

Exploration report

CORPORATE SUMMARY

Shield Mining Limited was listed on the Australian Securities Exchange on 27 September 2006. The Company has an office in Mauritania where it is exploring for gold and base metals, and a corporate head office in Perth, Australia.

Financing

Following the results of the drilling in April 2009, Shield undertook a rights issue in July 2009 to raise \$1.7 million. This issue closed in August and was fully subscribed. A further private placement of \$0.4 million was completed at the same time to raise a total of \$2.1 million before costs.

EXPLORATION REPORT

Licence Status

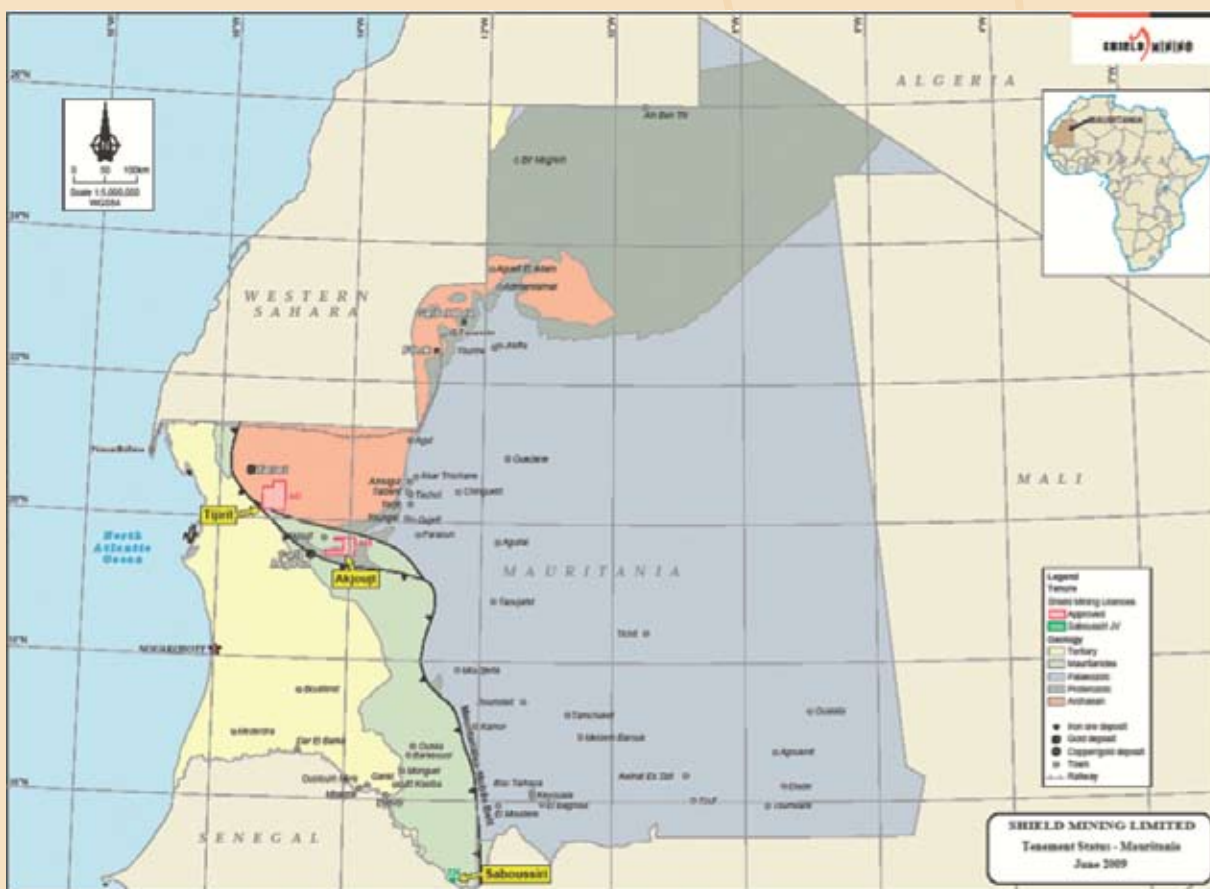
Shield has the following licences in Mauritania:

NAME	LICENCE	APPROVAL DATE	EXPIRY DATE	AREA KM ²	COMMENTS
Saboussiri	EP236	16 March 2009	16 March 2012	33	GMS joint venture
Tijirit	EL447	5 December 2007	5 December 2010	1,460	
Akjoujt	EL448	5 December 2007	5 December 2010	749	
			Total Area	2,242	

Permitting

During the year, Shield did not renew its licences except for those listed above. The main reason for this was the lack of sufficient prospectivity of the other licences and Shield's philosophy of not holding licences that are not prospective. A secondary reason was the cost of holding these licences, which increased substantially during the year.

Upon renewal, the Saboussiri licence was reduced in size to cover only the Diaguili anomaly and reduce holding costs.



Tijirit Project

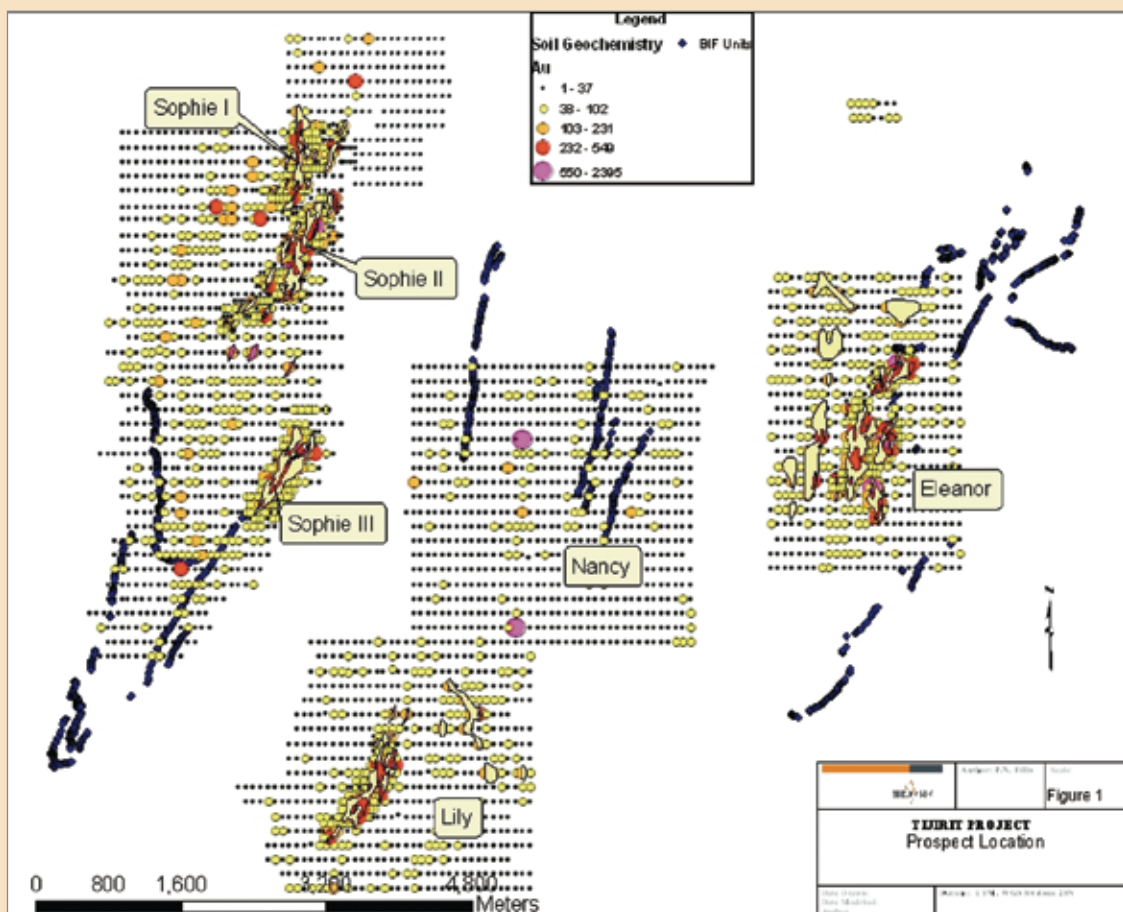
The Tijirit Project area is located 35 kilometres south-east of the Tasiast gold mine which is owned by Red Back Mining Inc and produces 230,000 ounces of gold per year. It is in an adjacent archean greenstone belt and has a similar geology to Tasiast. Previous explorers outlined broad-spaced (1km centres) gold in soil anomalies on Tijirit in the 1990s during the same campaign that delineated Tasiast.

During the 2008-09 field season, Shield continued its soil sampling programme and also undertook a trenching programme. Six prospects were located and trenched with encouraging results.

In April 2009, a small drilling programme of 3,250 metres of reverse circulation (RC) drilling was undertaken to cover three of the prospects. The drilling results confirmed the earlier sampling and trenching results by the Company that delineated the targets areas. The holes tested Sophie II, Sophie III and Eleanor prospects. Most holes were angled -50° or -60° and averaged 60m in length.

The highest grade intersections include:

- 6 metres @ 17.63 g/t Au (from 10m to 16m depth in ERC4);
- 6 metres @ 10.47 g/t Au (from 16m to 22m depth in SRC10); and
- 2 metres @ 24.90 g/t Au (from 56m to 58m depth in SRC24).



Future Work

The drilling results together with soil, rock chip sampling and trenching all demonstrate that Tijirit is host to gold mineralised structures in a style similar to that seen at the Tasiast gold mine in an adjacent greenstone belt. The Tijirit area had not been tested before in the subsurface prior to Shield's drilling programme in April. The permit has been sparsely explored to date and continued work is warranted not only on the mineralised structures defined but also on the untested portion of the permit where no soil sampling has yet been carried out.

First priority for the next phase of work will be additional drilling at Sophie II targeting the strike slip faults and mineralised horizons delineated subsurface to date, particularly at depths below the calcreted and weathered surface altered material. Second priority will be deeper drill testing of the Sophie III low-grade mineralised zone as well as testing of the Sophie I, Lily, Nancy and Eleanor West prospects. Regional work will also continue with extension of the soil sampling grid to cover those structures and banded iron formations (BIFs) not previously sampled by Bureau de Recherches Géologiques et Minières (BRGM)/Normandy La Source.

Plans showing the above interpretations on plan and section may be viewed on the website at www.shieldmining.com.

Saboussiri Joint Venture

In March 2007 Shield signed an agreement with General Mining Services (GMS) over the Saboussiri licence whereby the Company is entitled to earn a 60% interest in the potential copper/gold project. Saboussiri is a tenement in the southern Mauritanides close to the border with Senegal on which various companies have undertaken substantial work programmes in the past. Among other prospects, this work identified the Diaguili copper prospect and the Saboussiri hematite breccias on the licence.

The Company undertook an extensive soil and drainage and rock chip sampling programme over the whole of the Saboussiri licence area. However, the results showed that apart from the known anomalies there was little else of interest.

A VTEM (Time Domain Electromagnetic System) helicopter survey was carried out in January 2008, which identified a coherent anomaly at Diaguili. The Diaguili anomaly is close to and parallel to a line of hills containing the Diaguili copper prospect. The licence was then reduced in size, on renewal, to cover this anomaly.

The anomaly now requires some ground geophysics, trenching and then a short drill programme. With the concentration on the Tijirit Project, no work has been planned for this financial year.

Akjoujt

The geology of the Akjoujt licence is similar to the Guelb Moghrein gold/copper mine operated by First Quantum which is located 33 kilometres to the east of the licence.



Tabrinkout Prospect

The Tabrinkout Prospect is the site of a tungsten placer operation in the 1960s, with the recovery of 9.4 tonnes of WO₃ (wolframite – the tungsten host rock), grading 30% to 35%. The area was drilled by the French BRGM and the Mauritanian Office for Geological Exploration in 1975 and tungsten mineralisation was noted in the cores. This was followed up by OMRG around 1992 testing specifically for tungsten. OMRG trenched the target area and took at least 13 rock chip samples with best results as:

GOLD G/T	SILVER G/T	COPPER %	BISMUTH %
21.2	2.42	0.724	0
25.4	3.69	2.95	>1.0

However, no tungsten was recorded.

The prospect was also investigated by BRGM (as Normandy La Source) in 1997, following up the gold, rather than tungsten potential. BRGM undertook substantial drilling over a probable area of 500m x 1,000m, reporting isolated high gold values in intersections but with an overall low grade. Not all results have been sighted and are not confirmed. There is also major trenching and costeaning at the site, of uncertain origins.

The work by Normandy La Source at Tabrinkout is reported as indicating a similar geological setting to that of First Quantum Minerals' producing Guelb Moghrein copper/gold mine 33km to the west. The geochemical signature and association of minor metals with gold is also similar to Guelb Moghrein.

Limited historical data on the project has been acquired and is currently being reviewed to determine whether any of the +26 holes drilled to date could have missed mineralisation at depth.

Details of Sampling and Analysis: RC samples were collected every metre, split to approximately 1.25kg and composited every 2m to 2.5kg on site. Samples are transported by road to SGS Laboratories in Kayes, Mali. Gold only analysis is by aqua regia digestion thence flame AAS detection on a 50gm charge (0.01ppm Au detection limit) (SGS ARE155 method).

The information in this Report that relates to exploration results is based on information compiled by Mr Phil Fillis who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Fillis is a geologist consulting to the Company, with over 30 years' experience as a geologist. Mr Fillis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Fillis consents to the inclusion in the report of the matters based on his information in the form and context in which it is used.