St Ives Gold Mine

Technical Short Form Report

St Ives Gold Mine represents a solid base for Gold Fields growth in Australia and is an important contributor to the Gold Fields' vision, "To be the global leader in sustainable gold mining," with a target contribution from the Australasia Region of ~1 Moz per annum.

Reported Mineral Resources and Mineral Reserves at St Ives gold mine show a headline increase of 1,105 and 443 koz during F2009 respectively, inclusive of a depletion of 490 koz, indicating an underlying increase of 1,595 and 933 koz respectively. Changes from June 2008 were dominated by discoveries at Athena and Hamlet, and the impact of the higher declared gold price. The St Ives LoM has again been extended by a further 12 months following a year of continued exploration successes.

The St Ives Gold Mining Company (Pty) Limited is wholly owned by Gold Fields Limited and is situated within the highly prospective Norseman-Wiluna Greenstone Belt in Western Australia. The St Ives operations are conducted within mining tenements comprised of 366 Mining Titles (69.919 ha), 9 Exploration Licences (15,530 ha), 47 Prospecting Licences (7,194 ha) and 19 Miscellaneous Licences (14,643 ha) for a total area of approximately 107,286 ha.

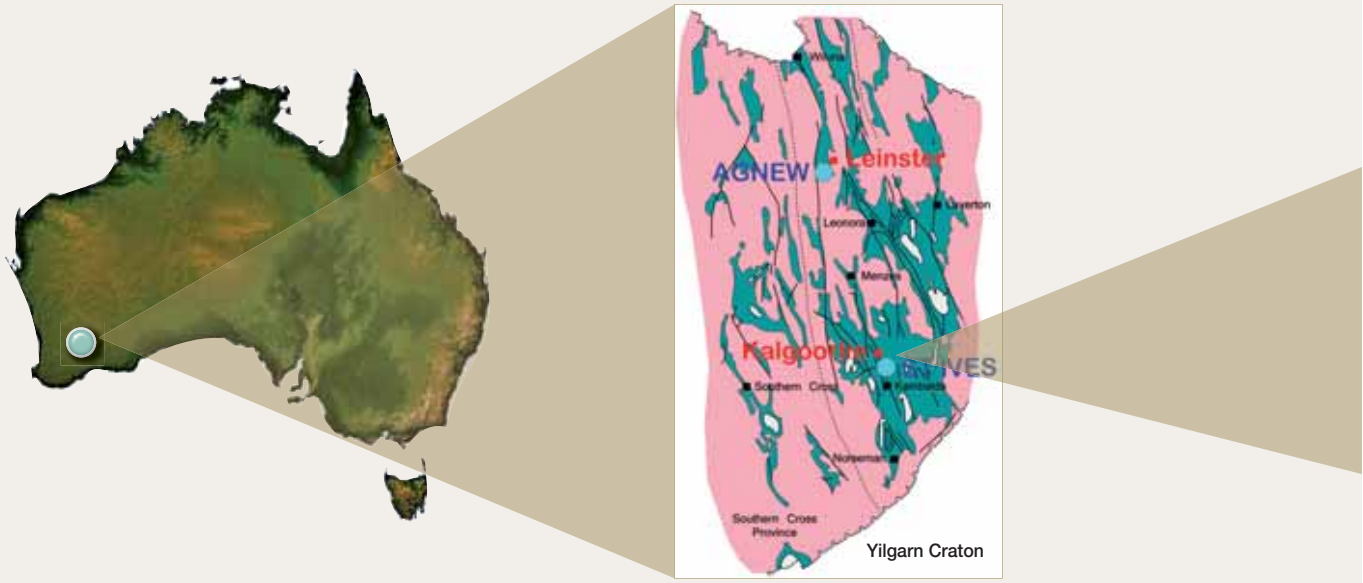
This Technical Short Form Report reflects the latest Life of Mine plan, coupled with an updated Mineral Resource and Mineral Reserve statement as at 30 June 2009. All Mineral Resource and Mineral Reserve figures reported are managed unless otherwise stated and Mineral Resources are inclusive of Mineral Reserves.

Salient Features

- Highly prospective gold camp in the Norseman-Wiluna Archaean Greenstone Belt.
- Dynamic mix of open pit and underground mining operations.
- Mineral Resources at 5.6 Moz.
- Mineral Reserves at 2.3 Moz – increase of 24% post F2009 depletion.
- Continuous exploration and resource definition programmes supported by Research and Development (R&D) initiatives.
- Athena – Hamlet complex; significant discovery in 2009.
- Life of Mine extends to 2014 (5 years).

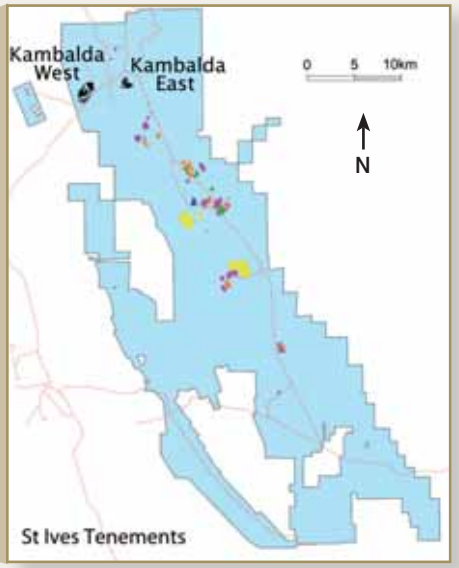
The St Ives gold mine is located 80 km south of Kalgoorlie, near Lake Lefroy in the Eastern Goldfields region of Western Australia. Gold was discovered at Kambalda in 1897 at "Red Hill Camp". New discoveries during 1919 led to the construction of many small mines and a town in the St Ives area.

St Ives takes its name from the largest of the many small, historic workings scattered throughout the area, that of Ives Reward, which was discovered by prospector Pat Ives. Mining here was discontinued for many years until resumed by Western Mining Company (WMC) Limited in 1981, when gold production from St Ives began. Since then St Ives has produced 86.1 Mt of ore at an average grade of 3.3 g/t yielding 9.2 Moz from 40 open pits and 16 underground mining operations. Gold Fields Limited acquired the St Ives gold mining operations in Western Australia from WMC Limited in December 2001.



Key Features

Independent Audit	Figures reported in this declaration are as reviewed and approved by independent, external consultants as at 30 June 2009
Prepared by	Gold Fields Limited
Effective date	30 June 2009
Source of Information	This Technical Statement is a summary of the internally sourced document entitled F2010 St Ives Competent Persons Report
Personal Inspection	Personal inspection is conducted by the Competent Persons as listed, who are full time employees of Gold Fields Limited
General Location	The St Ives operations extend from 5 to 25 km south-southwest of the town of Kambalda in Western Australia, approximately 630 km east of Perth at latitude 31° 12` S and longitude 121° 40` E. The nearest major settlement is the town of Kalgoorlie situated 80 km to the north. Well established power, access roads and supporting infrastructure exist in the area
Licence Status and Holdings	St Ives controls exploration and mineral rights over a total area of 92,643 ha (total of granted tenements) and has security of tenure for all current exploration and mining leases that contribute to future Mineral Reserves
Operational Infrastructure	St Ives currently operates three underground mines accessed via declines and several open pits. Centralised administrative, engineering & Mill/CIP processing plant with a supplementary Heap Leach processing plant
Climate	No extreme climatic conditions are experienced that may affect mining operations
Deposit Type	Archaean Orogenic Greenstone gold hosted in a number of different styles of mineralisation
Life of Mine (LoM)	It is estimated that the current Mineral Reserve will be depleted in 2014
Environmental	The mine maintained AS4801:2000 Occupational Health and Safety Management System certification and ISO14001:2004, (Environmental Management System) certification. Post year end the mine was awarded full ICMI Cyanide Code compliance
Regulatory Codes	Gold Fields reports its Mineral Resources and Mineral Reserves in accordance with the South African Code for The Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2007 SAMREC Code), and other relevant international codes such as SEC Industry Guide 7, JORC Code and NI 43 – 101. The Mineral Resources and Mineral Reserves are underpinned by a sufficient Mineral Resource Management process and protocol to ensure adequate corporate governance in respect of the intent of the Sarbanes-Oxley Act



Gold Fields has stated that:
"If we cannot mine safely, we will not mine".
This principle is embedded at St Ives.

Operating Statistics

Year ended June	Units	F2009	F2008	F2007	F2006	F2005
Open pit mining						
– Waste mined	'000 BCM	**9,921**	11,807	9,892	6,764	9,352
– Ore mined	'000 tons	**5,799**	5,143	3,928	4,487	3,738
– Head grade	g/t	**1.5**	1.7	2.2	1.9	1.8
– Strip ratio	waste:ore	**4.3**	5.8	6.8	4.4	6.3
Underground mining						
– Ore mined	'000 tons	**1,222**	901	1,336	1,771	2,134
– Head grade	g/t	**5.1**	5.2	5.3	4.6	5.5
Processing						
– Milled	'000 tons	**4,821**	4,647	4,669	4,567	4,052
– Heap leach	'000 tons	**2,441**	2,586	2,090	2,123	2,280
Total	**'000 tons**	**7,262**	**7,233**	**6,759**	**6,690**	**6,332**
Yield						
– Milled	g/t	**2.5**	2.5	3.3	3.1	3.7
– Heap leach	g/t	**0.5**	0.6	0.9	0.5	0.6
Combined	g/t	**1.8**	1.8	2.2	2.3	2.6
Gold produced						
– Milled	kg	**12,187**	11,552	14,177	14,404	15,707
– Heap leach	kg	**1,135**	1,440	969	1,036	1,286
Total	**kg**	**13,322**	**12,992**	**15,146**	**15,440**	**16,393**
Total	**'000 tons**	**428**	**418**	**487**	**496**	**527**
Total cash costs	**A$/oz**	**805**	**649**	**540**	**453**	**447**
	US$/oz	**596**	582	424	339	336
NCE	US$/oz	**757**	836	579	459	553
	A$m	**1,023**	932	738	–	–
Capital expenditure	A$m	**92,9**	120,3	96,6	–	–
– Life of Mine	years	**4**	4	4	4	4
Mineral Reserves	million tons	**30.1**	25.9	33.0	27.4	30.3
Mineral Reserves head grade	g/t	**2.4**	2.3	2.4	2.5	2.6

Rounding off of figures presented in this report may result in minor computational discrepancies, where this occurs it is not deemed significant.

Geological Setting and Mineralisation

St Ives is situated in the Norseman-Wiluna Greenstone Belt, which is part of the Yilgarn Craton, a 2.6 Ga granite-greenstone terrane in Western Australia. In comparison to other greenstone belts in the Yilgarn Craton, the Norseman-Wiluna Belt is highly mineralised, particularly in gold and nickel. The rock-types in the belt comprise abundant tholeiitic and komatiitic volcanic rocks, chert, sulphidic and albitic sedimentary rocks, and a chain of discrete felsic volcanic centres.

The gross structure is markedly linear with north-northwest trending strike-slip faults and other tectonic lineaments traceable for hundreds of kilometres, which disrupt the greenstone into fault-bounded domains. The generalised stratigraphic sequence comprises three mafic-ultramafic units, two felsic volcanic units, and an uppermost epiclastic sequence.

There has been a complex and long-lasting history of structural deformation incorporating up to 7 significant stages (D0-D7) during and after regional metamorphism. The gold mineralising episodes are interpreted to have occurred during thrusting and faulting associated with the D2-D3 structural events.

Metamorphism has affected all rock-types and ranges from low temperature prehnite-pumpellyite facies to high temperature-pressure amphibolite and granulite facies. Flexures and irregularities in many local and regional shear zones are interpreted to be the major control on location of the majority of economic gold deposits in the belt.

Much of the Yilgarn Craton is deeply weathered and partially covered by Tertiary and Quaternary regolith. Pre-Tertiary lateritic horizons are variably exposed, eroded or buried by later deposits that have in turn been lateritised.

Local geology

St Ives lies within the Kambalda Domain, a subset of the Norseman-Wiluna Belt. The Kambalda Domain is bound by the north-northwest trending Boulder-Lefroy Fault (BLF) and Zuleika Shear. The region has undergone four compressional events pre-dated by early extension and has been metamorphosed to upper greenschist or lower amphibolite facies.

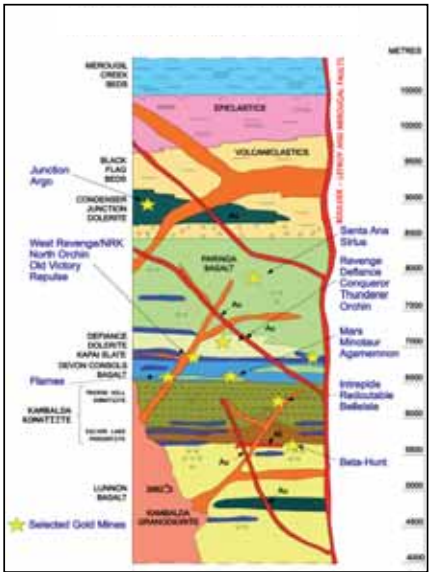
The main structural feature of the St Ives area is the gently south plunging Kambalda Anticline, which extends 35 km from the south end of the Kambalda Dome to the Junction Mine. The majority of known gold deposits are proximal to the trace of the anticlinal axis. A major second order structure known as the Playa Shear splays off the BLF Shear Zone and can be traced through the St Ives field for a distance in excess of 10 km. Most of the St Ives orebodies mined to date are associated with third order splays off the Playa Shear – notable exceptions being Argo and Santa Ana which are situated on the western limb of the anticline. Mineralisation typically occurs where these structures intersect favourable rock units, with chemical or rheological contrasts combining with structural flexures to form the most important local controls to mineralisation. The interaction between structures and rock-types has produced a large number of individual deposits with at least 80 having been mined in the St Ives area.

The stratigraphic succession in the Kambalda Domain comprises Kalgoorlie Group volcanic rocks and the Black Flag Group felsic volcanic and sedimentary rocks overlain by the post-tectonic Merougil Beds unit.

The most common host rocks of gold mineralisation are dolerites such as the Defiance, Condenser and Junction Dolerites. Granophyric dolerite and Kapai Slate tend to host the highest grade mineralisation. The Paringa Basalt and Kambalda Komatiite host deposits in discrete shear structures that are moderate in both tonnage and grade. Low to moderate grade, high tonnage mineralisation is commonly developed in porphyries, which are found in almost all deposits.

The Kambalda Domain to the north is structurally complex. Multiple phases of deformation occurred during and after regional metamorphism. The domain is crossed by a network of variably striking and dipping first, second, third and fourth-order shears, faults and thrusts that control the location of the gold mineralisation.

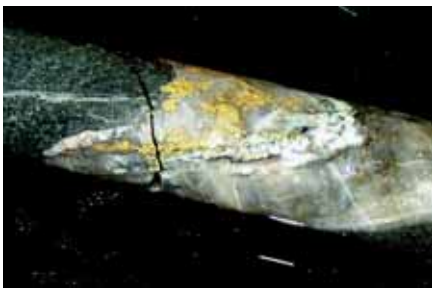
Hydrothermal alteration and associated gold mineralisation was synchronous with deformation on a network of shear zones. Alteration is concentrated in 10 cm to 300 m wide halos around shear zones. Gold is commonly associated with pyrite or granular pyrrhotite.



Schematic of gold mineralisation occurrences

There are several styles of gold mineralisation at St Ives. The individual deposits may contain more than one of these styles:

- **Lode mineralisation:** Lode mineralisation typically consists of a 0.5 cm to 20 m wide mesothermal vein complexes ± hydraulic breccias, ± mylonites;
- **Supergene:** Broad zones of flat lying gold mineralisation in weathered Archaean and overlying Tertiary rocks; and
- Subordinate Tertiary palaeoplacer mineralisation.


Visible gold within quartz vein


Exploration drilling

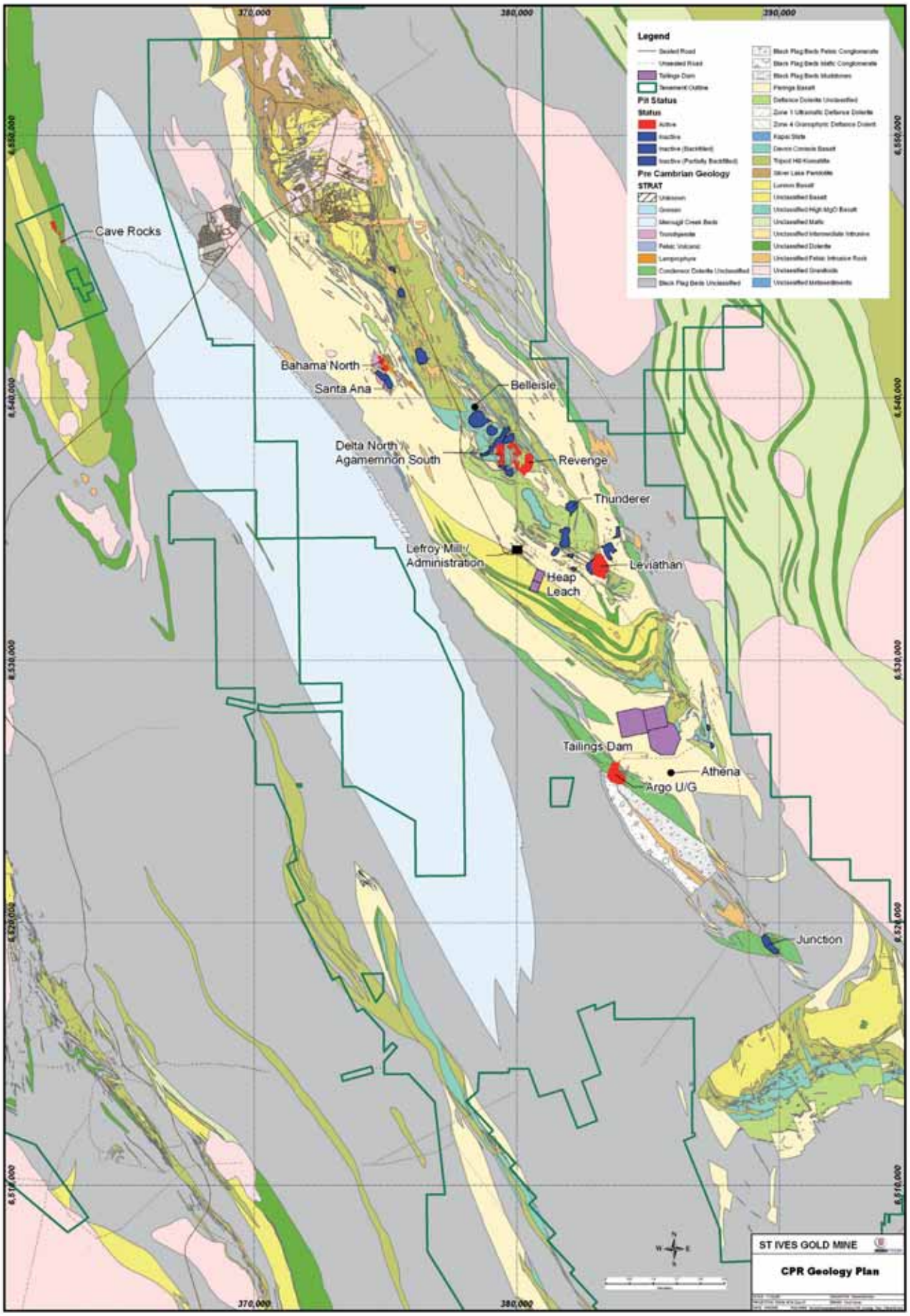
Exploration and drilling

The St Ives exploration strategy incorporates the integration of geological information and knowledge of ore forming systems to identify targets with the greatest potential for conversion from endowment, thus maintaining a high value project pipeline.

This strategy includes:

- Greenfields – enhance the capacity and data consolidation to identify additional targets based on new knowledge and application of current Research & Development initiatives;
- Continued support, application and integration of company/industry funded research projects aimed at understanding the structural, geochemical and ore mineralizing fluid pathways applicable to the St Ives gold camp;
- Convert and integrate existing knowledge and research into 3 dimensional information data sets to identify additional target areas internally and externally to current lease areas;
- Convert existing knowledge and expand the future potential of the Athena complex environs;
- Increased targeting based on understanding of the structural and macro boundary modelling of ore shoot development at various mine sites; and
- Aggressive and continued drill out of identified targets across the spectrum of exploration projects.


Diamond drilling on Lake Lefroy



Regional geology map

Mining

Gold mineralisation at St Ives is mined via both open pit and underground methods to depths generally not exceeding 500 m below surface.

As many of the operations involve mining deposits on or under Lake Lefroy (a shallow salt lake), extraction requires construction of berms and other earthworks to provide access, short-term stockpile areas and to prevent water intrusion.

Mining methods

Open pit mining by conventional drill and blast/truck and shovel is employed at all open pits. Grade control is generally by inclined RC drilling. Open pit projects may include 10 – 40 m of unconsolidated sedimentary overburden which does not require drill and blast, but requires hard rock to be imported for sheeting to provide equipment access during mining, and/or dewatering of the sedimentary overburden prior to mining.

Load-and-haul is by 140 t dump trucks and 150 – 250 t excavators in backhoe and/or face shovel configuration. Mining benches vary from 5 – 10 m which are excavated in 5 passes (flitches) of about 2.5 m.

Gold mineralisation is mined selectively to cut-offs and segregated into grade ranges as required to balance the ore production and processing capacities on site and maximise cash flow from operations.

Underground mines at St Ives are commonly extensions of open pit mines. Underground operations are characterised by common features which allow a high level of standardisation in operating strategy, mine design, stoping methods, mining equipment and utilisation. Mines are accessed via declines, with additional development of raises for return airways and ladder-ways as second means of egress. Ore drives are developed to access the ore and future stoping production areas.

Underground mining at St Ives is predominantly mechanised and is conducted by long hole open stoping (LHOS), with subordinate cut-and-fill and room-and-pillar for the shallower dipping orebodies. The use of paste fill in conjunction with LHOS is applied where mandated by geotechnical factors. Development and stoping utilises electric-hydraulic drilling jumbos and rubber-tyred diesel-powered LHDs and trucks are used for load and haul operations.

Ore from both open pit and underground operations is transported with road trains from individual mining operations to the St Ives' processing facilities.

Leviathan open pit

Mine planning and scheduling

Mineral Reserve definition processes for open pit and underground operations are essentially similar. Cut-off grades are applied to define potentially economic mining panels based on direct mining and/or processing costs, commodity prices and other parameters. The economic viability of future mining panels is then tested by determining whether the margin above cut-off is sufficient to cover the required capital development costs and provide a return on investment.

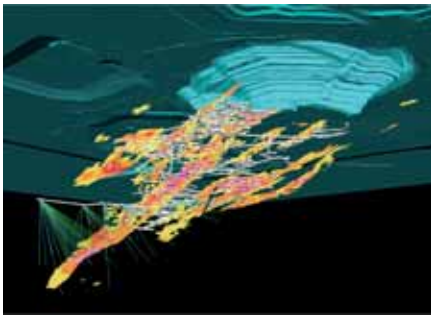
Open pit planning entails the input of economic parameters and physical constraints into optimisation software to generate a series of nested pits, from which an optimal shell is selected. Detailed design is then undertaken to confirm the mineability of the optimised shell. The process is iterated until an acceptable level of correlation is achieved between the optimised shell and detailed design.

Underground mining methods are largely determined by the geometry of the mineralised zones and the evaluation may involve review of more than one method. Mine design and scheduling is done utilising sophisticated software.

Mine planning is based on three-dimensional block models of in-situ mineralisation, with allowances made for minimum mining widths, dilution and ore loss appropriate to the mining method being considered.

Infrastructure, waste disposal and ore stockpile management requirements are incorporated into the planning process.

Ore stockpile management at St Ives strives to optimise the metallurgical blend requirements to the Lefroy Mill and the Heap Leach, with regard to material types and grade management, to maximise cash flow from operations.



Datamine model of the Argo Complex

Projects

The major mine expansion project at St Ives is the initiation of underground mining at the new Athena deposit. Portal and access development has commenced to provide exploration platforms and detailed mine design coupled with full feasibility studies are in progress.

Ongoing infrastructure development to meet current and future mine extensions together with extending the individual mines through focused extensional exploration and development continue. Other future projects are:

Heap Leach Expansion

The remaining pad capacity of the Heap Leach is 0.4 million tons, or 2 months production at the current throughput rate. Consideration has been given to either the construction of a new pad or the removal of spent (leached) ore from the existing pads. Preliminary site trials indicated that removal of the current spent material and re-usage of the pads will be environmentally sound and economically viable. A strategy of flushing, removing, re-stacking and leaching will be employed to treat the remainder of the Heap Leach ore supply.

Tailings Storage Facility

A fourth tailings storage facility (TSF 4) may be constructed and commissioned by January 2013 to allow tailings deposition from the Lefroy Mill. TSF 2 has reached its renovation limit and is expected to reach deposition capacity by the end of 2009. It will be replaced as an alternate deposition to TSF 3 with North Orchin pit. Construction of TSF 4 will permit the continual implementation of this strategy beyond the current LoM.

LoM Tailings Deposition

Mining Operation	LoM Deposition (Mt)	Available Capacity (Mt)	Surplus/ (Shortfall) (%)	Capital Requirement (A$M)	Expenditure Period (years)
St Ives	22.5	36.6	34	23.7*	6

** Budget estimates including tailings lifts, TSF4 and North Orchin Construction*

Mineral Processing

St Ives employs two separate beneficiation processes, CIP plant and Heap Leach facility, for the treatment of mined ore and existing stockpiles.

The Lefroy Mill was commissioned in December 2004 and achieved design capacity within seven months. It treats medium to high grade ore through a 4.8 Mtpa variable speed dual direction 13.5 MW SAG mill with wrap around motor. Oversize from the mill (scats) is in closed circuit with a 140 tphr pebble crusher. A gravity circuit recovers the gravity recoverable gold from the milling circuit and the concentrates are treated separately through to bullion form. The mill cyclone overflow product reports to a 5 stage leach circuit consisting of mechanical agitators, reagent addition and oxygen sparging. Leached slurry passes through the 6 stage carousel pump cell adsorption plant and subsequent 5 ton capacity acid wash, elution and electrowinning circuits which produce calcine ready for smelting. Bullion is shipped to the refinery. Tailings are alternately deposited on two tailings facilities which are constructed upstream and are of paddock type.

The Heap Leach process was commissioned during 2000 and is used to at treat lower grade ore at a rate of 2.3 Mtpa.

A three stage crushing circuit, of 900 kW installed comminution power, is currently used in a 24 hour operation to prepare -15 mm ores for agglomeration, stacking and leaching. A mobile oxide screen was recently introduced to the circuit to screen off oxides at 35 mm for direct feed into the agglomeration circuit thereby bypassing the comminution phase. The leach pads have been expanded in three stages of 5.5 Mt each with the third stage nearing full capacity. Alternate rehandling methods are currently under review for sustainable operation. Leaching on the heap is performed in 2 stages with typical solution application of 8-10 litres per m^2 per hour. The second stage pregnant leach solution passes through a 6 stage carbon circuit for gold adsorption. Gold is stripped off the carbon, electro won and calcined at the Heap Leach wet plant prior to shipment to the Lefroy Gold room for smelting.

Lefroy CIP processing plant

Sustainable Development

St Ives strives to achieve and maintain outstanding health and safety performance through the participation of all employees and the application of safe, innovative processes and technologies, within a framework of OHSAS 18001, which is an international occupational health and safety management system standard against which our management systems are assessed and certified.

At St Ives we strive to create a workplace culture of "zero harm" and to assist us in this pursuit for our people, we've embarked on a programme of ZIP (Zero Incident Process). ZIP is a process that gives the workplace the genuine opportunity to reach the goal of zero incidents. It is a process that empowers people to be able to take control of their personal safety. ZIP does this by giving them an insight into the way their brain works and how they can use it more effectively to keep themselves safe.

At St Ives the consideration of our activities in a manner which minimises our environmental and stakeholder impacts is fundamental to our operations and the way we do business. The operation is committed to responsible stewardship of natural resources, proactive engagement with all stakeholders and behaving in an environmentally responsible manner. This is demonstrated through our commitment to continuous improvement of the site management systems and operational performance. This is evident through our ISO 14001:2004 certification and compliance with our licence to operate.

Safety Statistics	Units	F2005	F2006	F2007	F2008	F2009
Fatalities	(No)	0	0	0	0	**0**
Fatality Rate	(per mmhrs)	0	0	0	0	**0**
LDIFR	(per mmhrs)	2.1	2.1	2	1.8	**0.8**

Mineral Resources and Mineral Reserves

Mineral Resources

The Mineral Resource statement for St Ives is summarised in the tables below. The following points apply to Mineral Resources presented in this report:

- Quoted at an appropriate in-situ economic cut-off grade with tonnages and grades based on the inventory block model. They also include estimates of any material below the cut-off grade required to be mined to extract the economic portion of the Mineral Resource;
- Attributable to St Ives Gold Mine;
- All references to "tons" should be taken as being in metric units.
- Surface sources are comprised of stockpiles. St Ives assumes that stockpiles are managed and monitored when mining occurs and are supported by adequate sampling, and are thus classified as Measured Mineral Resources.

Mineral Resource Classification	Tons (Mt)			Grade (g/t)			Gold ('000 oz)		
	June 09	June 08	Dec 06	June 09	June 08	Dec 06	June 09	June 08	Dec 06
Open pit and underground									
Measured	**2.5**	1.2	2.2	**4.0**	6.3	4.1	**322**	250	287
Indicated	**41.3**	32.4	42.9	**2.7**	2.8	2.7	**3,545**	2,951	3,689
Inferred	**15.9**	8.9	10.5	**3.2**	4.1	3.6	**1,636**	1,175	1,210
Total open pit and underground	**59.7**	42.5	55.5	**2.9**	3.2	2.9	**5,503**	4,376	5,185
Surface stockpiles									
Measured	**4.1**	4.3	5.8	**1.1**	1.2	1.3	**139**	163	235
Total surface stockpiles	**4.1**	4.3	5.8	**1.1**	1.2	1.3	**139**	163	235
Grand Total	**63.8**	**46.8**	**61.3**	**2.8**	**3.0**	**2.8**	**5,643**	**4,538**	**5,421**

Mineral Resource by Source	Tons (Mt)			Grade (g/t)			Gold ('000 oz)		
	June 09	June 08	Dec 06	June 09	June 08	Dec 06	June 09	June 08	Dec 06
Open pit	**40.4**	27.8	34.8	**1.8**	1.9	1.9	**2,337**	1,699	2,041
Underground	**19.4**	14.7	20.7	**5.1**	5.7	5.5	**3,166**	2,677	3,145
Stockpiles	**4.1**	4.3	5.8	**1.1**	1.2	1.2	**139**	163	235
Total	**63.8**	46.8	61.3	**2.8**	3.0	2.8	**5,643**	4,538	5,421

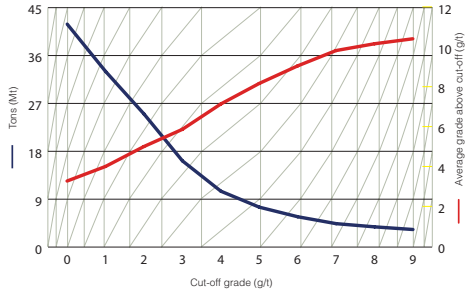
Modifying factors

- The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves;
- Unless otherwise stated, all Mineral Resources and Mineral Reserves are quoted as 100% and are not attributable with respect to ownership;
- All Mineral Reserves are quoted in terms of Run of Mine (RoM) grades and tonnages as delivered to the metallurgical processing facilities and are therefore fully diluted;
- Mineral Reserve statements include only Measured and Indicated Mineral Resources, modified to produce Mineral Reserves and contained in the LoM plan; and
- Mineral Resources and Mineral Reserves undergo both internal and external audits either during the year, yearly or bi-annually, and any issues identified are rectified at the earliest opportunity – usually during the current reporting cycle, though it does sometimes occur that more comprehensive work requires more time for adequate completion.

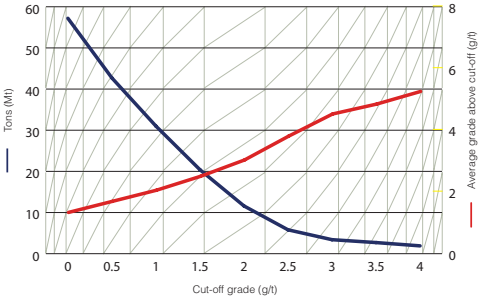
Mineral Resource Parameters		
Mineral Resource Gold Price	US$/0z	1,000
	US$/A$	1.25
	A$/oz	1,250
Cut off for heap leach	g/t	0.37 – 0.50
Cut off mill feed	g/t	0.53 – 3.30
Cut off for fresh ore	g/t	0.53 – 3.30
Cut off for oxcide ore	g/t	0.37 – 0.50
Cut off for open pit	g/t	0.37 – 0.79
Cut off for underground	g/t	2.10 – 3.30
Mineral Reserve Parameters		
Mineral Reserve Gold Price	US$/oz	800
	US$/A$	1.25
	A$/oz	1000
Cut off for heap leach	g/t	0.41 – 0.81
Cut off for mill feed open pit	g/t	0.41 – 0.81
Cut off for mill feed u/g	g/t	2.2 – 4.90
Cut off for fresh ore	g/t	0.58 – 4.90
Cut off for oxide ore	g/t	0.41 – 0.54
Stripping ratio	waste:ore	3.6
Dulution (open pits)	%	1 – 13
Mining recovery (open pits)	%	95 – 99
Mine Call Factor	%	100
Plant recovery factor fresh ore	%	85 – 95
Plant recovery factor oxide ore	%	94 – 95
Heap Leach Recovery	%	57 – 75
Processing capacity	Mtpa	4.8
Heap Leach capacity	Mtpa	2.5
Pit wall angles	degrees	25 – 45

Grade tonnage curves

Underground



Open pits



Mineral Reserves

The Mineral Reserve statement for St Ives is summarised in the tables below and these following points apply:

- Estimates for St Ives include allowances for all relevant modifying factors;
- Gold price sensitivities have been derived by assessment of the impact of price changes on individual projects;
- Attributable to St Ives;
- Mineral Reserves are reported in terms of tonnages, grades and contained gold delivered for processing; and
- All references to "tons" should be taken as being in metric units.

Surface sources are comprised of stockpiles. St Ives assumes that stockpiles are managed and monitored when mining occurs and are supported by adequate sampling, and are thus classified as Proved Mineral Reserves.

Mineral Reserve Classification	Tons (Mt)			Grade (g/t)			Gold ('000 oz)		
	June 09	June 08	Dec 06	June 09	June 08	Dec 06	June 09	June 08	Dec 06
Open pit and underground									
Proved	**1.9**	0.8	1.0	**4.3**	6.7	4.2	**260**	170	129
Probable	**24.1**	20.8	26.2	**2.5**	2.3	2.6	**1,922**	1,547	2,188
Total open pit and underground	**26.0**	21.6	27.2	**2.6**	2.5	2.7	**2,182**	1,716	2,317
Surface stockpiles									
Probable	**4.1**	4.3	5.8	**1.1**	1.2	1.3	**139**	163	235
Total surface stockpiles	**4.1**	4.3	5.8	**1.1**	1.2	1.3	**139**	163	235
Grand Total	**30.1**	25.9	33.0	**2.4**	2.3	2.4	**2,322**	1,879	2,553

Mineral Reserve split by source between CIP Plant and Heap Leach facility

Source and Feed	Tons (Mt)			Grade (g/t)			Gold ('000 oz)		
	June 2009	June 2008	Dec 2006	June 2009	June 2008	Dec 2006	June 2009	June 2008	Dec 2006
Open pit									
CIP plant	**15.8**	11.0	11.1	**1.9**	2.2	2.6	**956**	774	918
Heap Leach	**2.5**	6.7	9.3	**0.7**	0.9	0.9	**54**	191	273
Total open pit	**18.3**	17.7	20.4	**1.7**	1.7	1.8	**1,010**	965	1,191
Underground									
CIP Plant	**7.7**	3.9	6.7	**4.7**	5.9	5.2	**1,173**	751	1,127
Heap Leach	**–**	–	–	**–**	–	–	**–**	–	–
Total underground	**7.7**	3.9	6.7	**4.7**	5.9	5.2	**1,173**	751	1,127
Stockpiles									
CIP plant	**0.7**	0.6	1.7	**1.6**	2.2	1.8	**37**	45	100
Heap Leach	**3.3**	3.7	4.1	**1.0**	1.0	1.0	**103**	118	135
Total stockpiles	**4.1**	4.3	5.8	**1.1**	1.2	1.3	**139**	163	235
Grand Total	**30.1**	25.9	33.0	**2.4**	2.3	2.4	**2,322**	1,879	2,553

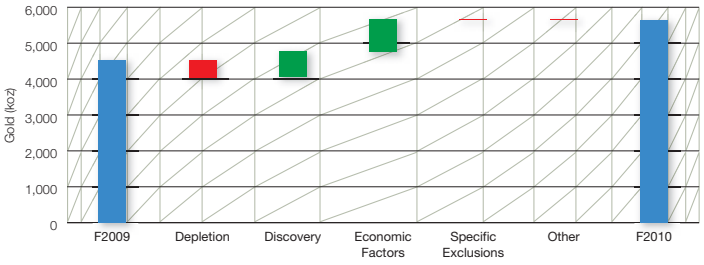
Mineral Resources and Mineral Reserves Reconciliation year-on-year

Mineral Resource

Factors that affected Mineral Resource reconciliation:

- Mined depletion for the period was measured by processing feed (tonnes crushed);
- Discovery is dominated by additions from Athena and Hamlet; and
- Paylimit changes are dominated by Bellerophon and Sirius.

Change in Mineral Resource F2009 to F2010

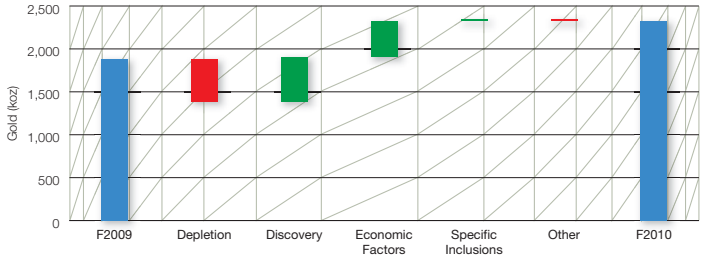


Mineral Reserve

Factors that affected Mineral Reserve reconciliation:

- Mined depletion for the period was measured by processing feed;
- Discovery was dominated by Athena, Argo, Hamlet, Cave Rocks and Belleisle;
- Resource modelling reductions at Belleisle were partly offset by gains at Formidable; and
- Paylimit impacted on Mineral Reserves at Sirius, Bellerophon, Agamannon, Swiftsure and Revenge.

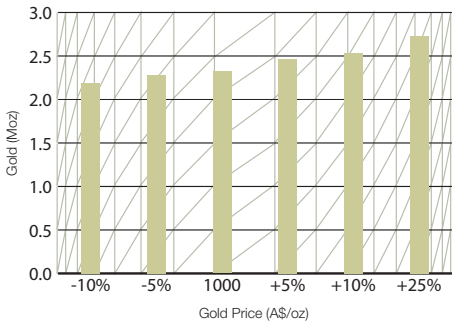
Change in Mineral Reserve F2009 to F2010



Mineral Reserve sensitivity

Mineral Reserves are presented on a RoM basis delivered to the metallurgical processing facilities. To illustrate the impact of fluctuations in gold price and exchange rates on the current declaration, St Ives has generated sensitivities with respect to Mineral Reserves. These sensitivities (other than for the base case) are not supported by detailed plans and should only be considered on an indicative basis, specifically as such sensitivities assume 100% selectivity, without any operating cost increases.

Managed Mineral Reserve Sensitivity



Regulatory Codes

SAMREC

This Technical Statement has been prepared in Compliance with the South Africa Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2007 SAMREC Code).

JSE

This Technical Statement has been prepared in compliance with the listing requirements of the JSE Securities Exchange, South Africa (JSE), specifically Section 12 – Issue 11.

Sarbanes-Oxley Act

The Mineral Resource and Mineral Reserve is underpinned by an adequate Mineral Resource Management process and protocol to ensure adequate corporate governance in respect of the intent of the Sarbanes-Oxley Act.

Environmental

St Ives has an environmental management team who are supported by specialist assistance from the Corporate office in Johannesburg. The systems, procedures, training etc. are at international best practice levels. Gold Fields has produced a Sustainability Report in 2009 and intends reporting annually in accordance with the Global Reporting Initiative.

Competent Persons

M Jolly: Manager: Mineral Resources

MSc (Geology), EDP Wits Business School, Pr. Sci. Nat. (Reg. No. 400006/02). Mr Jolly has 28 years experience in the mining industry (6 months at St Ives) and is responsible for the overall correctness, standard and compliance of this declaration.

M Briggs: Exploration Manager

BSc (Hons) in Geology, MAusIMM. Mr Briggs has 11 years experience in the mining industry (7 years at St Ives) and is responsible for surface exploration and resource development drilling and the oversight of resource development geology models.

J. Donaldson, Principal Resource Geologist

BSc. (Hons), MAusIMM, Mr Donaldson has 15 years mining industry experience (12 years at St. Ives), and is responsible for the gold resource estimation processes and models.

C Ferguson: Mine Geology Manager

BSc (Hons) Geology, Mr Ferguson has 12 years experience in the mining industry (5 years at St Ives) and is responsible for the mine geology functions at St Ives.

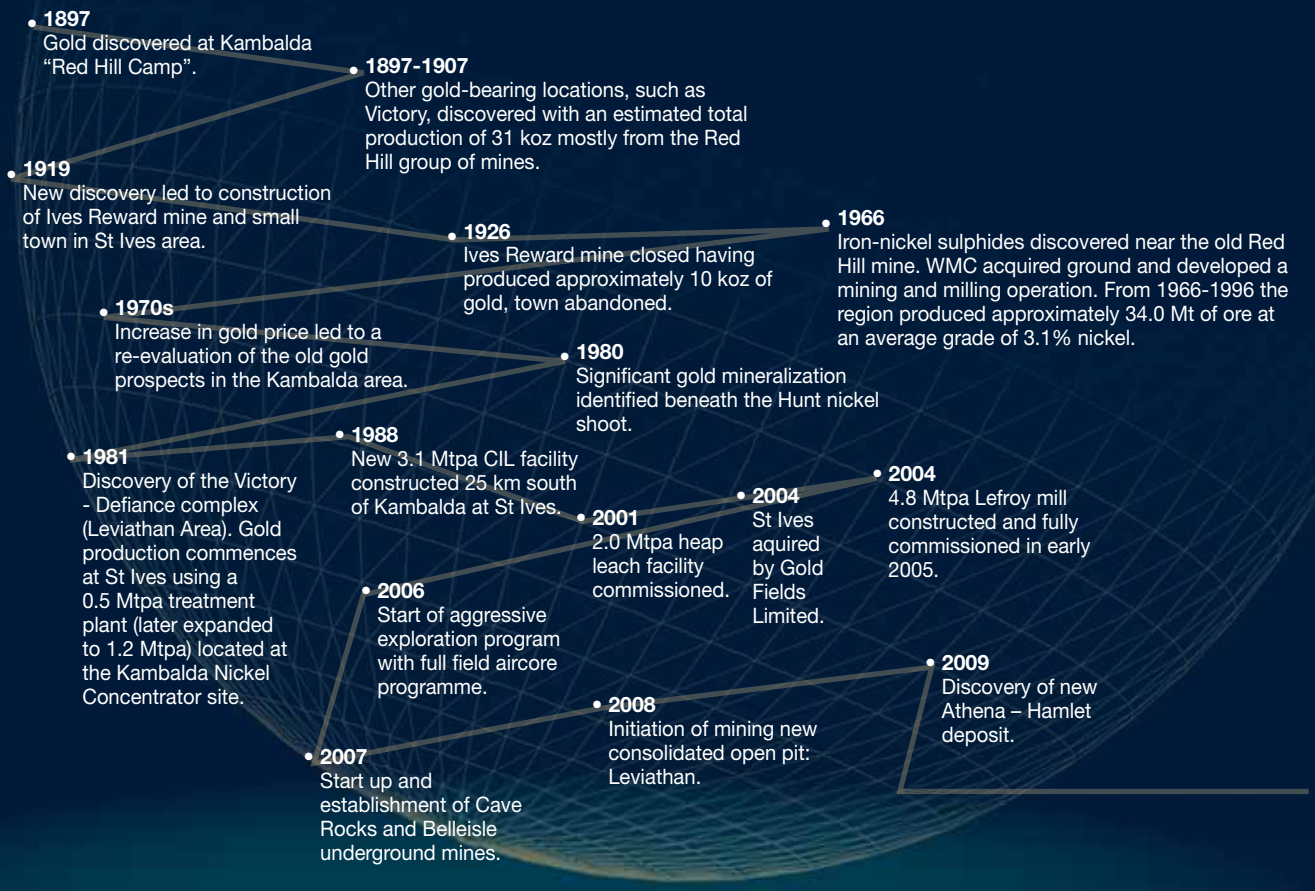
S Ellery: Resource Evaluation Supt

BSc (Hons), MSc Geology, Grad Dip Applied Finance and Investment (SIA), MAusIMM. Mr Ellery has 19 years experience in the mining industry (16 years at St Ives) and is responsible for some aspects of economic evaluation at St Ives.

Key Technical Staff

Post	Incumbent	Qualifications	Years	Key responsibilities
General Manager	Louw Smith	BSc (Hons) Geology; BComm; MSc Mining (Business Economics); The Executive Programme (Darden Business School)	18	Overall strategic direction, leadership and management
Mining Manager Mining Open Pit	Johan Labuschagne	MSc Mining (Wits); B-Eng Mining (UP) MDP (Unisa)	22	Full operational management
Mining Manager Mining Underground	Simon Fitzgerald	BE (Mining Engineering) BA (Economics)	11	Full operational management
Mineral Resources Manager: Mineral Resources	Malcolm Jolly	MSc (Geology), EDP (Wits) COM Cert. Rock Engineering	28	Exploration and Mine Geology. compilation of CPR
Financial Commercial Manager	Sam Vogel	BComm	22	Financial management, reporting and compliance
Human Resources Manager Employee Relations	Helen Anderson	BSc (OHS), Postgraduate Applied Science	18	Human Resources, Safety and Health, Emergency Services
Processing Manager Metallurgy	Arno Dippenaar	NHD (Extractive metallurgy)	18	Mineral Processing, Metallurgy and Tailings management.
Engineering Manager Engineering	Ted Lambourne	Associate Diploma	13	Engineering, logistics and infrastructure management
Mine Planning Planning Superintendent	Max Sheppard	BEng (Mining)	20	Mineral Reserves, Planning Open Pits and Underground LoM
Environment Manager	Peter Bayliss	BSc Hons. (Applied Biology) MPhil (Environmental Sciences)	20	Environmental management

St Ives History at a Glance



Disclaimer

Forward looking statements

Certain statements in this document constitute "forward looking statements" within the meaning of Section 27A of the US Securities Act of 1933 and Section 21E of the US Securities Exchange Act of 1934.

Such forward looking statements involve known and unknown risks, uncertainties and other important factors that could cause the actual results, performance or achievements of the company to be materially different from the future results, performance or achievements expressed or implied by such forward looking statements. Such risks, uncertainties and other important factors include among others: economic, business and political conditions in South Africa, Ghana, Australia, Peru and elsewhere; the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, exploration and development activities; decreases in the market price of gold or copper; hazards associated with underground and surface gold mining; labour disruptions; availability terms and deployment of capital or credit; changes in government regulations, particularly environmental regulations; and new legislation affecting mining and mineral rights; changes in exchange rates; currency devaluations; inflation and other macro-economic factors, industrial action, temporary stoppages of mines for safety reasons; and the impact of the Aids crisis in South Africa. These forward looking statements speak only as of the date of this document. The company undertakes no obligation to update publicly or release any revisions to these forward looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events.

Note: For abbreviations refer to page 23, Glossary of Terms page 24 – "Mineral Resource and Mineral Reserve Overview 2009"