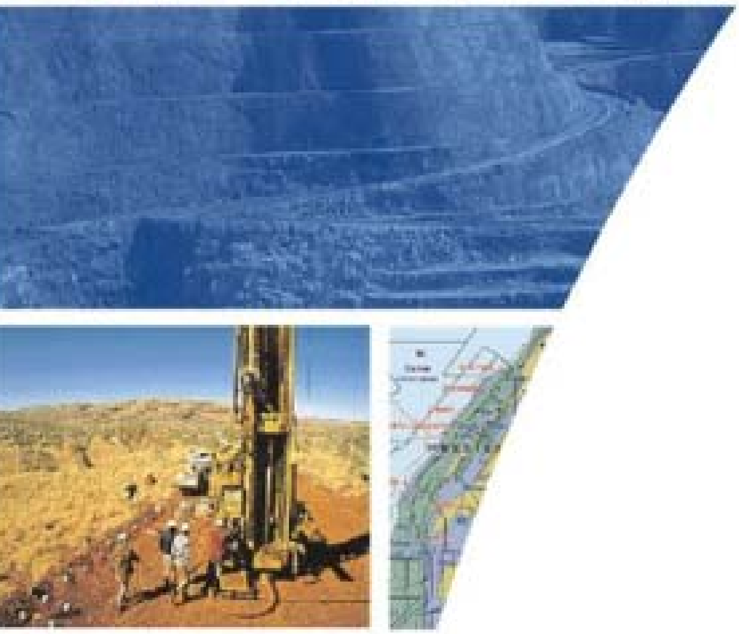

OTAVI EXPLORATION PROJECT, Namibia

Independent Technical Report

Prepared by RSG Global on behalf of:

TEAL Exploration & Mining Incorporated

GEOLOGY • EXPLORATION • RESOURCES • MINING ENGINEERING • METALLURGY

OTAVI EXPLORATION PROJECT, Namibia

Independent Technical Report

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TEAL Exploration & Mining Incorporated

Author(s):	André van der Merwe	Regional Manager Southern Africa	(MAusIMM, Pr.Sci.Nat.)
	Ken Lomberg	Senior Consultant Mineral Resources	(Pr.Sci.Nat.)
	Steven Rupprecht	Senior Consultant Mine Engineering	(Pr.Eng., FSAIMM)

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Copies:	TEAL Exploration & Mining Incorporated	(2)
	RSG Global – Johannesburg	(1)
	RSG Global – Perth	(1)

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signed: "AJ van der Merwe"
Primary Author
André J. van der Merwe

Signed: "C Jones"
Supervising Principal
Colin Jones

The Reader is advised to read the Disclaimer (Section 3 of this document).

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1 SUMMARY

1.1 Introduction

RSG Global Pty Ltd ("RSG Global") has been requested by TEAL Exploration & Mining Incorporated (collectively with its subsidiaries, "TEAL") to prepare an Independent Technical Report on its Namibian mineral properties. This Technical Report complies with all relevant aspects of the Canadian National Instrument 43-101 ("NI 43-101").

TEAL's Namibian mineral properties are located in the Otavi region of north-central Namibia. These mineral properties are held by the wholly owned Namibian subsidiary of TEAL: Avdale Namibia (Pty) Limited ("AVDALE"), and comprise four contiguous Exclusive Prospecting Licenses ("EPLs"), totalling 3,084km^2 in areal extent.

These mineral properties are readily accessible, and subject to a climate that allows field work to continue through all seasons. The local infrastructure is very good, with excellent transport facilities, electricity and modern social amenities readily available.

No unusual or fatal environmental issues have been identified to date.

1.2 Geology

The Otavi Exploration Project is set within the northern zone of the northeast trending intracratonic arm of the Damara Orogen. In this part of the orogen, fluvial sedimentation was initiated in intracontinental rift basins at about 1000Ma to form the Nosib Group. Subsequently rifting gradually evolved into spreading and deepening of the basin southwards, culminating in continental rupture to form a mid-ocean ridge in the southern zone ocean by about 700Ma. Pelites and carbonate rocks were deposited in the northern zone and central zone flanking basins to form the Swakop Group.

Damaran orogenic activity resulted from a reversal of spreading and the initiation of subduction of the Kalahari Craton below the Congo Craton. Episodes of granitoid intrusion, metamorphism and tectonic activity took place over an extended period from about 650Ma to 460Ma.

Isostatic uplift and rise of isotherms in the central zone caused melting of both basement and cover rocks for about 70Ma after the peak of metamorphism in the southern zone, i.e. until about 460Ma, and the emplacement of post-tectonic intrusions.

Poor exposure precludes an exact determination, but Otjikoto is located within 50km of two major terrane boundaries marked by thrust faults.

The gold mineralisation is hosted by a series of thin sheeted veins, which lie essentially parallel to the northeast striking foliation of the schists and granofels of the basal Oberwasser Formation. In the Otjikoto area, the shallow-dipping (~25°) Oberwasser Formation attains a thickness of approximately 1,000 metres and is overlain to the southeast by the calcareous marbles and relatively minor calc-silicate rocks of the Karibib Formation, the most reliable and best exposed marker in the area. The calc-silicate fels immediately underlying the Karibib Formation marbles proper also host bedding-parallel auriferous quartz + pyrrhotite + chalcopyrite veins.

The lithotypes at the Otjikoto gold deposit have been divided into three lithostratigraphic units: from bottom to top the OTA fels, the OTB marble and the OTC albitite-hornfels. The OTC unit hosts the mineralised vein system and is underlain by the 6m to 10m thick unmineralised OTB calcareous marble. Underlying the OTB marble is the albitised OTA fels (~30 m thick), which hosts minor bedding-parallel veins with irregularly distributed gold values. At the base of the OTA fels is the Footwall Marble (~20m thick). The OTA fels and the OTB marble are part of the Okawayo Formation, which is an important host to tungsten skarns in the Omaruru District and gold skarns in the Karibib District (e.g. the so-called MC zone at the Navachab Gold Mine).

Through field relations, the vein swarm is interpreted to be of late Damaran age (550Ma to 500Ma).

The vein swarm is particularly concentrated in the granofels, because the less competent schist and marble could absorb the late Damaran strain without tensional cracks developing. At Otjikoto, rheology is as important as lithology in localising auriferous fluids, as it is elsewhere in the Damaran orogeny. The magnetic-structural breaks oriented at 080° are probably R2 Riedel fractures related to dextral motion.

Otjikoto is an example of an orogenic (probably metamorphogenic) low-sulphidation Au skarn with very low base metal contents. The deposit appears to be a variation on the Central Damaran gold deposit theme where vein types are highly variable.

There are several mineralising events, implying a long-lived hydrothermal event and changing fluid chemistry. These events have not been separated and relatively dated as yet.

Gold is erratically distributed at Otjikoto. The erratic distribution at least is partly a function of the coarse grain size of the gold at Otjikoto (Steven, 2001).

1.3 Exploration Status

In 1996, the initial Otavi Project was acquired as a base metal focused exploration strategy from conceptual target generation, research, desktop studies and regional structural interpretations. Two Exploration Reconnaissance Licenses covering approximately 1.1 million hectares were applied for.

During 1997 the bulk of these Exploration Reconnaissance Licenses was converted into 13 EPLs covering some 1 million hectares.

AVDALE completed several airborne magnetic surveys, leading to the identification of a magnetic anomaly centred on the farm Otjikoto. Intensive follow-up exploration of this magnetic anomaly led to the discovery of the Otjikoto Gold Deposit.

Various mandatory relinquishments have reduced the original EPL holding to its current size of 308,000ha, including the recently awarded EPL 3317 (~96,000ha). This EPL was acquired in the light of the increased geological knowledge from the Otjikoto evaluation study and application of the concepts of the current exploration model.

Outcrop of Damara stratigraphy is very poor within the property and much of the geological understanding has been complied from photo-geological interpretation.

Summary exploration statistics for the Otavi Project are as follows:-

- Airborne magnetometry and radiometry: 3,859 line kilometres;
- Airborne electromagnetometry (Spectrem): 3,600 line kilometres;
- Ground magnetometry: 468.7 line kilometres;
- Ground electromagnetometry: 95.7 line kilometres;
- Induced Polarisation surveys: 286.7 line kilometres;
- Diamond drilling: 40 holes, 8,149.7 metres;
- Reverse Circulation (RC) drilling: 23 holes, 2,007 metres;
- Percussion drilling: 548 holes, 9,769.5 metres; and
- Sample analysis: 7,840 samples (combined diamond, RC and percussion drilling).

These statistics do not include the resource evaluation and metallurgical drilling done on the Otjikoto gold deposit.

The Otjikoto deposit possesses a clear magnetic and electro-magnetic signature from both airborne and ground data. The application of airborne EM to the exploration of the property is enhanced by the absence of significantly conductive overburden and saline ground water.

A concise mineralising model for the Otjikoto deposit is still evolving. However, general principles appear to remain valid with regard to the focusing of the mineralisation and potential further sites for similar gold deposits.

1.4 Data Integrity

TEAL uses a standardised GIS based database for exploration data on all its exploration programmes. This database covered the acquisition and storage of exploration data, standardising and validating data entries as they are made.

RSG Global found during the site visit (November 2004) that all data and information are properly filed, both in hardcopy and electronic format. Supporting data were easy to find, thus establishing an audit trail. RSG Global specifically asked for and checked geological logs and assay results against drill core and percussion chips.

The cores of five diamond drillholes were inspected and compared with the logs and assay results: OT1, OT16, OT24, OT32 and OT39. RC drillhole OTR17 was also inspected and compared. No discrepancies were found for any of these holes.

All land surveying of drillholes and surface features were completed by Mr Johan Weakley, a qualified surveyor registered with the South African Council for Professional and Technical Surveyors (“PLATO”).

Samples for assaying were submitted to four different analytical laboratories. Data used for formal mineral resource estimation were all sourced from well known laboratories which are all accredited with internationally recognised authorities.

RSG Global carried out its own analysis of the quality control data available for the analytical results from samples taken. This analysis demonstrated that the assay results from the fine fraction (-106 micron) are very good for all laboratories, with good comparison between laboratories. The coarse fraction (+106 micron) showed, predictably, more scatter in the values due to the coarse particulate nature of the gold mineralisation. However, no biases could be detected in the data.

The absence of standard material to monitor assay accuracy and bias is the only significant deviation from a proper Quality Control regime.

1.5 Mineral Resources and Reserve

Mineral Resources have been estimated at the Otjikoto Project, an area of approximately 26ha.

The drilling was conducted on a grid of 100m (strike) by 50m (dip) spacing between drillholes. The database used for the modelling consists of 107 diamond and RC drillholes.

The samples were analysed by Genalysis, Moruo and SGS Lakefield laboratories. The assay values below detection (0.02g/t Au) were set at 0.01g/t Au and the high values cut to 20g/t Au as values greater than 20g/t form outliers. The basic statistics undertaken indicated a typical log-normal distribution for the gold grades.

The bulk density values used are based on 358 determinations undertaken by Anglo American Research Laboratories and SGS Lakefield Laboratories from 4 drillholes. The average bulk density of a variety of lithotypes is 2.81t/m³. A bulk density of 2.8t/m³ for the mineralised zone is used in the resource estimation.

The geological model was undertaken using Datamine. The mineralised zones were modelled on a 0.5g/t Au cutoff combined with vein type and intensity. The boundaries of the mineralised zones or lenses were extended by 1m as is the practice at TEAL where no clear geological/lithological border can be defined ("soft grade boundary approach").

Grade estimation was undertaken by P.J. van der Merwe (Pr.Sci.Nat.), an employee of African Rainbow Minerals Ltd. The estimate is presented below and has been classified as an Inferred Mineral Resource. RSG Global agrees with the classification of the Mineral Resource, and considers that the data and methods used to determine the resource is appropriate for this type and classification of Mineral Resource.

Inferred Mineral Resource estimate for the Otjikoto Project

Mineralised Zone	Tonnes ('000t)	Gold Grade (g/t)
Upper	4,410	1.43
Middle	2,620	0.31
Lower	18,551	1.08
Total	**25,581**	**1.06**

No Mineral Reserves have been estimated for any of the mineral properties comprising the Otavi Exploration Project.

1.6 Technical Feasibility Investigations

1.6.1 Metallurgical Testing and Mineral Processing

Seventeen large diameter (HQ/TNW) diamond drillholes were drilled at the Otjikoto gold deposit to recover sample material for metallurgical test work. These holes were drilled to collect material that was representative of the mineralisation characteristics (mineralogy) of the entire deposit. The sample material was also selected to represent low, medium and high in situ gold grades.

Laboratory test work evaluated the Otjikoto mineralisation with regard to:-

- Pre-concentration through magnetic separation and In-line Pressure Jigging (pre-milling),
- Gravity concentration for the recovery of coarse gold,
- Tabling, with a view to recover coarse gold by jigging,
- Flotation,
- Cyanide dissolution tests on coarse mill gold and flotation concentrates,
- Bond work index and abrasion, and
- Cyanide gold dissolution of crushed mineralised material (heap leaching).

High grade oxide and sulphide material achieved good gold recoveries, but high mass pull, due to the abundance of magnetic minerals associated with the gold.

Compared with the magnetic separation results, the pre-concentration In-line Pressure Jig currently appears less effective.

TEAL intends to further investigate the use of magnetic separation equipment suitable for Otjikoto project requirements.

Gravity concentration indicated good recoveries of coarse "mill" gold for both oxide and sulphide mineralisation types. Therefore, gravity concentration in the milling circuit is considered advantageous.

Flotation test work was carried out on both oxide and sulphide pulp mineralisation material prior and post the removal of coarse gold by gravity means. The free gold flotation tests provided excellent results averaging 94.6% recovery.

Dissolution test work carried out on mill gold concentrates to simulate intensive leaching in an In-Line Leach Reactor returned extremely good dissolution results. Dissolution test work carried out on flotation concentrates of both oxide and sulphide material returned recoveries in excess of 95%.

A suite of samples were submitted for bond work and abrasive index determinations. The results have shown that both mineralisation types are relatively soft, with the sulphide material being marginally harder than the oxide mineralisation types and no specific problems are envisaged during milling operations.

Limited test work on the crushed mineralised material to test its amenability to heap leaching indicated poor recoveries and long dissolution periods.

The fundamental factors identified and tested, include:-

- Upgrade of ROM mineralised material by pre-concentration;
- Coarse particulate gold allowing for gravity concentration; and
- Positive response of the material to flotation test work.

The existing results need to be optimised with additional advanced metallurgical test work.

1.6.2 Feasibility Studies

TEAL commissioned a project assessment study during 2004-2005, which included evaluating the technical feasibility of mining and processing the Otjikoto mineralisation. An initial financial evaluation was also undertaken. This latter study does not comply with the regulations of NI 43-101, and is not reported on in this document.

Badger Mining and Consulting (Pty) Ltd ("Badger") was approached in November 2003 to conduct a technical feasibility evaluation, on the Otjikoto Project. The study is based on a conceptual in-situ resource (after layout losses but no geological losses applied) of 2.2 million tonnes of oxide mineralised material and 10.8 million tonnes of sulphide mineralised material. The preliminary mine design is based on 110,000 tonnes per month of oxide mineralisation and 94,600 tonnes per month of sulphide mineralisation. The base case study assumed a crusher feed grade of 1.57g/t Au and 1.44g/t Au for oxide and sulphide material respectively. ***It must be stated here that these numbers are based on a portion of the known mineralisation as described in the section on Mineral Resources, but is not a resource statement in itself.***

Nonetheless, the results of the Badger study provide useful indicators to guide the project's future development. It can be concluded that, based on the current body of knowledge regarding the Otjikoto deposit, no major technical obstacle was found to mining and processing this type of mineralisation.

RSG Global concurs with Badger's conclusion that to sustain a significant mining operation at Otjikoto, TEAL will need to discovery additional resources of sufficient grade. Results from a single drillhole indicate that there may be a potential southwest extension of the known Otjikoto mineralisation. Additional exploration targets have also been identified toward the south (±500m distant) and southeast (±500m distant). The potential for further resources could create the correct economy of scale for Otjikoto and potentially allow the selective extraction of higher grade areas.

The in-situ mineral resource grade reported for Navachab (1.18g/t Au, AngloGold Ashanti, 2004) is similar to the grades intersected at Otjikoto. At Navachab stringent in-pit grade control procedures define categories of mined material, varying from waste, mineralised waste and three categories of mineralisation grade. This practice, combined with stockpiling, ensures an average crusher feed grade of approximately 1.6g/t Au, an improvement of some 35% (this operational improvement in mineralisation grade amounted to approximately 60% in 2003).

At this time Otjikoto Gold Project requires further exploration and evaluation.

1.7 Conclusions

The northern parts of the Otavi Exploration Project (approximately 24% by area) have been well explored by several reputable companies for base metals (principally Cu, Zn, Pb). However, there is no recorded exploration for gold mineralisation, up until the time when TEAL discovered the Otjikoto gold deposit. The knowledge gained by TEAL in investigating the Otjikoto mineralisation has shown that there are many similarities between the Otjikoto mineralisation and that of the Navachab Gold Mine, some 250km to the southwest of Otjikoto. Indeed it is accepted by TEAL geologists and some independent workers that Otjikoto and Navachab have similar styles of mineralisation. RSG Global concurs with this view.

Exploration work done to date (field mapping, photogeological mapping, ground and airborne geophysics, structural analyses) have indicated a number of promising exploration targets. When the data from the recently completed airborne EM survey (Spectrem Air Ltd) is finally processed and interpreted, it can be expected that many of these exploration targets will be confirmed, and some additional ones identified.

The main geological units that may be preferentially mineralised have been identified and delineated by TEAL. Structural situations that are considered favourable have also been identified. The exploration tenements currently held by TEAL were selected to cover specifically these prospective areas. The correlation of such large scale features with detailed results from ground and airborne geophysics should identify targets to be investigated by drilling.

Given the well developed exploration model and methodology and the large ground holding of TEAL, the exploration potential of TEAL's Namibian properties are considered to be good.

The mineralisation encountered so far at Otjikoto and Navachab indicates bulk mineralisation grades generally less than 2g/t Au, with potential for higher grades in certain structurally advantageous areas. The Navachab deposit has reached a total resource of 5.23 million ounces of gold. However, not enough of this style of higher grade mineralisation has been identified to make a definitive statement on the resource potential of the TEAL properties.

RSG Global considers that the mining engineering and metallurgical test work completed to date show that a mining operation at the Otjikoto deposit is technically feasible, in the sense that no technical obstacles to conventional mining and mineral processing methods were encountered.

1.8 Recommendations

A concise mineralising model for the Otjikoto deposit is still evolving, however, general principles appear to remain valid with regard to the focusing of the mineralisation and potential further sites for similar gold deposits. TEAL geologists have identified several important geological parameters to locate exploration targets for further discoveries, including prospective host lithotypes and structural settings.

A number of priority exploration targets have been generated. Ground follow-up of four of these targets are currently in progress. A high-resolution airborne electromagnetic (AEM) and magnetic survey was completed during February 2005 over prospective host stratigraphy and structurally favourable settings to further investigate a portion of the property. The survey tested a total of some 75km of strike of this amenable stratigraphy. This survey also covered the Otjikoto gold deposit and will therefore also assist in investigating the exploration potential in the direct vicinity of the deposit itself. Data from this survey will be interpreted by a team of geoscientists to identify high priority areas for ground follow-up exploration activities.

In EPL 3177 there is a total strike length of approximately 70km of the targeted host lithotypes present. Exploration planning includes the surveying of this area with a high-resolution AEM survey to assist in the delineation of areas that have good potential to host mineralisation.

RSG Global considers the exploration strategy and methods pursued by TEAL to be sound.

RSG Global recommends that future assessments make use of only one primary and one umpire laboratory, in order to minimise potential uncertainties.

RSG Global also recommends that the use of industry standard reference material be made mandatory for all future assaying of samples that may be used in mineral resource assessments. It would be appropriate to insert a standard with mineralogy and concentration as close as possible to the sample material itself, at a frequency of 5% (i.e. one standard for every twenty samples submitted for analysis).

Resource definition drilling should endeavour to have consistent hole orientation and drilling methods, in order to that the samples would give a coherent support base for resource estimation. RSG Global understands that drill core gives good sample recovery in the deeper, non-oxidised, material, and the much better geological and structural information obtainable from core is essential in understanding the mineralisation. TEAL anticipates using Reverse Circulation drilling for the shallower, oxidised, portions on the mineralisation, mainly due to much better sample recovery. RSG Global agrees with this approach, but advises that additional twinning of RC and diamond drillholes should be undertaken, in order to demonstrate the reliability of this approach.

It is recommended that bulk density determinations are undertaken using an appropriate weight-in-air/weight-in-water method on sealed drill core and the current method of using pycnometer readings on pulped material should be discontinued.

RSG Global considers that the technical evaluation work done to date on the Otjikoto gold deposit is of sufficient detail and quality for the current size and status of the deposit. The focus for the immediate future should be on expanding the known mineralisation, and finding additional deposits. The strategy and methods proposed by TEAL to pursue these goals are considered appropriate.

1.9 Exploration Budget

TEAL prepared exploration expenditure budgets for the Otavi Exploration Project, which is focussed on finding and testing new mineralisation, and the Otjikoto Project, which is aimed at increasing the known mineralisation at this locality.

The combined (Year 1 and Year 2) budget for the proposed work programme for the Otavi Exploration Project is estimated at US$3.0 million.

The combined (Year 1, Year 2 and Year 3) budget for the proposed work programme for the Otjikoto Project is estimated at US$6.0 million.

RSG Global considers the proposed work schedules and budgets to be reasonable, and justified by the technical merits of the mineral properties.

2 INTRODUCTION AND TERMS OF REFERENCE

RSG Global Pty Ltd ("RSG Global") has been requested by TEAL Exploration & Mining Incorporated (collectively with its subsidiaries, "TEAL") to prepare an Independent Technical Report on its Namibian mineral properties. It is understood by RSG Global that the Technical Report will be used by TEAL as part of a process of raising additional funds for exploration, property development and working capital, through private placements or by public means such as listing or a merger with or reverse takeover by a listed company on any of the Canadian securities exchanges. Accordingly, this Technical Report complies with all relevant aspects of the Canadian National Instrument 43-101 ("NI 43-101").

TEAL's mineral properties material to this report are located in the Otavi region of north-central Namibia. These mineral properties are held by Avdale Namibia (Pty) Limited ("AVDALE"), a wholly owned Namibian subsidiary of African Rainbow Minerals Limited ("ARM"), which company's shares trade on the Johannesburg Stock Exchange ("JSE").

TEAL's Namibian mineral properties comprise four Exclusive Prospecting Licenses ("EPLs"), totalling 3,084km^2 in areal extent.

All technical measurements are reported in metric units, unless otherwise stated.

2.1 Scope of the Report

The main activities for completion of the Independent Technical Report on TEAL's mineral properties included the following:-

- review of existing data and information;
- site visits and meetings;
- review of Mineral Resource estimations and classifications;
- review of feasibility type studies;
- review of Mineral Reserves estimations and classifications; and
- compiling an independent Technical Report, in accordance with the requirements of the Canadian NI 43-101.

The report has been prepared in accordance with the requirements of NI 43-101, (the 'Standards of Disclosure for Mineral Projects' of February 2001) as well as the resource and reserve classifications adopted by CIM Council in August 2000 (the "CIM Standards"). The report is also consistent with the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' of December 2004 (the JORC Code) as prepared by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia.

The satisfaction of requirements under both the JORC and Valmin Codes is binding on the authors as Members of the Australasian Institute of Mining and Metallurgy ("AusIMM").

In order for this Independent Technical Report to be in accord with NI 43-101, it is required that any other reports that are referenced in this Technical Report also comply with the requirements of NI 43-101. Accordingly, any information included that is not in the form prescribed by NI 43-101 has been qualified in accordance with the requirements of NI 43-101.

2.2 Principal Sources of Information

TEAL, and its Namibian subsidiary AVDALE, has acquired the physical data used as the basis of this report from geological mapping, sampling and various drilling techniques. This work has been conducted in accordance with best exploration practice principles throughout.

Various contactors have been engaged in data acquisition specifically in conducting airborne and ground geophysical surveys.

Expert technical consultants and AVDALE representatives have conducted investigations, interpretations and compilations of the exploration data. AVDALE representatives have been responsible for technical management and the formulation of recommended work plans for the Otavi Exploration Project.

The relevant EPL certification is on file in the TEAL exploration office in Windhoek, Namibia.

The sources of information and data can be divided into public domain data that were sourced from conventional publications and the Internet, as well as information and data that have been gathered or otherwise acquired by TEAL and its subsidiaries, which are not generally available in the public domain.

The public domain sources are listed in Section 21, References, in addition to documents that were supplied by TEAL and its subsidiaries.

2.3 Qualifications and Experience

RSG Global is an integrated Australian-based consulting firm, which has been providing services and advice to the international mineral industry and financial institutions since 1987. RSG Global has maintained a fully operational office at Accra in Ghana since 1996, providing an operational base for consulting and contracting assignments throughout the West African region. An additional African office was established in Johannesburg, South Africa, in 1999 to support expanding activities within southern and eastern portions of the continent.

The following key personnel were nominated to the project team and their specific areas of responsibility are shown below. The qualifications and appropriate experience of each author are detailed in Appendix B: Authors' Certificates.

- **André van der Merwe, RSG Global Manager Southern Africa**
  Project manager, geology, quality control, quality assurance, geological site visits.
- **Ken Lomberg, RSG Global Senior Consultant Resources**
  Mineral resources, geological interpretations, site visits.
- **Steven Rupprecht, RSG Global Senior Consultant Mining Engineering**
  Mining engineering, metallurgy and evaluation studies.

2.4 Independence

Neither RSG Global, nor the key personnel nominated for the proposed work, have any material interest in TEAL or its mineral properties. The proposed work, and any other work done by RSG Global for TEAL, is strictly in return for professional fees, payable in cash. Payment for the proposed work is not in any way dependent on the outcome of the work, nor on the success or otherwise of TEAL's own business dealings. As such there is no conflict of interest in RSG Global undertaking the Independent Technical Report as contained in this document.

Individual declarations of independence by the authors of this report are also contained in the Authors' Certificates (Section 23).

3 DISCLAIMER

RSG Global has based its review of the Namibian mineral properties on information largely provided by TEAL. This data includes third party technical reports prepared by Government agencies and previous tenements holders, along with other relevant published and unpublished third party information. We have endeavoured, by making all reasonable enquiries, to confirm the authenticity and completeness of the third party technical data upon which this report is based. However, RSG Global does not warrant the authenticity or completeness of any such third party information. A final draft of this report was provided to TEAL, along with a written request to identify any material errors or omissions, prior to lodgement.

Neither RSG Global, nor the authors of this report, are qualified to provide extensive comment on legal facets associated with ownership and other rights pertaining to TEAL's mineral properties, which are included in Sections 1, 4 and 6. RSG Global has relied heavily on review of copies of the various title deeds and joint venture terms made available by TEAL, encapsulating the rights afforded to TEAL (and its subsidiaries and business partners). RSG Global did not see or carry out any legal due diligence confirming the legal title of TEAL to the properties.

Similarly, neither RSG Global nor the authors of this report are qualified to provide extensive comment on environmental issues associated with TEAL's mineral properties, as discussed in Section 4.

Assessments of metallurgical and mineral processing aspects of the Otjikoto Project (discussed in Section 16) are based on information and reports provided by independent consulting metallurgists, Metallurgical Design and Management (Pty) Ltd, as well as Badger Mining & Consulting (Pty) Limited.

RSG Global has reviewed the Mineral Resources (Section 17) and considers that they NI43-101 compliant.

No warranty or guarantee, be it express or implied, is made by RSG Global with respect to the completeness or accuracy of the legal, environmental, metallurgical or mineral processing not undertaken by RSG Global, referred to in this document. Neither RSG Global nor the authors of this report accept any responsibility or liability in any way whatsoever to any person or entity in respect of these parts of this document, or any errors in or omissions from it, whether arising from negligence or any other basis in law whatsoever.

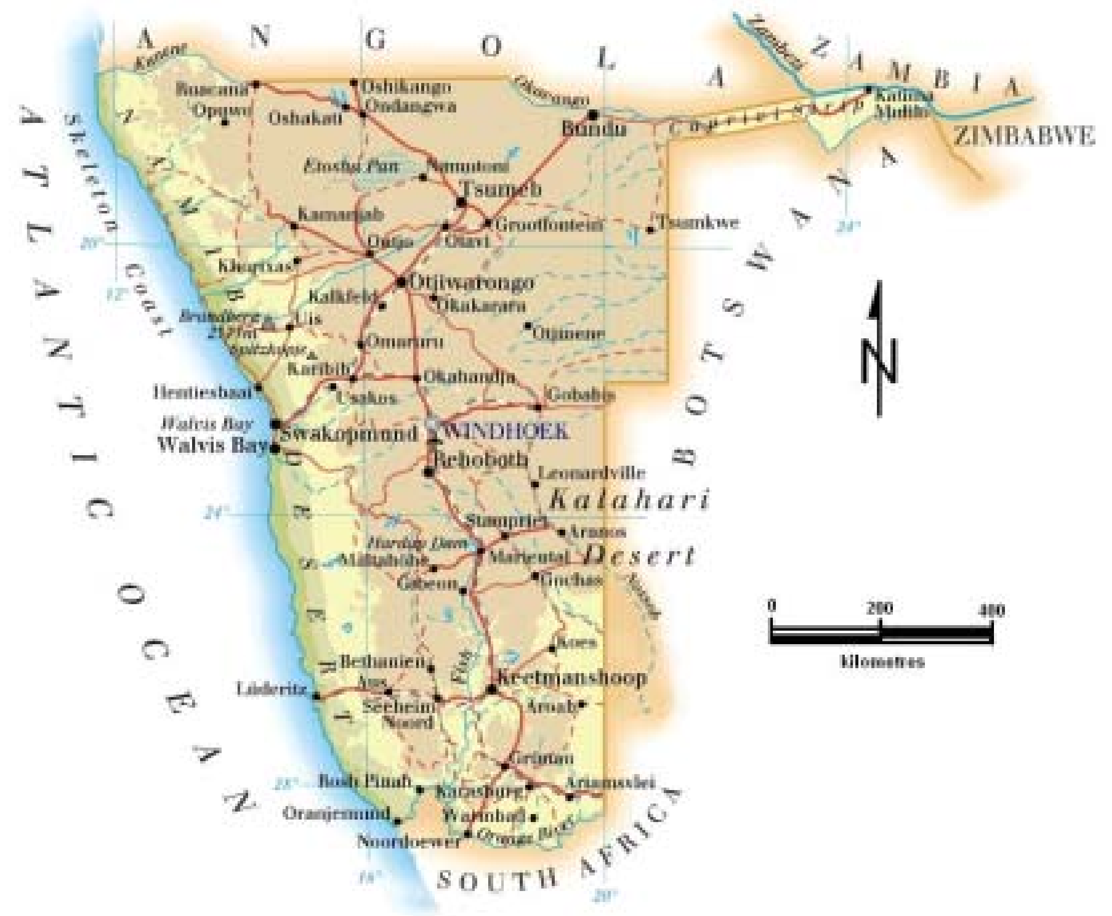
4 PROPERTY DESCRIPTION AND LOCATION

4.1 Background Information on Namibia

4.1.1 Demographics and Geographic Setting

Namibia is an independent republic with a surface area of 825,418km^2, situated north of South Africa, west of Botswana and south of Angola. It is bordered in the west by the Atlantic Ocean (Figure 4.1.1_1). Namibia forms part of the Southern African Region.

Figure 4.1.1_1
Map of Namibia



The capital of Namibia is Windhoek, roughly in the centre of the country. The largest harbour is located at Walvis Bay. The country is arid or semi-arid with mostly a high plateau, with the Namib Desert along the coast and the Kalahari Desert in the east The coast is washed by the cold Benguela current. Namibia has a population of approximately 2 million people (The CIA World Fact Book, 2004).

The population comprises black 87.5%, white 6% and another 6.5% of mixed origin. About 50% of the population belong to the Ovambo tribe and 9% to the Kavango tribe; other ethnic groups are: Herero 7%, Damara 7%, Nama 5%, Caprivian 4%, Bushmen 3%, Baster 2%, Tswana 0.5%. The official language is English but Afrikaans is the commonly spoken language of most of the population and about 60% of the white population. Some 32% of the white population speak German. Other indigenous languages are Oshivambo, Herero and Nama. According to World Bank standards, 84% of the population are literate.

4.1.2 Political and Financial Status

South Africa occupied the German colony of South West Africa during World War I and administered it as a mandate until after World War II, when it annexed the territory. In 1966 the South West Africa People's Organisation ("SWAPO") guerrilla group launched a war of independence for the area that was soon named Namibia, but it was not until 1988 that South Africa agreed to end its administration in accordance with a UN peace plan for the entire region. Namibia gained independence from the South African mandate on 21 March 1990 following multi-party elections and the establishment of a constitution. Past President Nujoma served for the first three terms, and has been succeeded by President Hifikepunye Pohamba in March 2005, after a peaceful election.

The economy is heavily dependent on the extraction and processing of minerals for export. Mining accounts for 20% of Namibia's GDP. In 2003 the GDP (purchasing power parity) was US$13.72 billion and the per capita income was US$7,100 with a real growth rate of 3.3%. Namibia earned US$1.09 billion (2003 est.) from the export of diamonds, copper, gold, zinc, lead, uranium, cattle, processed fish and karakul skins.

4.1.3 Mining Industry

Rich alluvial diamond deposits make Namibia a primary source for gem-quality diamonds. Namibia is the fourth-largest exporter of non-fuel minerals in Africa, the world's fifth-largest producer of uranium, and the producer of large quantities of lead, zinc, tin, silver, and tungsten. The mining sector employs only about 3% of the population while about half of the population depends on subsistence agriculture for its livelihood. Namibia normally imports about 50% of its cereal requirements; in drought years food shortages are a major problem in rural areas. A high per capita GDP, relative to the region, hides the great inequality of income distribution and nearly one-third of Namibians had annual incomes of less than US$1,400 in 1994. The Namibian economy is closely linked to South Africa with the Namibian dollar ("N$") pegged to the South African Rand ("ZAR"). Privatisation of several enterprises in coming years may stimulate long term foreign investment. Mining of zinc, copper, and silver and increased fish production led growth in 2003. There is potential for large deposits of oil and gas off the Atlantic coast.

4.1.4 Mining Tenure

The Namibian mineral exploration and Mining Rights are provided in Table 4.1.4_1.

4.2 Project Location

The Otavi Exploration Project is centred around coordinates 17°25' East and 20°20' South. It is located in the north central part of Namibia, approximately halfway between the towns of Otjiwarongo and Otavi, and some 300km due north of the country's capital Windhoek.

4.3 Land Area

In terms of Section 52 of the Minerals (Prospecting and Mining) Act, 1992, a compensation agreement should be entered into with any private landowner to access individual farms. Provision is made in Part XV of the Act for arbitration by the Ancillary Rights Commission in the event that an agreement cannot be reached between the landowner and license holder.

AVDALE enters into compensation agreements with landowners, when relevant, to allow for ground follow-up testing of exploration targets as they are generated.

Table 4.1.4_1

Namibian Mineral Exploration and Mining Rights

Namibia		***Mineral Exploration and Mining Rights***
Mining Act	:	Minerals (Prospecting and Mining) Act, 1992
State Ownership of Minerals	:	Yes
Negotiated Agreement	:	No
Mining Title / License Types		
Reconnaissance Tenements	:	Exclusive Reconnaissance License
Exploration Tenements	:	Exclusive Prospecting License Non-exclusive Prospecting License
Mining Tenements	:	Mining License
Retention Tenements	:	Mineral Deposit Retention License
Special Purpose Tenements	:	-
Small Scale Mining Tenements	:	Mining Claim
Reconnaissance Tenement		
Name	:	Exclusive Reconnaissance License
Purpose	:	Permits regional prospecting by aerial or surface ground means or other remote sensing techniques
Maximum Area	:	Two 1" x 1" graticules
Duration	:	6 months
Renewals	:	1 x 6 months (in special cases)
Area Reduction	:	No
Procedure	:	Application to Ministry of Mines and Energy
Granted by	:	Ministry of Mines and Energy
Prospecting Tenement		
Name	:	Exclusive Prospecting License
Purpose	:	Confers exclusive prospecting rights for specified mineral(s)
Maximum Area	:	1000km²
Duration	:	3 years
Renewals	:	2 x 2 years
Area Reduction	:	Yes. Relinquish at least 25% on first renewal and at least an additional 50% on second renewal. Can apply to Ministry of Mines and Energy for relaxation on these requirements.
Procedure	:	Application to Ministry of Mines and Energy
Granted by	:	Ministry of Mines and Energy
Mining Tenement		
Name	:	Mining License
Purpose	:	Confers the exclusive rights to extract specific minerals
Maximum Area	:	Depending on deposit size
Duration	:	25 years or the life of mine, whichever is shorter
Renewals	:	Multiple 15 year extensions to the end of mine life
Procedure	:	Application to Ministry of Mines and Energy
Granted by	:	Ministry of Mines and Energy

The two main agricultural practices carried out in the area are cattle and game farming. The region provides around 20kg to 50kg per hectare carrying capacity for cattle. Game farming includes eco-tourism and hunting with related accommodation generally in the form of bush lodges.

The general aspect of the region provides many suitable potential sites for the construction of mineral processing sites. The thin but extensive calcrete cover and schistose aquitard bedrock formations would provide many suitable potential areas for the construction of tailings dams and heap leach pads.

4.4 Exclusive Prospecting Licenses Description

Avdale Namibia (Pty) Ltd was incorporated as a private limited Liability Company on the 8th of November 1993 (Company Registration Number 93/613). The company is a wholly owned subsidiary of ARM.

AVDALE is the holder of four EPLs in terms of the Namibian Minerals (Prospecting and Mining) Act, 1992. The EPLs were issued by the Ministry of Mines and Energy ("MME") and cover a total surface area of approximately 308,000 hectares.

The EPLs provide AVDALE with the exclusive right to prospect its licenses for two-year renewable periods. These exploration rights allow for the prospecting for precious metals, base and rare metals and precious stones. The descriptive details of the properties are listed in Table 4.4_1.

Table 4.4_1
Tenement Schedule

Tenements	Area (km^2)	Grant Date	Expiry Date	Expenditure			Annual Fees
				Commitment	From	To	
EPL No. 2409	653.55	30/07/1997	30/07/2006	N$ 2,820,000	30/07/2004	29/07/2006	N$ 7,000
EPL No. 2410	905.85	15/09/1997	14/09/2006	N$ 5,950,000	15/09/2004	14/09/2006	N$ 10,000
EPL No. 2417	565.78	15/09/1997	14/09/2006	N$ 1,780,000	15/09/2004	14/09/2006	N$ 6,000
EPL No. 3177	958.96	24/06/2004	23/06/2007	N$ 2,360,000	24/06/2004	23/06/2007	N$ 10,000

The current boundary points of the individual EPLs are listed in Tables 4.4_2 to 4.4_5. The geographic co-ordinates (degrees) are projected using the Albers Conic Equal Area projection, based on the Bessel 1841 spheroid with the Central Meridian at 17° East.

Table 4.4_2
Boundary points of EPL No. 2409 (Area 10)

Boundary Point	Latitude	Longitude
R 1	-19.75889	17.36416
R 2	-19.79107	17.39220
R 3	-19.87571	17.38796
R 4	-19.87345	17.45839
R 5	-19.88174	17.47046
R 6	-19.91200	17.50141
R 7	-19.96014	17.49261
R 8	-19.98918	17.41003
R 9	-20.04690	17.44162
R 10	-20.05406	17.42380
R 11	-20.10041	17.30954
R 12	-20.03664	17.28180
R 13	-20.06879	17.19502
R 14	-20.01758	17.16371
R 15	-20.01743	17.16351
R 16	-19.94171	17.21935
R 17	-19.89685	17.25267
R 18	-19.82585	17.30992
R 19	-19.80122	17.32985

Table 4.4_3
Boundary points of EPL No. 3177 (Area 14)

Boundary Point	Latitude	Longitude
R 1	-19.87853	17.65231
R 2	-19.87548	17.70275
R 3	-19.94216	17.70382
R 4	-19.94181	17.70491
R 5	-19.93795	17.73237
R 6	-20.01400	17.72965
R 7	-20.04934	17.62781
R 8	-20.11197	17.51379
R 9	-20.18354	17.41283
R 10	-20.25005	17.37604
R 11	-20.25768	17.33125
R 12	-20.30560	17.26472
R 13	-20.32550	17.19566
R 14	-20.33898	17.11684
R 15	-20.29469	17.15750
R 16	-20.22888	17.20661
R 17	-20.17445	17.27412
R 18	-20.05894	17.22254
R 19	-20.03666	17.28185
R 20	-20.06942	17.29724
R 21	-20.10041	17.30953
R 22	-20.04688	17.44164
R 23	-19.98911	17.41004
R 24	-19.96017	17.49258
R 25	-19.97982	17.50129
R 26	-19.96163	17.54477
R 27	-19.95309	17.59307
R 28	-19.95502	17.62616
R 29	-19.95445	17.65731

Table 4.4_4
Boundary points of EPL No. 2410 (Area 9)

Boundary Point	Latitude	Longitude
R 1	-19.80193	17.32941
R 2	-19.82970	17.30754
R 3	-19.89763	17.25358
R 4	-20.00360	17.17415
R 5	-20.01667	17.16441
R 6	-20.11142	17.09352
R 7	-20.13844	17.03841
R 8	-20.16047	16.97946
R 9	-20.12956	16.91634
R 10	-20.11662	16.88972
R 11	-20.01468	16.92558
R 12	-19.99752	16.93626
R 13	-19.99468	16.93940
R 14	-19.95189	16.96630
R 15	-19.91351	16.99462
R 16	-19.87978	17.02166
R 17	-19.83355	17.05758
R 18	-19.81411	17.07554
R 19	-19.80258	17.21173
R 20	-19.80226	17.21549

Table 4.4_5 Boundary points of EPL No. 2417 (Area 4)		
Boundary Point	**Latitude**	**Longitude**
R 1	-19.87255	17.75606
R 2	-19.87553	17.70275
R 3	-19.87852	17.65231
R 4	-19.95453	17.65714
R 5	-19.95496	17.62672
R 6	-19.95316	17.59302
R 7	-19.96165	17.54467
R 8	-19.96716	17.53158
R 9	-19.97991	17.50124
R 10	-19.96003	17.49262
R 11	-19.91202	17.50141
R 12	-19.88174	17.47043
R 13	-19.87352	17.45832
R 14	-19.87574	17.38798
R 15	-19.83554	17.38936
R 16	-19.79102	17.39202
R 17	-19.79221	17.44994
R 18	-19.77590	17.45111
R 19	-19.77834	17.51383
R 20	-19.77699	17.56360
R 21	-19.75206	17.56438
R 22	-19.76347	17.61784
R 23	-19.76543	17.62293
R 24	-19.77778	17.65478
R 25	-19.77820	17.66255
R 26	-19.78072	17.70849
R 27	-19.80922	17.70696
R 28	-19.80880	17.73313
R 29	-19.81335	17.76180
R 30	-19.83423	17.76008
R 31	-19.85148	17.75533

4.5 Agreements and Encumbrances

AVDALE's EPLs are not subject to any royalties, back-in rights, payments or other encumbrances related to carrying out its exploration work plans or the trading of its rights to the property.

Should a mine be established on any of the licenses, the Namibian State will levy Royalties on Net Market Value of all production, not exceeding the following maximum scales:-

- Rough & uncut precious stones: 10%
- Rough & unprocessed dimension stone: 5%
- Any other minerals: 5%.

A mining company can apply to the MME for relaxation of the State royalty payable on a specific operation.

AVDALE is the sole and exclusive owner of the rights to prospect its property subject to the requirements of the Minerals (Prospecting and Mining) Act, 1992.

In the event of mining production from the properties, AVDALE will have to comply with the requirements of section 114 of the Minerals (Prospecting and Mining) Act, 1992.

4.6 Environmental Liabilities and Permits

TEAL's subsidiary AVDALE is not subject to any environmental liabilities with respect to its property. AVDALE is bound to conduct its business activities in compliance with the environmental requirements of the Minerals (Prospecting and Mining) Act, 1992.

These requirements materially require a bi-annual environmental report on the prospecting activities. AVDALE has complied with and submitted all of this required documentation.

In addition to these requirements AVDALE conducts its field operations according to its Environmental Rehabilitation Programme for Shallow Prospecting Activities. This document and all relevant environmental documentation are on file in the AVDALE exploration office.

The Waterberg National Park lies off the south-eastern boundary of the property and is located topographically higher than the Otavi Exploration Project. No prospective stratigraphy falls within the limits of the National Park. It is considered unlikely that this Park will be negatively influenced by any future mining activities in the Otavi Exploration Project area.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access

The Otavi Exploration Project area can be reached from the capital city, Windhoek, some 300km to the south along the B1 national road, which is a surfaced road in excellent condition. Windhoek can be reached by direct commercial air travel from several European countries, South Africa and other African countries. Figure 5.1_1 shows the turn-off from the B1 road into the Otavi Exploration Project

Figure 5.1_1
Turn-off from the B1 road onto the Otavi Exploration Project

The large regional town of Tsumeb, a mining centre in its own right, is located some 110km north of the project area, also along the B1 road. An domestic airport is located at Tsumeb, with both scheduled and charter flights connecting with Windhoek.

Internal access to the project area is via a well-maintained network of secondary roads and farm tracks. Given the arid climate of the area, these roads are generally passable year-round.

5.2 Climate

The general climate of the region in which the property is located is considered semi-arid. The climate does not seasonally restrict field activities and AVDALE has conducted full field operations throughout the year.

Through its programme of environmental impact investigations AVDALE has compiled a general report on climate for the project area, from which most of the information presented below was extracted (Speiser, *et al*., 2004).

The annual rainfall is between 450mm and 500mm. Most of the rain falls between January and March, but rainfall may occur as early as November. The potential annual evaporation is 2,600mm to 2,400mm, with a maximum in summer, which progressively declines during autumn, winter and spring.

The mean monthly maximum temperature during the summer months is 31ºC, and the mean monthly maximum temperature during the winter months is 26.7ºC.

5.3 Physiography

The area falls within the eastern part of the 'Central Western Plains' (Atlas of Namibia, 2002). The elevation of the study area is on average 1,500m above sea level. Figure 5.3_1 provides a general view over the project area.

Figure 5.3_1
General view to the southwest over the Otavi Exploration Project

Marble outcrops generally form topographical highs as a result of their more resistive nature to mechanical weathering. They also exhibit karst-like features such as doline and pothole-type solution features in places, due to the chemical soluble nature of the marble rock strata.

Shallow, northeast and east-west elongated, valley-like features extend for kilometres throughout the property. These features are controlled by the outcrop pattern of the Karibib Marble. They are thought to have formed partly due to surface and subsurface solution of the country rock. It is also observed that local drainage streams converge and discharge towards these low lying areas.

The soils of the study area are classified as ‘chromic cambisols’ (Atlas of Namibia, 2002). The term ‘chromic’ indicates that these soils are of a bright colour. Cambisols are soils that formed quite recently in geological times. They derived mainly from medium- and fine-textured parent material that was deposited during sporadic flooding. Due to the low degree of weathering, these soils are characterised by the absence of high quantities of clay, organic material, aluminium and iron. The soil fertility is on average moderate to high, partly because of its good water-holding capacity and internal drainage (Atlas of Namibia, 2002).

In most parts of the study area the soils are very shallow. However, lower lying areas could have soil accumulation of over 1m in thickness.

According to the Atlas of Namibia (2002) the flora of the study area falls within the Thornbush Shrubland. The vegetation is very dense and mainly comprises *Acacia mellifera* (Black Thorn) and *Acacia luederitzii* (Bastard Umbrella Thorn). *Acacia mellifera* is a problem species within the study area.

Plant diversity is high, although this measurement only takes the so-called higher plants (spermatophytes, gymnosperms and angiosperms) into account (Atlas of Namibia, 2002). Information regarding the so-called lower plants (mosses, ferns, etc.) would need to be obtained by a specialised botanical study.

No fauna survey has been conducted at the project to date. The following information was taken from the Atlas of Namibia (2002). Bird counts show that up to 230 different bird species have been encountered in the area. This might be a result of the close vicinity of the broad-leaved woodlands on the Tsumeb-Grootfontein-Otavi hills and the Waterberg area, which supports many birds otherwise absent from the Acacia woodlands. As the area is dominated by farmland and private nature reserve, the movement of large game is already severely restricted. As regards reptile species, the area falls within the second highest class, with up to 80 species to be found.

5.4 Local Resources and Infrastructure

Namibia possesses a relatively well-developed and maintained infrastructure including 9,172km of paved road and 2,382km of rail network. This region is well connected via road and rail to the deep-water harbour of Walvis Bay some 300km to the southwest. Walvis Bay serves as an Export Processing Zone (“EPZ”) facility in Namibia and an important gateway for the Southern African Development Economic Community (“SADEC”).

The Namibian port, rail and road network provides well maintained trade links into Angola, Zambia, Botswana and South Africa.

The western part of the Otavi Exploration Project is transected by both the B1 national road and the main national rail line to the north of the country.

Figure 5.4_1
Goods train transporting Fluorspar concentrate on the main national rail line in the western part of the Otavi Exploration Project

The region is classified as a semi-arid climate. All of the water resources available within the property that could potentially support mining operations are related to ground water extraction.

Water resources and usage are monitored and controlled by the Department of Water Affairs in Namibia. The public utility, Namwater, extracts, supplies and sells water resources. Depending upon the exact situation, permits may be required from the Department of Water Affairs and Namwater. It would be possible to purchase existing water supply from Namwater at commercial rates.

However, significant shallow and sustainable water resources are currently available in the region that could be used to support any mining operations. This water is of potable quality and suitable for mineral processing requirements.

Three main aquifers have been identified in the immediate region of the property, namely the Grootfontein Karst Aquifer (GKA), the Platveld Basin (Platveld Water Study) and the Karibib Marble (Omarassa Water Scheme). The GKA and the Omarassa Water Scheme aquifers are currently producing significant quantities of water that is supplied into the Namibia water system. The Karibib Marble is the main aquifer supplying the Omarassa Water Scheme and this geological formation extends throughout the property. This water resource is extracted through a borehole field from a maximum depth of 50m. It is anticipated that this unit would host significant ground water resources throughout the property.

A ground water investigation has been completed to test the potential for significant ground water extraction from the Platveld Basin aquifer. This aquifer is located in the western area of the property and is hosted within the Kalahari Sequence (Ground water in Namibia, 2001). The study concluded that a minimum of 80,000m^3 of water per month would be extractable from the closest aquifer, at an extraction rate that is understood to be within the normal water re-charge of the aquifer and which should satisfy approximately 80% of the anticipated requirements for a mining and processing operation at the Otjikoto Gold Project.

Electrical power should be readily available from the national electricity utility, Nampower. A Nampower scheme to be completed in the next two years will provide 33kV power throughout the project area.

Large areas of the western and northern portions of the project have close proximity to 66kV power via substations from the Otjiwarongo-Maxwell and Grootfontein-Kombat Mine power lines. The 66kV electrical power upon transformation should cater for the requirements of a metallurgical plant and all general mine site requirements.

The town of Otjiwarongo, some 50km southwest of the Project along the B1 road, has most modern amenities expected of a regional town serving a large agricultural community. These include medical and dental services, schools, shops and light to medium industries.

Communication facilities are readily available, including modern fixed line and cellular telecommunications.

Namibia has long history of mining and some skilled workers should be available. In order to staff a fully operational mine, it is anticipated that some training will be required. It may be possible to recruit skilled operators in adjacent South Africa as well.

6 HISTORY

6.1 Ownership History

The mineral rights to the properties comprising the Otavi Exploration Project are vested in the State. All historical exploration within the Otavi Exploration Project area was reported through the Ministry of Mines by means of the Energy Grant and EPL license system. This data is on open file within the Geological Survey of Namibia national archive. Original reports are referenced from the Grant or EPL numbers.

Little exploration was carried out in the current license area prior to the initiation of the Otavi Exploration Project by AVDALE.

Of AVDALE's current contiguous 308,000ha EPL holding only approximately 75,000ha (24%) of this area was previously held as an exploration grant or EPL. Much of this previous exploration work was conducted for base metal prospecting in the 1970s near and beyond the northern boundary of AVDALE's current properties.

It is critical to note that *no gold focused historical exploration* has been carried out within the project area prior to the discovery of the Otjikoto gold deposit by AVDALE. Subsequent to the initial discovery at Otjikoto, AVDALE continued with base metal focussed exploration in the region up until 2003.

6.2 Exploration History

Table 6.2_1 summarises the companies which carried out any exploration within the property, grant or EPL numbers, primary target commodities, area and date of final report.

Table 6.2_1

Summary of Exploration History

Company	Grant/EPL Ref.	Target Commodity	Data Source	Area (ha)	Date of Final Report
Kennecott Exploration	196	Cu	Li196.shp	37,732	Dec 1968
Kennecott Exploration	184	Cu/Pb/Zn	Li184.shp	48,482	Dec 1968
Kennecott Exploration	154	Cu/Pb/Zn	Li154.shp	10,351	Aug 1969
Falconbridge of SWA	454	Cu/Pb/Zn	Li454.shp	10,527	Sept 1973
Falconbridge of SWA	423	Cu/Pb/Zn	Li423.shp	20,626	May 1973
Falconbridge of SWA	310	Cu/Pb/Zn	Li310.shp	33,161	Feb 1974
Tsumeb Corporation	720	Cu	Li720.shp	10,325	Oct 1975
Anglo American	1070	Base metals	Li1070.shp	25,486	Apr 1985
Gold Fields Prospecting	1654	Cu	Li1654.shp	39,568	Mar 1991
Tsumeb Corporation	1655	Base metals	Li1655.shp	57,122	unknown

6.2.1 Kennecott Exploration SWA (Pty) Ltd

Kennecott carried out extensive exploration along and beyond the northern boundary of the TEAL properties, under Grants 154, 184 and196. The target commodities were Cu, Pb and Zn. Relatively detailed geological and geochemical field mapping was done.

Soil sampling identified a number of Cu anomalies, some of which were followed up by more detailed soil sampling surveys and trenching. Apart from a small Cu deposit on the farm Rietfontein 344, no mineralisation was found worthy of further investigation.

6.2.2 Falconbridge of SWA (Pty) Ltd

Falconbridge explored towards the north of the TEAL properties during the early 1970s. The area comprised Grants 310, 423 and 454, in parts overlapping with the earlier grants to Kennecott. The target commodities were Cu, Pb and Zn.

Geological mapping and geochemical sampling were carried out, sometimes to detailed scale. Several Zn anomalies were found, often together with anomalous Pb concentrations. A few Cu anomalies were also detected.

Some targets were investigated further using magnetic surveys and the Induced Polarisation ("IP") technique.

In total some 22 drillholes were completed on the farms Rietfontein 344, Driekoppies 801 and Eenberg 802.

6.2.3 Tsumeb Corporation (Pty) Ltd

Tsumeb Corporation explored Grant 720 for Cu during the earl 1970s. This Grant overlapped with some of the earlier Grants, and Tsumeb Corporation prepared a field map consolidating the earlier work.

Reconnaissance soil sampling was done in areas that had previously not been sampled, at intervals of 50m. A magnetometer survey was carried out which clearly differentiated the Askevold Formation from the carbonate rocks underlying the remainder of the area.

Detailed field mapping was done along sample lines and a generalised geology map on the scale on 1:5 000, as well as magnetic profiles and geochemical maps, were drawn up.

An extensive grid was laid over areas of highest known potential and sampling was done at 25m intervals. Exploration pits were sunk on anomalies in the Askevold Formation.

The best Cu mineralisation encountered occurs within the carbonates approximately 100m north of the Askevold-Abenab Formation contact. Here, rich stratiform chalcocite and malachite, with minor chalcopyrite, bornite and azurite, are seen in an intensely deformed, banded, impure, quartzitic-sideritic dolomite. This mineralisation does not appear to be of significant lateral extent.

6.2.4 Anglo American Corporation

Anglo American Corporation prospected Grant 1070, which overlaps historical Grant 184, during the early 1980s for base metals. Anglo American specifically targeted the quartz-hematite "plug" on the farm Eque 578. Soils samples were collected and analysed, and magnetic and gravity ground surveys were carried out. The target area was geologically mapped at a scale of 1:500.

Three diamond holes were drilled on the farm Eque 578. Two were sited to investigate a gravity low, and another to investigate the quartz-hematite filled fault zone to the southeast of the "plug". Anglo American concluded that the quartz/haematite "plug" was actually a fault filled feature.

The circular gravity low was ascribed to a low density, probably granitic, intrusive with a top contact deeper than 321m (the maximum depth attained by the drill) and probably at 400 to 450m depth.

Historical work on this property also mentions anomalous arsenic concentrations in soils and low grade gold in grab samples was also reported within this quartz-hematite ‘plug’.

6.2.5 Goldfields Prospecting Corporation (Pty) Ltd

Grant 1654 was explored for Cu by Goldfields during the 1980s. This Grant overlapped with historical Grants 167, 184, 196 and 310.

All the reconnaissance work that had been done previously was used and adapted for this investigation. A 1:10,000 scale geological map of the farm Neuwerk 507, on which the Deblin copper mine is located, was drawn up. Cu anomalies that had been observed by Anglo American and Falconbridge during previous exploration, were investigated in greater detail.

74 percussion holes were drilled in the Neuwerk-Deblin prospect area. These ranged in depth from 2m to 10m.

The defunct Deblin copper mine is located on the farm Neuwerk 507, 19km to the south east of the Otavi village.

Four more areas of interest were investigated with no mineralisation of economic interest being identified.

6.2.6 Tsumeb Corporation (Pty) Ltd

Grant 1655 of the Tsumeb Corporation (now Ongopolo Mining and Processing (Pty) Ltd) overlaps historical Grants 167, 196, 267 and 310. The open file report contains no exploration results.

6.3 Resource History

RSG Global is not aware of any historical Mineral Resources or Reserves estimated for any mineral occurrences on the Otavi Exploration Project.

6.4 Production History

RSG Global is not aware of any significant commercial mineral exploitation having taken place on the Otavi Exploration Project. Limited small scale amethyst mining has taken place within certain claims on the tenements. None of these claims are in the areas targeted by TEAL for gold mineralisation.

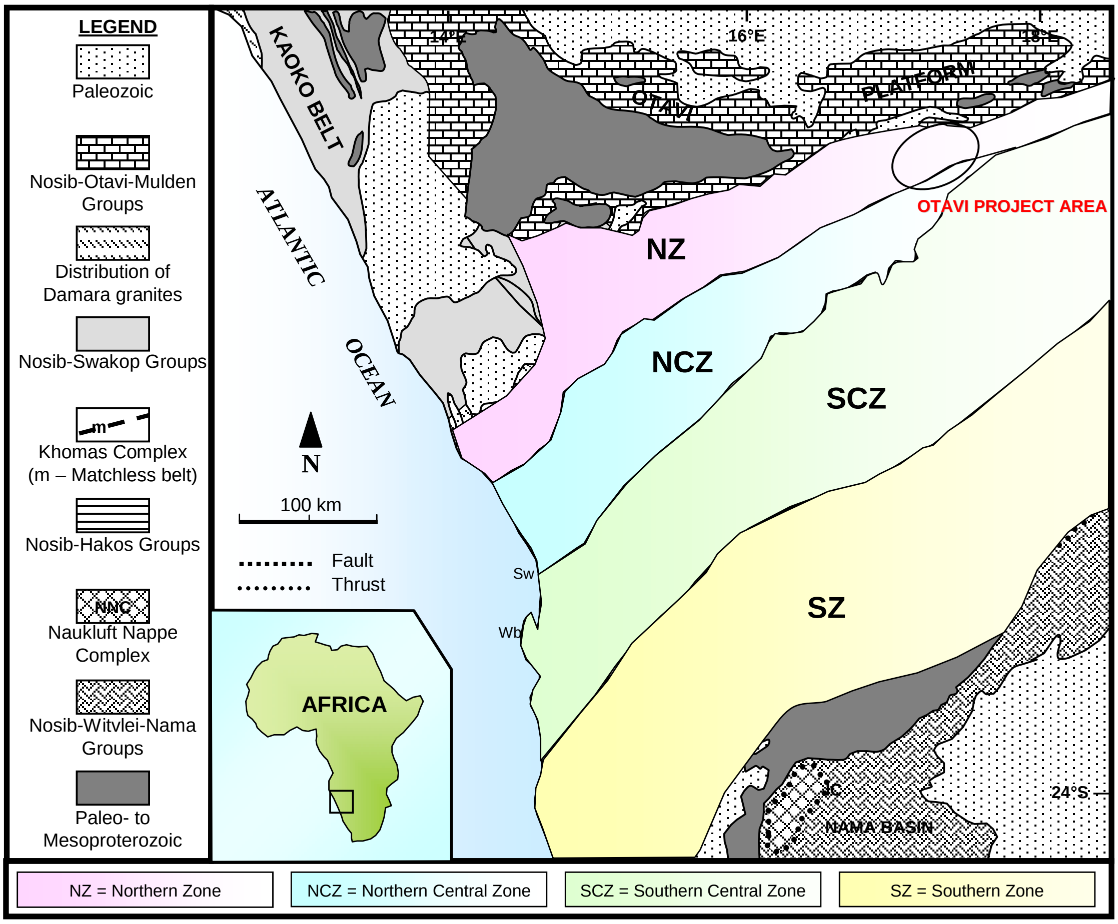
7 GEOLOGICAL SETTING

7.1 Regional Setting

The Otavi Exploration Project is set within the northeast-trending, intracratonic arm of the Damara Orogen.

Figure 7.1_1 illustrates the major tectonostratigraphic zones of the Damaran Orogen.

Figure 7.1_1
The major tectonostratigraphic zones of the Damaran Orogen



(modified after Miller, 1979)

The regional area is presumed to traverse the Northern Central Zone ("NCZ") and Northern Zone ("NZ") of the Damaran tectonostratigraphic zones. The AVDALE properties lie predominantly within the NZ.

The edge of the Northern Platform ("NP", also "Otavi Platform") is to the north of the property in the vicinity of Kombat Mine.

In this part of the orogen, fluvial sedimentation was initiated in intracontinental rift basins at about 1000Ma to form the Nosib Group. Subsequently rifting gradually evolved into spreading and deepening of the basin southwards, culminating in continental rupture to form a mid-ocean ridge (Matchless Member) in the Southern Zone ocean by about 700Ma ago. Pelites and carbonate rocks were deposited in the NZ and Central Zone (“CZ”) flanking basins to form the Swakop Group. Throughout this evolutionary period the NP remained an extremely stable carbonate depository forming the Otavi Group in which marker stromatolite horizons can be traced over hundreds of kilometres.

Damaran orogenic activity resulted from a reversal of spreading and the initiation of subduction of the Kalahari Craton below the Congo Craton. Episodes of granitoid intrusion, metamorphism and tectonic activity took place over an extended period from about 650Ma to 460Ma. D_1 recumbent folding was followed by the intrusion of granitic rocks (650Ma), uplift and erosion in the north-westerly trending coastal arm and deposition of a molasses (the Mulden Group) in the Northern Platform region. The D_2 deformational event and its accompanying metamorphism which resulted form continental collision, directly affected the Otjiwarongo-Otavi region where it results in open to tight, partly overturned, folding and refolding on east to east-northeast axes. D_2 was followed by the intrusion of 590Ma granites.

D_3 doming is considered to be the final major deformational event in the CZ (Miller, 1983b) and was accompanied by a general southward progression of the locus of deformation into the Southern Zone (“SZ”) where south-easterly directed thrusting occurred. D_3 was followed by the intrusion of the Donkerhuk Granite at 523Ma.

Isostatic uplift and rise of isotherms in the CZ caused melting of both basement and cover rocks for about 70Ma after the peak of metamorphism in the SZ, i.e. until about 460Ma, and the emplacement of post-tectonic intrusions.

Due to the very poor outcrop of Damara units within the property, much of the geological understanding has been complied from photo-geological interpretation carried out by Thatcher, 1999. Further surface mapping, where possible, and GIS compilation with other datasets and drilling information has provided the current understanding of the properties geological environment.

The Damaran succession above the Nosib Group can be clearly differentiated from photo geology and in the field, into a “platform facies” and a “basin facies”. The “platform facies” sequence distinguished and utilised for photo geological purposes is shown in Table 7.1_1.

Table 7.1_1

Stratigraphy of the “platform facies” of the Damaran above the Nosib Group

OTAVI Group	TSUMEB Subgroup
	CHUOS Formation
	ABENAB Subgroup

The Abenab Subgroup consists of dolomite and limestone with subordinate shale arkose and greywacke.

The Chuos Formation can often be clearly distinguished photo geologically in outcrop, but not the other formations of the Tsumeb Subgroup. The Chuos (‘tillite’) Formation is reported to be predominantly a mixtite but also includes a variety of other rock types, such as pebbly schist, quartz-mica schist, quartzite, conglomerate, dolomite, iron-formation, calc-silicate rocks, etc.

The remainder of the Tsumeb Subgroup, above the Chuos Formation, is reported to consist of thinly bedded or massive dolomite and limestone with occasional chert beds, intraformational breccias or conglomerates and stromatolitic horizons. Some shale occurs interbedded near the top of the succession.

The Mulden Group unconformably overlies the Tsumeb Supergroup. It is interpreted to represent a molasses assemblage. Within the project area, it is found only in the core of the Otavi Valley Synclinorium.

The Chuos Formation appears to be absent form the “basin facies” of the middle Damaran and the sequence as shown in Table 7.1_2 has been applied in photogeological mapping in the area north of Otjiwarongo.

Table 7.1_2

Stratigraphy of the “basin facies” of the Damaran above the Nosib Group

KHOMAS Subgroup	KUISEB Formation	
	KARIBIB Formation	“Main Marble Marker”
		Undifferentiated Karibib Fm below “Main Marble Marker”

A new, more concise stratigraphic setting for the Otavi area has been proposed by Hoffman et al (2004), as shown in Figure 7.1_2. The regional geology of the Otavi Exploration Project is shown in Figure 7.1_3.

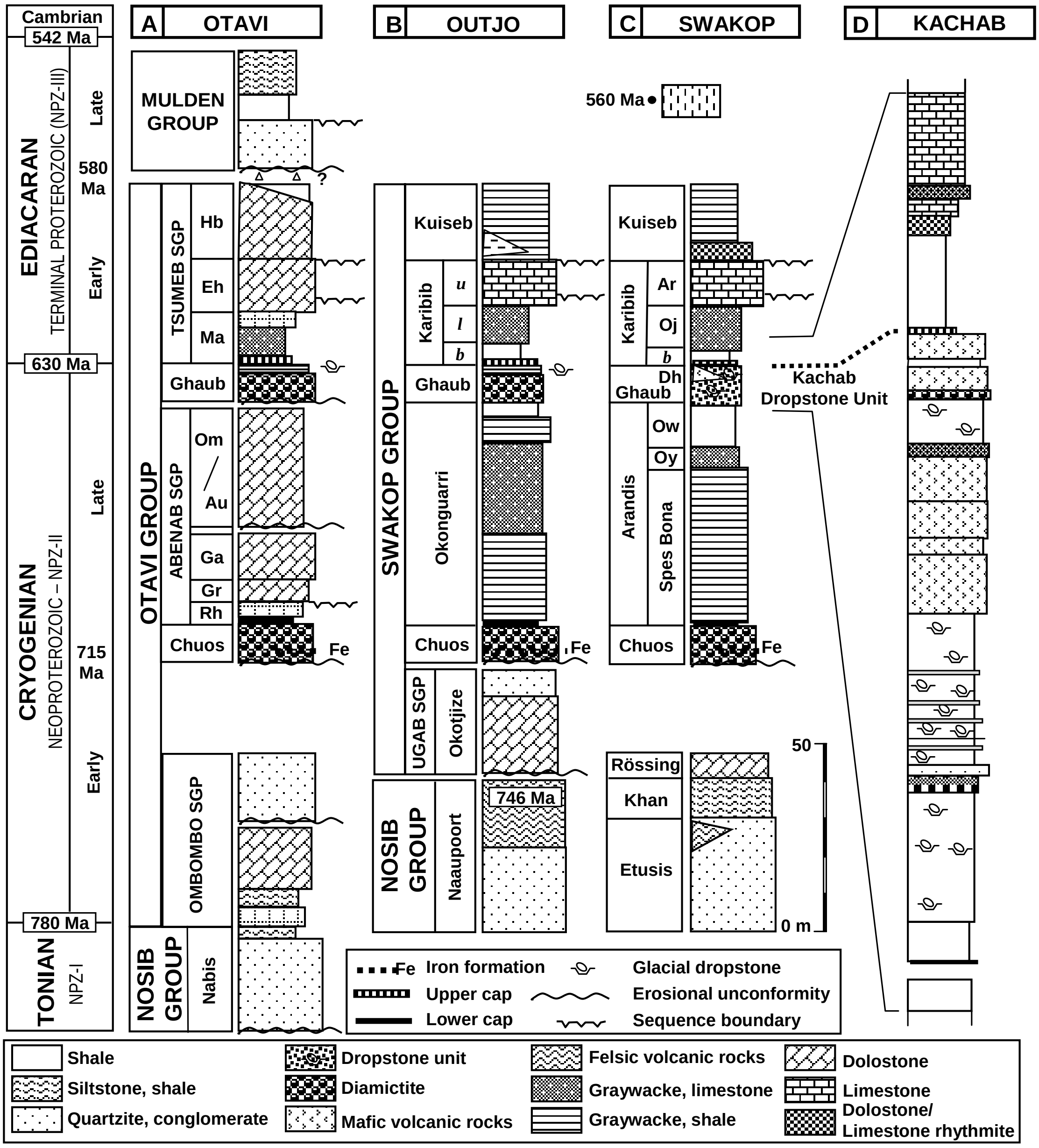
Intrusions into the Damaran in the Otjiwarongo-Otavi region appear to be overwhelmingly granitic in composition, grouped into syntectonic granites and post-tectonic granites.

Karoo-related intrusions were encountered during the photogeological investigation at Okorusu, Groot Paresis and Klein Paresis. Okorusu is a carbonatite/syenite complex. According to the 1:1,000,000 Geological Map of South West Africa/Namibia (Miller and Schalk, 1980), Groot and Klein Paresis are rhyolite/tuff complexes.

7.2 Project Geology

Where checked in the field, “undifferentiated Karibib Formation below the Main Marble Marker” is seen to include quite thick units of dark grey marble (Tirol type), schists (including biotite-schists and graphitic schists) and calc-silicate horizons. Tourmalinisation was found to be quite extensively developed at one locality visited, including conformable tourmalinite beds. The large apparent thickness of this unit is interpreted to be mainly the result of repetition by complex folding in synclinorial or anticlinorial zones. Some thrusting, or imbricate thrust sheeting might also be involved. The unit occupies relatively low lying and flat terrain and is generally poorly exposed.

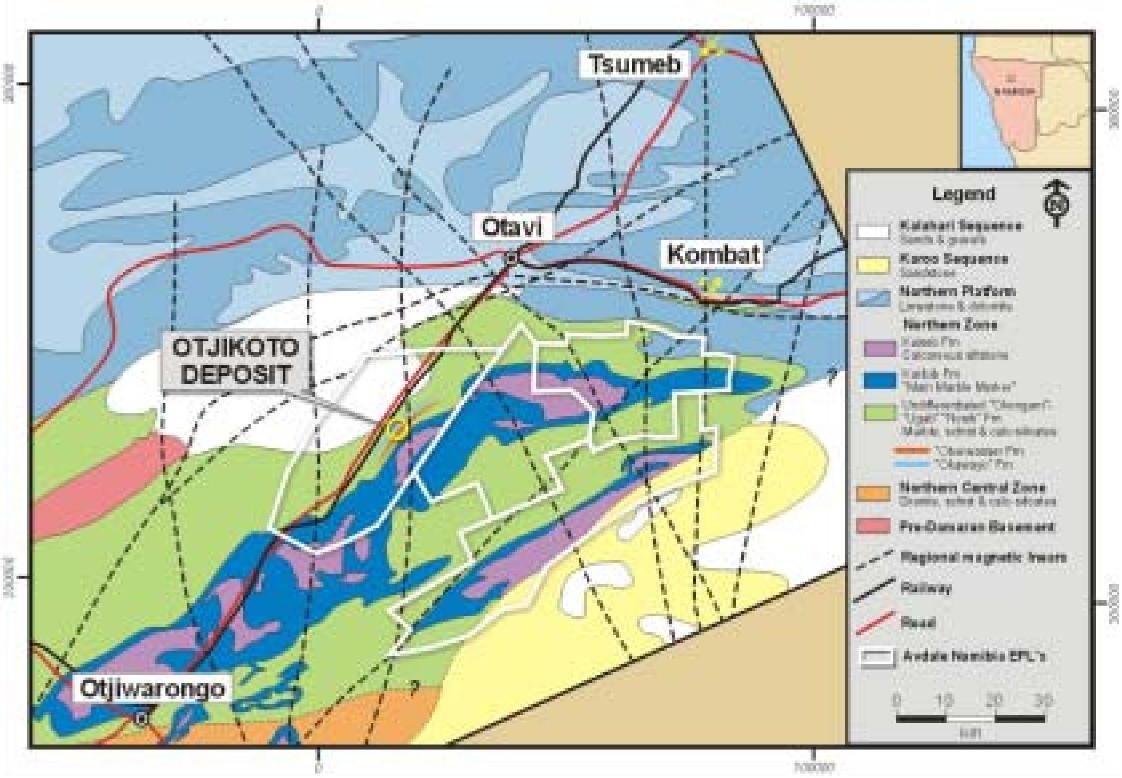
Figure 7.1_2
New lithostratigraphic subdivisions and correlations of the Otavi and Swakop Groups



Ar-Arises Member (Mb)	Au-Auros Formation (Fm)	Dh-Daheim Mb	Eh-Elandshoek Fm
Ga-Gauss Fm	Gr-Gruis Fm	Hb-Huttenberg Fm	Ka-Karub Mb
Ke-Keilberg Mb	Ma-Maieberg Fm	Om-Ombaatjie Fm	Oj-Otjongeama Mm
Ow-Oberwasser Mb	Oy-Okawayo Mb	Rh-Rasthof Fm	

b-basal; l-lower; u-upper Karibib Fm

Figure 7.1_3
Regional Geology of the Otavi Exploration Project area



(after Miller, 1979, and Thatcher, 1999)

The “Main Marker Marble” is interpreted photogeologically to lie at the top of the Karibib Formation, at least as far south as Otjiwarongo. In most places where it was observed in the field it consists of a continuous, thick succession of white to light grey marbles which are usually quite well bedded. The “Main Marker Marble” often occupies prominent ridges with excellent outcrop and can be traced on aerial photographs right across the area. It is for this reason that it is regarded as being of great significance as a photogeological marker horizon over much of the central part of the project area.

The poorly exposed rocks immediately overlying the “Main Marble Marker” has been assigned photogeologically to the Kuiseb Formation of the Khomas Subgroup. It occupies topographically flat, depressed areas in the axial zones of “Main Marble marker” synclines. It is reported to consist of schistose quartz-feldspar-mica metagreywacke and metapelite, garnet-cordierite gneiss, minor marble, quartzite, amphibole schist, calc-silicate rock, skarn, graphitic schist and migmatite.

An attempt was also made to classify and subdivide the various types of superficial cover encountered but this was more successful in some parts of the area than in others. The well developed, old calcrete land surface in the northeastern corner of the project area can be clearly recognised and mapped. Elsewhere areas of transported soil can sometimes be clearly mapped, which may have significance in planning geochemical soil surveys.

7.2.1 Structure

Although the depositional patterns within the Damaran Sequence were controlled by early rifting followed by spreading, geological structures and metamorphism were mainly developed as a result of the compressional events and possible subduction of the Kalahari Craton beneath the Congo Craton, triggering the onset of orogenic activity some time between 700Ma and 650Ma (Miller, 1983b).

<u>Folding</u>

D_1 recumbent folding, pre-dating the deposition of the Mulden Group, has been recognised, but the major folds can all be related to the D_2 deformational event. This event led to the development of a series of major doubly plunging anticlines and synclines throughout the area and across the NP to the north. These vary in closure from open to tight and in attitude from upright to overturned, occasionally recumbent.

Of regional significance within the Otjiwarongo-Otavi area is the fairly abrupt swing in axial trend of D_2 folds from NE-SW to more or less E-W to the north of about latitude 20°S.

The major D_2 folds are internally quite complex structures with numerous parasitic folds on the flanks of the major structures. These have been mapped in some detail in the Otavi Valley Synclinorium (Innes and Chaplin, op. cit.) but were also observed photogeologically on the flanks of the Otjiwarongo-Kududamm Syncline. There are discrepancies in the attitudes of D_2 fold axes at the platform margins as indicated by photogeology and those reported by previous workers. Experience to date has shown that the photogeologically observed strike and dip directions were found generally to conform closely to actual follow-up measurements in the field.

Asymmetrical refolding of major D_2 folds on northeast trending axes has been noted at a number of localities, mainly in the northern part of the project area. This refolding has not been assigned to a separate deformational event. The best known and most closely studied example occurs at the Kombat Mine, where it appears to have played a significant role in localising the mineralisation (Innes & Chaplin, op. cit.).

A D_3 doming event has evidently played a major role in disrupting and refolding D_2 fold structures in the area south of Otjiwarongo. Several Nosib-cored domes or relatively short, northeast trending, doubly-plunging anticlinal structures can probably be ascribed to this event. The domal structure on the farms Wagner 14 and Claussen 354 has been investigated by AVDALE and found to be related to intrusion of a circular granite body. The domal structure on farms Schwerborn 6 and Northland 9 probably has a similar origin.

<u>Faulting</u>

Most of the faults so far discovered and mapped in the Damaran of the Otjiwarongo-Otavi Region appear closely related to the D_2 deformational event.

A number of closely spaced strike faults are interpreted photogeologically to follow the southern (possibly overturned) flank of the major D_2 anticline to the south of the Otavi Valley Synclinorium. These are probably closely related to the earlier phase of the D_2 event. Faulting at the southwestern end of Otjiwarongo-Kududamm Syncline may also have formed during early D_2 deformation.

Most other faults so far mapped in the area probably post-date D_2, and probably also D_3.

The Waterberg Fault essentially forms the southeastern boundary of the project area and brings Damaran rocks against Karoo sedimentary and volcanic rocks. It is defined as a reverse fault, upthrown on the northwestern side, on the 1:500,000 scale geological map (Miller and Grote, 1988). The east-west fault on farm Warlencourt 99 and other faults may be splays off the main Waterberg Fault.

Dykes

Mapped dykes are rare and probably mainly related to Karoo alkaline intrusives. Exceptions are the two east-west trending dyke-like features in the Kuiseb Formation on Okaruikosonduno 5 and adjoining farms.

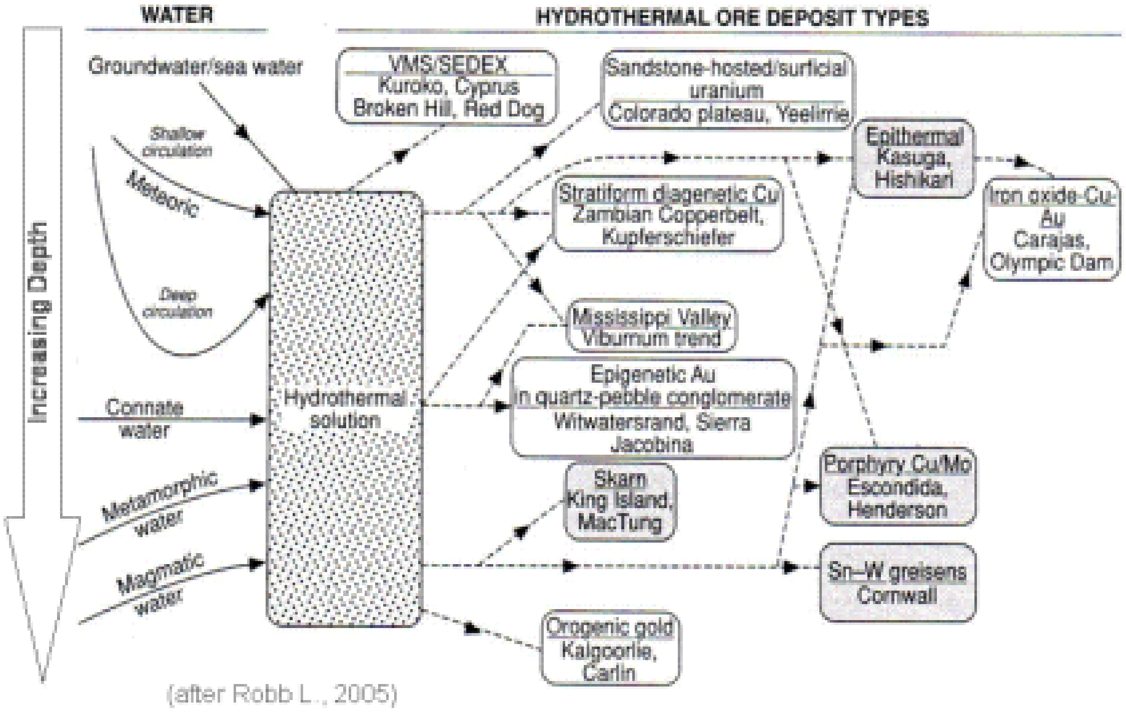
8 DEPOSIT TYPES

Historically all exploration in the Otavi-Otjiwarongo region focused on exploration for base metals (Cu-Pb-Zn). Although TEAL still has the rights to explore for base metals, the current exploration programme is primarily aimed at extending the known mineralisation at the Otjikoto gold deposit, and finding additional, similar deposits. Whilst the Otjikoto sheeted vein style of mineralisation presents the primary focus of the Otavi Exploration Project other but similar styles of structurally controlled gold mineralisation are known to occur within the Damaran Orogen.

The Otjikoto-Navachab style of mineralisation does not fit any pre-defined mineralisation style exactly, although Nörtemann et al (2000) describes the Navachab mineralisation as a "'mesothermal' regional metamorphic gold skarn" and compares it with several known deposits, including Lucky Draw and Nevoria in Australia, Lupin and Tillicum in Canada and Mallapakonda and Oriental in India. Figure 8_1 shows the spectrum of hydrothermal mineral deposits in relation to depth and fluid genesis. Otjikoto does not fit into any one of the mineralisation types shown, but exhibit characteristics indicative of the following:-

- epigenetic Au mineralisation;
- metamorphogenic mineralising fluids; and
- skarn-type alteration mineral assemblages.

Figure 8_1
Hydrothermal mineral deposits



Specific lithologic units are preferentially mineralised, and it is accepted that the proximity of these rocks to carbonate units played a geochemical role in the precipitation of the gold and associated minerals. Gold mineralisation is generally stratabound and hosted within a "sheeted-vein" system. At Navachab, gold mineralisation is observed in both stratiform, lense-shaped massive skarn bodies and as late-kinematic auriferous quartz veins cross-cutting both the skarn and country rock. Both types of mineralisation exhibit the same paragenetic sequences. The Navachab gold deposit is believed to have formed towards the end of a high temperature - low pressure ("HTLP") tectonothermal event, which culminated in voluminous igneous intrusion. An orogenic - HTLP metamorphogenic model for Navachab-Otjikoto style of mineralisation allows for the involvement of both magmatic and non-magmatic (metamorphogenic) fluids in ore formation (Steven, 2003).

The mineralised vein systems at Navachab have lateral dimensions of at least 2km (probably 5km) by approximately 900m. Depth extent exceeds 730m below surface.

Structural features also play a controlling role in forming the Navachab and Otjikoto gold deposits. Large scale structures with deep roots are considered essential for mineralised fluid transport, while regional to project scale structures play a role in forming localised fluids traps. The latter are required to allow economically significant amounts of gold to accumulate and precipitate in a spatially constrained locale.

Initial investigations (Wilton, 2000; Scheepers, 2000 and Steven, 2001) of mineralisation encountered in the drill core at Otjikoto, indicated a few differences from the generally accepted Navachab interpretation as summarised below:-

- The gold mineralisation may not be related directly to the skarnification process.
- A metamorphic-structural control has been suggested as the primary control on gold mineralisation. Elements of this may also be interpreted at Navachab.
- Although there is a spatial correlation between gold and magnetite at Otjikoto, the magnetite appears to be an earlier, higher temperature event. Minor retrograde alteration has been associated with gold mineralisation at Navachab (Nörtemann et al, 2000).
- Gold precipitation is argued (Scheepers, 2000) to have taken place as a result of an oxidation/reduction front and changing eH and pH conditions in vicinity of the marble unit.

The albitisation of a biotite schist at Otjikoto is seen as a crucial ground-preparing event. The resultant brittle rock fractured extensively during the D_3-D_4 deformation events that affected the adjacent marble unit in a ductile manner. This created pathways for the movement of mineralising fluids and their subsequent trapping at the marble contacts.

It is clear from the preceding discussion that certain generalities regarding the gold mineralisation at Navachab and Otjikoto can be extracted, and these have been employed by TEAL in directing its exploration programme in the Otavi area (see also Section 10 - Exploration). However, TEAL should continue to investigate the characteristics of the observed mineralisation, since it is felt that there are still significant uncertainties or ambiguities remaining with regard to the paragenesis of the mineralisation.

9 MINERALISATION

The Otjikoto gold deposit is located in the inland branch of the Damaran orogeny, close to the boundary between the SZ and the NZ. Poor exposure precludes an exact determination, but Otjikoto is located within 50km of two major terrane boundaries marked by thrust faults, namely the strike extension of the Otjihorongo Thrust, which separates the Central from the Northern Zones and the Omaruru Lineament - Waterberg Thrust.

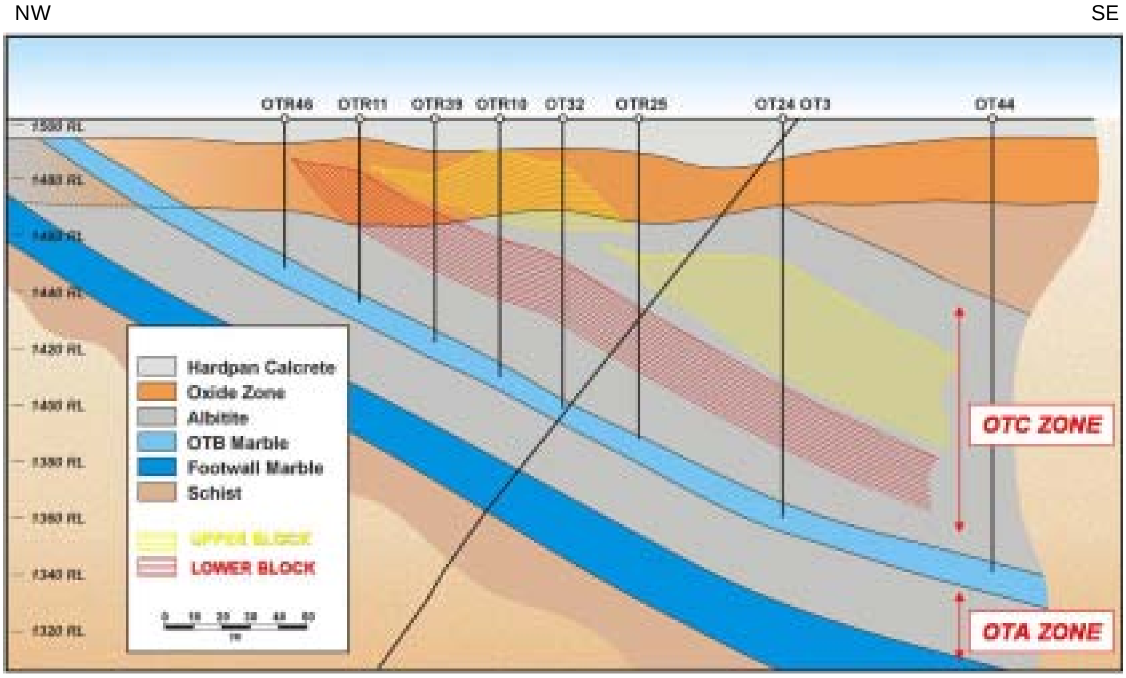
The gold mineralisation is hosted by a series of thin (<10cm) sheeted veins, which lie essentially parallel to the northeast trending foliation of the schists and granofels (metamarls) of the basal Oberwasser Formation. Strictly speaking, the veins lie parallel to an S_0/S_1 transposition foliation, which approximates bedding, and the term bedding is used hereafter for simplicity. In the Otjikoto area, the shallow-dipping (~25°) Oberwasser Formation attains a thickness of approximately 1,000m and is overlain to the southeast by the calcareous marbles and relatively minor calc-silicate rocks of the Karibib Formation, the most reliable (and best exposed) marker in the area. The calc-silicate fels immediately underlying (within 100m) the Karibib Formation marbles proper also host bedding-parallel auriferous quartz + pyrrhotite + chalcopyrite veins.

The lithotypes at the Otjikoto gold deposit have been divided into three lithostratigraphic units: from bottom to top the OTA fels, the OTB marble and the OTC albitite-hornfels. The OTC unit hosts the mineralised vein system and is underlain by the 6m to 10m thick unmineralised OTB calcareous marble. Underlying the OTB marble is the albitised OTA fels (~30m thick), which hosts minor bedding-parallel veins with irregularly distributed gold values. At the base of the OTA fels is the Footwall Marble (~20m thick). The OTA fels and the OTB marble are part of the Okawayo Formation, which is an important host to tungsten skarns in the Omaruru District (Steven and Moore, 1994) and gold skarns in the Karibib District (e.g. the so-called MC zone at the Navachab Gold Mine; Steven et al., 1994). Figure 9_1 gives a schematic view of a northwest to southeast oriented cross section through the Otjikoto mineralisation.

Otjikoto is an example of an orogenic (probably metamorphogenic) low-sulphidation Au skarn with very low base metal contents. The deposit appears to be a variation on the Central Damaran gold deposit theme where vein types are highly variable.

The mineralised veins are essentially unmetamorphosed and relatively undeformed and thus postdate the peak tectonothermal events of the Damaran Orogeny (~550Ma). No indications of movement (kinematic indicators) are present on the vein margins and an extensional (i.e. tectonic) and/or dilational (i.e. fluid pressure) origin for the veins seems most likely. The absence of any contact aureole on the margin of (presumably) high temperature (i.e. >500°C) vein skarn assemblages precludes a post-Damaran (e.g. Karoo or post-Karoo) age. It is thus accepted that the vein swarm is of late Damaran age (550Ma to 500Ma).

Figure 9_1
NW-SE schematic cross section through the Otjikoto mineralisation, looking northeast



Geophysical data (magnetics and IP) clearly indicate that the Otjikoto veins, although lying parallel to the bedding (oriented 035°/25°SE) are located within a north-northeast trending corridor defined by the >25msec IP contour. The IP anomaly has a north-northeast axis length of >4.2km (open-ended to the north) and a width of ~700m. Thus, the vein swarm is lying at an angle of 20° to 30° to deep-seated north-northeast trending linears which could be an extensional array that formed from late Damaran dextral movement on these structures. All the significant mesothermal gold deposits in central Namibia discovered to date are hosted within these north-northeast trending corridors (Sandamap, Steven et al., 1993; Navachab-Onguati and Otjimbojo; Navachab Gold Mine guide, Steven and Moore, 2000), though the auriferous structures are commonly at a high angle to the north-northeast direction.

The vein swarm is particularly concentrated in the granofels, because the less competent schist and marble could absorb the late Damaran strain without tensional cracks developing. At Otjikoto, rheology is as important as lithology in localising auriferous fluids, as it is elsewhere in the Damaran orogeny. The magnetic structural breaks oriented 080° mentioned by Wilton (pers. comm.) are probably R_2 Riedel fractures related to this dextral motion (similar structures shown at Otjimbojo; Steven and Moore, 2000).

It is concluded from the veins observed in drill core that most sheeted veins were emplaced just before, during and after the first phase of folding, but it is not clear whether any of these veins post-date the second and possibly the third phase of folding (modified after Kasch, 2004).

Not enough information is as yet available to allow authoritative commenting on gold distribution in the various alteration assemblages.

The intense albitisation of the granofels and schist observed at Otjikoto is unusual in the Central Zone. The albitisation may have occurred relatively early in the tectonothermal history and have nothing to do with the gold-mineralising event. However, albitisation probably changed the rheology of the host rocks (made them more brittle) and hence albitised zones may be more prospective for auriferous quartz veins. This pre-mineralising ground preparation is important in the location of other gold mineralising systems.

Some of the bedding-parallel magnetite + pyrrhotite + chalcopyrite veins (~10cm thick) are mineralised. At Otjikoto these granular magnetite veins are commonly hosted by intensively albitised metasediments.

Silicate + sulphide vein assemblages show very variable proportions of the constituent minerals: garnet + amphibole + quartz + pyrrhotite + chalcopyrite + pyrite + minor magnetite.

A relatively minor set of cross-cutting chlorite + pyrite + minor magnetite veins (probably steeply oriented) may be a remobilisation/sulphidisation (i.e. new fluid chemistry) or a retrogressive event.

Dolomite + calcite + ankerite + siderite + pyrite veins are developed within some areas of the main sheeted vein array.

There are several mineralising events implying a long-lived hydrothermal event and changing fluid chemistry. These events have not been separated and relatively dated as yet.

Gold is erratically distributed at Otjikoto. The erratic distribution at least is partly a function of the coarse grain size of the gold at Otjikoto (Steven, 2001).

An example of visible gold occurring in the drill core from hole OT24 (at 105m depth) is shown in Figure 9_2. Although visible gold is relatively rare, investigations during assaying showed that the gold is generally of a coarse nature.

Figure 9_2
Visible gold (approximately 3mm across) in drill core – hole OT24 at 105m depth

10 EXPLORATION

10.1 Exploration and Development Strategy

In 1996, the initial Otavi Project was recognised from conceptual target generation, research, desktop studies and regional structural interpretations. A base metal focused exploration strategy was developed and two Exploration Reconnaissance Licenses (ERLs) covering approximately 1.1 million hectares were acquired. During 1997 the bulk of these ERLs was converted into 13 EPLs covering some 1 million hectares.

AVDALE commissioned airborne magnetic surveys and a magnetic anomaly centred on the farm Otjikoto was identified (Corner, 1997). These surveys were conducted by Geodass Exploration Geophysical Services (Pty) Ltd and Fugro Airborne Surveys (Pty) Ltd. Extensive follow-up exploration of this magnetic anomaly led to the discovery of the Otjikoto Gold Deposit.

Various mandatory relinquishments have reduced the original EPL holding to 308,000ha. The current property includes the recently awarded EPL 3177 (~96,000ha). This EPL was acquired in the light of the increased geological knowledge from the Otjikoto prefeasibility study and application of the concepts of the current exploration model.

Following the completion of the Otjikoto resource drilling programme, AVDALE has now acquired a considerable amount of geological data and enhanced its understanding of the mineralising system, enabling focussed exploration of the 308,000ha contiguous tenements for additional gold mineralisation.

Significantly, the Damaran Sequence within the project area is extensively covered by a thin (5m to 20m) calcrete “Lower African” surface. Sediments of the Kalahari Sequence between 30m and 50m in thickness also cover a small area towards the northwestern portion of the property. The outcrop pattern is dominated by the Karibib Marble which is used as the main marker unit within the property. Soil development is generally thin (<50cm) and often absent in areas of Karibib Marble outcrop.

The abovementioned regolith profile dictates the project’s reliance upon airborne and ground geophysical techniques as primary exploration techniques.

A number of priority exploration targets have been generated from current structural and stratigraphic interpretations. A high-resolution airborne electromagnetic (AEM) survey has recently been carried out over amenable host stratigraphy and structurally favourable settings to further test the prospectivity of a portion of the property (see Figure 10.1_1).

Initial results of the AEM survey have been received and a number of prominent magnetic and electromagnetic exploration targets have been identified from the geophysical interpretation (Spectrem, 2005). TEAL’s exploration geologists and geophysical consultants will further characterise and prioritise these targets after placing them into geological context.

Figure 10.1_1
Regional aeromagnetic image with AEM survey areas shown

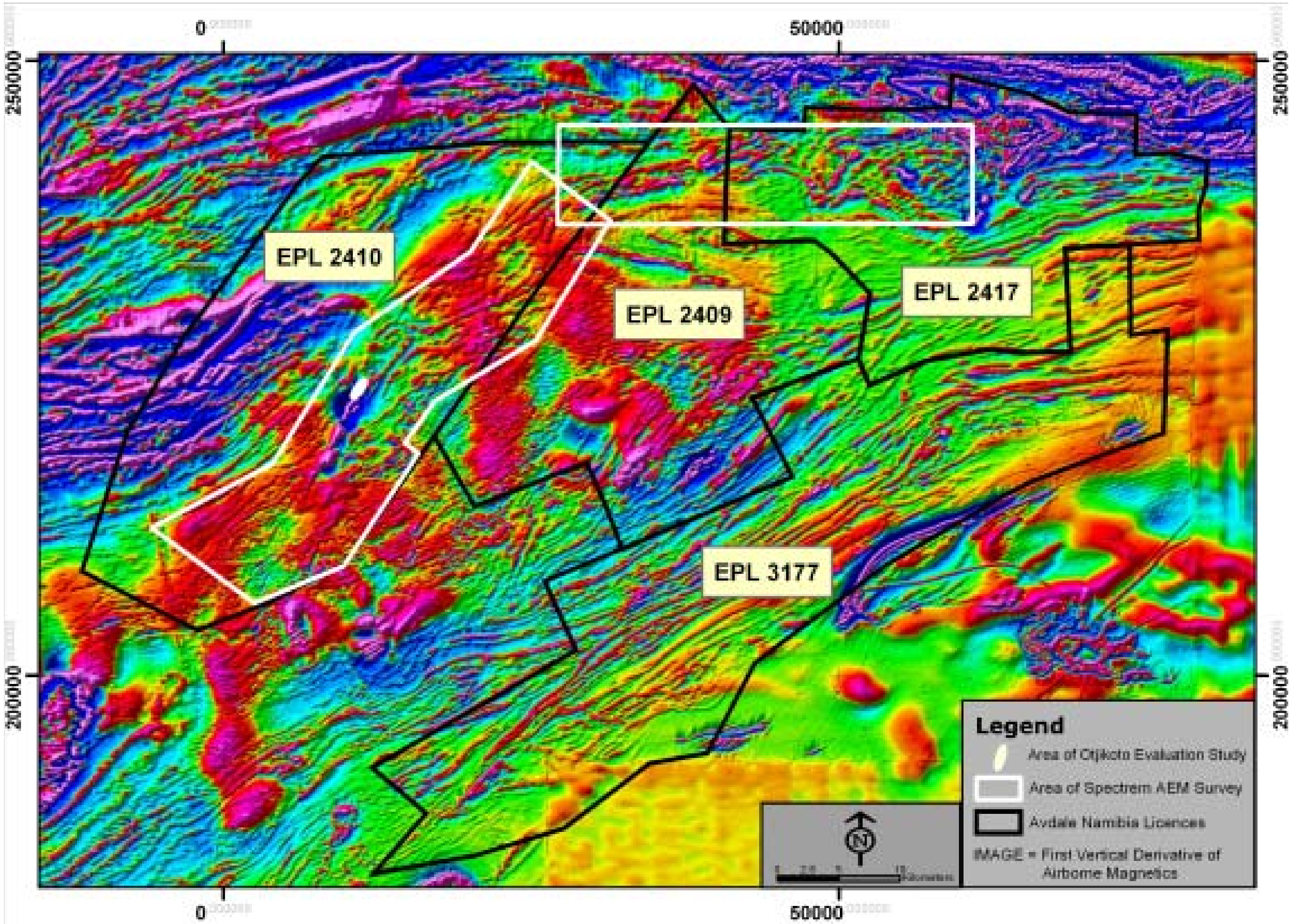
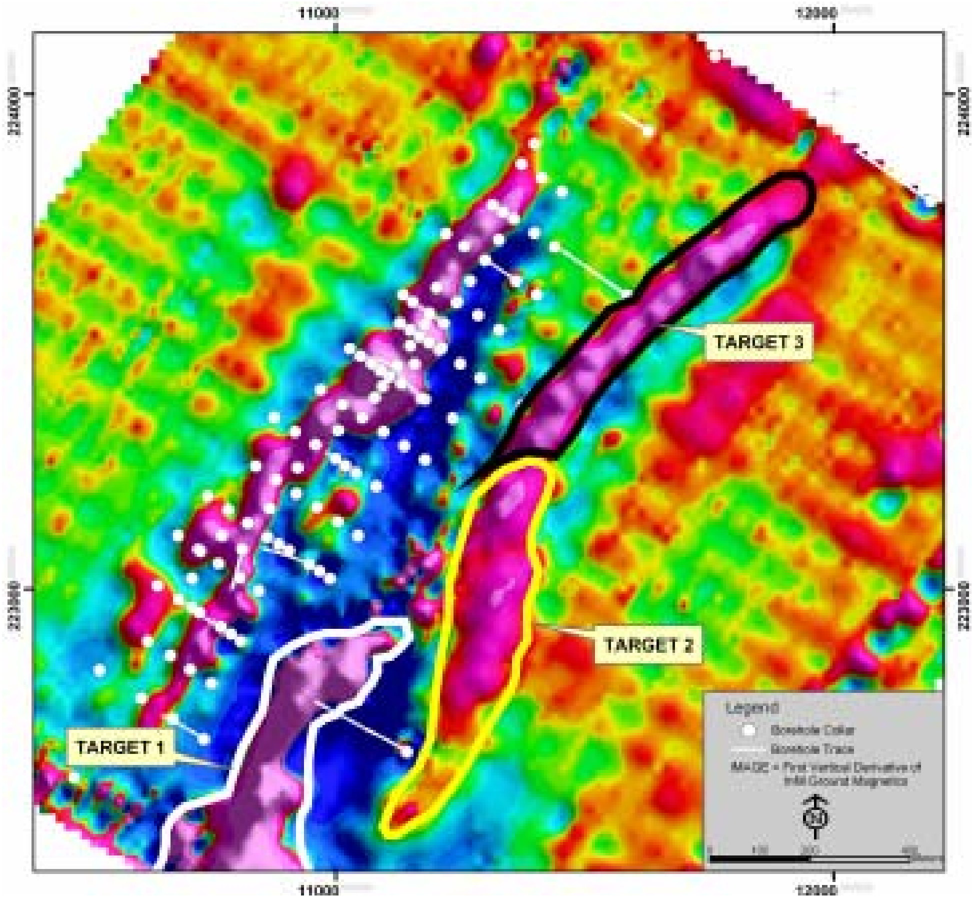


Figure 10.1_2 illustrates the results of a recently completed detailed ground magnetic survey completed over the known zone of Otjikoto mineralisation and extended some 1,000m further east. This survey has identified a second magnetic anomaly of similar character to that associated with the mineralisation at Otjikoto. This second magnetic anomaly has not yet been tested by drilling. This magnetic target and other magnetic targets will be integrated with the recently completed high resolution AEM survey. The result should be the identification of high priority exploration targets for drill testing in close proximity to the known mineral resource.

Figure 10.1_2
Detailed ground magnetic image at Otjikoto gold deposit and surrounds



10.2 Exploration Statistics

Exploration carried out to date at the Otavi Exploration Project is summarised in Table 10.2_1.

10.3 Project Management

The Namibian exploration work is ably managed by AVDALE geologists from a well equipped regional office in Windhoek. A project exploration office with supporting infrastructure has been set up in Otjiwarongo, some 50km south of the project area.

Table 10.2_1

Summary of TEAL's Exploration at the Otavi Exploration Project

EPL No.	Airborne Geophysics		Historical and Current Anomaly ID	Farm Name	Ground Geophysics			Drilling						Number of Samples Analysed			
	Mag + Radiometric	EM			Mag (line km)	IP (line km)	EM (line km)	Core		RC		Percussion		Core	RC Chips	Percussion	Soil
								No. of Holes	Metres	No. of Holes	Metres	No. of Holes	Metres				
2409 (Area 10)			10 UNA 1	Una	35.9	11.9						48	867.5			231	
			10 UNA 2	Una	14.0	16.3		1	150.1					22			
			10 KH 1	Kharesis	14.4							49	350.0			112	
			10 OS 1	Oslo	8.4	10.3		2	380.4					56			
			10 G 1	Gaidas	1.8	1.8											73
Sub-total	***1,357km***	***550km***			***74.5***	***40.3***		***3***	***530.5***			***97***	***1,217.5***	***78***		***343***	***73***
2410 (Area 9)			9 OPT 1	Okaputa	6.0		3.4	1	159.8					28			
			9 OKN 1	Okaputa Nord	11.4		15.6	1	300.6					100			
			9 EH 1	Erhardshof	17.7							35	583			133	
			9 EH 2	Erhardshof	10.0	10.4		4	823.5					64			
			9 GK 1	Glucksburg	3.0												
			9 FR 1	Fischer	7.0		6.1										
			9 LN 1	Lardner	7.0		7.4	1	170.0					22			
			9 OPN 2	Okaputa Nord	7.0		11.7	1	171.9					32			
			9 WH 2	Wolfshaag	19.9	31.1		1	171.5					64			
			9 WEH 2	Wolfshaag	12.8	12.8											
			9 WH 1	Wolfshaag	12.8	11.2	4.0	5	898.8	2	141	56	1,290	439	101	276	Yes
			9 OT 1	Otjikoto	63.7	45.6	32.0	18	3972.2	21	1866	126	3,412	2,129	2,175	885	Yes
			OTES	Otjikoto	Work carried out as part of the Evaluation Study has not been included.												
			9 GH 1	Gerhardshausen	26.5	21.6	3.9	1	115.2			123	1,739			393	Yes
			9 OPN 1	Okaputa Nord 2	27.2	17.0	10.4	1	203.6			58	1,030	99		235	Yes
Sub-total	***2,502km***	***2,200km***			***232***	***149.7***	***94.5***	***34***	***6,986.9***	***23***	***2,007***	***398***	***8,054***	***2,977***	***2,276***	***1,922***	***Yes***
2417 (Area 4)			4 OKT 1	Okukamanti	Gridding of this anomaly has commenced												
			4 DS 1	Devon South	29.0	36.8		1	229.9			38	257	78		62	214
			4 DV 1	Devon	7.0												57
			4 HO 1	Hamburg	9.4							15	241			56	29
			4 SG 1	Segen	2.8	2.8	1.2	1	227.4					42			
			4 BW 1	Bergweide	7.6	9.5		1	175.0					6			68
Sub-total		***850km***			***55.8***	***49.1***	***1.2***	***3***	***632.3***			***53***	***498***	***126***		***118***	***368***
3177 (Area 14)			14 ECK 1	Eckburg	47.6	47.6											
			14 ZB 1	Zabis	31.9												
			14 HB1	Haribib	26.9												
Sub-total					***106.4***	***47.6***											

10.4 Data Reliability

In 1998 Avmin (Anglovaal Minerals) implemented a standardised GIS based database for exploration data (Watkins et al, 1998). This database covered the acquisition and storage of exploration data, standardising the following:-

- data storage (directory structure, coverage, naming, media);
- data acquisition (digitising standards, metadata, attribute standards);
- data transfer (between offices, data conversions);
- data display (ArcView standards for map production);
- integration (standard analyses);
- analysis (including verification); and
- field data capture.

During the RSG Global site visit in November 2004, it was found that all data and information were properly filed, both in hardcopy and electronic format. Supporting data were easy to find, thus establishing an audit trail. RSG Global specifically asked for and checked geological logs and assay results against drill core and percussion chips.

The cores of five diamond drillholes were inspected and compared with the logs and assay results: OT1, OT16, OT24, OT32 and OT39. Reverse Circulation drillhole OTR17 was also inspected and compared. No discrepancies were found for any of these holes.

The reliability of the derived data sets to calculate a Mineral Resource is discussed in Section 17 – Mineral Resources and Mineral Reserves.

10.5 Interpretation of Results

The Otjikoto deposit exhibits a clear magnetic and electromagnetic signature from both airborne and ground data. The application of AEM to the exploration of the property is enhanced by the absence of significantly conductive overburden and saline ground water.

It should be noted that whilst the Otjikoto deposit has a strong spatial association with magnetite on a large scale, this may not occur in other instances. The Navachab deposit has some similarities to the Otjikoto style of mineralisation but there is an absence of magnetite within the Navachab ore zones.

A concise mineralising model for the Otjikoto deposit is still evolving. However, general principles appear to remain valid with regard to the focusing of the mineralisation and potential further sites for similar gold deposits.

Important geological parameters to identify targets for further discoveries include the following:-

- **Structural setting**
  - The location of major structural features trending north-northeast such as the Otjikoto lineament. Similarly trending structures are known to be associated with other gold and uranium deposits throughout the northeastern branch of the Damaran Orogen.
  - The development of other Damaran east and east-southeast trending structures.
  - Proximity to late Damaran interference folding could provide further sites for the focusing of mineralising fluids.
- **Rock types**
  - The Otjikoto deposit is hosted within a series of metamorphic units interpreted to represent equivalents of the Oberwasser and Okawayo Formations. These Formations and the Karibib Formation are known to also host the Navachab deposit some 260km to the southwest of the property.
  - Albitic units host the bulk of the mineralised veins. The albitisation process is a critical ground preparation event producing a rigid, brittle unit amenable to subsequent fracturing and vein propagation.
  - The precipitation of the gold from the mineralising fluids could be related, in part, to host rock chemistry variation where more reducing conditions are found in the proximity to marble unit contacts.
  - Potential may also exist for the creation of similar favourable host units at or close to the Karibib Marble - Kuiseb Formation contact.

High priority exploration targets are identified at the intersection of these productive Damaran structures and favourable host rock types.

In line with good exploration practice, and from previous experience in the region, the methodology applied aims not to exclude the potential for detection of other styles of mineralisation.

It is also anticipated that high resolution airborne electromagnetic surveys will directly identify additional exploration targets.

11 DRILLING

11.1 Introduction

AVDALE has employed three drilling techniques within the property at various stages of exploration and through various phases of work:-

- Percussion drilling to recover geochemical samples below the calcrete cover and allow for basic geological and regolith assessment.
- Reverse Circulation (RC) drilling to test exploration targets and as part of the advanced exploration and prefeasibility evaluation of Otjikoto.
- Diamond drilling using HQ and NQ core diameters to test exploration targets, to evaluate geological environments and to provide geological and structural information at Otjikoto.

Procedures for all stages for the drilling and sampling are documented in AVDALE's standard procedure document for the project. This document has been updated to reflect operational changes through time.

Experience form initial exploration of the Otjikoto deposit dictated that a combination of drilling techniques would be used:-

- RC drilling: This method generates a large sample mass and provides improved recovery in the near surface, often fractured oxide mineralised zone.
- HQ/TNW diamond drilling: Provides a relatively large sample mass and allows for detailed logging of vein distribution, orientation and individual mineralogy.
- NQ diamond drilling: This technique was utilised for deeper evaluation and exploration drillholes.

The geological logging of core and percussion material has been based upon visual observations supported by mineralogical observations where applicable. The terminology used is based upon a generic identification on various minerals. A SABLE database was designed to be compatible with the observations and provide validated data for import into Datamine and other processing software (Holleman, 2004).

11.2 Reverse Circulation Drilling

Drillcon Africa (Pty) Ltd carried out the percussion and RC drilling for AVDALE using an Ingersoll Rand (350/900) compressor with a RC/Percussion (Smith system) trailer mounted drill rig. Some phases of the RC drilling also utilised a Schram drill rig.

AVDALE to date has only carried out RC drilling related to the advanced exploration of the Otjikoto deposit and potential extensions to the mineralising system. RC drilling utilised a 4¾" inch (~120mm) bit, giving a drillhole volume of ~11 litres/metre which relates to a theoretical sample weight of 30 kilograms per meter, assuming 100% recovery and a bulk density of 2.8t/m^3. Experience gained at Otjikoto indicates that 26kg to 28kg per metre is an average sample mass obtained by RC drilling, which indicates exceptionally good RC recoveries. It is standard procedure to measure the bit diameter at the beginning and end of the drilling of each drillhole (Lombard, 2001).

PVC casing (140mm outer diameter) is inserted and foamed into the hole upon completion in order to preserve the drill collars.

RC geological logs were observed and recorded in three types:-

- UNIT CODE: a summarised geological classification importantly recorded the transition between various regolith units, depth of oxidation and major identifiable units.
- ROCK TYPE: an observation of the predominant rock type in each metre sample.
- VEIN (RC): a visual estimate of the total percentage of vein material per metre sample and the relative proportion of important economic minerals.

11.3 Diamond Core Drilling

AVDALE has carried out various phases of diamond drilling related to both regional exploration holes and evaluation studies at the Otjikoto deposit. Two contractors have provided this service over the length of the project namely; Drillcon Africa (Pty) Ltd and Afridrill (Pty) Ltd. The contractors supply all required drilling equipment, trained personnel and safe equipment. HQ and NQ main core and equipment sizes have been used namely, depending on ground conditions and depth.

AVDALE has followed the TEAL standard procedures documentation for field and core yard operations. In summary, drillhole depths and core recoveries are calculated on a run-by-run basis from measured stick-up of the quill rod. Any gains or losses are noted.

At the AVDALE core yard in Otjiwarongo, these daily report depths are used to mark the appropriate metre depth intervals on the core, taking into account core losses within open fractures or broken ground conditions. AVDALE requests depth checks on a periodic basis and these checks are recorded in the relevant daily reports.

Further “low point” and reference lines are indicated on the core according to standard procedures before geological logging is commenced. The “low point” line is positioned as the line of maximum dip of the fabric in the core.

Diamond drill drillholes were surveyed at regular intervals of 50m or 100m using a downhole magnetic compass and inclinometer with single and multi-shot camera systems. The relevant drilling contractor at the instruction of AVDALE carried out the drillhole surveys.

Geological logging has been carried out on all core drilled and recorded in AVDALE’s standardised SABLE database. The logging of regional exploration drilling puts more emphasis on descriptive geology and stratigraphy, while the evaluation drilling at the Otjikoto deposit emphasised more stringent sampling and assaying procedures and more standardised logging conventions, allowing for improved interpretation of the geology and mineralising system.

The logs of regional exploration holes generally capture the following information (apart from the usual drillhole header information): depth from, depth to, dip, top contact, bottom contact, rock type, base of oxidation or any oxidised open fractures, colour and general comments.

The database constructed for the Otjikoto evaluation drillholes was designed to allow streamlined data transfer into Datamine for the geological modelling of the deposit. Calculations developed within the SABLE database allowed for bulk vein frequency and mineralogy to be calculated in the mineralised zones. This capability is critical in allowing for direct comparison and correlation between core and RC geological observations.

Two logs are recorded for each core drillhole:-

- GEODD: Major features and units (rock types).
- VEINDD: The depth, thickness, dip, strike and proportional mineralogy for each individual vein.

The dip and strike of the veins were measured using a gonioscope.

11.4 Twin Hole Program

Two core intersections of the mineralised zones were twinned by RC drilling as listed below:-

- OT32 by OT32R
- OT37 by OT37R.

In addition, all 17 metallurgical holes drilled twinned existing evaluation drillholes. RSG Global did not see comparisons of the assay results from these twinned holes.

11.5 Summary of Drillholes

The drillhole collars, inclination, azimuth and final depth are listed in Table 11.5_1.

11.6 Drilling Orientation

The majority of the RC holes were drilled vertically, with the exception of 4 inclined holes. Most regional exploration holes were angled at -55° to -60°. Initial exploration holes at Otjikoto were also angled, however, this only accounts for 10 holes within the current Datamine geological model. Following the commencement of the evaluation phases of the Otjikoto deposit, all drilling has been vertical.

11.7 Drilling Quality

Drilling quality for both RC and diamond drilling was generally good, with good recovery of material. Inspection showed that RC recoveries were generally between 24kg and 28kg per running metre, which is exceptionally good.

Apart from the very weathered near-surface core, the diamond core recoveries, as well as the RQDs, were very good, generally above 95%.

Table 11.5_1

Summary of Drillholes

Otjikoto Deposit: Geological Model Drillholes

BHID	X	Y	Z	Inclination	Azimuth	EOH (m)
OT18	10907.17	223078.87	1505.01	-90.00	0.00	135.8
OT19	10963.10	223166.57	1504.39	-90.00	0.00	132.5
OT20	11041.46	223235.75	1504.14	-90.00	0.00	141.5
OT21	11096.37	223317.64	1503.37	-90.00	0.00	190.2
OT22	10808.87	223024.79	1504.59	-90.00	0.00	175.3
OT23	10709.36	222839.05	1505.96	-90.00	0.00	155.5
OT24	11173.06	223385.10	1503.72	-90.00	0.00	141.9
OT25	11250.12	223454.78	1503.50	-90.00	0.00	145.0
OT26	11168.90	223509.58	1502.24	-90.00	0.00	146.3
OT27	10528.85	222838.24	1504.72	-90.00	0.00	143.5
OT28	11328.30	223523.09	1502.93	-90.00	0.00	146.6
OT29	11403.29	223593.16	1502.65	-90.00	0.00	145.6
OT30	11438.73	223690.19	1501.94	-90.00	0.00	127.0
OT31	11453.97	223800.65	1500.75	-90.00	0.00	110.0
OT32	11109.73	223429.98	1502.46	-90.00	0.00	102.3
OT32R	11108.68	223428.19	1502.49	-90.00	0.00	30.0
OT33	11188.29	223496.76	1502.30	-90.00	0.00	110.9
OT34	10847.57	222998.29	1505.37	-90.00	0.00	149.1
OT35	10770.90	222925.91	1505.46	-90.00	0.00	144.5
OT36	11188.68	223554.14	1502.00	-90.00	0.00	91.6
OT37	11080.05	223387.66	1502.55	-90.00	0.00	103.3
OT37R	11078.96	223385.89	1502.49	-90.00	0.00	37.0
OT38	11159.07	223454.42	1502.63	-90.00	0.00	111.2
OT39	11046.00	223109.00	1506.10	-90.00	0.00	182.8
OT40	11179.60	223261.60	1504.98	-90.00	0.00	178.8
OT41	10947.67	223051.40	1505.92	-90.00	0.00	164.5
OT42	10687.33	222980.78	1504.41	-90.00	0.00	107.0
OT43	11082.51	223208.06	1504.86	-90.00	0.00	167.5
OT44	11235.50	223344.64	1504.35	-90.00	0.00	161.2
OT45	11291.00	223426.00	1504.01	-90.00	0.00	161.5
OT46	11270.44	223621.76	1501.64	-90.00	0.00	96.7
OT47	11327.39	223704.44	1501.16	-90.00	0.00	85.9
OT48	10613.00	222782.00	1505.72	-90.00	0.00	139.9
OT49	11138.36	223289.44	1504.00	-90.00	0.00	160.9
OT50	11005.88	223320.79	1502.94	-90.00	0.00	96.2
OT51	10925.07	223245.89	1503.10	-90.00	0.00	92.0
OT52	10869.41	223163.98	1503.50	-90.00	0.00	100.6
OT53	10773.29	223109.13	1503.31	-90.00	0.00	96.5
OT54	10713.50	223023.37	1504.06	-90.00	0.00	100.4
OT55	11005.10	223137.37	1505.52	-90.00	0.00	158.3
OT56	10989.26	223022.88	1506.88	-90.00	0.00	188.2
OT57	10674.92	222740.62	1506.48	-90.00	0.00	170.5
OT58	10752.76	222811.25	1506.50	-90.00	0.00	179.5
OT59	10811.08	222896.83	1506.24	-90.00	0.00	167.1
OT60	10670.04	222867.52	1505.37	-90.00	0.00	130.6
OTR10	11091.34	223442.62	1502.09	-90.00	0.00	91.0
OTR11	11051.13	223470.58	1501.30	-90.00	0.00	64.0
OTR12	11135.75	223593.28	1500.81	-90.00	0.00	53.0
OTR13	11054.19	223346.39	1503.06	-90.00	0.00	106.0
OTR14	10960.35	223291.83	1502.87	-90.00	0.00	90.0
OTR15	10881.35	223221.35	1503.09	-90.00	0.00	85.0
OTR16	10824.45	223133.81	1503.58	-90.00	0.00	97.0
OTR17	10726.04	223081.00	1503.37	-90.00	0.00	85.0
OTR18	10625.30	222896.12	1504.94	-90.00	0.00	106.0
OTR19	10919.84	223317.75	1502.30	-90.00	0.00	71.0
OTR20	10785.67	223161.05	1502.89	-90.00	0.00	78.0
OTR21	11398.50	223717.89	1501.39	-90.00	0.00	107.0
OTR22	11362.55	223621.17	1502.26	-90.00	0.00	122.0
OTR23	11286.18	223552.33	1502.24	-90.00	0.00	117.0
OTR24	11208.56	223482.61	1502.70	-90.00	0.00	120.0
OTR25	11131.99	223414.44	1503.01	-90.00	0.00	114.0
OTR26	11000.52	223264.16	1503.63	-90.00	0.00	116.0
OTR27	10922.30	223193.64	1503.68	-90.00	0.00	108.0
OTR28	10864.46	223106.03	1504.39	-90.00	0.00	116.0
OTR29	10766.61	223052.79	1503.93	-90.00	0.00	105.0
OTR30	10728.14	222954.33	1505.00	-90.00	0.00	120.0
OTR31	10645.53	223008.93	1503.83	-90.00	0.00	89.0
OTR32	11258.68	223691.59	1501.10	-90.00	0.00	68.0
OTR33	11244.76	223579.94	1502.19	-90.00	0.00	100.0
OTR34	11014.82	223372.59	1502.43	-90.00	0.00	83.0
OTR35	10841.31	223249.17	1502.39	-90.00	0.00	66.0
OTR36	10685.87	223108.96	1502.85	-90.00	0.00	66.0
OTR37	11372.37	223857.03	1499.39	-90.00	0.00	57.0
OTR38	10971.24	223402.31	1501.45	-90.00	0.00	60.0
OTR39	11072.72	223455.39	1501.57	-90.00	0.00	78.0
OTR40	11149.32	223523.11	1501.73	-90.00	0.00	85.0
OTR41	11129.13	223536.41	1501.52	-90.00	0.00	73.0
OTR42	11202.95	223607.55	1501.47	-90.00	0.00	77.0
OTR43	11314.76	223774.17	1500.07	-90.00	0.00	61.0
OTR44	11399.06	223897.51	1499.11	-90.00	0.00	55.0
OTR45	11221.97	223716.41	1500.55	-90.00	0.00	46.0
OTR46	11029.33	223485.16	1501.11	-90.00	0.00	52.0
OTR47	10878.30	223346.48	1501.59	-90.00	0.00	52.0
OTR48	10744.44	223188.70	1502.30	-90.00	0.00	59.0
OTR49	11094.73	223409.54	1502.41	-90.00	0.00	88.0
OTR50	11124.09	223450.72	1502.54	-90.00	0.00	101.0
OTR51	11149.91	223491.18	1502.18	-90.00	0.00	95.0
OTR52	11179.34	223533.25	1501.88	-90.00	0.00	91.0
OTR7C	10477.69	222621.95	1505.31	-90.00	0.00	145.0
OTR8	11413.13	223828.84	1500.12	-90.00	0.00	78.0
OTR9	11300.00	223663.61	1500.99	-90.00	0.00	89.0
OTR1	11357.07	223746.69	1500.59	-70.00	305.00	78.0
OTR2	11188.83	223556.12	1501.92	-70.00	305.00	83.0
OTR4	10712.53	222964.86	1504.88	-70.00	305.00	112.0
OTR5	11217.40	223536.58	1502.30	-70.00	305.00	70.0
OT11	11020.40	223250.27	1503.85	-67.50	305.00	124.5
OT10	11361.66	223622.00	1502.17	-60.00	305.00	165.1
OT12	10791.09	222911.38	1505.77	-60.00	305.00	175.5
OT14	10736.96	222699.26	1507.15	-60.00	305.00	195.7
OTS1	10814.27	223080.93	1503.89	-60.00	195.00	152.7
WH4	11626.32	223924.08	1501.51	-60.00	305.00	133.5
WH5	11623.13	224407.18	1497.09	-60.00	305.00	129.3
WH6	12412.97	224112.56	1510.09	-60.00	305.00	138.6
OT3	11179.47	223382.61	1503.72	-60.00	305.00	281.5
OT4	11143.26	222673.61	1508.92	-55.00	305.00	390.6
OT6	11583.03	223592.83	1504.45	-55.00	305.00	300.0
OT8	10968.55	223037.24	1506.43	-50.00	305.00	241.1

Otjikoto Deposit: Exploration Drillholes

BHID	X	Y	Z	Inclination	Azimuth	EOH (m)	BHID	X	Y	Z	Inclination	Azimuth	EOH (m)
OTR3	10886.86	223091.52	1504.70	-90	305	81	OT17	11053.13	222260.92	1510.50	-75	305	121
OTR6	11374.19	223371.27	1504.67	-90	305	48	OT2	10146.73	222010.07	1506.57	-65	125	298
OT11R	11027.20	223242.53	1503.66	-70	305	48	OT5	10093.21	222045.52	1505.97	-55	305	231
WHR1	11677.51	224130.07	1499.46	-70	305	76	OT7	10401.49	221373.35	1513.74	-55	305	261
WHR2	11759.94	224074.06	1501.24	-90	305	65	OT9	10439.10	222292.50	1507.00	-55	305	262
OT1	10384.29	221851.61	1508.94	-55	305	400	WH1	12191.07	223781.50	1499.01	-55	305	342
OT13	10266.21	222425.61	1507.00	-60	305	141	WH2	12422.90	225977.24	1510.00	-55	306	172
OT15	10325.33	221663.75	1510.00	-60	305	165	WH3	12556.27	224015.01	1513.22	-50	305	155
OT16	10882.22	221754.73	1511.79	-50	305	174							

Otjikoto Deposit: Evaluation Metallurgy Drillholes

BHID	X	Y	Z	Inclination	Azimuth	EOH (m)	BHID	X	Y	Z	Inclination	Azimuth	EOH (m)
OTM1	11090.75	223440.44	1502.11	-90	0	91	OTM10	11051.13	223470.58	1501.30	-90	0	50
OTM2	11155.21	223578.84	1501.31	-90	0	69	OTM11	11080.05	223387.66	1502.55	-90	0	90
OTM3	11335.52	223760.73	1500.69	-90	0	70	OTM12	10919.84	223317.75	1502.30	-90	0	50
OTM4	10730.34	223077.55	1503.36	-90	0	92	OTM12R	10919.84	223317.75	1502.30	-90	0	40
OTM5	11212.72	223486.77	1502.63	-90	0	122	OTM13	11124.09	223450.72	1502.54	-90	0	85
OTM6	11399.06	223897.51	1499.11	-90	0	44	OTM14	11054.19	223346.39	1503.06	-90	0	85
OTM7	11314.76	223774.17	1500.07	-90	0	50	OTM15	11005.10	223137.37	1505.52	-90	0	135
OTM8	11244.76	223579.94	1502.19	-90	0	90	OTM16	10808.87	223024.79	1504.59	-90	0	101
OTM9	11129.13	223536.41	1501.52	-90	0	51							

Otavi Regional Exploration Drillholes

BHID	X	Y	Z	Inclination	Azimuth	EOH (m)	BHID	X	Y	Z	Inclination	Azimuth	EOH (m)
BW1	77579.08	241820.08	1479.00	-55	8	175	LN1	-430.40	225175.13	1447.00	-55	330	170
DS1	61624.75	237550.59	1531.62	-55	298	230	OKN1	7803.97	209888.27	1530.00	-55	116	301
EH1	13230.61	228387.98	1503.00	-50	306	165	OPN1	7036.47	215443.42	1530.00	-70	280	172
EH2	12549.69	227643.29	1503.00	-55	306	201	OPN2	7588.70	216444.90	1509.00	-60	320	204
EH2/1	12548.13	227644.47	1503.00	-55	306	94	OPT1	5744.00	208190.00	1525.28	-60	90	160
EH3	12834.69	226923.35	1511.00	-52	306	243	OS1	31019.00	216721.00	1514.90	-60	330	200
EH4	13420.46	226474.14	1515.00	-55	306	214	OS2	30348.00	216768.00	1509.70	-90	0	180
FR1	3612.54	220484.96	1474.00	-50	125	164	SG1	70298.17	245401.11	1526.00	-55	185	227
GH1	8930.52	218518.50	1511.00	-75	305	115	UNA1	41687.00	218204.00	1472.30	-90	0	150

11.8 Survey Control

All land surveying of drillholes and surface features were completed by Mr Johan Weakly, a qualified surveyor registered with the South African Council for Professional and Technical Surveyors ("PLATO"). Mr Weakly was at the time an employee of Anglovaal Mining Company (Pty) Limited, but is currently an independent professional land surveyor.

Traverses, digital terrain models and drillhole collars were surveyed using Leica system 9500 dual frequency differential global positioning system ("DGPS") instrumentation. Measurements were taken using real time kinematic ("RTK") observations, which are accurate to within a centimetre horizontally, and between 2cm and 4cm vertically.

12 SAMPLING METHOD AND APPROACH

12.1 Percussion Sampling

Percussion drilling was only used for regional geochemical sampling, employing short holes to penetrate surficial cover.

Samples were collected as 2m composites through a cyclone with a continuous splitter. Each 2m sample approximated 40kg to 50kg from which a representative 4kg were split into quarters. A 3kg sample was retained and stored as the reference sample. The remaining 1kg sample was split to 200g to 400g and dispatched for analysis.

The cyclone was inspected on a regular basis and all sampling equipment cleaned with compressed air as appropriate. Specific care was taken in the infrequent occasions where water was intersected in the drilling. Any wet samples were flagged and the entire sample was dried before systematic homogenisation by riffling and extraction of a representative sub-sample.

A +1mm washed sample was logged for each 2m sample. Where possible, percentage estimates were made of regolith or bedrock chips and any sulphides or oxides. This provided continuous geological control during drilling of the regolith, and holes were stopped when bedrock saprolite or weathered bedrock was intersected.

In general the deepest 2 to 3 samples (4m to 6m) of each hole were sampled in order to obtain the most representative sample of bedrock geology and geochemistry.

Samples from the drilling were submitted to the ALS Chemex laboratory in Canada for analysis. Samples were analysed for Au by fire assay and for 31 other elements by ICP for most samples. The 31 elements are Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, U, V, W and Zn.

12.2 RC Sampling

RC drilling was employed for the Otjikoto deposit evaluation sampling, as part of the dataset used for mineral resource estimation.

RC sample material is routed from the bit and hammer to the drill rods' inner-tube and goes via a hose to a cyclone. Samples are collected in 50kg plastic bags at the cyclone outlet. Each one metre sample is weighed before splitting on site. This allows for immediate monitoring of sample recovery whilst drilling. Should sample recovery drop below ~85% then drilling was suspended and equipment checked.

The one metre samples are split in half in a two step process through a large riffler to achieve homogenisation and Left and Right samples obtained. Each of these samples are again split in half through two smaller rifflers, producing four sub-samples (i.e. L1, L2 and R1, R2). All rifflers are cleaned with compressed air after splitting of each one metre sample. The L1 and R1 samples are bagged in separate A3 size thick polyurethane bags with identification tickets on the inside and outside of the bags. Average sample mass is approximately 6kg to 7kg. Bags containing material from every 5m of L1 and R1 samples are packed in separate 50kg bags and sample numbers marked on the outside. The large bags containing the L1 and R1 samples are transported to the core yard facility. When logistics allow the L1 and R1 samples are transported during separate trips and/or in different vehicles.

The L2 sample is dry screened using a 2mm sieve and the +2mm sample placed in a clearly labelled 500ml plastic bottle, which is transported to the core yard for detailed geological logging. In the field, the R2 sample is wet screened using a 2mm sieve and the +2mm fraction logged for drilling control and geological information.

At various stages of drilling, check bypass material was collected and assayed to compare with the grade of the RC material. No significant discrepancies were noted.

All further sample processing is carried out in the core yard facility. Splitting and bagging tasks are carried out in batches of ten samples. All the handled samples are checked again for possible labelling errors. The riffling equipment is then cleaned with compressed air between every sample and the work place cleaned after every batch of ten samples.

The L1 and R1 samples from the field are homogenised, composited and split again by feeding both the samples through a large riffler. Two samples with similar masses are produced. Both samples are again split in half, one half from each sample is bagged and labelled – this is referred to as the M sample (this material is for metallurgical test work if required). The M samples are stored in 50kg bags with each of these bags containing five samples. M samples have a mass of approximately 6kg to 7kg each.

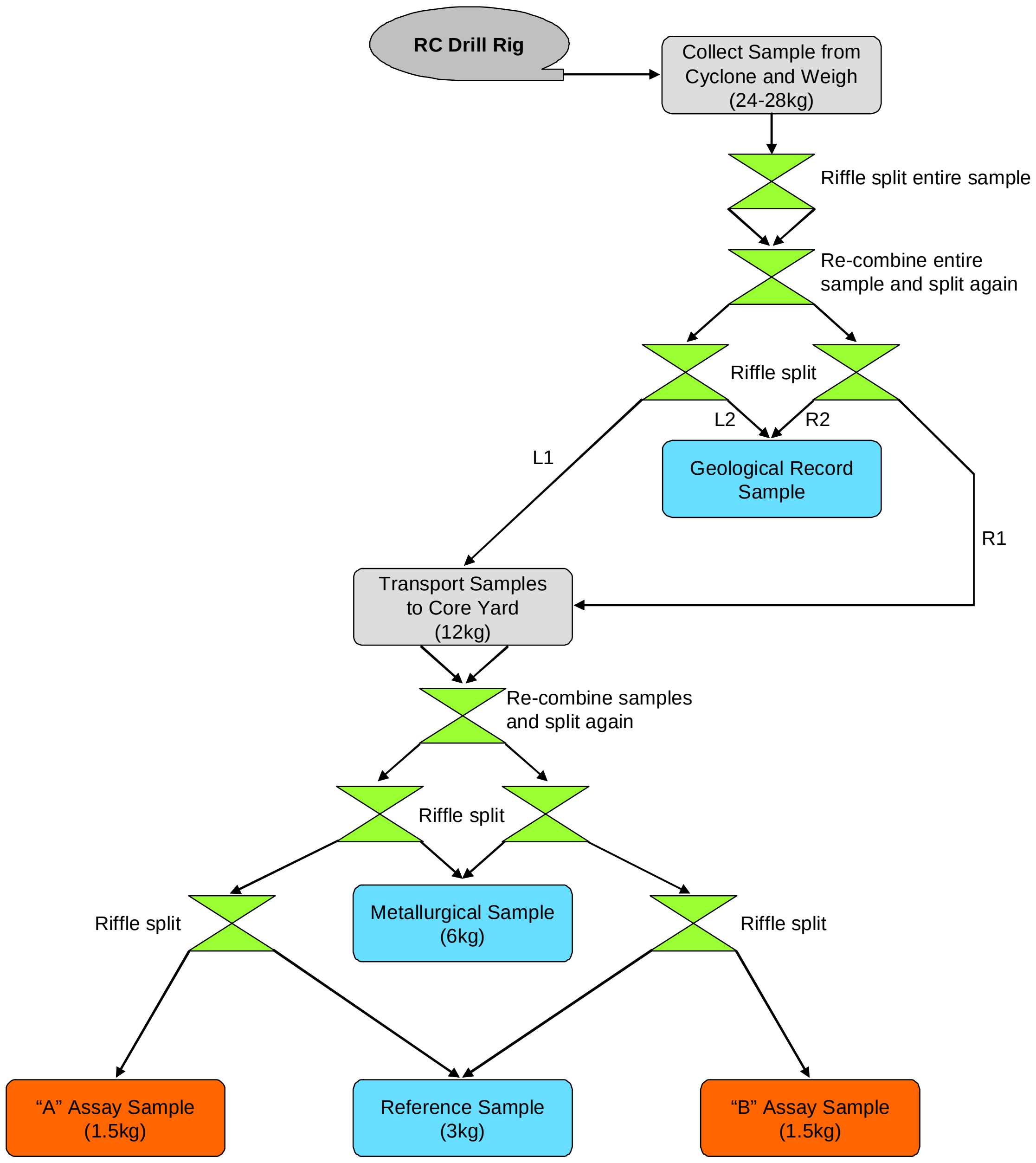
The second phase of sample preparation involves the riffling of remaining samples into four sub-samples. Two of these sub-samples were combined to produce the R sample (the reference sample intended for future re-sampling and possible auditing). The remaining two samples were bagged as A and B samples for assay. These samples typically range from 1.5kg to 1.8kg. All A samples and every tenth B sample (full field duplicate) were submitted for assay.

A summary of samples produced from each metre of RC drilling is given below:-

- A Sample: 1.5kg to 1.8kg assay sample.
- B Sample: 1.5kg to 1.8kg complete field duplicate of A sample. Every 10^{th} sample submitted for assay.
- M Sample: 6kg to 7kg retained and submitted as required for metallurgical test work.
- R Sample: balance of sample material retained for reference material, re-sampling and/or sample audits.

The RC sampling procedure is graphically illustrated in Figure 12.2_1.

Figure 12.2_1
RC sampling and splitting procedures



The sample masses shown are approximate.

12.3 Diamond Core Sampling

Field core collection followed standard procedures. Core is orientated and a low point-line placed on the core at the point of maximum dip of the prevalent dip of the fabric. A second reference line is also place down the entire length of the core to ensure that a standard (top) half of the core is always sampled.

Metre depth marks are placed on the core and any core losses are corrected as appropriate. The core is then geologically logged. The geologist then indicates the zones for sampling. In the case of the Otjikoto evaluation study this was the entire mineralised zone.

The orientated core is split in half along the low point line with core cutting diamond blade saws. Depths are then marked with a permanent-marking pen on the cut-face of both halves of the core.

Samples are taken on a consecutive metre basis and labelled with the “depth to” metre number.

Samples are placed in labelled A3 size thick polyurethane bags with the sample number placed on the inside and outside of the bag. These samples are placed in 50kg bags. HQ/TNW half core samples were collected at one metre intervals which provided a sample mass of approximately 3.5kg to 4kg. NQ core was processed in the same manner producing an initial sample mass of approximately 2.2kg to 2.4kg per metre.

12.4 Sample Quality

The abovementioned drilling techniques, field operations and core yard processing were developed to enable high quality reproducible results throughout prospecting activities. The only significant drill tested mineralisation within the property to date remains the Otjikoto sheeted vein complex.

Generally drillhole orientations are planned to intersect target units at orthogonal angles. At Otjikoto the evaluation drilling has been carried out using vertical holes that intersect the shallow dipping (25°) sheeted vein array at representative core angles. A true width correction of approximately 10% is applied.

The coarsely particulate nature of the gold and its inherent nugget effect guided the evaluation programme into using large sample masses, so that splitting of coarse crushed material is minimised.

12.5 Bulk Density Determination

All bulk density determinations were done by Anglo American Laboratories and SGS Lakefield Laboratories, using a pycnometer on pulp material. This means that the results are closer to a “specific gravity” measurement than an in-situ bulk density measurement. This method is likely to overestimate the bulk density, and hence the tonnage and in-situ metal calculated during resource estimation.

13 SAMPLE PREPARATION, ANALYSIS AND SECURITY

13.1 Sample Security

Transport of drill samples (core and RC chips) from the drill rigs to the Otjiwarongo core yard is undertaken daily by TEAL exploration personnel, overseen by a Senior Geological Technologist. For RC samples the A and B sub-samples are transported separately for added safety. The roads used are in good condition, and travelling distance varies between 60km and 80km.

The Otjiwarongo core yard facility is well fenced and the entrance kept locked. Security guards are employed on a 24 hour basis.

Transport of samples to the Windhoek regional exploration office is by independent courier. Samples are kept in sealed & labelled plastic bags. On arrival at Windhoek, samples are checked against the Otjiwarongo dispatch list. A dispatch list to the analytical facility is prepared in Windhoek, and the samples transported overland to Johannesburg by independent courier. For analytical facilities located in Johannesburg, delivery is made directly by the courier company. In the case of samples sent to overseas facilities, the same courier company is responsible for the air freighting of the samples to the correct destination. Analytical laboratories are instructed to check samples against the dispatch list and indicated weights.

All material are pulverised at the laboratory and the unused portions returned to TEAL and stored in a secure facility (sealed containers) in Johannesburg. All pulped material not utilised are returned to TEAL and also kept in the same secure facility in Johannesburg.

Half core, RC and metallurgical reference material are kept secure in the Otjiwarongo sample storage facility, which is a well built and secure shed on the outskirts of town.

13.2 Analytical Laboratories

Various laboratories were utilised for the various stages of the exploration programme.

During the initial regional exploration, geologically identified zones of interest in the drilling core were sampled. Chemex Laboratories, Toronto Canada (now ALS Chemex) and Anglo American Research Laboratories, Johannesburg RSA, were utilised.

With the more advanced exploration having identified the coarse particulate nature of the gold mineralisation within the Otjikoto deposit, with associated high nugget effect within the sampling results, discussions were held with numerous analytical laboratories regarding the optimal assay procedure to accurately establish the gold content of the sample material.

Samples originating from both inside and outside of the mineralised zone where selected and an orientation screen fire assay programme at SGS Lakefield (referred to as ‘pulps’ and ‘metallics’) was undertaken. An orientation batch of 128 RC samples was submitted to confirm the applicability of this method.

Samples were pulverized and then screened to -106µ and +106µ fractions. These sub-samples were then analysed by fire assay (AA finish) using 50g aliquots. Importantly the +106µ fraction is assayed to completion and a representative -106µ sample is produced by rotary splitting the entire -106µ sample material.

The subsequent gold assays are then combined by way of a weighted (by mass) calculation. These results confirmed that significant coarse gold was present and the screen fire assay method provided the optimum technique to provide reproducible gold grades.

Due to the time consuming nature of this assay method and project deadlines, three laboratories were involved in the assay of all subsequent evaluation samples: SGS Lakefield (Johannesburg), Moruo Analytical Services (Johannesburg) and Genalysis Laboratory Services (Perth W.A.).

SGS Lakefield Research Africa (Pty) Ltd is accredited with the South African National Accreditation System for "chemical testing" of inter alia "determination of Au by lead fusion followed by Atomic Absorption analysis or gravimetry". The same certificate states that the laboratory complies with ISO/IEC 17025.

Moruo Analytical Services is accredited with the South African National Accreditation System for "chemical and physical testing" of inter alia "fire assay methods for old, silver and platinum group metals". The same certificate states that the laboratory complies with ISO/IEC 17025.

Genalysis Laboratory Services Pty Ltd is accredited with the National Association of Testing Facilities, Australia ("NATA") for "chemical testing" of inter alia "analysis by classical, AAS (flame, furnace, vapour generation), ICP/AES, ICP/MS, fire assay and LECO techniques for the following determinations - Elements …Precious metal ores". The same certificate states that the laboratory complies with ISO/IEC 17025.

13.3 Sample Preparation and Analytical Procedure

13.3.1 Regional Exploration Diamond Drilling

During the initial regional exploration sampling, the core was split using a diamond saw and half core dispatched from the core yard to the laboratories where the half core was crushed, split and pulverised before a single aliquot of either 30g or 50g was taken for fire assay. Typical core sample lengths varied from 0.5m to 1.75m.

13.3.2 Otjikoto Evaluation Drilling

Due to the coarse particulate nature of the gold mineralisation, entire half-core samples were submitted to the laboratories. The entire half-core samples were crushed and pulverised in sieb ("ring and puck") mills at the laboratories. This is seen as a critical step and negates the need to split coarse crushed material and standardises the sample masses processed. Samples submitted to SGS Lakefield and Moruo laboratories were treated as follows:-

- Crushed to -2mm.
- Pulverized entire sample (generally 3 minutes in LM5 mill).
- Screened with 106µ sieve.
- Accurate weight determined for both fractions (after milling mass).
- +106µ assayed (fire assay) to completion (typically 10g to 50g).
- -106µ split with a rotary splitter.
- -106µ sub-sample assayed (~50g).
- Resultant gold grades combined using weighted (mass) calculation.

Only a half split of HQ/TNW pulverised material was screened and assayed. In order to further standardise sample masses, the entire half core from the smaller diameter NQ drill core was processed.

Only RC sample material was submitted to Genalysis, which closely followed this method except that two 25g aliquots from the -106µ fraction were combined for each sample to determine the gold grade of the -106µ fraction. Pulps are retained for reference and quality control purposes.

Quality control sampling involved some 10% B full duplicate sampling. A further 10% of the -106µ duplicate assays were also carried out as internal -106µ check assays. Sample suites to check potential batch and inter-laboratory comparisons were submitted and re-submitted for assay.

13.4 Adequacy of Procedures

13.4.1 Quality Control (QC) Assessment

AVDALE has had a statistical assessment of the assay results carried out by an independent entity (Kasch, 2005). The Kasch report presents the results of the statistical analyses without concluding whether the data is reliable or not.

TEAL geologists visually inspect quality control data as it becomes available, but a more critical investigation is not done until the data is submitted for resource estimation.

13.4.2 Normal Laboratory Internal Standard Procedures

During the course of the sampling programmes laboratories carried out internal check assays on the -106µ material. This typically represented 10% duplicate of the -106µ fraction.

This routine procedure proved effective in identifying poor duplication in the -106µ fraction of drillhole OT18 during analysis. SGS Lakefield brought this to the immediate attention of AVDALE and the poor reproducibility of the -106µ fraction was investigated by SGS Lakefield. Systematic re-screening of several samples of the -106µ fraction identified +106µ material still present in the material. This was traced to a damaged screen in the sample preparation. Therefore coarse gold was reporting to the -106µ fraction, causing poor reproducibility.

The entire drillhole was re-screened and a double weighted mass calculation used to reconcile the correct gold determinations for this drillhole. Following this event screens were checked for potential damage on a more frequent basis and replaced more regularly. This indicated the effectiveness of the laboratory quality control procedures in place and their timeous remedial actions to ensure quality was maintained.

13.4.3 Adequacy of Sampling Methods

The sampling technique, equipment, field and core yard operations and analytical method undertaken throughout the development of the Otavi Project, are considered appropriate for this stage of the exploration programme.

Specific problems related to the coarse gold at the Otjikoto deposit have been identified and addressed by the implementation of a combination of RC and HQ/TNW drilling. Also the orientation study and best practise international standards indicated that a screen fire assay represents an appropriate technique to produce representative gold determinations where a significant coarse gold effect occurs.

Sample preparation in the field, core yard and laboratories has taken into account the need for representative sampling. The retention of representative geological and assay material allows for thorough auditing and check analysis.

The RC samples are split to a relatively small size. Consideration should be given to submit a sample of a size close to the maximum capacity of the assay laboratory's milling equipment (e.g. an LM-5 mill).

14 DATA VERIFICATION

14.1 Introduction

Geological data are recorded based upon a generic system of visual observations and estimates in order to standardise the geological integrity of the database. This approach also allowed subsequent construction and critical interrogation of geological and mineralisation models.

Templates were constructed for the recording of data and its capture into a SABLE database structure. The SABLE database structure was built with the objective of being able to calculate various mineralogical composites, effective grade distribution between +106 and -106 micron fractions, vein frequency and vein counts. Assay data was merged within SABLE and various validations were run to ensure the database integrity. A number of database developments were compiled to produce a structure allowing for the efficient and auditable transfer of results into a three dimensional modelling software package.

14.2 Analytical Quality Control Procedures

The quality control procedures employed by TEAL included duplicate samples of the pulps, repeat readings of assays and the use of an independent umpire laboratory. All the laboratories used also reported their own internal quality control results.

TEAL did not include any industry standard reference material in the sample stream submitted to any of the laboratories. This is considered to be a significant oversight, that may have serious repercussions should a stricter classification of the mineral resources be sought, although this is mitigated somewhat by the lack of consistent bias between the laboratories used.

Sizing analysis in the conventional sense has not been reported for the assaying of the drill samples (both core and RC) taken from the Otavi Exploration Project. After crushing and milling, the samples (pulps) were classified into a fine (-106µ) and a coarse (+106µ) fraction. The different fractions were then separately assayed, and combined afterwards to determine the overall gold concentration. This obviously required careful weighing and tracking of samples.

Approximately 60% of the sample mass reported to the -106µ fraction and 40% to the +106µ fraction.

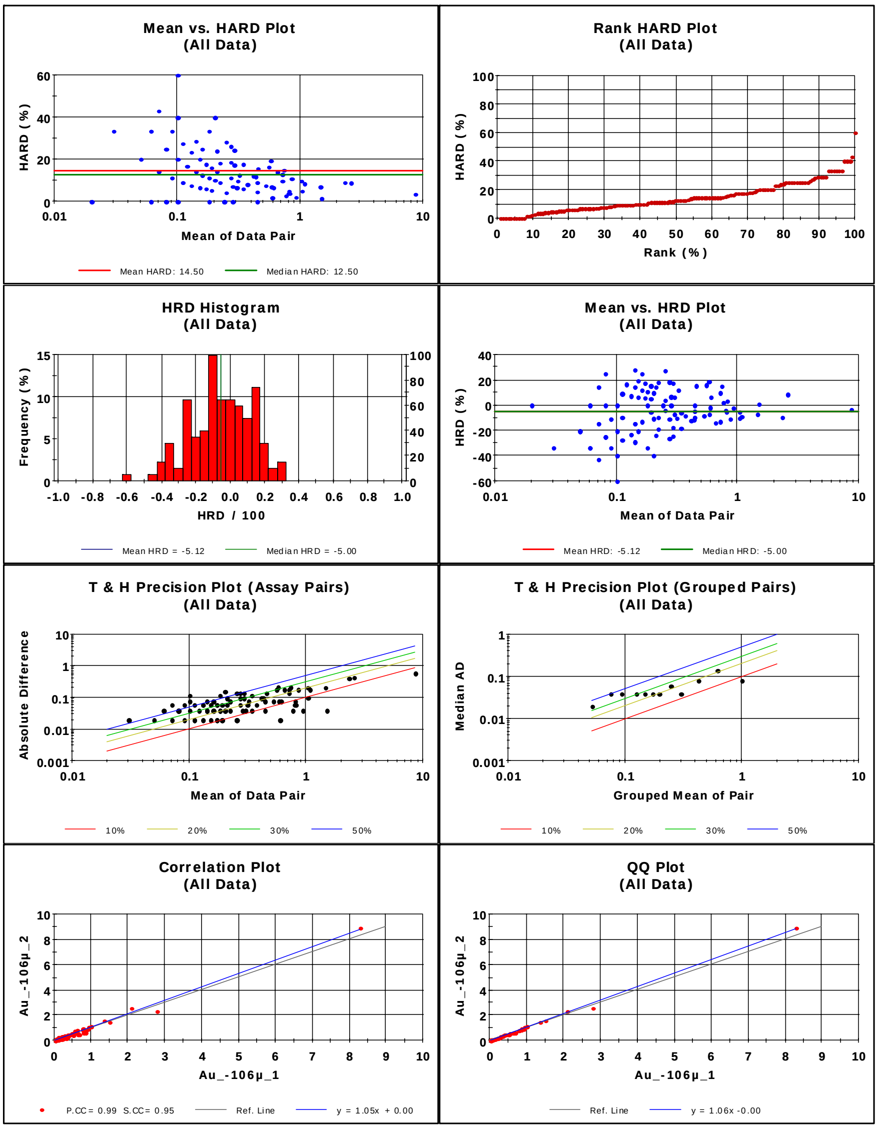
14.3 Moruo Laboratory Quality Control Data

14.3.1 -106µ Pulp Duplicates

Laboratory duplicate samples of some 135 pulps from both RC and diamond drilling were selected from the -106µ fraction for repeat assaying. The results are presented as Figure 14.3_1. The various statistics calculated (mean, minimum, maximum and coefficient of variation) are very similar. The plots of the individual samples indicates very little scatter even at the higher values. No apparent bias exists in the analyses although the differences between samples are less at higher grades. No influence from coarse gold grains in the samples is apparent, as can be expected from the -106µ fraction.

Figure 14.3_1
Quality assurance analysis of the -106µ fraction pulp duplicates by Moruo Laboratory

	Au_-106µ_1	Au_-106µ_2	Units			Result
No. Pairs:	135	135			Pearson CC:	0.99
Minimum:	0.02	0.02	g/t		Spearman CC:	0.95
Maximum:	8.28	8.88	g/t		Mean HARD:	14.50
Mean:	0.37	0.39	g/t		Median HARD:	12.50
Median	0.20	0.18	g/t			
Std. Deviation:	0.78	0.83	g/t		Mean HRD:	-5.12
Coefficient of Variation:	2.12	2.13	%		Median HRD	-5.00



The conclusion drawn is that although there is minor inhomogeneity in the samples, the results from this laboratory are more precise than from the other laboratories.

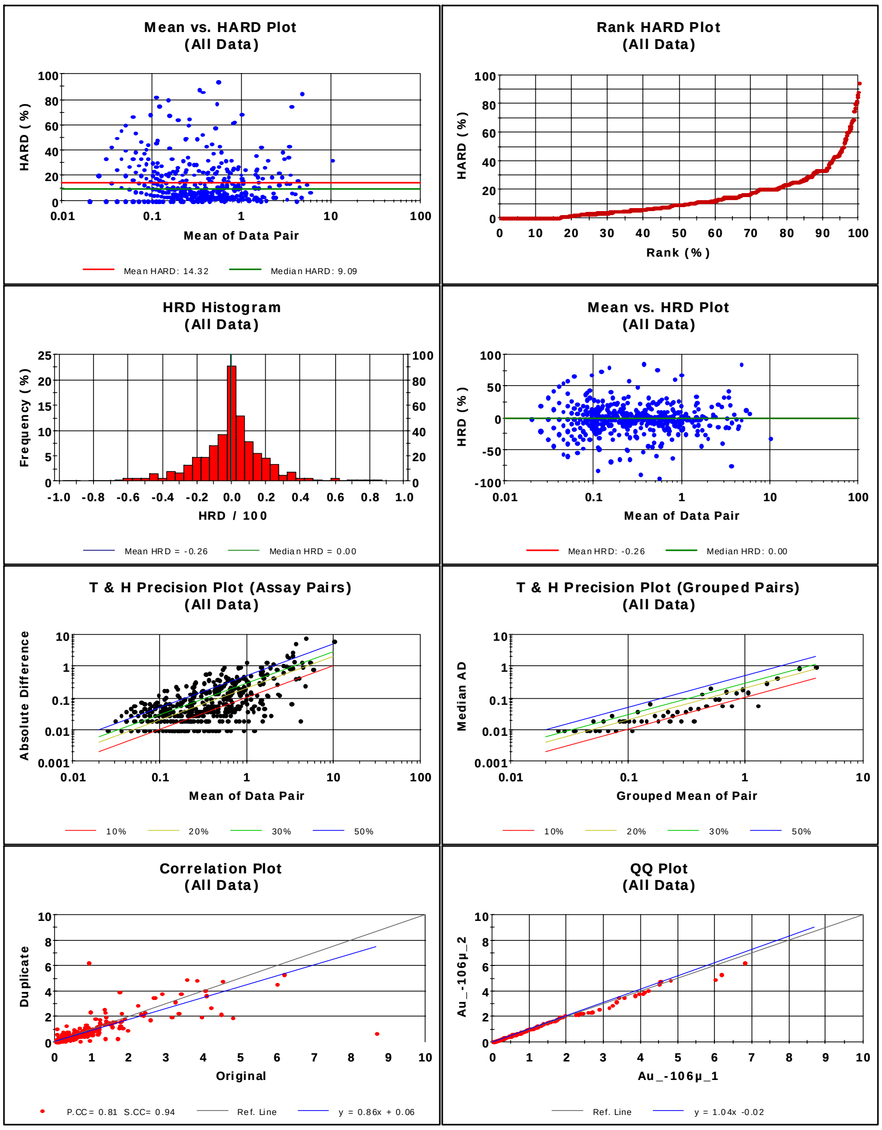
14.4 SGS Lakefield Laboratory Quality Control Data

14.4.1 -106µ Pulp Duplicates

A total of 630 pulp duplicate samples from the -106µ fraction were re-analysed by SGS Lakefield. These repeats included both RC and diamond drilling samples. The results are presented as Figure 14.4_1. The various statistics calculated (mean, minimum, maximum and coefficient of variation) are very similar. However the plots of the individual samples indicates some scatter, particularly at the higher grades. No apparent bias exists in the data.

Figure 14.4_1
Quality assurance analysis of the -106µ fraction pulp duplicates by SGS Lakefield Laboratory

	Au_-106µ_1	Au_-106µ_2	Units			Result
No. Pairs:	630	630			Pearson CC:	0.81
Minimum:	0.02	0.02	g/t		Spearman CC:	0.94
Maximum:	8.67	13.30	g/t		Mean HARD:	14.32
Mean:	0.45	0.45	g/t		Median HARD:	9.09
Median	0.15	0.15	g/t			
Std. Deviation:	0.86	0.91	g/t		Mean HRD:	-0.26
Coefficient of Variation:	1.91	2.03	%		Median HRD	0.00



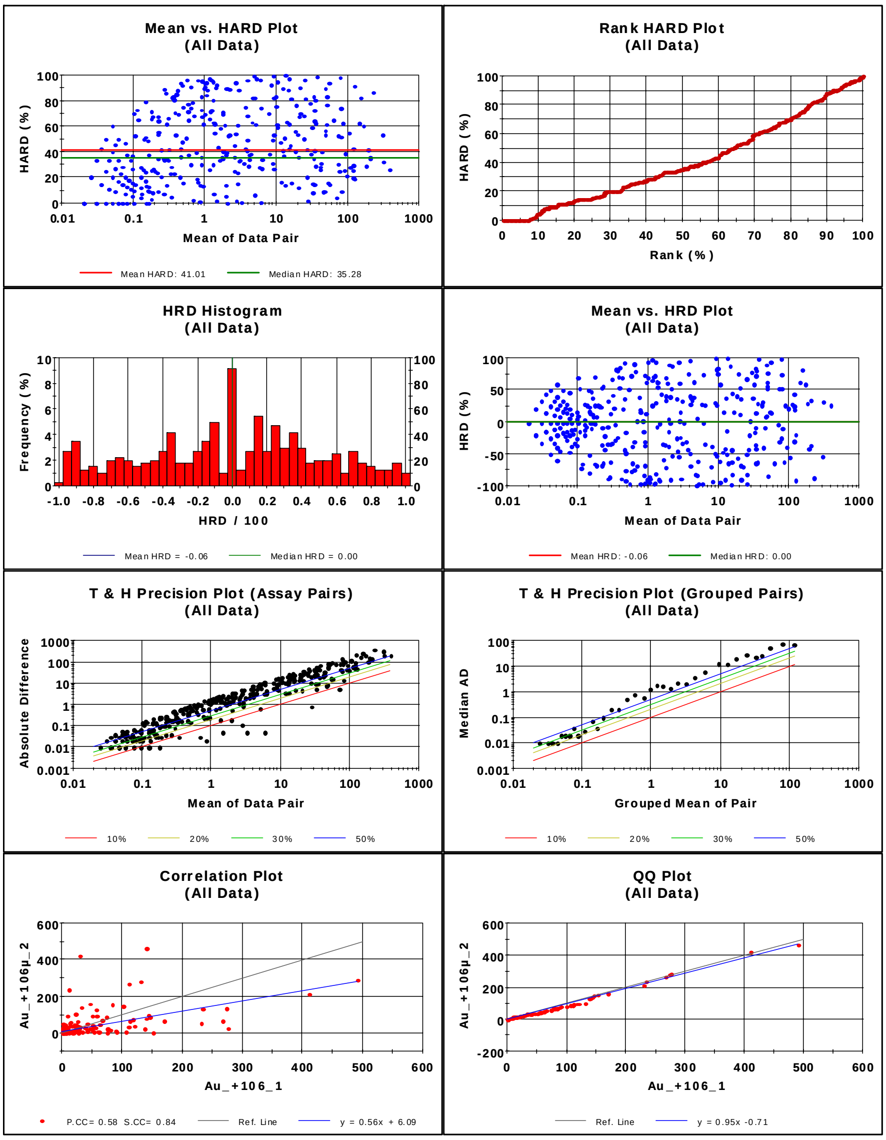
The conclusion drawn is that there is minor inhomogeneity in the samples but due to the large number of samples analysed, the statistics of the sampled values are relatively reliable.

14.4.2 +106µ Pulp Duplicates

A total of 406 pulp duplicate samples from the +106µ fraction were re-analysed by SGS Lakefield. These repeats included both RC and diamond drilling samples. The results are presented as Figure 14.4_2. The minimum and maximum values are comparable. There are differences in the means and standard deviations. The plots of the individual samples indicate considerable scatter. No apparent bias exists in the data. The differences are interpreted as a result of coarse gold grains being present in the samples.

Figure 14.4_2
Quality assurance analysis of the +106µ fraction pulp duplicates by SGS Lakefield Laboratory

	Au_+106_1	Au_+106µ_2	Units			Result
No. Pairs:	406	406			Pearson CC:	0.58
Minimum:	0.02	0.02	g/t		Spearman CC:	0.84
Maximum:	491.00	464.00	g/t		Mean HARD:	41.01
Mean:	17.25	15.70	g/t		Median HARD:	35.28
Median	0.43	0.50	g/t			
Std. Deviation:	49.86	47.63	g/t		Mean HRD:	-0.06
Coefficient of Variation:	2.89	3.03	%		Median HRD	0.00



The conclusion drawn is that there is significant inhomogeneity in the samples. Caution must therefore be exercised when interpreting the assay values of this coarse fraction.

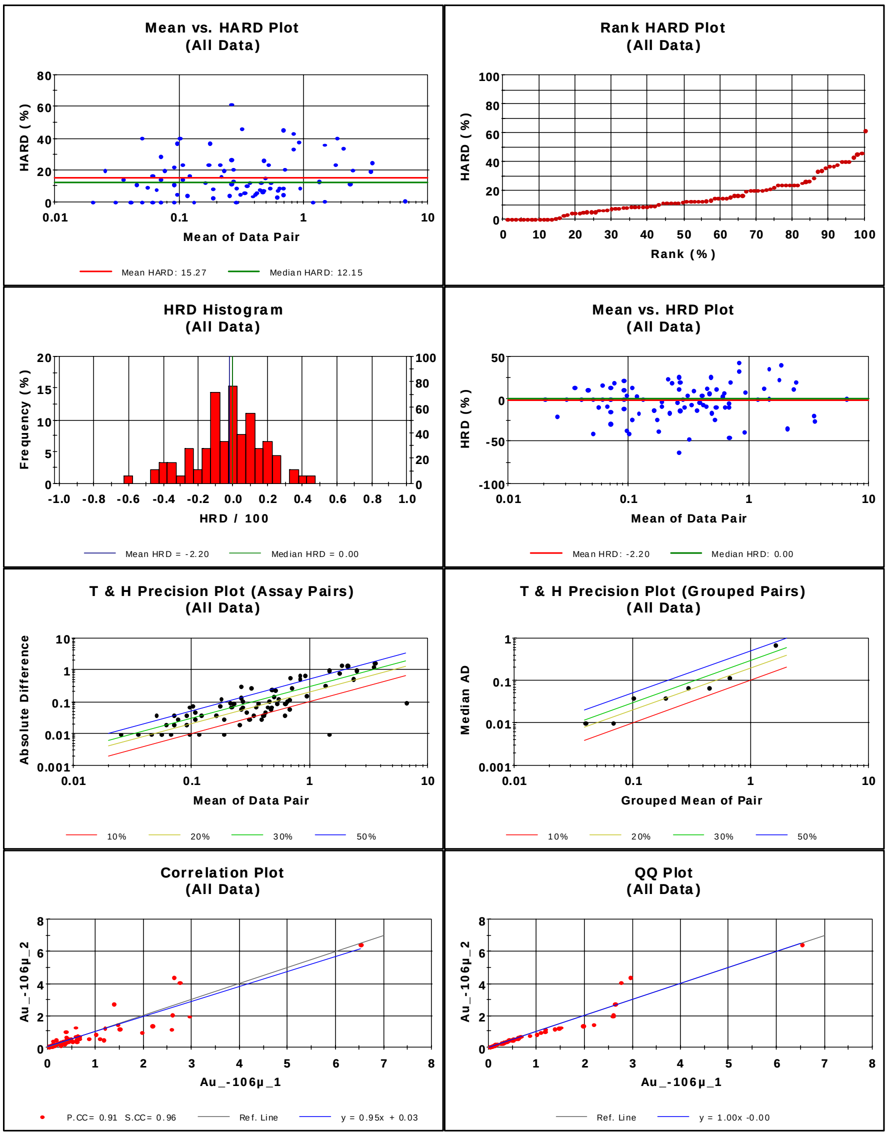
14.5 Genalysis Laboratory Quality Control Data

14.5.1 -106µ Pulp Duplicates

A total of 91 pulp duplicate samples from the -106µ fraction were re-analysed by Genalysis. These repeats included both RC and diamond drilling samples. The results are presented as Figure 14.5_1. The various statistics calculated i.e. mean, minimum, maximum and coefficient of variation are very similar. However the plots of the individual samples indicate some scatter, particularly at the higher grades. No apparent bias exists in the data.

Figure 14.5_1
Quality assurance analysis of the -106µ fraction pulp duplicates by Genalysis Laboratory

	Au_-106µ_1	Au_-106µ_2	Units			Result
No. Pairs:	91	91			Pearson CC:	0.91
Minimum:	0.02	0.02	g/t		Spearman CC:	0.96
Maximum:	6.51	6.41	g/t		Mean HARD:	15.27
Mean:	0.56	0.56	g/t		Median HARD:	12.15
Median	0.26	0.25	g/t			
Std. Deviation:	0.93	0.96	g/t		Mean HRD:	-2.20
Coefficient of Variation:	1.66	1.74	%		Median HRD	0.00



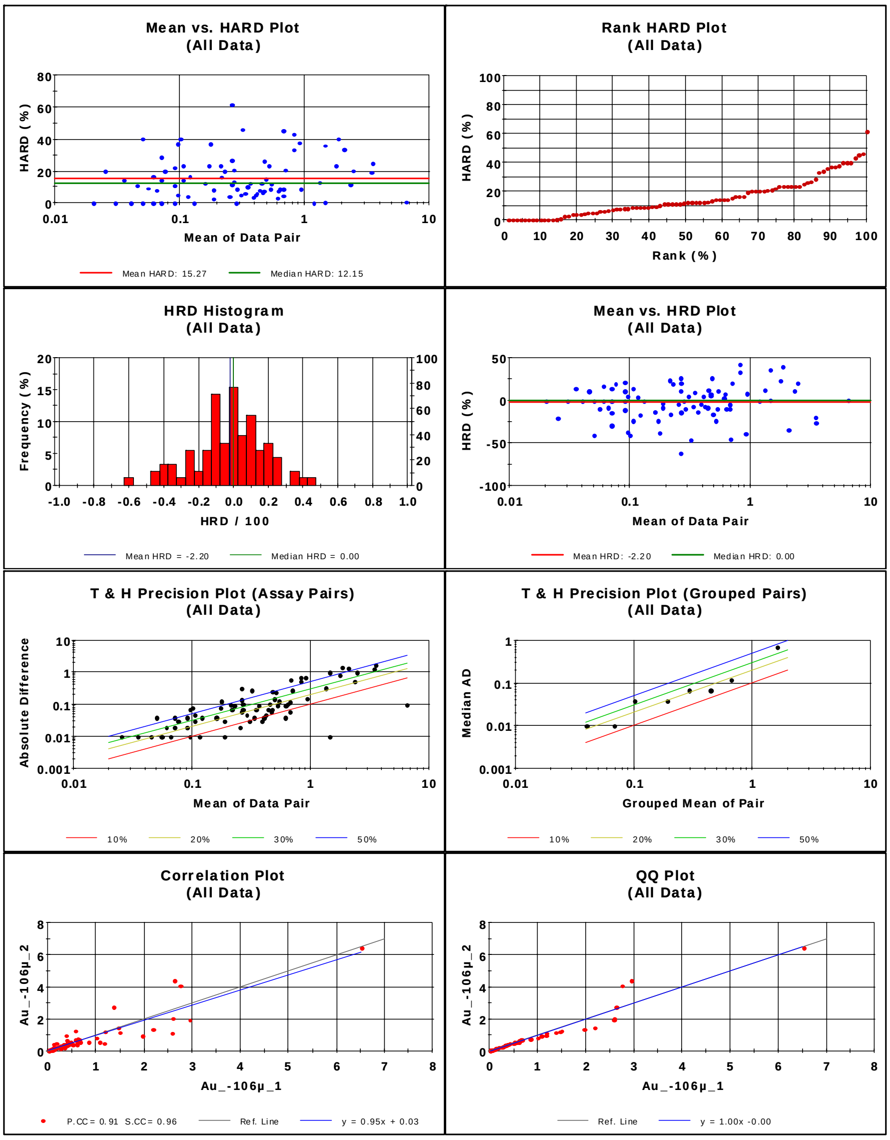
The conclusion drawn is that there is minor inhomogeneity in the samples.

14.5.2 +106µ Pulp Duplicates

A total of 70 pulp duplicate samples from the +106µ fraction were re-analysed in duplicate by Genalysis. These repeats included both RC and diamond drilling samples. The results are presented as Figure 14.5_2. The minimum and maximum values are comparable for the duplicated samples. There is a significant difference in the means and standard deviations. In addition the plots of the individual samples indicate considerable scatter. No apparent bias exists in the data. The differences are interpreted as a result of coarse gold grains being present in the samples.

Figure 14.5_2
Quality assurance analysis of the +106µ fraction pulp duplicates by Genalysis Laboratory

	Au_-106µ_1	Au_-106µ_2	Units			Result
No. Pairs:	91	91			Pearson CC:	0.91
Minimum:	0.02	0.02	g/t		Spearman CC:	0.96
Maximum:	6.51	6.41	g/t		Mean HARD:	15.27
Mean:	0.56	0.56	g/t		Median HARD:	12.15
Median	0.26	0.25	g/t			
Std. Deviation:	0.93	0.96	g/t		Mean HRD:	-2.20
Coefficient of Variation:	1.66	1.74	%		Median HRD	0.00



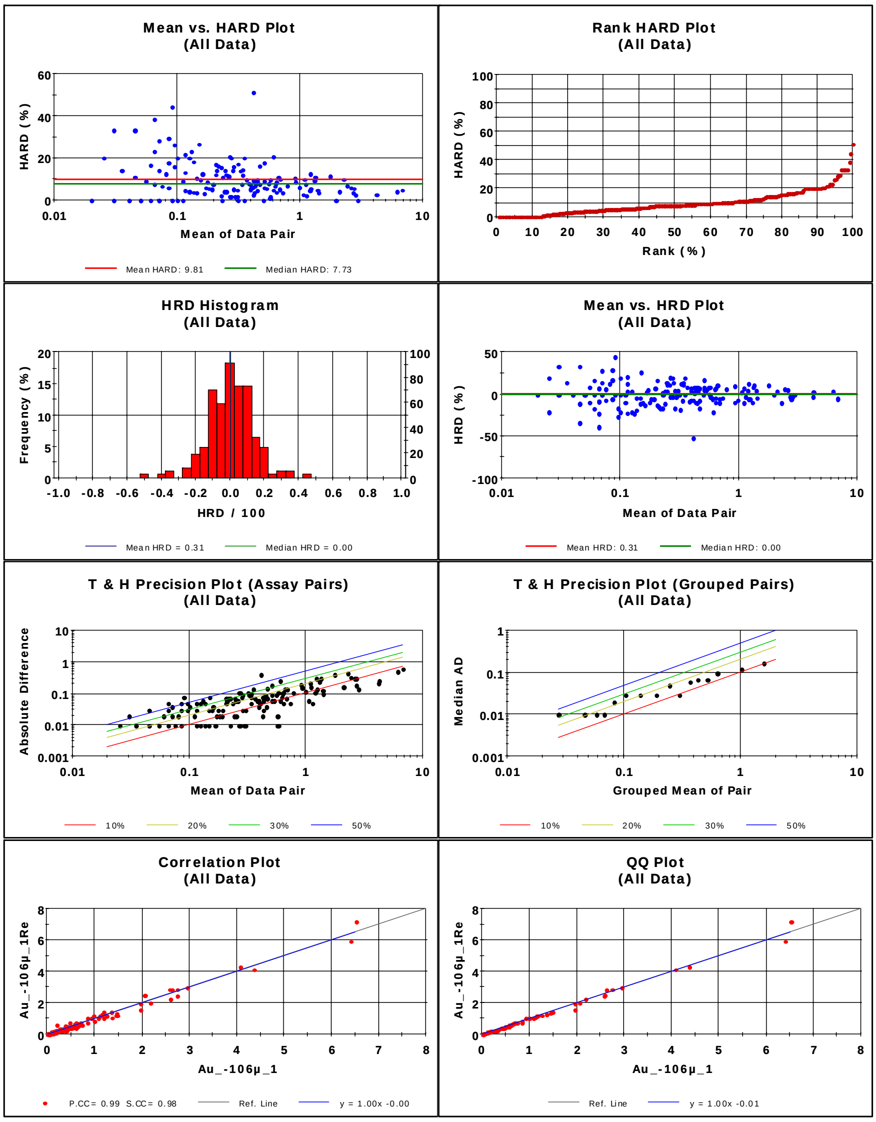
The conclusion drawn is that there is significant inhomogeneity in the samples. Caution must therefore be exercised when interpreting the assay values of this coarse fraction.

14.5.3 -106µ Pulp Repeats

A total of 186 samples were repeat readings re-analysed by Genalysis. These repeats included both RC and diamond drilling samples. The results are presented as Figure 14.5_3. The various statistics calculated (mean, minimum, maximum and coefficient of variation) are very similar. The plots of the individual samples indicate very little scatter, even at the higher grades. No apparent bias exists in the analyses. These data behave as can be expected, showing good analytical procedures.

Figure 14.5_3
Quality assurance analysis of the -106µ fraction pulp repeats by Genalysis Laboratory

	Au_-106µ_1	Au_-106µ_1Re	Units			Result
No. Pairs:	186	186			Pearson CC:	0.99
Minimum:	0.02	0.02	g/t		Spearman CC:	0.98
Maximum:	6.51	7.15	g/t		Mean HARD:	9.81
Mean:	0.54	0.54	g/t		Median HARD:	7.73
Median	0.24	0.23	g/t			
Std. Deviation:	0.94	0.94	g/t		Mean HRD:	0.31
Coefficient of Variation:	1.72	1.74	%		Median HRD	0.00



The conclusion drawn is that the analytical technique as practised is good and produces accurate results.

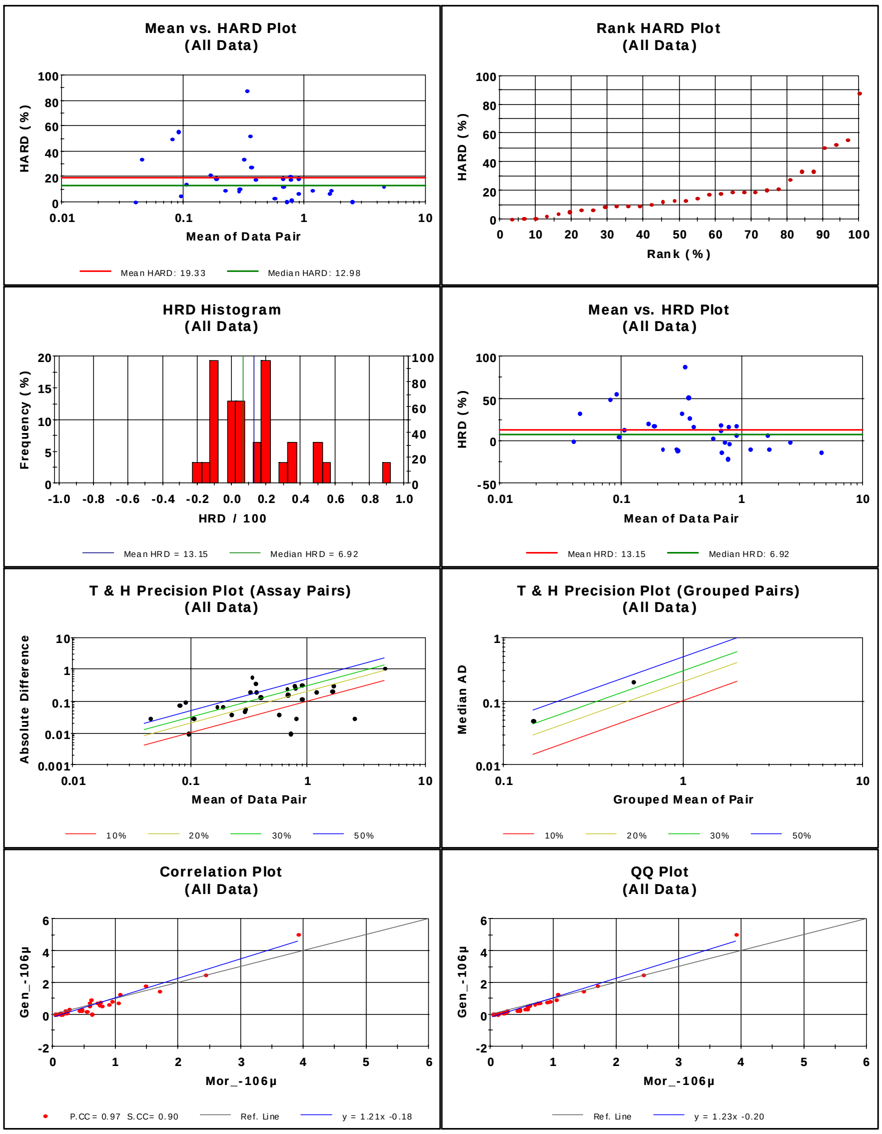
14.6 Umpire Assaying

14.6.1 Moruo vs Genalysis: -106µ Pulp Re-assays

A total of 31 pulp duplicate samples of the -106µ fraction were analysed by both Moruo and Genalysis laboratories. This dataset includes both RC and diamond drilling samples. The results are presented as Figure 14.6_1. The mean Au value of the two laboratories are 0.72g/t and 0.69g/t. The maximum values are 3.92g/t and 5.04g/t and the minimum values 0.04g/t and 0.03g/t. The coefficient of variance are also similar at 1.10 and 1.42. A good correlation exists between the two datasets. No apparent bias by one or the other laboratory can be seen in the analyses.

Figure 14.6_1
Quality assurance analysis of the umpire assays of the -106µ fraction: Moruo vs Genalysis

	Mor_-106µ	Gen_-106µ	Units			Result
No. Pairs:	31	31			Pearson CC:	0.97
Minimum:	0.04	0.03	g/t		Spearman CC:	0.90
Maximum:	3.92	5.04	g/t		Mean HARD:	19.33
Mean:	0.72	0.69	g/t		Median HARD:	12.98
Median	0.58	0.32	g/t			
Std. Deviation:	0.79	0.99	g/t		Mean HRD:	13.15
Coefficient of Variation:	1.10	1.42	%		Median HRD	6.92



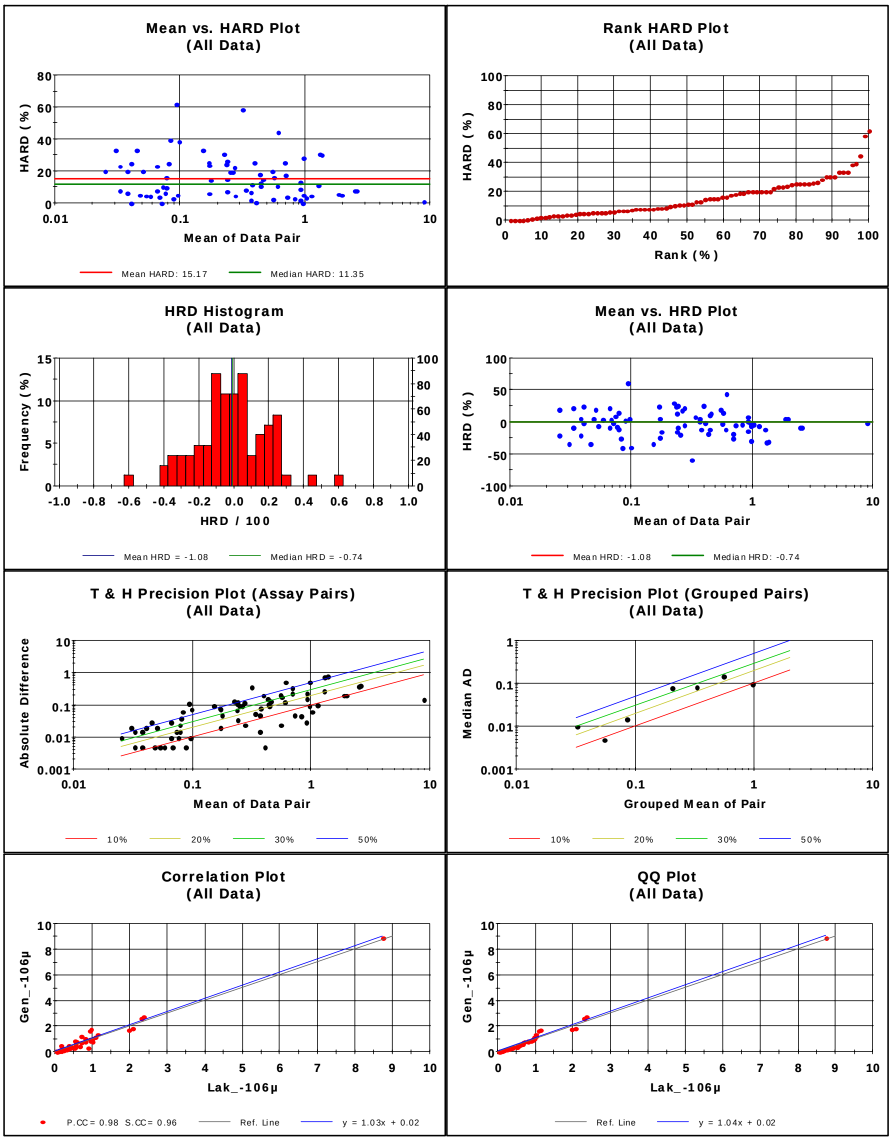
The conclusion drawn is that the analyses of these two laboratories are reliable and comparable.

14.6.2 SGS Lakefield vs Genalysis: -106µ Pulp Re-assays

A total of 84 pulp duplicate samples of the -106µ fraction were analysed by both SGS Lakefield and Genalysis laboratories. This dataset includes both RC and diamond drilling samples. The results are presented as Figure 14.6_2. The mean Au value of the two laboratories are 0.51g/t and 0.55g/t. The maximum values are 8.74g/t and 8.89g/t and the minimum values 0.02g/t and 0.02g/t. The coefficient of variance are also similar at 2.03 and 1.98. A good correlation exists between the two datasets. No apparent bias exists between the analyses by the two laboratories.

Figure 14.6_2
Quality assurance analysis of the umpire assays of the -106µ fraction: SGS Lakefield vs Genalysis

	Lak_-106µ	Gen_-106µ	Units			Result
No. Pairs:	84	84			Pearson CC:	0.98
Minimum:	0.02	0.02	g/t		Spearman CC:	0.96
Maximum:	8.74	8.89	g/t		Mean HARD:	15.17
Mean:	0.51	0.55	g/t		Median HARD:	11.35
Median	0.24	0.21	g/t			
Std. Deviation:	1.04	1.09	g/t		Mean HRD:	-1.08
Coefficient of Variation:	2.03	1.98	%		Median HRD	-0.74



The conclusion drawn is that the analyses of these two laboratories are reliable and comparable.

14.7 Assay Certificate Verification

RSG Global has had sight of a random selection of original assay certificates from all three laboratories used for resource evaluation purposes and compared them with the assay database. No errors were found.

14.8 Data Quality Summary

Inhomogeneity of the gold in the +106µ fraction samples, particularly at higher gold grades, is clearly evident but not a significant obstacle to resource estimation. No bias is apparent in the data.

The analytical technique may be considered appropriate and accurate despite caution being expressed for the coarser fraction and higher gold grades. The comparison of the various laboratories indicates that the values are comparable between the various laboratories. RSG Global recommends that future assessments make use of only one primary and one umpire laboratory, in order to minimise potential uncertainties. The size of the RC samples submitted to the laboratory should be at least as large as the maximum amount that the laboratory can mill in a single pass.

RSG Global also recommends that the use of industry standard reference material be made mandatory for all future assaying of samples that may be used in mineral resource assessments. It would be appropriate to insert a standard with mineralogy and concentration as close as possible to the sample material itself, at a frequency of 5% (i.e. one standard for every twenty samples submitted for analysis).

15 ADJACENT PROPERTIES

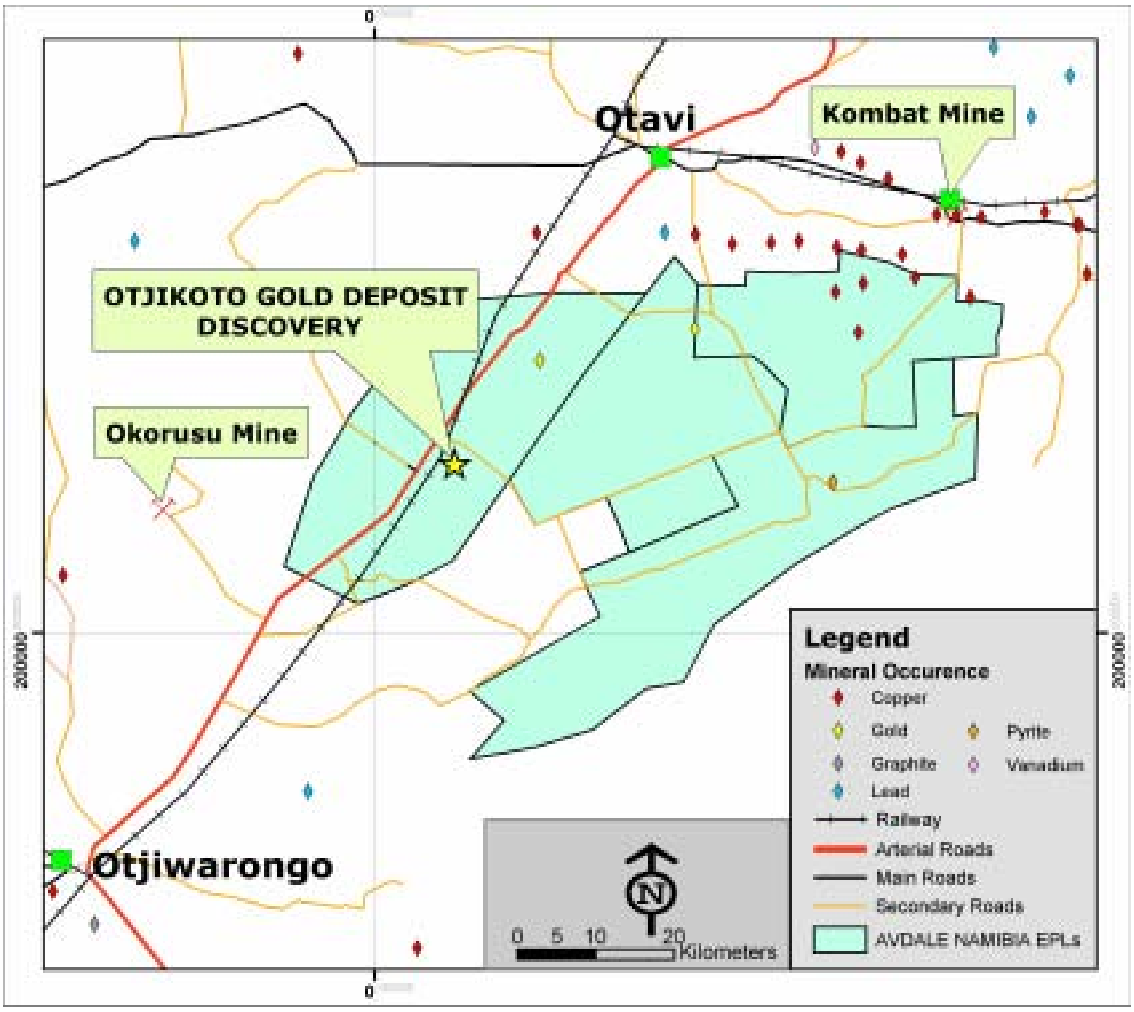
15.1 Introduction

There is no known gold mineralisation of economic interest within the immediate vicinity of the Otavi Exploration Project.

Figure 15_1 illustrates the location of the TEAL properties in relation to known mineralisation of in the region. These can be summarised as:-

- the Otjikoto gold deposit discovery;
- Kombat copper mines;
- Okorusu fluorspar mine; and
- various known mineral occurrences.

Figure 15_1
Adjacent mineral projects and mineralisation



Also indicated on Figure 15.1_1 are the main road and rail networks.

15.2 Kombat

The metallurgy of the Otavi Mountain Land is strongly related to stratigraphy. The upper portion of the Tsumeb subgroup is characterised by Cu-Pb-Zn-Ag concentrations, best represented by the Tsumeb and Kombat mines, both owned and operated by Ongopolo Mining and Processing (Pty) Ltd.

Although the Kombat deposit is classically regarded as a “Tsumeb-type” deposit, it differs from other examples in several ways. At Kombat the mineralisation is formed by a large number of small to medium size deposits developed along the contact of the upper Tsumeb Subgroup (Hüttenberg Formation) with clastic rocks (shales) of the Kombat Formation forming a prominent synclinal structure. Locally, the mineralisation is controlled by monoclinal folds. The mineralisation style changes from east to west from a fine hairline fill to a more disseminated occurrence. The orebodies are generally subvertical with an aspect ratio of about 2.5 to 1 and form discordant sulphide lenses and stringer mineralisation. The sulphide mineralisation types are accompanied by Fe- and Mn-rich silicate and oxide rocks of probable hydrothermal origin and chalcopyrite and bornite are the major sulphide minerals, contrary to dominant tennantite at Tsumeb. Lenses of feldspathic sandstone (“pseudoaplite”) are present along the dolomite-phyllite contact and are regarded as “intrusive” and karst-related and are believed to have an important impact on the mineralisation occurrences.

In January 2004 Ongopolo declared an Inferred Mineral Resource of 2.08Mt at 2.6% Cu, an Indicated Mineral Resource of 0.5Mt at 2.54% Cu and a Probable Reserve of 0.26Mt at 2.69% Cu for the combined Kombat and Asis Far West operations.

15.3 Okorusu Fluorspar Mine

Fluorite deposits are developed at the Okorusu locality in the contact metamorphic aureole of a syenite-carbonatite complex. Numerous separate mineralised bodies are found as replacements in marble, as veins and as disseminations in K-feldspar fenite. Sporadic mining and exploration has been carried out since the 1940s by the South African Iron and Steel Corporation (then “ISCOR”, currently Kumba Resources (Pty) Limited) and the then Tsumeb Corporation Ltd.

Van Zijl (1962) estimated total “ore reserves” at between 7Mt and 10Mt of >35% CaF_2.

The fluorspar deposits are currently mined by Okorusu Fluorspar (Pty) Ltd, which reported a production of some 100,000t of acid-grade fluorspar in 2004 (Murray, 2004).

15.4 Other Known Mineral Occurrences

A number of known mineral occurrences are mentioned in Section 6.2. In additional to these, outcropping copper-gold skarn mineralisation was sampled by Petzel (1995) on the farm Okorusu 499, 25km South of Otavi. Rock samples contained 108ppb, 471ppb and 7,845ppb gold (Burnett, 2000).

16 MINERAL PROCESSING AND METALLURGICAL TESTING

16.1 Metallurgical Sampling

Seventeen large diameter (HQ/TNW) diamond drillholes were drilled at the Otjikoto gold deposit to recover sample material for metallurgical test work. These holes were drilled to collect material that was representative of the mineralisation characteristics (mineralogy) of the entire deposit. The sample material was also selected to represent low, medium and high in situ gold grades.

The drillholes were drilled specifically for metallurgical test sampling, centred adjacent and parallel to existing exploration holes. The full core of the mineralised intersections were used in the test work.

16.2 Metallurgical Testing and Results

16.2.1 Laboratory Test Work

Detailed geological logging indicates that the typical percentage of vein material in the mineralisation rarely exceeds 10% of the total volume within the mineralised envelopes. It is therefore considered important to test the applicability of a pre-concentration stage prior to milling. Two possible methods for this pre-concentration stage have been tested namely magnetic separation and In-Line Pressure Jig (“IPJ”) gravity separation.

Analytical and mineralogical tests indicate that a considerable percentage of contained gold is present as coarse particles in both weathered oxide and sulphide mineralisation.

The technical detail and results of the metallurgical test work briefly described and summarised below, are based on the study by Badger Mining & Consulting (Pty) Limited, February 2005. The study includes the following:-

- Pre-concentration through magnetic separation and IPJ (pre-milling).
- Gravity concentration for the recovery of coarse gold.
- Tabling, with a view to recover coarse gold by jigging.
- Flotation.
- Cyanide dissolution tests on coarse mill gold and flotation concentrates.
- Bond work index and abrasion.
- Cyanide gold dissolution of crushed mineralised material (heap leaching).

16.2.2 Pre Concentration of Crushed Mineralised Material

Initial magnetic separation test work was carried out on material ranging between 20mm and 0.5mm. High grade oxide and sulphide material achieved good gold recoveries but high mass pull due to the abundance of magnetic minerals associated with the gold. Further test work on the 12mm × 6mm and 6mm × 2mm size fractions for the sulphide mineralisation returned good gold recoveries (78% and 83% respectively) and mass pulls of 55% and 60% respectively.

IPJ test work results on the 12x6mm and 6x2mm crushed size fractions resulted in gold recoveries of 79.5% and 88.2% respectively and mass pull results of 50.3% and 49.4% respectively. Compared with the magnetic separation results, the pre-concentration IPJ currently appears less effective.

During these metallurgical investigations however, it was considered that specific equipment for the commercial application of magnetic separation at the required scale was not available. Therefore, in the process flow sheet and mass balance currently proposed, an IPJ pre-milling upgrade step is envisaged. In this process, the IPJ concentrate represent a mass pull of 49.6%, which contains 82.8% of the gold. The balance of gold (17.2%) reports to the tailing disposal facility.

TEAL intends to further investigate the use of magnetic separation equipment suitable for Otjikoto project requirements.

16.2.3 Concentration of Milled Mineralised Material

The results achieved from gravity concentration, such as IPJ, Falcon and Knelson concentrator test work, resulted in good recoveries of coarse “mill” gold for both oxide and sulphide mineralisation types. Therefore, gravity concentration in the milling circuit is considered advantageous and essential.

Flotation test work was carried out on both oxide and sulphide pulp mineralised material prior and post the removal of coarse gold by gravity means. The free gold flotation tests provided excellent results averaging 94.6% recovery.

Dissolution test work carried out on mill gold concentrates to simulate intensive leaching in an In-Line Leach Reactor (“ILR”) returned extremely good dissolution results. Dissolution test work carried out on flotation concentrates of both oxide and sulphide material returned recoveries in excess of 95%.

A suite of samples were submitted for bond work and abrasive index determinations. The results have shown that both mineralisation types are relatively soft, with the sulphide mineralisation types being marginally harder than the oxide mineralisation types. No specific problems are envisaged during milling operations.

In a previous study, limited test work was carried out on the crushed mineralised material to test its amenability to heap leaching. The results of this test work indicated poor recoveries and long dissolution periods.

16.3 Possible Processing Routes

Plant design has been based on the limited test work completed to date as described in the Badger Study (February 2005). The plant will consist of the following sections:-

- Screening and Primary crushing of ROM mineralised material.
- Screening and Secondary crushing.
- Screening and Tertiary crushing.
- IPJ pre-concentration of sulphide material crushed size fractions 12x6mm and 6x2mm.

- Milling.
- IPJ gravity concentration of coarse free “mill” gold.
- Flotation.
- Gold recovery by intensive cyanidation and electro-winning.
- Final flotation tails disposal.
- Bullion smelting.

The process flow sheet for oxide material does not include a pre-concentration step at present. The mineralised material is crushed, milled and then concentrated by IPJ and flotation prior to leaching and electrowinning.

A flow sheet diagram for the oxidised and sulphide material and the resultant mass balances with anticipated recoveries are shown in Figure 16.3_1 and Figure 16.3_2, and in Figure 16.3_3 and Figure 16.3_4 respectively.

Milling will be performed in a ball mill sized to treat 182 tonnes per hour of the softer oxide material and 160 tonne per hour of fresh sulphide material. Gravity concentration of the coarse “mill” gold will also be carried out by an IPJ. Mill classification cyclone overflow will gravitate to the flotation plant conditioner tanks, where the pulp will be conditioned and pumped to the flotation cells. Flotation will be carried out by Rougher, Scavenger and Cleaner cells. Coarse “mill” gold concentrates and flotation concentrates will be subjected to intensive cyanide leaching in an automated in-line leach reactor (“ILR”). Gold bullion will be reclaimed from the pregnant gold solution by Electro-winning cells and smelt to produce bullion bars.

It is anticipated that any mining and metallurgical plant operations would required 6,000KvA power which would be readily provided by the Maxwell substation approximately 16km north-west of the project.

16.4 Metallurgical Summary

The metallurgical test work completed to date has provided indicative solutions for the processing of the Otjikoto mineralisation.

TEAL has identified key characteristics of the Otjikoto mineralisation and its response to various metallurgical process options.

The fundamental factors identified and tested, include:-

- Upgrade of ROM material by pre-concentration;
- Coarse particulate gold allowing for gravity concentration;
- Positive response of the material to flotation test work.

Figure 16.3_1
Flow sheet diagram for the oxide mineralised material (total milling)

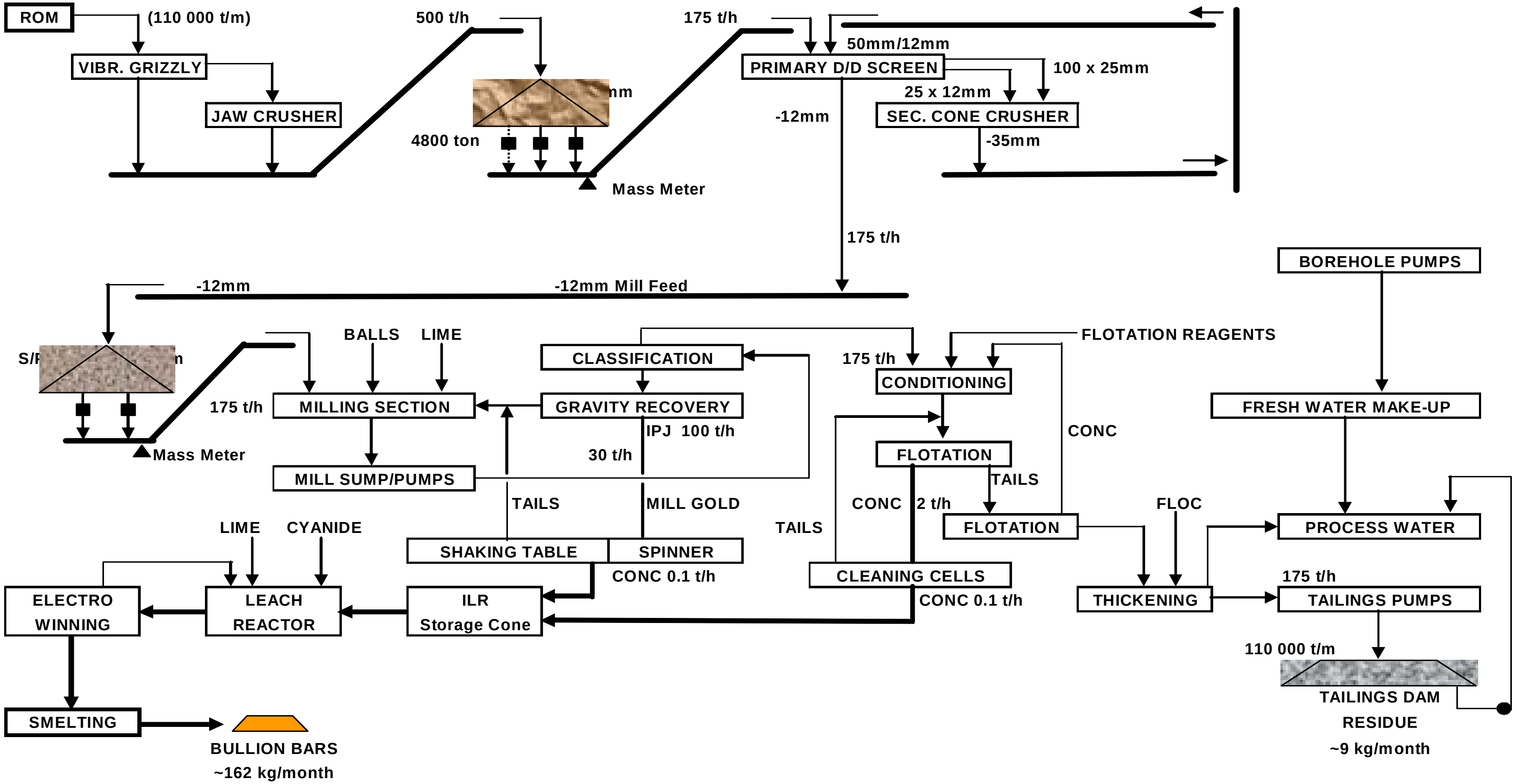


Figure 16.3_2
Figure Description

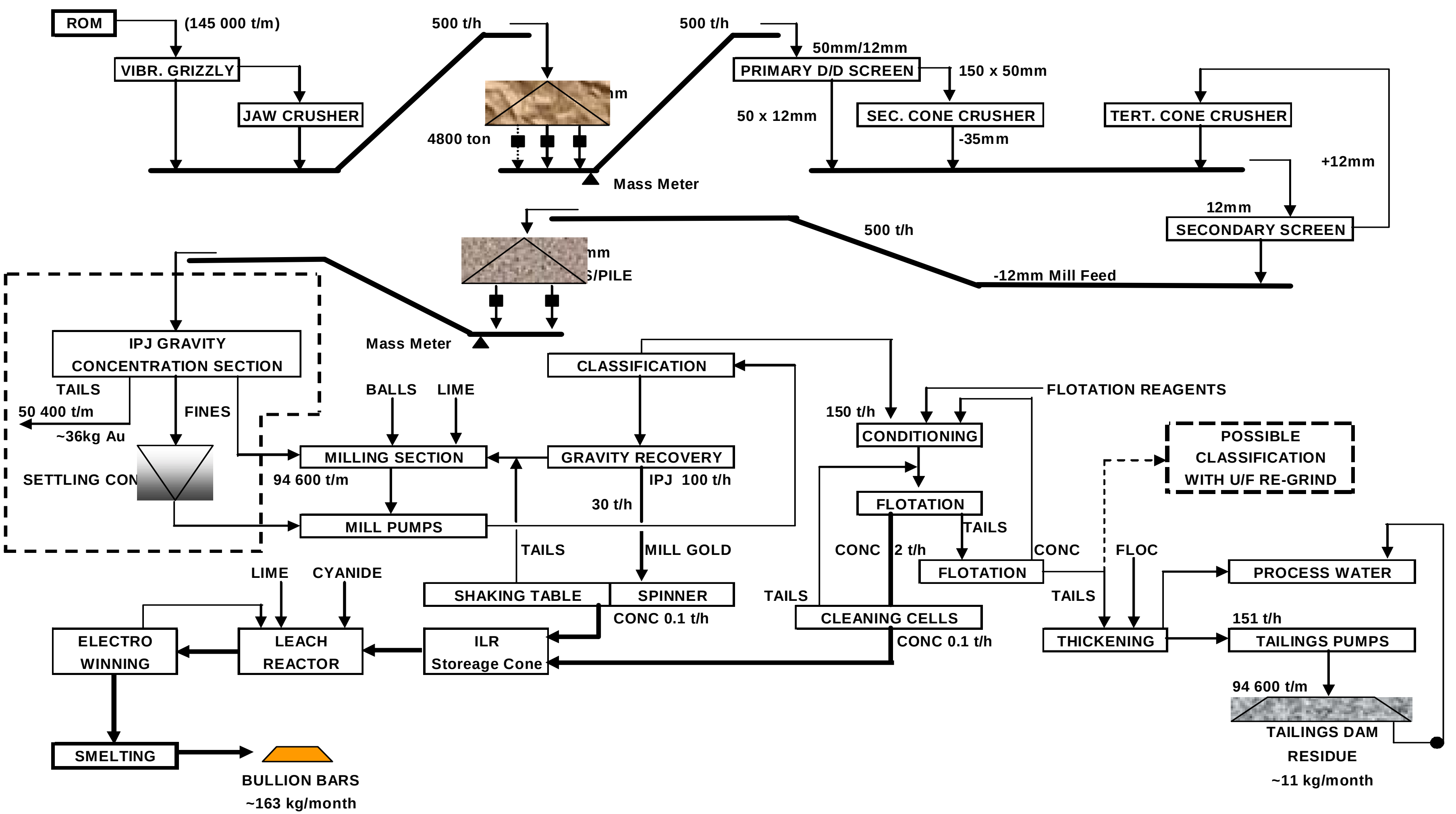


Figure 16.3_3
Resultant mass balances with anticipated recoveries for oxidised material

EXPECTED OXIDE PROCESS RECOVERIES (TOTAL MILLING)

Borehole No.	12 x 6mm Mass %	12 x 6mm Au g/t	6 x 2mm Mass %	6 x 2mm Au g/t	2 x 1mm Mass %	2 x 1mm Au g/t	-1mm Mass %	-1mm Au g/t	
High Grade Ore	34.5	2.25	32.2	2.40	9.8	2.50	23.5	2.70	2.43
Medium grade Ore	34.5	1.35	32.2	1.50	9.8	1.60	23.5	1.80	1.53
Low Grade Ore	34.5	0.55	32.2	0.70	9.8	0.80	23.5	0.90	0.71
Mean	**34.5**	**1.38**	**32.2**	**1.53**	**9.8**	**1.63**	**23.5**	**1.80**	
Standard Deviation	0.0	0.85	0.0	0.85	0.0	0.85	0.0	0.90	

Ore Grade g/t
1.55

Total Ore	Mass	Au	Au g/t
Tonne x 10^3/kg Au	**109.9**	**170.8**	**1.55**

	12 x 6mm Mass	12 x 6mm Au	6 x 2mm Mass	6 x 2mm Au	2 x 1mm Mass	2 x 1mm Au	-1mm Mass	-1mm Au
DISTRIBUTION %	34.5	30.7	32.2	31.8	9.8	10.3	23.5	27.2
Tonne x 10^3/kg Au	37.9	52.45	35.4	54.26	10.8	17.59	25.8	46.49

Milling Section

Fraction	Mass	Au
-1mm	25.8	46.49
2 x 1mm	10.8	17.59
6 x 2mm	35.4	54.26
12 x 6mm	37.9	52.45
Total	109.9	170.79

Cyclone

20.0%

80.0%

Cyclone Overflow		
Mass	20.0%	22.0
Gold	20.0%	34.2

Gravity Concentration		
Mass	80.0%	87.9
Gold	80.0%	136.6

Flotation Section

Fraction	Mass	Au
-75µ	22.0	34.2
+75µ	87.9	75.1
Total	109.9	109.3

IPJ, Spinner and Table		
Mass Recov	0.0%	0.0
Au Recovery	45.0%	61.5

Mass Recov 0.0%
Au Recovery 92.0% (95% of Lab recovery)

Recovery	Mass	kg Au	% Au
Flotation Concent	0.0	100.6	58.9
Gravity Concentrate	0.0	61.5	36.0
Total Au %	**0.0**	**162.0**	**94.9**

Figure 16.3_4
Resultant mass balances with anticipated recoveries for sulphide material

EXPECTED SULPHIDE PROCESS RECOVERIES (IPJ PRE-CONCENTRATION)

Borehole No.	12 x 6mm		6 x 2mm		2 x 1mm		-1mm		
	Mass %	Au g/t	Mass %	Au g/t	Mass %	Au g/t	Mass %	Au g/t	
High Grade Ore	40.2	2.05	29.2	2.20	8.3	2.30	22.3	2.50	2.21
Medium Grade Ore	40.2	1.25	29.2	1.40	8.3	1.50	22.3	1.70	1.41
Low Grade Ore	40.2	0.55	29.2	0.70	8.3	0.80	22.3	1.00	0.71
Mean	**40.2**	**1.28**	**29.2**	**1.43**	**8.3**	**1.53**	**22.3**	**1.73**	
Standard Deviation	0.0	0.75	0.0	0.75	0.0	0.75	0.0	0.75	

Ore Grade g/t
1.45

Total Ore	Mass	Au	Au g/t
Tonne x 10^3/kg Au	145.0	210	1.45

	12 x 6mm		6 x 2mm		2 x 1mm		-1mm	
	Mass	Au	Mass	Au	Mass	Au	Mass	Au
DISTRIBUTION %	40.2	35.6	29.2	28.9	8.3	8.8	22.3	26.7
Tonne x 10^3/kg Au	58.3	74.81	42.3	60.69	12.0	18.5	32.3	56.0

12 x 6mm Jig		
Mass Recov	50.3%	29.3
Au Recovery	79.5%	59.47

6 x 2mm Jig		
Mass Recov	49.4%	20.9
Au Recovery	88.2%	53.53

JIG TAILS

Mass	50.4
Au kg	36.05
Au g/t	0.715
% Au	17.2

Milling Section

Fraction	Mass	Au
-1mm	32.3	56.0
2 x 1mm	12.0	18.5
6 x 2mm	20.9	53.5
12 x 6mm	29.3	59.5
Total	94.6	187.5

Cyclone

20.0% **80.0%**

Cyclone Overflow		
Mass	20.0%	18.9
Gold	20.0%	37.5

Gravity Concentration		
Mass	80.0%	75.7
Gold	80.0%	150.0

Flotation Section

Fraction	Mass	Au
-75µ	18.9	37.5
+75µ	75.7	82.5
Total	94.6	120

IPJ, Spinner and Table		
Mass Recov	0.0%	0.0
Au Recovery	45.0%	67.5

Mass Recov 0.0%
Au Recovery 90.0% (95% of Lab recovery)

Recovery	Mass	kg Au	% Au
Flotation Concent	0.0	108.0	51.4
Gravity Concentrate	0.0	67.5	32.1
Total Au %	**0.0**	**175.5**	**83.6**

The existing test work needs to be optimised with additional "bulk" scale test work. The metallurgical process currently proposed is complex and capital intensive, resulting in lower than expected recoveries and high operating costs. Considering the coarse particulate, unbound nature of the gold mineralisation, and the mineralogy of the host veins, alternative processing techniques need to be evaluated. Further investigations are required to increase the confidence level of the proposed flow sheet and possible alternative process options.

17 MINERAL RESOURCES AND MINERAL RESERVES

17.1 Mineral Resources

17.1.1 Introduction

Mineral Resources have been estimated at the Otjikoto Project, an area of approximately 26ha.

17.1.2 Data

The drilling was conducted on a grid of 100m (strike) by 50m (dip) spacing between drillholes. The database for the wireframing consists of 107 diamond drill and RC drillholes (Table 17.1.2_1). Ten of the diamond drillholes are inclined with a minimum inclination of 62°. A total of 55 diamond drillholes (8,342m) and 52 RC holes (4,398m) were drilled. A summary of the intersections in each mineralised zone is presented in Table 17.1.2_2. The number of intersections for each mineralised zone is summarised in Table 17.1.2_3.

Table 17.1.2_1

Summary of drilling conducted at the Otjikoto Project

Diamond Drillholes						Reverse Circulation Drillholes			
Drillhole No	**Final Depth**	**Drillhole No**	**Final Depth**	**Drillhole No**	**Final Depth**	**Drillhole No**	**Final Depth**	**Drillhole No**	**Final Depth**
OT3	281.53	OT36	91.63	OTS1	152.71	OTR1	78.00	OTR29	105.00
OT4	391.00	OT37	103.28	WH4	133.46	OTR2	83.00	OTR30	120.00
OT6	300.00	OT38	111.20	WH5	129.34	OTR4	112.00	OTR31	89.00
OT8	214.12	OT39	182.83	WH6	138.65	OTR5	70.00	OTR32	68.00
OT10	166.00	OT40	178.84			OTR7C	145.00	OT32R	30.00
OT11	124.50	OT41	164.49			OTR8	78.00	OTR33	100.00
OT12	175.50	OT42	108.00			OTR9	89.00	OTR34	83.00
OT14	196.00	OT43	167.49			OTR10	91.00	OTR35	66.00
OT18	135.82	OT44	161.22			OTR11	64.00	OTR36	66.00
OT19	132.50	OT45	161.53			OTR12	53.00	OTR37	57.00
OT20	141.51	OT46	96.68			OTR13	106.00	OT37R	37.00
OT21	190.22	OT47	85.90			OTR14	90.00	OTR38	60.00
OT22	175.33	OT48	139.92			OTR15	85.00	OTR39	78.00
OT23	156.00	OT49	160.89			OTR16	97.00	OTR40	85.00
OT24	141.87	OT50	96.17			OTR17	85.00	OTR41	73.00
OT25	145.00	OT51	92.00			OTR18	109.00	OTR42	77.00
OT26	146.31	OT52	100.55			OTR19	71.00	OTR43	61.00
OT27	143.50	OT53	96.53			OTR20	78.00	OTR44	55.00
OT28	147.00	OT54	100.38			OTR21	107.00	OTR45	46.00
OT29	146.00	OT55	159.00			OTR22	122.00	OTR46	52.00
OT30	126.98	OT56	188.23			OTR23	117.00	OTR47	52.00
OT31	110.00	OT57	170.45			OTR24	120.00	OTR48	59.00
OT32	103.89	OT58	176.48			OTR25	114.00	OTR49	88.00
OT33	110.92	OT59	167.10			OTR26	116.00	OTR50	101.00
OT34	150.00	OT60	130.60			OTR27	108.00	OTR51	95.00
OT35	145.00					OTR28	116.00	OTR52	91.00

Table 17.1.2_2

Summary of the intersections of the mineralised zones of the Otjikoto Project

The Upper Zone of the Otjikoto Project

Drillhole	From (m)	To (m)	Length
OTR1	25.0	41.0	16.0
OTR10	11.0	35.0	24.0
OTR13	42.0	62.0	20.0
OTR2	14.0	16.0	2.0
OTR21	52.0	66.0	14.0
OTR24	35.0	69.0	34.0
OTR25	51.0	59.0	8.0
OTR32	24.0	33.0	9.0
OTR33	37.0	47.0	10.0
OTR34	16.0	37.0	21.0
OTR49	15.0	76.0	61.0
OTR5	23.0	37.0	14.0
OTR50	38.0	76.0	38.0
OTR51	32.0	70.0	38.0
OTR52	21.0	68.0	47.0
OTR9	36.0	54.0	18.0
OT10	70.0	77.0	7.0
OT21	62.0	76.0	14.0
OT24	49.9	88.0	38.1
OT26	21.8	32.0	10.2
OT3	62.0	79.0	17.0
OT32	30.0	40.0	10.0
OT32R	16.0	30.0	14.0
OT33	30.0	50.0	20.0
OT36	14.4	18.0	3.6
OT37	37.0	46.0	9.0
OT37R	18.0	37.0	19.0
OT46	44.6	60.0	15.4
OT47	34.1	51.0	16.9
OT49	74.2	95.0	20.8
OT50	31.1	34.0	2.9

The Middle Zone of the Otjikoto Project

Drillhole	From (m)	To (m)	Length
OTR1	43.0	47.0	4.0
OTR10	35.0	42.0	7.0
OTR13	62.0	65.0	3.0
OTR2	16.0	20.0	4.0
OTR21	68.0	75.0	7.0
OTR24	69.0	74.0	5.0
OTR25	59.0	65.0	6.0
OTR32	33.0	35.0	2.0
OTR33	47.0	52.0	5.0
OTR34	37.0	43.0	6.0
OTR49	33.0	44.0	11.0
OTR5	37.0	46.0	9.0
OTR50	57.0	59.0	2.0
OTR51	59.0	61.0	2.0
OTR52	38.0	48.0	10.0
OTR9	55.0	59.0	4.0
OT10	76.0	84.0	8.0
OT21	76.0	82.0	6.0
OT24	89.0	93.0	4.0
OT26	32.0	39.8	7.8
OT3	86.0	90.0	4.0
OT32	40.0	48.0	8.0
OT33	50.0	56.0	6.0
OT36	15.0	28.0	13.0
OT37	46.0	62.0	16.0
OT38	63.7	64.0	0.3
OT46	61.0	63.0	2.0
OT47	51.0	54.0	3.0
OT49	95.0	103.0	8.0

The Lower Zone of the Otjikoto Project

Drillhole	From (m)	To (m)	Length
OTR1	46.0	66.0	20.0
OTR10	41.0	64.0	23.0
OTR11	18.0	37.0	19.0
OTR12	15.0	26.0	11.0
OTR13	64.0	78.0	14.0
OTR14	40.0	57.0	17.0
OTR15	52.0	73.0	21.0
OTR16	30.0	69.0	39.0
OTR17	36.0	73.0	37.0
OTR19	25.0	41.0	16.0
OTR2	20.0	59.0	39.0
OTR20	27.0	59.0	32.0
OTR21	75.0	96.0	21.0
OTR22	91.0	103.0	12.0
OTR23	70.0	104.0	34.0
OTR24	73.0	97.0	24.0
OTR25	64.0	90.0	26.0
OTR26	53.0	85.0	32.0
OTR27	61.0	93.0	32.0
OTR28	59.0	90.0	31.0
OTR29	45.0	65.0	20.0
OTR30	75.0	99.0	24.0
OTR31	33.0	42.0	9.0
OTR32	34.0	52.0	18.0
OTR33	50.0	82.0	32.0
OTR34	42.0	53.0	11.0
OTR35	28.0	47.0	19.0
OTR37	24.0	38.0	14.0
OTR38	16.0	23.0	7.0
OTR39	32.0	52.0	20.0
OTR40	22.0	57.0	35.0
OTR41	29.0	45.0	16.0
OTR42	24.0	57.0	33.0
OTR43	34.0	43.0	9.0
OTR44	19.0	37.0	18.0
OTR46	8.0	14.0	6.0
OTR48	30.0	41.0	11.0
OTR49	44.0	76.0	32.0
OTR5	45.0	70.0	25.0
OTR50	59.0	76.0	17.0
OTR51	59.0	78.0	19.0
OTR52	48.0	68.0	20.0
OTR7C	104.0	107.0	3.0
OTR8	45.0	64.0	19.0
OTR9	58.0	71.0	13.0
OT10	84.0	97.0	13.0
OT11	57.6	93.1	35.5
OT12	101.0	112.0	11.0
OT14	144.0	171.4	27.4
OT18	72.0	114.0	42.0
OT19	80.0	96.4	16.4
OT20	70.0	99.6	29.6
OT21	81.0	99.9	18.9
OT22	55.0	109.0	54.0
OT23	103.6	117.0	14.0
OT24	92.0	116.0	24.0
OT25	97.2	120.5	23.3
OT26	39.3	75.0	35.8
OT3	90.0	110.0	20.0
OT32	47.0	73.4	26.4
OT33	55.8	85.4	29.6
OT34	101.0	113.0	12.0
OT35	103.0	111.0	8.0
OT36	26.0	65.0	39.0
OT37	61.0	80.1	19.1
OT38	63.0	88.6	25.6
OT39	94.1	145.7	51.6
OT41	114.0	131.7	17.7
OT42	62.0	92.0	30.0
OT43	81.7	129.0	47.3
OT46	62.0	76.0	14.0
OT47	53.0	73.0	20.0
OT49	102.3	128.5	26.2
OT50	45.0	69.0	24.0
OT51	39.0	63.3	24.3
OT52	51.0	77.4	26.4
OT53	36.0	74.0	38.0
OT54	57.0	84.6	27.6
OT55	89.0	127.6	38.6
OT56	109.6	158.0	48.4
OT57	122.0	147.0	25.0
OT58	98.0	155.0	57.0
OT59	123.0	132.0	9.0
OT60	89.6	108.3	18.8
OT8	112.0	134.0	22.0

Table 17.1.2_3 Summary of the number of intersections of the various mineralised zones of the Otjikoto Project			
Mineralised Zone	**Number of Diamond Drill Intersections**	**Number of Reverse Circulation Intersections**	**Total Number of Drill Intersections**
Upper	16	15	31
Middle	13	16	29
Lower	42	43	85

The samples were analysed by Genalysis, Moruo and SGS Lakefield laboratories. The assay values below detection (0.02g/t Au) were set at 0.01g/t Au and the high values cut to 20g/t Au as values greater than 20g/t form outliers. The basic statistics undertaken indicated a typical log-normal distribution for the gold grades.

The bulk density values used are based on 358 determinations undertaken by Anglo American Research Laboratories and SGS Lakefield Laboratories from 4 drillholes (OTR13, OT10, OT8 and OTR11). The average bulk density of a variety of lithotypes is 2.81t/m³. A summary of the bulk density is presented in Table 17.1.2_4. A bulk density of 2.8t/m³ for the mineralised zone is used in the estimation. It should be noted, however, that the method used to determine bulk densities (pycnometer on pulp material) is likely to have overestimated the actual in-situ bulk density of the deposit. In addition, there has been no attempt to subdivide the density data according to the weathering profile.

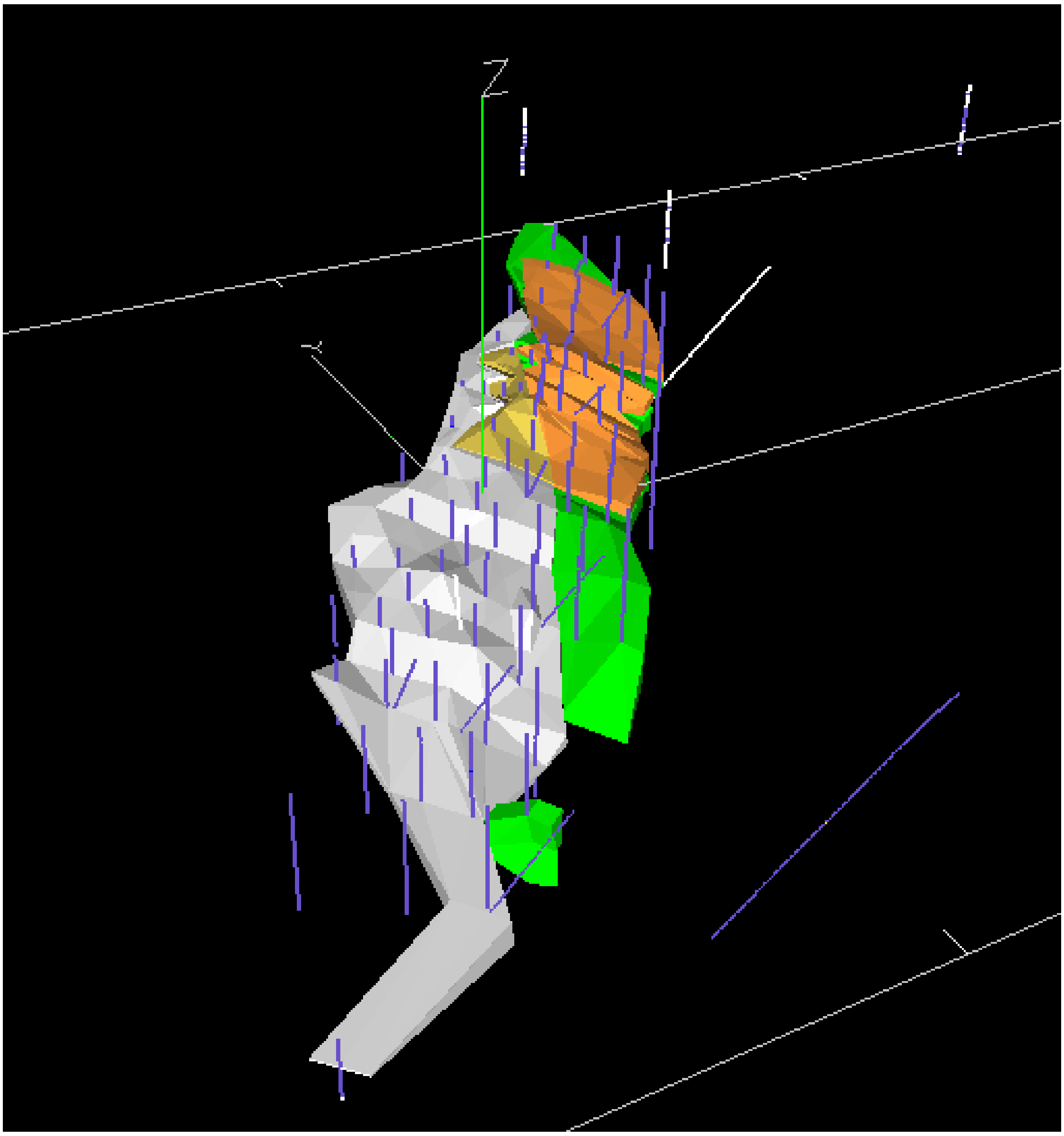
Table 17.1.2_4 Summary of the bulk densities for the Otjikoto Project					
	n	**Average**	**Max**	**Min**	**Std Deviation**
Upper Zone	30	2.88	3.17	2.77	0.10
Middle Zone	12	2.83	2.88	2.79	0.02
Lower Zone	70	2.82	3.08	2.67	0.08
Overall Mineralised	112	2.83	3.17	2.67	0.08
Hangingwall	121	2.79	3.16	2.63	0.09
Footwall	124	2.82	2.99	2.75	0.04
Total / Average	**358**	**2.81**	**3.17**	**2.63**	**0.08**

17.1.3 Geological Model

The geological modelling was undertaken by M O'Callaghan (GMSI) using Datamine, with Mr J Wilton (Pr. Sci. Nat.) of AVDALE providing geological insight and control. The mineralised zones were modelled on a 0.5g/t Au cutoff combined with vein type and intensity. The boundaries of the mineralised zones or lenses were extended by 1m as is the practice at TEAL where no clear geological/lithological border can be defined ("soft grade boundary approach"). The mineralised zone has been subdivided into three zones, viz. the Upper, Middle and Lower zones.

A three dimensional view of the resulting wireframe model is given in Figure 17.1.3_1.

Figure 17.1.3_1
Three dimensional view of the Otjikoto orebody looking northeast, demonstrating the mineralised zones



(Upper = orange and light brown, Middle is between the Upper and Lower zones, Lower = white and green. Strike length = 1.6km and dip length = 0.25km. Drillholes indicated in blue.)

17.1.4 Grade Estimation

Grade estimation was undertaken by PJ van der Merwe (Pr. Sci. Nat.), an employee of African Rainbow Minerals.

A spatial analysis was undertaken on gold grade to confirm the application of kriging techniques in the resource estimation. Logarithmic semivariograms were calculated for the Lower zone, which was the largest number of data available. The semivariograms indicated pure nugget effect. Downhole semivariograms were generated and found to have a nugget of 60% of the sill. The theoretical semivariograms were therefore constructed for the three zones using the sill at the log variance and the nugget at 60% of the sill (Table 17.1.4_1).

Table 17.1.4_1 Semivariogram parameters used in the resource estimate for the Otjikoto Project									
	Angle1	**Angle2**	**Axis1**	**Axis2**	**C0**	**C1**	**C2**	**a1**	**a2**
Upper	125	25	3	1	1.19	0.34	0.57	10	200
Middle	125	25	3	1	0.9	0.25	0.42	10	200
Lower	125	25	3	1	1.03	0.28	0.49	10	200

Ordinary kriging was undertaken into blocks of 50m (X) × 50m (Y) × 2.5m (Z). An estimate required a minimum of 6 values and a maximum of 30. The search ellipsoid parameters used in the estimation are presented in Table 17.1.4_2.

Table 17.1.4_2 Search ellipsoid parameters used in the resource estimate for the Otjikoto Project										
Search1	**Search2**	**Search3**	**Angle1**	**Angle2**	**Angle3**	**Axis1**	**Axis2**	**Axis3**	**Min**	**Max**
1000m	1000m	20m	125°	25°		3	1		6	30

The resource estimate was made of the Upper and Lower zones with the Middle zone being determined from the difference between these two zones and the total mineralised zone. The estimate is presented in Table 17.1.4_3 and has been classified as an Inferred Mineral Resource.

Table 17.1.4_3 Inferred Mineral Resource estimate for the Otjikoto Project		
Mineralised Zone	**Tonnes ('000t)**	**Gold Grade (g/t)**
Upper	4,410	1.43
Middle	2,620	0.31
Lower	18,551	1.08
Total	**25,581**	**1.06**

17.1.5 RSG Global Technical Review

RSG Global notes that previous ARM disclosure of the mineral resource for the Otjikoto Project has not utilized the soft grade boundary approach and as such reported a higher grade, although with a slightly lower total tonnage. This reporting otherwise utilizes the same geological database and RSG Global does not consider these results to be a separate or prior estimation of Mineral Resources.

The investigation undertaken by RSG Global (Section 14) concludes that the precision and accuracy of the analyses are more than acceptable for the Inferred Mineral Resource as there is good comparison between the results from different laboratories. The quality control analysis shows that the representativeness of the assays of the coarse fraction is poorer, as expected, but should not impact significantly on resource estimation.

The bulk density determinations are limited but sufficient to support the applied bulk density 2.8t/m³ for an Inferred Mineral Resource. The level of oxidation is noted and described in the drillhole logs. Due to the mineralisation being classified as an Inferred Mineral Resource and the paucity of bulk density data for the oxide material, it was not considered necessary to report the oxide and sulphide mineralisation separately. No allowance has been made for weathering (oxidation) when applying density values to the resource. In addition, the method used for bulk density determinations has more than likely resulted in an overestimation of the densities used in the resource estimate.

The mineral resource estimate makes use of results from two different drilling procedures (RC and diamond drilling) and both vertical and inclined drillholes. The geostatistical support is therefore not the same for all samples. This has been recognised and compositing undertaken to reduce the effect. The compositing was applied to both the vertical and inclined holes. The effect of the variable sample support is not considered large but may be significant if the mineral resource were to be considered for a higher level classification.

The determination of the geological model is well documented. It is based on the gold grade and vein characteristics and intensity. A “soft grade boundary approach” is applied due to lack of clear geological/lithological borders to the mineralisation. Both of these approaches to the geological model are considered appropriate for the type of mineralisation and geological setting as well as for an Inferred Mineral Resource.

The level of oxidation is noted and described in the drillhole logs. Due to the mineralisation being classified as an Inferred Mineral Resource and the paucity of bulk density data for the oxide material, it was not considered necessary to report the oxide and sulphide mineralisation separately.

Good understanding of the geology and available data is demonstrated. The use of geostatistics is considered appropriate, given the drilling layout and results. However, the application of geostatistics has not been comprehensive. Semivariograms have been determined but little attempt has been made to obtain better semivariograms in the plane of the mineralised zone. As a result, downhole semivariograms have been applied in a non-optimal direction.

The block size used is considered acceptable but its selection is not fully justified in the mineral resource estimation report (P.J. van der Merwe, 2004).

Drillhole grades from holes used in the resource estimate were averaged for comparative purposes. This evaluation resulted in an average grade of 1.13g/t Au, some 5% higher than the estimate using geostatistics. This confirms the robustness of the resource estimate.

The classification of an Inferred Mineral Resource is appropriate.

17.1.6 Recommendations

The drilling program needs to be designed with the resource estimation in mind. This implies that the drilling method and inclination of the holes needs to be standardised as far as possible to minimise the impact of varying support on the geostatistical evaluation.

It may be feasible to use RC drilling with a minimal amount of diamond drilling. Samples from both drilling methods may be used in the resource estimate, provided that a statistical comparison is made and some RC holes twinned with diamond. The current RC sample splitting process and resultant sample size would have to be revised.

The gold assays should be undertaken by the same laboratory. TEAL should introduce standards into the assay programme to ensure consistent and reliable data for further grade estimation. The continued use of duplicates and blanks is recommended. The coarse gold effect and it's potential affect on the grade estimate needs to be borne in mind but the use of an appropriate sample size should obviate the need for screened fire assays.

Further work is required in the determination of bulk densities for the individual lithotypes to improve the level of confidence in the estimate of the tonnages. This should include the bulk densities of the oxidised and fresh material, for both mineralised and waste material. At a later stage the level of oxidation will be important for accurately modelling the mineral resources and reserves, as well as the influence on metallurgical treatment and metal recoveries.

It is recommended that bulk density determinations are undertaken using an appropriate weight in air/weight in water method on sealed drill core, and the current method of using pycnometer readings on pulped material should be discontinued.

17.2 Mineral Reserves

No Mineral Reserves have been estimated for any of the mineral properties comprising the Otavi Exploration Project.

18 FEASIBILITY STUDIES

18.1 Introduction

Due to the current status of the available data, the Otjikoto mineral resource is in the Inferred category and any evaluation work should be considered preliminary in nature. TEAL conducted a project assessment study, which included evaluating the technical feasibility of mining and processing the Otjikoto deposit. This study was intended to show whether a mining and processing operation could be undertaken by conventional methods should sufficient resources be delineated. The results of this work have highlighted certain aspects of the project that warrant further investigation. These factors will influence the design of future exploration and evaluations programmes.

18.2 Mining Operations

Badger Mining and Consulting (Pty) Ltd ("Badger") was approached in November 2003 to conduct a technical feasibility evaluation on the Otjikoto Project. The study is based on a conceptual in-situ resource (after layout losses but no geological losses applied) of 2.2 million tonnes of oxide mineralised material and 10.8 million tonnes of sulphide mineralised material. The preliminary mine design is based on a production throughput of 110,000 tonnes per month of oxide material and 94,600 tonnes per month of sulphide material. The base case study assumed a crusher feed grade of 1.57g/t Au and 1.44g/t Au for oxide and sulphide material respectively. ***These numbers represent a subset of the formally estimated Inferred Mineral Resource, which is fully included in the formal Mineral Resource. They do not purport to be a formal Mineral Resource statement in themselves.***

The metallurgical test work showed that after crushing the sulphide material it was possible to upgrade the two coarse size fractions arising in an IPJ gravity concentration section. As a result, the mining operation has to supply 145,000 run of mine ("ROM") tonnes per month to keep the mill full. A project life of approximately 10 to 12 years has been calculated. It is assumed that opencast operations will be conducted by a contractor.

A number of mine designs were evaluated to meet TEAL's requirements, however none of the designs and schedules were able to solve the problem of mining an acceptable amount of waste in the first three years. In order to reduce the strip ratio the "optimised" mine model uses a steep pit slope, which has not been geotechnically assessed and remains theoretical. Future studies will need to address these geotechnical issues in order convert the resources into reserves.

18.3 Metallurgical Recovery

The Badger study reviewed the metallurgical design of the processing plant. The metallurgy study assumed gold recovery by gravity concentration and froth flotation. Although the assumed process flow was selected after examination of test results, it must be stated that the process flow is based on limited test work and could change as additional test work results are reported.

An overall gold recovery of 94.9% for oxide and 77.5% for sulphide mineralised material was used in the technical evaluation, based on the metallurgical work done to date, and the process flowsheet designed by Badger (also see Section 16). The results show that the mass feed to the mill could be reduced by 50.4% with only a 17.2% loss of gold when using an IPJ pre-concentration stage. The currently available test work indicates that a pre-milling concentration phase may be applicable and economically beneficial for the processing of Otjikoto mineralisation.

18.4 Markets and Contracts

It is assumed that the bullion produced by the mine will be refined at the Rand Refinery in Germiston, South Africa.

18.5 Environmental Considerations

None of the studies provided to RSG Global considered environmental aspects or waste disposal. These issues should be addressed in more detail in future evaluations.

18.6 Taxes

Mining companies are subject to normal tax of 37.5% with investment income taxed at 35%.

Namibia’s Minerals Act, Act No. 33 of 1992 does not specify the basis for calculating the royalty percentage but merely states that the royalty rate for gold mining companies would not exceed 5%. RSG Global recommends that future financial evaluations use a royalty rate of 5% as the base case.

Generally, a non-resident shareholder’s tax (“NRST”) of 10% is deducted from any dividend distributed by a company to a shareholder who is a non-resident and not carrying out business in Namibia. However, under the double taxation agreement between South Africa and Namibia, NRST of 5% is paid on dividends payable to companies registered in South Africa provided the recipient owns at least 25% of the payer of the dividends.

Exploration operations are of a capital nature and can be carried forward to the year in which the mine commences production and can be deducted that year. Deduction exceeding the income from mining operation can be carried forward and off set against any other income. Once the mine has commenced operations further exploration expenditure is immediately deductible.

Development expenditure can be carried forward until the year in which the mine begins production.

18.7 Financial Analysis

TEAL completed a preliminary financial analysis of the Otjikoto gold deposit, the details of which cannot be reported according to the requirements of NI 43-101 since the current mineral resource is classified as only an Inferred Mineral Resource.

18.8 Comment

Due to the current status of the available data, the results of the Badger study provide useful indicators to guide the project's future development. It can be concluded that, based on the current body of knowledge regarding the Otjikoto deposit, no major technical obstacle was found that would prevent mining and processing the deposit.

RSG Global concurs with Badger's conclusion that, to sustain a significant mining operation at Otjikoto, TEAL will need to discover additional resources of sufficient grade. Geological compilations, known grade distribution and geophysical results indicate that there may be a potential southwest extension of the known Otjikoto Mineral Resource. Additional exploration targets have also been identified toward the south (approximately 500m distant) and southeast (approximately 500m distant). The potential for further resources could create the correct economy of scale for Otjikoto and potentially allow the selective extraction of higher grade areas.

The in-situ Mineral Resource grade reported for Navachab (1.18g/t Au) is similar to the grades intersected at Otjikoto. At Navachab stringent in-pit grade control procedures define categories of mined material, varying from waste, mineralised waste and three categories of ore grade. This practice, combined with stockpiling, ensures an average crusher feed grade of approximately 1.6g/t Au, an improvement of some 35% (during 2003 this operational improvement in head grade amounted to nearly 60%).

At this time Otjikoto Gold Project requires further exploration and evaluation.

19 INTERPRETATION AND CONCLUSIONS

19.1 Exploration and Resource Potential

The northern parts of the Otavi Exploration Project (approximately 24% by area) have been well explored by several reputable companies for base metals (principally Cu, Zn, Pb). However, there is no recorded exploration for gold mineralisation, up until the time when TEAL discovered the Otjikoto gold deposit. The knowledge gained by TEAL in investigating the Otjikoto mineralisation has shown that there are many similarities between the Otjikoto mineralisation and that of the Navachab Gold Mine, some 260km to the southwest of Otjikoto. Indeed it is accepted by TEAL geologists and some independent workers (Steven, pers. comm.) that Otjikoto and Navachab have similar styles of mineralisation. RSG Global concurs with this view.

Exploration work done to date (field mapping, photogeological mapping, ground and airborne geophysics, structural analyses) have indicated a number of promising exploration targets. When the data from the recently completed airborne EM survey (Spectrem Air Ltd) is fully processed and interpreted, it can be expected that many of these exploration targets will be confirmed, and some additional targets identified.

The main geological units that may be preferentially mineralised have been identified and delineated by TEAL. Structural situations that are considered favourable have also been identified. The exploration tenements currently held by TEAL were selected to cover specifically these prospective areas. The correlation of such large scale features with detailed results from ground and airborne geophysics should identify targets to be investigated by drilling.

Given the well developed exploration model and exploration methods adopted, as well as the large ground holding of TEAL, the exploration potential of TEAL's Namibian properties are considered to be good.

The mineralisation encountered so far at Otjikoto and Navachab indicates bulk mineralisation grades generally less than 2g/t Au, with potential for higher grades in certain structurally advantageous areas. However, not enough of this style of higher grade mineralisation has been identified to make a definitive statement on the resource potential of the TEAL properties.

A Mineral Resource has been estimated at the Otjikoto Project, an area of approximately 26ha.

P. J. van der Merwe (Pr.Sci.Nat.), an employee of African Rainbow Minerals estimated an Inferred Mineral Resource as shown below. RSG Global agrees with the classification of the Mineral Resource, and considers that the data and methods used to determine the resource are generally appropriate for this type and classification of Mineral Resource. However, additional work is required if the resource category is to be upgraded to Indicated or Measured.

Inferred Mineral Resource estimate for the Otjikoto Project		
Mineralised Zone	**Tonnes ('000t)**	**Gold grade (g/t)**
Total	25,581	1.06

AngloGold Ashanti's Navachab mine may serve as the closest example of the potential at Otjikoto and surrounds. The Navachab mine has developed since its original discovery into its current world class status with 5.23Moz of gold in resources (137.7Mt at 1.18g/t Au, classified in accordance with the JORC and SAMREC Codes) (AngloGold Ashanti, 2004). The mine has recently converted to owner mining and is considering expansion options to increase production from the 2004 figure of 67,000 ounces per year.

RSG Global considers that the mining engineering and metallurgical test work completed to date show that a mining operation at the Otjikoto deposit is technically feasible, in the sense that no technical obstacles to conventional mining and mineral processing methods were encountered.

19.2 Data Adequacy and Reliability

TEAL uses a standardised GIS based database for exploration data, which standardises data capture, validation, storage and transfer, and does not allow unauthorised manipulation of data.

RSG Global found during the site visit (November 2004) that all data and information are properly filed, both in hardcopy and electronic format. Supporting data were easy to find, thus establishing an audit trail. RSG Global specifically asked for and checked geological logs and assay results against drill core and percussion chips.

The cores of five diamond and one RC drillholes were inspected and compared with the logs and assay results. No discrepancies were found for any of these holes.

The inhomogeneity of the gold in the +106µ fraction samples, particularly at higher gold grades, is clearly evident but not a significant obstacle to resource estimation. No bias is apparent in the data.

The analytical technique is considered appropriate and accurate. Comparison of the results from different laboratories indicates that the values are comparable between the various laboratories.

The absence of standard material to monitor assay accuracy and bias is the only significant deviation from a best practice quality control regime.

20 RECOMMENDATIONS

20.1 Exploration Strategy

A concise mineralising model for the Otjikoto deposit is still evolving, however, general principles appear to remain valid with regard to the focusing of the mineralisation and potential further sites for similar gold deposits. TEAL geologists have identified several important geological parameters to locate exploration targets for further discoveries, including prospective host lithotypes and structural settings.

A number of priority exploration targets have been generated. Ground follow-up of four of these targets are currently in progress, being anomalies 4OTK1, 10HB1, 14ECK1 and 14ZB1. The initial phase of work will include ground magnetic, gradient array IP and natural source audio-magnetotelluric (NSAMT) surveys as well as field mapping. The IP survey at 14ECK1, located in EPL3177, has been completed. Resistivity data from this work reveals a zone of low resistivity with a strike length of approximately 1,400m. This zone is located in the direct footwall of the Main Marker Marble and forms part of the targeted stratigraphic package. This geophysical response indicates that a strong possibility exist for sulphide mineralisation to be present. This target should be tested by drilling.

A high-resolution AEM and magnetic survey has been completed during February 2005 over prospective host stratigraphy and structurally favourable settings to further investigate a portion of the property. The survey tested a total of some 75km of strike of this amenable stratigraphy in EPLs 2409, 2410 and 2417. This survey also covered the Otjikoto gold deposit and will therefore also assist in investigating the exploration potential in the direct vicinity of the deposit itself. Data from this survey will be interpreted by a team of geoscientists to identify high priority areas for ground follow-up exploration activities.

In EPL 3177 there is a total strike length of approximately 70km of the targeted host lithotypes present. Exploration planning includes the surveying of this area with a high-resolution AEM survey to assist in the delineation of areas that have good potential to host mineralisation.

RSG Global considers the exploration strategy and methods pursued by TEAL to be appropriate.

RSG Global recommends that future assessments make use of only one primary and one umpire laboratory, in order to minimise potential uncertainties.

RSG Global also recommends that the use of industry standard reference material be made mandatory for all future assaying of samples that may be used in mineral resource assessments. It would be appropriate to insert a standard with mineralogy and concentration as close as possible to the sample material itself, at a frequency of 5% (i.e. one standard for every twenty samples submitted for analysis).

Resource definition drilling should endeavour to have consistent hole orientation and drilling methods, so that the samples will give a coherent support base for resource estimation. RSG Global understands that drill core gives good sample recovery in the deeper, non-oxidised, material, and the much better geological and structural information obtainable from core is essential in understanding the mineralisation. TEAL anticipates using RC drilling for the shallower, oxidised, portions on the mineralisation, mainly due to much better sample recovery. RSG Global agrees with this approach, but advises that additional twinning of RC and diamond drillholes should be undertaken, in order to demonstrate the reliability of this approach.

RSG Global considers that the technical evaluation work done to date on the Otjikoto gold deposit is of sufficient detail and quality for the current size and status of the deposit. The focus for the immediate future should be on expanding the known mineralisation, and finding additional deposits. The strategy and methods proposed by TEAL to pursue these goals are considered appropriate.

20.2 Exploration Budget

TEAL prepared exploration expenditure budgets for the Otavi Exploration Project, which is focussed on finding and testing new mineralisation, and the Otjikoto Project, which is aimed at increasing the known mineralisation at this locality.

20.2.1 Otavi Regional Exploration Programme

The exploration budget proposed covers two years of exploration, and covers the following activities:-

- **Year 1**
  - Spectrem airborne EM (2005) survey results appraisal
  - Ground follow-up of airborne EM anomalies
  - Continued regional exploration drill testing
  - Provision for advanced exploration (resource definition) of specific targets.
- **Year 2**
  - Airborne electromagnetic survey phase 2
  - Ground follow-up of airborne EM and other anomalies
  - Results appraisal and prioritisation
  - Regional exploration drill testing phase 2
  - Provision for advanced exploration (resource definition) of specific targets.

The combined (Year 1 plus Year 2) budget for the proposed work is estimated at US$3 million.

20.2.2 Otjikoto Mineral Resource Extension and Exploration

TEAL proposes the following exploration activities and budget:-

- **<u>Year 1</u>**
  - Exploration drilling: extension of current Mineral Resource
  - Exploration drilling: new exploration targets
  - Delineation drilling: grade distribution (down plunge)
  - Delineation drilling: OTA, hangingwall and bottom vein zones exploration
  - Assays and mineralogy
  - Geological modelling and assessments
  - Project management and logistics.

Budgeted amount for Year 1: US$1.8 million.

- **<u>Years 2 and 3</u>**
  - Confirmation drilling
  - Geological modelling and assessments
  - Geotechnical assessments
  - Geohydrological investigations
  - Feasibility study
  - Provision for advanced metallurgical test work.

Budgeted amount for Years 2 and 3: US$4.2 million.

RSG Global considers the proposed work schedules and budgets to be reasonable, and justified by the technical merits of the mineral properties. Depending on results from continued drilling at Otjikoto, feasibility work may have to be delayed to incorporate an expanded mineral resource.

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22 GLOSSARY OF ABBREVIATIONS, DEFINITIONS AND TECHNICAL TERMS

AA	Analytical technique – Atomic Absorption spectroscopy technique.
AEM	Airborne electromagnetometry.
aerial photography	Photographs of the earth's surface taken from an aircraft.
airborne magnetic surveys	Surveys flown by helicopter or fixed wing aircraft to measure the magnetic susceptibility of rocks at or near the earth's surface.
aircore drilling	An air drilling technique employed in poorly consolidated rocks which is generally more efficient and accurate than alternative methods.
alkaline intrusive	An intrusive igneous rock characterised by a relative abundance of alkali minerals.
amphibole	A common mafic rock forming magnesium-iron-calcium-aluminium silicate mineral.
amsl	Above mean sea level.
AngloGold Ltd	Supplementary Mineral Resource and Ore Reserve information 2003. AngloGold Ltd.
anticline	A fold, generally with strata dipping in opposite directions, which core contains the stratigraphically older rocks.
ARM	African Rainbow Minerals Limited.
Au	Gold.
AVDALE	Avdale Namibia (Pty) Limited.
Badger	Badger Mining and Consulting (Pty) Ltd.
Basalt, basaltic	A dark, fine-grained extrusive igneous rock, composed of feldspar and iron and magnesium rich minerals.
basement	Crust of the earth underlying younger sedimentary deposits.
biotite	A dark brown to green magnesium-iron mica commonly found in igneous and metamorphic rocks.
breccia	Rock comprising angular fragments enclosed in a matrix, usually the result of persistent fracturing by tectonic or hydraulic means.
brecciated	Condition applied to an intensely fractured body of rock.
BQ core	Diamond drill core with a diameter of 36.5mm.
chalcopyrite	A common sulphide ore of copper, $CuFeS_2$.
chlorite	A green coloured hydrated aluminium-iron-magnesium silicate mineral common in greenschist facies metamorphic rocks and alteration systems.
CIM Standards	CIM Standards on Mineral Resources and Reserves (Canadian Institute of Mining, Metallurgy and Petroleum, August 2000).
competency contrast	Evident where two adjacent rock types, on deformation, behave in a brittle (stiff) and ductile (plastic) fashion respectively.
Cu	Copper.
CZ	Central Zone (of the Damaran tectonostratigraphy).
diamond drilling	Method of obtaining cylindrical core of rock by drilling with a diamond set or diamond impregnated bit.
dip	The maximum angle at which a planar geological feature is inclined from the horizontal.
disseminated sulphides	Small scattered grains or accumulations (blebs) of sulphide minerals occurring in between other, more abundant rock forming minerals (such as orthopyroxene or pyroxenite).

dolerite	A medium grained basic intrusive rock composed mostly of pyroxenes and sodium-calcium feldspar.
downhole surveying	The electronic or physical measurement of the three dimensional position of a drillhole, measured by means of lowering instruments down the hole.
DTM	Digital Terrain Model, similar to DEM, but with relative height.
ductile deformation	Deformation of rocks involving permanent stretching or bending in a plastic manner without breaking.
dyke	A tabular body of intrusive igneous rock, crosscutting the host strata at a high angle.
electromagnetic (EM)	Geophysical method used to measure electromagnetic waves in the earth's surface.
EPL	Exclusive Prospecting License.
EPZ	Export Processing Zone.
ERL	Exploration Reconnaissance License.
feldspar	A group of rock forming minerals.
feldspathic	Rock containing interstitial (in between) feldspar.
felsic	Light colour rocks containing an abundance of any of the following – feldspars, feldspathoids and silica.
felsic volcanic	A volcanic extrusive rock which has a high proportion of silica, potassium and sodium and low iron and magnesium.
flux, fluxing	Addition of chemicals to samples to assist with analytical procedure or technique.
folding, fold	A term applied to the bending of strata or a planar feature about an axis.
footwall	The mass of rock below a fault, vein or zone of mineralisation.
gabbro	A coarse grained intrusive rock, which is low in silica and has relatively high levels or iron and magnesium minerals.
granite	Coarse grained igneous rock containing mainly quartz and feldspar minerals and subordinate micas.
g/t	Measure of concentration – grams per metric tonne.
hangingwall	The mass of rock overlying a zone of mineralisation or a fault.
horizon(s)	horizons or tabular layers typically containing PGE mineralisation.
HQ core	Diamond drill core with a diameter of 63.5mm.
HTLP	High temperature – low pressure.
ICP-OES	Analytical technique Inductively Coupled Plasma – Optical Emission Spectroscopy.
ICP-MS	Analytical technique, Inductively Coupled Plasma – Mass Spectrometry.
ILR	In-line leach reactor.
Indicated Mineral Resource	That part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough for geologic or grade continuity to be reasonably assumed. As defined in the CIM Standards.

Inferred Mineral Resource	That part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. As defined in the CIM Standards.
in-situ	Latin phrase for 'in place', i.e. not removed or disturbed.
IP	Induced polarisation.
IPJ	In-line pressure jig.
IPO	Initial Public Offering.
ITR	Independent Technical Report.
JORC Code	Australasian Code for Reporting of Mineral Resources and Ore Reserves (Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, September 1999).
JSE	Johannesburg Stock Exchange.
km	kilometre.
landsat imagery	Photographs of the earth's surface collected by satellite and commonly processed to enhance particular features.
layered intrusive complex	A large body of igneous intrusive rock which has a layered appearance in response to progressive introduction of magma and/or differential rates of cooling.
lithotypes	Rock types.
mafic	Descriptive of rocks composed dominantly of magnesium and iron rock-forming silicates.
magnetic or aeromagnetic survey	Determination of the deviation in the earth's magnetic field in response to the inherent magnetism of different rock types either on the ground or from an aircraft (aeromagnetic).
mamsl	metres above mean sea level.
mantle	The layer of the earth between the crust and the core, usually lying at depths between 10km and 35km.
Measured Mineral Resource	That part of a mineral resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough to confirm both geological and grade continuity. As defined in the CIM Standards.
metasediments	A sedimentary rock that has been altered through a process of metamorphosis.
Mineral Resource	A concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge.
Mineral Reserve	The economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. Mineral reserve includes diluting materials and allowances for losses which may occur when the material is mined.

mineralisation	The concentration of economic minerals or metals in a rock.
Mintek	South African parastatal institution specialising in minerals processing technology.
mm	millimetre.
MME	Ministry of Mines and Energy (of Namibia).
µ	micron: a millionth of a metre.
NCZ	Northern Central Zone (of the Damaran tectonostratigraphy).
Ni	Nickel.
NI 43-101	Canadian National Instrument 43-101.
NP	Northern Platform (of the Damaran tectonostratigraphy).
NQ core	Diamond drill core with a diameter of 47.6mm.
NZ	Northern Zone (of the Damaran tectonostratigraphy)
N$	Namibian Dollar, the currency of Namibia, equal to one South African Rand
olivine	An olive green magnesium-iron silicate $(Mg, Fe)_2SiO_4$, common in mafic and ultramafic igneous rocks.
pegmatite	A very coarse grained intrusive igneous rock which commonly occurs in dyke-like bodies containing lithium-boron-fluorine-rare earth bearing minerals.
percussion drilling	A drilling method which uses a percussive hammer on a set of drill rods to drill a hole, using compressed air to power the hammer and remove drill cuttings.
ppb	parts per billion.
Probable Mineral Reserve	The economically mineable part of an indicated, and in some circumstances a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.
Proven Mineral Reserve	The economically mineable part of a measured mineral resource demonstrated by at least a Preliminary Feasibility Study. The study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.
pyrite	A sulphide mineral of iron, FeS_2.
pyrrhotite	An sulphide mineral of iron, FeS.
Qualified Person	Person with the necessary qualifications and experience to determine the geology and quantify the resource or reserve of a property or deposit according to the CIM Code.
RC drilling	Reverse Circulation: a drilling method in which the fragmented sample is brought to the surface inside the drill rods, thereby reducing contamination.
rock chip sampling	The collection of representative samples of rock fragments within a limited area.
ROM	Run of mine.
RSG Global	RSG Global Pty Limited.
SADEC	Southern African Development Economic Community. Member countries: Angola, Botswana, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.
SAMREC Code	South African Code for Reporting of Mineral Resources and Mineral Reserves (The South African Mineral Resource Committee under the auspices of The South African Institute of Mining and Metallurgy, March 2000).

sandstone	A sedimentary rock composed of cemented or compacted detrital sediment, principally quartz grains.
scree	A sheet of loose fragmental material lying at or near the base of a slope.
sericite	A white or pale apple green potassium mica.
siliceous	Containing silica.
silicified	The alteration or replacement of primary minerals by silica.
sill	A sheet of igneous rock which is flat lying or has intruded parallel to stratigraphy.
skarn	Mineralisation formed in predominantly carbonate lithotypes where in contact with magmatic derived fluids.
stratigraphic	The sorting (or ordering) of laterally extensive geological units on the basis of age. A particular stratigraphic horizon or layer will occupy the same position in a geological succession at different localities.
stratigraphy	Composition, sequence and correlation of stratified rocks.
sub-outcrop	Occurrence of a particular stratigraphic horizon near surface, and covered only by soil of surficial cover (such as scree).
soil geochemistry	The determination of relative or absolute abundances of elements in soil.
sphalerite	A black to brown sulphide ore of zinc, ZnS.
syenite	An intrusive igneous rock composed essentially of orthoclase and little or no quartz and ferromagnesian minerals.
SZ	Southern Zone (of the Damaran tectonostratigraphy).
t	metric tonne.
TEAL	TEAL Exploration & Mining Incorporated (collectively with its subsidiaries).
thrust fault	A reverse fault or shear where the fault plane has a low angle dip.
TNW core barrel	Barrel used in conventional drilling to collect TNW diamond drill core (which has a diameter of 60.5mm).
trenching	Long narrow excavation typically dug with earth moving equipment to expose geological formations obscured by a thin, younger cover (typically soil).
ultrabasic	See ultramafic.
ultramafic	Igneous rocks consisting essentially of ferro-magnesium minerals with trace quartz and feldspar.
US$	United States Dollars.
weathered horizon	Rock formations that have been exposed to the atmosphere and which have become oxidized and hydrated. The process of weathering ultimately reduces rocks to soil.
xenolith	A small fragment or body of foreign rock preserved within a magma.
ZAR or R	Rand, the currency of South Africa.

23 CERTIFICATES

RSG Global Pty Ltd

Certificate of Qualified Person

As an author of the report entitled "Independent Technical Report: Otavi Exploration Project, Namibia" dated 29 March 2005, on the Namibian Mineral Properties of TEAL Exploration & Mining Incorporated (the "Report"), I hereby state:-

1. My name is Andre Johannes van der Merwe and I am Regional Manager Southern Africa with the firm of RSG Global Pty Ltd of 604 Kudu Avenue, Allen's Nek 1737, Gauteng, South Africa. My residential address is 9 Sabre Avenue, Helderkruin Hill 1724, Gauteng, South Africa.
2. I am a practising geologist registered with the Australasian Institute of Mining and Metallurgy (AusIMM). I am a member of the AusIMM. I am also a Professional Natural Scientist (Geological Sciences) (Pr.Sci.Nat.) registered with the South African Council for Natural Scientific Professions.
3. I am a graduate of the University of Stellenbosch and hold a Bachelor of Science (Geology & Physics) degree (1985) from this institute. I am also a graduate of the University of the Witwatersrand and hold a Bachelor of Science with Honours (Geophysics) degree (1988) from this institute. I also hold a Graduate Diploma in Engineering (Mining) (1996) from the University of the Witwatersrand.
4. I have practiced my profession continuously since 1987.
5. I am a "qualified person" as that term is defined in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) (the "Instrument").
6. I have personally visited TEAL EXPLORATION & MINING INCORPORATED's Namibian Mineral Properties on 1-3 November 2004. I have performed consulting services during and reviewed files and data supplied by TEAL Exploration & Mining Incorporated between 31 October 2004 and 16 September 2005.
7. I prepared Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 19, 20, 21, 22 and 23 of the Report.
8. I am not aware of any material fact or material change with respect to the subject matter of the Report, which is not reflected in the Report, the omission of which would make the Report misleading.
9. I am independent of TEAL Exploration & Mining Incorporated pursuant to section 1.5 of the Instrument.
10. I have read the National Instrument and Form 43-101F1 (the "Form") and the Report has been prepared in compliance with the Instrument and the Form.
11. I do not have nor do I expect to receive a direct or indirect interest in the Namibian Mineral Properties of TEAL Exploration & Mining Incorporated, and I do not beneficially own, directly or indirectly, any securities of TEAL Exploration & Mining Incorporated or any associate or affiliate of such company.

Dated at Johannesburg, South Africa, on 16 September 2005.

Signed: "A van der Merwe"

André van der Merwe BSc Hons (Geophysics), Pr.Sci.Nat., MAusIMM
Regional Manager Southern Africa

RSG Global Pty Ltd

Certificate of Qualified Person

As an author of the report entitled "Independent Technical Report: Otavi Exploration Project, Namibia" dated 29 March 2005, on the Namibian Mineral Properties of TEAL Exploration & Mining Incorporated (the "Report"), I hereby state:-

1. My name is Kenneth Graham Lomberg and I am Senior Consultant Resources with the firm of RSG Global Pty Ltd of 604 Kudu Avenue, Allen's Nek 1737, Gauteng, South Africa. My residential address is 37 Jan K Marais Avenue, Malanshof 2132, Gauteng, South Africa.
2. I am a practising geologist registered with the South African Council for Natural Scientific Professions (Pr.Sci.Nat.).
3. I am a graduate of the University of Cape Town and hold a Bachelor of Science with Honours (Geology) degree (1984) from this institute. I also hold a Bachelor of Commerce degree (1993) from the University of South Africa.
4. I have practiced my profession continuously since 1985.
5. I am a "qualified person" as that term is defined in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) (the "Instrument").
6. I have not personally visited TEAL Exploration & Mining Incorporated's Namibian Mineral Properties. I have performed consulting services during and reviewed files and data supplied by TEAL Exploration & Mining Incorporated between 15 November 2004 and 16 September 2005.
7. I prepared Sections 17 and contributed to the preparation of Sections 1, 11, 14, 19, 20 and 23 of the Report.
8. I am not aware of any material fact or material change with respect to the subject matter of the Report, which is not reflected in the Report, the omission of which would make the Report misleading.
9. I am independent of TEAL Exploration & Mining Incorporated pursuant to section 1.5 of the Instrument.
10. I have read the National Instrument and Form 43-101F1 (the "Form") and the Report has been prepared in compliance with the Instrument and the Form.
11. I do not have nor do I expect to receive a direct or indirect interest in the Namibian Mineral Properties of TEAL Exploration & Mining Incorporated, and I do not beneficially own, directly or indirectly, any securities of TEAL Exploration & Mining Incorporated or any associate or affiliate of such company.

Dated at Johannesburg, South Africa, on 16 September 2005.

Signed: "K Lomberg"

Ken Lomberg BSc Hons (Geology), BCom, Pr.Sci.Nat.

Senior Consultant Resources

RSG Global Pty Ltd

Certificate of Qualified Person

As an author of the report entitled "Independent Technical Report: Otavi Exploration Project, Namibia" dated 29 March 2005, on the Namibian Mineral Properties of TEAL Exploration & Mining Incorporated (the "Report"), I hereby state:-

1. My name is Steven Michael Rupprecht and I am Senior Consultant Mining Engineering with the firm of RSG Global Pty Ltd of 604 Kudu Avenue, Allen's Nek 1737, Gauteng, South Africa. My residential address is 39 Bristow Street, Constantia Kloof, Gauteng, South Africa.
2. I am a practising mining engineer registered with the Engineering Council of South Africa (Pr.Eng.). I am also a Fellow of the South African Institute of Mining and Metallurgy.
3. I am a graduate of the University of Nevada Reno and hold a Bachelor of Science (Mining Engineering) degree (1986) from this institute. I also hold a Doctor of Philosophy (Ph.D.) degree (2003) from the University of Natal (Mechanical Engineering).
4. I have practiced my profession continuously since 1987.
5. I am a "qualified person" as that term is defined in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) (the "Instrument").
6. I have not personally visited TEAL Exploration & Mining Incorporated's Namibian Mineral Properties. I have performed consulting services during and reviewed files and data supplied by TEAL Exploration & Mining Incorporated between 12 January 2005 and 29 March 2005.
7. I prepared Sections 16 and 18 and contributed to the preparation of Sections 1, 19, 20 and 23 of the Report.
8. I am not aware of any material fact or material change with respect to the subject matter of the Report, which is not reflected in the Report, the omission of which would make the Report misleading.
9. I am independent of TEAL Exploration & Mining Incorporated pursuant to section 1.5 of the Instrument.
10. I have read the National Instrument and Form 43-101F1 (the "Form") and the Report has been prepared in compliance with the Instrument and the Form.
11. I do not have nor do I expect to receive a direct or indirect interest in the Namibian Mineral Properties of TEAL Exploration & Mining Incorporated, and I do not beneficially own, directly or indirectly, any securities of TEAL Exploration & Mining Incorporated or any associate or affiliate of such company.

Dated at Johannesburg, South Africa, on 16 September 2005.

Signed: "S Rupprecht"

Steven Rupprecht BSc (Mining Engineering), Ph.D. (Mech. Eng.), Pr.Eng., FSAIMM
Senior Consultant Mining Engineering