

**Figure 15-3: The JF42 Exploration Licences surrounding the Jinfeng Mine**

(HCG and F3 indicated on plan)

### 15.1.3 Jinlou JV

The Jinlou JV (Figure 15-2) with Brigade 117 was signed in January 2005. Sino is currently earning 65% of the JV interests and may earn up to a possible 92.5% equity with further exploration.

The JV exploration licences cover approximately 25km strike length along the margin of the Laizhishan Dome immediately south and south-west of Jinfeng.

Lower Triassic shale, sandstone and marl sequences are similar to those at Jinfeng. Unlike Jinfeng, the area has undergone relatively gentle folding. On the eastern side of the Dome, north-east trending folds and north-east trending faults are common. These structures may have initially formed during south-east directed extension but have been subjected to later shortening, similar to the second fold event identified at Jinfeng.

On the southern edge of the dome, folding is very open. This area may be protected by a basement cratonic block which has protected this part of the Dome from significant shortening.

A number of small scale active and historic surface mines on the exploration licence. These mines are recovering gold from the surface oxide material of deposits similar to that at Jinfeng.

The main prospect areas currently identified are:

- Luofan-Weiruo which is a group of prospects on a north-east trending parallel set of 2 faults (east and west). The prospects in this area are Luofan (northern most prospect), Guabang, Pingjing and Weiruo (southern most prospect). Only at Weiruo has the eastern shear zone (and anticline) been drill tested. In the north at Luofan Prospect, the two faults merge into one
- Naxi, which is a group of prospects and showing on a north-east trending fault, towards the south-eastern corner of the Dome
- Bannian (Figure 15-4), which is a group of prospects on north-east and north-west trending faults at the south-western corner of the Dome.

During 2005 geochemical surveys and an IP survey of approximately 20 line km was completed around Guabang, Shang Peng and Weiro prospects and identified anomalies near existing surface workings in the northern part of the licence.

Geological mapping at Naxi identified a 1.5km fault zone with numerous sulphide occurrences.

Drilling at some of these prospects during 2006 indicated some narrow low grade replacement-style gold mineralisation associated with silicification and high Arsenic.

- At Luofan IP chargeability anomalies coincident with the merging of the east and west shear zones have been tested with two drill holes. Surface rock chip samples returned less than 1g/t Au and pyrite was found in the drill holes coincident with the fault. No significant gold values have been returned from samples of the drill core
- At Guabang, two targets have been drilled to test a 1.5km long soil geochemical anomaly and a strong IP chargeability high located immediately to the west of the soil geochemical anomaly. Surface rock chip samples have returned gold values of 0.5 to 7.2g/t. No gold values greater than 1g/t Au have been returned from samples of the drill core.
- At Pingjing strong silica, limonite, pyrite and well developed quartz veining have been observed associated with a North-South fault (western fault zone) near the contact of Triassic shale with Permian limestone. Surface samples of the silicification from faults returned 0.3 to 2.26g/t Au. Two holes were drilled, which returned 2.5g/t Au over one narrow intersection in one hole.

- At Weiruo, surface rock chip samples return up to 16g/t Au with many samples returning greater than 1g/t Au. Eight drill holes at Weiro prospect were completed during 2006. Of these, six intersected narrow zones of low grade gold mineralisation within wider arsenic and antimony mineralisation zones associated with moderately dipping thrust faults. The best intersection is 5m at 2.0g/t Au (hole JLW009) over a narrow intersection in the western fault zone. No significant intersections were reported in the eastern shear zone
- Rock chip sampling in the area around Naxi and Bannian has returned gold values between 0.6 and 16g/t Au associated with high As.
- Three drill holes at Naxi intersected low grade gold mineralisation with strong arsenic anomalies in major faults. Further drilling was done to test a deeper IP chargeability anomaly without intersecting significant mineralisation.

At Bannian a strong IP chargeability anomaly was defined over a 1.2km strike length fault striking north-west. Drilling of this feature is in progress at the time of writing this report.

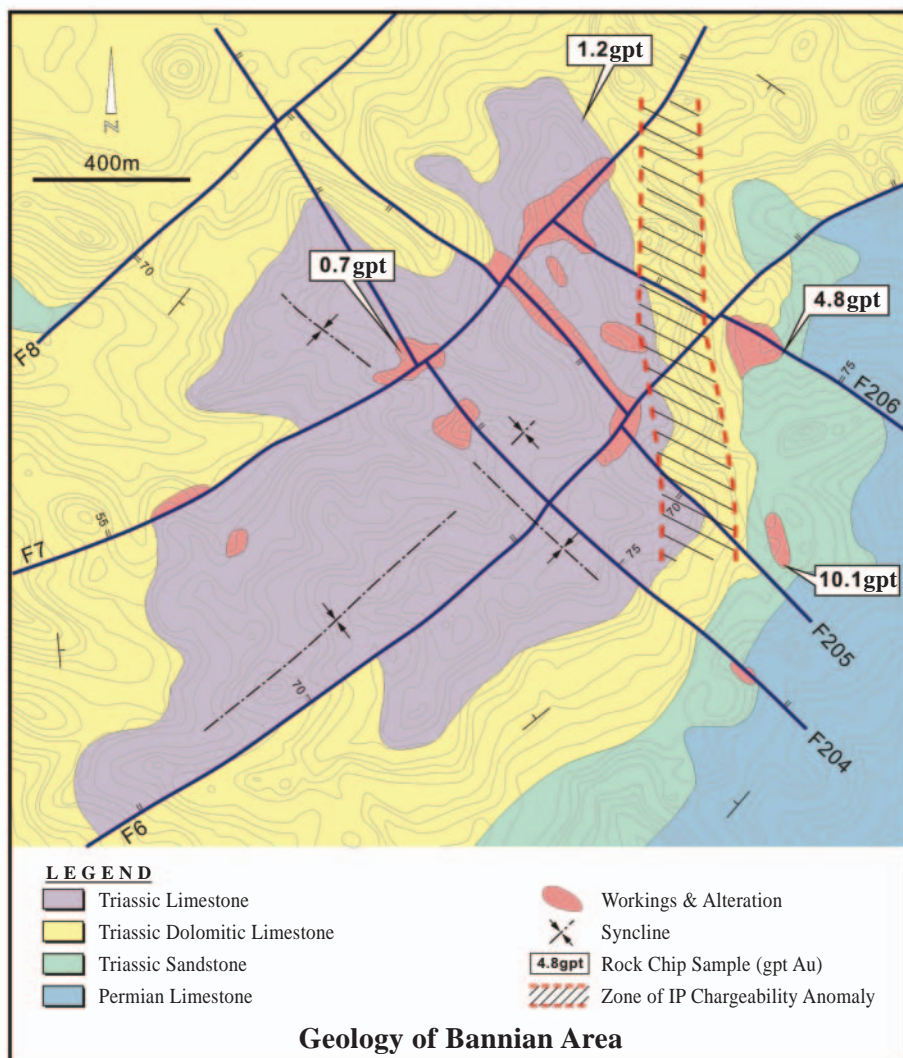


Figure 15-4: Geology and targets within the Bannian Prospects of the Jinluo Exploration Licence

#### 15.1.4 *Jindu JV*

The Jindu JV is broken down into three geographic areas within the Golden). Jindu 1 contains the ground that occurs at the edge of the Dome (Figure 15-2).

Sino is earning 75% of the JV interests. Field work commenced on the Jindu tenements during 2006 and comprised follow up of stream sediment surveys, soil geochemistry, rock chip sampling and geological mapping. A number of the stream sediment gold and arsenic geochemical anomalies have been targeted for follow up. Within the Jindu I project, 1,471 stream sediment samples, 429 soil samples, 188 rock chip samples and 28.5km<sup>2</sup> of mapping has been completed.

As part of this review, the Pogao prospect was visited to gain a better understanding of the styles of mineralisation on the licences at the edge of the Dome. The style of mineralisation is similar to that in the Jinlou JV. A number of faults were observed, which have a control on the distribution of disseminated sulphides. In and around these faults there are a number of surface workings where gold is being recovered from the weathered sulphides. The style of mineralisation is generally similar to that at Jinfeng.

Initial orientation mapping and sampling at Jindu II started in latter part of 2006.

#### 15.1.5 *Guangxi JV*

On 2 September 2006, Sino entered a new JV with the Guangxi Institute of Regional Geology Survey (GIRGS) which includes joint tenure over fourteen exploration licences in the Golden Triangle centred on the Leye Dome, Lingyun Dome and Longlin Dome in Guangxi province (Figure 15-1).

Sino has the right to earn up to 85% of the interests of the JV with GIRGS, which then has an option to fund 15% of the exploration or JV an additional 10% to Sino.

The exploration licences cover an initial area of 67km<sup>2</sup> with agreements in place to expand this to 200km<sup>2</sup>. SRK did not visit the exploration licences or any of the prospects due to the very early stages of exploration and lack of any confirmed results.

Prospects on the Guanxi JV exploration licences reportedly display characteristics of Carlin-style replacement gold, similar to that at Jinfeng.

Exploration work undertaken by GIRGS to 2006 includes:

- Geological mapping (7km<sup>2</sup> at 1:2,000 scale and 31km<sup>2</sup> at 1:10,000 scale) at six prospects
- Soil lines (203km) at six prospects
- Trenching (12,600m<sup>3</sup>) at six prospects
- Nine adits (718m) at five prospects
- Eleven drill holes (1,685m) at two prospects
- Stream sediment sampling (200km<sup>2</sup>)
- IP (40 line km at four prospects).

The stream sediment survey reports zones of strongly anomalous gold and arsenic in stream sediment surveys over several kilometres.

Some gold mineralisation has been reported from limited drilling, surface trenching and adits at some of the prospects, however Sino has yet to follow up on the results of this exploration or confirm the nature of the mineralisation.

Surface mining of the oxide deposits over some of the prospects has occurred. No production results have been recorded at these workings.

#### *Greatlands JV*

In October 2006, Sino entered a JV with Brigade 105 of the Guizhou Bureau of Geology and Mineral Resource. The JV covers seven exploration licences in north-western Guizhou Province, along strike from the Nibao gold deposit (Figure 15-1).

The Project is concentrating on the Lianhuashan Anticline which is part of a polymetallic (Fe-Cu-Pb-Zn-Au-Ag) metallogenic zone. Mineralisation styles similar to that at Jinfeng have been reported, but are yet to be reviewed by Sino. Brigade 105 has completed a stream sediment survey which has defined an extensive north-easterly trending anomaly which follows a number of regional faults mapped at surface.

Within the exploration licences, some mining of surface oxidized sulphide (down to approximately 20m below surface) has been done. The mineralisation is controlled by faults and fractures in Permian limestone.

#### **15.1.6 Golden Triangle Proposed (Future) Exploration**

Summarises the proposed future exploration for the GTBU.

**Table 15-1: Summary of Exploration likely in 2007 at Jinfeng and GTBU**

<u>Project</u>	<u>Geochemistry</u>	<u>Geophysics</u>	<u>Mapping &amp; Sampling</u>	<u>Drill Testing</u>	<u>Notes</u>
Jinfeng Mine Lease				36 drill holes Each 850 — 900m depth	Target deep parts of deposit
JF42 licences		10km 3D IP		5,000m in 2 phases	Laugi, Liutan, SE of Liutan, Honggei
Jinlou JV		30km of IP (including Naxi) Possibly follow up with CSAMT	10km <sup>2</sup> of detailed mapping 1,000m <sup>3</sup> of trenching (including Naxi)	5,000m — in 2 phases probably targeted at Bannian, Naxi and Loufan prospects	Bannian drilling depends on results of current program. Naxi and Loufan drilling following reconnaissance data compilation.



<u>Project</u>	<u>Geochemistry</u>	<u>Geophysics</u>	<u>Mapping &amp; Sampling</u>	<u>Drill Testing</u>	<u>Notes</u>
Jindu JV		40km IP	70km <sup>2</sup> selected areas mapped at 1:10K scale 3,000m <sup>3</sup> trenching	3,000m	Focus on JD1 and test at least 5 targets
Guanxi JV	50km of soil traverses	70km IP	Selected areas mapped at 1:10K scale 3,500m <sup>3</sup> trenching	5,000m	Prospects of interest are: Gengxi, Bayran, Xiaojilai and Yandan
Greatlands Project	50km <sup>2</sup> stream sediment survey. 70 km soil	60km IP	60km <sup>2</sup> selected areas mapped at 1:10K scale 3,500m <sup>3</sup> trenching	2,500m	Identify 2–4 prospects for follow up detailed testing

#### *JF42*

On the JF42 licences, 2 to 3 targets are expected to be followed up in 2007 with the aim of discovering Resources that would be possible to send to the Jinfeng development or develop as a stand alone operation. The main prospects of interest currently are Laowuji, Lintan and an area south-east of Lintan. 10km of 3D IP surveys and 5,000m of drilling is expected in 2007.

#### *Jinlou*

For 2007, the JV proposes to test 2 to 3 new targets by consolidating current knowledge from past exploration and further mapping and trenching. Approximately 30km of IP and 5,000m of drilling are also expected in 2007. Some of this may be follow up drilling of the Bannian prospect, depending on the results returned from the 2006 drilling program at this prospect. Other drill holes are likely to be follow compilation and synthesis of the results of all work done across the JV.

In addition to drill testing reconnaissance IP and surface trenching is planned for Naxi. If the results of the IP are positive, Controlled Source Audio-Frequency Magneto Tellurics (CSAMT) may also be used to define deeper targets.

At Loufan, further work is proposed for the eastern prospects thought to be associated with a fault zone and anticline complex that has been defined during the 2006 exploration. This structure is associated with IP anomalies and remains relatively poorly tested. This may also include drill testing.

#### *Jindu*

The focus on the Jindu JV licences will be those in close proximity to current development at Jinfeng (referred to as 'Jindu 1').

Following the successful stream sediment survey undertaken in 2006, it is expected that 7 or 8 follow up prospects will be selected for detailed mapping (70 km<sup>2</sup> at 1:10,000 scale) and surface trenching (3,000m<sup>3</sup>). In addition, 40km of IP has been budgeted to support the surface mapping and assist with drill target identification.

Following successful identification of targets, 3,000 metres of drilling is expected at JD1. At this stage it is expected that Pogao and will be important follow up areas.

### *Guangxi*

In the Guangxi JV 1:10,000 scale mapping is planned to identify at least 5 targets at the main prospects of interest. It is expected that 50km<sup>2</sup> of mapping will be required, which will be supported by the 40km of IP that has been completed in 2006 and a further 70km which is planned for 2007.

It is expected that some of the areas mapped will require follow up trenching and soil geochemistry. 3,500m<sup>3</sup> of trenching and 50km of soil lines are planned for 2007 to assist in target identification.

5,000m of drilling is planned to test some of the Guangxi prospects in 2007. The main prospects of interest at this stage are Gengxi, Bayran, Xiaojilai and Yandan.

### *Greatlands Project*

At the time of writing this report, the geological data package from the JV partners had yet to be received and reviewed. The objective of the 2007 program for the Greatlands Project to follow up on 2 to 4 target areas of interest, which have been identified from previous investigations by Brigade 105. The programme may include stream sediment survey (60km<sup>2</sup> expected), geological mapping, soil sampling (70 km expected), trenching (3,500m<sup>3</sup> expected), IP (60 km) and drilling (2,500m expected).

## **15.2 Northern China Business Unit**

### **15.2.1 White Mountain Project**

White Mountain Project (formerly Banmiaozi gold prospect) is located in Jilin Province (Figure 15-5), approximately 8km from the City of Baishan and 230km south-east of the provincial capital, Changchun. Baishan can be accessed by sealed road from Changchun. Driving time is approximately 4 hours one way.

At the end of June 2003, Sino entered the initial JV agreement to acquire the initial 80% interest in the JV at a cost of US\$0.84M payable over three years with an exploration commitment of up to US\$0.8M over the same period. Sino currently has 95% equity in the White Mountain project, which was increased from 80% in July 2006 at a cost of US\$625,000.

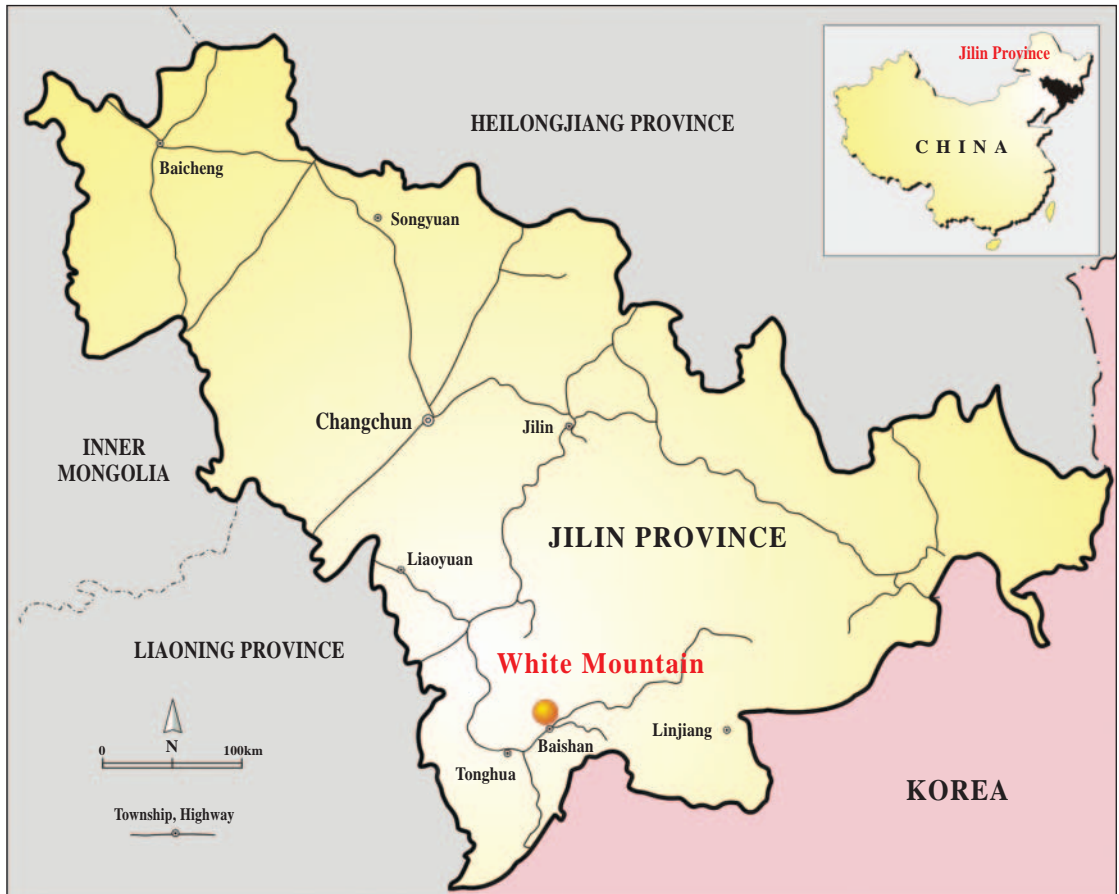


Figure 15-5: Location of the White Mountain Project near the Town of Baishan in Jilin Province

### *Geology*

White Mountain project is located on a regional north-east-striking fault zone that can be traced for 10km and hosts gold mineralisation over at least 6km which is part of a series of parallel thrust faults at the edge of a Proterozoic craton in Jilin province. The edge of the thrust fault complex at the edge of the craton is approximately 5 km to the north-west of the White Mountain project. The thrust faults separate the Proterozoic craton from a sequence of Phanerozoic (Cambrian — Cretaceous sedimentary rocks) which host the mineralisation at White Mountain.

The White Mountain deposit is hosted by a silica-rich breccia within a 40 to 45° south-east dipping regional fault (locally named the F100). The F100 occurs near the contact of Proterozoic quartzite and marl dominated sequences. The higher gold grades are hosted by breccia within the F100 fault, however not all of the breccias are strongly mineralised or have the same thickness of mineralisation.

The F100 is overprinted by a steeply dipping fault (locally named the F102), such that the F100 occurs only in the HW of the F102.

There are four stages of mineralisation at White Mountain, all of which are associated with elevated gold grades. Overprinting of the different styles of mineralisation has enabled a chronology of “stages” to be documented. These stages are likely to be related to a single hydrothermal event (probably spanning several 10’s to 100’s of thousands of years).



### *Exploration Methods*

Exploration work undertaken by previous tenement holders included surface mapping, rock chip sampling and trenching to test the surface geology and geochemistry. In addition one underground adit (with two cross-cuts through the mineralisation) has been completed which returned encouraging results including 28m at 5.3g/t Au and 13.3m at 5.1g/t Au.

Since the JV was established, Sino have completed a number of additional surface trenches, re-mapped and re-sampled the adits and completed 168 diamond drill holes at the time of writing this report.

### *Geophysical Exploration*

During 2006, several ground geophysical resistivity (IP) lines over the north-east extension of the F100 and F102 fault system indicated the mineralised system continued along strike in that direction. This work has provided additional targets for drill testing which have been pursued during the 2006 field season.

### *Controls on Mineralisation*

A model of the structural geology and controls on mineralisation has been done by SRK Consulting (SRK, 2006) using information collected from surface exposures near the adit entrance and from surface trenches with the bulk of information coming from observations of drill core.

As par of the structural model, detail of the F100 fault, the F102 fault and structure of the adit has been investigated. It is expected that the interpretation will be improved by more detailed drilling which was on-going at the time of writing this report.

The controls on mineralisation are:

- Reactivation of the F100 and F102 during mineralisation has a primary control on the distribution of gold
- The F100 has been compartmentalised by a number of steeply dipping transfer faults.
- Mineralisation on the F102 may be a result of the intersection between the F102 and the F100 (shallowly north-east plunging), or may have a similar control to that of the F100 (compartmentalised by transfer faults).

The controls on mineralisation result in the formation of a number of discrete south-plunging shoots within the plane of the breccia of the F100. These shoots are characterised by thicker zones of breccia-hosted mineralisation and higher gold grades within the thicker shoots (Figure 15-5: Location of the White Mountain Project near the Town of Baishan in Jilin Province). Although the deposit is hosted by brittle, structures which can be unpredictable in extent and thickness, the shoots in the F100 and F102 will be predictable such that the Identified Mineral Resource can be more precisely estimated (much of the currently Inferred resource can be upgraded to Measured and Indicated) and Ore Reserves will be able to be estimated from the upgraded reserves in the future.

*Resource Estimation*

In January 2007, Sino announced a JORC Resource from White Mountain as shown in Table 15-2.

**Table 15-2: White Mountain Resource (December 2005) estimated using a 1.0g/t Au cut-off**

<u>Category</u>	<u>Tonnes</u> ( <i>'000</i> )	<u>Gold Grade</u> ( <i>g/t</i> )	<u>Contained Gold</u> ( <i>'000 oz</i> )
Measured	2,594	3.6	304
Indicated	2,288	3.5	258
<b>Subtotal of Measured and Indicated</b>	<b><u>4,882</u></b>	<b><u>3.6</u></b>	<b><u>562</u></b>
Inferred	<u>2,861</u>	<u>3.1</u>	<u>284</u>
<b>Total</b>	<b><u><u>7,743</u></u></b>	<b><u><u>3.4</u></u></b>	<b><u><u>846</u></u></b>

The Resource estimate is based on analyses of 191 diamond drill holes, totalling 50,555m, as well as channel sampling from two underground adits and surface trenches. Estimation was done using Ordinary Kriging of the mineralised domain within the F100 and F102 fault breccia.

Table 15-3 contains some of the significant intercepts released from the 2005 and 2006 filed seasons drilling. All intervals are down hole thickness and so are not necessarily true thickness.

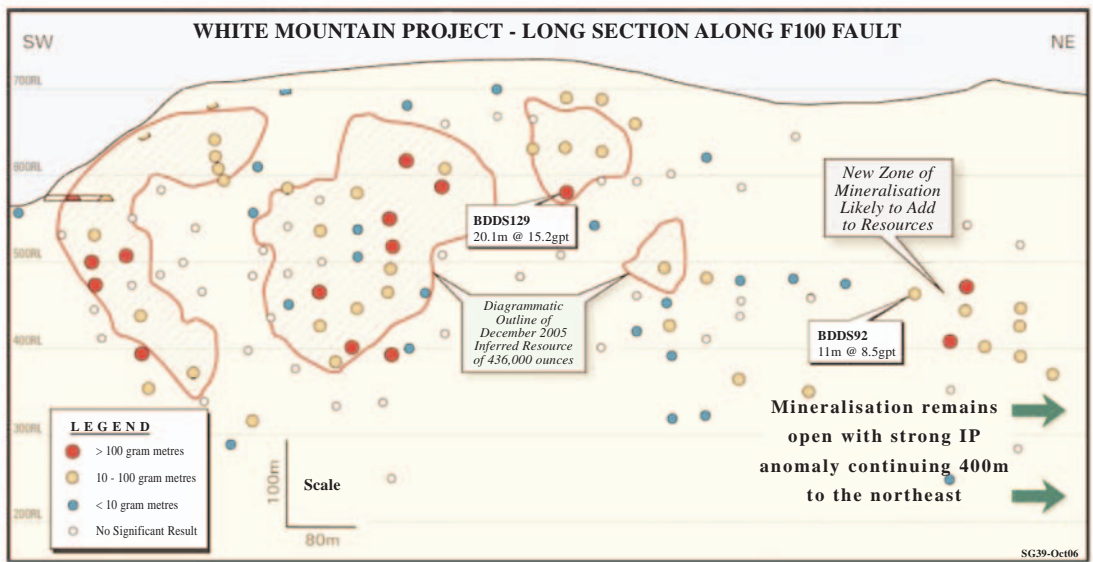
Table 15-3: Significant Intercepts from the White Mountain 2006 Drilling Program

Hole Number	From (m)	Interval (m)	Grade (g/t Au)
BDDS43	251.5	12.6	4.9
BDDS44	340.0	3.7	1.4
and	345.8	4.2	2.0
BDDS45	217.8	10.0	19.1
BDDS48	224.5	19.5	3.1
(including)	(229.5)	(10.0)	(4.3)
BDDS50	279.0	18.0	3.1
(including)	(279.0)	(11.0)	(4.1)
BDDS56	236.6	30.3	6.8
BDDS58	312.9	5.6	6.1
BDDS59	59.8	6.0	5.0
BDDS60	274.1	60.7	3.9
BDDS61	260.6	11.0	3.7
BDDS66	306.2	2.6	3.8
BDDS67	163.3	12.1	8.7
BDDS92	206.9	11.0	8.5
BDDS93	170.6	7.9	16.1
BDDS104	264.7	6.3	25.6
BDDS105	273.8	35.1	3.9
BDDS106	112.9	19.9	4.8
BDDS108	233.6	29.0	6.8
BDDS128	212.0	21.0	2.3
BDDS129	176.6	20.1	15.2

*Pre-feasibility*

Pre-feasibility work initiated at the time of writing this work includes:

- metallurgy and mineralogy
- environmental baseline
- hydrological and tailings dam
- geotechnical and structural geology and
- site and plant design.



**Figure 15-6: Long section through the White Mountain Deposit showing location of high grade x width within the F100 and F102 shoots**

**(upper 50 to 100m of the long section)**

#### *Extent of White Mountain mineralisation*

SRK has reviewed the sections and drill results provided by Sino and discussed with Sino the extent of currently known mineralisation at the White Mountain deposit. In January 2007 the known mineralisation at White Mountain extended over 1,300m horizontally, the depth extent ranged from 100m down dip to 600m down dip, i.e. in the plane of the F100 and F102 faults and the average thickness was in the range of 10m to 12m.

#### *Gold Occurrence and Metallurgy*

The work completed to date on the gold association indicates the bulk of the gold is very fine grained and associated with pyrite and marcasite with small amounts of chalcopyrite, sphalerite and galena in quartz, and associated with quartz + sericite alteration. Barite overprints the silicification and is commonly observed to be late (observed readily in the core). Limonite and other iron-oxides over print the barite and may be related to fracture oxidation (from surface).

Initial metallurgical testing has returned encouraging results for most of the different styles of mineralisation hosted by the F100 fault. Further testing is planned as part of the pre-feasibility study.

#### **15.2.2 Sanjianfang Project**

The Sanjianfang Project is in Heilongjiang Province and comprises one exploration licence which covers approximately 44km<sup>2</sup>, located approximately 425km north of Harbin. The licence is within a belt of volcanic-related deposit at the border of China and Russia, which was once the largest placer gold mining centre in China.

The Sino-Foreign JV Contract was signed in July 2005 is with Brigade 707 of the Heilongjiang Nonferrous Metals Geology Exploration. The JV allows Sino to earn a 70% interest by spending US\$1.44M on exploration.

The Sanjianfang exploration licence is proposed to be transferred to the JV in early 2007, which will allow Sino to move to the next exploration phase, involving drill testing the geophysical anomalies and further mapping and sampling.

The project is located immediately south of the Dong'an epithermal gold vein deposit (Figure 15-7) and covers approximately 10km of a potentially southern extension to the Dong'an system.

Brigade 707 has previously located four epithermal veins exposed at surface in the southern parts of the tenement. The veins are each from 300m to 600m in strike, with IP resistivity surveys indicating possible extensions under cover.

In 2005, geological mapping, geophysical data, geochemical surveys and surface trench results collected by Brigade 707 were reviewed.

In 2006, ground geophysical surveys, including Time-domain Electro-Magnetic (TEM), Induced Polarisation (IP) and ground magnetic techniques have been used to assist with interpretation of the geology and identification of targets.





**Figure 15-7: Location of the Sanjianfang Project which is immediately south of the Dong'an Deposit**

### 15.2.3 North Mountain JV

In August 2006, Sino entered a JV in Xinjiang Province in north-west China at the south-western periphery of the Gobi Desert near the boarder with Mongolia (Figure 15-8).

The JV tenements consist of four Mining Leases covering 19km<sup>2</sup> and three Exploration Licences covering 70km<sup>2</sup>.

The area is nearby to a number of porphyry deposits, which may be associated with relatively low tonnage gold and base metal deposits which are being mined on a small scale. Rock chip samples from a small scale surface mine returned up to 30 g/t gold and 120 g/t silver with elevated base metals.

An IP anomaly has been identified on the Beishan Mining Lease. Deep drilling of this target commenced in 2006. Three holes had been drilled at the time of writing this report, however no assay results had been returned from these.

Mineralisation is associated with quartz-base metal veins, with, epidote, gypsum, pyrite, sphalerite and galena. Mineralised zones have been observed which are up to 6m thick (down hole) within a thicker alteration zone. Sulphide intersected in the core corresponds well with the IP anomaly as defined by the conventional IP survey.



Figure 15-8: Location of the North Mountain JV in Xinjiang Province

### 15.3 Shandong Province Business Unit

In 2002 Gold Fields entered a 50% JV with Sino to explore Shandong Province for a significant gold deposit. In the June quarter 2006, Gold Fields withdrew from the JV and Sino has continued to maintain established JVs and establish new JVs. The Shandong Business Unit is concentrating on the historically important gold belts in Shandong Province which have been mined over the past 1,000 years (Figure 15-9).

Shandong Province currently accounts for approximately one-quarter of China's annual gold production. The area occurs in the south east of the North China Craton. The gold district hosts more than 100 known gold deposits, which form three basic types;

- Vein-hosted gold deposits, which generally contain less than one million ounces of gold,
- Fault-hosted and fault-related, disseminated gold deposits, and
- Unconformity-hosted gold deposits at the base of the Cretaceous sedimentary rock sequence.

Of these the fault-hosted deposits have been primary targets as they have greatest potential in terms of potential contained ounces. More than 80% of these lodes are hosted within Mesozoic granitoid rocks or their contacts with Archaean basement rocks.



**Figure 15-9: Location of the Sino JV projects in Shandong Province**

#### 15.3.1 Ludi JV

Sino has 70% of the interests of the Ludi JV with the BGMR Number 6 Brigade. Previously this interest was held jointly with Gold Fields, however they have subsequently decided not to proceed with exploration in Shandong. The current JV is with the Shandong BGMR, which has been active since July 2004.

The Heishan prospect is the main area of interest in the JV. At Heishan, a NNE-striking fault (Potouqing Fault) dips steeply south-east and controls a number of FW and HW splay faults which are mineralised. Along strike to the north-west and south-east of the Potouqing Fault are other known zones of alteration and mineralisation. Intersections between north-east and east-north-east trending faults plunge eastwards under the JV licences and provide a deep target.

In 2005, drilling of an IP chargeability high at the Heishan prospect intersected the Potouqing Fault and a wide zone of alteration, however sulphide was lower than expected and no significant gold values were returned from samples of the altered material. The fault at surface has been rock chip sampled and has returned 0.2 to 0.3g/t Au.

At the Heishan project within the JV, diamond drilling was done during 2006 aimed at targets within the Potouqing Fault. One drill hole at the eastern edge of the licence returned no significant analyses. Two holes were drilled at the western edge of the licence, one of which has returned a narrow zone of mineralisation (2m at 2.25g/t Au).

### **15.3.2 *Zhengyuan JV (Sandi Prospect)***

Sino have 80% of the interests of the JV which was signed on 6 June 2005. At that time, the 80% interest was held jointly with Gold Fields, however they have subsequently decided not to proceed with exploration in Shandong.

The Dazhuangzi fault-hosted polymetallic gold deposit is immediately north of the JV ground. Within the exploration licence, thin Quaternary alluvial cover (less than 10m thick) and Cretaceous cover rocks (less than 30m thick) cover the prospective sequences. As a result, surface sampling and mapping techniques are not possible.

The Sandi prospect is the main target area within the exploration licence. At Sandi, ground magnetic and IP geophysical targeting techniques were completed during 2006 with the aim of locating major faults in the Proterozoic sequence under the younger cover rocks. These surveys have located a number of major faults in the basement rocks. Shallow drill testing of targets identified from this work is expected to be undertaken in the short term. Possible targets include North-South striking faults and granitic rocks in the FW of these faults.

### **15.3.3 *Hexi JV***

On 5 September 2006, Sino announced a JV with Zhaoyuan Hexi Gold Limited (Hexi Gold) to explore a number of faults along strike from a number of existing gold mines. The JV was signed in August 2006.

The JV includes three exploration tenements (named Xinzhuang, Qiansungjia & Suijia) covering approximately 38km<sup>2</sup>. Sino is earning up to 70% interest in the JV by sole funding and managing the exploration.

Hexi Gold operates the Hexi Gold Mine in Shandong (Figure 15-10) which is within 10km of the exploration ground that forms part of the JV. The process plant at the Mine is reportedly operating below capacity, which provides a potential opportunity for the JV to process small deposits relatively rapidly as well as discover and develop larger deposits.

Within the JV area, north-east trending faults control the distribution of Mesozoic granitic intrusions and gold deposition. The Jiaojia Fault passes through the JV exploration permits and has a strong control on gold mineralisation. The Jiaojia Fault is one of the most important structures in Shandong Province as it hosts a number of significant deposits each containing more than one million ounces of gold.

The exploration ground occurs in two areas (Xinzhuang and Qiansunjia — Suijia), both of which host significant regional faults, which are known to contain gold mineralisation. Xinzhuang includes approximately 5km of the Jiaojia Fault. Within the tenement, the Jiaojia Fault is covered by approximately 30m of Quaternary sediments. As a result, the location of the fault has been established only through geophysics and widely spaced drill holes.

Hexi Gold has completed IP, CSAMT, EM, gravity and magnetic survey geophysical techniques to assist in defining the Jiaojia Fault and the location of sulphide controlled by the fault.

Berkeley Resources Limited in JV with Hexi Gold found gold mineralisation in the HW of the Jiaojia Fault. The best results from drilling by Hexi Gold And Berkley Resources Limited are:

- 1ZK1 — 1m at 9g/t Au in a fault zone with sericite alteration, and
- 6ZK1 — 1m at 0.6g/t Au in a fault. Re-sampling and analysis by Sino indicates elevated Ag and Bi
- XZD0005 — 3.2m at 1.39g/t Au where pyrite occurs with sericite.

Qiansunjia and Suijia are located on the north-east trending Jinhuanshan Fault and Linbei Fault and subsidiary splays. The faults are granite hosted and generally dip 75 to 70° south-east.

In 1998, small-scale mining was undertaken along the Jinhuanshan Fault to a depth of 120m, with an average grade of approximately 10g/t gold. Previous exploration work near the Jinhuanshan Fault includes IP geophysics and soil sampling. Surface rock chip samples recovered by Hexi have reportedly returned up to 3g/t Au. Hexi has four drill holes at Qiansunjia based on the results of this work, although no results were available at the time of writing this report.

The Linbei Fault has a control on other gold deposits outside the JV ground. The Lingshangou Mine, which is hosted by the Linbei Fault, has reportedly produced 300,000 ounces at an average grade of 6.6g/t Au.



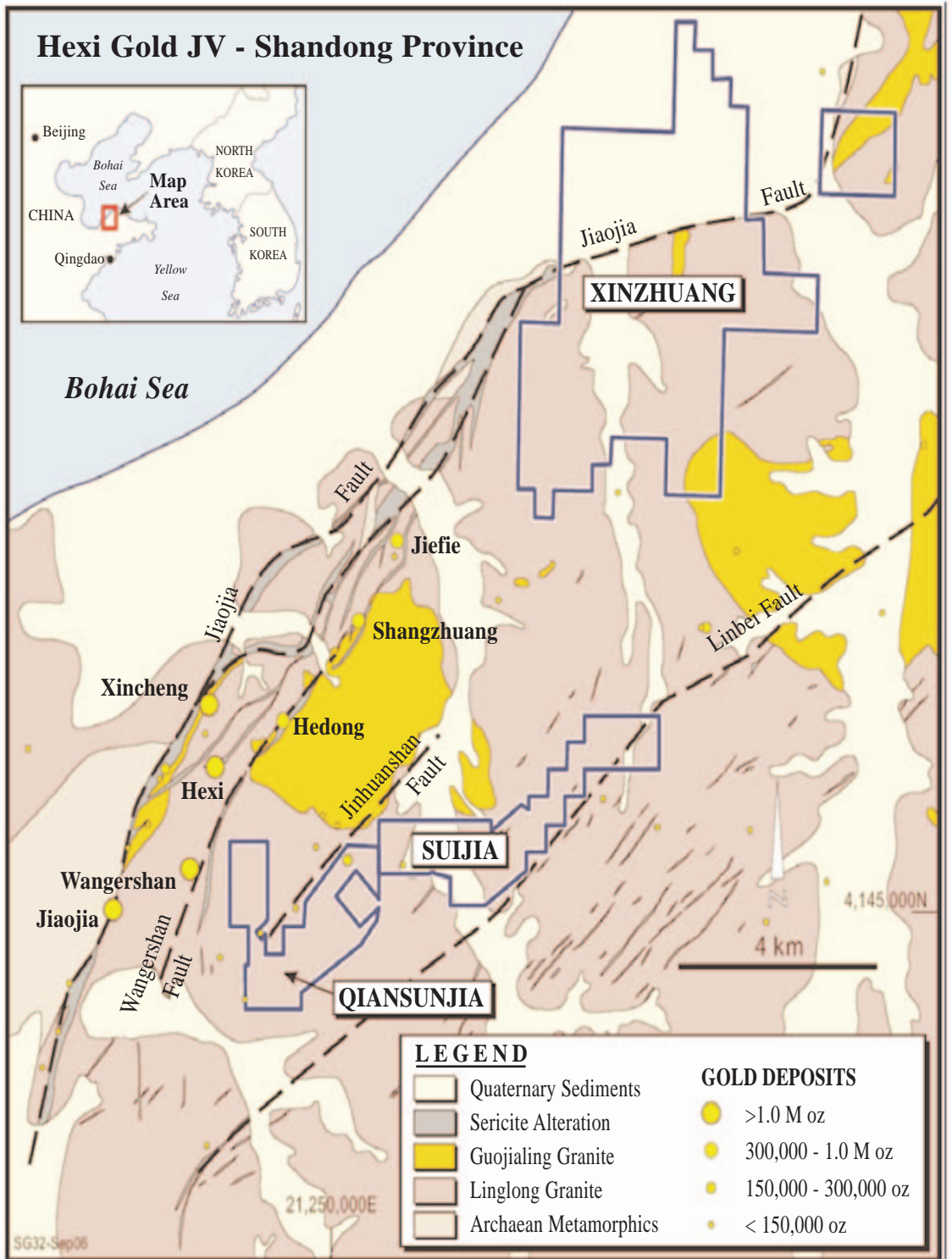


Figure 15-10: Geology of Hexi JV area and location of Hexi JV Licences

### 15.3.4 Shandong Province Proposed (Future) Exploration

#### *Ludi JV*

At Heishan on the Ludi JV Licence, drilling of the Potouqing Fault was in progress at the time of writing this report, although no results have been returned from this drilling. Future exploration of the JV Licence is contingent on the results of the current program.

#### *Zhengyuan JV*

Relatively shallow percussion drilling is proposed for the Sandi Prospect during 2007, to penetrate the cover and test the prospective bedrock geology as well as the conceptual targets generated by the geological interpretation of the geophysical program.

#### *Hexi JV*

Sino plans to commence drilling 5 holes in late 2006 on the Xinzhuang licence. The proposal is to test the FW side of the Jiaojia Fault which is considered more prospective, based on the location of other gold deposits within the field. Possibly the targeting will be assisted by ground-based geophysical techniques (IP and magnetic) in conjunction with shallow drilling designed to test bed rock geochemistry. The results of this work were not available at the time of writing this report.

Systematic exploration of the Suijia area has not been done. It is expected that the JV will drill test known prospects in 2007. Drill targets are expected to be based on surface mapping and sampling which has identified a number of alteration zones on the Linbei Fault and other parallel faults.

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## APPENDIX 1 — ABBREVIATIONS AND TECHNICAL TERMS

%	percent
/	Per, as in hours per day (hr/d)
°	Degrees, either of temperature or angle of inclination
3D	three dimensional
4D	four dimensional
A\$ or AUD	Australian Dollars
AARL	Anglo American Research Laboratory
Ag	Chemical symbol for silver
AMC	AMC Resource Consultants Pty Ltd
AMMTEC	Australian Metallurgical and Mineral Testing Consultants
ANCOLD	Australian National Committee on Large Dams
ANFO	Ammonium Nitrate Fuel-Oil
As	Arsenic
AsO <sub>4</sub> <sup>3-</sup>	arsenic acid
Au	Chemical symbol for gold
AusIMM	Australasian Institute of Mining and Metallurgy
Bcm	Bank cubic metres, a measure of the in-situ volume of soil
BFS	“Bankable” Feasibility Study
BGRIMM	Beijing General Research Institute of Mining and Metallurgy
CAF	Cut and fill
CCD	Counter current decantation
CIL	Carbon In Leach, a method of processing gold ores
Citect	A well known brand of process control instrumentation
CN	The chemical symbol for cyanide
CN-T	Total cyanide

CSAMT	Controlled Source Audio-Frequency Magneto Tellurics
Cu	Chemical symbol for copper
dB	Decibels, a measure of the loudness of sound
E	East
EAP	Environmental Action Plan
EGL	Effective Grinding Length
EIA	Environmental Impact Assessment
EL's	Exploration Licences
EPCM	Engineering Procurement Construction Management
ESIA	Environmental and Social Impact Assessment
EXPL	Chongqing Gezhouba Explosive Chemical Company Limited
FW	Foot Wall
g	Gravity, also means gram/s
g/t	gram per tonne
GIRGS	Guanxi Institute of Regional Geology Survey
Golder	Golder Associates
GTBU	The Golden Triangle Business Unit
ha	hectares
Hexi Gold	Zhaoyuan Hexi Gold Limited
Hg	Mercury
HQ core	core diameter of 63.5mm
HSE	health, safety and environment
HW	Hanging Wall
ICOLD	International Commission on Large Dams
IFC	International Finance Corporation

Indicated Mineral Resource	An Indicated Mineral Resource is that part of a coal resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	An Inferred Mineral Resource is that part of a coal resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes which may be limited or of uncertain quality and reliability
IP (Induced Polarisation)	an exploration technique whereby an electrical current is pulsed through the ground and the response from the sub surface measured in order to identify minerals of interest. Strong IP responses may be a result of sulphide which may be associated with gold mineralisation
JKMRC	Julius Kruttschnitt Mineral Research Centre
JORC Code	Joint Ore Reserves Committee Code
JORC Committee	Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
JV	Joint Venture
K	The chemical symbol for potassium
kg	kilogram, equivalent to 1,000 grams
km	kilometres, equivalent to 1,000 metres
km <sup>2</sup>	square kilometres
kPa	Kilo Pascals, equivalent to 1,000 Pascals
kV	kilovolts — equivalent 1,000 volts
kW	Kilowatt, equivalent to 1,000 watt
L	litres
l/s	litres per second

Late Triassic	a time period of approximately 18 million years from 228 million to 210 million years ago
LHD	Load-haul-dump, a type of front-end-loader used in underground mines
LOM	Life of Mine
m	metre/s
M	Million
m <sup>3</sup>	cubic metres
Measured Mineral Resource	A Measured Resource is that part of a resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes
mg/l	milligrams per litre
mg/m <sup>3</sup>	milligrams per cubic metre
MGMR	Guizhou Metallurgical Design and Research Institute
MIBC	methyl isobutyl carbinol, a chemical reagent
Micron	1/1,000 of a millimetre
Middle Triassic	a time period of approximately 14 million years from 242 million to 228 million years ago
Minsaco	Minsaco BIOX <sup>®</sup> Pty Limited
mm	millimetre/s
Moz	Million ounce/s
mRL	metres reduced level, a vertical distance above or below a set datum
Mt	Million tonne(s)
Mtpa	Million tonnes per annum
MW	Megawatt, equivalent to 1,000,000 watt
N	North, also the chemical symbol for Nitrogen
NaHS	Sodium hydro sulphide
NERIN	Nanchang Engineering and Research Institute for Nonferrous Metals

Ni	Chemical symbol for nickel
NQ size core	47.6mm diameter, approximately 70% of the core taken
oz	troy ounce, equivalent to 31.1035 grams
P	phosphorous
Pa	Pascal, a measure of pressure, equivalent to approximately 9.87 atmospheres
pH	A measure of the acidity or alkalinity of a solution, numerically equal to 7 for neutral solutions, increasing with increasing alkalinity and decreasing with increasing acidity. The pH scale commonly in use ranges from 0 to 14
PID	proportional integral derivative
PLC	Programmable Logic Controllers
PPE	personal protective equipment
ppm	parts per million, equivalent to grams per tonne (g/t)
PQ size core	85mm diameter
PRC	People's Republic of China
Probable Ore Reserve	A Probable Ore Reserve is the economically mineable part of an Indicated, and in some circumstances Measured, Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Proved Ore Reserves	A Proved Ore Reserve is the economically mineable part of a Measured Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Also referred to as Recoverable Proved Coal Reserve
Q	quality value
RC (Reverse Circulation)	a percussion-drilling technique in which the cuttings are recovered
RL	see mRL

ROM	Run of Mine
RQD	Rock Quality Designation, a measure of the number of breaks in a drill core of rock
S	South, also the chemical symbol for sulphur
SAG	Semi-Autogenous Grinding — a technique for grinding ore prior to processing
Sb	The chemical symbol for Antimony
Silurian	a time period, approximately 440 million to 410 million years ago
Sino	Sino Gold Limited
SLOS	Sub-Level Open Stopping, an underground mining method
SO <sub>4</sub>	Sulphate
SO <sub>4</sub> <sup>2-</sup>	sulphuric acid
SRK	Steffen Robertson and Kirsten (Australasia) Pty Ltd trading as SRK Consulting
t	Tonne
TDS	total dissolved solid
the Company	Sino Gold Limited
the Stock Exchange	the Stock Exchange of Hong Kong Limited
tpa	tonnes per annum
Triassic	a time period, approximately 250 million to 210 million years ago
TSF	tailings storage facility
US\$	United States Dollars
USA	United States of America
Valmin Code	Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports
W	West
w/w	weight/weight
WAD	weak acid dissociable