numerous volcanic troughs, and
- Major transcurrent faulting.

The regional geology of the area hosting the Tri-K Projects is dominated by sedimentary units of the Siguiri Basin which have been subjected to low greenschist facies metamorphism. The Siguiri Basin covers much of the northeast corner of Guinea and extends into southern Mali. This large basin corresponds to a marine platform filled with turbiditic sediments, predominantly sandstones with subordinate black siltstone. The upper part of the sequence comprises dolomitic limestones and acidic volcanics.

Most of the major gold occurrences are considered to be of metamorphic origin with gold remobilised along fractures and fault zones and derived from auriferous source rocks of the older Birimian volcanic and volcano-sedimentary units.

19.7 Local Geology

19.7.1 Balandougou

Balandougou is located approximately 60kms northeast of Koulékoun, at the Guinea / Mali border. Eighty-five 70m deep AC and RC drill holes have been planned north of the Tri-K block project at Balandougou on twelve 160m spaced lines. The program will test a 2.6km long NNW striking zone of interest. The mineralisation is considered to occur in steeply dipping quartz veins in saprolitic fine-grained sediments. Significant intercepts obtained by Anglo Ashanti drilling in this area includes, 6m @ 15.98 g/t gold, 17m @ 17.26 g/t gold in the North and 29m @ 1.53 g/t gold, 11m @ 2.45 g/t gold in the South. The terrain is heavily weathered up to 130m below surface and, in conjunction with expected low strip ratios, should permit favourable mining conditions. A second phase of drilling comprised of 40 AC and RC drill holes will extend mineralisation along strike should the initial phase prove successful.

Avocet will not renew the current licence once it expires in April 2015.

19.7.2 Koulékoun

The Koulékoun Gold Project and surrounding deposits represent a porphyry hosted orogenic disseminated style mineralisation system. This is markedly different to the typical orogenic lode or mesothermal lode style of the Birimian (Figure 75 and Figure 76).

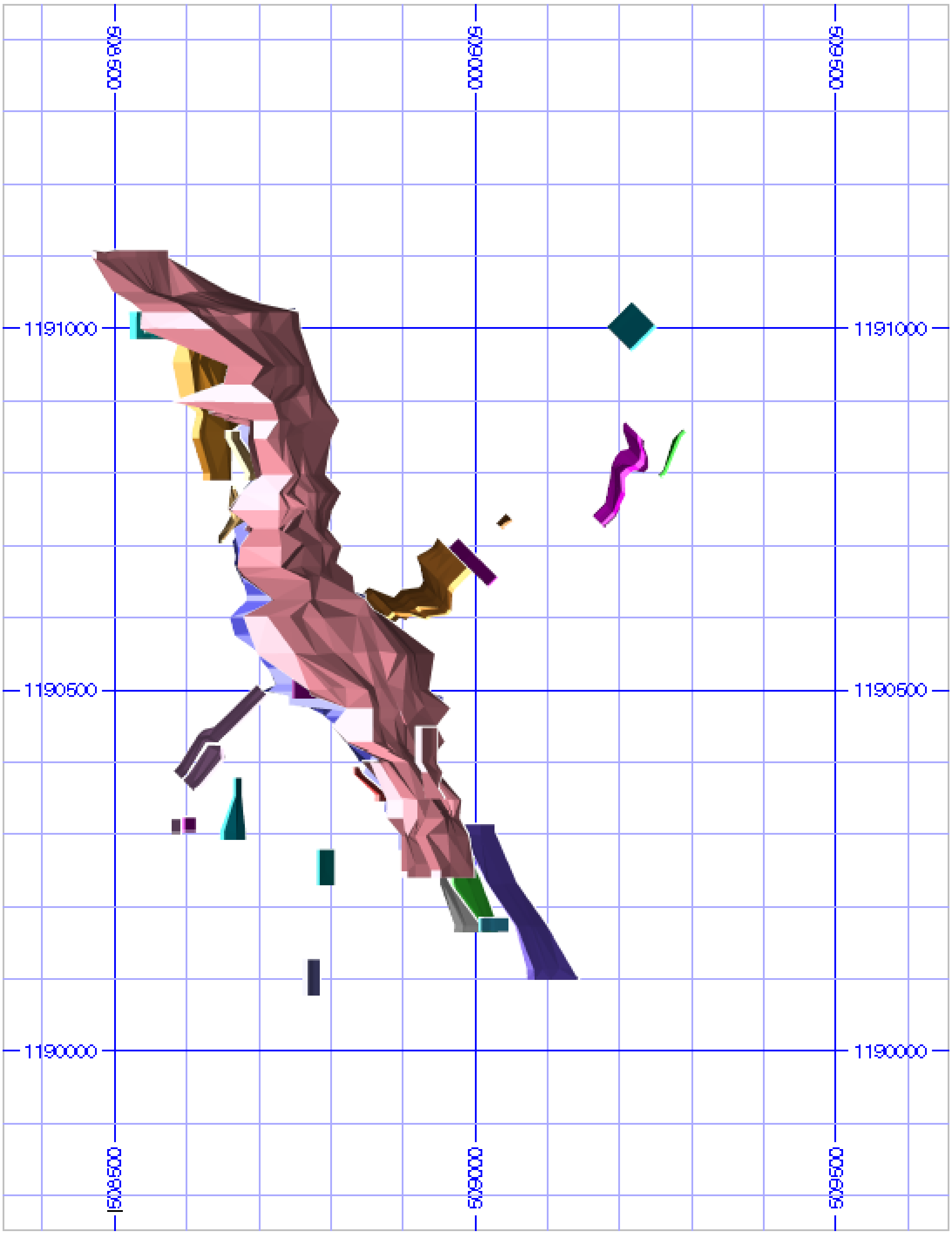


Figure 75: Plan View Koulékoun Mineralisation Outlines

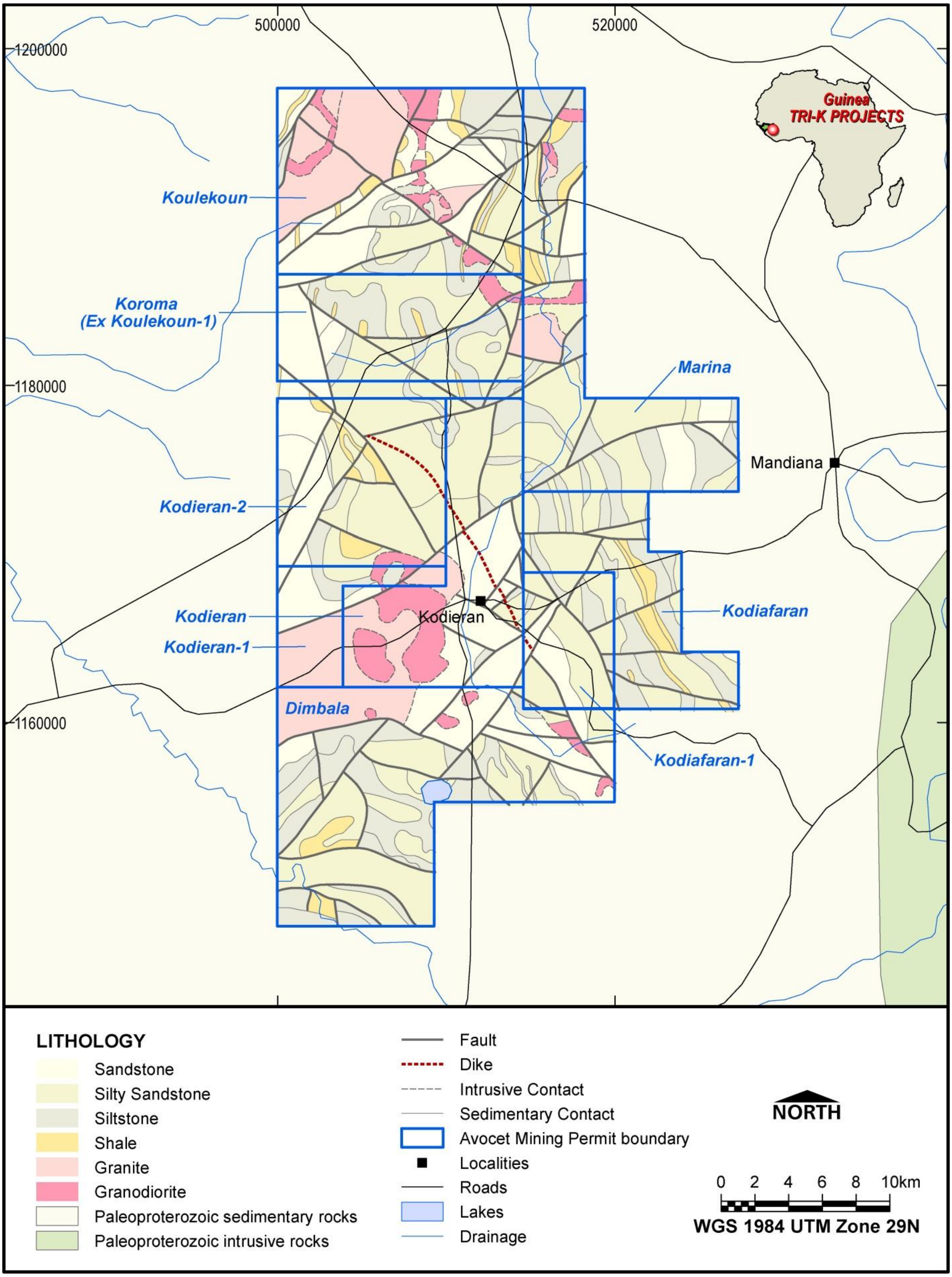


Figure 76: Tri-K Project Area

The dominant geological feature is massive, NW-striking and steeply E-dipping, quartz feldspar porphyry typically 20-80m wide and drilled to a maximum vertical depth of 400m and open along strike and at depth. This porphyry unit is the primary host to gold mineralisation, and has intruded along the anticlinal axis of a folded sequence of volcanogenic sedimentary rocks. These have a regional north-east strike and steep easterly dip; and comprise turbidites, pelites, schistose pelites, sandstones, greywackes, and arkose sandstones and tuffs. An auriferous NE-SW trending fault zone also hosts significant mineralisation between the main porphyry unit and parallel units in the northeast. The most significant gold drill intercepts occur at the intersection of this structure and the porphyry.

The above package is intruded by a younger, sub-horizontal dolerite dyke of Mesozoic age. The dyke cuts the mineralised geology and controls the position of the water table. As a result, the rock above the dolerite is highly weathered, whilst rocks in the footwall are fresh.

The weathering profile extends to depths of up to 80 m, typically to the prominent dolerite dyke. This weathering profile is covered by a 2-5m thick blanket of ferricrete that is typically composed of pisolitic gravels, rocks fragments and soil. No exposure of fresh, unweathered rock has been seen at the surface within the Project Area. The above geology is common to all of the projects in the Tri-K Block.

Gold mineralisation is primarily hosted by the quartz feldspar intrusion. Any mineralisation within the country rock is a result of wall rock alteration associated with the intrusion of the quartz-feldspar porphyry and is of limited extent and is typically affiliated with the footwall.

Gold is typically associated with disseminated pyrite and arsenopyrite. There is a relationship between high grades and zones of strong dolomite flooding and silicification, which are often found in shear zones with quartz stockworks. Gold is also seen with quartz-carbonate veins enveloped by disseminated crystalline and amorphous arsenopyrite and limited pyrite. The latter has no apparent association with structure or alteration. The total sulphide content in the porphyry is typically below 5%.

Cubic pyrite occurs in black, carbonaceous shales in the wallrock to the porphyry and is not associated with mineralisation.

The Koulékoun Mineral Resource is hosted in a 40 – 80m thick, steeply east dipping zone of NNW striking porphyry dykes and adjacent wall rocks, cut by a steeply north dipping NE striking structure. To date, the main mineralised porphyry zone has been tested over a strike length of 2,000m and to a vertical depth of 400m. Mineral Resource grades occur over a strike length of 950m and the mineralisation is open at depth. Gold grades are locally higher in the sub-vertically plunging pipe (80m by 120m across) formed by the intersection of the porphyry dyke complex and the NE striking structure, and diminish along strike.

19.7.3 Kodiéran

Kodiéran Deposit is located in sediments close to the contact of a large diorite intrusive to the west. The sediments are basically shale, siltstone and sandstone and have been intruded by granodiorite and dioritic units.

The weathering profile varies in depth from 20m in the north to 80 – 100m in the south. The bulk of Kodiéran Deposit is located in a deeply weathered saprolite profile where wearing depth is up to 100m. In fresh bedrock and core samples, the host succession is mainly made up of sandstone and black shales with isolated occurrences of quartz breccias and intermediate intrusives. The mineralisation is associated with chlorite alteration and fine grained pyrite localised within fractured rock.

At Kodiéran, gold is typically associated with disseminated pyrite and arsenopyrite. There is a relationship between high grades and zones of strong dolomite flooding and silicification, which are often found in shear zones with quartz stockworks. Gold is also seen with quartz-carbonate veins enveloped by disseminated crystalline and amorphous arsenopyrite and limited pyrite. The latter has no apparent association with structure or alteration. The total sulphide content in the porphyry is typically below 5%. Cubic pyrite occurs in black, carbonaceous shales in the wall rock to the porphyry and is not associated with mineralisation (Figure 77). Gold is typically associated with disseminated pyrite. There is a relationship between high grades and fine pyrite crystals and silicification.

Mineralisation in the Northern portion of the Kodiéran Deposit is controlled by a NE-SW structure whereas in the central portion where the bulk of the mineralisation sit is controlled by intersection NE-SW structure.

Mineralisation dips shallow to the west and ranges in thickness between 20 – 60m. Mineralisation has been tested over 2500m along strike to date.

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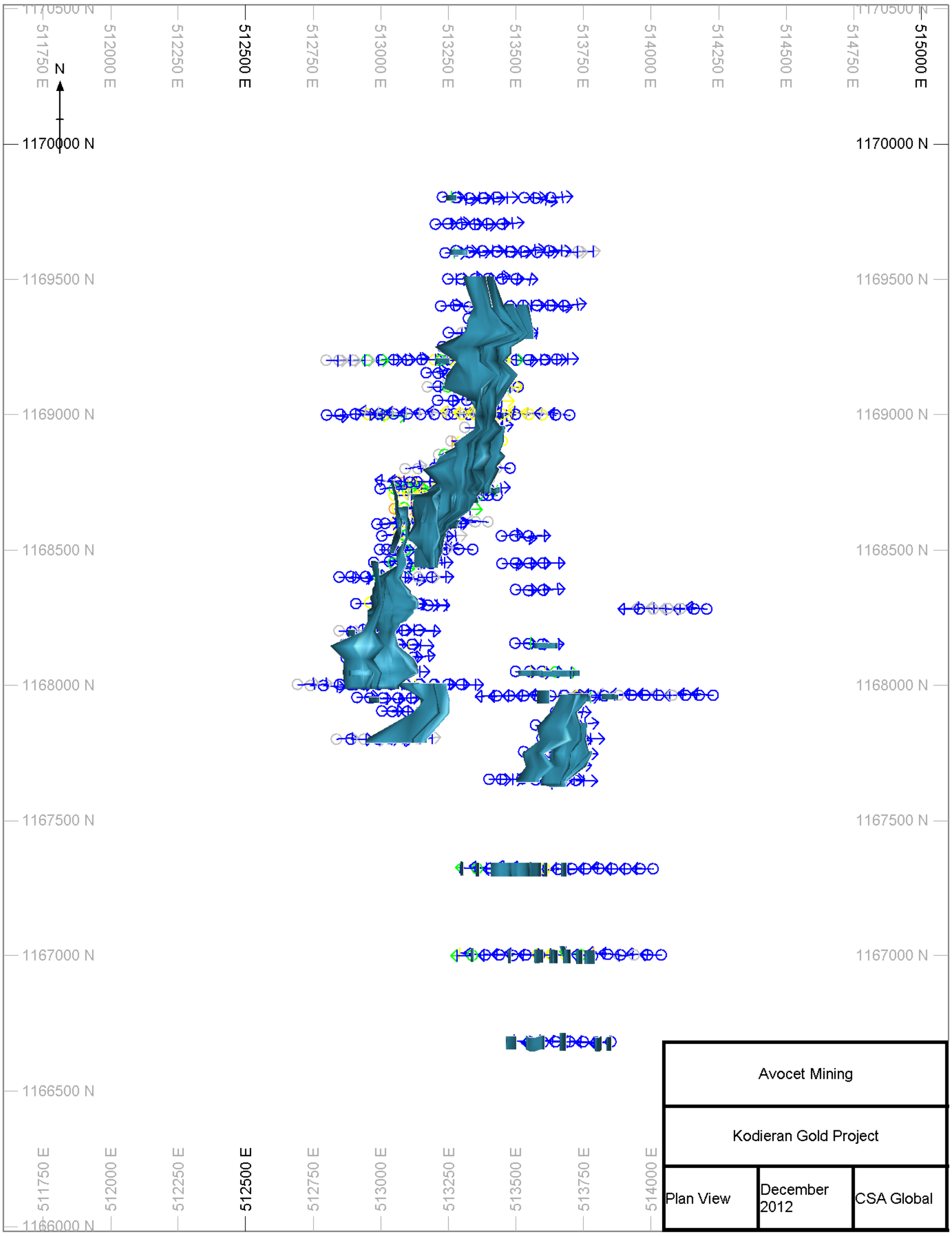

Figure 77: Plan View of Kodiéran Gold Mineralisation with Drill Holes

19.8 Exploration

Exploration throughout the region has been source back to 1937. Since this time, work has been conducted by a former Soviet group, a Chinese-Guinean joint venture, a Guinean-German joint venture, and numerous private corporations. More recent works have been conducted by the Ashanti-AGEM Alliance, and Wega Mining.

Ashanti-AGEM Alliance

The Ashanti AGEM Alliance was the first to conduct modern exploration. The Alliance undertook exploration in the Mandiana Concession for approximately 22 months identifying three gold geochemical anomalies in the Koulékoun Project Area based on regional geochemical surveys using soil samples and termite mounds. This survey was reported by in the Scott Wilson report (2008) to have been conducted on a 1 km x 200 m grid, surveyed by tape and compass over a nine month period. A number of grab samples were taken from various sites of artisanal mining (13 samples in Koulékoun had an average grade of 3.38 ppm gold, the highest grade recorded 11.10 Au ppm). A total of 46,476 samples were taken in the region, of which 26,699 were analysed for gold. A total of 4,570 samples (of which 2,285 were tested for gold) were taken in the Daoule (Koulékoun) sub-sector. The majority of the analyses were undertaken at the Analabs Laboratory in Obuasi, Ghana, on the pulverised – 2mm fraction of the soils by fire assay on a 30g sample with Atomic Absorption Spectroscopy (AAS) finish. Some samples were tested at the ITS Mandiana Laboratory.

Additional exploration activities included geophysical tests using Magnetics, VLF and IP with little reported success, aerial photography, geologic mapping and small scale pit excavation. The photography was successful in identifying structures, but the pitting proved costly and channel sampling from artisanal workings was preferred.

Wega also commissioned MIR Télédétection in 2007 to conduct a remote sensing study utilising regional-scale airborne magnetics and radiometrics data, ASTER and Landsat imagery, and topographic data. This study highlighted the Mesozoic dolerite dykes and proposed a number of structural features.

No geophysics has been undertaken on the Property by Wega Mining; however, SAGAX Afrique reinterpreted the Alliance IP dipole-dipole data. The new interpretation shows that the Koulékoun Main Zone mineralisation is spatially coincident with a zone of high conductivity and high resistivity. This highlights the usefulness of IP dipole-dipole data over the gradient array surveys that Wega has conducted elsewhere.

19.8.1 XRF Termite/Soil Sampling Programme

In early 2013 1,840 termite/soil samples were collected on a 100m by 25m sampling grid on the Koulékoun permit and 1,428 samples were measured for multi elements using the XRF hand held instrument. The objective of the programme is to generate regional targets around the Koulékoun Project area. The XRF programme was designed to test the parallel North West cross cutting structure 1.8km north east from the main Koulékoun trend and also to test the contact between the sediments and the intrusives indicated by the VTEM study.

Arsenic data analysis from the XRF results indicate strong arsenic anomaly in two areas one northeast from the main Koulékoun trend (Figure 78) and another northwest southeast strike and a north south strike. This confirms the parallel northwest structural trend from the main Koulékoun zone which is indicated from the VTEM and lies along the sedimentary intrusive contact.

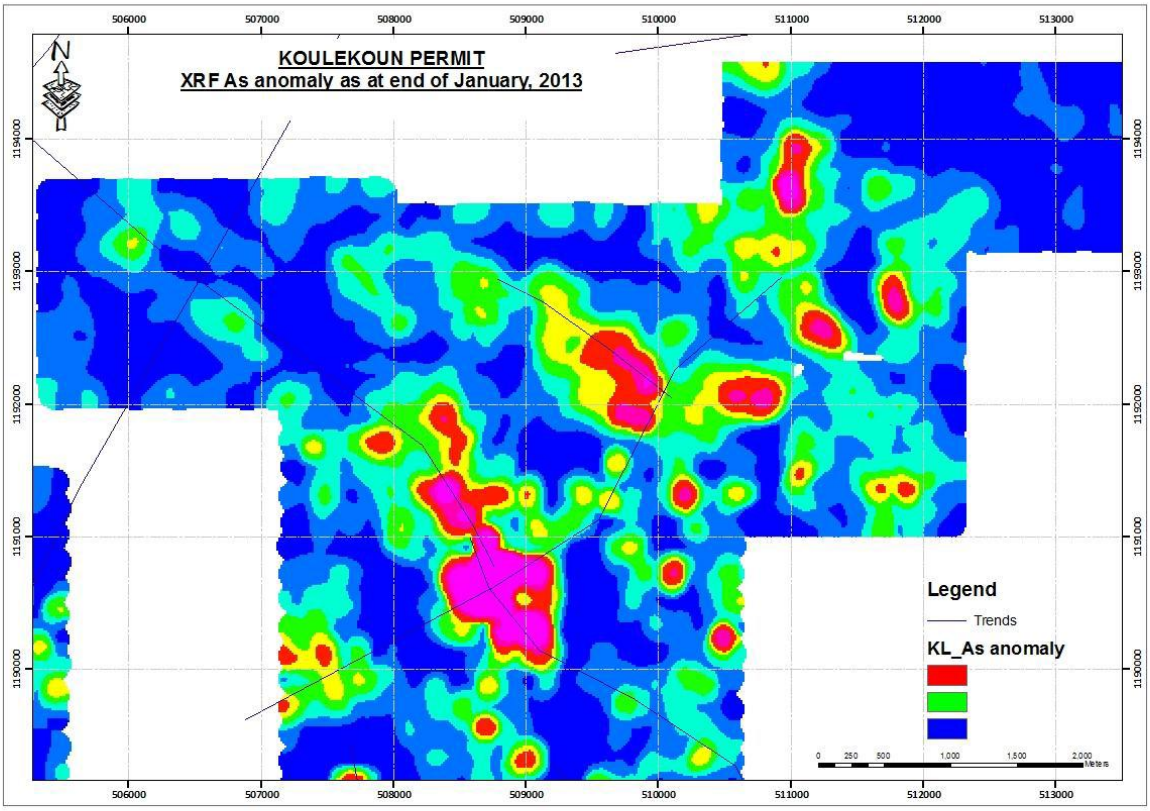

Figure 78: XRF Soil Sampling Arsenic Anomalies

The Kourournin Prospect is located within the Kodiéran permit immediately south of Koulékoun. Located within the Suguri basin the area is comprised of fine grained sediments (mainly black shales and grey wackes), with minor granitic batholiths. The apparent mineralisation occurs in and around structurally controlled contacts with these granites within a sub-vertical dipping narrow corridor. The mineralisation is assumed to be flat lying quartz-carbonate veins containing massive and disseminated sulphide. Minor levels of mineralisation are associated with propylitic style alteration selvages.

Fowaro is located immediately Southwest of Kourournin. Fifty-four RC drill holes have been completed at Fowaro on line spacing from 160m to 320m visible gold was panned from quartz veining in saprolite taken from two holes in the area, coincident with a zone of high geophysical Induced-polarisation chargeability.

19.9 Drilling

19.9.1 Koulékoun

Drilling at Koulékoun has included rotary air blast (RAB), aircore (AC), reverse circulation (RC), diamond drilling (DDH) and diamond drilling tails (DH) however, much of the historic data is not available to Avocet. Table 63 summarises the drilling at Koulékoun up to end 2012. The majority of drilling (~80% of holes) has been conducted on EW-oriented sections however, with ~15% of holes were drilled toward the SE. The remaining holes were drilled on a north- south azimuth.

Table 63: Koulékoun Drilling Summary 1996- 2012

Year	Holes				Metres			
	RAB	AC	RC	DDH	RAB	AC	RC	DDH
1996	149				4,095			
1997	66	31	48		1,945	741	4,161	
2006			55				4,175	
2008			56	49			5,770	9,446
2010				8				3,238.2
2011			301	51			27,091	13,846.6
2012			88	31			7,002	4,582.15
Sub Total	215	31	548	139	6040	741	48,199	31,113
TOTALS	**933**				**86,093**			

Wega Mining conducted two drilling programmes, the first commencing in late 2006 and the second in November 2007. The aim was to verify an untested geological model of Koulékoun compiled by the Alliance. Drilling was performed by West African Drilling Services (WADS).

The drillhole collar positions (using co-ordinate system UTM 29N, WGS 84) were set out by a geologist with the dip and azimuth of the holes established by the geologist and driller. All the collars of Wega and some of the Alliance were surveyed by differential GPS at the end of the 2008 drill programme.

Downhole surveys were initially taken using the Sperrysun DTH system however, since October 2010 a reflex magnetic tool has been used for surveys. One reading is taken above the sill and one below however, readings are not taken (or disregarded if taken) within 5m of the dolerite sill due to its inherent magnetism.

Drilling was supervised by a geologist who produced a quick rock description of the core and measured rock quality distribution (RQD) at the drill rig site. Geotechnical logging was conducted at the rig site including, but not limited to, measurements of core loss, rock density quality (RQD), fracture frequency (FF), and orientation reliability. Geological logging, including structural measurements, is conducted on computer-data entry style sheets at a core logging facility, a short drive from the mineralised areas.

19.9.2 Kodiéran

Drilling at Kodiéran has included rotary air blast (RAB), air core (AC), reverse circulation (RC), diamond drilling (DDH) and diamond drilling tails (DH) however, much of the historic data is not available to Avocet. Table 64 summarises the drilling that was used in the grade estimation at Kodiéran up to end 2012 as supplied by Avocet. The drilling has been conducted on east-west oriented sections with drilling prior to 2011 being drilled toward the west, and from 2011 on towards the east.

Table 64: Kodiéran Drilling Summary 2008 to 2012

Year	Holes		Metres	
	RC	DDH	RC	DDH
2008	23		2,358	
2010	80	3	9,234	674.9
2011	153		14,887	
2012	91	41	8,250	5,052
Sub Total	347	44	34728.5	5726.4
TOTALS	**391**		**40,454.9**	

Infill resource drilling and feasibility programs continued on the Kodiéran and Koulékoun Prospects through late 2012- early 2013 within the Tri-K Prospects licence. A total of 135 holes for a combined total of 10,007.70m was achieved during April 2013. A total of 8,990m RC and 1,017.7m DD was drilled.

- Out of the total 135 holes completed, 121 are resource RC holes, 10 resource DD holes, 1 Geotech DD hole and 3 boreholes drilled to provide water for the on-going Geotech DD drilling at Kodiéran.
- A total of 12,651 samples were dispatched to the laboratory for analysis of which results for 6,935 samples were received, during the month under review.
- Out of the 6,935 assay results received, 67 drill holes returned with 251 significant intercepts above the 0.5 g/t Au cut-off. The best intercept was reported from KD000508 with 21m @ 9.29 g/t Au starting at 48m. Some significant intersections are displayed in Table 65.

Table 65: Significant Intersections at the Tri K Project Drilling Program in (Avocet Exploration Report April 2013).

KD000508 with 21m @ 9.29 g/t Au starting at 48m
KD000504 with 27m @ 6.894 g/t Au starting at 90m
KD000508 with 11m @ 12.101 g/t Au starting at 60m
KD000489 with 33m @ 3.567 g/t Au starting at 74m
KD000497 with 24m @ 4.768 g/t Au starting at 116m
KD000525 with 17m @ 6.311 g/t Au starting at 55m
KD000511 with 13m @ 6.6 g/t Au starting at 78m
KD000527 with 14m @ 5.254 g/t Au starting at 86m
KD000500 with 9m @ 7.873 g/t Au starting at 129m
KD000488 with 19m @ 3.149 g/t Au starting at 39m
KD000511 with 11m @ 5.396 g/t Au starting at 90m
KD000496 with 15m @ 3.775 g/t Au starting at 48m
KD000492 with 19m @ 2.741 g/t Au starting at 138m
KD000510 with 11m @ 4.572 g/t Au starting at 43m
KD000485 with 15m @ 3.183 g/t Au starting at 39m
KD000503 with 8m @ 5.93 g/t Au starting at 24m
KD000547 with 20m @ 2.119 g/t Au starting at 20m
KD000526 with 3m @ 13.89 g/t Au starting at 72m
KD000511 with 8m @ 5.084 g/t Au starting at 43m
KD000497 with 12m @ 2.968 g/t Au starting at 143m

19.10 Sample Security

All drill hole samples are under direct secure control of either the contracted drilling company, at time of drilling, or by Avocet when samples are transferred to the sample yards at either Koulékoun or Kodiéran. The sample yards are guarded 24/7 by on site security guards. Samples are then dispatched to the nominated assay laboratory by a truck, carrying between 3,000 and 5,000 samples to the SGS laboratory in Bamako, Mali.

19.11 Sample Collection and Dispatch

Reverse Circulation (RC) drill samples are taken at 1m intervals. The RC samples are of 1m interval, dry and greater than 75% sample recovery, weighing between 30kg to 35kg. The 1m samples are then split through the three-tier riffle-splitter to obtain two 3kg samples. The split sample intervals are collected in a plastic bag labelled by drillhole name and interval. One 3kg sample is stored on-site for reference and the other is dispatched to the assay laboratory. The bulk reject is stored on-site. The samples are transported to the Sample Preparation Laboratory on site.

At the Sample Preparation Laboratory, one litre of the sample is measured in a graduated cup, sieved and washed to result in a + 2mm fraction which is logged by a geologist. For each sample, a small reference sample is kept of the non-washed and + 2mm washed material. The entire remaining sample is dried, weighed and crushed to - 2mm.

The diamond drill core is laid out and cleaned prior to being photographed. The core boxes are then placed on the tables by hole and depth. Prior to geological logging the core is laid out on racks, checked and aligned along its centre line.

Once the core has been logged, it is cut in half by a diamond saw. One half of the core is retained at the Sample Preparation Laboratory for reference and the other half is sampled. Standard sample length is 1m except at geological contacts. Samples are sent to the assay laboratory accompanied by a sample ticket.

All drill samples are under the secure control of Avocet staff, from time of sample collection, until delivery to the assay laboratory.

19.12 Sample Preparation and Analyses

19.12.1 Wega Samples

ALS Chemex in Bamako, Mali assayed all the Tri-K samples collected by Wega Mining. The laboratory sample preparation methodology followed involves:

- Weighing,
- High temperature drying,
- Fine crushing at 70% passing 2mm
- Splitting (by riffle), and
- Pulverising 1.5kg to 85% passing 75µm.

The primary analytical method used by ALS Chemex (Bamako, Mali) to determine the gold content of the Tri-K Prospects drill samples is fire assay with AAS finish on a 50gm nominal sample weight with a detection range of 0.01 to 100ppm Au. Wega did not request routine analysis of other elements. However, 860 mineralised saprolite and porphyry samples were subjected to ICP analysis for whole rock chemistry and the correlation between gold and other indicator elements. In summary, the ICP analysis showed:

- Low silver content,
- Saprolite shows a moderate correlation between As and Ag, with weak correlation between Au and Fe, Mn and Pb, and
- Fresh rock (QFP) shows a very strong correlation between Au and As, with a weak negative correlation between Au and Cu and Fe.

19.12.2 Avocet Samples

Ofori-Amanfo (2012) describes the sample preparation as below.

Avocet dispatched drill hole samples to SGS Mali, with excess samples sent to SGS Suguiri (up until December 2011) and ALS Mali.

Standard submission sheets listing only a unique sequential batch number, sample numbers and instructions on the analytical protocols accompanied all the samples submitted for analysis. No information concerning the project name, drill hole number, depth, or any geological information was included with the samples.

The three laboratories have the same sample analysis protocols for 50g charge fire assay as outlined below.

1. Sample receive and sorting, (2 to 3kg)
2. Dry entire sample at 105°C
3. Jaw crush entire sample to –6mm. Riffle split to <3.5kg if the sample is more than 2kg.
4. Keep the residual split in original sample bag.
5. Pulverize the < 1.5kg in chromium steel bowl, min 85% passing 75µm.
6. Mat roll and bag 200g sub-sample and retain the residual pulp in a pulp bag.
7. Fuse a 50g sample with a litharge based flux cupel.
8. Dissolve the prill in aqua regia.
9. Determine gold by flame AAS – detection limit 0.01ppm.

19.13 Geological Logging

Geotechnical logging was conducted at the rig site including, but not limited to, measurements of core loss, rock density quality (RQD), fracture frequency (FF), and orientation reliability. Geological logging, including structural measurements, is conducted on computer-data entry style sheets at a core logging facility, a short drive from the mineralised areas.

19.14 Bulk Density

A total of 2,859 bulk density tests were undertaken on the 2007 / 08 drill core at 2m intervals in competent core by the water volume weight immersion method.

An additional 486 drill core samples from the 2010 / 2011 drill campaign (KLRD001-KLRD008) have been used for density test work with the water immersion technique. All samples were taken from beyond 100m down hole depth at a rate of 1 sample per drill core tray (i.e., 1 sample every 5m). A total of 3.5% of these samples fell beyond the values of >3.5g/cc or <2g/cc and as such were deemed erroneous and omitted from the bulk density analysis results displayed in Table 66. The 2010/2011 samples were not oven dried prior to weighing.

Table 66: Koulékoun Average Bulk Density Analysis.

Bulk Density				
	2007 / 2008 drilling campaign		2010 / 2011 drilling campaign	
Lithology	Number of Tests	Density (Average)	Number of Tests	Density (Average)
Laterite	17	2.14	N/A	N/A
Saprolite (weathered QFP)	45	1.62	N/A	N/A
Saprolite (Weathered volcano-sediments)	185	1.66	N/A	N/A
Total Saprolite	230	1.65	N/A	N/A
Dolerite	120	2.85	8	2.98
QFP	730	2.57	103	2.86
Volcano-Sediments	1,760	2.63	355	2.9

There is a contrast in the calculated average rock densities from the 2007/2008 drilling campaign relative to the 2010/2011 drill campaign. The more recent tests are approximately 5% - 10% denser than previous testwork.

19.15 QA/QC

19.15.1 Procedure

Quality control and quality assurance is an essential regime as far as exploration activities are concerned. This section describes the quality control and quality-assurance (QAQC) steps taken for RC and DD sampling that has been used to verify or determine grades used in the estimation of mineral resources, including standards submissions within sample batches, and preparation and submission of field duplicates samples during drilling campaigns.

A total of 8,935 assay results were received from ALS Mali Laboratory between June 2012 and December 2012. These included 1,316 check samples, representing 14.7% of the total assays received. Similarly, a total of 15,867 assays were received from SGS Mali Laboratory including 2,049 check samples; this is 12.9% of the total assay results received. Check samples were sent to both ALS Mali and SGS Mali and included blanks, duplicates and nine different categories of certified reference standards (CRM) ranging from 0.21g/t to 13.20g/t. A total of 4.9% of the analysed samples were blanks, 4.9% were standards and 3.7% were field duplicates. The CRMs were sourced from GEOSTAT, an Australian based supplier. Details are presented in Table 67.

Table 67: QAQC Sample Analyses

Laboratory	Project	Samples	Duplicates	Standards	Blanks	Total
ALS Mali	Kodiéran	7619	443	441	432	8935
SGS_Mali	Kodiéran	856		92	91	1039
SGS_Mali	Koulékoun	12962	480	689	697	14828

19.15.2 Certified Reference Materials

Certified standard reference materials (CRM) from Geostats Pty Ltd were used for the RC and DD samples. In all, nine different CRM standard samples were used for the Koulékoun and Kodiéran drilling program for the period June to December 2012, with Au grades ranging between 0.21 – 6.78

g/t. CSA reviewed the performance of the CRMs by setting a benchmark of +/- 2 standard deviations from the expected mean.

Most of the standards reported grades within the acceptable limits of +/-2 standard deviations. The majority of those that fell outside the acceptable limits were realized to be as a result of wrong labelling of the samples and/or swaps of the standard IDs (Figure 79).

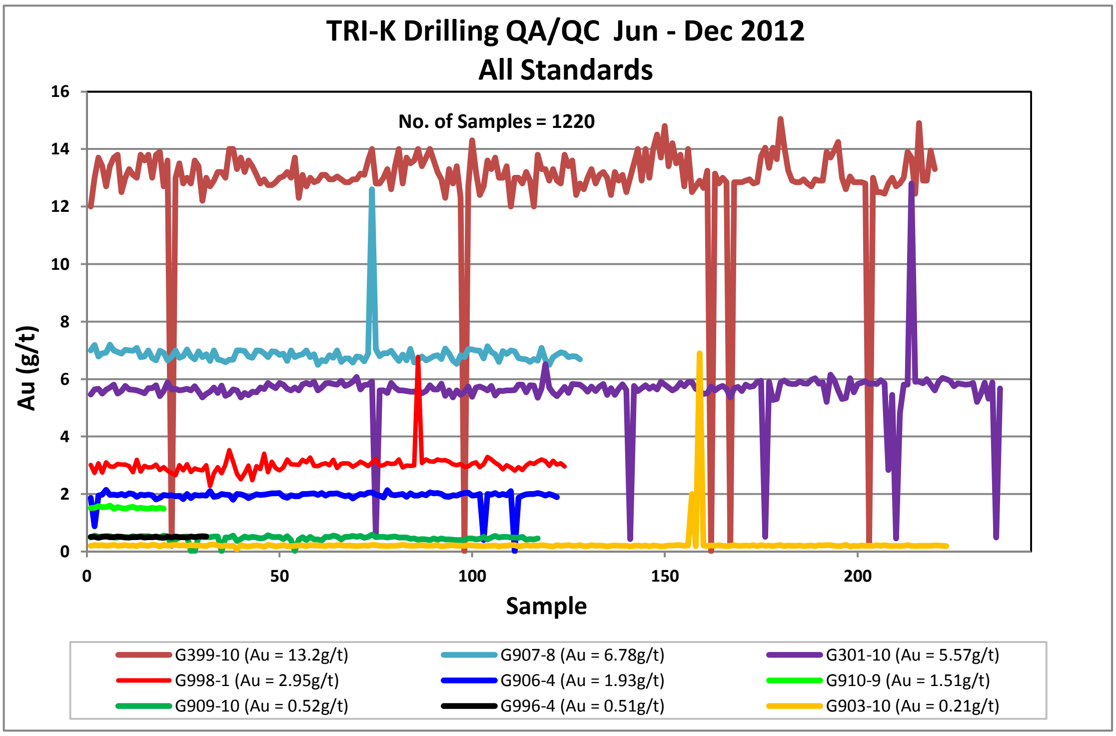

Figure 79: Comparison Chart for All CRMs. June to December 2012.

Blank CRMs were prepared from barren granite chips, and submitted at a rate of 1 in 20 samples.

Blank assay results received from the assay laboratories had majority of the results reporting around the detection limit of 0.01g/t. However a few samples reported values above 0.1 g/t, the highest being 0.41g/t. This could be attributed to contamination from the laboratory because all failed blanks were analysed by ALS Mali. The situation was discussed with the laboratory to avoid re-occurrence. However, the results of the batches were accepted since assays of other checks including standards, and other blanks within the batch returned acceptable assays.

Time scatter plots for blank CRMs are presented in Figure 80.

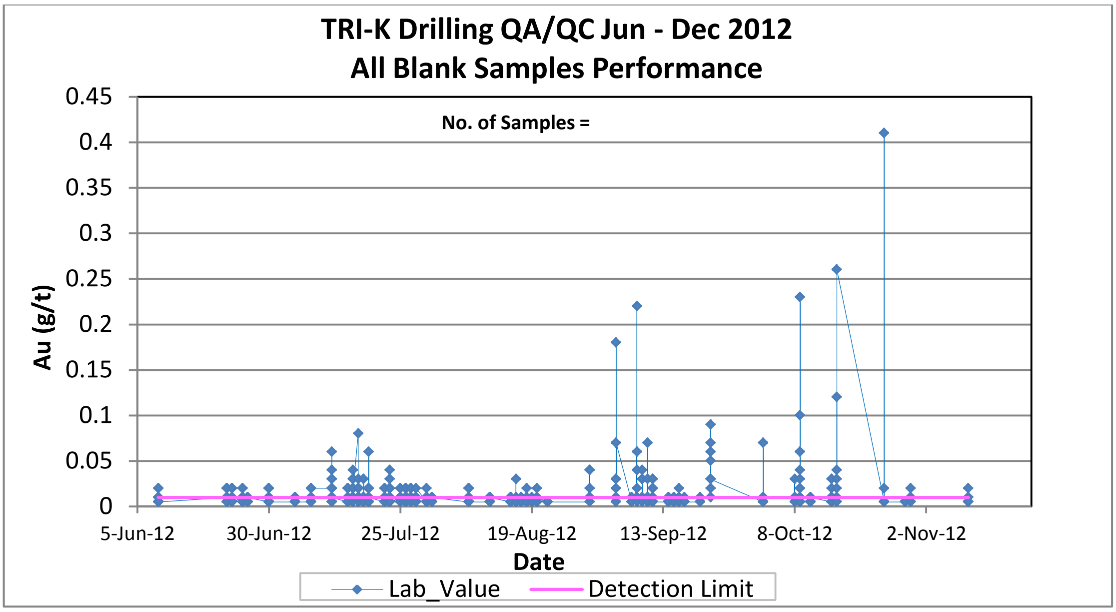

Figure 80: Blank Samples Performance against Detection Limit as Analysed by the Labs

19.15.3 Field Duplicates

To monitor the quality of sample splitting, field duplicates were taken from the RC samples. A correlation coefficient of 86% was obtained for the data set, indicating good correlation for RC sample data between original samples and their field duplicates. A scatter plot comparing original and field duplicate Au assay results for all Koulékoun and Kodiéran results is presented in Figure 81.

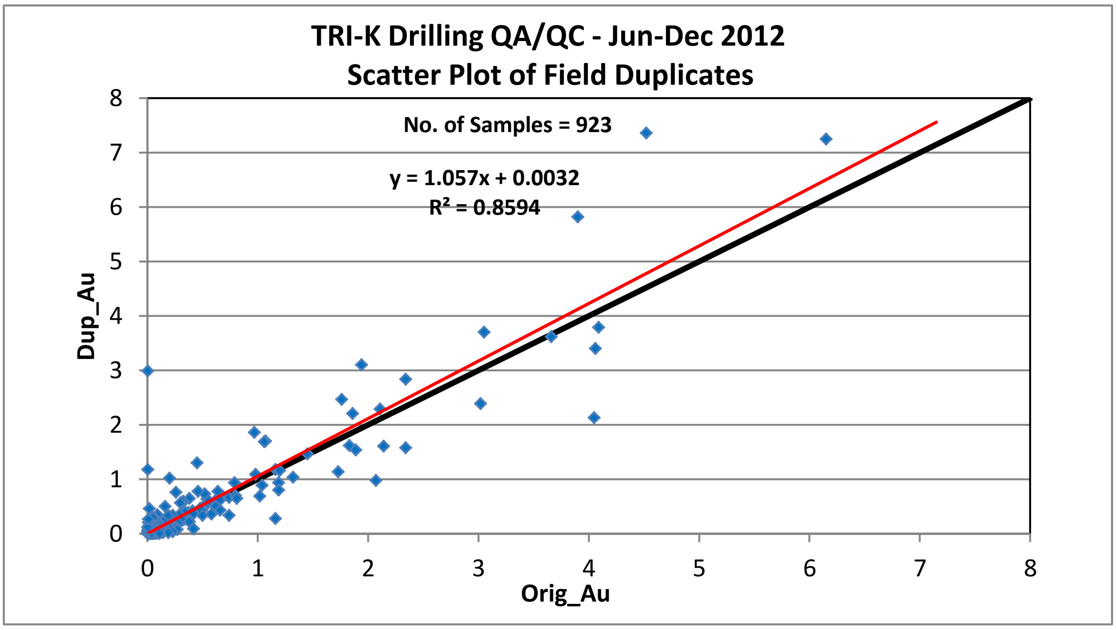

Figure 81: Scatter Plot of Field Duplicate against Original Assays

Precision can be commonly measured using a sample database of paired sample values. A common approach is to calculate the half absolute relative deviation (HARD) of each sample pair and to sort these values in ascending order plotted against the rank of the pair. Such a format allows one to gauge the fraction of the data that report precision better than a specified tolerance.

The formula to calculate the HARD is as follows:

$$HARD = \frac{|A-B|}{(A+B)} \text{ (x 100 to convert to a percentage)}$$

where A and B are the original and duplicate assay grades.

Avocet analysed data where Au >=0.3g/t, which cancels out the noise at the lower grade end of the scale. Results from the field duplicate data as presented in Figure 82 demonstrate sample repeatability issues, which may be attributed to high nugget effect and / or sampling methodology at the drill rig. Figure 82 shows 64% of the field duplicates exhibited a precision of ±20% or better for all data, whereas 74% of samples (assays >0.3g/t) had precision of ±20% or better. The filtered dataset (>0.3g/t) is considered to offer more meaningful assessment of the data because it excludes the 'high noise' effect that results from comparing duplicate data from very low grade assays. The thresholds for HARD and rank should be determined on a project by project basis, taking into account the natural grade variability (nugget effect). Once the thresholds have been settled upon, Avocet should take action if the results start to under-perform. Issues may be poor sampling procedures or problems in the laboratory.

Avocet has not provided a HARD plot based upon laboratory pulp duplicate results.

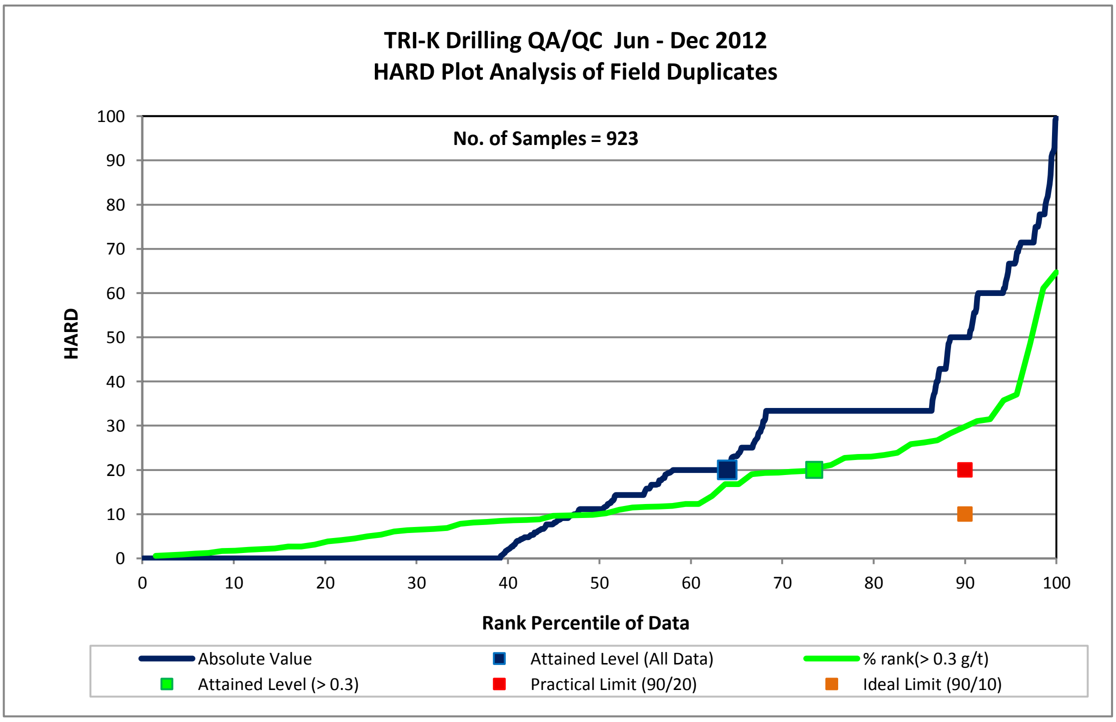

Figure 82: Half Absolute Relative Deviation (HARD) Plot from Field Replicate RC Samples, All Labs. Au >=0.3g/t

19.16 Mineral Resource Estimate

The Mineral Resource estimate has been updated by CSA in December 2012. The details of the updated resource are presented in Table 68. Modelling procedures are discussed in Section 4.4.

Table 68: Koulékoun and Kodiéran Mineral Resource, December 2012

Tri K		Gross			Net Attributable to Avocet Mining		
Deposit	Classification	Tonnes	Au Grade (g/t)	Contained Ounces	Tonnes	Au Grade (g/t)	Contained Ounces
Koulékoun	Measured	0	0	0	0	0	0
	Indicated	31,545,000	1.38	1,402,000	31,545,000	1.38	1,402,000
	Sub-total	31,545,000	1.38	1,402,000	31,545,000	1.38	1,402,000
	Inferred	22,762,000	1.22	892,500	22,762,000	1.22	892,500
	Total	**54,307,000**	**1.31**	**2,294,500**	**54,307,000**	**1.31**	**2,294,500**
Kodiéran	Measured	0	0	0	0	0	0
	Indicated	4,267,000	1.81	249,000	4,267,000	1.81	249,000
	Sub-total	4,267,000	1.81	249,000	4,267,000	1.81	249,000
	Inferred	13,594,000	1.55	676,700	13,594,000	1.55	676,700
	Total	**17,861,000**	**1.61**	**925,700**	**17,861,000**	**1.61**	**925,700**
Total	Measured	0	0	0	0	0	0
	Indicated	35,812,000	1.43	1,651,000	35,812,000	1.43	1,651,000
	Meas + Ind	35,812,000	1.43	1,651,000	35,812,000	1.43	1,651,000
	Inferred	36,356,000	1.34	1,569,200	36,356,000	1.34	1,569,200
	Total	**72,168,000**	**1.39**	**3,220,200**	**72,168,000**	**1.39**	**3,220,200**

Note: *The Mineral Resource was estimated by David Williams of CSA Global. Mr Williams is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). David Williams consents to the inclusion of such information in this Report in the form and context in which it appears. The resource has been estimated within constraining wireframe solids based on a nominal lower cut-off grade of 0.3 g/t Au. The resource is quoted from blocks above 0.5 g/t Au. Differences may occur due to rounding.*

19.16.1 Block Models

A block model was constructed for Koulékoun and Kodiéran using wireframe domains and variables as documented in Table 69. Parent block sizes were based upon approximately half the typical drill spacing. Sub - blocks were used to ensure the block model honoured the mineralisation zone geometries. The block model was not rotated.

19.16.2 Topography

A topographic DTM was provided by Avocet covering the project area. This was generated from drill hole collars surveyed by DGPS.

19.16.3 Geological interpretation

Mineralisation envelopes were constructed using a nominal 0.3 g/t lower limit, based upon a geological interpretation. A total of 31 domains were constructed, striking either 335° or 55°. The NNW striking mineralisation (21 domains) is associated with the porphyry intrusion, although some mineralisation to the footwall and hangingwall of the porphyry is located in the sedimentary rocks.

The porphyry mineralisation is open at depth and appears to close along strike. The NE striking mineralisation (10 domains) is hosted by the sedimentary rock.

A sub-vertically plunging pipe (80m by 120m across), formed by the intersection of the porphyry dyke complex and the NE striking structure, was modelled by a 2g/t constraining wireframe, encapsulated within the main porphyry hosting mineralisation wireframe (Figure 83).

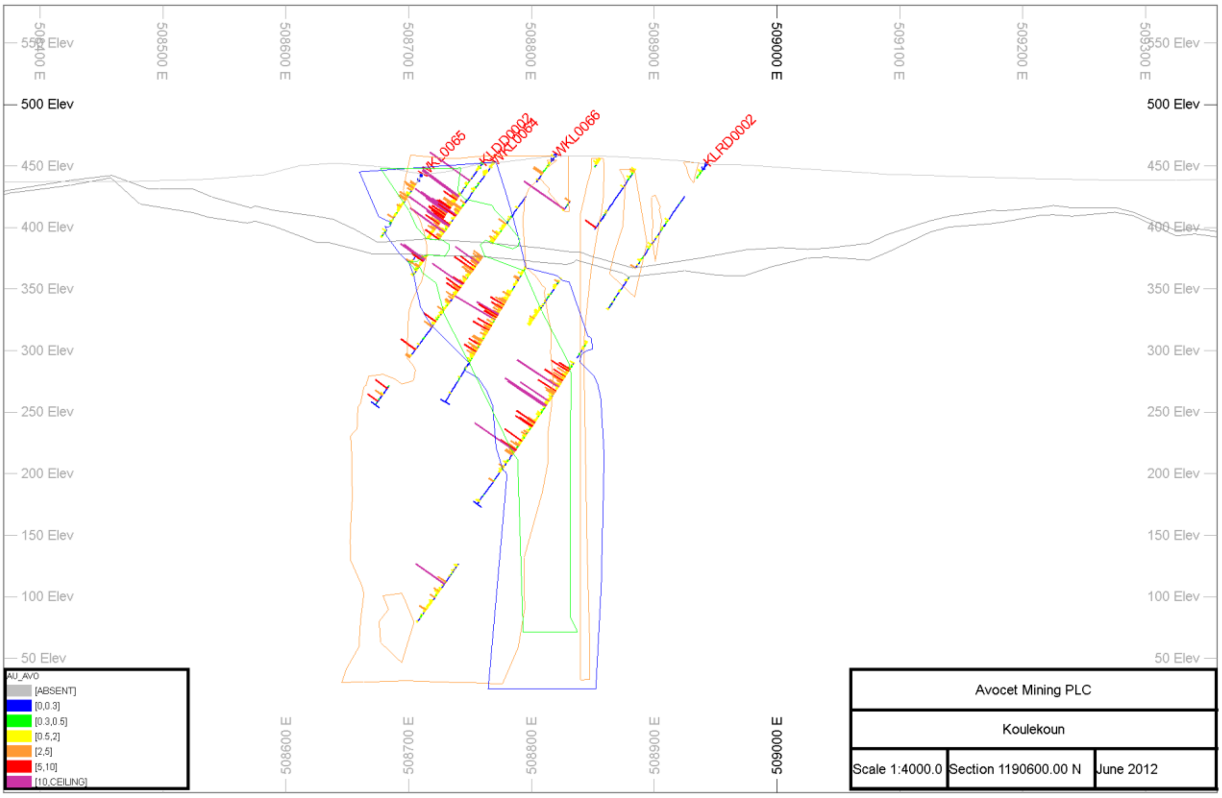

Figure 83: Mineralisation Domains, Section 1190600N, Highlighting Intersection of Porphyry (Blue) and Sediment (Orange) Hosted Domains, by Green 2g/t Au Domain. Drill Hole Trace coloured by Au as per Legend. Barren Dyke Cuts Mineralisation.

Table 69: Outline of Parameters Used

Deposit	Method	Mineralisation envelopes	g/t gold cut off for Mineral envelopes	Densities	Top cuts	Cell Size	Discretisation (X Y Z))	Search	Composites
Kouléko un	OK	A total of 33 domains were constructed, striking 020° and dipping 70° W.	0.3	2.04,(sediment) 1.97(porphyry) Transitional and fresh 3.00 (Dolerite), 2.83 (sediment), 2.8 (porphyry)	30,40	15m (1m) X 25m (2.5m) X 15m (1m)	7x7x16	150m x 70m x 70m	1 M
Kodiéran	OK	A total of 36 domains were constructed, striking 010° and dipping 70° W (with some variation)	0.3	Oxide1.95,Transition2.35, Fresh 2.70	17	10m (2m) 25m (5m) 5m (1m)	2 x 5 x 1	Varying	1 M

Wireframe surfaces representing the porphyry and dolerite lithologies were generated, based upon lithological logging recorded in drilling logs. The porphyry models associated with the NNW striking mineralisation do not always coincide with the mineralisation models described as porphyry hosted. The porphyry models obliquely cut the NE striking mineralisation.

The dolerite sill was provided by Avocet as a hangingwall and footwall surface. These were combined by CSA to create a single wireframe solid. The dolerite cuts the mineralisation and is considered to be barren.

The Base of Complete Oxidation and Top of Fresh Rock weathering surfaces were modelled by Avocet.

19.16.4 Kodiéran

All mineralisation envelopes were constructed using a nominal 0.3 g/t Au cut-off within the host lithological units and supplied to CSA for use in the block modelling. A total of 61 mineralisation envelopes have been provided. Not all of these envelopes have sufficient across sectional and along strike drill hole support to allow use in the classified portion of the Mineral Resource.

The mineralisation zones generally strike north-north west with a predominantly westerly dip of around 60°. Some of the minor lenses in the southern area are interpreted to dip steeply towards the east (Figure 84).

A minimum of 15 and maximum of 35 samples were used in any one block estimate. If a block was informed by insufficient number of samples with the search ellipse, then the ellipse radii was doubled in size, and then multiplied by 20 until the block was estimated. A maximum of 6 composited samples per drill hole were used in any one block estimate. Cell discretisation of 5 x 5 x 2 (X Y Z) was employed.

No lithological model has been constructed for Kodiéran. The deposit, at this relatively early stage, is considered to be a primarily meta-sedimentary package with some minor intrusive rocks. Diamond drilling programs currently underway are expected to clarify the lithological setting of the deposit.

The Base of Complete Oxidation (BOCO) and Top of Fresh Rock (TOFR) weathering surfaces have been modelled by Avocet.

The relative nugget effect of 32% is lower than Koulékoun (>50%), necessitating alternative sample selection procedures. Koulékoun required a large sample support whereas the lower nugget effect has allowed the sample selection criteria to be tightened for Kodiéran, with a smaller search ellipse and fewer samples selected. Therefore a block being estimated for gold will be more dependent upon the samples closer to the block, than was the case for Koulékoun where a larger net was flung to capture sample grades.

The Mineral Resource has been reported above a lower cut-off of 0.5g/t gold.

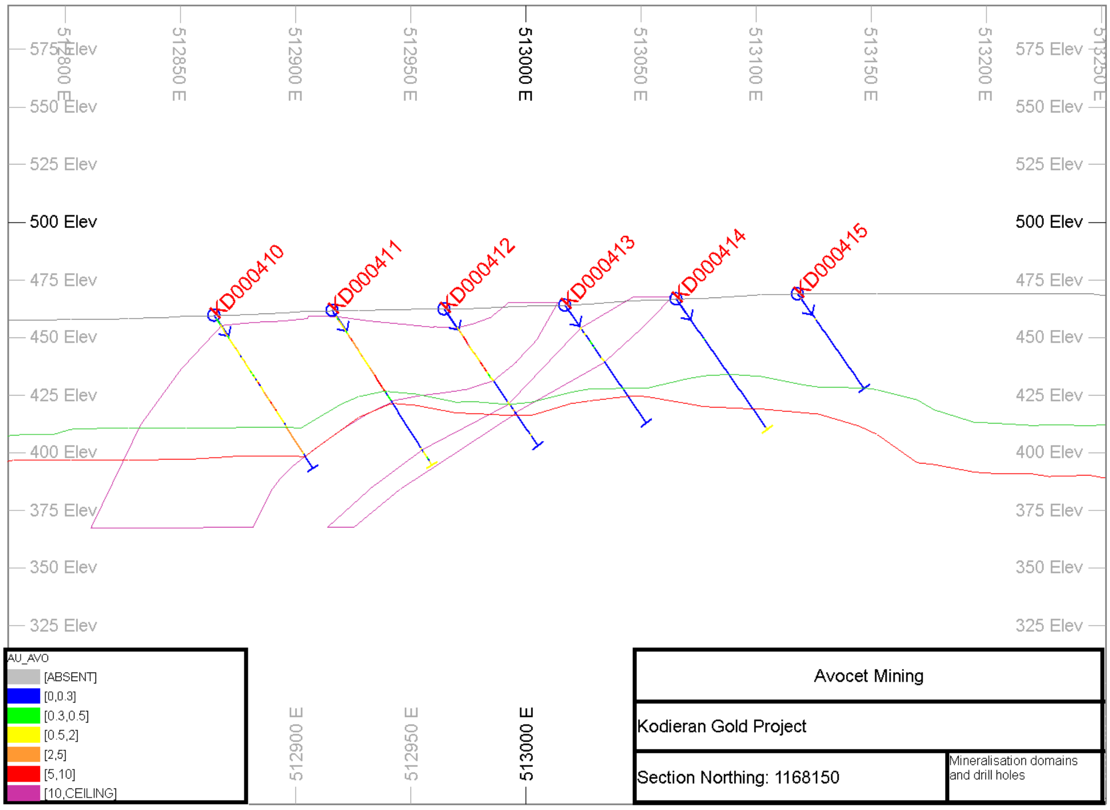

Figure 84: Mineralisation Domains, Section 1168150N. BOCO and TOFR Surfaces shown. Drill Hole Trace coloured by Gold as per Legend. View to North.

19.1 Environmental

The environmental permitting for submission as part of the mining licence application is well advanced. Most baseline studies have been completed or are ongoing as part of routine data collection (e.g. surface water quality). The ESIA is being prepared to IFC standards and the Terms of Reference report for the study was approved by the Guinean authorities in February 2013.

Community and other stakeholder engagement have been significantly increased during works associated with project permitting. A Stakeholder Engagement Strategy has been implemented and communities, traditional community leaders, special interest group and elected representatives have all been involved in discussion non the project so far. Further stakeholder engagement is planned as the permitting process continues.

An environmental management plan covering exploration activities in Guinea is in operation. The plan includes management activities relating to drill site selection and preparation, drilling activities and site clean-up.

Environmental monitoring for exploration is limited to water quality and the inspection of work areas after drilling is completed. The results of the water analysis indicate that exploration has not had a measurable impact on water quality.

19.2 Other relative information

The project is located in a very rural area of Guinea with no substantial housing or infrastructure currently present. Electricity for the current camp site is provided by portable diesel generators, and there is no running water in the village itself. Telecommunications are also limited, much of which is provided by V-Sat services in the camp.

No Ore Reserves have been estimated for the Koulékoun or Kodiéran Deposits as the project has not yet developed to this stage. In house pit optimisations have been completed and these pits are currently assisting with drill hole planning. A feasibility study is currently underway and will be reported to JORC 2012 standards.

No Market studies or contracts have been investigated for the Koulékoun Deposit as the project has not yet developed to this stage.

No capital or operating costs have been investigated for the Koulékoun Deposit as the project has not yet developed to this stage.

No economic analysis has been conducted for the Koulékoun Deposit as the project has not yet developed to this stage.

CSA Comments:

Koulékoun is an advanced stage gold exploration project located in the Siguiri basin of Guinea, which has a strong history of gold production. The project is held in favourable relations with the local community and government.

The project site is most easily accessed from Bamako – Mali however, road access is limited, and significant upgrades to the immediate area will be required as the project develops. The site infrastructure and logistics are also very limited. The project is sustained by potable diesel fuel generators and there is no running water outside of the camp.

The region surrounding the project area hosts several favourable exploration targets; these require additional testing.

The Mineral Resource estimation has been prepared in accordance with the JORC Code (2004 Edition) reporting standards. Drill core density measurements are conducted frequently however; there is a slight discrepancy between recent measurements and the 2008 measurements.

Avocet are currently progressing the project for a mining licence application in 2013.

Appendix 1: Glossary of Terms

Abbreviation	Description
Ωm	Measure of electrical resistivity, ohm.metres or ohms * metre.
3D	Three Dimensional.
AA	Atomic absorption.
AIM	Alternative Investment Market.
AAS	Atomic absorption spectroscopy.
Archaean	The period extending from 3.8 to 2.5 billion years ago.
Argillic	Clay-rich assemblages dominated by low-temperature clays such as kaolinite, smectite, and interlayered illite-smectite. These are formed by low temperature (<230°C), acid to neutral, low salinity hydrothermal fluids.
Aqua Regia	A corrosive, fuming, volatile mixture of hydrochloric and nitric acids, used for testing metals and dissolving platinum and gold.
ASD	Analytical Spectral Device
Avion	Avion is a Canadian-based gold company focused in West Africa
Avocet	Avocet Mining PLC
Basin	A depressed sediment filled area.
BLEG	Bulk Leach Extractable Gold assay method
BLS	Barren leach solution
Breccia	Coarse (usually >2 mm) fragmental rock, consisting of generally angular clasts of one or more lithologies. A complexly veined rock can have a brecciated appearance (if veins are multi-generational and/or branching), but it is important to differentiate between the two. Veins are generally linear or sinuous, whereas a breccia matrix is highly irregular.
BUMIGEB	Bureau des Mines et de la Geologie du Burkina.
Carbonaceous ore	Ore hosted by a rock containing specific types of carbon in sufficient concentrations that it has preg-robbing characteristics that may reduce gold recovery unless appropriately treated
Cenozoic Era	The most recent of the three classic geological eras and covers the period from 65.5 million years ago to the present.
CHF	Cemented Hydraulic Fill.
Cockade	Concentric crustiform banding in the cement surrounding matrix supported breccia clasts.
Colloform	A botryoidal type of texture commonly observed in vein chalcedony, where radiating aggregates of chalcedony have a grape-like outer surface. Banding within this material produces agate.
CRM	Certified Reference Material.
Crustiform	Banding texture produced by differences of mineralogy, texture, and/or colour away from the vein margins. Crustiform banding is commonly produced by alternating chalcedony and saccharoidal quartz layers.
CSA	CSA Global Pty Ltd. Also used for CSA Global (UK) Ltd, a wholly owned subsidiary of CSA.
CSAMT	Control Source Audio Magneto Tellurics
CSV	Comma Separated Value(s) (database export/import format and file extension).
DDH	Diamond drill hole.
DIBK	Di-isobutyl ketone.
Disseminated	Ore carrying fine particles, usually sulphides scattered throughout the rock.
E	East.
ECG	Economic Geology Consulting.
EDM	Electronic Distance Meter.
EIA	Environmental Impact Assessment
EIS	Environment Impact Statement
EMP	Environmental Management Plan
Epithermal	Mineralisation produced by near-surface hydrothermal fluids related to igneous activity; originally defined as having formed in the range 150-300°C.
ERT	Emergency Response Team

Abbreviation	Description
GBIS	Micromine database.
GC	Grade control
GPS	Global Positioning System.
GSI	Geological Survey of Indonesia.
ha	hectares
Holocene	A geological epoch which began approximately 12,000 years ago.
High-sulphidation	Originally referred to opaque minerals which contain sulphur in a high oxidation state, but now used in a broader sense for deposits which contain them; for example “enargite-gold” (or quartz-alunite, or acid sulphate) systems, in which the mineralising hydrothermal fluids have a major magmatic component, and produce acid alteration, with base metal mineralisation at shallow levels.
HQ	Diamond Drill Core diameter 63.5mm.
MER	Independent Competent Persons Report.
Inata	Inata Gold Mine
Intermediate-sulphidation	A deposit that is intermediate between high and low sulphidation. These deposits are characterised by a moderate magmatic component.
IBRT	Intermittent Bottle Roll Test.
Inverse Distance Cubed (ID3)	Inverse distance cubed interpolation method utilises spatial correlations of grades, inverse distance weighting models work on the premise that samples further away should have their contributions diminished according to how far away they are from the resource blocks being estimated.
Inverse Distance Squared (IDS)	A method as described above for interpolating spatial sample data and determining values between data points. A value interpolated for any spatial point is determined by applying a weighting factor based on distance between the spatial point and surrounding sample data. Selection of sample points to include in the calculation may be determined by minimum and/or maximum distance, azimuth orientation, and the minimum and/or maximum number of the nearest sample data points.
IPDD	Induced Polarisation Dipole-Dipole.
ISA	International Standards Association.
ITS	Intertek Testing Service, Ouagadougou.
JORC	An acronym for Joint Ore Reserves Committee. The JORC Code has been adopted by the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG), and is binding on their respective members. It is endorsed by the Minerals Council of Australia (MCA) and the Securities Institute of Australia (SIA). The Code has been adopted by and included in the listing rules of the Australian (ASX) and New Zealand (NZX) Stock Exchanges, the purpose of which is to set the regulatory enforceable standards or a Code of Practice for the reporting of Exploration Results, Mineral Resources and Ore Reserves.
K	Potassium.
kg	Kilogram.
Koulékoun	Koulékoun Gold Project
L/h/m2	Litres per hour per meter squared.
Low-sulphidation	Originally referred to opaque minerals containing sulphur in a low oxidation state, but now used in a broader sense for the deposits which contain them; for example “adularia-sericite” type systems in which meteoric-dominated fluids produce phyllic, propylitic, and argillic alteration zones.
m	Metre.
Mm	Millimetre.
m3	Cubic metre.
Ma	Million Years.
Matrix	The interstitial material between clasts in a breccia, of which there are two main types. Some breccias may contain a proportion of both types: Clastic matrix: composed of finely ground clast material; and Chemically deposited matrix (cement): composed of chemically deposited material (usually similar to veins).If the matrix encloses and separates clasts, the breccia is matrix supported; if clasts are in contact and support each other, it is described as clast-supported.
MIK	Multiple indicator kriging.

Abbreviation	Description
Mineral Resources and Ore Reserves	Specific terms as defined in the JORC Code or NI 43-101 and refer to the actual resources and reserves used for reporting purposes and are required to be classified as Measured, Indicated and Inferred Mineral Resources or Proved and Probable Ore Reserves.
mSec	Millisecond, one thousandth (10-3) of a second.
N	North.
NI-43-101	National Instrument 43-101 (NI 43-101) is a rule developed by the Canadian Securities Administrators and administered by the provincial securities commissions that governs how issuers disclose scientific and technical information about their mineral projects to the public. It covers oral statements as well as written documents and websites. It requires that all disclosure be based on advice by a "qualified person" and in some circumstances that the person be independent of the issuer and the property.
NQ	Diamond Drill Core diameter 47.6mm.
OK	Ordinary Kriging.
OREAS	Names of standards from Ore Research and Exploration Pty Ltd.
Outcrop	An exposure of bedrock at the surface.
Phyllic	Dominated by illite or sericite and quartz, together with pyrite and possibly anhydrite. May also contain minor chlorite, calcite, titanate and rutile. Formed in the presence of moderate to high temperature (approx. 230-400°C), acid to neutral fluids at a range of salinities, commonly in permeable zones and adjacent to veins.
PIMA	Portable Infrared Mineral Analyser.
Pleistocene	Geologic period that extends from 2.588 million to 12,000 years before present.
Pliocene	The period in the geologic timescale that extends from 5.332 million to 2.588 million years before present.
PLS	Pregnant leach solution.
ppm	Parts per million (same as grams per tonne).
ppb	Parts per billion.
Pre-feasibility	The Pre-feasibility Study is an intermediate step in the engineering studies required to evaluate a mining or beneficiation project. It is usually based on some engineering basis (quotations for major components obtained from generally one supplier) and the level of accuracy is approximately +/-20% to 25%. The objective of a Pre-feasibility study is to establish the relevance of investing in the preparation of a Feasibility Study.
PQ	Diamond Drill Core diameter 85mm.
Proterozoic	The period extending from 2500 Ma to 542.0 ± 1.0.
QA/QC	Quality Assurance / Quality Control.
QLT	Quality Leach Test.
Qualified Person (QP)	A qualified person (QP) as defined in NI 43-101 as an individual who: a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these;
	b) has experience relevant to the subject matter of the mineral project and the technical report; and c) is a member in good standing of a professional association.
Quaternary	The most recent of the three periods of the Cenozoic Era in the geologic time scale.
RAB	Rotary air blast - Percussion drilling using a pneumatic hammer, cutting the rock into chips that are flushed to the surface through the space between the drill pipe and the wall of the hole.
RC	Reverse circulation: Percussion drilling using an air-cooled bit, cutting the rock into chips which are flushed to the surface through a double walled pipe by the air pressure.
RDG	Avocet's Resources Development Group.
Reverse Circulation (RC)	A percussion drilling technique in which the cuttings are recovered through the drill rods, thus minimising sample losses and contamination.
RIL	Resin in Leach. Ore recovery process.
RL	Reduced Level (same as elevation coordinate).
RLS	Recycle leach solution.
ROM	Run of mine stockpiles. The use of ROM stockpiles is critical to a mining operation by supplying products with suitable blending specification for a milling operation (e.g. high, medium and low grade and oxidized and fresh ore or fee milling and refractory ore)
RSG	RSG Global Consulting Pty Ltd.
S	South.

Abbreviation	Description
Sediment	Rocks formed by the deposition of solids from water.
Skarn	May contain garnet, clinopyroxene, vesuvianite, scapolite, wollastonite, epidote, amphibole, magnetite and calcite as major components. Minor amounts of biotite, K-feldspar, quartz and chlorite may also be present. Minerals present are similar to those found in potassic, high temperature propylitic.
SOPs	Avocet Standard Operating Procedures.
Th	Thorium.
Stratigraphy	Composition, sequence and correlation of stratified rock in the earth's crust.
TSX	Toronto Stock Exchange - Based in Toronto it is the largest stock exchange in Canada and is owned and operated by TMX Group for the trading of senior equities. A broad range of businesses from Canada, the United States, Europe, Australia and other countries are represented on the exchange.
µm	Micrometer.
UTM	Universal Transverse Mercator.
UV	Ultraviolet - light is electromagnetic radiation with a wavelength shorter than that of visible light, but longer than x-rays, in the range 10 nm to 400 nm, and energies from 3 eV to 124 eV. It is so named because the spectrum consists of electromagnetic waves with frequencies higher than those that humans identify as the colour violet.
VALMIN Code	Code for the technical assessment and valuation of mineral and petroleum assets and securities for Independent Expert Reports and is binding on members of the Australasian Institute of Mining and Metallurgy (AusIMM) and members of the Australian Institute of Geoscientists (AIG) when preparing public experts reports concerning mineral and petroleum assets and securities.
Vein	Material which was chemically deposited by fluids within a rock fracture. Veins exhibit a range of textures and minerals, depending primarily on the temperature, depth, and composition of both the fluid and the host rock. Veins may contain a small amount (<10%) of entrained host rock and/or vein clasts.
VHMS	Volcanic hosted massive sulphide.
Vug (druse)	Open cavity within a rock, usually in a vein or breccia cement, which is lined by euhedral prismatic crystals that project into the cavity.
W	West.
WADS	West African Drilling Service.
Wega	Wega Mining ASA
Whittle	Software used for pit optimisation.
WGS	World Geodetic System.
XRD	X-Ray Diffraction.
Zonge GGT-10 transmitter	Broadband, constant-current, time and frequency domain, medium power geophysical transmitter.

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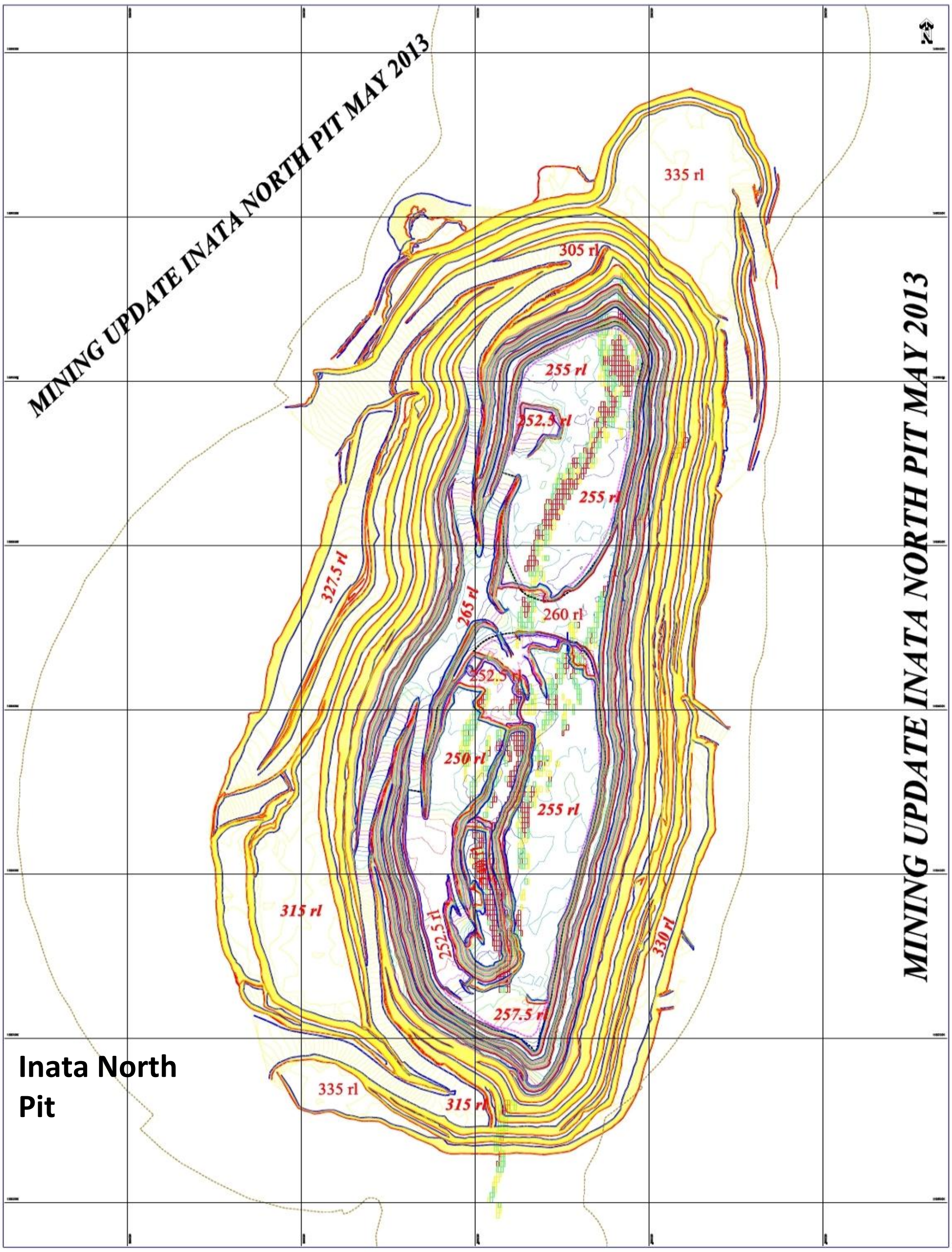
Appendix 3: Tables

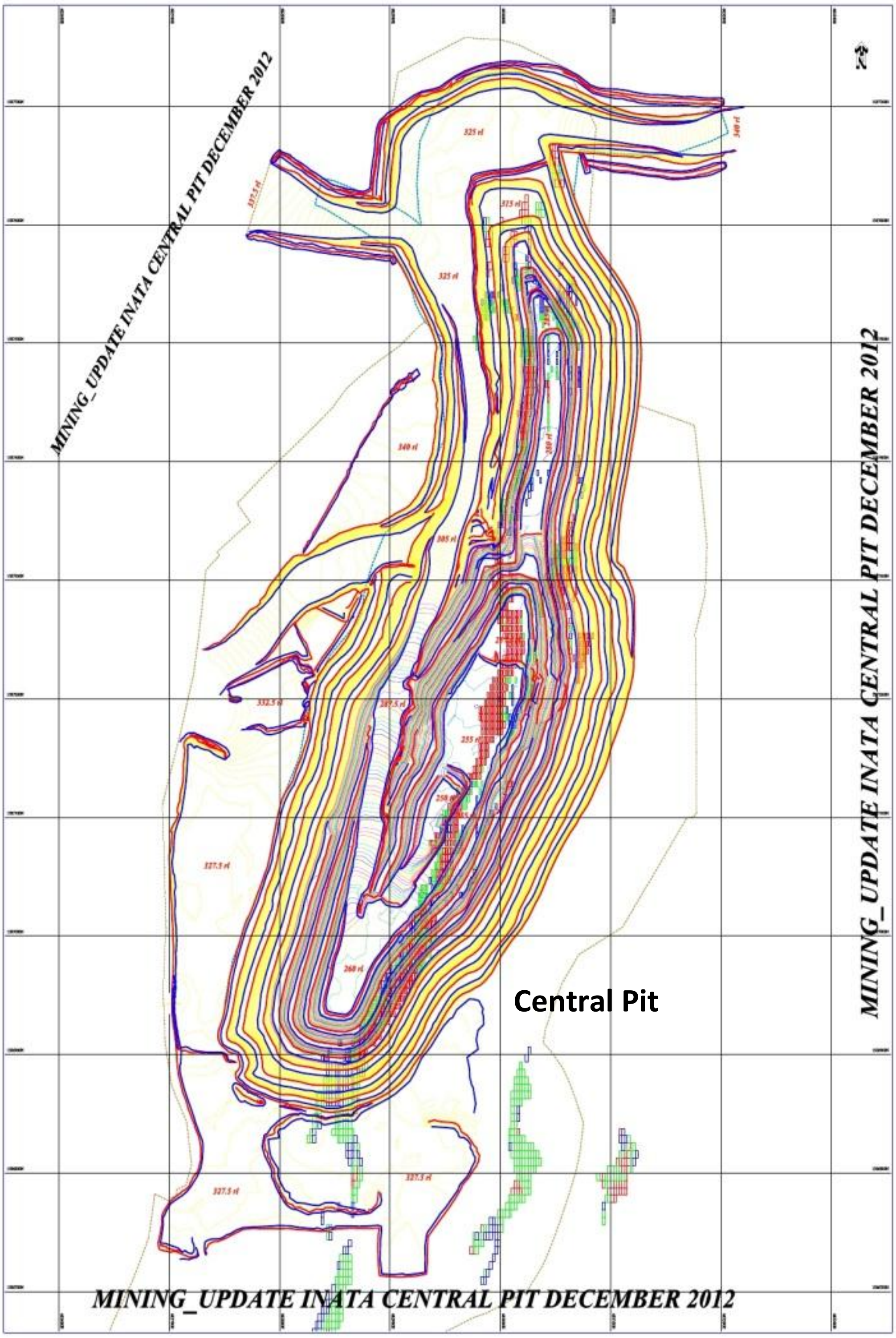
Table 1: JORC Modifying Factors

Modifying Factors	Comments
Resource classification and conversion from Mineral Resources to Ore Reserves	The Mineral Resources have been classified into Measured, Indicated and Inferred Resources. Only the Measured and Indicated Resource classifications have been considered for conversion to Ore Reserves. The Mineral Resources classified as Measured Resource for the Fresh and Transitional ore types, have been converted to Probable Reserves, due to the higher percentage of transitional and fresh ore and associated uncertainty in the metallurgical recoveries.
Cut-off grade and optimisations	Reserves were estimated using Whittle optimisation software, incorporating historical processing and operating costs.
Open cut mine and waste dump design	As an existing operation ongoing mine planning and production records are the basis of the mining cost estimates.
Mine geotechnical and hydrological studies	Geotechnical sampling and analysis has been completed by SRK as consultants to the operation. The optimisations for the reserve estimate are in broad conformance with geotechnical recommendations.
Infrastructure including transportation, power and water	As an existing operation established infrastructure supports the operation.
Mining dilution & mining recovery	Mining dilutions has been allowed for by applying a 5 % dilution at zero Au grade and a 97.5% recovery factor. This approach is consistent with historical reconciliation records. The loss and dilution estimates are applied to the Whittle optimisations.
Metallurgy & process	Metallurgical samples have been collected and test work completed on both oxide, transition and fresh ores. Estimates of oxide ore metallurgical recoveries are based on both testwork and historical processing records. Estimates for recoveries from fresh and transitional ore with variable carbonaceous and refractory mineralogy have been estimated based upon multiple sampling campaigns and test work programs, including two plant trial campaigns of transitional ore in December 2012. The estimated metallurgical recoveries of the process flow sheet, calculated via a multi-variable algorithm, have been incorporated into the Whittle optimisations to estimate the Ore Reserves. Until the recovery algorithm is further refined in relation to predicted quantity and deportment of gold in tailing, and sustained operation with transitional and fresh ores is achieved, some uncertainties remain in recovery estimates.
Mining, processing and transportation operating costs	As an existing operation the mining, processing and transportation costs have been based on historical data for the oxide ore mining and processing. Estimates of costs for mining and processing fresh ore containing variable percentages of carbonaceous and refractory ore types have been incorporated into the Whittle Optimisations for the

Modifying Factors	Comments
	Reserve estimates.
Metal price and penalties, exchange rates and discount rates	Exchange rates and discount rates used to estimate the economic viability of reserves are based on Avocets long term forecasts applied at the time the estimate was calculated. Gold Price Assumptions USD$1,200/oz. Royalty 5%, Gold Hedge, agreements in place.
Environment, legal, government and social factors	As an existing operation environment , legal , government and social factors are subject to ongoing management by Avocet
Risk assessments	Risk assessments are routinely updated by Avocet.

Appendix 4: Mine Plans

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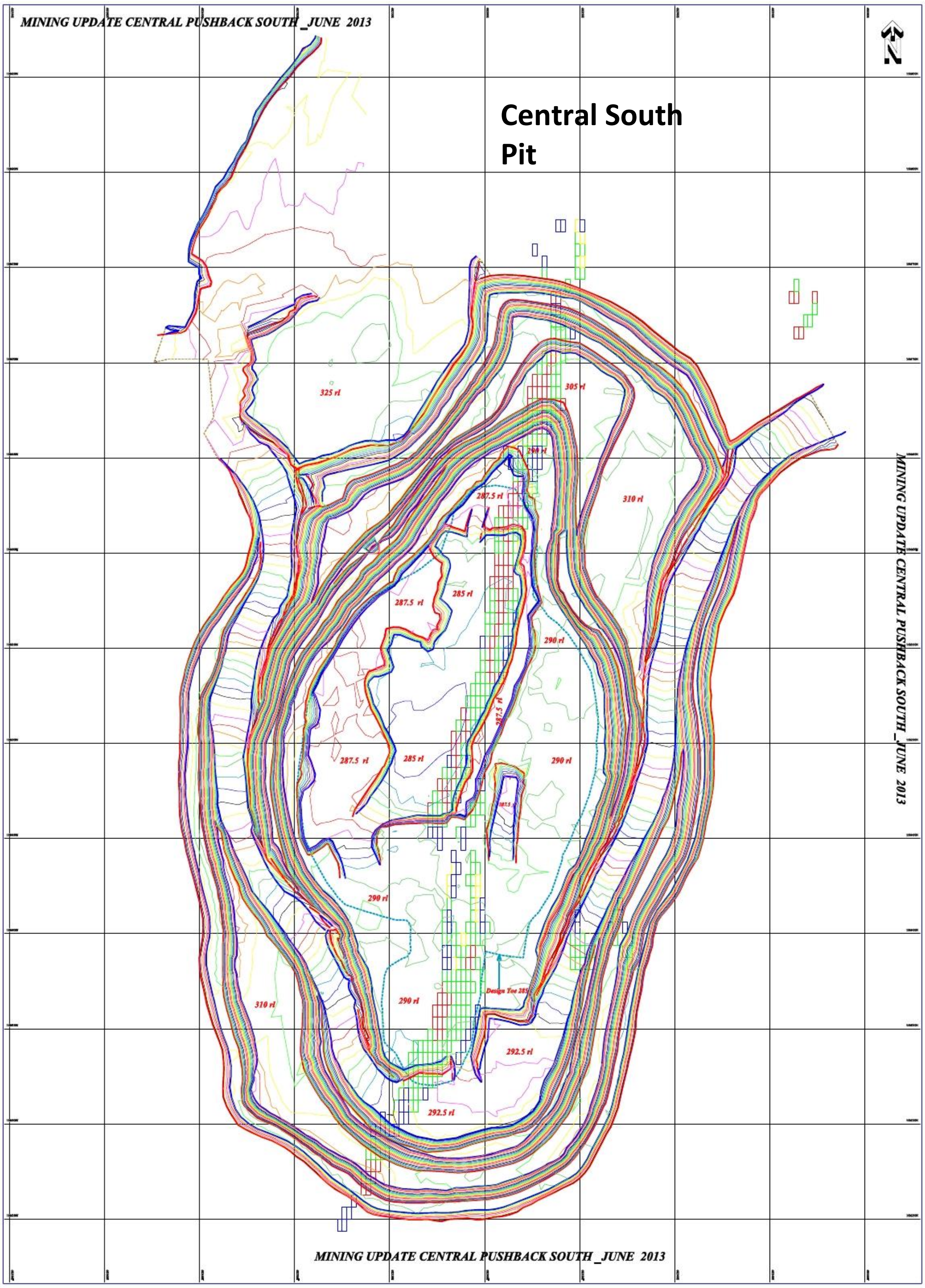
MINING_UPDATE INATA CENTRAL PIT DECEMBER 2012
MINING_UPDATE INATA CENTRAL PIT DECEMBER 2012
Central Pit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Central South
Pit
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310 rl
287.5 rl
285 rl
290 rl
292.5 rl
Design Toe 285
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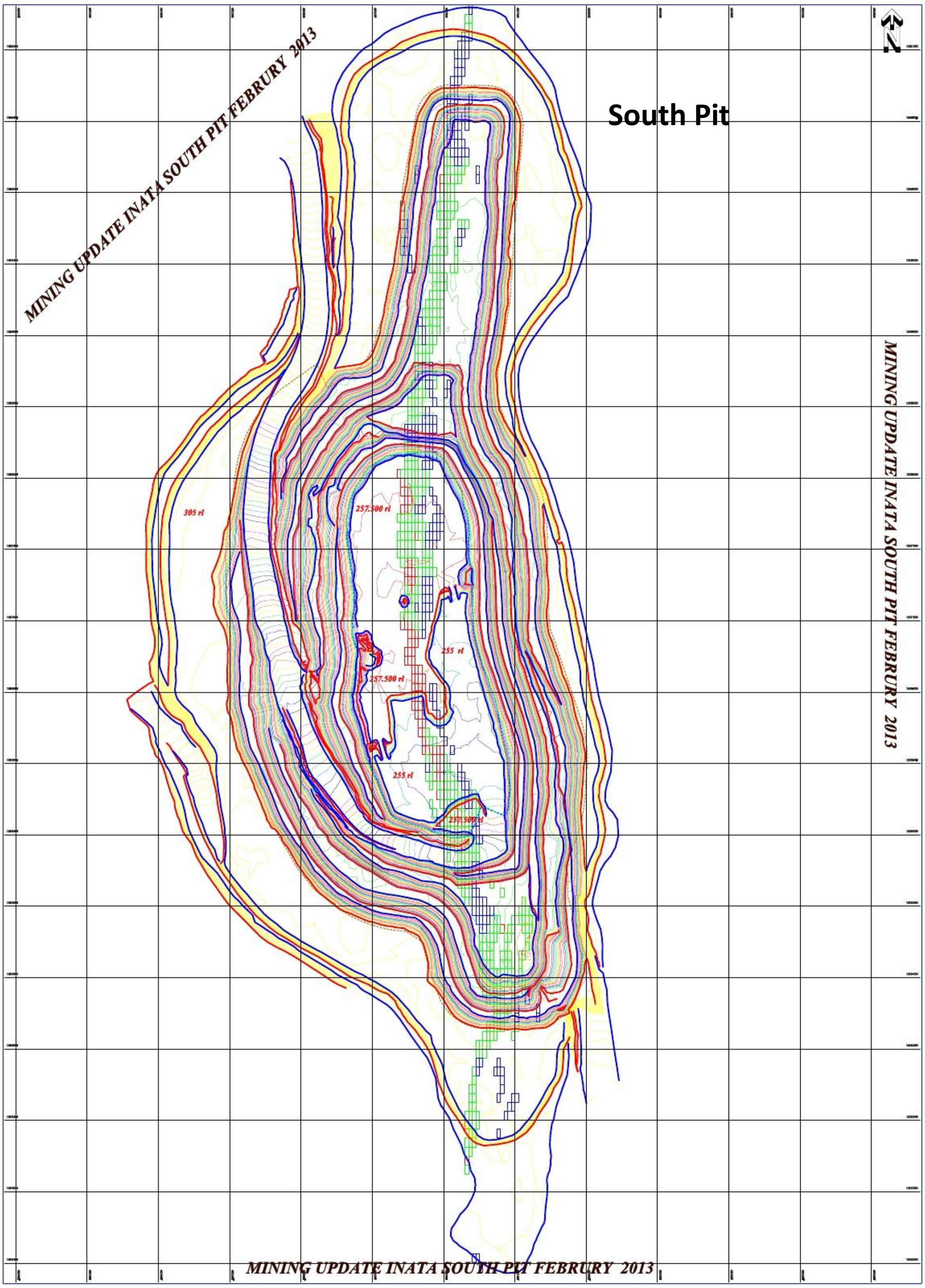
MINING UPDATE CENTRAL PUSHBACK SOUTH _JUNE 2013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South Pit
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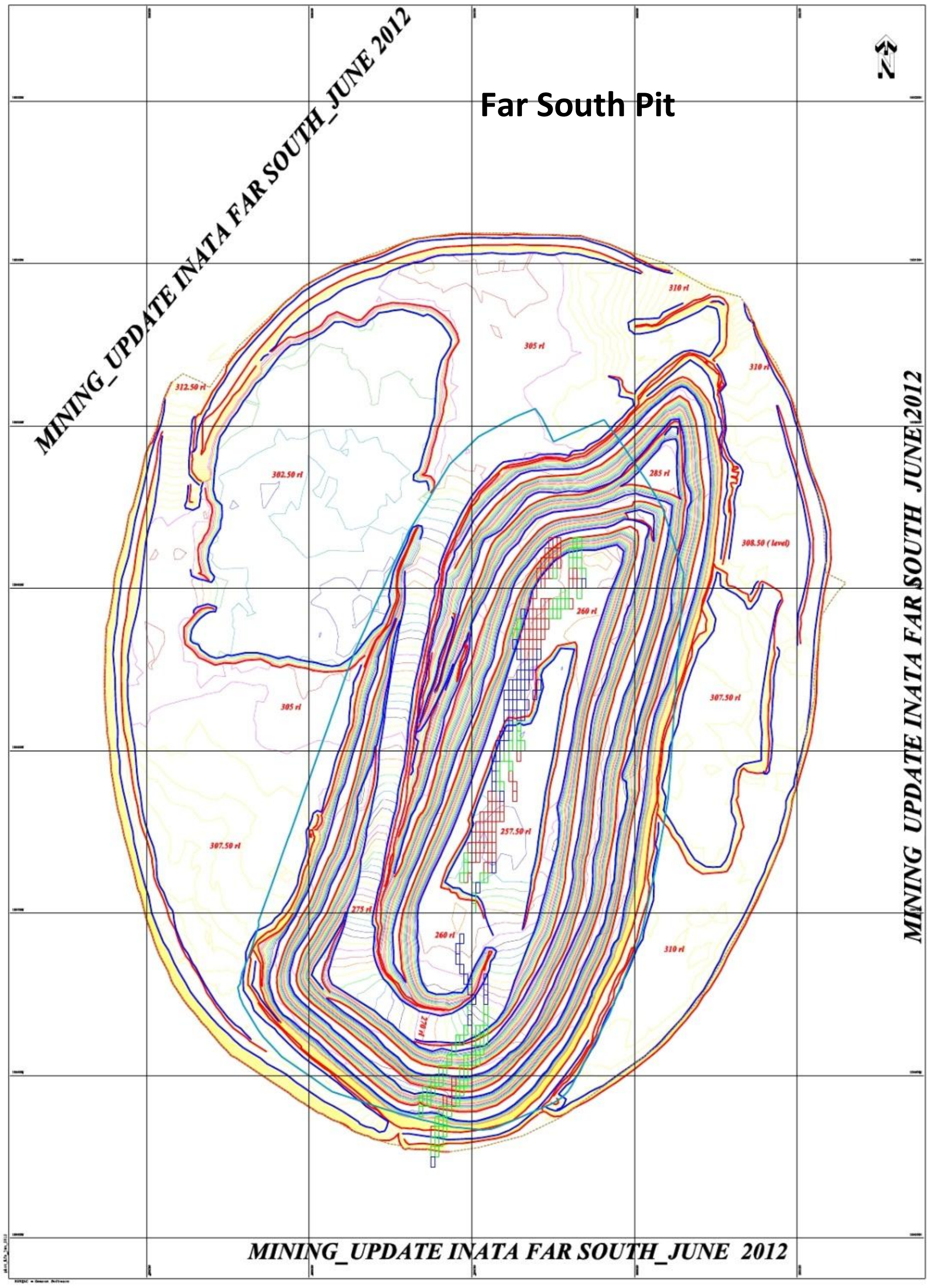
257.500 rl
255 rl
257.500 rl
MINING UPDATE INATA SOUTH PIT FEBRURY 2013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305 rl
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302.50 rl
285 rl
308.50 (level)
260 rl
305 rl
307.50 rl
307.50 rl
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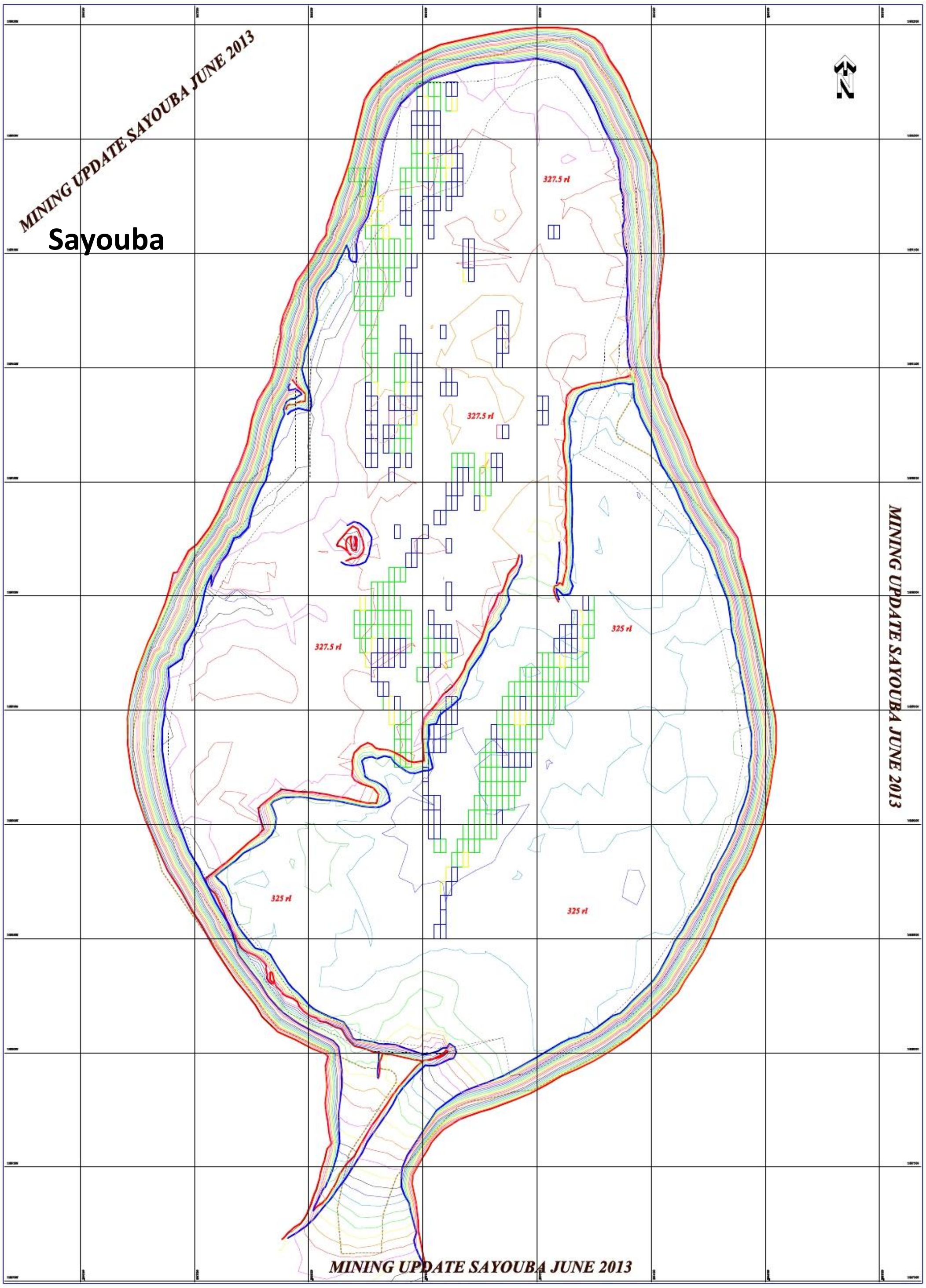
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Sayouba
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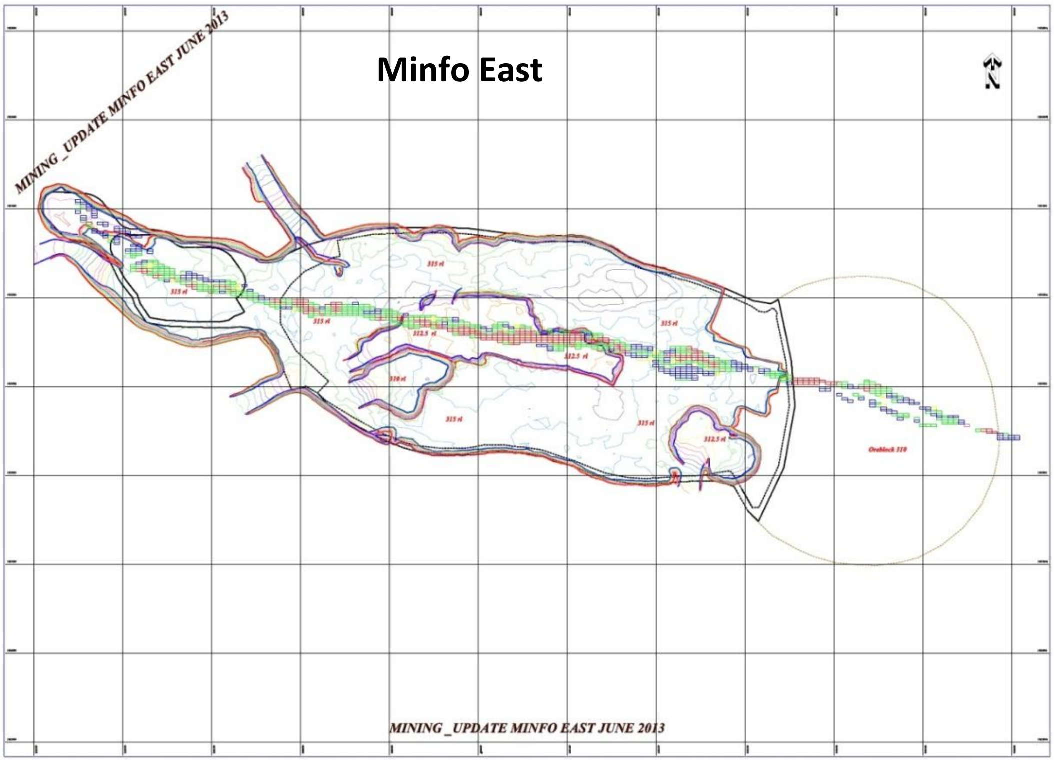
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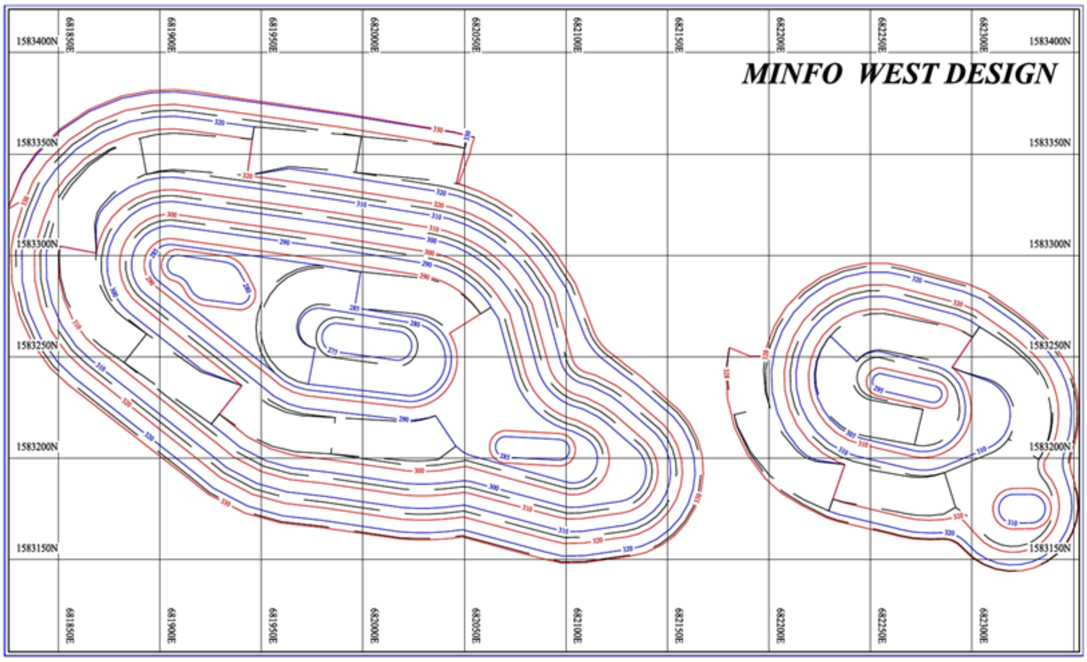
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682050E
682100E
682150E
682200E
682250E
682300E

Appendix 5: Recovery Algorithm Accuracy when compared to Diagnostic Leach Results

AVOCET

Project Development Group
Guinea & Burkina Faso

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Avocet Mining PLC

Recovery Algorithm Accuracy when compared to Diagnostic Leach Results

By: Neels van Niekerk

August 2013

Project Development Group
Guinea & Burkina Faso

Introduction

During the testwork campaigns of 2012, some diagnostic leaches were conducted at ALS in Australia and Mintek in South Africa. Keeping in mind that the samples were selected to test the highly refractory nature of the ore body, these samples can not be seen as representative of the ore body.

Only a small number of diagnostic tests were conducted and therefore not enough data to assist in the development of the algorithm. Instead the results of these diagnostic leaches were analysed, and compared to the recovery algorithm, to ascertain if there is any indicators that either support or contradict the algorithm.

Analysis

CIL Tails

The three diagnostic leaches were conducted on CIL test tails samples. It is important to note that the samples were selected based on tests that gave inconsistent results, when compared to the predicted recoveries at that time.

The table below show actual values (gold content) compared to those predicted by the new algorithm. The first and last samples did not have complete predicted results as head analysis was not conducted and only head grade were available. The team was not sure where to allocate the carbonate gold as some of it might be associated with HG and some with PRI/carbon, so the analysis focussed on the arsenic and pyrite gold.

Sample ID	**INC Composites Tails**		**INN_RC_IDR Tails**		**INN_RC_cbn_SSH Tials**	
	Diagnostic	Algorithm	Diagnostic	Algorithm	Diagnostic	Algorithm
Carbonate associated Au	0.107 g/t		0.021 g/t		0.078 g/t	
Au associated with Arsenic	0.129 g/t	0.081 g/t	0.076 g/t		0.446 g/t	
Au associated with carbon	0.191 g/t	0.295 g/t	0.151 g/t		0.501 g/t	
Au associated with pyrite	0.014 g/t	0.028 g/t	0.012 g/t		0.014 g/t	
Balance of gold by fire assy. (Silicates)	0.607 g/t	0.110 g/t	0.100 g/t	0.086 g/t	0.168 g/t	0.172 g/t
Total Grade	1.049 g/t	0.514 g/t	0.359 g/t		1.207 g/t	

One concern out of this analysis was the high value associated with silica in the INC sample. This was deemed to be an abnormality as the total reside value for the INC composite roasted sample were only 0.300 g/t and the total combined residue for the two float fractions followed by CIL 0.540 g/t. Both these values are lower than the 0.607 g/t which were assumed to be silica locked.

The gold associated with pyrite was half of what was predicted by the algorithm. The gold associated with Arsenic was 60% higher than that predicted. This factors were noted, but it was decided that the diagnostic leach cannot be used, as the test tails grade of 1.049g/t was much higher than predicted and it was concluded that this sample is an abnormality.

<u>Floatation product CIL residues</u>

There were also seven other diagnostic tests conducted. These samples were on CIL residue of float products (thus the preg-robbing effects were mitigated by the blinding effect of floatation reagents identified). There were only 2 cases where both the float concentrates and float tails CIL residues were submitted for diagnostic leach, which allowed for reconciliation. The INN and INC composites were chosen for these, as they represent the bulk of the refractory ore. The other three samples, only float tails were done and were subsequently not used for arsenic and pyrite predictions.

Arsenic associated gold

INN: - the diagnostic leach combined results indicated that 0.138 g/t against the algorithm prediction of 0.138 g/t.

INC: - the diagnostic leach combined results indicated that 0.053 g/t against the algorithm prediction of 0.081 g/t.

These two results supported the algorithm, with the INC result indicating that the algorithm might be over predicting in contrast to the CIL diagnostic leach. It was concluded that these results does not contain significant evidence to alter the recovery algorithm.

Pyrite associated gold

INN - the diagnostic leach combined results indicated that 0.031 g/t against the algorithm prediction of 0.085 g/t.

INC: - the diagnostic leach combined results indicated that 0.120 g/t against the algorithm prediction of 0.028 g/t.

The main reason for the INC value to be this high is that according to the report 41.8% or 0.125 g/t of gold in the flotation tails is associated with pyrite. This is extremely unlikely as the float tails contain less than 0.01% sulphur. The float concentrate, containing 3.64 % Sulphur had 0.026 g/t pyrite associated gold.

The only reasonable explanation was that the value was captured incorrectly and should have been 0.0125g/t. This means the gold associated with sulphur in the sample is 4% of the total, which is in line with the other flotation tails gold analysis. If this value is used the combined results is 0.013g/t which is lower than the algorithm prediction. Unfortunately the error could not be confirmed.

Considering all of the above it was decided not to alter the algorithm.

Silica Associated Gold

For some of the diagnostic results, inconsistent association with silica lock up was detected. If the diagnostic analysis is to be used, the silica lock up is not dependent on HG, which was considered to be unlikely with various other analyses supporting this dependency. Simultaneously, a trend developed that showed the gold associated with carbon was lower than predicted as losses to PRI.

It was then considered that although reported as silica lock up, the values derived is actually the balance of the gold that can not be directly attributed to any of the other results. This step is a fire assay step that determines residual gold, and does not destroy the silica selectively.

One possible explanation is that the aurocyanide complex that absorbed onto the carbon is not recovered by the relatively simple cyanidation procedure following each step and ends up as residual gold which are incorrectly attributed to silica. This is also supported by industry where loaded carbon, after being ashed, does not have good gold recoveries when utilizing standard leaching conditions. To test this theory, the samples submitted for diagnostic leaching with low preg-robbing ability was isolated. The table below shows the assayed “silica” gold locked up vs the algorithm prediction for these samples:

MINTEK	% Gold preg robbed	Diagnostic Silica	Algorithm Silica	Variance
INN Fresh	0.90%	0.071	0.108	0.037
Minfo E Fresh	3.53%	0.045	0.066	0.021
Minfo E Trans	0%	0.084	0.074	-0.010
ALS	**PRI**			
INN_RC_IDR	0.25	0.100	0.086	-0.014
INN_RC_cbn_SSH	0	0.168	0.172	0.004

Analysing these results it supported the theory as gold in silica predictions for all the low preg-robing ores were reasonably accurate and therefore it was concluded that the algorithm does predict silica lockup correctly.

Conclusion

In general, the diagnostic tests conducted by ALS and MINTEK were not planned to support the development of the algorithm. This is evident in the sample selection. Although they can not be used in developing an algorithm, they were used to evaluate the accuracy of the algorithm.

The major criticism of the algorithm since conception by various consultants, Avocet employees and even the developers was the untested theory that the algorithm was under predicting gold losses associated with gold locked up in silica, pyrite and arsenopyrite. The only analysis available to test this is the various diagnostic leaches conducted. An analysis of these results indicated that the algorithm is reasonably accurate in is more likely to over predict these gold associations than under predicting them.

Appendix 6: Multi-variant Recovery Algorithm for Inata Ore

Project Development Group
Guinea & Burkina Faso

Avocet Mining PLC

Multi-variant Recovery Algorithm for Inata Ore
Revision 1

By: Neels van Niekerk and
Cameron Talbot

March 2013

Introduction

During production in 2011 & 2012, and in testwork conducted in 2012, it was found that the Inata transitional and fresh ores have a refractory nature. Initially it was believed that the refractory nature is limited to "preg-robbers" found in the ore. Recovery predictions were based on the Preg-robbing index (PRI), an index used to classify the ore on the severity of its preg-robbing ability.

Although the PRI showed a correlation to the recovery of gold, the accuracy of current prediction algorithms against available testwork indicated that there are other contributing factors that influence recovery.

The authors sought to develop an algorithm that includes these aspects into the recovery estimation.

In developing the new algorithm the authors looked at all the testwork results available to date, including:

1. Feasibility testwork conducted by ALS Ammtec in 2006.
2. Testwork trial conducted by ALS Ammtec in 2012.
3. Diagnostic leaching testwork by Mintek 2012.
4. 5000 geology samples analysed in 2012.

Identification of Contributing Factors

The first step in the development of the algorithm was to evaluate various chemical and physical properties of the ore body to identify the parameters that will influence the expected recovery of gold in the fresh and transitional zones. This was done by analysing quick leach test (QLT) results from the 5 000 geology samples and establishing trends within the obtained results. It was concluded that four parameters will have a significant impact on the recovery of gold from the Inata ore:

- Head Grade of sample
- Sulphides concentration
- Arsenic (As) concentration
- Preg-robbers (measured using PRI)

Other parameters worthy of mentioning include:

Carbon Concentrations: The authors found a correlation between gold losses and the concentration of organic carbon in the sample. As this correlation was found to be inconsistent, and it was previously proven that this correlation was due to the preg-robbing ability of the carbon, it was decided to use the more consistent PRI dependency and ignore the carbon concentrations.

Spatial Dependency: The influence of depth and location within the ore body was evaluated and found to have a minor impact on recovery. It was concluded that this dependency is driven mostly by lithology and therefore spatial dependency was ignored.

Lithology: Although lithology does have a strong impact on recovery, similar correlations were found between lithology and sulphide, arsenic and PRI. Lithology was ignored during the initial development of the algorithm as it was believed that lithology per se does not influence recovery, but rather has an indirect effect as some lithology types are more likely to have higher amounts of organic carbon, sulphide and arsenic. Lithology was re-evaluated once the dependencies on the other factors were quantified, and it was found that lithology as a separate parameter has an insignificant impact on recovery.

Development of the Algorithm

Direct Leach

To develop the algorithm, the authors studied the literature available and analysed the 5 000 geology QLT samples. As the recovery is a function of all four parameters, the gold grade in the tails attributable to each individual parameter was calculated, rather than calculating an overall recovery. The total tails grade per sample was calculated by summing the tails grades for each of the parameters.

The dependency of the individual parameters was identified by isolating samples within the sample set with similar concentration / values for the other three parameters. The dependencies for the first three parameters were identified as follow:

$$\boldsymbol{Tail\ Grade}\ (\boldsymbol{HG}) = \mathbf{0.072} \times \sqrt{\boldsymbol{Head\ Grade}}$$

$$\boldsymbol{Tail\ Grade}\ (\boldsymbol{Sulphide}) = \mathbf{0.09} \times \%\boldsymbol{Sulphide}$$

$$\boldsymbol{Tail\ Grade}\ (\boldsymbol{As}) = \mathbf{0.005203} \times \sqrt{\boldsymbol{ppm\ As}}$$

It was determined that the impact of PRI requires a different approach. As PRI gives an indication of the amount of gold dissolved being re-absorbed by preg-robbers, it was necessary to take into account the gold unavailable for re-absorption owing to the above three parameters. The amount of dissolved gold available for re-absorption was therefore calculated by subtracting the sum of the gold losses due to the first three parameters from the head grade. The amount of dissolved gold re-absorbed by the preg-robbers was then evaluated using this "dissolved gold factor", and was found to follow the following relationship:

$$\boldsymbol{Tail\ Grade}\ (\boldsymbol{PRI}) = \left(\mathbf{1} - \boldsymbol{e}^{-\boldsymbol{PRI}}\right) \times \boldsymbol{Dissolved\ Au}$$

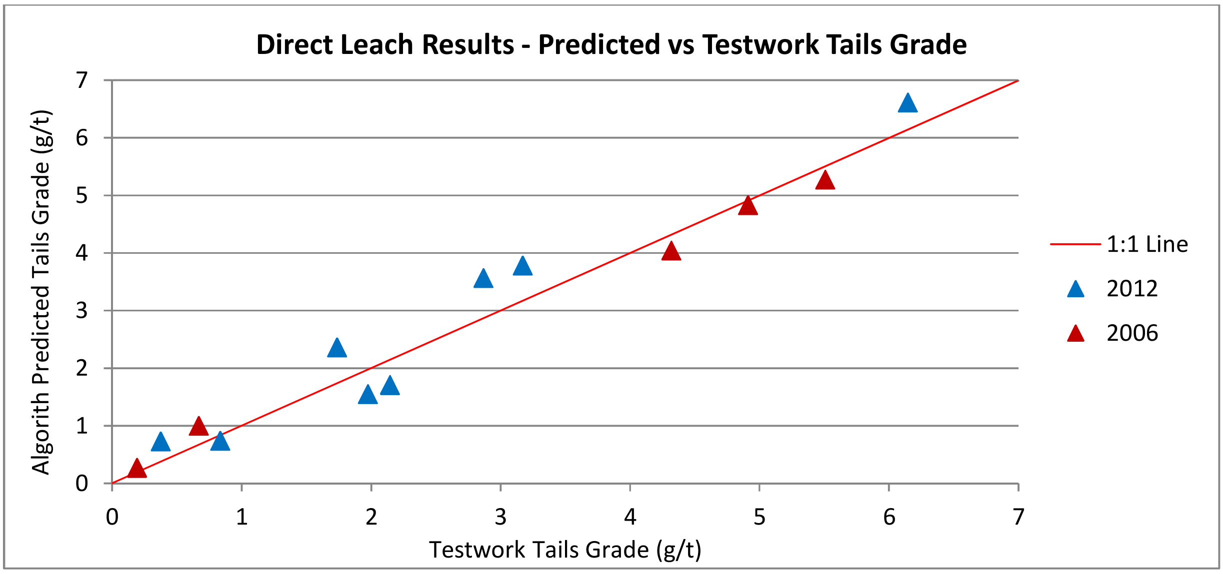
Recovery can then be calculated using the following equations:

$$\boldsymbol{Tail\ Grade\ Total} = \boldsymbol{Tail\ Grade}\ (\boldsymbol{HG}) + \boldsymbol{Tails\ Grade}\ (\boldsymbol{Sulphide}) + \boldsymbol{Tail\ Grade}\ (\boldsymbol{As}) + \boldsymbol{Tail\ Grade}\ (\boldsymbol{PRI})$$

$$\%\ \boldsymbol{Recovery} = (\boldsymbol{Head\ Grade} - \boldsymbol{Tail\ Grade\ Total})\ /\ \boldsymbol{Head\ Grade}$$

Figure 1 show the algorithms predicted tails grade compared to the 2006 and 2012 ALS Ammtec testwork campaigns direct leach test results. These were the only available sample points where the effect of PRI was not mitigated.

Figure 1: Direct Leach Comparison



CIL/Blinding

There are various methods to reduce the impact of preg-robbers, including the introduction of more aggressive carbon to counteract the preg-robbers (CIL leaching), chemical blinding and destruction of the preg-robbers by oxidative pre-treatment. Initially it was assumed that the reduction in PRI effect would be percentage based. Although literature neither supported nor denied this approach, it gave reasonable correlations, and therefore was used for the initial algorithm. A percentage reduction was calculated for each mitigation process and is summarised in Table 1 below:

Using the above relationship, the algorithm was modified to account for the effect of CIL/Blinding as follows:

$$Tail\ Grade\ Total = Tail\ Grade(HG) + Tails\ Grade(Sulphide) + Tail\ Grade(As) + f_m\ x\ Tail\ Grade\ (PRI)$$

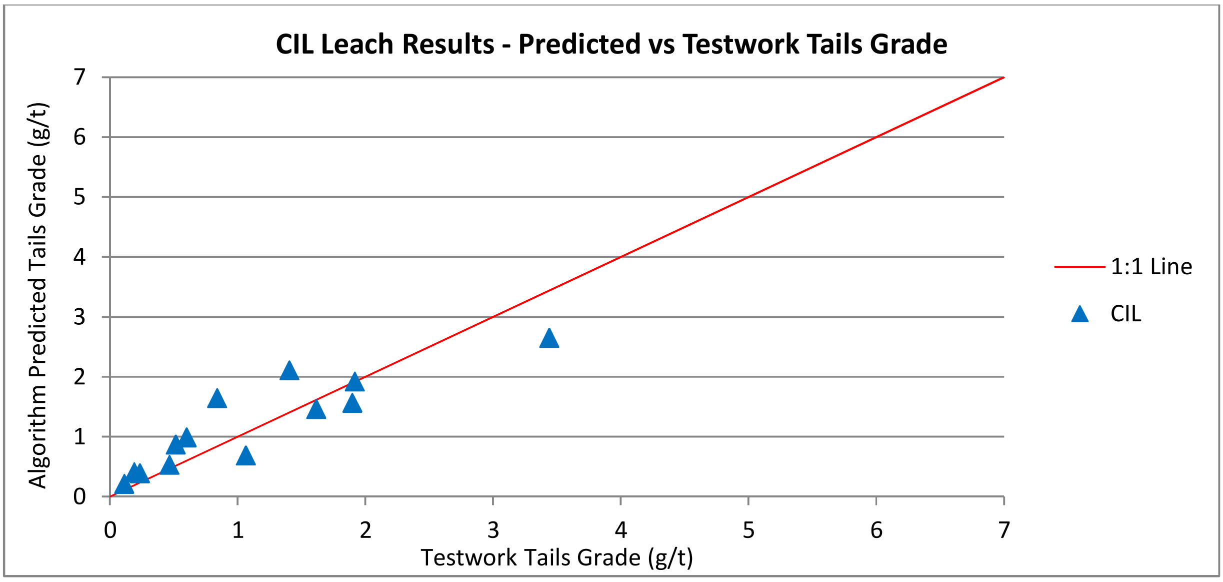
where F_m is the PRI mitigation factor.

Table 1: PRI mitigation factors.

	Description	Reduction	f_m
1	Direct Leaching (Laboratory results)	0%	1.00
2	CIL (Plant results)	60%	0.40
3	CIL (Laboratory results)	65%	0.35
4	CIL and “ineffective” blinding (Plant)	72%	0.28
5	CIL and blinding (Laboratory results)	85%	0.15

CIL leaching with fresh carbon (laboratory conditions) were found to reduce the effect of PRI by 65% and therefore an F_m value of 0.35 was applied when predicting the tails grade. Figure 2 shows the correlation between CIL testwork tails grade and those predicted using the algorithm.

Figure 2: CIL Leach Comparison



<u>**Mitigation Factor (Fm)**</u>

During the development of the algorithm, using a percentage base for the mitigation factor was considered an over simplification. Although insufficient testwork data was available to confirm this, the tendency of the algorithm to over-predict tails grades at lower PRI's and under-predict at higher PRI's in the laboratory testwork was observed. This was later confirmed by continuously testing the algorithm against plant results.

The authors concluded that a better algorithm needed to be developed to predict the PRI mitigation factor. To scientifically develop this relationship, a series of on-site testwork is planned to obtain sufficient data. Time pressure, due to mine planning requirements, required the authors to establish an "interim" relationship in the meantime, which would be more accurate than the initial assumption.

To establish a better relationship for the mitigation factor, the authors considered the principle of how mitigation of the preg-robbing effects occurs in CIL. The principle is that the activated carbon competes with the preg-robbing components in the ore for adsorption of the gold. It was assumed that, with low PRI minerals having lower "activity" than high PRI minerals, mitigating on the effects of lower PRI samples should be more effective than with higher PRI samples. During the development of the improved algorithm it was observed that the PRI effect or "activity" follows an exponential relationship, and therefore it is reasonable to assume that the mitigation of PRI should follow a similar relationship.

A new mitigation factor algorithm was considered, using the following equation:

$$f_m = 1 - \left(1 + e^{-b \times PRI}\right) \times f_e$$

Where: b = constant
f_e = efficiency factor based on process route
f_m = mitigation factor

If the mitigation of PRI mirrors the dependency as previously established for the PRI algorithm, the value of *b* should be 1. The authors also optimised the value of *b* by establishing the best fit to the 2012 Ammtec results, and found *b* to be 0.331.

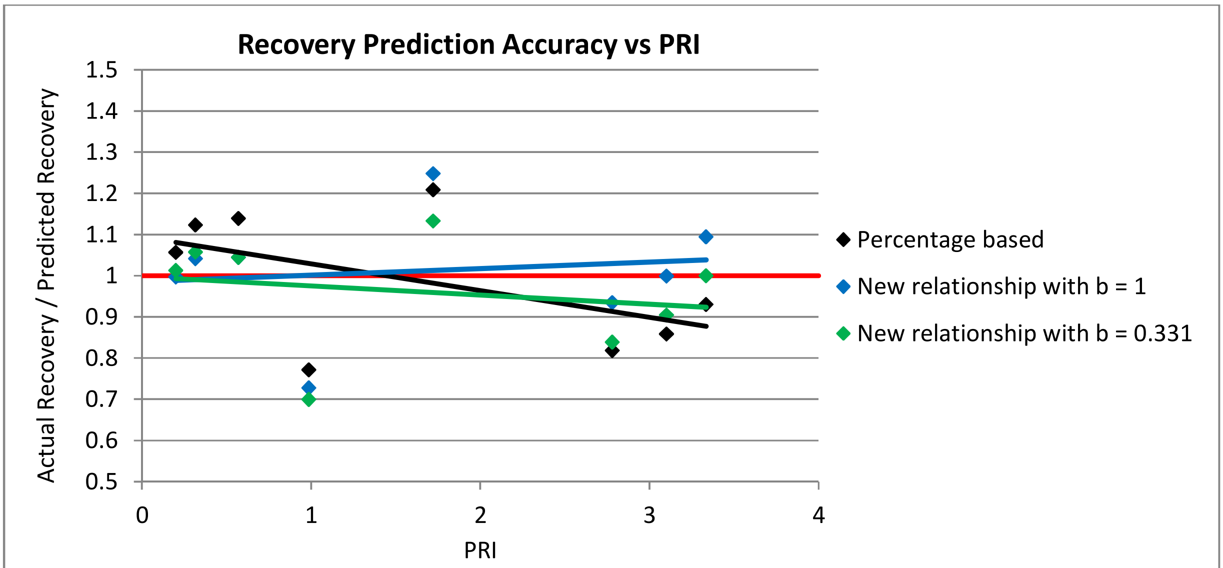
Efficiency factors were calculated for the two new scenarios and are listed in Table 2 below.

Table 2: PRI efficiency factors.

	Description	*b* = 1	*b* = 0.331
1	Direct Leaching (Laboratory results)	0	0
2	CIL (Plant results)	0.510	0.452
3	CIL (Laboratory results)	0.528	0.452
4	CIL and “ineffective” blinding (Plant)	0.577	0.497
5	CIL and blinding (Laboratory results)	0.798	0.601

Figure 3 below shows the actual/predicted recovery relationship compared to PRI for all 3 scenarios ie percentage based, *b* = 1 and *b* = 0.331. Although the new dependencies do predict more accurately at low PRI’s, the data set is too small and the results too erratic to convincingly conclude which prediction method would be more accurate.

Figure 3: Actual / Predicted recoveries versus PRI



To determine which of the three prediction methods is more accurate; the authors reverted to a less scientific approach:

The 5000 geology samples are considered the most comprehensive sample set for the Inata ore body. The predicted recoveries of these samples were plotted against PRI. The plots indicated a “cloud” of recoveries with a semi hard upper limit boundary, driven by PRI. It was concluded that plant recoveries should normally fall within this “cloud”, and will only be able to exceed the upper boundary in exceptional circumstances.

When plotting actual recoveries obtained at the Inata plant from the 1st of December 2012 to the 13th of January 2013 (when the plant had steady production), onto the same graphs, it was found that only one mitigation algorithm fit this criteria, that being the one where *b* = 0.331.

Figure 4a: Scenario 1 Predicted recoveries versus PRI: Percentage based

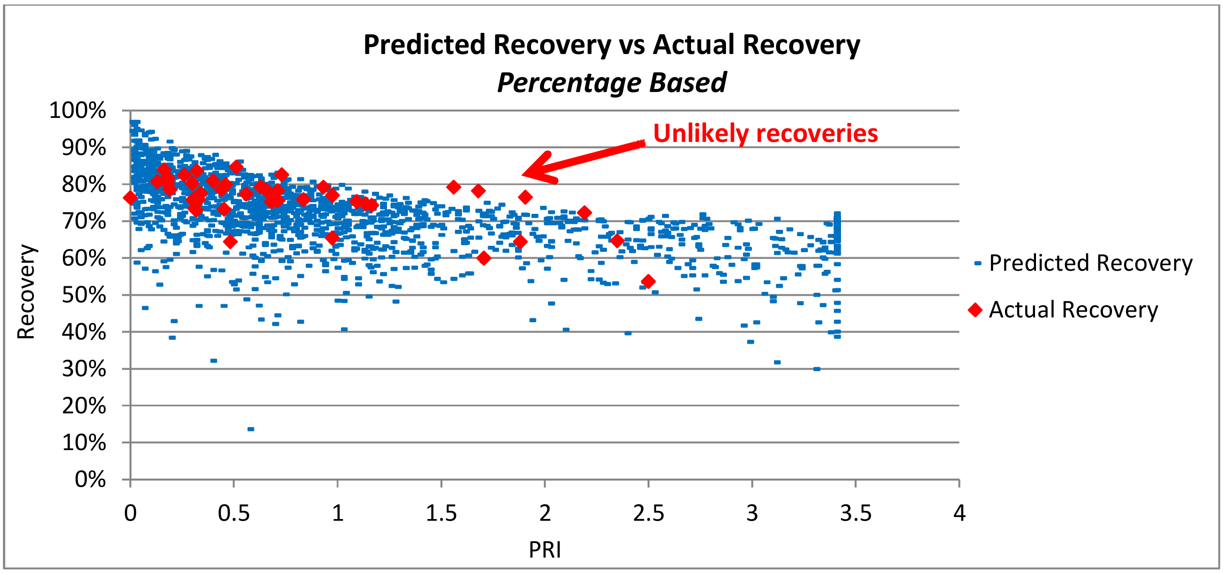


Figure 4b: Scenario 2 Predicted recoveries versus PRI: b = 1

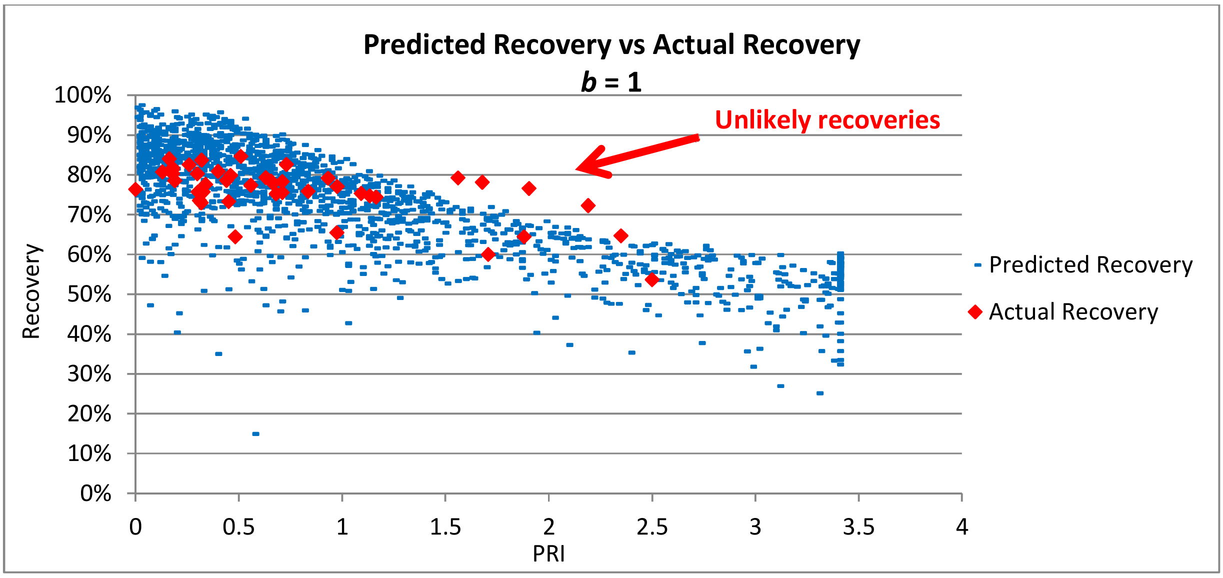
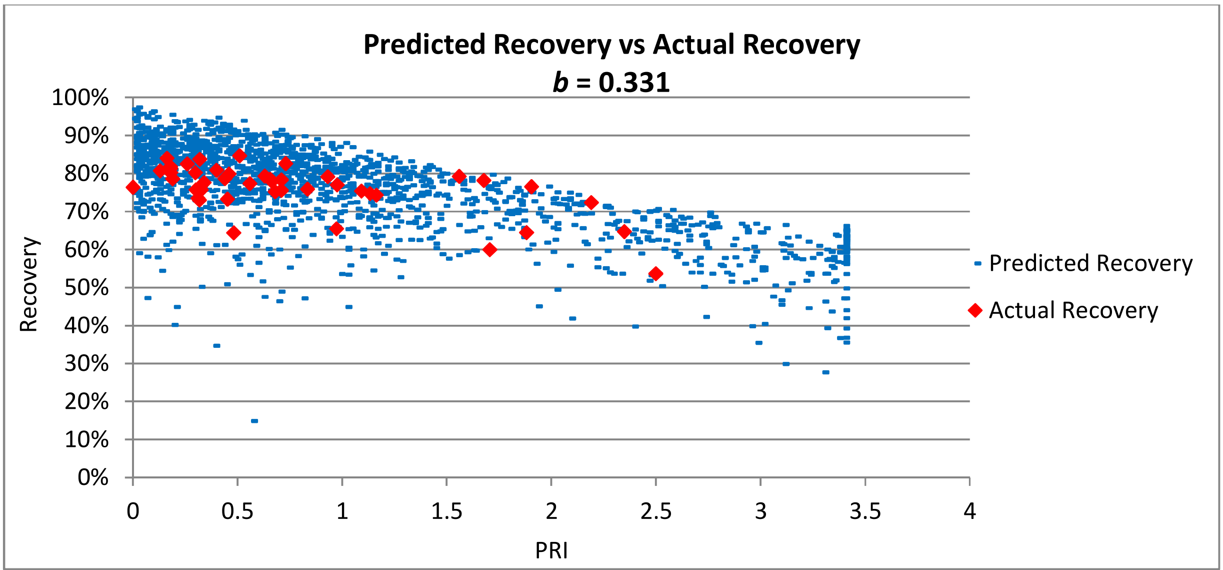


Figure 4c: Scenario 3 Predicted recoveries versus PRI : b = 0.331



It was therefore concluded that the mitigation factor can be calculated using the following equation:

$$f_m = 1 - (1 + e^{-0.331 \times PRI}) \times f_e$$

Testing of the Algorithm

To test the algorithm, ideally it needs to be compared to a sample set which was not used during the development of the algorithm. The only sample set available was the transitional ore trial conducted during December 2012 at the Inata mine site. The sample set does have some restriction as follows:

Sulphide concentration: During the plant trials the sulphide concentration was not analysed. Total sulphur was analysed, and using the correlation between total sulphur and sulphide established in the geology sample campaign, the sulphide concentration was calculated as 0.8736 x total sulphur.

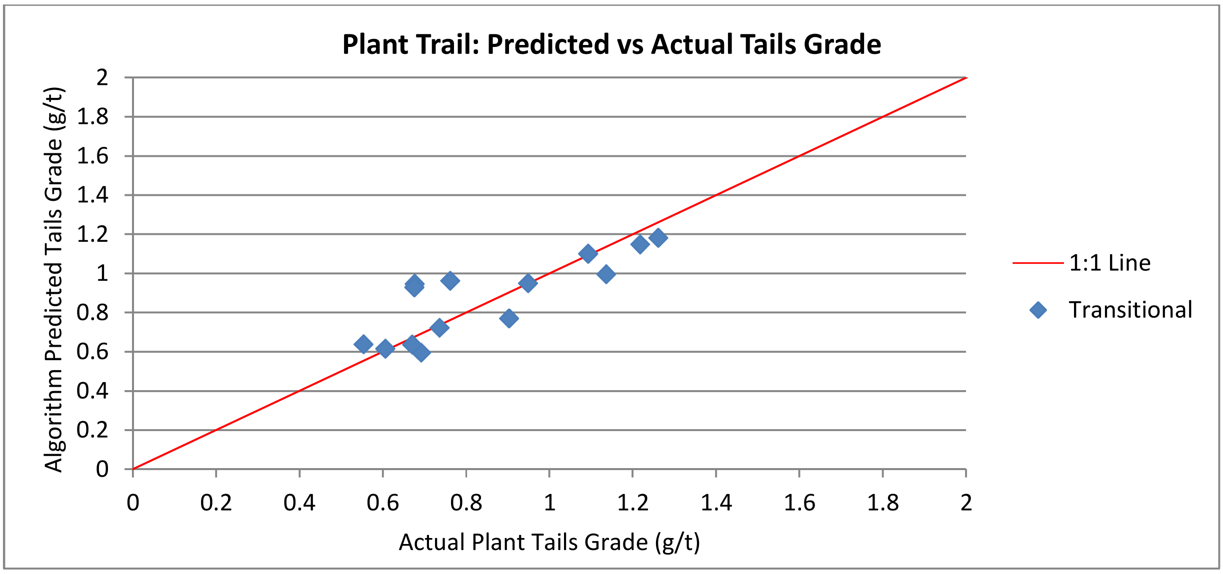
Arsenic (As) concentration: The arsenic concentration was not measured. For the analysis, an arsenic value of 50 ppm was assumed. This assumption were based on the predicted As concentrations for the area where the trials ore was mined.

Other operational influences: During December the plant had a steady run with 98.2% utilisation. Analysing the production data, no specific upset conditions could be identified and therefore no external influence on recovery was considered.

Diesel Blanking: During the trial, diesel blanking was used to mitigate the effect of preg-robbers. Analysing the results, the effect of diesel blanking and CIL operations indicated a mitigation factor of 0.72 to be used. This is in line with what were expected as laboratory trials indicated factors of 0.65 and 0.85 for CIL and blinding followed by CIL, respectively, under laboratory conditions.

The tails grade comparison was done comparing the feed material with the tails grade with a 1 day lag to compensate for the 24 hour residence time. Figure 5 shows the correlation between the predicted and the recorded tails grades for the days transitional ore were fed to the plant. The data shows a reasonable comparison between the predicted and actual tails grades.

Figure 5: Plant Trial Comparison



Oxide Ore

During the development of the algorithm, oxide ore test results were not considered as it was believed that they will have different dependencies compared to the un-oxidised zones. The analysis of the QLT results did indicate that the oxidation state and depth of the ore does not have a significant impact on the tails grade. Therefore it could be concluded that the oxide ore recovery should have similar dependencies to that of the transitional/fresh ore. To test this hypothesis, the comparison for the plant trials was expanded to include the days oxide ore were treated. Figures 6 and 7 show the expanded correlation.

These figures clearly show that the algorithm has accurately predicted the tails grade for the transitional as well as oxide material fed through the plant during December 2012. Similar results were obtained for January and February when oxide ore was the predominant feed source for the plant. Although more in-depth analysis is required, the authors believe it is a reasonable assumption that the algorithm holds true for the entire Inata ore body.

Figure 6: Plant Trial Expanded Comparison

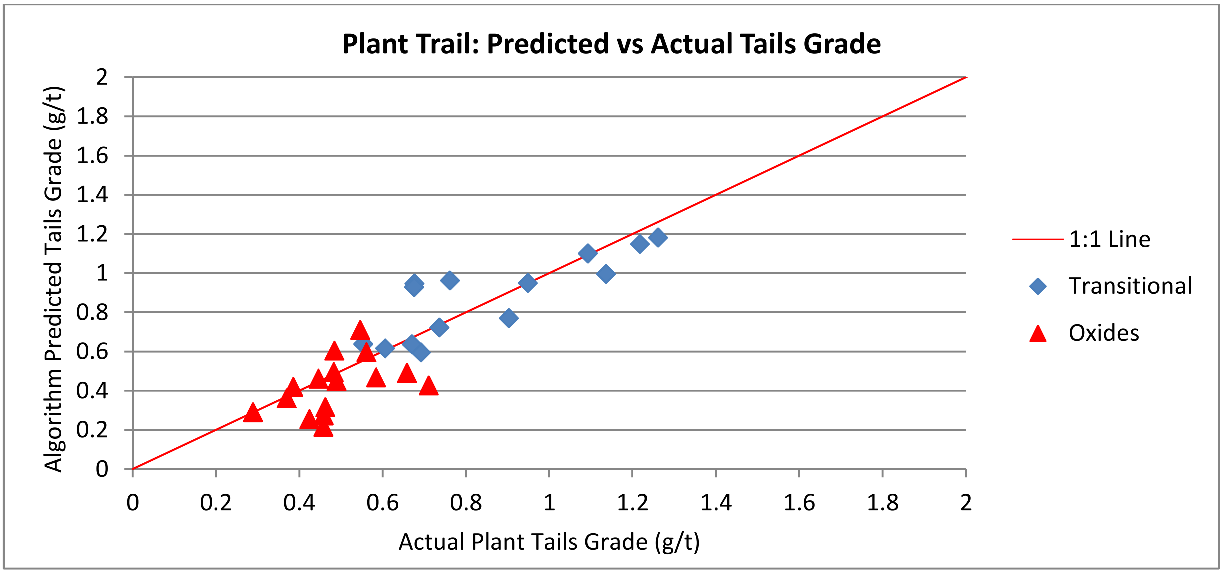
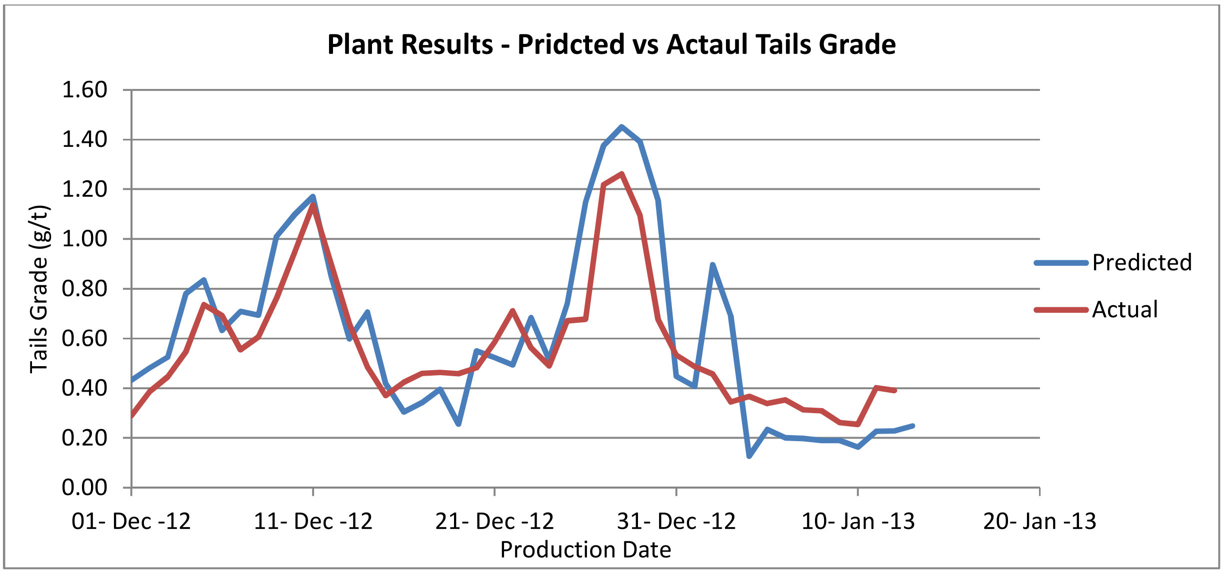


Figure 7: Plant Trial Expanded Comparison



Conclusion

An algorithm was developed that predicts the tails grade for Inata ore being treated through the current plant. The dependencies of recovery to ore parameters were successfully modelled with head grade, sulphide concentration, arsenic concentration and PRI being the main drivers.

The algorithm was developed using available testwork results. As the number of test results is limited, it is foreseen that on-going development of the algorithm will be required. As new information becomes available, assumptions used during the development of the algorithm can be better defined. These adjustments should be minor and it is believed that this algorithm is the most accurate prediction method of recoveries for the Inata ore body available.

In addition to predicting operating performance, the algorithm will be used in the development of the plant. It is foreseen that changes and/or expansions to the plant will be required in future to optimally treat the refractory ore. This algorithm can be used to predict recovery improvements for various expansion options, which will assist in the financial evaluation and ranking of the various options.