THIS CIRCULAR IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

If you are in any doubt as to any aspect of this circular or as to the action to be taken, you should consult your stockbroker or other licensed securities dealer, bank manager, solicitor, professional accountant or other professional advisers.

If you have sold or transferred all your shares in **China Vanadium Titano-Magnetite Mining Company Limited**, you should at once hand this circular and the accompanying form of proxy to the purchaser(s) or the transferee(s) or to the bank, stockbroker or licensed securities dealer or other agent through whom the sale or transfer was effected for transmission to the purchaser(s) or the transferee(s).

China Vanadium Titano-Magnetite Mining Company Limited
中國釩鈦磁鐵礦業有限公司

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 00893)

VERY SUBSTANTIAL DISPOSAL AND CONNECTED TRANSACTION IN RELATION TO THE PROPOSED DISPOSAL OF 100% EQUITY INTEREST OF HUILI CAITONG AND NOTICE OF EGM

Independent Financial Adviser to the Independent Board Committee and the Independent Shareholders

MESSIS 大有融資

A letter from the Board is set out from pages 8 to 27 of this circular. A letter from the Independent Board Committee is set out on pages 28 to 29 of this circular. A letter from the Independent Financial Adviser, is set out on pages 30 to 64 of this circular.

A notice convening the EGM to be held on Friday, 28 June 2019 at 10:00 a.m. at Victoria Room I, 3/F., Regal Hong Kong Hotel, 88 Yee Wo Street, Causeway Bay, Hong Kong is set out on pages EGM-1 to EGM-2 of this circular. A form of proxy for use at the EGM is also enclosed with this circular.

Whether or not you intend to attend the EGM, you are advised to read the notice of EGM and complete and return the enclosed form of proxy in accordance with the instructions printed thereon to the Company's share registrar and transfer office in Hong Kong, Computershare Hong Kong Investor Services Limited at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong as soon as possible and in any event not later than 48 hours before the time appointed for the holding of the EGM (i.e. at or before 10:00 a.m. on Wednesday, 26 June 2019 (Hong Kong time)) or any adjournment thereof. Completion and delivery of the form of proxy will not preclude you from attending and voting in person at the EGM should you so wish.

10 June 2019

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In this circular, unless the context otherwise requires, the following expressions have the following meanings:

"Baicao Mine"	Baicao Mine*(白草鐵礦), the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan with a mining area of 1.88 sq.km. and operated by Huili Caitong
"Baicao Processing Plant"	the ore processing plant located near the Baicao Mine and operated by Huili Caitong
"Board"	the board of Directors
"Business Day"	any day (other than Saturdays, Sunday and statutory holidays) on which licensed banks in PRC are open for business
"Cizhuqing Mine" or "Cizhuqing Project"	Cizhuqing Mine*(茨竹箐鐵礦), the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan and owned by Huili Caitong, with a mining area of 1.279 sq.km.
"Company"	China Vanadium Titano-Magnetite Mining Company Limited(中國釩鈦磁鐵礦業有限公司), a limited liability company incorporated in the Cayman Islands on 28 April 2008, the issued shares of which are listed on the Main Board of the Stock Exchange (stock code: 00893)
"close associate(s)"	has the same meaning ascribed to it under the Listing Rules
"Competent Person's Report"	the competent person's report prepared by BAW Mineral Partners Limited, as set out in Appendix IV to this circular
"Completion"	completion of the SPA in accordance with its terms
"connected person(s)"	has the same meaning ascribed to it under the Listing Rules
"Consideration"	consideration for the sum of RMB550.0 million payable by the Purchaser to the Vendor for the acquisition of the Sale Interest pursuant to the SPA

"Counter Indemnity"	a moveable asset pledge contract (動產質押合同) to be entered into between the Purchaser and the Company for the provision of counter-indemnity by the Purchaser in favour of the Company in respect of the Company's liabilities and claims under the CVT Guarantees (if any), and the pledge of the Purchaser's inventories (including but not limited to structural steels, coals etc) as security for such counter-indemnity
"CP Completion Date"	day of fulfillment of all the conditions for the Completion as set out in the SPA
"CVT Guarantees"	guarantees given by the Company in favour of the Disposal Group guaranteeing, *inter alia*, the indebtedness owing by the Disposal Group Companies to certain banks in the PRC with maximum guaranteed amount of RMB730.0 million
"Director(s)"	director(s) of the Company
"Disposal"	the disposal by the Vendor of the Sale Interest pursuant to the SPA
"Disposal Group"	Huili Caitong and its subsidiaries, namely Xiushuihe Mining and Panzhihua Yixingda
"Disposal Group Company(ies)"	any company(ies) in the Disposal Group
"EGM"	the extraordinary general meeting of the Company to be convened and held at 10:00 a.m. on Friday, 28 June 2019 at Victoria Room I, 3/F., Regal Hong Kong Hotel, 88 Yee Wo Street, Causeway Bay, Hong Kong, the notice of which is set out on pages EGM-1 to EGM-2 of this circular, and any adjournment thereof for the purpose of considering, and if thought fit, approve (among other matters) the Disposal
"Fe"	chemical symbol of iron element
"Group"	the Company and its subsidiaries

"Haibaodang Mine" or "Haibaodang Project"	Haibaodang Mine*(海保凼鈦鐵礦), the vanadium-bearing titano-magnetite mine located in Renhe District, Panzhihua City, Sichuan, with an exploration area of 26.2 sq.km. and owned by Panzhihua Yixingda
"Hailong Processing Plant"	the ore processing plant located near the Cizhuqing Mine and operated by Huili Caitong
"Heigutian Processing Plant"	the ore processing plant located near the Yangqueqing Mine and owned by Huili Caitong
"High-Fe Mining Operation"	comprises the operation of sales of self-produced high-grade iron concentrates within the range of 65% TFe to 72% TFe
"High Fe Mines and Assets"	mainly consist of Maoling-Yanglongshan Mine and Maoling Processing Plant
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"Huili Caitong"	Huili County Caitong Iron and Titanium Co., Ltd.*(會理縣財通鐵鈦有限責任公司), established in the PRC on 7 July 1998 is an indirect wholly-owned subsidiary of the Company
"IBC" or "Independent Board Committee"	the independent board committee of the Board comprising Mr. Yu Haizong, Mr. Wu Wen and Mr. Liu Yi, the independent non-executive Directors, appointed by the Board for the purpose of advising the Independent Shareholders in relation to the Disposal, the SPA and the transactions contemplated thereunder
"IFA" or "Independent Financial Adviser"	Messis Capital Limited, a licensed corporation to carry out type 1 (dealing in securities) and type 6 (advising on corporate finance) regulated activities under the SFO, being the independent financial adviser to the Independent Board Committee and the Independent Shareholders in relation to the Disposal, the SPA and the transactions contemplated thereunder
"Independent Shareholders"	Shareholders other than Trisonic International, any other Shareholders and their respective close associates having a material interest in the Disposal, the SPA and the transactions contemplated thereunder

"Intra-Group Debts"	means the debts in the principal amount of up to RMB465.0 million owing by the Vendor to Huili Caitong
"Iron Pelletising Plant"	the plant that produces iron pellets and is located in Huili County, Sichuan, which is approximately 5.5 km from the Xiushuihe Mine and owned by Huili Caitong
"JORC"	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
"Kt"	thousand tonnes
"Latest Practicable Date"	3 June 2019, being the latest practicable date prior to the printing of this circular for ascertaining certain information contained in this circular
"Listing Rules"	Rules Governing the Listing of Securities on the Stock Exchange
"Long Stop Date"	30 July 2019, or such later date as the Vendor, the Purchaser and Huili Caitong may agree in writing
"Low Fe Mines"	collectively, Baicao Mine, Baicao Processing Plant, Xiushuihe Mine (including expansion), Xiushuihe Processing Plant, Hailong Processing Plant, Heigutian Processing Plant and Iron Pelletising Plant, the information and status of which are set out in the paragraph headed "Information on the Disposal Group Companies" in this circular
"Low Fe and Inactive Mines"	collectively, Cizhuqing Mine, Yangqueqing Mine, Haibaodang Mine and the Low Fe Mines, the information and status of which are set out in the paragraph headed "Information on the Disposal Group Companies" in this circular
"Mancala Holdings"	Mancala Holdings Limited and its subsidiaries, in which the Company indirectly owns 81% equity interest and is principally engage in rendering of specialised mining services

"Maoling Processing Plant"	the ore processing plant owned and operated by Aba Mining Co., Ltd., a wholly owned subsidiary of the Company, which produces iron concentrates of high Fe contents within the range of 65% TFe to 72% TFe
"Maoling-Yanglongshan Mine"	Maoling-Yanglongshan Mine*(毛嶺－羊龍山鐵礦), the magnetite mine located in Wenchuan County, Sichuan with an exploration region with a total area of 11.6 sq.km. and operated by the Remaining Group
"Mt"	million tonnes
"Net Profit" or "Net Loss"	means the net profit or loss attributable to the owners of the Company
"Panzhihua Yixingda"	Panzhihua Yixingda Industrial Trading Co., Ltd.*(攀枝花易興達工貿有限責任公司), a limited liability company established in the PRC on 9 July 2009, which is wholly owned by Huili Caitong
"PRC"	People's Republic of China which, for the purpose of this circular, excludes Hong Kong, Macau Special Administrative Region and Taiwan
"Purchaser"	Chengyu Vanadium Titano Technology Ltd.*(成渝釩鈦科技有限公司), formerly known as Weiyuan Steel Co., Ltd.*(威遠鋼鐵有限公司), a sino-foreign equity joint venture established in the PRC on 3 April 2001, and is controlled by the Relevant CVT Substantial Shareholders
"Registration Completion Date"	date of completion of requisite change of registration at the local Administration for Industry & Commerce in relation to the transfer of the Sale Interest upon completion of the Disposal and the date of issue of the updated business licence of Huili Caitong
"Relevant CVT Substantial Shareholders"	Mr. Wang Jin(王勁), Mr. Shi Yinjun(石銀君), Mr. Zhang Yuangui(張遠貴) and Mr. Li Hesheng(李和勝), parties acting in concert and some of the substantial Shareholders
"Remaining Group"	the Company and its subsidiaries upon the Completion
"RMB"	Renminbi, the lawful currency in the PRC

"Sale Interest"	the entire equity interest in Huili Caitong
"SFO"	Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) as amended from time to time
"Shareholder(s)"	holder(s) of shares of the Company
"Shigou Gypsum Mine"	Shigou Gypsum Mine*(石溝石膏礦), the gypsum mine located at Hanyuan County, Ya'an City, Sichuan with a mining area of 0.1228 sq.km. and owned by the Remaining Group
"SPA"	the sale and purchase agreement in relation to the Disposal dated 29 January 2019 entered into among the Vendor, the Purchaser and Huili Caitong
"Specialised Mining Services"	comprises the provision of specialised mining services, which include raised boring, shaft excavation, engineering services, and other mining services
"sq.km."	square kilometers
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"TFe"	the symbol for denoting total iron
"Trading"	comprises the operation of sales of traded products
"Trisonic International"	Trisonic International Limited(合創國際有限公司), a company incorporated in Hong Kong on 19 July 2006, a controlling shareholder of the Company and controlled by the Relevant CVT Substantial Shareholders
"Valuation Report"	the valuation report prepared by Asia-Pacific Consulting and Appraisal Limited, an independent qualified valuer, as set out in appendix V to this circular
"Vendor"	Sichuan Lingyu Investment Co., Ltd.*(四川省凌御投資有限公司), a limited liability company established in the PRC on 9 June 2010 and an indirect wholly-owned subsidiary of the Company

"Xiushuihe Mine"	the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan and operated by Xiushuihe Mining, with a mining area of 0.52 sq.km.
"Xiushuihe Mining"	Huili County Xiushuihe Mining Co., Ltd.*(會理縣秀水河礦業有限公司), a limited liability company established in the PRC on 26 June 2007, which is owned as to 95% by Huili Caitong and 5% by Xichang Vanadium and Titanium Products Co., Ltd*(西昌釩鈦製品有限公司)
"Xiushuihe Processing Plant"	the ore processing plant located near the Xiushuihe Mine and operated by Xiushuihe Mining
"Yangqueqing Mine"or "Yangqueqing Project"	Yangqueqing Mine(陽雀箐鐵礦), the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan and owned by Huili Caitong, with a mining area of 0.25 sq.km.
"%"	per cent.

* *The English translation of the Chinese name is for information only, and should not be regarded as the official English translation of such name.*

This circular has been printed in English and Chinese. In the event of any inconsistency, the English text of this circular shall prevail over its Chinese text.

China Vanadium Titano-Magnetite Mining Company Limited
中國釩鈦磁鐵礦業有限公司

(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 00893)

Non-executive Director:
Mr. Teh Wing Kwan *(Chairman)*

Executive Directors:
Mr. Jiang Zhong Ping *(Chief Executive Officer)*
Mr. Hao Xiemin *(Financial Controller)*
Mr. Wang Hu

Independent Non-executive Directors:
Mr. Yu Haizong
Mr. Liu Yi
Mr. Wu Wen

Registered Office:
Cricket Square
Hutchins Drive
P.O. Box 2681
Grand Cayman
KY1-1111, Cayman Islands

Principal Place of Business in Hong Kong:
Unit A on 4th Floor
E168
Nos. 166-168 Des Voeux Road Central
Hong Kong

10 June 2019

To the Shareholders

Dear Sir or Madam,

VERY SUBSTANTIAL DISPOSAL AND CONNECTED TRANSACTION IN RELATION TO THE PROPOSED DISPOSAL OF 100% EQUITY INTEREST OF HUILI CAITONG

1. INTRODUCTION

Reference is made to the announcement of the Company dated 29 January 2019 in relation to, among others, the Disposal.

The purpose of this circular is to provide you with information regarding the resolutions to be proposed at the EGM to approve the Disposal, the SPA and the transactions contemplated thereunder.

2. SALE AND PURCHASE AGREEMENT

Date

29 January 2019

Parties

(1) Sichuan Lingyu Investment Co., Ltd.*(四川省凌御投資有限公司), a wholly owned subsidiary of the Company, being the Vendor under the Disposal

(2) Chengyu Vanadium Titano Technology Ltd.*(成渝釩鈦科技有限公司), being the purchaser under the Disposal

(3) Huili County Caitong Iron and Titanium Co., Ltd.*(會理縣財通鐵鈦有限責任公司), a wholly owned subsidiary of the Company, being the subject company under the Disposal

Assets involved

Pursuant to the SPA, the Vendor has conditionally agreed to sell to the Purchaser, and the Purchaser has conditionally agreed to purchase from the Vendor, the Sale Interest, being the 100% equity interest in Huili Caitong.

As at the Latest Practicable Date, Huili Caitong is a wholly-owned subsidiary of the Vendor and an indirect wholly-owned subsidiary of the Company.

Huili Caitong, together with its two subsidiaries, namely Xiushuihe Mining and Panzhihua Yixingda, are the operators and/or owners of the Group's existing Low Fe and Inactive Mines. Please refer to the paragraph headed "Information on the Disposal Group Companies" in this circular for further information about these Low Fe and Inactive Mines.

Conditions

Completion is conditional upon fulfillment of the following conditions:

(1) the passing of the requisite resolutions by the Independent Shareholders at an extraordinary general meeting of the Company for approving the SPA and the transactions contemplated thereby;

(2) the Counter Indemnity having been entered into between the Purchaser and the Company;

(3) the fair value or (as the case may be) the range of the fair value of the Disposal Group as at 30 June 2018 as appraised by an independent qualified valuer, Asia-Pacific Consulting and Appraisal Limited, falling within the range of RMB410.0 million to RMB570.0 million; and

(4) the obtaining of all other consents, approvals and authorisations from the Vendor, the Purchaser, the board of directors of Huili Caitong and the applicable government authorities in relation to the SPA and the transactions contemplated under the SPA (including but not limited to the approval by the applicable government authorities in respect of the transfer of the Sale Interest).

If any of the conditions set out above is not fulfilled on or before the Long Stop Date, then the obligations of the parties shall cease and determine and neither party shall have any claim under the SPA against the other save in respect of any antecedent breaches.

As at the Latest Practicable Date, save that the condition as stated in condition (3) above had been satisfied, none of the above conditions precedents had been satisfied.

Consideration

The Consideration for the Sale Interest shall be RMB550.0 million, which is to be settled as follows:

(1) upon the execution of the SPA, the Purchaser shall pay a cash deposit of RMB10.0 million to the Vendor;

(2) on the CP Completion Date, the Purchaser shall accept the novation of, and assume the Vendor's repayment obligation in respect of the Intra-Group Debts of up to RMB465.0 million on a dollar-for-dollar basis which shall be taken to offset the same amount against the Consideration payable by the Purchaser to the Vendor; and

(3) within five Business Days after the CP Completion Date, the Purchaser shall pay the remaining balance of the Consideration in the amount of approximately RMB75.0 million net of deposit and Intra-Group Debts, in cash to the Vendor.

The Purchaser has paid a cash deposit of RMB10.0 million to the Vendor upon the execution of the SPA. The cash deposit of RMB10.0 million shall be refunded to the Purchaser without interest in the event that the SPA is terminated prior to the Completion taking place or any of the conditions for the Completion is not fulfilled by the Long Stop Date, unless such termination arises from the breach of the SPA by the Purchaser or is otherwise attributable to the fault of the Purchaser, in which event the cash deposit shall not be refunded by the Vendor.

The Consideration was determined at arm-length's and on a willing-buyer-willing-seller basis between the Vendor and the Purchaser taking into consideration (i) the financial performance of the Disposal Group for the last three financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018; (ii) the net assets value of the Disposal Group as at 30 June 2018, which included the Intra-Group Debts; and (iii) the fair value of the Disposal Group as at 30 June 2018, being RMB420.0 million to RMB560.0 million according to the Valuation Report. Having considered the above factors, in particular that the Consideration falls in towards higher end of the abovementioned valuation range, the Directors consider that the Consideration and the terms of the SPA are fair and reasonable and in the interest of the Company and the Shareholders as a whole.

The Competent Person's Report, which is referred to in the Valuation Report, contained information regarding the resource and reserve estimates of the Low Fe and Inactive Mines, being the mines owned and/or operated by the Disposal Group Companies, as of 31 December 2018. In particular, the resource and reserve estimates of the Low Fe and Inactive Mines (other than Haibaodang Mine) were made by BAW Mineral Partners Limited based on (i) the estimation carried out by independent, licensed, government-owned exploration entities in China in 2008 and 2010 using the polygonal estimation method; (ii) the review by Behre Dolbear Asia, Inc., an independent qualified mining consultant, in 2009 and 2011 of the estimation made by the said exploration entities (including the geological database prepared by them) to independently classify, estimate and report the initial JORC-compliant estimation of mineral resources of these mines; (iii) the updated report by Behre Dolbear Asia, Inc. and Behre Dolbear Australia Pty Ltd. in updating and reporting the resource and reserve estimates of these mines on an annual basis from 2009 to 2017 to reflect the continuous mining depletion of mineral resources during the period; and (iv) the mining depletion of mineral resources of these mines throughout 2018. Please refer to the Competent Person's Report for the methodologies used in the mineral resource and reserve estimation of these mines, and the basis and assumptions used.

In arriving at the resource and reserve estimation in the Competent Person's Report, BAW Mineral Partners Limited relied on the exploration result and resource estimation procedures completed in 2008 and 2010 and the review thereof by Behre Dolbear Asia, Inc., without involving in the historic exploration program itself. No systematic exploration program on these mines had been carried out since 2010, and therefore no updated geological data has been used in the estimation process. Resource and reserve estimates involve professional judgment based on factors such as geological interpretation, technical data, experience and industry practice, and the accuracy of these estimates may also be affected by many other factors, including the quality of the results of the exploration drilling, sampling procedure, Quality Assurance and Quality Control protocol, sample analytical results, estimation procedures and the experience of the competent person responsible for the estimates.

Apart from the application of geological data which was obtained through exploration program in 2008 and 2010, no three-dimensional geological model, which is a new resource model for JORC-compliant resource classification, estimation and reporting of mineral resources, had been attempted since the original resource and reserve estimation was completed in 2008 and 2010, despite that an advanced computerized pit optimization for the ultimate pit design should further improve the economics of the project. Resource estimation provides an estimation of the quantity of mineral resources which may be recovered at a reasonable confidence level, but does not provide an analysis as to whether such resources are capable of being mined or whether minerals could be processed economically and do not incorporate mining dilution or allowance for mining losses. There is no assurance that estimates of mineral resources of these mines would not have changed significantly if the new three-dimensional geological model had been adopted for the mineral resource estimation for these mines.

Completion

The parties shall, after the settlement of the Consideration by the Purchaser in full, proceed with the requisite change of registration in respect of the transfer of Sale Interest upon completion of the Disposal at the local Administration for Industry & Commerce within 30 Business Days after the CP Completion Date. Completion shall take place after the fulfillment of the abovementioned conditions, the settlement of the Consideration by the Purchaser, and the completion of the said requisite change of registration at the local Administration for Industry & Commerce.

Post-Completion undertaking by the Purchaser and Huili Caitong

In light of the CVT Guarantees given by the Company in favour of the Disposal Group guaranteeing, *inter alia*, the indebtedness owing by the Disposal Group Companies to certain banks in the PRC with maximum guaranteed amount of RMB730.0 million, and considering that these banks will only review and process applications for the proposed release of the CVT Guarantees after the Completion, each of Huili Caitong and the Purchaser has undertaken to the Vendor that, subject to the Completion, it will procure the release of the CVT Guarantees within one year after the Registration Completion Date (or such other date that may be agreed by the parties in writing). Upon completion of the release of the CVT Guarantees, the Counter Indemnity will be released contemporaneously.

Continuing connected transactions with the Purchaser and/or the Disposal Group

Upon Completion, the Disposal Group Companies will become subsidiaries of the Purchaser and will cease to be the subsidiaries of the Company. Accordingly, certain existing on-going transactions between the Group and the Disposal Group will become continuing connected transactions under Chapter 14A of the Listing Rules:

(i) the on-going provision of the CVT Guarantees by the Company in favour of the Disposal Group will become continuing connected transactions of the Company under Chapter 14A of the Listing Rules; and

(ii) the on-going provision of technical consultancy services by the Group to the Disposal Group for the operations of Low Fe and Inactive Mines operated by the Disposal Group Companies.

The Group will comply with the annual review and disclosure requirements pursuant to Rule 14A.60 of the Listing Rules in respect of the above continuing connected transactions upon Completion.

After Completion, the Counter Indemnity to be entered into between the Purchaser and the Group will constitute financial assistance to be received by the Group, which will be fully exempt pursuant to Rule 14A.90 of the Listing Rules. The Counter Indemnity will be effective from the Registration Completion Date to the date of the release of the CVT Guarantees.

Reasons for and benefits of the Disposal

Background

As highlighted in its annual report issued on 27 March 2018 for the full year ended 31 December 2017 ("**FY2017**") and interim report issued on 28 August 2018 for the six months ended 30 June 2018 ("**1H2018**"), the Company guided that it would conduct strategic reviews on certain under-utilised assets of the Group, including the suspended and/or inactive mines of the Group, which had resulted in significant impairment losses for both FY2017 and 1H2018.

Since then, there have been pressing needs to firm up strategic plans relating to implementation of operational restructuring, business reorganisation and turnaround strategies, particularly as the Group had incurred significant operating and impairment losses for most of its business segments over the last few financial years. The immediate objectives of these strategic plans are to focus on improving cash flows, stabilising utilisation rates for selected operating assets and reducing risk of having further impairment losses. In this aspect, the Company has evaluated various commercial options as referred to in the paragraph "Observations and Other Commercial Options" below, including the Disposal.

In addition, the Company had appointed Roger Emmott Associates Limited (an international consulting firm based in the United Kingdom and specializing in the steel, mining and energy sectors) and China Metallurgical Industry Planning and Research Institute (an established consulting firm based in the PRC and specializing in the steel sector) to conduct independent reviews of the overall steel, iron ore and gypsum industry outlook in the PRC from technical perspective and macro outlook. These experienced research professional firms are industrial specialists and their views are useful as important references in the Company's business reviews.

Independent Expert's Review

Based on these independent reviews from the industrial experts, the Company shared the views that its business has been operating in a challenging environment due mainly to excessive capacity, high compliance cost, weak market conditions, low selling prices and aggressive destocking. Whilst there appears to be some growth opportunities in the industry for certain selected segments after the major structural reforms by the government, the estimated investments to upgrade facilities, improve efficiencies and comply with stringent requirements are extremely substantial with longer-than-expected investment recovery periods given the estimated cost of capital and the required internal rate of returns.

More recently, the drastic shift in demand to high-grade from low-grade iron ore has fragmented the iron ore market and driven up the prices for iron ore with higher iron content, which is less pollutive during steel production. While low-grade iron concentrates prices have fallen due to the above reason, on the contrary, costs have continued to rise notwithstanding cost control disciplines having been implemented, resulting in declining operating margins. Environmental regulations have also become increasingly stringent, giving rise to higher costs of compliance. Moreover, the shift in government policies in the PRC, with increased emphasis to crack down on inefficient and outdated steel production as part of an effort to cut excess capacity and tackle pollution have translated into a fall in the demand for low-grade iron concentrates and is expected to further weaken the price of low-grade iron concentrates or, at least, maintain at its current level. This shift in trend has adversely affected the operations of the Low Fe Mines, which are located in the southern region of Sichuan.

Against this context, the Company also noted that vanadium as a by-product from iron concentrates which is a minor metal traditionally used to strengthen steel and more recently in a new generation of battery technology (vanadium redox batteries) that have potential to store electricity from solar and wind generation – are expected to take off in the coming years which seems to have differentiated characteristics of higher growth opportunity.

However, an internal analysis and independent review suggest that if the Company is to upgrade and expand the production facilities for better growth prospects, the expansion and upgrade would require significant capital investment and working capital which would entail much higher borrowings with no certainty in relation to investment recovery period and internal rates of return.

Asset Impairment and Weak Financial Performance

The above factors had resulted in (i) lower-than-expected capacity utilisation for the Group's key operating assets; (ii) management decisions to suspense under-performed production; (iii) major operational streamlining and redundancies and (iv) cutting down and/or cutting off major capital expenditure. As a consequence, the Disposal Group had, over the last four financial years ended 31 December 2018, incurred significant impairment losses of approximately RMB1.5 billion in aggregate due largely to impairment assessment conducted in accordance with the required International Financial Reporting Standards which arose from the loss-making status of the operations under assessment, a sharp fall in value-in-use for those operating assets and a sharp fall in fair value less cost to sell for those non-operating assets.

For the last three financial years ended 31 December 2017, the accumulated loss attributable to owners of the Disposal Group was approximately RMB1.8 billion, and its loss attributable to owners of the Disposal Group for the year ended 31 December 2018 was approximately RMB460.5 million. It was further noted that there were no consistent signs of recovery during these financial reporting periods under review. While the Group's financial conditions and performance were adversely affected and the Group is under intense pressure to turnaround, there appear no convincing signs of recovery in the industry, obviously not just yet.

Observations and Other Commercial Options

As guided in the previous results announcements of the Company since the financial year ended 31 December 2015, the Company had shut down under-utilised processing plants, scaled down operations, cut fixed costs and capped capital investment budgets. Despite these efforts, the operations remained loss making and were difficult to achieve economies of scale. These unprofitable operations continued to be burdened by significant impairment losses as a result of lower-than-optimal utilisation rates and market volatility, which appear to be at risk of additional loss-making and impairment losses if there is no improvement in overall capacity utilisation and no commercial justification to re-start suspended production. Whilst the Company is well aware of such risk of assets impairment, the Company does not think it will be commercially viable over the medium-term to invest, expand, resume, re-activate, reorganise and/or merge these unprofitable operations, particularly business forecasts relating to Low Fe and Inactive Mines do not seem to be promising under the existing market conditions.

While there appears to be no viable business plans for the Low Fe and Inactive Mines for the time being, the Company had also evaluated and sought, but was not able to obtain, any firm interest for the following commercial options:

- proposed farm-out operating arrangements with other mining companies to operate the Low Fe Mines and/or to resume production for the Inactive Mines for fixed fees with revenue-sharing;

- proposed sale of processing plants, excluding mining rights, to other steel manufacturers;

- proposed sale of the Low Fe and Inactive Mines separately from the foregoing proposed sale of processing plants and/or plant and equipment; and

- proposed sale of equipment to traders, dealers and/or steel manufacturers.

The Company has finally decided against such options, as there was lack of interest for farm-out operating arrangements; and the commercial negotiations to dispose of the mining rights, processing plants and/or equipment on a piecemeal basis are expected to take considerable time. In addition, there is no certainty that there will be offer; or if there are offers for each of the above options, there is also no assurance that the total cash offer in such a case, would be higher than the Consideration. The lack of interest in the above commercial options could be due to the weak commodity market conditions, massive overcapacity, aggressive destocking, increasingly higher environmental compliance cost in the PRC and the recent drastic shift in demand.

The recent shift in demand to high-grade iron concentrates has caused an abrupt fall in prices and has adverse effects on the already-loss making operations for Low Fe Mines, which stem from the fact that:

- the PRC has seen a surge in demand for high-grade iron ore as the government stepped up its efforts to curb the smog pollution and clean up its steel industry by implementing strict restrictions on emission. The shift in demand has fragmented the iron ore market and driven up the prices for iron ore with higher iron content which is less pollutive during steel production;

- the average selling price of 66% TFe iron ore in Hebei (assessed on February 2019) was RMB827 per tonne. The assessment for the 56% TFe iron ore in Chengdu was RMB350. These represent 14.7% increase in high-grade iron ore and 11.4% decrease in low-grade iron ore prices since December 2017; and

- the price of titanium concentrates (with over 46% titanium contents) in the Panzhihua region dropped from RMB1,380 per tonne at the beginning of 2018 to RMB1,060 per tonne at mid-year, and bounced back to RMB1,150-RMB1,180 per tonne at the end of 2018. The mid-year drop was mainly due to weak demand resulting from stringent environment protection requirements that Sichuan government imposed on downstream titanium dioxide producers, which caused a decline in supply, boosting a slight rebound in price from October 2018 onwards.

The Disposal, if completed, is expected to significantly improve the financial performance of the Group, reduce working capital burdens, improve gearing position and allows the Group to direct its resources and steer its focus towards the high-grade iron concentrates to take advantage of the recent market shift that is expected to achieve better economies of scale and deliver greater economic value. Meanwhile, it will further free up the Group's resources in evaluating other business diversification opportunities and earning-accretive strategies.

Based on the above reasons and the below positive estimated financial effects, the Directors are of the view that the Disposal is conducted by the Company, on normal commercial terms, is fair and reasonable and in the interest of the Company and the Shareholders as a whole.

Positive financial effects of the Disposal by the Group

The proposed Disposal, upon Completion, is expected to result in positive financial effects on profit, nets assets, cash flows and gearing ratio of the Group. Details of which are as follows:

(a) Estimated gain on Disposal of RMB100.0 million

Based on (i) the Consideration of RMB550.0 million less estimated cost to sell of approximately RMB7.0 million; (ii) de-consolidation of the unaudited net asset value of the Disposal Group of approximately RMB458.1 million as of 31 December 2018; and (iii) de-recognition of non-controlling interests after the Completion of RMB15.1 million, the estimated gain on the Disposal is approximately RMB100.0 million;

(b) Estimated net increase in net assets by RMB84.9 million

Taking into account of the estimated gain on Disposal of approximately RMB100.0 million, the net assets is expected to increase by approximately RMB84.9 million to RMB978.6 million, net of effects from de-recognition of non-controlling interests;

(c) Estimated cash inflows of RMB81.1 million from Disposal

The estimated net cash position of the Group is expected to be improved by RMB81.1 million to RMB114.9 million on Completion of the Disposal; and

(d) Significant improvement in gearing ratio

Given the exclusion of the net debts of RMB802.1 million attributable to the Disposal Group, the estimated increase in net assets and the improvement in estimated net cash position of the Group on Completion of the Disposal, the gearing ratio is expected to improve from 49.3% as at 31 December 2018 to zero after the Completion (Note: Gearing ratio is calculated by dividing Net Debt by Total Equity plus Net Debt. Net Debt is defined as all interest-bearing loans, net of cash and cash equivalents. Equity includes equity attributable to owners of the Company and non-controlling interests).

It should be noted that the aforementioned estimations are for illustrative purpose only and do not purport to represent how the actual financial position of the Remaining Group will be upon Completion. The final amount of the gain on Disposal is subject to the Completion and finalisation of the audit on the Disposal.

Moving forward

On Completion of the Disposal, the Group will continue to operate within its existing scope of business and allocate more resources for the operations for high-grade iron concentrates to take advantage of the market shift that is expected to achieve better economies of scale and deliver greater economic value while focusing on stabilising and improving operating cash flows for the Group. The Group will also explore other business diversification initiatives focusing on assets-light strategies while evaluating businesses in those industries, which the PRC government is promoting and supportive. The Company will update Shareholders in due course.

Based on the foregoing investment strategies, the Company may potentially explore businesses opportunities outside the mining industry. However, in the event that the Group undertakes any acquisition, investment or transaction, joint venture or collaboration in future, the Company will comply with the applicable requirements under the Listing Rules.

Competent Person's Report

The Competent Person's Report, which is referred to in the Valuation Report, is included in this circular on a voluntary basis to provide additional information to the Independent Shareholders regarding the resource and reserve estimates of the Low Fe and Inactive Mines, being the mines owned and/or operated by the Disposal Group Companies, as of 31 December 2018. The Directors noted that in the Competent Person's Report, in arriving the resource and reserve estimates of the Low Fe and Inactive Mines (other than Haibaodang Mine), BAW Mineral Partners Limited has relied upon, among others, the exploration program carried out by independent, licensed, government-owned exploration entities in China in 2008 and 2010 and the depletion of the estimates thereafter. No systematic exploration program on these mines had been carried out since 2010, and therefore no updated geological data has been used in the estimation process. Besides, the Directors noted that the polygonal estimation method, rather than a more advanced three-dimensional geological model, had been adopted in the mineral resource and reserve estimation of these mines. Nevertheless, the Directors consider it is reasonable for BAW Mineral Partners Limited to rely on the above geological data and estimation methodology in estimating the resource and reserve estimates for the following reasons:

a) the costs of adopting a change in the estimation methodology of estimating the resource and reserve estimates could outweigh the expected benefits that might occur given that the estimated cost of at least RMB15 million to RMB20 million would have to be incurred for such technical exercises;

b) the costly exercise for adopting a change in the methodology in estimating the resource and reserve estimates is not in line with the Group's strategy given its restrictive and prudent capital expenditures budgets as adopted by the Board at discretion, particularly after incurring losses for consecutive years from the Disposal Group;

c) resource estimation using polygonal estimation method based on projected cross sections is a generally acceptable method in the industry as well as pursuant to the JORC Code, and is consistent with the long adopted methodology used by the Company since its initial public offering or such relevant dates of acquisition of the mines. Such approach was adopted with the view to keep consistency in our method selection given market uncertainty and volatility; and

d) the management of the Group acknowledge that as scientific research and technology development advance from time to time, there are often new approaches being developed for ore reserve and resource estimation. Ideally, having multiple methods available for use in the said estimation exercises and to examine the differences arising from these multiple methods, if any, should be recommended but it is however also noted that these will not be straight-forward decisions – both commercially and operationally – particularly under the circumstances that the cost-benefit analysis for any proposed change in estimation method is obvious.

Despite that, additional efforts have been taken in order to verify the accuracy and reasonableness of resource estimate made by Behre Dolbear Asia, Inc in 2009 through the polygonal estimation method. BAW Mineral Partners Limited has performed the following tasks to update the 2018 resource estimates for the Baicao and Xiushuihe Mines:

- cross-check has been performed to validate the geological interpretation and grade estimation of multiple cross-sections based on which the resource estimate was completed using the polygonal estimation method by Behre Dolbear Asia, Inc for the purpose of the Company's initial public offering public disclosure in 2009;

- variogram modeling has been performed for all drillhole data available for each mine which generally shows a good continuity of the grade distribution;

- three-dimensional modeling and block grade estimation have been performed for the portion depleted at the Baicao Mine and Xiushuihe Mine during the period from January to December 2018. The result generally demonstrates that the estimated tonnage and average grade obtained by BAW Mineral Partners Limited's work through three-dimensional modeling and by polygonal estimation method in 2009 are highly comparable for the portion depleted during 2018; and

- production data from the processing plants and stockpiles have been collected to reconcile against the resource estimates, which demonstrates that the tonnage of ore mined during the period from January to December 2018 is highly comparable with the resource estimates obtained by BAW Mineral Partners Limited's work through three-dimensional modeling and by polygonal estimation method in 2009.

For Yangqueqing Project and Cizhuqing Project, the Company has initially disclosed the estimated resource type 331, type 332 and/or type 333 pursuant to the Chinese resources classification scheme upon acquisition in the Company's announcement and annual report on 18 January 2010 and 14 March 2011, respectively. In 2011, the Company has further engaged an independent competent person, Behre Dolbear Asia, Inc, to review and update the resource estimates in conformity to the 2004 JORC Code. Given that both of these projects do not have exploration and mining activities since its acquisition and the estimation results had further complemented by necessary and additional technical works performed by BAW Mineral Partners Limited such as, among others, checking the polygonal estimation procedures as completed by the exploration program in 2008 and 2010 and the reviews thereof by Behre Dolbear Asia, Inc, without involving in the historic exploration program itself.

The Board is well aware that significant capital expenditures are expected to be incurred, among others, to obtain an updated resource and reserve estimation for the Low Fe and Inactive Mines, which the Company does not see a commercial rationale in doing so particularly as the Company does not have immediate plans to resume production and these mines are expected to remain inactive in the midst of market uncertainty and volatility.

Given the above, the Board also agrees with the management of the Group that the Competent's Person Report is technically reliable and practically adequate after considering all those reasonable commercial endeavours.

Use of proceeds from the Disposal

The Group intends to use the net sale proceeds of approximately RMB88.2 million for (i) equipment upgrade and environmental compliance related investments for the existing operations of high-grade iron concentrates; (ii) working capital; and (iii) business diversification as and when investment opportunities arise.

Information on the Disposal Group Companies

Huili Caitong

Huili Caitong is located in Huili County, Sichuan, the PRC and is a foreign equity joint venture since 29 December 2010 established under the laws of the PRC with a registered capital of RMB610,520,000. The principal business of Huili Caitong is iron ore mining, iron ore beneficiation and sale of self-produced products. Huili Caitong owns the Baicao Mine, the Baicao Processing Plant, the Cizhuqing Mine, the Yanqueqing Mine, the Hailong Processing Plant, the Heigutian Processing Plant, and the Iron Pelletising Plant.

Xiushuihe Mining

Xiushuihe Mining is located in Huili County, Sichuan, the PRC and is a limited liability company established on 26 June 2007 under the laws of the PRC with a registered capital of RMB200,000,000. The principal business of Xiushuihe Mining is iron ore mining, iron ore beneficiation and sale of self-produced products. Xiushuihe Mining owns the Xiushuihe Mine (including expansion) and the Xiushuihe Processing Plant.

Panzhihua Yixingda

Panzhihua Yixingda is located in the Panzhihua City, Sichuan, the PRC and is a limited liability company established on 9 July 2009 under the laws of the PRC with a registered capital of RMB1,000,000. Panzhihua Yixingda is the holder of the exploration right of Haibaodang Mine.

The Low Fe and Inactive Mines

The following table summarises the Low Fe and Inactive Mines owned and/or operated by each company of the Disposal Group Companies and their status as at 31 December 2018. The Company had also previously disclosed the following details in the annual report for the financial year ended 31 December 2018.

Name of Disposal Group companies	**Relevant mines/processing plants owned and/or operated by the relevant Disposal Group companies**	**Status as at 31 December 2018**
Huili Caitong	Baicao Processing Plant (Baicao Mine)	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
	Heigutian Processing Plant (Baicao Mine)	Suspended since 2015 and has no intention to resume production
	Cizhuqing Mine	Inactive; vanadium-bearing titano-magnetite of low Fe contents (average grade of 21.40% TFe)
	Iron Pelletising Plant (Xiushuihe Mine)	Suspended since 2013 and has no intention to resume production
	Hailong Processing Plant (Xiushuihe Mine)	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
	Yangqueqing Mine	Inactive; vanadium-bearing titano-magnetite of low Fe contents (average grade of 25.06% TFe)
Xiushuihe Mining	Xiushuihe Processing Plant (Xiushuihe Mine)	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
Panzhihua Yixingda	Haibaodang Mine	Inactive; vanadium-bearing titano-magnetite of low Fe contents

Summarised Financial information of the Disposal Group

The financial information of the Disposal Group for the financial years ended each of 31 December 2015, 2016, 2017 and 2018 is as follows:

	Year ended 31 December 2015	**Year ended 31 December 2016**	**Year ended 31 December 2017**	**Year ended 31 December 2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Financial Performance				
Revenue	219,926	325,993	440,296	457,221
Loss before tax	(950,789)	(632,661)	(188,351)	(445,904)
Loss after tax	(1,054,992)	(630,162)	(167,158)	(462,020)
Loss attributable to the Disposal Group	(1,047,458)	(627,320)	(163,673)	(460,496)
Financial Position				
Total assets	3,629,344	3,190,846	2,858,247	1,813,846
Total liabilities	(1,908,470)	(2,100,134)	(1,934,693)	(1,355,765)
Net assets	1,720,874	1,090,712	923,554	458,081
Equity attributable to owners of the Disposal Group	1,697,799	1,070,479	906,806	442,995

Background information of the Group and the Purchaser

The Group

The Group is principally engaged in mining and ore processing, sale of self-produced products such as iron concentrates and titanium concentrates, trading of coals and steels, management of strategic investments and rendering of specialised mining services. The Group currently sells its iron concentrates and titanium concentrates to distributors in the Sichuan region.

Subsequent to Disposal, the Remaining Group will continue to principally engage in mining and ore processing, sale of self-produced high-grade iron concentrates, trading of coals and steels, management of strategic investments and rendering of specialized mining services.

The following table briefly summarizes the mines owned and/or operated by each company of the Remaining Group and their status as at 31 December 2018:

Name of Remaining Group companies	Relevant mines/processing plants owned and/or operated by the relevant Remaining Group companies	Status as at 31 December 2018
Aba Mining Co., Ltd.	Maoling Processing Plant (Maoling-Yanglongshan Mine)	Producing iron concentrates of high iron contents (within the range of 65% TFe to 72% TFe)
Sichuan Haoyuan New Materials Co., Ltd. and its subsidiaries	Shigou Gypsum Mine	Conducted feasibility studies and started trail production in small quality; to observe and monitor consistency of trial production results if they are satisfactory

The Purchaser

The Purchaser is a company established in the PRC in which Relevant CVT Substantial Shareholders collectively hold more than 30% equity interests. Accordingly, the Purchaser is a connected person for the purposes of the Disposal. The Purchaser is principally engaged in the manufacturing, processing and sales of structural steels and other self-produced products such as vanadium pentoxide.

Listing rules implications

As the applicable percentage ratios (as calculated in accordance with Rule 14.07 of the Listing Rules) for the Disposal are more than 75%, the Disposal constitutes a very substantial disposal transaction of the Company under Rule 14.06 of the Listing Rules. In addition, as the Relevant CVT Substantial Shareholders collectively hold more than 30% equity interests in the Purchaser, the Purchaser is a connected person of the Company pursuant to the Listing Rules, and the Disposal constitutes a connected transaction for the Company and is subject to the reporting, announcement and Independent Shareholders' approval requirements under the Listing Rules. Under the Listing Rules, Trisonic International, any other Shareholders and their respective close associates having a material interest in the Disposal, the SPA and the transactions contemplated thereunder are therefore required to abstain from voting on the resolution proposed to be passed at the EGM for approving the Disposal, the SPA and the transactions contemplated thereunder.

None of the Directors has a material interest in the Disposal, the SPA and the transactions contemplated thereunder and accordingly no Directors have abstained from voting on the board resolution for approving the same.

To the best knowledge of the Directors after making all reasonable enquiries, as at the Latest Practicable Date, Trisonic International and its associates held an aggregate of 1,006,754,000 Shares, representing approximately 44.76% of the entire issued share capital of the Company as at the Latest Practicable Date.

3. EGM

The Company will convene the EGM at Victoria Room I, 3/F., Regal Hong Kong Hotel, 88 Yee Wo Street, Causeway Bay, Hong Kong, at 10:00 a.m. on Friday, 28 June 2019 for the Shareholders to consider and, if thought fit, approve the Disposal, the SPA and the transactions contemplated thereunder. A notice of the EGM is set out on pages EGM-1 to EGM-2 of this circular.

Under the Listing Rules, Trisonic International, any other Shareholders and their respective close associates having a material interest in the Disposal, the SPA and the transactions contemplated thereunder are therefore required to abstain from voting on the resolution proposed to be passed at the EGM for approving the Disposal, the SPA and the transactions contemplated thereunder. Pursuant to Rule 13.39(4) of the Listing Rules, all resolutions to be proposed at the EGM will be taken by poll, the results of which will be announced after the EGM.

A form of proxy for use at the EGM is also enclosed. Whether or not you are able to attend the EGM in person, you are requested to complete and return the form of proxy in accordance with the instructions printed thereon to the Company's share registrar and transfer office in Hong Kong, Computershare Hong Kong Investor Services Limited at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong as soon as possible and, in any event not later than 48 hours before the time appointed for the holding of the EGM (i.e. at or before 10:00 a.m. on Wednesday, 26 June 2019 (Hong Kong time)) or any adjourned meeting thereof. Completion and return of the form of proxy will not preclude you from attending and voting in person at the EGM or any adjournment meeting thereof.

4. RECOMMENDATION

The Directors consider that the terms of the Disposal, the SPA and the transactions contemplated thereunder are fair and reasonable and are in the interests of the Company and the Shareholders as a whole. Accordingly, the Directors recommend you to vote in favour of the resolutions in the terms as set out in the notice of the EGM.

Your attention is also drawn to the letter from the IBC as set out in this circular. Having considered the principal factors and reasons considered by, and the advice of, the IFA as set out in its letter of advice, the IBC considers that the terms and conditions of the Disposal, the SPA and the transactions contemplated thereunder are fair and reasonable. The IBC also considers that the Disposal, the SPA and the transactions contemplated thereunder is on normal commercial terms and in the interests of the Company and the Shareholders as a whole. Accordingly, the IBC has recommended the Independent Shareholders to vote in favour of the ordinary resolutions to approve the Disposal, the SPA and the transactions contemplated thereunder at the EGM.

5. ADDITIONAL INFORMATION

Your attention is also drawn to the information contained in the appendices to this circular.

Yours faithfully
By order of the Board
China Vanadium Titano-Magnetite Mining Company Limited
Teh Wing Kwan
Chairman

China Vanadium Titano-Magnetite Mining Company Limited
中國釩鈦磁鐵礦業有限公司

(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 00893)

10 June 2019

To the Independent Shareholders

Dear Sir or Madam,

VERY SUBSTANTIAL DISPOSAL AND CONNECTED TRANSACTION IN RELATION TO THE PROPOSED DISPOSAL OF 100% EQUITY INTEREST OF HUILI CAITONG

We refer to the circular issued by the Company to the Shareholders and dated 10 June 2019 ("**Circular**") of which this letter forms part. Terms defined in the Circular have the same meanings when used in this letter unless the context otherwise requires.

As the applicable percentage ratios (as calculated in accordance with Rule 14.07 of the Listing Rules) for the Disposal are more than 75%, the Disposal constitutes a very substantial disposal transaction of the Company under Rule 14.06 of the Listing Rules. In addition, as the Relevant CVT Substantial Shareholders collectively hold more than 30% equity interests in the Purchaser, the Purchaser is a connected person of the Company pursuant to the Listing Rules, and the Disposal constitutes a connected transaction for the Company and is subject to the reporting, announcement and Independent Shareholders' approval requirements under the Listing Rules.

We have been appointed by the Board to consider the terms of the Disposal, the SPA and the transactions contemplated thereunder and to advise the Independent Shareholders as to whether, in our opinion, the terms of the Disposal, the SPA and the transactions contemplated thereunder are fair and reasonable and whether the Disposal, the SPA and the transactions contemplated thereunder is in the interests of the Company and the Shareholders as a whole. Messis Capital Limited has been appointed as the IFA to advise us and the Independent Shareholders in this respect.

We wish to draw your attention to the letter from the Board and the letter from the IFA as set out in the Circular. Having considered the principal factors and reasons considered by, and the advice of, the IFA as set out in its letter of advice, we consider that the terms and conditions of the Disposal, the SPA and the transactions contemplated thereunder are fair and reasonable. We also consider that the Disposal, the SPA and the transactions contemplated thereunder is on normal commercial terms and in the interests of the Company and the Shareholders as a whole. Accordingly, we would recommend the Independent Shareholders to vote in favour of the ordinary resolution to approve the Disposal, the SPA and the transactions contemplated thereunder at the EGM.

Yours faithfully,
For and on behalf of
Independent Board Committee

Yu Haizong **Liu Yi** **Wu Wen**

Independent non-executive Directors

The following is the full text of the letter from Messis Capital Limited for the purpose of inclusion in this circular, to the Independent Board Committee and the Independent Shareholders in respect of the Disposal, the SPA and the transactions contemplated thereunder

MESSIS 大有融資

10 June 2019

To: The Independent Board Committee and the Independent Shareholders of China Vanadium Titano-Magnetite Mining Company Limited

Dear Sir or Madam,

VERY SUBSTANTIAL DISPOSAL AND CONNECTED TRANSACTION IN RELATION TO THE PROPOSED DISPOSAL OF 100% EQUITY INTEREST OF HUILI CAITONG

INTRODUCTION

We refer to our appointment as the Independent Financial Adviser to advise the Independent Board Committee and the Independent Shareholders in relation to the Disposal, the SPA and the transactions contemplated thereunder, details of which are set out in the letter from the Board (the "**Letter from the Board**") contained in the circular of the Company to the Shareholders dated 10 June 2019 (the "**Circular**"), of which this letter forms part. Capitalised terms used in this letter shall have the same meanings as defined in the Circular unless the context otherwise requires.

On 29 January 2019, the Vendor entered into the SPA with the Purchaser and Huili Caitong pursuant to which the Vendor has conditionally agreed to sell to the Purchaser the 100% equity interest in Huili Caitong at the Consideration of RMB550,000,000, which will be settled partly in cash and partly by the assumption of the Vendor's repayment obligation in respect of the Intra-Group Debts. The Disposal Group Companies are the operators and/or owners of the Group's existing Low Fe and Inactive Mines.

As the applicable percentage ratios (as calculated in accordance with Rule 14.07 of the Listing Rules) for the Disposal are more than 75%, the Disposal constitutes a very substantial disposal transaction of the Company under Rule 14.06 of the Listing Rules. In addition, as the Relevant CVT Substantial Shareholders collectively hold more than 30% equity interests in the Purchaser, the Purchaser is a connected person of the Company pursuant to the Listing Rules, and the Disposal constitutes a connected transaction for the Company and is subject to the reporting, announcement and Independent Shareholders' approval requirements under the Listing Rules. Under the Listing Rules, Trisonic International, any other Shareholders and their respective close associates having a material interest in the Disposal, the SPA and the transactions contemplated thereunder are therefore required to abstain from voting on the resolution to be proposed at the EGM.

The Independent Board Committee (comprising all independent non-executive Directors namely Mr. Yu Haizong, Mr. Liu Yi and Mr. Wu Wen) has been formed in accordance with Chapter 14A of the Listing Rules to advise the Independent Shareholders on the Disposal, the SPA and the transactions contemplated thereunder. We, Messis Capital Limited, have been appointed as the Independent Financial Adviser to advise the Independent Board Committee and the Independent Shareholders in this regard.

As at the Latest Practicable Date, we did not have any relationships with or interests in the Company and any other parties that could reasonably be regarded as relevant to our independence. During the past two years, we have not acted as the independent financial adviser on any other transactions for the Company. Apart from normal professional fees payable to us in connection with this appointment as the Independent Financial Adviser, no arrangement exists whereby we will receive any fees or benefits from the Company or any other parties that could reasonably be regarded as relevant to our independence and we are independent from the Company pursuant to Rule 13.84 of the Listing Rules.

BASIS OF OUR OPINION

In arriving at our recommendations, we have relied on the statements, information and representations contained in the Circular and the information and representations provided to us by the Company, the Directors and the management of the Company. We have assumed that all information, representations and opinions contained or referred to in the Circular and all information and representations which have been provided by the Company, the Directors and the management of the Company for which they are solely and wholly responsible, are true and accurate at the time they were made and will continue to be accurate as at the Latest Practicable Date. We have no reason to doubt the truth, accuracy and completeness of the information and representations provided to us by the management of the Company.

The Circular, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Listing Rules for the purpose of giving information with regard to the Company. The Directors having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in the Circular is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement therein or the document misleading.

We consider that we have been provided with sufficient information on which to form a reasonable basis for our opinion. We have no reason to suspect that any relevant information has been withheld, nor are we aware of any material facts or circumstances which would render the information provided and representations made to us untrue, inaccurate or misleading. We consider that we have performed all the necessary steps to enable us to reach an informed view and to justify our reliance on the information provided so as to provide a reasonable basis for our opinion. We have not, however, carried out any independent verification of the information provided by the Company, the Directors and the management of the Company, nor have we conducted an independent investigation into the business and affairs of the Group and any parties in relation to the Disposal, the SPA and the transactions contemplated thereunder.

This letter is issued for the information of the Independent Board Committee and the Independent Shareholders solely in connection with their consideration of the Disposal, the SPA and the transactions contemplated thereunder. Except for its inclusion in the Circular, this letter is not to be quoted or referred to, in whole or in part, nor shall this letter be used for any other purposes, without our prior written consent.

PRINCIPAL FACTORS AND REASONS CONSIDERED

In arriving at our opinions and recommendations, we have taken into consideration the following principal factors and reasons:

1. Background and reasons for the Disposal

1.1 Background information of the Group

The Group is principally engaged in mining and ore processing, sale of self-produced products such as iron concentrates and titanium concentrates, trading of coals and steels, management of strategic investments and rendering of specialised mining services. The Group currently sells its iron concentrates and titanium concentrates to distributors in the Sichuan region.

1.2 Financial performance on the Group

Set out below is a summary of the consolidated statements of profit or loss of the Group for (i) each of the two years ended 31 December 2018, which are extracted from the Company's annual report for the year ended 31 December 2018 (the "**2018 Annual Report**") and (ii) the year end 31 December 2016 as extracted from the Company's annual report for the year ended 31 December 2016.

Consolidated statement of profit or loss

	For the year ended 31 December		
	2018	**2017**	**2016**
	(audited)	**(audited)**	**(audited)**
		(re-presented)	
	RMB'000	*RMB'000*	*RMB'000*
Revenue	684,750	877,183	1,833,305
Gross profit	50,540	15,572	42,447
Profit/(loss) for the year from continuing operations	4,656	(222,463)	–
Loss for the year from discontinued operations	(453,907)	(167,158)	–
Loss attributable to owners of the Company	(443,969)	(349,490)	(773,742)

The Group's revenue for the year ended 31 December 2017 was approximately RMB1.318 billion (including revenue from continuing operations of approximately RMB877.2 million and revenue from discontinued operations of approximately RMB440.3 million), representing a decrease of approximately 28.1% over the corresponding period of the previous financial year. The decrease in the Group's revenue was mainly due to the lower sales recorded from the Remaining Group as a result of lower trading sales of coals and steels according to the Group's strategies since 2017 to reduce trading sales which had lower profit margins. The decrease was partially offset by the increase in sales for the Group's self-produced products such as low-grade iron concentrates produced by the Disposal Group as a result of higher average selling price as compared to 2016.

The Group recorded a gross profit of approximately RMB127.5 million (including gross profit from continuing operations of approximately RMB15.6 million and gross profit from discontinued operations of approximately RMB111.9 million) for the year ended 31 December 2017 as compared to a gross profit of approximately RMB42.4 million for the year ended 31 December 2016. The increase in gross profit was mainly due to higher selling prices of the Disposal Group's self-produced products such as low-grade iron concentrates during 2017 and a lower sales volume in its trading business which had thin profit margin. As a result, the gross profit margin of the Group for the year ended 31 December 2017 increased to approximately 9.7% as compared to that of approximately 2.3% for the year ended 31 December 2016.

In addition, the Group recorded a decrease in impairment loss on property, plant and equipment from approximately RMB185.2 million for the year ended 31 December 2016 to approximately RMB72.8 million for the year ended 31 December 2017 which was mainly due to decrease in impairment losses on processing plants of Baicao Mine and Xiushuihe Mine owned by the Disposal Group. The Group also recorded a decrease in impairment loss on intangible assets from approximately RMB200.0 million for the year ended 31 December 2016 to approximately RMB76.1 million for the year ended 31 December 2017. The impairment loss on intangible assets for the two years ended 31 December 2017 were mainly related to Baicao Mine, Xiushuihe Mine and Haibaodang Mine owned by the Disposal Group. As a result of the foregoing, the Group recorded a decrease in loss attributable to owners of the Company from approximately RMB773.7 million for the year ended 31 December 2016 to approximately RMB349.5 million for the year ended 31 December 2017.

According to the 2018 Annual Report, the Group's revenue from continuing operations for the year ended 31 December 2018 was approximately RMB684.8 million, representing a decrease of approximately 21.9% over the corresponding period of the previous financial period. The decrease was mainly due to the decrease in revenue from trading services as a result of the Group's business direction to progressively reduce its exposure in this segment which required higher working capital requirements, partially offset by the increase in revenue from High-Fe Mining Operation of approximately RMB14.1 million to approximately RMB81.7 million for the year ended 31 December 2018 which was mainly attributable to the increase in sales volume as well as higher average selling prices of high-grade iron concentrates.

Despite the decrease in revenue, the gross profit of the Group's continuing operations increased by approximately RMB35.0 million to approximately RMB50.5 million for the year ended 31 December 2018. The increase was mainly attributable to higher selling price for high-grade iron concentrates and gross profit contributed by its mining service business.

The Group recorded a profit from continuing operation of approximately RMB4.7 million for the year ended 31 December 2018 as compared to a loss from continuing operation of approximately RMB222.5 million for the year ended 31 December 2017. The turnaround was mainly attributable to (i) increase in gross profit as discussed above; and (ii) an aggregate amount of impairment loss on intangible assets and fair value losses on financial assets at fair value through profit or loss of approximately RMB174.5 million was incurred in 2017 while no such losses was incurred in 2018. As stated in the 2018 Annual Report, the loss for the year from discontinued operation amounted to approximately RMB453.9 million for the year ended 31 December 2018. As a result, the loss attributable to owners of the Company amounted to approximately RMB444.0 million for the year ended 31 December 2018.

1.3 Financial position on the Group

Consolidated statement of financial position

	As at 31 December		
	2018	**2017**	**2016**
	(audited)	**(audited)**	**(audited)**
	RMB'000	*RMB'000*	*RMB'000*
Non-current assets	923,027	2,100,096	2,162,708
Current assets	1,522,820	935,779	1,118,448
Total assets	2,445,847	3,035,875	3,281,156
Non-current liabilities	19,133	347,513	11,924
Current liabilities	1,533,018	1,343,257	1,597,277
Total liabilities	1,552,151	1,690,770	1,609,201
Equity attributable to owners of the Company	574,737	1,020,907	1,318,173

As at 31 December 2017, the total assets of the Group amounted to approximately RMB3,035.9 million as compared to approximately RMB3,281.2 million as at 31 December 2016. The decrease in total assets of the Group was mainly due to (i) the decrease in inventories to approximately RMB174.6 million; (ii) decrease in financial assets at fair value through profit or loss to nil; and (iii) the decrease in intangible assets to approximately RMB1,350.0 million. The total liabilities of the Group slightly increased to approximately RMB1,690.8 million as at 31 December 2017 which was mainly due to the increase in non-current liabilities as a result of the increase in long term interest-bearing bank and other loans to approximately RMB311.1 million; partially offset by the decrease in current liabilities to approximately RMB1,343.3 million as a result of decrease in current portion of interest-bearing bank and other loan to approximately RMB596.2 million. As a result of the foregoing, the equity attributable to owners of the Company decreased to approximately RMB1,020.9 million as at 31 December 2017.

As at 31 December 2018, the total assets of the Group amounted to approximately RMB2,445.8 million, representing a drop of approximately RMB590.0 million as compared to that as at 31 December 2017. The decrease was mainly due to the decrease in the Group's inventories to approximately RMB23.6 million as at 31 December 2018 as a result of a drop in purchase for trading business. The total liabilities of the Group decreased to approximately RMB1,552.2 million as at 31 December 2018. As a result of the foregoing, the equity attributable to owners of the Company decreased to approximately RMB574.7 million as at 31 December 2018.

1.4 Background information on the Disposal Group

As at the Latest Practicable Date, the Disposal Group comprised of Huili Caitong and its subsidiaries, namely Xiushuihe Mining and Panzhihua Yixingda.

Huili Caitong is established on 7 July 1998 under the laws of the PRC with a registered capital of RMB610,520,000. The principal business of Huili Caitong is iron ore mining, iron ore beneficiation and sale of self-produced products. Huili Caitong owns the Baicao Mine, the Baicao Processing Plant, the Cizhuqing Mine, the Yangqueqing Mine, the Hailong Processing Plant, the Heigutian Processing Plant, and the Iron Pelletising Plant.

Xiushuihe Mining is located in Huili County, Sichuan, the PRC and is a limited liability company established on 26 June 2007 under the laws of the PRC with a registered capital of RMB200,000,000. The principal business of Xiushuihe Mining is iron ore mining, iron ore beneficiation and sale of self-produced products. Xiushuihe Mining owns the Xiushuihe Mine (including expansion) and the Xiushuihe Processing Plant.

Panzhihua Yixingda is located in the Panzhihua City, Sichuan, the PRC and is a limited liability company established on 9 July 2009 under the laws of the PRC with a registered capital of RMB1,000,000. Panzhihua Yixingda is the holder of the exploration right of Haibaodang Mine.

Set out below is the unaudited key financial information of the Disposal Group as extracted from Appendix I of the Circular, for the four years ended 31 December 2015, 2016, 2017 and 2018:

	For the year ended 31 December			
	2015	**2016**	**2017**	**2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Financial performance				
Revenue	219,926	325,993	440,296	457,221
Gross profit/(loss)	(31,490)	17,343	111,948	75,359
Loss before tax	(950,789)	(632,661)	(188,351)	(445,904)
Loss attributable to owners of the Disposal Group	(1,047,458)	(627,320)	(163,673)	(460,496)

	As at 31 December			
	2015	**2016**	**2017**	**2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Financial position				
Total assets	3,629,344	3,190,846	2,858,247	1,813,846
Total liabilities	1,908,470	2,100,134	1,934,693	1,355,765
Net assets	1,720,874	1,090,712	923,554	458,081
Equity attributable to owners of the Disposal Group	1,697,799	1,070,479	906,806	442,995

Year ended 31 December 2016 compared with year ended 31 December 2015

The Disposal Group's revenue for the year ended 31 December 2016 amounted to approximately RMB326.0 million, representing an increase of approximately 48.2% over the previous financial year. The increase in the revenue was mainly due to the increase in sales volume of low-grade iron concentrates from approximately 752.6 Kt in 2015 to approximately 1,098.4 Kt in 2016 as the Xiushuihe Mine experienced periodic suspension from April to December 2015 while the operation of Baicao Mine was suspended during the whole year of 2015.

The Disposal Group recorded a gross profit of approximately RMB17.3 million for the year ended 31 December 2016 as compared to a gross loss of approximately RMB31.5 million for the year ended 31 December 2015. The turnaround was mainly due to (i) the increase in revenue as mentioned above; (ii) increase in average selling price of low-grade iron concentrates from approximately RMB231 per ton in 2015 to RMB268 per ton in 2016 following a slight recovery of the market; and (iii) increase in average selling price of titanium concentrates from approximately RMB441 per ton in 2015 to approximately RMB779 per ton in 2016 as the local government authorities carried out stringent environmental protection measures, which led to production suspension or closed down certain titanium producers who failed to meet the required standard. The reduced in supply therefore pushed up the price of titanium concentrates in 2016.

In addition, the Disposal Group recorded a substantial decrease in administrative expenses by approximately 67.3% to approximately RMB62.3 million for the year ended 31 December 2016 which was mainly due to the decrease in plant suspension expenses from approximately RMB94.9 million for the year ended 31 December 2015 to approximately RMB26.8 million for the year ended 31 December 2016 because (i) the suspension period for Baicao processing plant and Hailong processing plant was shortened to four months in 2016; and (ii) the Xiushuihe processing plant resumed its productions in January 2016. Furthermore, the Disposal Group recorded (i) a decrease in impairment loss on trade receivables from approximately RMB158.9 million for the year ended 31 December 2015 to approximately RMB64.9 million for the year ended 31 December 2016; (ii) a decrease in impairment loss on property, plant and equipment from approximately RMB250.8 million to approximately RMB185.2 million for the year ended 31 December 2016 and (iii) a decrease in other expenses from approximately RMB127.6 million to approximately RMB0.3 million for the year ended 31 December 2016 which was mainly due to (a) incur of landslide treatment expenses in 2015 at Baicao Mine as the landslide had prevented the stripping activities during rainy seasons at the Baicao Mine coupled with the safety concerns to the villagers nearby and (b) one-off expenses of approximately RMB70 million in relation to proforma adjustment on the reorganisation of gypsum mine. As a result of the foregoing, the loss attributable to owners of the Disposal Group decreased from approximately RMB1,047.5 million for the year ended 31 December 2015 to approximately RMB627.3 million for the year ended 31 December 2016.

Year ended 31 December 2017 compared with year ended 31 December 2016

The Disposal Group's revenue for the year ended 31 December 2017 amounted to approximately RMB440.3 million, representing an increase of approximately 35.1% over the previous financial year. The increase in the Disposal Group's revenue was mainly due to (i) increase in sales of low-grade iron concentrates and titanium concentrates as a result of short rebound on selling price of these products in 2017.

The Disposal Group recorded a substantial increase in gross profit to approximately RMB111.9 million for the year ended 31 December 2017 as compared to a gross profit of approximately RMB17.3 million for the year ended 31 December 2016. The increase was mainly due to the increase in revenue with reasons as mentioned above. In addition, the Disposal Group recorded (i) a decrease in impairment loss on trade receivables from approximately RMB64.9 million for the year ended 31 December 2016 to nil for the year ended 31 December 2017 as the bad debts exposures had been accounted for during the financial year 2015 and 2016; (ii) a decrease in impairment losses on property, plant and equipment and intangible assets from RMB185.2 million to approximately RMB72.8 million and RMB152.8 million to approximately RMB11.2 million, respectively, for the year ended 31 December 2017 which was mainly due to low commodity prices across metals and mining sector in general before the financial year 2017. As a result of the foregoing, the loss attributable to owners of the Disposal Group reduced from approximately RMB627.3 million for the year ended 31 December 2016 to approximately RMB163.7 million for the year ended 31 December 2017.

Year ended 31 December 2018 compared with year ended 31 December 2017

For the year ended 31 December 2018, the Disposal Group's revenue amounted to approximately RMB457.2 million, representing an increase of approximately 3.8% over the previous corresponding period. The increase was mainly due to the slight increase in the sales volume of low-grade iron concentrates as a result of the improvement to higher utilisation rate of the Low Fe Mines, despite the decrease in average unit price of the low-grade iron concentrates during the year ended 31 December 2018.

Despite the slight increase in revenue, the Disposal Group recorded a decrease in gross profit to approximately RMB75.4 million for the year ended 31 December 2018 as compared to approximately RMB111.9 million for the corresponding period in 2017. The decrease was mainly attributable to the increase in cost of sales as a result of the increase in spending on technical improvement with the intention to improve the product grades of iron concentrates. Further, the Disposal Group recorded an increase in (i) administrative expenses from approximately RMB51.6 million for the year ended 31 December 2017 to approximately RMB91.6 million for the year ended 31 December 2018 which was mainly attributable to professional fee incurred for (a) strategic review of the Disposal Group and (b) the Disposal; and (ii) the increase in impairment losses and write-down of inventories to net realisable value to RMB399.1 million for the year ended 31 December 2018 as compared to approximately RMB126.4 million for the year ended 31 December 2017 which was mainly due to lower value-in-use of the Low Fe Mines as a result of the fall in selling price and lower-than-expected utilisation rates and inactive status of the existing suspended mines. As a result of the foregoing, the loss attributable to the owners of the Disposal Group increased sharply from approximately RMB163.7 million for the year ended 31 December 2017 to approximately RMB460.5 million for the year ended 31 December 2018.

As at 31 December 2016, the total assets of the Disposal Group amounted to RMB3,190.8 million. The decrease in total assets of the Group as at 31 December 2016 as compared to that as at 31 December 2015 was mainly due to the decrease in property, plant and equipment to RMB539.8 million and decrease in intangible assets to RMB626.1 million as a result of impairments. The total liabilities of the Disposal Group as at 31 December 2016 also increased to RMB2,100.1 million which was mainly due to the increase in (i) amounts due to the Remaining Group to approximately RMB679.2 million and (ii) other payables and accruals to approximately RMB466.9 million. As a result of the foregoing, the equity attributable to owners of the Disposal Group decreased to approximately RMB1,070.5 million as at 31 December 2016.

As at 31 December 2017, the total assets of the Disposal Group amounted to RMB2,858.2 million. The decrease in total assets of the Group as at 31 December 2017 as compared to that as at 31 December 2016 was mainly due to (i) the decrease in property, plant and equipment to RMB472.8 million and decrease in intangible assets to RMB611.3 million as a result of impairments; and (ii) decrease in amount due from the Remaining Group to approximately RMB1,157.1 million. The total liabilities of the Disposal Group as at 31 December 2017 also decreased to RMB1,934.7 million which was mainly due to the decrease in amount due to the Remaining Group to approximately RMB489.8 million and offset by the increase in interest-bearing bank and other loans to approximately RMB813.1 million. As a result of the foregoing, the equity attributable to owners of the Disposal Group further decreased to approximately RMB906.8 million as at 31 December 2017.

As at 31 December 2018, the total assets of the Disposal Group amounted to RMB1,813.8 million. The decrease in total assets of the Disposal Group as at 31 December 2018 as compared to that as at 31 December 2017 was mainly due to (i) decrease in property, plant and equipment to RMB403.4 million as a result of impairments; (ii) decrease in intangible assets to RMB340.7 million as a result of impairments; and (iii) decrease in amount due from the Remaining Group to approximately RMB491.1 million. The total liabilities of the Disposal Group as at 31 December 2018 also decreased to RMB1,355.8 million which was mainly due to the decrease in (i) amount due to the Remaining Group to approximately RMB29.3 million and (ii) other payables and accruals to approximately RMB381.8 million. As a result of the foregoing, the equity attributable to owners of the Disposal Group further decreased to approximately RMB443.0 million as at 31 December 2018.

Based on the above, it is noted that the Disposal Group recorded substantial losses for each of the four years ended 31 December 2018. As a result, the equity attributable to owners of the Disposal Group was deteriorating significantly from approximately RMB1,697.8 million as at 31 December 2015 to approximately RMB443.0 million as at 31 December 2018.

1.5 Reasons for and benefits of the Disposal

As stated in the Letter from the Board, the Disposal Group Companies own and/or operate 8 mines/processing plants. Set out the table below summarises the status of the mines/processing plants of the Disposal Group as at 31 December 2018:

Name of Disposal Group Companies	**Relevant mines/processing plants owned and/or operated by the relevant Disposal Group Companies**	**Status as at 31 December 2018**
Huili Caitong	Baicao Processing Plant (Baicao Mine)	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
	Heigutian Processing Plant (Baicao Mine)	Suspended since 2015 and has no intention to resume production
	Cizhuqing Mine	Inactive; vanadium-bearing titano-magnetite of low Fe contents (average grade of 21.40% TFe)
	Iron Pelletising Plant (Xiushuihe Mine including expansion)	Suspended since 2013 and has no intention to resume production
	Hailong Processing Plant (Xiushuihe Mine including expansion)	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
	Yangqueqing Mine	Inactive; vanadium-bearing titano-magnetite of low Fe contents (average grade of 25.06% TFe)
Xiushuihe Mining	Xiushuihe Processing Plant (Xiushuihe Mine including expansion)	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
Panzhihua Yixingda	Haibaodang Mine	Inactive; vanadium-bearing titano-magnetite of low Fe contents

From the table above, it is noted that 5 out of 8 of mines/processing plants of the Disposal Group are currently either inactive or under suspension while the remaining 3 mines are the Low Fe Mines.

Based on our discussion with the management of the Company, we are given to understand that the Iron Pelletising Plant and the Heigutian Processing Plant have been suspended since 2013 and 2015, respectively, which were mainly due to the Group's efforts to streamline operations and rationalise assets and to minimise operating losses by suspending the operations of the under-performing mines. As advised by the management of the Company, given that substantial capital investment in the amount of approximately RMB245.0 million is expected in order to resume the operations of these two plants and there is no clear sign of market recoverability and profitability, the Directors consider that there is lack of solid commercial ground to justify the resumption in operations of these two plants.

Cizhuqing Mine was acquired in 2010 and according to the competent person report as stipulated in Appendix IV of the Circular (the "**CP Report**"), as of 31 December 2018, the Cizhuqing Mine has approximately 2.01 Mt of indicated resources and approximately 23.56 Mt inferred resources and no ore reserves are estimated. Further to our discussion with the management of the Company, we are given to understand substantial costs of approximately RMB406.4 million (such as exploration costs, environmental and safety compliance regulations costs, costs for relocation of surrounding rural households and the resettlement of local farmers as well as construction of processing plant and tailings pond) are required in order to activate the Cizhuqing Mine.

Yangqueqing Mine was acquired in 2010. According to the CP Reports as of 31 December 2018, the Yangqueqing Mine has approximately 7.34 Mt measured resources, approximately 10.27 Mt of indicated resources and approximately 3.57 Mt inferred resources and no ore reserves are estimated. Further to our discussion with the management of the Company, we are given to understand that substantial costs of approximately RMB168.0 million is expected for environmental and safety regulations compliance costs and costs for building new processing plant in order to reactive the Yangqueqing Mine.

Haibaodang Mine was acquired in 2013. As discussed in the CP Report, due to the low grades of TFe and titanium dioxide contents of the Haibaodang Mine, capital investment is expected to be significant in order to reactivate the mine (given relatively remote infrastructures). In addition, the exploration license has been expired and the renewal of such is pending under regulatory review. It is anticipated that there is absence of reasonable prospects for an eventual economic extraction and therefore, classified all mineralised blocks as exploration results under the JORC Code for the Haibaodang Mine.

Given that (i) operations of the Iron Pelletising Plant and the Heigutian Processing Plant were suspended in 2013 and 2015 respectively and the management have no intention to resume their operations; (ii) no ore reserves are estimated for the both inactive Cizhuqing Mine and Yangqueqing Mine according to the CP report and substantial investments are required to activate the production; and (iii) there is an absence of reasonable prospects for an eventual economic extractions for Haibaodang Mine, we concur with the view of the Directors that it is in the interests of the Shareholders to dispose these suspended/inactive mines and/or processing plants owned by the Disposal Group.

According to the CP report, Baicao Mine is the one of two mine in the Disposal Group which has proved and probable reserves. As of 31 December 2018, there were a total of 9.13 Mt of reserves, of which 2.27 Mt were proved and 6.86 Mt were probable. There were a further 47.36 Mt in the various mineral resource categories, of which approximately 16.09 Mt were measured resources, 21.76 Mt were indicated resources while the remaining were inferred resources. The iron ore produced by Baicao Mine contains TFe grade range from approximately 20.76% to 23.42%. Xiushuihe Mine is the other mine that possesses proved and probable reserves. As of 31 December 2018, there were a total of 45.64 Mt of reserves, of which 28.10 Mt were proved and 17.54 Mt were probable. There were a further 63.30 Mt in the various mineral resource categories, of which approximately 40.21 Mt were measured resources and 23.09 Mt were indicated resources. The iron ore produced by Xiushuihe Mine contains TFe grade range from approximately 22.51% to 32.74%. Despite the proven ore reserves possessed by the Baicao Mine and the Xiushuihe Mine (including expansion), we understand from the management of the Company that significant capital expenditure in the amount of approximately RMB287.8 million is expected to be required by the Disposal Group to operate such mines throughout the life of these mines. Given that (i) substantial capital expenditure is expected to be required to operate such mines and (ii) the shift in demand to high-grade iron ore from low-grade iron ore as discussed below, the Directors consider that it is not commercially viable to operate such mines going forward.

Further to the latest status of the mines/processing plants of the Disposal Group as discussed above, the Directors considers that the Disposal is in the interests of the Company and the Shareholders due to (i) the continuous poor financial performances and deteriorating financial positions of the Disposal Group; and (ii) the recent shift in demand to high-grade from low-grade iron ore.

(i) Continuous poor financial performances and deteriorating financial positions of the Disposal Group

As discussed in section "1.4 Background information on the Target Group" above, the Disposal Group recorded continuous substantial losses for each of the four years ended 31 December 2018. Given the loss making performance, as a consequence, the Disposal Group had experienced significant impairment losses of approximately RMB1.5 billion in aggregate for the four years ended 31 December 2018 due to impairment assessment conducted in accordance with the required International Financial Reporting Standards which arose from the loss-making status of the operations under assessment, a sharp fall in value-in-use for those operating assets and a sharp fall in fair value less cost to sell for those non-operating assets. The equity attributable to owners of the Disposal Group had been deteriorated from approximately RMB1,697.8 million as at 31 December 2015 to approximately RMB443.0 million as at 31 December 2018.

(ii) Recent shift in demand to high-grade iron ore from low-grade iron ore

As advised by the management of the Company, the products of the Group's are ultimately used in steel industry. The industry development and policies of the PRC's steel industry are driven and guided by the PRC 13th Five Year Plan (the "**Plan**"). The Plan states that the PRC government will actively and steadily address overcapacity by putting greater emphasis on making use of market forces, economic measures and rule of law approaches and will tighten control on the expansion of production capacity, enforce strict financial and credit rules. Further, the National Development and Reform Commission of the PRC issued the "Notice Concerning Properly Undertaking Work for the Dissolution of Excessive Capacity in Key Sectors in 2018" in April 2018, which set explicitly its target to further cut the steel capacity by 30 Mt in 2018. In April 2019, it further issued measures that PRC will press ahead with the efforts to cut excess capacity in, among others, steel sector in 2019. According to China Metallurgical Industry Planning and Research Institute[1], PRC's crude steel output in 2018 is estimated as 838 Mt, with a year on year increase of only 0.7%. Based on the current policy of the PRC government, it is expected that the growth rate on steel output and hence the consumption of iron ore will be controlled along with the reductions in steel production overcapacity.

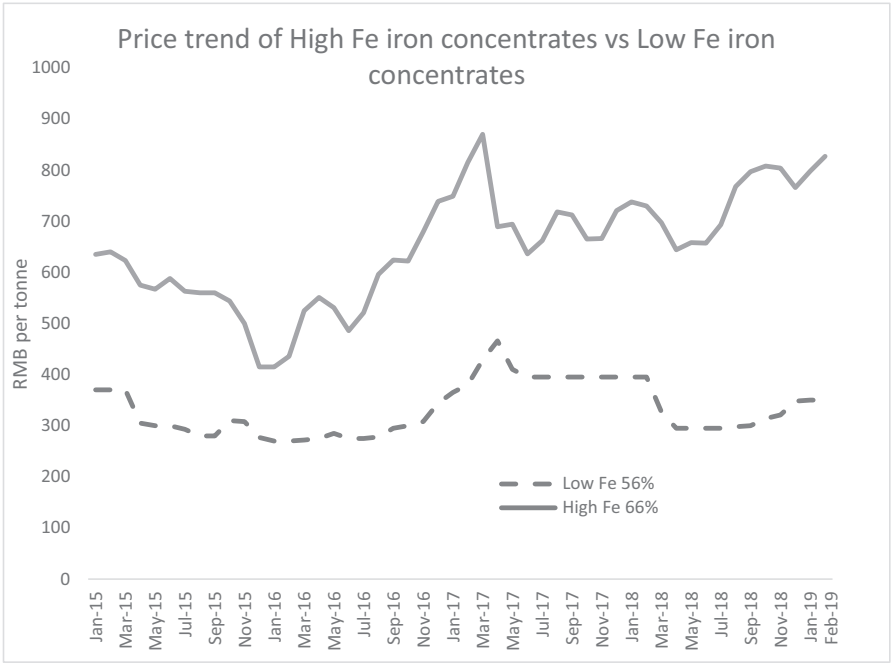
[1] *China Metallurgical Industry Planning and Research Institute was approved by the State Council of the PRC and established in April 1972 as a national consulting institution. It is specially engaged in development plan and strategies research of metallurgical industry.*

Further to PRC government's policy to reduce steel overcapacity, the blue sky policy issued by the PRC government also largely affected the demand the iron ore with lower Fe content. Using iron ore with lower Fe content is much more pollutive than that of iron ore with higher Fe content during steel production. In recent years, the PRC government has stepped up efforts in environmental protection and emission control. In February 2017, PRC government issued a "2+26" policy to reduce smog by at least 15% year on year in 28 northern cities which covers Beijing, Tianjin and 26 other cities in the smog-plagued provinces. In May 2018, the Ministry of Ecology and Environment of the PRC issued a consultation paper on the "Ultra-low Emission Renovation Plan for Steel Enterprises" which required 480 Mt of steel capacity in China to meet the ultra-low emission standards by 2020. The emission target would rise to 580 Mt and 900 Mt by 2022 and 2025, respectively, with a view to promoting healthy and sustainable development of the steel industry.

Based on the aforesaid, the drastic shift in demand to high-grade from low-grade iron ore has driven up the prices for iron ore with higher iron content, which is less pollutive during steel production.

According to the information provided by the Company, during the financial year from 2017 to 2018, the average unit selling prices of iron concentrates of the Baicao Mine and the Xiushuihe Mine generally decreased by approximately 4.5% and 13.7%, respectively. Set out below is a graph showing the price movements of low Fe iron concentrates (56% TFe) in Sichuan and high Fe iron concentrates (66% TFe) in Hebei from January 2015 to February 2019 (the "**Review Period**"), as extracted from SteelHome Website[2] (http://www.steelhome.cn).

[2] *SteelHome Website is an independent website in Chinese steel market, providing information, consultancy, data, industry events and E-commerce to global steel companies, raw material suppliers, traders, logistics companies, steel users, government departments, industry associations, financial & research institutes etc. The number of registered members has been 250,000. SteelHome is strategic partner of World Steel Dynamics, American Metal Markets, Metal Bulletin, Bloomberg, Reuters.*



Source: SteelHome Website

From the graph above, it is noted that high Fe iron concentrates have higher market prices than that of the low Fe iron concentrates. The market price of low Fe iron concentrates experienced a general decreasing trend during the Review Period, from amounted to approximately RMB370 per tonne in January 2015 to approximately RMB350 per tonne in February 2019. It is particularly noted that the market price of Low Fe dropped significantly from approximately RMB466 per tonne in April 2017 to approximately RMB348 per tonne in December 2018, following the introduction of "2 + 26" policy by the PRC government in February 2017. On the other hand, the market price of high Fe iron concentrates was in an increasing trend in general during the Review Period. The market price of which increased from approximately RMB415 per tonne in January 2015 to approximately RMB827 per tonne in February 2019. The widening of price difference between the low Fe iron concentrates and high Fe iron concentrates indicated that there is a recent shift in demand to high-grade iron ore from low-grade iron ore.

After taking into consideration of the above, in particular, (i) the prices of iron concentrates of both Baicao Mine and Xiushuihe Mine were decreasing; (ii) the price differences between the low Fe iron concentrates and high Fe iron concentrates was widened recently; (iii) the growth rate on the output of iron ore and steel production will be largely affected by the Plan and PRC's government policy; and (iv) PRC government's policy on smog reduction may largely affect the demand of iron ore with lower Fe content which is much pollutive during steel production process, we concur with the view of the Directors that the prospects of the Low Fe Mines are challenging and uncertain.

1.6 Prospects of the High Fe Mines and Assets of the Remaining Group

As stated in the Letter from the Board, it is expected that the net proceeds from the Disposal of approximately RMB88.2 million will be utilised, among others, for equipment upgrade and environmental compliance related investments for the existing operations of high-grade iron concentrates.

The key business of the Remaining Group is mainly the operation of the High Fe Mines and Assets. As discussed above, the high Fe content iron concentrates is far less pollutive during steel production process. China has been increasingly emphasising its focus on environmental protection. To achieve the green mine construction in China, the Ministry of Natural Resources of the PRC announced the "Non-metal Mining Industry Green Mine Construction Code" and nine other guidelines in June 2018. It was the first national green mine construction industry standard released to promote the green development of China's mining industry.

The High Fe Mines and Assets of the Remaining Group produces the high-grade iron concentrates (above 65% TFe) and its related facilities have since been upgraded for productivity improvement and environmental control compliance. In this aspect, the Group had invested approximately RMB33.4 million over the past 3 years. There are plans to further invest approximately RMB41.5 million for equipment and facilities upgrade at Maoling Processing Plant (part of the High Fe Mines and Assets) for improving efficiency in the next 3 years. The Remaining Group expects to fund this additional investment via the net cash proceeds from the Disposal.

As advised by the Directors, the imposition of higher compliance requirements on environmental protection helps in the elimination of other small competitors, reduces the price pressure resulting from overcapacity of iron mine operations, and therefore is expected to have a positive impact on the selling price of iron ore, especially high-grade iron concentrates, in the long run. The average unit selling price for the Group's self-produced high-grade iron concentrates (above 65% TFe) rose from about RMB693 per tonne in 2016 to RMB727 per tonne in 2017. This increasing trend continued in 2018, which saw the average unit selling price first rose to about RMB777 per tonne in 2018.

Based on the above, we concur with the view of the Directors that the prospect of the High Fe Mines and Assets of the Remaining Group would be positive.

After taking into consideration of the aforementioned, we concur with the view of the Directors that the Disposal is in the interests of the Company and the Shareholders as a whole and fair and reasonable so far as the Independent Shareholders are concerned.

2. The terms of the SPA

2.1 Details of the SPA

Set out below is the principal terms of the SPA and please refer to the Letter from the Board for details:

Date

29 January 2019

Parties

(1) Sichuan Lingyu Investment Co., Ltd.*(四川省凌御投資有限公司), a wholly owned subsidiary of the Company, being the Vendor under the Disposal

(2) Chengyu Vanadium Titano Technology Ltd.*(成渝釩鈦科技有限公司), being the purchaser under the Disposal

(3) Huili County Caitong Iron and Titanium Co., Ltd.*(會理縣財通鐵鈦有限責任公司), a wholly owned subsidiary of the Company, being the subject company under the Disposal

Assets involved

Pursuant to the SPA, the Vendor has conditionally agreed to sell to the Purchaser, and the Purchaser has conditionally agreed to purchase from the Vendor, the Sale Interest, being the 100% equity interest in Huili Caitong.

As at the Latest Practicable Date, Huili Caitong is a wholly-owned subsidiary of the Vendor and an indirect wholly-owned subsidiary of the Company.

Consideration

The Consideration for the Sale Interest shall be RMB550.0 million, which is to be settled as follows:

(1) upon the execution of the SPA, the Purchaser shall pay a cash deposit of RMB10.0 million to the Vendor;

(2) on the CP Completion Date, the Purchaser shall accept the novation of, and assume the Vendor's repayment obligation in respect of the Intra-Group Debts of up to RMB465.0 million on a dollar-for-dollar basis which shall be taken to offset the same amount against the Consideration payable by the Purchaser to the Vendor; and

(3) within five Business Days after the CP Completion Date, the Purchaser shall pay the remaining balance of the Consideration in the amount of approximately RMB75.0 million net of deposit and Intra-Group Debts, in cash to the Vendor.

2.2 Evaluation of the Consideration

As stated in the Letter from the Board, the Consideration was determined at arm-length's and on a willing-buyer-willing-seller basis between the Vendor and the Purchaser taking into consideration (i) the financial performance of the Disposal Group for the last three financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018; (ii) the net assets value of the Disposal Group as at 30 June 2018, which included the Intra-Group Debts and (iii) the fair value of the Disposal Group as at 30 June 2018, being RMB420.0 million to RMB560.0 million according to the Valuation Report (as defined below) prepared by the Valuer (as defined below).

In assessing the fairness and the reasonableness of the Consideration, we have considered the following factors:

(a) Net assets value of the Disposal Group as at 31 December 2018

As stated in the section "1.4 Background information on the Disposal Group" above, the unaudited net assets attributable to owners of the Disposal Group as at 31 December 2018 was approximately RMB443.0 million and the Consideration of RMB550.0 million is at a premium over the unaudited net assets value of the Disposal Group as at 31 December 2018.

(b) The valuation report on the Disposal Group

We have reviewed the valuation report (the "**Valuation Report**") issued by Asia-Pacific Consulting and Appraisal Limited (the "**Valuer**"), an independent and qualified valuer. Details of which are set out in Appendix V of this Circular. Although the Valuation Report was prepared as of 30 June 2018, we note that (i) the Disposal Group continued to suffer losses during the second half of 2018 and hence a substantial loss attributable to owners of the Disposal Group of approximately RMB460.5 million for the year ended 31 December 2018 was recorded; (ii) the equity attributable to owners of the Disposal Group decreased to approximately RMB443.0 million as at 31 December 2018; (iii) there is no material change on the status of the Low Fe and Inactive Mines as of 31 December 2018 as compared to that of 30 June 2018 as advised by the management of the Company; (iv) as advised by the management of the Group, there is no investment plan to re-activate or resume the operations of the inactive or suspended mines owned by the Disposal Group; (v) in estimating the forecasted selling prices of Baicao Mine and Xiushuihe Mine for the Valuation Report dated 10 October 2018, the Valuer has made reference to the average selling prices of both Baicao Mine and Xiushuihe Mine as at 30 September 2018 of approximately RMB330 per ton and RMB280.9 per ton, respectively. The lower selling prices of iron ore of Xiushuihe Mine than that of the Baicao Mine's was due to lower grading of the iron ore; (vi) the price of the iron ore with grading of 56% TFe as quoted on SteelHome Website (as set out above) is on dry basis while the forecasted selling prices adopted in the Valuation Report are under wet basis. By converting to the wet basis, the price of iron ore with 56% TFe as quoted on SteelHome Website as at February 2019 amounted to RMB330 per ton, which is similar to the forecasted selling price of Baicao Mine; (vii) the forecasted selling prices adopted in the valuation for Baicao Mine and Xiushuihe Mine was RMB332 per ton and RMB283 per ton respectively, which were (a) approximately 9.2% higher than the average selling prices for the six months ended 30 June 2018; (b) approximately 1.3% higher than the average selling price for the year ended 31 December 2018; (c) 3.0% higher than the unit selling price at February 2019 as quoted on SteelHome Website and (d) 10.8% higher than the average unit selling price from July 2018 to February 2019 as quoted on SteelHome Website; and (viii) through discussion with the Valuer, the iron ore prices are highly sensitive to many factors and changing variables, which are largely uncontrollable given the market volatility and thus, there is no certainty that the rising selling price can be sustained or prolonged that the recent increase in such selling price may not be an accurate indication for the future trend. In light with our discussions with the Valuer, we have also made reference to the latest futures prices of iron ore with grading of 56% TFe as quoted on Bloomberg, and we noted that the future prices of iron ore is in a decreasing trend for the years ending 2019 and 2020. This may suggest the recent increase in selling prices of iron concentrates may not necessarily be sustainable in near future.

Based on the above, in particular, (i) the Valuer had used the then latest available information for purpose of the valuation (i.e. selling prices of iron ore of Baicao Mine and Xiushuihe Mine as of 30 September 2018); and (ii) forecasted selling prices of Baicao Mine adopted was similar to that of the market price as quoted at SteelHome Website as at February 2019, we concur with the view of the Directors that (a) the basis and assumption adopted by the Valuer in the Valuation Report is fair and reasonable and has taken into account the potential market volatility of the price of iron concentrates; and (b) the valuation can provide a meaningful reference to the market value of the Disposal Group in light of the recent volatility of the prices of the iron ore. According to the Valuation Report, the fair value of the Disposal Group as at 30 June 2018 was stated between RMB420.0 million to RMB560.0 million.

In arriving the fair value of the Disposal Group, we have discussed with the Valuer and we are given to understand that the Valuer has taken into account the fair value of the mineral assets/processing plants owned by the Disposal Group. We have reviewed the underlying working paper and noted that the fair value of the mineral assets/processing plants as at 30 June 2018 has been adopted in replacement of the book value of the relevant mineral assets/processing plant as at 30 June 2018. As such, the market value of the Disposal Group as at 30 June 2018 is stated between RMB420.0 million to RMB560.0 million. As advised by the Valuer, the range of the market value of the Disposal Group as at 30 June 2018 was due to the range of fair value of the mineral assets/processing plants as at 30 June 2018 as appraised by the Valuer as a result of different parameters such as discount rate and prices of iron ore being adopted.

In order to assess the fairness and reasonableness of the Valuation Report as set out in Appendix V of the Circular, we have reviewed the Valuation Report and discussed with the Valuer regarding the methodology adopted for and the basis and assumptions used in arriving at the Valuation. We noted that the Valuation Report has been prepared in accordance with Chapter 18 of the Listing Rules, and is in conformance with the Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (the "**VALMIN Code**"). We understand that the Valuer has performed site visit in August 2018.

The Valuer and its independence

We noted that the principal senior consultant of the Valuer preparing and signing off the Valuation Report is the Competent Evaluator for the purpose of fulfilling the requirements under Rule 18.23 of the Listing Rules and holders of the professional qualifications in metallurgy with numerous experiences in performing valuation assignments involving iron ore, coal, oil and gas, precious and base metals and specialty minerals. Furthermore, we have enquired the Valuer and were given to understand that the Valuer is an Independent Third Party to the Group, the Disposal Group and their respective associates. We have also reviewed the Valuer's terms of engagement and its scope of work. We were not aware of any irregularities during our interview with the Valuer or in our review of the work. Also, during the course of our discussion with the Valuer, we have not identified any major factors which cause us to doubt the fairness and reasonableness of the basis and assumptions adopted for the valuation. As such, we are satisfied that the Valuer is independent and qualified to perform the valuation.

Valuation methodology

We have discussed with the Valuer regarding the assumptions made and methodology adopted for the valuation of the Disposal Group. We understand that the Valuer has considered three valuation methodologies including the market approach, asset-based approach and income-based approach in the valuations.

(a) Baicao Mine and Xiushuihe Mine

As advised by the Valuer, income approach should be considered when valuing an operating business. As both Baicao Mine and Xiushuihe Mine are in production, the Valuer can adopt the income approach as the future economic income can be predicted by using identified resources and reserves data. As advised by the Valuer, the value of a mineral asset is based on the future income that it is projected to generate and is a primary method under the income approach and should be considered in priority to all other methods whenever applicable. As such, the Valuer has applied the discount cash flow method ("**DCF**") to discount the future free cash flow of Baicao Mine and Xiushuihe Mine at a discount rate (i.e. capital asset pricing model ("**CAPM**")) to reflect all business risks including intrinsic and extrinsic uncertainties in relation to Baicao Mine and Xiushuihe Mine. As advised by the Valuer, as the income approach (as a priority) is applicable in valuing the Baicao Mine and Xiushuihe Mine, both cost approach and market approach have not been considered by the Valuer.

In our assessment of the income-based approach valuation on Baicao Mine and Xiushuihe Mine, we have reviewed the following key quantitative assumptions:

(i) Forecasted revenue

We have obtained and reviewed the Valuation Report and the underlying working papers in deriving the forecasted revenue. We are given to understand that the forecasted revenue are derived based on (i) mineral resources and ore reserves for the Baicao Mine and Xiushuihe Mine; (ii) annual production plan of Baicao Mine and Xiushuihe Mine; and (iii) the forecasted prices of metal products from Baicao Mine and Xiushuihe Mine.

We have enquired the Valuer and noted that the mineral resources and ore reserves are based on the initial JORC (2012) – compliant estimation of Mineral Resources and Ore Reserves for the Baicao Mine and Xiushuihe Mine were independently classified and prepared by the Competent Person as of 30 June 2018. We have enquired with the management of the Company regarding the annual production plans and noted that the production plan is estimated with reference to historical productions and the life of mine of Baicao Mine and Xiushuihe Mine. After reviewing the Valuation Report and the underlying working papers provided by the Valuer, we noted that the forecasted prices of metal products of Baicao Mine and Xiushuihe Mine are relatively stable and are based on the price estimated in the amount as set out in the CP Report.

(ii) Forecasted operating costs

Forecasted operating costs included mining costs, processing costs, general and administrative costs, selling costs, environmental protection costs, taxes, resource compensation levy, interests on loans and other cash cost items. We have obtained and reviewed the Valuation Report and the underlying working papers in deriving the forecasted operating costs. We have enquired with the Valuer and we were given to understand that the operating costs are relatively stable and are based on the estimates as set out in the CP Report. We have further reviewed the CP Report and noted that the forecasted operating costs are estimated after making to the historical operating costs of the Baicao Mine and Xiushuihe Mine in recent years.

(iii) Capital expenditure

We have enquired with the Valuer on the basis in estimating the capital expenditure of Baicao Mine and Xiushuihe Mine and we are given to understand that such capital expenditure are made reference to the definitive feasibility study results circular provided by the Group. According to this, the initial capital expenditures of the Baicao Mine and the Xinshuihe Mine amounted to approximately RMB21.32 million and RMB266.47 million, respectively. Further, as advised by the Valuer, the Disposal Group has not provided any schedule on construction and capital expenditure. As such, the Valuer assumes that the capital expenditure will be spent in equal parts over the life of the mine of both Baicao Mine and Xiushuihe Mine.

(iv) Discount rate

In estimating the cost of equity ("**r_e**"), the Valuer has adopted the CAPM which is a commonly used model to compute the cost of equity. We understand from the Valuer that the equation of r_e is "$r_e = r_f + MRP \times \beta + r_c$", where

– "r_f" stands for rate which is based on 10-year China government bond yield of 3.49% as extracted from the People's Bank of China (PBOC).

– "β" or beta, represents the sensitivity of the expected excess asset returns on the expected excess market, which is calculated from the unlevered beta of comparable listed companies in similar industry selected by the Valuer as at 30 June 2018, of which will be re-levered according to the Disposal Group debt to equity ratio. The Valuer has identified nine comparable publicly listed companies and adopted the average unlevered beta of 0.93. We note that the major activities of the comparable companies are the exploration and production of iron ore; therefore, the comparable companies bear the similar business nature as the Disposal Group. Hence, we consider that the comparable companies selected by the Valuer are appropriate and sufficient for the valuation purpose that the unlevered beta derived from the comparable companies can be the proxy in relating to measure the systematic risk. The unlevered beta is then re-levered according to the debt to equity ratio of the Disposal Group.

– MRP stands for market risk premium which is the pro rata of return required by equity investors beyond the risk free rate. The MRP rate adopted by the Valuer was 7.07% according to the U.S. Valuation Book.

– "r_c" refers to the individual risk premium of the valued company. The Valuer has adopted 0.50% as a specific risk premium to the Target Group.

As a result of the foregoing, the cost of equity (i.e. r_e) is 11.85%. We further noted that weighted average cost of capital ("**WACC**") is used to determine the discount rate of the Disposal Group, by taking into account the capital structure of the Disposal Group. The Valuer has adopted the costs of debt of 4.9% which is made reference to the RMB long term cost of borrowing (i.e. over five years) as extracted from the PBOC and adjusted by corporate tax rate. Based on the above and with debt to equity ratio of the Disposal Group of 37%, the WACC discount rate adopted by the Valuer is 10.02%.

As such, the fair value of Baicao Mine and Xiushuihe Mine as at 30 June 2018 was in a range of RMB37.6 million to RMB38.4 million and a range of RMB373.9 million and RMB387.7 million, respectively.

Based on the factors above, we consider that the income approach using the DCF method is an approximately methodology in valuating the Baicao Mine and the Xiushuihe Mine and we are of the view that the key quantitative assumptions adopted by the Valuer in the valuation of Baicao Mine and Xiushuihe Mine were fair and reasonable.

(b) Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine

As advised by the Valuer, in determining the valuation of Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine, income approach is not applicable, given that (i) these mines are inactive; and (ii) as stated in the CP Report, these mines have only resources estimation without reserve data and there is no support documentation to prove that these three mineral assets can bring any anticipated future benefits (income). For cost approach, it generally furnishes the most reliable indication of value for assets without a known secondary market. Given there is a known secondary market, the Valuer consider that cost approach is not applicable. The Valuer considers that the market approach was the appropriate approach in arriving at the value of the Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine.

Further to our discussions with the Valuer, we are given to understand that there are 3 methods under the market approach. The first one is broad-based method which compares the value of mineral assets with the values of similar mineral assets under similar circumstances. However, according to the Valuer, this method is difficult to apply to mineral assets because the underlying mineral assets have a number of unique characteristics that make it complicated to perform direct comparisons between different situations and characteristics such as quality and quantity of each mineral, mining and processing systems and costs, production quantities and products, and location and schedule of mining. The second one is industry multiple method which involves comparing the value of two or more publicly traded companies on the basis of stock price. However, the Valuer considered that such method has drawback as market capitalisation can represent a discount or premium to the underlying asset value. As such, the Valuer has adopted the comparable transaction method. Under this method, value of the subject matter is determined on a per unit basis, such as value per tonne. Differences in the mineral and property characteristics are reflected in the unit value of the mineral.

We have reviewed the Valuation Report and noted that the Valuer has identified 5 comparable completed transactions involving iron ore mine projects with similar characteristics to the subject assets. These transactions were conducted during 2007 to 2014. We are advised by the Valuer that since the comparable transactions were conducted at different time when the iron prices differed greatly from that on the valuation date, a price adjustment is used to reflect the difference in valuation due to differences in iron ore prices at the time of each transaction. This is accomplished by applying a price adjustment factor of the iron price on 30 June 2018 divided by the iron price on the dates of the comparable transactions. The price adjustment factor is applied to calculate the adjusted price per tonne for each comparable transaction. The median of the adjusted price per tonne of the 5 comparable transactions is then adopted to calculate the value of the Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine in accordance to their respective iron resources as stated in the CP Report. For Haibaodang Mine, as there is no measured or indicated resources and contains only inferred resources, the indicated valuation of the Haibaodang Mine was insignificant.

Based on the above, the Valuer concluded that the fair value of Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine as at 30 June 2018 was in a range of RMB23.1 million to RMB34.6 million, a range of RMB178.6 million and RMB267.7 million, and nil respectively.

Given that (i) the fair value of Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine is determined on a per unit basis and differences in the mineral and property characteristics have been reflected in the unit value of the mineral under comparable transactions method; and (ii) a price adjustment factor is applied to reflect the differences in iron ore prices at the time of each comparable transaction, we are of the view that the key assumptions and methodology adopted by the Valuer in the valuation of Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine are fair and reasonable.

(c) Heigutian Processing Plant

Heigutian Processing Plant includes machinery, equipment, land and buildings. For machinery and equipment, as advised by the Valuer, in the situation where the Valuer could identify and collect sufficient data on certain plant and equipment that make a direct contribution to revenue generation, they will apply the income approach in order to cross-check the results from the cost approach and the market approach to determine the relevant value. However, as advised by the Valuer, due to insufficient financial data being available, the Valuer has considered and decided to exclude income approach. As such, the Valuer used both the cost approach and the market approach in arriving the estimate market value of machinery and equipment market. We have reviewed the underlying working papers of the Valuer and noted that the valuation are based on a list of machinery and equipment owned by the Heigutian Processing Plant. As advised by the Valuer, the valuation of machinery and equipment are based on the market price of a comparable new equipment or machinery and adjusted for allowance for depreciation or loss of value arising from condition, utility, age, wear and tear, and obsolescence, taking into consideration past and present maintenance policy, and rebuilding history, if any, and current utilization.

For land and buildings, as advised by the Valuer, given the land and buildings of Heigutian Processing Plant cannot make a direct contribution to revenue generation, the future economic benefits cannot be determined and hence the income approach is not appropriate. Further, we are given to understand that the Valuer has considered the market approach by making reference to comparable market transactions in the assessment of the market value of property interests. However, due to the nature of the buildings and structures of the properties, there are no market comparable sales readily available, and as such the Valuer valued the property on the basis of its depreciated replacement cost (i.e. cost approach). We have reviewed the underlying working papers and noted that its valuation are based on a list of buildings and structures of the Heigutian Processing Plant. As advised by the Valuer, the valuation of buildings and structures are based on the cost of reproducing new or replacement cost, less allowance for depreciation or loss of value arising from condition, utility, age, wear and tear, and obsolescence. We have enquired with the Valuer regarding the depreciation rate and noted that such rate are applied in accordance to the accounting policies of the Disposal Group.

For the land use rights, we are given to understand from the Valuer that given the nature of the land use rights which cannot make a direct contribution to revenue generation, the future economic benefits cannot be determined and hence the income approach is not appropriate. Further, as advised by the Valuer, given there is a secondary market for transacting the land use rights, the Valuer has considered to adopt market approach and the comparable transaction method. We have reviewed the underlying working papers and noted that the Valuer has made reference to market comparables which are located in in proximity to the relevant site areas.

As such, the Valuer concluded that the fair value of Heigutian Processing Plant as at 30 June 2018 was approximately RMB285.3 million.

Based on the factors above, we consider that the methodologies has been properly applied in the valuation of Heigutian Processing Plant. We are also of the view that the key assumptions adopted by the Valuer in the valuation of Heigutian Processing Plant were fair and reasonable.

Based on the valuations as stated in the Valuation Report, the Consideration is within and close to the high end of the range of the Valuation. Taking into account of the above and the Consideration is at a premium over the net assets value of the Disposal Group as at 31 December 2018, we are of the view that the terms of the SPA are on normal commercial terms and the bases in determining the Consideration are fair and reasonable so far as the Independent Shareholders are concerned.

(c) Comparable analysis

In order to further assess the fairness and reasonableness of the Consideration, it is a general practice to apply commonly used benchmarks for evaluating the value of companies. We have considered applying the price-to-earning ratio in our analyses. However, as the Disposal Group was loss making for the year ended 31 December 2018, we consider that comparing price to earning ratio is not applicable. Alternatively, we have applied price-to-book ratio for comparable analysis. We have, based on the information available from the Stock Exchange's website, identified an exhaustive list of 3 companies listed on the Stock Exchange (excluding the Company) for comparison purpose which are (i) principally engaged in mining and production of iron ore and (ii) with market capitalisation of not more than HK$1.5 billion as at the Latest Practicable Date (the "**Comparables**"). We consider that the Comparables are fair and representative. Shareholders should note that the mineral assets of the Comparables may have a number of unique characteristics such as quality and quantity of each mineral, mining and processing systems and costs of production and process, production quantities and products, mine design, technology, location and schedule of mining as compared with those of the Disposal Group. We have not conducted any in-depth investigation into the mineral assets and business operations of the Comparables. Nevertheless, the analysis can still be meaningful reference to assess the fairness and reasonableness of the Consideration.

Company Name	Stock code	Principal activities	P/B ratio as at the Latest Practicable Date *(note)*
Prosperity International Holdings (H.K.) Limited	803	Principally engaged in the mining and trading of iron ore and raw materials	0.08
IRC Limited	1029	Principally engaged in the development and production of industrial commodities products including iron ore	0.48
Add New Energy Investment Holdings Group Ltd	2623	Principally engaged in the exploration and mining of iron and ilmenite ore, the processing and trading of iron concentrates in Shandong Province of PRC	1.53
		Max	1.53
		Min	0.08
		Average	0.70
		The Disposal Group	**1.13**

Note: The P/B ratios of the Comparables are calculated based on the market capitalisation as at the Latest Practicable Date and the latest audited/unaudited net asset value as extracted from the latest financial reports of the Comparables. P/B ratio of the Disposal Group is calculated based on the Consideration and the equity attributable to owners of the Disposal Group as at 31 December 2018.

As shown in the above table, the P/B ratios of the Comparables ranged from approximately 0.08 times to approximately 1.53 times, with an average of approximately 0.70 times. We note that the P/B ratio of the Disposal Group as derived from the Consideration amounted to approximately 1.13 times, and is within the range and higher than the average P/B ratio of the Comparables.

Based on the aforesaid and taking into account that (i) the Disposal Group were loss making for each of the 4 years ended 31 December 2018; (ii) the Consideration represents a premium over the net assets value of the Disposal Group as at 31 December 2018; (iii) the methodologies, basis and assumptions adopted by the Valuer for the valuations of the mineral assets/processing plant are fair and reasonable; and (iv) the Consideration is within the range and near the high end of the market value of the Disposal Group as valued by the Valuer and (v) the P/B ratio as implied by the Disposal is within the range and higher than the average P/B ratio of the Comparables, we are of the view that the Consideration is fair and reasonable so far as the Independent Shareholders are concerned.

2.3 Post-Completion undertaking by the Purchaser and Huili Caitong

We have enquired with the management of the Company in relation to the reasons for the on-going provision of the CVT Guarantees by the Company in favour of the Disposal Group and noted that the banks will only review and process applications for the proposed release of the CVT Guarantees after the Completion. In light of this, each of Huili Caitong and the Purchaser has undertaken to the Vendor that, subject to the Completion, it will procure the release of the CVT Guarantees within one year after the Registration Completion Date (or such other date that may be agreed by the parties in writing). Further, the Purchaser and the Company has entered into the Counter Indemnity for the provision of counter-indemnity by the Purchaser in favour of the Company in respect of the Group's liabilities and claims under the CVT Guarantees.

According to the Counter Indemnity the Purchaser's inventories (including but not limited to structural steels, coals etc) of approximately RMB767.0 million will be pledged as security for such counter-indemnity. We also noted that should the market value of such inventories lower than that of the amount under the CVT Guarantees (i.e. RMB730.0 million) by approximately 5%, the Purchaser is required to provide further inventories until the market value of such inventories restored. Upon completion of the release of the CVT Guarantees, the Counter Indemnity will be released contemporaneously.

After taking into consideration that (i) the banks will only review and process applications for the proposed release of the CVT Guarantees after the Completion; (ii) each of Huili Caitong and the Purchaser has undertaken to the Vendor that it will procure the release of the CVT Guarantees within one year after the Registration Completion Date; (iii) the CVT Guarantee will be protected by the Counter Indemnity with an amount higher than that of the guaranteed amount; and (iv) should the Counter Indemnity is enforced, the inventories (including but not limited to structural steels, coals etc) pledged by the Purchaser can be used for the Group's trading business, we are of the view that the on-going provision of the CVT Guarantees (together with the Counter Indemnity) by the Company in favour of the Disposal Group is fair and reasonable so far as the Independent Shareholders are concerned.

Based on the above, we concur with the view of the Directors that terms of the CVT Guarantees (together with the Counter Indemnity) are on normal commercial terms and fair and reasonable so far as the Independent Shareholders are concerned.

3. Potential Financial Effect of the Disposal

Effect on net assets value

Based on the unaudited pro forma financial information on the Remaining Group as set out in Appendix II to the Circular (the "**Pro Forma Financial Information**"), as if the Disposal had been completed on 31 December 2018, the unaudited pro forma consolidated total assets of the Remaining Group as at 31 December 2018 would decrease to approximately RMB1,246.3 million while the unaudited pro forma consolidated total liabilities of the Remaining Group as at 31 December 2018 would also decrease to approximately RMB267.7 million. As a result of the foregoing, the net assets value of the Remaining Group would increase to RMB978.6 million as at 31 December 2018.

Effect on working capital

Based on the Pro Forma Financial Information, as if the Disposal had been completed on 1 January 2018, the unaudited pro forma cash and cash equivalent of the Remaining Group as at 31 December 2018 will be substantially increased from approximately RMB33.7 million to approximately RMB114.9 million. Such increase would be mainly due to the cash receipt of RMB88.2 million as part of the settlement of the Consideration.

Effect on gearing ratio

As stated in the 2018 Annual Report, the gearing ratio (as calculated by total debt net of cash, divided by total equity) was approximately 7.5% as at 31 December 2018. Based on the Pro Forma Financial Information, as if the Disposal had been completed on 31 December 2018, the total debt net of cash would be nil for the Remaining Group as at 31 December 2018 and hence the gearing ratio would be improved upon Completion.

Effect on revenue and earnings

Based on the Pro Forma Financial Information, as if the Disposal had been completed on 1 January 2018, the revenue of the Remaining Group would be slightly increased from approximately RMB684.8 million to approximately RMB692.9 million. Based on the Pro Forma Financial Information, as if the Disposal had been completed on 1 January 2018, the Remaining Group would record a decrease in loss attributable to owners of the Company from approximately RMB443.9 million to a net loss attributable to owners of the Company of approximately RMB347.3 million. By excluding the estimated net loss on the Disposal of approximately RMB363.8 million, the Remaining Group would record a profit attributable to owners of the Company of approximately RMB16.5 million.

It should be noted that the aforementioned analyses are for illustrative purpose only and do not purport to represent how the financial position of the Remaining Group will be upon the Completion.

Based on the aforementioned, in particular the Disposal can enhance the net assets value, working capital and gearing position as well as decrease in the loss making performance of the Remaining Group, and after taking into consideration the factors as discussed in section "1.4 Background information on the Disposal Group", "1.5 Reasons for and benefits of the Disposal" and "2.2 Fairness and reasonableness on the Consideration" above, we consider that although the Disposal is not in the ordinary course of business of the Group, the Disposal is in the interests of the Company and the Shareholders as a whole and the terms of the SPA and the transactions contemplated thereunder are on normal commercial terms and are fair and reasonable so far as the Independent Shareholders as concerned.

RECOMMENDATION

Having taken into account the above-mentioned principal factors and reasons, although the Disposal is not conducted in the ordinary and usual course of the business of the Group, it is in the interests of the Company and the Shareholders as a whole, and the terms of the SPA and the transactions contemplated thereunder and the CVT Guarantees (together with the Counter Indemnity) are on normal commercial terms and are fair and reasonable so far as the Independent Shareholders are concerned. Accordingly, we recommend the Independent Shareholders, as well as the Independent Board Committee to recommend the Independent Shareholders, to vote in favour of the resolutions to be proposed at the EGM to approve the Disposal, the SPA and the transactions contemplated thereunder.

Yours faithfully,
For and on behalf of
Messis Capital Limited
Vincent Cheung
Managing Director

Mr. Vincent Cheung is a licensed person registered with the Securities and Futures Commission and regarded as a responsible officer of Messis Capital Limited to carry out type 1 (dealing in securities) and type 6 (advising on corporate finance) regulated activities under the SFO and has over 10 years of experience in corporate finance industry.

UNAUDITED FINANCIAL INFORMATION OF THE DISPOSAL GROUP

Set out below are the unaudited combined statements of financial position of the Disposal Group as of 31 December 2015, 2016, 2017 and 2018 and the related combined statement of profit or loss and other comprehensive income, the combined statement of changes in equity and combined statement of cash flows for each of the years ended 31 December 2015, 2016, 2017 and 2018 (the "Relevant Periods"), and explanatory notes (collectively referred to as the "Unaudited Combined Financial Information"). The Unaudited Combined Financial Information has been prepared on the basis set out in note 2 below and prepared in accordance with paragraph 68(2)(a)(i) of Chapter 14 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (the "Listing Rules").

The Company's auditor, Ernst & Young, has reviewed the Unaudited Combined Financial Information of the Disposal Group in accordance with Hong Kong Standard on Review Engagements 2410 "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" and with reference to Practice Note 750 "Review of Financial Information under the Hong Kong Listing Rules for a Very Substantial Disposal" issued by the Hong Kong Institute of Certified Public Accountants.

A review is substantially less in scope than an audit conducted in accordance with Hong Kong Standards on Auditing and consequently does not enable the auditor to obtain assurance that the auditor would become aware of all significant matters that might be identified in an audit. Accordingly, the auditor does not express an audit opinion.

Based on their review, nothing has come to their attention that causes them to believe that the Unaudited Combined Financial Information of the Disposal Group for the Relevant Periods is not prepared, in all material respects, in accordance with the basis of preparation set out in note 2 below.

UNAUDITED COMBINED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

Years ended 31 December 2015, 2016, 2017 and 2018

	Year ended 31 December			
	2015	**2016**	**2017**	**2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)
REVENUE	219,926	325,993	440,296	457,221
Cost of sales	(251,416)	(308,650)	(328,348)	(381,862)
Gross profit/(loss)	(31,490)	17,343	111,948	75,359
Other income and gains	22,988	1,202	6,681	121,396
Selling and distribution expenses	(29,514)	(52,697)	(54,476)	(73,103)
Administrative expenses	(190,630)	(62,321)	(51,629)	(91,566)
Reversal/(provision) of impairment losses on trade receivables, net	(158,888)	(64,865)	–	3,452
Write-down of inventories to net realisable value	(9,888)	–	–	(2,680)
Impairment of goodwill	(15,318)	–	–	–
Impairment loss on property, plant and equipment	(250,784)	(185,195)	(72,776)	(112,238)
Impairment loss on intangible assets	(34,146)	(152,770)	(11,245)	(266,630)
Impairment loss on prepaid land lease payments	–	–	(2,413)	(8,841)
Impairment loss on financial assets included in prepayments, deposit and other receivables	–	–	–	(12,198)
Impairment loss on assets classified as held for sale	(60,555)	(78,334)	(40,000)	–
Other expenses	(127,563)	(303)	(6,135)	(26,021)
Finance costs	(60,111)	(54,721)	(68,306)	(52,834)
Share of loss of an associate	(4,890)	–	–	–
LOSS BEFORE TAX	(950,789)	(632,661)	(188,351)	(445,904)
Income tax credit/(expense)	(104,203)	2,499	21,193	(16,116)
LOSS AND TOTAL COMPREHENSIVE LOSS FOR THE YEAR	(1,054,992)	(630,162)	(167,158)	(462,020)
Attributable to:				
Owners of the Disposal Group	(1,047,458)	(627,320)	(163,673)	(460,496)
Non-controlling interests	(7,534)	(2,842)	(3,485)	(1,524)
	(1,054,992)	(630,162)	(167,158)	(462,020)

UNAUDITED COMBINED STATEMENT OF FINANCIAL POSITION

31 December 2015, 2016, 2017 and 2018

	31 December			
	2015	**2016**	**2017**	**2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)
NON-CURRENT ASSETS				
Property, plant and equipment	738,315	539,754	472,792	403,423
Intangible assets	799,092	626,092	611,347	340,666
Prepaid land lease payments	37,642	36,536	33,015	23,064
Prepayments and deposits	5,464	6,365	6,123	6,318
Payments in advance	156	156	156	156
Deferred tax assets	31,642	34,141	55,334	39,218
Total non-current assets	1,612,311	1,243,044	1,178,767	812,845
CURRENT ASSETS				
Inventories	109,904	75,287	91,890	45,594
Trade and bills receivables	78,739	84,762	84,582	47,614
Prepayments, deposits and other receivables	88,363	103,255	61,019	131,722
Dividend receivable	24,836	24,836	24,836	24,836
Due from related parties	6,064	112	–	27
Due from Remaining Group	1,328,981	1,359,477	1,157,078	491,133
Cash and cash equivalents	1,812	73	75	75
	1,638,699	1,647,802	1,419,480	741,001
Assets classified as held for sale	378,334	300,000	260,000	260,000
Total current assets	2,017,033	1,947,802	1,679,480	1,001,001
CURRENT LIABILITIES				
Trade and bills payables	162,872	142,901	124,612	119,561
Contract liabilities	8,125	642	–	–
Other payables and accruals	337,300	466,901	484,881	381,846
Interest-bearing bank and other loans	788,866	788,858	502,100	500,698
Due to related parties	489	449	452	449
Due to Remaining Group	590,199	679,183	489,828	29,328
Taxes payable	(6,821)	(6,821)	(6,821)	(6,821)
Dividend payable	1,801	1,801	1,801	1,801
Dividend to holding company	17,156	17,156	17,156	17,156
Total current liabilities	1,899,987	2,091,070	1,614,009	1,044,018
NET CURRENT ASSETS/(LIABILITIES)	117,046	(143,268)	65,471	(43,017)
Total assets less current liabilities	1,729,357	1,099,776	1,244,238	769,828

	31 December			
	2015	**2016**	**2017**	**2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)
NON-CURRENT LIABILITIES				
Interest-bearing bank and other loans	–	–	311,000	301,400
Provision for rehabilitation	8,483	9,064	9,684	10,347
Total non-current liabilities	8,483	9,064	320,684	311,747
Net assets	1,720,874	1,090,712	923,554	458,081
EQUITY				
Equity attributable to owners of the Disposal Group				
Paid-up capital	610,520	610,520	610,520	610,520
Reserves	1,087,279	459,959	296,286	(167,525)
	1,697,799	1,070,479	906,806	442,995
Non-controlling interests	23,075	20,233	16,748	15,086
Total equity	1,720,874	1,090,712	923,554	458,081

UNAUDITED COMBINED STATEMENT OF CHANGES IN EQUITY

Years ended 31 December 2015, 2016, 2017 and 2018

	Attributable to owners of the Disposal Group								
	Paid-up capital *RMB'000* (Unaudited) *(note 16)*	Share premium account *RMB'000* (Unaudited)	Statutory reserve *RMB'000* (Unaudited)	Safety fund surplus reserve *RMB'000* (Unaudited)	Difference arising from acquisition of non-controlling interests *RMB'000* (Unaudited)	Retained earnings/ (accumulated losses) *RMB'000* (Unaudited)	Total *RMB'000* (Unaudited)	Non-controlling interests *RMB'000* (Unaudited)	Total equity *RMB'000* (Unaudited)
At 1 January 2015	610,520	42,042	231,508	106,095	137,978	1,617,114	2,745,257	30,609	2,775,866
Total comprehensive loss for the year	–	–	–	–	–	(1,047,458)	(1,047,458)	(7,534)	(1,054,992)
Establishment for safety fund surplus reserve	–	–	–	8,881	–	(8,881)	–	–	–
At 31 December 2015	610,520	42,042	231,508	114,976	137,978	560,775	1,697,799	23,075	1,720,874
At 1 January 2016	610,520	42,042	231,508	114,976	137,978	560,775	1,697,799	23,075	1,720,874
Total comprehensive loss for the year	–	–	–	–	–	(627,320)	(627,320)	(2,842)	(630,162)
Establishment for safety fund surplus reserve	–	–	–	19,238	–	(19,238)	–	–	–
At 31 December 2016	610,520	42,042	231,508	134,214	137,978	(85,783)	1,070,479	20,233	1,090,712
At 1 January 2017	610,520	42,042	231,508	134,214	137,978	(85,783)	1,070,479	20,233	1,090,712
Total comprehensive loss for the year	–	–	–	–	–	(163,673)	(163,673)	(3,485)	(167,158)
Establishment for safety fund surplus reserve	–	–	–	26,430	–	(26,430)	–	–	–
At 31 December 2017	610,520	42,042	231,508	160,644	137,978	(275,886)	906,806	16,748	923,554
At 1 January 2018	610,520	42,042	231,508	160,644	137,978	(275,886)	906,806	16,748	923,554
Effect of adoption of IFRS 9	–	–	–	–	–	(3,315)	(3,315)	(138)	(3,453)
At 1 January 2018 (restated)	610,520	42,042	231,508	160,644	137,978	(279,201)	903,491	16,610	920,101
Total comprehensive loss for the year	–	–	–	–	–	(460,496)	(460,496)	(1,524)	(462,020)
Utilisation of safety fund surplus reserve	–	–	–	(192)	–	192	–	–	–
Establishment for safety fund surplus reserve	–	–	–	12,618	–	(12,618)	–	–	–
At 31 December 2018	610,520	42,042	231,508	173,070	137,978	(752,123)	442,995	15,086	458,081

UNAUDITED COMBINED STATEMENT OF CASH FLOWS

Years ended 31 December 2015, 2016, 2017 and 2018

	Year ended 31 December			
	2015	**2016**	**2017**	**2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)
CASH FLOWS FROM OPERATING ACTIVITIES				
Loss before tax	(950,789)	(632,661)	(188,351)	(445,904)
Adjustments for:				
Finance costs	60,111	54,721	68,306	52,834
Bank interest income	(3,978)	(5)	–	(1)
Gain on disposal of a subsidiary	(17,583)	–	–	–
Loss on disposal of a subsidiary	70,000	–	–	–
Gain on disposal of property, plant and equipment	–	–	–	(612)
Write-down of inventories to net realisable value	9,888	–	–	2,680
Depreciation	87,346	56,768	37,917	37,148
Impairment of items of property, plant and equipment	250,784	185,195	72,776	112,238
Impairment of items of intangible assets	34,146	152,770	11,245	266,630
Impairment loss on prepaid land lease payments	–	–	2,413	8,841
Provision/(reversal) of impairment losses on trade receivable, net	158,888	64,865	–	(3,452)
Impairment loss on financial assets included in prepayments, deposits and other receivables	–	–	–	12,198
Impairment of goodwill	15,318	–	–	–
Impairment of assets held for sale	60,555	78,334	40,000	–
Prepaid technical fee released to profits or loss	2,068	–	–	–
Prepaid technical fee written off	39,266	–	–	–
Prepayment written off	4,890	–	–	–
Gain on debt restructuring	–	–	–	(4,093)
Amortization of intangible assets	6,254	20,771	7,187	4,674
Amortization of prepaid land lease payments	1,106	1,106	1,108	1,110
Amortization of rehabilitation	543	581	620	663
	(171,187)	(17,555)	53,221	44,954
Decrease/(increase) in trade receivables	53,545	(70,888)	180	37,008
Decrease/(increase) in inventories	14,268	34,617	(16,603)	43,616
Decrease/(increase) in prepayments, deposits and other receivables	20,859	(16,793)	42,478	(83,137)
Decrease/(increase) in due from related parties	(6,064)	5,952	112	(27)
Decrease/(increase) in due from Remaining Group	(3,496)	(20,140)	(160,809)	258,077
Decrease in trade and bills payables	(44,501)	(19,971)	(18,289)	(5,051)
Increase/(decrease) in due to related parties	(59)	(40)	3	(3)
Increase/(decrease) in due to Remaining Group	140,655	79,953	(153,465)	(135,111)
Increase/(decrease) in other payables and accruals	35,346	69,979	29,793	(107,667)
	39,366	45,114	(223,379)	52,659
Interest received	3,978	5	–	1
Net cash generated from/(used in) operating activities	43,344	45,119	(223,379)	52,660

	Year ended 31 December			
	2015	**2016**	**2017**	**2018**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)
CASH FLOWS FROM INVESTING ACTIVITIES				
Purchase of items of property, plant and equipment	(121,103)	(39,875)	(49,845)	(105,068)
Purchase of intangible assets	(4,360)	(541)	(3,687)	(82)
Decrease in pledged bank balance	198,430	–	–	–
Decrease in time deposits with maturity of over three months	44,630	–	–	–
Disposal of a subsidiary	(451)	1,000	–	–
Acquisition of subsidiaries	(18,047)	–	(20,000)	–
Net cash generated from/(used in) investing activities	99,099	(39,416)	(73,532)	(105,150)
CASH FLOWS FROM FINANCING ACTIVITIES				
Proceed of bank loans	59,870	–	408,959	69,500
Repayment of bank loans	(172,949)	(8)	(384,717)	(80,502)
Proceed/(repayment) of other loans, net	(105,724)	8,763	(35,622)	(325,389)
Proceed of other borrowings	–	–	450,050	–
Proceeds from/(repayment to) Remaining Group, net	(352,032)	(10,088)	(87,110)	407,868
Interest paid	(41,353)	(6,109)	(54,647)	(18,987)
Net cash generated from/ (used in) financing activities	(612,188)	(7,442)	296,913	52,490
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	(469,745)	(1,739)	2	–
Cash and cash equivalents at beginning of year	471,557	1,812	73	75
CASH AND CASH EQUIVALENTS AT END OF YEAR	1,812	73	75	75
ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS				
Cash and cash equivalents	1,812	73	75	75

NOTES TO UNAUDITED COMBINED FINANCIAL INFORMATION OF THE DISPOSAL GROUP

31 December 2015, 2016, 2017 and 2018

1. General information

Pursuant to the announcement on 29 January 2019, China Vanadium Titano-Magnetite Mining Company Limited (the "Company"), a company incorporated as an exempted company with limited liability in the Cayman Islands on 28 April 2008 under the Companies Law with its shares listed on The Stock Exchange of Hong Kong Limited, has entered into a disposal agreement with Chengyu Vanadium Titano Technology Co., Ltd. on 29 January 2019 in respect of the disposal of Huili County Caitong Iron and Titanium Co., Ltd. ("Huili Caitong") and its subsidiaries (hereinafter collectively referred to as the "Disposal Group") (the "Disposal"). The Disposal Group are currently engaged in business operations in relation to the mining and ore processing and sale of self-produced products mainly in Panxi region.

After the completion of the Disposal, the retained entities will remain as subsidiaries of the Company (hereinafter collectively referred to as the "Remaining Group"). The particulars of entities in the Disposal Group are set out below:

	Place and date of incorporation/registration	**Registered and paid-up capital** *RMB'000*	**Percentage of equity interests attributable to the Company** *%*
Huili Caitong	PRC, 7 July, 1998	610,520	100
Huili County Xiushuihe Mining Co., Ltd. ("Xiushuihe Mining")	PRC, 26 June, 2007	200,000	95
Panzhihua Yixingda Industrial Trading Co., Ltd. ("Panzhihua Yixingda")	PRC, 9 July, 2009	1,000	100

Huili Caitong owns 95% and 100% equity interests in Xiushuihe Mining and Panzhihua Yixingda, respectively. Upon completion of the Disposal, the Company will cease having control over the Disposal Group.

The 95% equity interest in Xiushuihe Mining have been secured for bank loans of the Disposal Group.

The Unaudited Combined Financial Information is presented in Renminbi ("RMB"). All values are rounded to the nearest thousand (RMB'000) except otherwise indicated.

2. Basis of preparation the unaudited combined financial information

The Unaudited Combined Financial Information has been prepared in accordance with paragraph 68(2)(a)(i) of Chapter 14 of the Listing Rules, and solely for the purpose of inclusion in the circular to be issued by the Company in connection with the disposal of the Disposal Group (the "Circular").

The Unaudited Combined Financial Information of the Disposal Group comprise the historical financial information of Huili Caitong, Xiushuihe Mining and Panzhihua Yixingda.

Pursuant to a reorganization on 27 September 2018, the Remaining Group acquired 51% equity interest in Sichuan Haoyuan New Material Co., Ltd. ("Sichuan Haoyuan"), which was acquired by Huili Caitong on 2 July 2015 ("Acquisition Date") from an independent third party. The Disposal Group would not include 51% equity interest in Sichuan Haoyuan. Accordingly, the Unaudited Combined Financial Information of the Disposal Group has been prepared and presented on the basis as if the Remaining Group had acquired 51% equity interest in Sichuan Haoyuan from the Disposal Group at the Acquisition Date.

The Unaudited Combined Financial Information has been prepared in accordance with the same accounting policies as those adopted by the Group in the preparation of the consolidated financial statements of the Group for the Relevant Periods. The consolidated financial statements of the Group have been prepared in accordance with the International Financial Reporting Standards issued by the International Accounting Standards Board.

The Unaudited Combined Financial Information does not contain sufficient information to constitute a complete set of financial statements as defined in International Accounting Standard 1, *Presentation of financial statements*, and should be read in conjunction with the Group's annual financial statements for the years ended 31 December 2015, 2016 and 2017 and 2018.

The following is the text of a report received from the reporting accountants, Ernst & Young, Certified Public Accountants, Hong Kong, in respect of the unaudited pro forma financial information of the Remaining Group for the purpose in this circular.

(A) INDEPENDENT REPORTING ACCOUNTANTS' ASSURANCE REPORT ON THE COMPILATION OF PRO FORMA FINANCIAL INFORMATION

To the Directors of China Vanadium Titano-Magnetite Mining Company Limited

We have completed our assurance engagement to report on the compilation of unaudited pro forma financial information of China Vanadium Titano-Magnetite Mining Company Limited (the "Company") and its remaining subsidiaries (hereinafter collectively referred to as the "Remaining Group") upon completion of the proposed disposal of Huili County Caitong Iron and Titanium Co., Ltd. and its subsidiaries (the "Disposal") mentioned in the circular dated 10 June 2019 (the "Circular") issued by the directors of the Company (the "Directors") for illustrative purposes only. The unaudited pro forma financial information consists of the unaudited pro forma consolidated statement of financial position as at 31 December 2018, and the unaudited pro forma consolidated statement of profit or loss and other comprehensive income and the unaudited pro forma consolidated statement of cash flows for the for the year ended 31 December 2018, and related notes as set out in Part B of Appendix II to the circular (the "Pro Forma Financial Information"). The applicable criteria on the basis of which the Directors have compiled the Pro Forma Financial Information are described in Part B of Appendix II to the Circular.

The Pro Forma Financial Information has been compiled by the Directors to illustrate the impact of the Disposal on the Remaining Group's financial position as at 31 December 2018 and the Remaining Group's financial performance and cash flows for the year ended 31 December 2018 as if the Disposal had taken place on 31 December 2018 and 1 January 2018, respectively. As part of this process, information about the Remaining Group's financial position as at 31 December 2018, and the Remaining Group's financial performance and cash flows for the year ended 31 December 2018 has been extracted by the Directors from the annual report of the Company for the year ended 31 December 2018.

Directors' responsibility for the Pro Forma Financial Information

The Directors are responsible for compiling the Pro Forma Financial Information in accordance with paragraph 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and with reference to Accounting Guideline ("AG") 7 *Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA").

Our independence and quality control

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the HKICPA, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies Hong Kong Standard on Quality Control 1 *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Reporting accountants' responsibilities

Our responsibility is to express an opinion, as required by paragraph 4.29(7) of the Listing Rules, on the Pro Forma Financial Information and to report our opinion to you. We do not accept any responsibility for any reports previously given by us on any financial information used in the compilation of the Pro Forma Financial Information beyond that owed to those to whom those reports were addressed by us at the dates of their issue.

We conducted our engagement in accordance with Hong Kong Standard on Assurance Engagements 3420 *Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus* issued by the HKICPA. This standard requires that the reporting accountants plan and perform procedures to obtain reasonable assurance about whether the Directors have compiled the Pro Forma Financial Information in accordance with paragraph 4.29 of the Listing Rules and with reference to AG 7 issued by the HKICPA.

For purposes of this engagement, we are not responsible for updating or reissuing any reports or opinions on any historical financial information used in compiling the Pro Forma Financial Information, nor have we, in the course of this engagement, performed an audit or review of the financial information used in compiling the Pro Forma Financial Information.

The purpose of the Pro Forma Financial Information included in the Circular is solely to illustrate the impact of a significant event or transaction on unadjusted financial information of the Remaining Group as if the event had occurred or the transaction had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the event or transaction as at 31 December 2018 or 1 January 2018 would have been as presented.

A reasonable assurance engagement to report on whether the Pro Forma Financial Information has been properly compiled on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by the Directors in the compilation of the Pro Forma Financial Information provide a reasonable basis for presenting the significant effects directly attributable to the event or transaction, and to obtain sufficient appropriate evidence about whether:

- the related pro forma adjustments give appropriate effect to those criteria; and
- the Pro Forma Financial Information reflects the proper application of those adjustments to the unadjusted financial information.

The procedures selected depend on the reporting accountants' judgment, having regard to the reporting accountants' understanding of the nature of the Remaining Group, the event or transaction in respect of which the Pro Forma Financial Information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the Pro Forma Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion:

(a) the Pro Forma Financial Information has been properly compiled on the basis stated;

(b) such basis is consistent with the accounting policies of the Remaining Group; and

(c) the adjustments are appropriate for the purpose of the Pro Forma Financial Information as disclosed pursuant to paragraph 4.29(1) of the Listing Rules.

Yours faithfully,

Certified Public Accountants
Hong Kong

10 June 2019

(B) UNAUDITED PRO FORMA FINANCIAL INFORMATION OF THE REMAINING GROUP

1. Basis of preparation of the unaudited pro forma financial information of the Remaining Group

The following is a summary of illustrative unaudited pro forma financial information of the Remaining Group in connection with the disposal of the entire issued share capital of Huili County Caitong Iron and Titanium Co., Ltd. and its subsidiaries (collectively referred to as the "Disposal Group") as described in the Section headed "Letter from the Board" in the Circular (the "Disposal"). The unaudited pro forma financial information presented below is prepared to illustrate (i) the financial position of the Remaining Group as at 31 December 2018 as if the Disposal had been completed on 31 December 2018; and (ii) the results and cash flows of the Remaining Group for the year ended 31 December 2018 as if the Disposal had been completed on 1 January 2018.

The unaudited pro forma financial information is prepared in accordance with Paragraph 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and has been prepared by the Directors of the Company for illustrative purpose only.

Narrative descriptions of the unaudited pro forma adjustments that are directly attributable to the Disposal and factually supportable are summarised in the accompanying notes to the unaudited pro forma financial information.

The unaudited pro forma financial information has been prepared for illustrative purposes only and because of its hypothetical nature, it may not give a true picture of the financial results, cash flows and financial position of the Remaining Group had the Disposal been completed as of the specified dates or any other dates.

The unaudited pro forma financial information of the Remaining Group is based upon the combined financial information of the Group for the year ended 31 December 2018, which has been derived from the Company's annual report for the year then ended as referred to in Appendix III to this circular and the combined financial information of the Disposal Group for the year ended 31 December 2018 as set out in Appendix I to this circular, and adjusted on a pro forma basis to reflect the effect of the Disposal. These pro forma adjustments are directly attributable to the Disposal and not relating to other future events and decisions.

The unaudited pro forma financial information of the Remaining Group should be read in conjunction with the historical financial information of the Group as set out in the published annual report of the Company for the year ended 31 December 2018 and other financial information included elsewhere in this Circular.

2. Unaudited pro forma consolidated statement of financial position of the Remaining Group as at 31 December 2018

	The Group as at 31 December 2018	Pro forma adjustments				The Remaining Group as at 31 December 2018
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
	(Note 1)	*(Note 2)*	*(Note 3)*	*(Note 4)*	*(Note 5)*	
NON-CURRENT ASSETS						
Property, plant and equipment	159,203	–	–	–	–	159,203
Intangible assets	737,526	–	–	–	–	737,526
Long term investment	–	–	–	–	–	–
Other intangible asset	7,525	–	–	–	–	7,525
Prepaid land lease payments	–	–	–	–	–	–
Prepayments and deposits	1,172	–	–	–	–	1,172
Payments in advance	–	–	–	–	–	–
Deferred tax assets	17,601	–	–	–	–	17,601
Total non-current assets	**923,027**	**–**	**–**	**–**	**–**	**923,027**
CURRENT ASSETS						
Inventories	23,627	–	–	–	–	23,627
Trade and bills receivables	105,229	–	–	–	–	105,229
Prepayments, deposits and other receivables	21,222	–	–	–	–	21,222
Dividend receivable from Disposal Group	–	–	17,156	–	–	17,156
Due from related parties	–	–	–	–	–	–
Due from Disposal Group	–	–	–	–	–	–
Cash and cash equivalents	33,696	–	–	88,195	(7,000)	114,891
	183,774	–	17,156	88,195	(7,000)	282,125
Assets classified as held for sale	41,169	–	–	–	–	41,169
Assets of a disposal group classified as held for sale	1,297,877	(1,813,846)	24,836	491,133	–	–
Total current assets	**1,522,820**	**(1,813,846)**	**41,992**	**579,328**	**(7,000)**	**323,294**

	The Group as at 31 December 2018		Pro forma adjustments			The Remaining Group as at 31 December 2018
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
	(Note 1)	*(Note 2)*	*(Note 3)*	*(Note 4)*	*(Note 5)*	
CURRENT LIABILITIES						
Trade and bills payables	54,235	–	–	–	–	54,235
Contract liabilities	5,811	–	–	–	–	5,811
Other payables and accruals	77,878	–	(17,791)	–	–	60,087
Interest-bearing bank and other loans	84,645	–	–	–	–	84,645
Due to related parties	9,805	–	–	–	–	9,805
Due to Disposal Group	–	–	–	–	–	–
Tax payables	9,154	–	–	–	–	9,154
Dividend payable	–	–	–	–	–	–
Dividend to Disposal Group	–	–	24,836	–	–	24,836
	241,528	–	7,045	–	–	248,573
Liabilities directly associated with the assets classified as held for sale	1,291,490	(1,355,765)	34,947	29,328	–	–
Total current liabilities	**1,533,018**	**(1,355,765)**	**41,992**	**29,328**	**–**	**248,573**
NON-CURRENT LIABILITIES						
Interest-bearing bank and other loans	16,149	–	–	–	–	16,149
Provision for rehabilitation	1,833	–	–	–	–	1,833
Other payables	1,151	–	–	–	–	1,151
Total non-current liabilities	**19,133**	**–**	**–**	**–**	**–**	**19,133**
Net assets	**893,696**	**(458,081)**	**–**	**550,000**	**(7,000)**	**978,615**
EQUITY						
Equity attributable to owners of the Company						
Issued capital	197,889	–	–	–	–	197,889
Reserves	376,848	(442,995)	–	550,000	(7,000)	476,853
	574,737	(442,995)	–	550,000	(7,000)	674,742
Non-controlling interest	318,959	(15,086)	–	–	–	303,873
Total equity	**893,696**	**(458,081)**	**–**	**550,000**	**(7,000)**	**978,615**

Notes:

(1) The amounts are extracted from the audited consolidated statement of financial position of the Group as at 31 December 2018 as set out in the published annual report of the Company for the year ended 31 December 2018.

(2) The adjustments represent the exclusion of assets and liabilities of the Disposal Group as if the Disposal had taken place on 31 December 2018 for the unaudited pro forma consolidated statement of financial position. The balances are extracted from the unaudited financial information of the Disposal Group as at 31 December 2018 as set out in Appendix I to this circular.

(3) The adjustments represent the grossing up of the intercompany balances between the Disposal Group and the Remaining Group, which were eliminated in the consolidated financial statements of the Group for the year ended 31 December 2018, made by the Group as if the Disposal had taken place on 31 December 2018.

(4) The adjustments represent total considerations of RMB550.0 million which will be satisfied as follows:

(i) RMB88.2 million in cash; and

(ii) RMB461.8 million or up to RMB465.0 million shall set off against the Intra-Group Debts which have the same meaning as net amount receivables by Disposal Group from Remaining Group which will be novated to the Purchaser upon Completion.

(5) The adjustments represent the estimated transaction costs directly attributable to the Disposal, including but not limited to legal and professional fees and other incidental costs, arising from the Disposal estimated by the Directors.

(6) The estimated net gain on the Disposal as if it had taken place on 31 December 2018, which is as follows:

		RMB'000
Gross proceeds		550,000
Less: Net assets of the Disposal Group as at 31 December 2018	*(Note 2)*	(458,081)
Add: Non-controlling interests derecognised as at 31 December 2018	*(Note 2)*	15,086
Less: Estimated transaction costs directly attributable to the Disposal	*(Note 5)*	(7,000)
Estimated gain on the Disposal		**100,005**

3. Unaudited pro forma consolidated statement of profit or loss and other comprehensive income of the Remaining Group for the year ended 31 December 2018

	The Group for the year ended 31 December 2018	Pro forma adjustments			The Remaining Group for the year ended 31 December 2018
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
	(Note 7)	*(Note 8)*	*(Note 9)*	*(Note 10)*	
CONTINUING OPERATIONS					
Revenue	684,750	–	8,113	–	692,863
Cost of sales	(634,210)	–	–	–	(634,210)
Gross profit	**50,540**	**–**	**8,113**	**–**	**58,653**
Other income and gains	602	–	–	–	602
Selling and distribution expenses	(11,284)	–	–	–	(11,284)
Administrative expenses	(34,746)	–	–	–	(34,746)
Reversal/(provision) of impairment losses on trade receivables, net	9,898	–	–	–	9,898
Impairment loss on assets classified as held for sale	(1,469)	–	–	–	(1,469)
Impairment loss on property, plant and equipment	(1,071)	–	–	–	(1,071)
Impairment loss on financial assets included in prepayments, deposits and other receivables	(23)	–	–	–	(23)
Other expenses	(2,256)	–	–	–	(2,256)
Finance costs	(8,343)	–	–	–	(8,343)
Net loss on disposal of subsidiaries	–	–	–	(363,806)	(363,806)
Loss before tax from continuing operations	**1,848**	**–**	**8,113**	**(363,806)**	**(353,845)**
Income tax credit	2,808	–	–	–	2,808
Loss for the year from continuing operations	**4,656**	**–**	**8,113**	**(363,806)**	**(351,037)**
DISCONTINUED OPERATIONS					
Loss for the year from discontinued operations	(453,907)	462,020	(8,113)	–	–
Loss for the year	**(449,251)**	**462,020**	**–**	**(363,806)**	**(351,037)**
Other comprehensive loss:					
Exchange differences on translation of foreign operations	989	–	–	–	989
TOTAL COMPREHENSIVE LOSS FOR THE YEAR	**(448,262)**	**462,020**	**–**	**(363,806)**	**(350,048)**

	The Group for the year ended 31 December 2018	Pro forma adjustments			The Remaining Group for the year ended 31 December 2018
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
	(Note 7)	*(Note 8)*	*(Note 9)*	*(Note 10)*	
Loss attributable to:					
Owners of the Company	(443,969)	460,496	–	(363,806)	(347,279)
Non-controlling interests	(5,282)	1,524	–	–	(3,758)
	(449,251)	**462,020**	**–**	**(363,806)**	**(351,037)**
Total comprehensive loss attributable to:					
Owners of the Company	(443,161)	460,496	–	(363,806)	(346,471)
Non-controlling interests	(5,101)	1,524	–	–	(3,577)
	(448,262)	**462,020**	**–**	**(363,806)**	**(350,048)**

Notes:

(7) The amounts are extracted from the audited consolidated statement of profit or loss and the audited consolidated statement of profit or loss and other comprehensive income of the Group for the year ended 31 December 2018 as set out in the published annual report of the Company for the year ended 31 December 2018.

(8) The adjustments represent the exclusion of the results of the Disposal Group for the year ended 31 December 2018 as if the Disposal had been completed on 1 January 2018. The balances are extracted from the unaudited financial information of the Disposal Group for the year ended 31 December 2018 as set out in Appendix I to this circular.

(9) The adjustments represent the grossing up of the intercompany transactions between the Disposal Group and the Remaining Group, which were eliminated in the consolidated financial statements of the Group for the year ended 31 December 2018, made by the Group as if the Disposal had taken place on 1 January 2018.

(10) The adjustments represent the estimated net gain on the Disposal as if it had taken place on 1 January 2018, which is as follows:

	RMB'000
Estimated net proceeds from the Disposal mentioned in *(Note 4)*	550,000
Less: Net assets of the Disposal Group as at 1 January 2018	(923,554)
Add: Non-controlling interests derecognised as at 1 January 2018	16,748
Less: Estimated transaction costs directly attributable to the Disposal	(7,000)
Estimated loss on the Disposal	**(363,806)**

The actual amount of gain on the Disposal may be different from the amount described above and would be subject to carrying amounts of net assets of the Disposal Group upon completion.

4. Unaudited pro forma condensed consolidated cash flow statement of the Remaining Group for the year ended 31 December 2018

	The Group for the year ended 31 December 2018	Pro forma adjustments			The Remaining Group for the year ended 31 December 2018
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
	(Note 11)	*(Note 12)*	*(Note 13)*	*(Note 14)*	
OPERATING ACTIVITIES					
Cash generated from operations	208,946	(52,659)	–	–	156,287
Interest received	50	(1)	–	–	49
Income tax paid	(779)	–	–	–	(779)
Net cash generated from operating activities	**208,217**	**(52,660)**	**–**	**–**	**155,557**
INVESTING ACTIVITIES					
Purchase of items of property, plant and equipment	(137,273)	105,123	–	–	(32,150)
Purchase of intangible assets	(82)	82	–	–	–
Proceeds from disposal of items of property, plant and equipment	321	(55)	–	–	266
Acquisition of an associate	(1,560)	–	–	–	(1,560)
Net cash inflow in respect of disposal of subsidiaries	–	–	88,195	(7,000)	81,195
Net cash used in investing activities	**(138,594)**	**105,150**	**88,195**	**(7,000)**	**47,751**
FINANCING ACTIVITIES					
Interest paid	(32,272)	18,987	–	–	(13,285)
Proceed of bank loans	153,479	(69,500)	–	–	83,979
Repayment of bank loans	(173,011)	80,502	–	–	(92,509)
Repayment of other loans	–	325,389	–	–	325,389
Decrease in an amount due to a related party	(966)	–	–	–	(966)
Decrease in an amount due to Remaining Group	–	(407,868)	–	–	(407,868)
Net cash used in financing activities	**(52,770)**	**(52,490)**	**–**	**–**	**(105,260)**
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	**16,853**	**–**	**88,195**	**(7,000)**	**98,048**
Cash and cash equivalents at beginning of year	13,286	(75)	–	–	13,211
Effect of foreign exchange rate changes, net	3,632	–	–	–	3,632
CASH AND CASH EQUIVALENTS AT END OF YEAR	**33,771**	**(75)**	**88,195**	**(7,000)**	**114,891**

Notes:

(11) The amounts are extracted from audited condensed consolidated cash flow statements of the Group for the year ended 31 December 2018 as set out in the published annual report of the Company for the year ended 31 December 2018.

(12) The adjustments represent the exclusion of cash flows of the Disposal Group for the year ended 31 December 2018 as if the Disposal had been completed on 1 January 2018. The balances are extracted from the unaudited financial information of the Disposal Group as at and for the year ended 31 December 2018 as set out in Appendix I to this circular.

(13) The adjustments represent the net cash flow as if the Disposal had taken place on 1 January 2018, with reference to estimated net proceeds from the Disposal mentioned in *(Note 4(i))*.

(14) The adjustments represent the estimated transaction costs directly attributable to the Disposal, including but not limited to legal and professional fees and other incidental costs, arising from the Disposal estimated by the Directors.

(15) The adjustments in respect of the unaudited pro forma consolidated statement of profit or loss, unaudited pro forma consolidated statement of profit or loss and other comprehensive income and unaudited pro forma condensed consolidated cash flow statement above are not expected to have a continuing effect on the Remaining Group.

(16) The estimated gain on the Disposal and net proceeds from the Disposal as illustrated above are subject to change on the date of completion of the Disposal. The actual carrying amount of the Disposal Group, cash and cash equivalents held by the Disposal Group and thus the gain or loss on Disposal and net proceeds from the Disposal at the date of completion will likely be different from those stated in the unaudited pro forma financial information.

1. FINANCIAL INFORMATION

The consolidated financial statements of the 31 December 2015, 2016, 2017 and 2018 are disclosed in the annual reports of the Company for the financial years ended 31 December 2015 (pages 69 to 151), 31 December 2016 (pages 65 to 141), 31 December 2017 (pages 69 to 157) and 31 December 2018 (pages 97 to 243), respectively, and are incorporated by reference into this circular.

The said annual reports of the Company are available on the Company's website at www.chinavtmmining.com and website of the Stock Exchange at www.hkexnews.hk through the links below:

http://www3.hkexnews.hk/listedco/listconews/SEHK/2019/0409/LTN20190409355.pdf

http://www3.hkexnews.hk/listedco/listconews/SEHK/2018/0411/LTN20180411299.pdf

http://www3.hkexnews.hk/listedco/listconews/SEHK/2017/0412/LTN20170412359.pdf

http://www3.hkexnews.hk/listedco/listconews/SEHK/2016/0406/LTN20160406617.pdf

2. INDEBTEDNESS STATEMENT

As at 30 April 2019, being the latest practicable date for the purpose of preparing this statement of indebtedness prior to the printing of this circular, the Group had outstanding borrowings amount to approximately RMB903.9 million, analysed into following:

	Disposal Group *RMB'000*	**Remaining Group** *RMB'000*	**Total** *RMB'000*
Bank loans repayable:			
Within one year or on demand	360,223	83,979	444,202
In the second year	298,400	–	298,400
	658,623	83,979	742,602
Hire purchase arrangements repayable:			
Within one year	–	19	19
Other loan payables			
Within one year or on demand	140,975	647	141,622
In the second year	–	19,162	19,162
In the third to fifth year, inclusive	–	463	463
	140,975	20,272	161,247
Total	**799,598**	**104,270**	**903,868**

(a) As at 30 April 2019, the unsecured bank loans totalling RMB230.7 million were guaranteed by the Company at nil consideration.

(b) The Group acquired certain of its machinery and other fixed assets through hire purchase arrangements, which were classified as finance leases and have remaining lease terms ranging within one year. As at 30 April 2019, payable relating to the hire purchase arrangements were secured by the corresponding assets with an aggregate carrying amount of RMB19,000.

(c) As at 30 April 2019, unsecured other loans consisted of (i) interest-bearing loans totalling RMB141.0 million payable to an asset management company, which were due for repayment on demand and (ii) interest-free loan totalling RMB14.9 million granted by Sapphire Corporation Limited, a non-controlling shareholder of Mancala Holdings Limited, to Mancala Holdings Pty Ltd. The loan is due for repayment on or before 31 December 2020.

As at 30 April 2019, the Group had no material contingent liabilities.

Save as aforesaid, and apart from intra-group liabilities and normal trade payables, the Group did not have any outstanding bank overdrafts, loans, debt securities, borrowings or other similar indebtedness, liabilities under acceptances or acceptance credits, debentures, mortgages, charges, finance lease, hire purchases commitments, which were either guaranteed, unguaranteed, secured or unsecured, guarantees or other material contingent liabilities at the close of business on 30 April 2019.

To the best knowledge of the Directors, having made all reasonable enquiries, there has been no material change in indebtedness or contingent liabilities of the Group since 30 April 2019 and up to the Latest Practicable Date.

3. WORKING CAPITAL

The Directors, after due and careful consideration, are of the opinion that, in the absence of unforeseeable circumstances and after taking into account of financial resources available to the Group, the Group has sufficient working capital for its present requirements, that is for at least 12 months from the date of this circular.

4. FUTURE PLANS AND PROSPECTS

On Completion of the Disposal, the Group will continue to operate within its existing scope of business and allocate more resources for the operations for high-grade iron concentrates to take advantage of the market shift that is expected to achieve better economies of scale and deliver greater economic value while focusing on stabilising and improving operating cash flows for the Group. The Group will also explore other business diversification initiatives focusing on assets-light strategies while evaluating businesses in those industries, which the PRC government is promoting and supportive. The Company will update Shareholders in due course.

Based on the foregoing investment strategies, the Company may potentially explore businesses opportunities outside the mining industry. However, in the event that the Group undertakes any acquisition, investment or transaction, joint venture or collaboration in future, the Company will comply with the applicable requirements under the Listing Rules.

5. MATERIAL ADVERSE CHANGE

As at the Latest Practicable Date, to the best of the knowledge, information and belief of Directors after making reasonable enquiries, there had not been any material adverse change in the financial position or trading position of the Group since 31 December 2018, being the date to which the latest published audited financial statements of the Group was made up.

6. MANAGEMENT DISCUSSION AND ANALYSIS

Set out below is the management discussion and analysis of the Remaining Group for each of the year ended 31 December 2015, 2016, 2017 and 2018. Capitalised terms used in this section shall have the same meanings as defined in the annual reports of the Company of the respective years.

A. Management discussion and analysis for the year ended 31 December 2018

Business and Financial Review

The Remaining Group recorded a profit for the year which was mainly attributable to increase in revenue of high-grade iron concentrates.

The Remaining Group recorded total revenue of approximately RMB692.9 million for the year. Sale of high-grade iron concentrates recorded revenue amounting to RMB89.9 million, trading of coal and steel amounting to RMB517.9 million and maiden consolidation of revenue from specialised mining services amounting to RMB85.1 million.

The Remaining Group recorded unaudited net profit attributable to owners of the Company amounting to RMB16.5 million for the year (2017: net loss of approximately RMB185.8 million). The increase in unaudited net profit was mainly due to the increase in both selling price and sales volume of high-grade iron concentrates during the year and in the absence of (i) fair value loss arising from the exchangeable notes subscribed by the Remaining Group of approximately RMB109.6 million, (ii) impairment losses of relevant assets amounting to RMB64.9 million and (iii) share of loss from joint venture amounting to RMB9.4 million.

High-Fe Mining Operation

During the year, the High-Fe Mining Operation contributed 57.2% of the gross profit for the Remaining Group amounting to RMB33.6 million despite only contributing 13% of the revenue to the Remaining Group. Gross profit margin was improved from 24.0% to 37.4% on the back of higher selling price for high-grade iron concentrates.

Trading

During the year, the Group continued to shrink its trading activities given its business direction to progressively reduce its exposure in this segment which required higher working capital requirements – total purchase and sales volumes of trading activities were approximately 307.7 Kt and 320.1 Kt, respectively, representing a fall of 40.8% and 46.2%, respectively, as compared to FY2017.

Specialised Mining Services

As a result of the maiden consolidation of full year financial results of Mancala Holdings, the Specialised Mining Services reported revenue amounting to RMB87.1 million with a gross profit margin of 15.6%. However, as a result of economic slowdown and a sign of hold back on capital spending in the market, the Specialised Mining Services recorded a segmental loss of RMB16.3 million.

Financial Position

The Remaining Group financed its operations by internally generated cash flows and banking facilities provided by its banker. The Remaining Group continued to maintain a prudent approach in managing its financial requirements.

The Remaining Group's net assets as at 31 December 2018 were approximately RMB435.6 million without considering the net assets of the Disposal Group. The Remaining Group's gearing ratio at the end of the year was 7.0% *(Note: Gearing ratio is calculated by dividing Net Debt by Total Equity plus Net Debt. Net Debt is defined as all interest-bearing loans, net of cash and cash equivalents. Equity includes equity attributable to owners of the Company and non-controlling interests.)* Net debt is based on total borrowings of approximately RMB100.8 million net of cash and cash equivalents of RMB33.7 million. The Remaining Group's borrowings were mainly on a fixed rate basis.

Foreign Exchange Rate Risk

The Remaining Group was exposed to currency risk primarily through income and expenditure streams denominated in Vietnamese Dong, United States Dollars, Hong Kong Dollars, Australian Dollars and Singapore Dollars. To manage currency risks, non-Renminbi assets were financed primarily by matching local currency debts as far as possible.

Pledge of Assets

As at 31 December 2018, mining rights of Maoling Mine is pledged to Shanghai Pudong Development Bank Chengdu Branch for bank loans.

Contingent Liabilities

As at 31 December 2018, the Remaining Group did not have any significant contingent liabilities.

Capital Commitments

As at 31 December 2018, the Remaining Group has capital commitments amounting to RMB1.7 million in relation to conversion of exploration rights of Maoling-Yanglongshan Mine to mining rights.

Employees and Emolument Policies

As at 31 December 2018, the Remaining Group had approximately 199 employees. The staff costs of the Remaining Group (including directors' remuneration in the form of salaries and other allowances) were approximately RMB27.0 million.

The emolument policies of the Remaining Group are based on performance, experience, competence and market comparable. Remuneration package generally comprises salary, housing allowance, contribution to pension scheme and discretionary bonus relating to the performance of the Remaining Group. The Remaining Group has also adopted share option schemes for its employees, providing incentives and rewards to eligible participants with reference to their contribution.

B. Management discussion and analysis for the year ended 31 December 2017

Business and Financial Review

On 28 February 2017, the Remaining Group acquired 49% equity interest of Mancala Group at a cash consideration of HK$3.2 million (equivalent to RMB2.8 million) and HK$25.0 million satisfied by issued of CVT's shares. On 29 September 2017, the Remaining Group further acquired 32% of the entire issued share capital of Mancala Group at an aggregate consideration of HK$25.0 million which was wholly satisfied by issued of CVT's shares. The Company is interested in 81% of the entire issued share capital of the Mancala Group as at 31 December 2017.

During the year, the Remaining Group made guided decisions to reduce trading sales (which earned substantially lower margins but required more working capital). As a results, the Remaining Group's revenue decreased to approximately RMB877.2 million due mainly to the significantly lower trading sales. The Remaining Group recorded a gross profit of approximately RMB15.6 million and gross profit margin of approximately 1.8%. During the year the Remaining Group has recorded (i) impairment losses on assets classified as held for sale, intangible assets and trade receivables RMB79.9 million due mainly to lower commodity price and budgeted gross margin due to the partially adjustment of production operation from self-produced products as gypsum concentrates as originally designated to raw ore production, (ii) fair value loss on the exchangeable note amounting to RMB109.6 million and (iii) sharing of 49% equity loss of Mancala Group amounting RMB9.5 million. As a result of the above, the Remaining Group recorded loss for the year of approximately RMB222.5 million.

High-Fe Mining Operation

During the year, High-Fe Mining Operation contributed 76.5% of the gross profit for the Remaining Group amounting to RMB16.2 million despite only contributing 7.7% of the revenue to the Remaining Group. Gross profit margin was improved from 19.9% to 24.0% on the back of higher selling price for high-grade iron concentrates.

Trading

During the year, the Group made guided decisions to reduce its trading sales (which earned substantially lower margins but required more working capital) – total purchase and sales volumes of trading activities were approximately 519.7 Kt and 595.4 Kt, respectively, representing a fall of 53.1% and 53.8%, respectively, as compared to FY2016.

Specialised Mining Services

During the year, the Group acquired an 81% equity interest in Mancala Holdings via two steps acquisition with a view to tapping on foreign expertise as well as gaining access to the technical fields of expertise in internationally recognised standards of efficiency, safety, environmental management and innovative training methods in mining operations. Since the completion of the acquisition, Specialised Mining Services segment contributed RMB3.6 million to the Remaining Group's revenue and recorded a RMB12.2 million segmental loss for the year.

Financial Position

The Remaining Group financed its operations by internally generated cash flows and banking facilities provided by its banker. The Remaining Group continued to maintain a prudent approach in managing its financial requirements.

The Remaining Group's net assets as at 31 December 2017 were approximately RMB421.6 million. The Remaining Group's gearing ratio at the end of the period was 16.1%. Net debt is based on total borrowings of approximately RMB94.2 million net of cash and cash equivalents of RMB13.2 million. The Remaining Group's borrowings were mainly on a fixed rate basis.

Foreign Exchange Rate Risk

The Remaining Group was exposed to currency risk primarily through income and expenditure streams denominated in United States Dollars, Hong Kong Dollars and Australian Dollars. To manage currency risks, non-Renminbi assets were financed primarily by matching local currency debts as far as possible.

Pledge of Assets

As at 31 December 2017, mining rights of Maoling Mine is pledged to Shanghai Pudong Development Bank Chengdu Branch for bank loans.

Contingent Liabilities

As at 31 December 2017, the Remaining Group did not have any significant contingent liabilities.

Capital Commitments

As at 31 December 2017, the Remaining Group did not have any significant capital commitments.

Employees and Emolument Policies

As at 31 December 2017, the Remaining Group had approximately 109 employees. The staff costs of the Remaining Group (including directors' remuneration in the form of salaries and other allowances) were approximately RMB14.4 million.

The emolument policies of the Remaining Group are based on performance, experience, competence and market comparable. Remuneration package generally comprises salary, housing allowance, contribution to pension scheme and discretionary bonus relating to the performance of the Remaining Group. The Remaining Group has also adopted share option schemes for its employees, providing incentives and rewards to eligible participants with reference to their contribution.

C. Management discussion and analysis for the year ended 31 December 2016

Business and Financial Review

On 30 December 2016, the Company entered into the sale and purchase agreement with Sapphire Corporation Limited, to acquire 49% equity interest of Mancala Group at a cash consideration of HK$3.2 million (equivalent to RMB2.8 million) and HK$25.0 million satisfied by issued of CVT's shares. The transaction was completed on 28 February 2017.

The global economy was filled with a mood of gloom in 2016. The slow pace of global economic recovery was further burdened by Brexit half way through 2016, which seemed to have a knock-on effect on the already bleak economy. China, while shifting away from export-driven economy, has seen its gross domestic product growth moderated and experienced a sharp Renminbi devaluation in 2016. The pace of interest rate rise and the recent political climate in the United States also added another dollop of uncertainty to the world economy.

While China was undergoing a structural transformation and its economy was rebalancing, a slowdown was unavoidable. Meanwhile, the global steel industry environment remained challenging and China's excess steel capacity had long been a thorn in the side of this already challenging industry which also limited export opportunity. Against this observation, property prices in major cities of China have risen and the real estate market was known to stand in direct correlation with steel demand in the construction sector. However, there have been divided opinions on the sustainability of real estate price surge and some experts continued to warn risks of vulnerability. As such, the impact of such rebound on continual increase in steel demand remained largely unknown. To partly address issues arising from this development, the Chinese government issued a number of stimulus measures in 2016 to boost fiscal spending on infrastructure and this has been seen as one of the strategic moves to curb excessive steel capacity.

In 2016, the market conditions of iron ore industry remained volatile. As a result, the capacity utilisation of the Remaining Group's plants was still low and below optimal levels. During the year, the Remaining Group's revenue increased significantly to approximately RMB1,597.4 million mainly due to the trading of steels and coals, as part of the Remaining Group's diversification plans, despite thin margins amidst market conditions. The gross profit of the Remaining Group was approximately RMB25.1 million and the gross profit margin was approximately 1.6% for the year. The impairment losses were approximately RMB47.3 million for the year mainly due to lower commodity price and budgeted gross margin with reference to a feasibility study conducted on gypsum mine. The estimated fair value loss on the Exchangeable Notes for the year was approximately RMB111.6 million with a carrying value for the exchangeable notes of approximately RMB109.6 million as at 31 December 2016. As a result, the Remaining Group recorded a loss and total comprehensive loss for the year of approximately RMB169.3 million.

High-Fe Mining Operation

During the year, High-Fe Mining Operation contributed 86.1% of the gross profit for the Remaining Group amounting to RMB21.6 million despite only contributing 6.8% of the revenue to the Remaining Group. Gross profit margin was improved from 14.7% to 19.9% on the back of higher selling price and sales volume for high-grade iron concentrates.

Trading

In face of the unfavourable operating environment, the Group streamlined its operations amidst challenging and highly volatile business conditions during the year. As a part of the Group's diversification plans, the management team has commenced trading of steels and coals which has helped to expand revenue stream since second half of FY2015. As a result, purchase and sales volumes of trading activities were approximately 1,108.7 Kt and 1,058.5 Kt, respectively, representing an increase of 350.9% and 414.1%, respectively, as compared to FY2015.

Financial Position

The Remaining Group financed its operations by internally generated cash flows and banking facilities provided by its banker. The Remaining Group continued to maintain a prudent approach in managing its financial requirements.

The Remaining Group's net assets as at 31 December 2016 were approximately RMB581.2 million. The Remaining Group's gearing ratio at the end of the period was 10.1%. Net debt is based on total borrowings of approximately RMB85.3 million net of cash and cash equivalents of RMB19.7 million. The Remaining Group's borrowings were mainly on a fixed rate basis.

Foreign Exchange Rate Risk

The Remaining Group was exposed to currency risk primarily through income and expenditure streams denominated in United States Dollars and Hong Kong Dollars. To manage currency risks, non-Renminbi assets were financed primarily by matching local currency debts as far as possible.

Pledge of Assets

As at 31 December 2016, mining rights of Maoling Mine is pledged to Shanghai Pudong Development Bank Chengdu Branch for bank loans.

Contingent Liabilities

As at 31 December 2016, the Remaining Group did not have any significant contingent liabilities.

Capital Commitments

As at 31 December 2016, the Remaining Group did not have any significant capital commitments.

Employees and Emolument Policies

As at 31 December 2016, the Remaining Group had approximately 110 employees. The staff costs of the Remaining Group (including directors' remuneration in the form of salaries and other allowances) were approximately RMB9.7 million.

The emolument policies of the Remaining Group are based on performance, experience, competence and market comparable. Remuneration package generally comprises salary, housing allowance, contribution to pension scheme and discretionary bonus relating to the performance of the Remaining Group. The Remaining Group has also adopted share option schemes for its employees, providing incentives and rewards to eligible participants with reference to their contribution.

D. Management discussion and analysis for the year ended 31 December 2015

Business and Financial Review

During the year, the severely weak market sentiment caused significant reductions in (i) production volume of many steel companies in Sichuan and (ii) demand for iron ore product in the upstream market. Under such unfavourable market conditions, the Group intended to explore new opportunities and diversify the business. As such, the trading of steel was conducted since the second half of the year and has recorded trading revenue of RMB358.5 million.

Meanwhile, Aba Mining resumed production since 2011 and completed reconstruction to achieve the planned production capacity during the year and hence the sales volume and production volume of high-grade iron concentrates increased by 31.7% and 35.6%, respectively.

The Remaining Group's revenue increased significantly to approximately RMB534.5 million due mainly to trading of steel activities started in second half of the year. The gross profit of the Remaining Group was approximately RMB8.3 million and the gross profit margin was approximately 1.6%. The impairment losses on property, plant and equipment, intangible assets and trade receivables were in aggregate of approximately RMB32.1 million, the fair value loss on the Exchangeable Notes was approximately RMB69.0 million and the loss and total comprehensive loss was approximately RMB128.2 million.

High-Fe Mining Operation

During the year, High-Fe Mining Operation contributed 95.3% of the gross profit for the Remaining Group amounting to RMB7.9 million despite only contributing 10.1% of the revenue to the Remaining Group. Gross profit margin was decreased from 23.0% to 14.7% mainly as a result of dropped in average selling price which has outpaced the fixed cost reduction per unit.

Trading

The Group has been exploring new opportunities and diversifying the business. As such, the trading of steel has been conducted since the second half of FY2015. As a result, the trading segment tried out with a minimum purchase and sales volumes of approximately 245.9 Kt and 205.9 Kt, respectively.

Financial Position

The Remaining Group financed its operations by internally generated cash flows and banking facilities provided by its banker. The Remaining Group continued to maintain a prudent approach in managing its financial requirements.

The Remaining Group's net assets as at 31 December 2015 were approximately RMB750.6 million. The Remaining has cash and cash equivalents exceeds it interest-bearing bank and other loan. Net debt is based on total borrowings of approximately RMB29.5 million net of cash and cash equivalents of RMB186.0 million. The Remaining Group's borrowings were mainly on a fixed rate basis.

Foreign Exchange Rate Risk

The Remaining Group was exposed to currency risk primarily through income and expenditure streams denominated in United States Dollars and Hong Kong Dollars. To manage currency risks, non-Renminbi assets were financed primarily by matching local currency debts as far as possible.

Pledge of Assets

As at 31 December 2015, mining rights of Maoling Mine is pledged to Shanghai Pudong Development Bank Chengdu Branch for bank loans.

Contingent Liabilities

As at 31 December 2015, the Remaining Group did not have any significant contingent liabilities.

Capital Commitments

As at 31 December 2015, the Remaining Group has capital commitments contracted but not provided for amounting to RMB260,000.

Employees and Emolument Policies

As at 31 December 2015, the Remaining Group had approximately 107 employees. The staff costs of the Remaining Group (including directors' remuneration in the form of salaries and other allowances) were approximately RMB10.0 million.

The emolument policies of the Remaining Group are based on performance, experience, competence and market comparable. Remuneration package generally comprises salary, housing allowance, contribution to pension scheme and discretionary bonus relating to the performance of the Remaining Group. The Remaining Group has also adopted share option schemes for its employees, providing incentives and rewards to eligible participants with reference to their contribution.

The following is the text of the Competent Person's Report prepared by BAW Mineral Partners Limited, for the purpose of incorporation in this circular.

10 June 2019

Board of Directors
China Vanadium Titano-Magnetite Mining Company Limited
Unit A, 4th Floor, E168,
Nos. 166-168 Des Voeux Road Central
Hong Kong

Dear Sirs,

BAW Mineral Partners Limited ("BAW") herewith submits the Competent Persons Report ("CPR") of the five iron properties including Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project, which are indirectly owned by China Vanadium Titano-Magnetite Mining Company Limited ("Client") via its subsidiaries and are located in the southern part of Sichuan Province, the People's Republic of China ("PRC"), pursuant to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition ("JORC Code 2012") and Chapter 18 of Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("HKEX").

BAW was initially engaged by the Client in July 2018 to prepare the CPR. Visiting the mining properties in August 2018, BAW issued the CPR dated 8 October 2018 which covered the resource estimates, reserve estimates and production as of 30 June 2018. Subsequently, BAW was engaged by the Client in January 2019 to further update the CPR which was intended to cover the resource estimates, reserve estimates and production as of 31 December 2018. The purpose of this CPR is to provide an independent technical assessment of the mining properties as of 31 December 2018 in relation to its various aspects, in particular, project geology, drilling, sampling, sample preparation, resource estimates, mine planning, past production, reserve estimates, processing strategy, capital costs, operating costs and economic analysis with reference to the requirements of the JORC Code 2012.

BAW believes that this CPR adequately and appropriately describes the technical aspects of the mining properties, our analysis and view as well as addresses issues of significance and risk.

BAW has not undertaken an audit of the Client's data nor reviewed the tenement status with respect to any legal or statutory issues.

BAW hereby certifies that neither BAW, nor its directors, shareholders, staffs have any present or prospective interests in the Client or its mining properties. BAW is to receive the professional fee for its services (the work product of which includes this report) at its normal commercial rate and customary payment schedules. The payment of our professional fee is not contingent on the outcome of this report.

Yours faithfully,
For and on behalf of
BAW MINERAL PARTNERS LIMITED

Karfai Leung
Director

DISCLAIMER

This report has been prepared solely in accordance with the specific requirements and instructions of the Client. The opinions expressed in this report have been based on the information supplied to BAW Mineral Partners (BAW) by the client. BAW has exercised all due care in reviewing the supplied information. While BAW has compared the key supplied data with expected value, the accuracy and effectiveness of the results and conclusions from the report are completely dependent on the quality of the supplied data. BAW does not take responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of BAW investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this report, about which BAW had no prior knowledge nor had the opportunity to evaluate.

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1 INTRODUCTION

1.1 General background

BAW Mineral Partners Limited ("BAW") is an independent, global consulting firm providing solutions and advisory to the mining industry across a wide range of mineral commodities in different regions, including exploration management services, resource estimation, reserve estimation, engineering studies and reporting for public disclosure. BAW's international team consists of over 60 mining experts and associates with a broad range of expertise. BAW is currently operating in three offices, Hong Kong, Beijing and Toronto.

In July 2018, BAW was commissioned by China Vanadium Titano-Magnetite Mining Company Limited ("CVT") to prepare the Competent Persons Report ("CPR") for its five iron properties, including Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project which are located in the southern part of Sichuan Province, the People's Republic of China ("PRC"), pursuant to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition ("JORC Code 2012") and Chapter 18 of Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("HKEX"). In August 2018, BAW visited the mining properties aforementioned and issued the CPR subsequently in October 2018 which covered the resource estimates, reserve estimates and production as of 30 June 2018. In January 2019, BAW was further commissioned by CVT to update the CPR which was intended to cover the resource estimates, reserve estimates and production as of 31 December 2018.

The purpose of this CPR is to provide an independent technical assessment of the mining properties in relation to its various aspects, in particular, project geology, drilling, sampling, sample preparation, resource estimates, mine planning, past production, reserve estimates, processing strategy, capital costs, operating costs and economic analysis with reference to the requirements of the JORC Code 2012.

1.2 Scope of work

The scope of work of BAW's engagement include the following technical aspects:

- Site visit to the mining properties
- Review of the available technical information
- Review of geology and database of the resource models
- Preparation of an updated resource estimate
- Preparation of an updated reserve estimate

- Review of mining operation
- Review of the processing and recovery operations
- Review of capital and operating costs
- Review of health, social and environmental (HSE) impact
- Risk assessment

The mining properties covered by this CPR included Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project which are located in the southern part of Sichuan Province, PRC.

1.3 Team members

BAW assembled a multidisciplinary team to undertake the CPR. The qualification of the team members is summarized as below.

Dr. Weiliang Wang (PhD, P.Geo, MAusIMM), as a Senior Geologist and CEO of BAW. He has more than fifteen years of extensive experience in management of exploration and mining projects, geological database management, mineral project evaluation, Competent Person Reports for IPO purpose and technical due diligence for a wide range of mineral projects. He has solid and proven track records in numerous deposits for gold, copper, nickel, lead, zinc, iron ore, molybdenum graphite and coal in Australia, China, Canada, Indonesia, Mongolia, Philippine, Bolivia, Mexico, Nigeria, Congo, Madagascar, Pakistan and Central Asia.

Mr. Karfai Leung (MPhil, MAusIMM), as the Project Manager and Senior Geologist of BAW. Mr. Leung graduated with Honours with a Bachelor of Science (major Earth Sciences) and a Master of Philosophy in Earth Sciences, both from The University of Hong Kong. He has more than fifteen years of extensive experience in the mining industry globally including project generation, prospecting, field exploration, mineral resource definition, HSE management, mineral assets valuation, project evaluation, M&A deals and IPO process for energy, base metals, non-ferrous metals and precious metals. He has hands-on and extensive experience in cash-flow modelling, valuation, due diligence, capital raising, M&A deals and IPOs project management.

Mr. Hongbo Liu (M. Sc., MAusIMM), as a Senior Mining Engineer of BAW, has more than fifteen years of underground and open pit mining experience in mine operations, constructions, project management, engineering, mine development, ground control, ventilation, backfill, haulage and technical services. He also has solid computer skills in MS Office suite, CAD, and mine applications including MineSched, Surpac, Vulcan, Whittle and MapGIS.

Mr. Shugang Zhao (M. Sc.), as a Senior Resource Geologist of BAW, earned his Master's degree in Safety Technology and Engineering in digital mining from Central South University. He has more than seven years of extensive experience in mineral exploration, resource database management, 3D resource modelling, resource and reserve estimation, mine planning and production scheduling.

Mr. Zuohua Yan (B.Sc.), as a Senior Metallurgical Engineer of BAW, has more than 35 years of experience in metallurgical processing, processing design, recovery management, technical reporting and project financing. He is a registered (Investment) Consulting Engineer and registered Mineral Engineer. In 2013, Mr Yan participated in the processing design for China Railway Resource Group and was awarded with the National Outstanding Design.

All personal above completed a site visit to the five mining properties in August 2018.

1.4 Terms of reference, units, abbreviations and currency

Unless Otherwise stated:

- All units of measurement in the Report are in metric system
- All costs, revenues and values are expressed in terms of Renminbi (RMB);
- All metal prices are expressed in terms of Renminbi (RMB);

Table 1-1 Terms of Reference, Units, Abbreviations and Currency

AAS	Atomic Absorption Spectroscopy
BAW	BAW Mineral Partners
CVT	China Vanadium Titano-Magnetite Mining Company Limited
CAPEX	Capital Cost
g/t	Gram per tonne
HQ3	Diamond drilling bit size
IDW3	Inverse Distance Weighted Cubed
JORC	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
Km	Kilometre
LOM	Life of Mine
m	Meter
MW	Megawatt
NQ3	Diamond drilling bit size
NPV	Net present value
PQ	Diamond drilling bit size
QA/QC	Quality Assurance/ Quality Control
RL	Reduced Level
RDDD	Diamond drill holes
COG	Cut-off grade
G&A	General and Administration cost
HG	High Grade
Ktpa	thousand tonnes per annum
LG	Low grade
Mt	Million Tonnes
MTPA	Million tonnes per annum
NQ	Diamond drilling bit size
OPEX	Operating Capex
PQ3	Diamond drilling bit size
PEA	Preliminary Economic Assessment
CP	Competent Person
TPA	tonnes per annum
ROM	Raw Ore Material/ Run of Mine
tpd	Tonne per day
TSF	Tailings Storage Facility
VALMIN	Australasian Code for Public Reporting of technical assessments and valuations of mineral assets

1.5 Reporting standard

The reporting standard of the CPR is the VALMIN Code which is Guidelines for Technical Assessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert Reports as adopted by the Australasian Institute of Mining and Metallurgy in 1995 and updated in 2005.

The reporting of Resource and Reserve is referenced to the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code") prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia revised in 2012. The JORC Code is a mineral resource/ore reserve classification system that has been widely used and is internationally recognized. It has also been used in independent technical reports for mineral resource and ore reserve statements for the natural resource companies listed on the HKEX.

The VALMIN Code incorporates the JORC Code for the reporting of Mineral Resources and Ore Reserves.

1.6 Independence statement

BAW certifies that neither BAW, nor its directors, shareholders, staffs have any present or prospective interests in the Client or its mining properties. BAW is to receive the professional fee for its services (the work product of which includes this report) at its normal commercial rate and customary payment schedules. The payment of our professional fee is not contingent on the outcome of this report.

1.7 Indemnities

As recommended by the VALMIN Code, CVT has provided BAW with an indemnity under which BAW is to be compensated for any liability and/or any additional work or expenditure resulting from any additional work required:

- Which results from BAW's reliance on material information provided by CVT;
- Which relates to any consequential extension workload through queries, questions or public hearings arising from this CPR.

1.8 Source of information

Information used to support this CPR was derived from previous technical reports on the properties, from the reports and documents listed in the Section of Reference of this CPR, from the technical and financial information provided by CVT.

1.9 Effective date

The effective date for the Mineral Resources and Ore Reserves was 31 December 2018. There were no material changes to the information on the mining properties between the effective date and the signature date of the CPR.

2 PROPERTY DESCRIPTION AND LOCATION

2.1 Location

China Vanadium Titano-Magnetite Mining Company Limited, through its subsidiaries, indirectly owns controlling interest in a number of mining properties, including the Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project, Haibaodang Project, Maoling Mine and Yanglongshan Project which are located in Sichuan Province of the PRC and are summarized in Table 2-1 below.

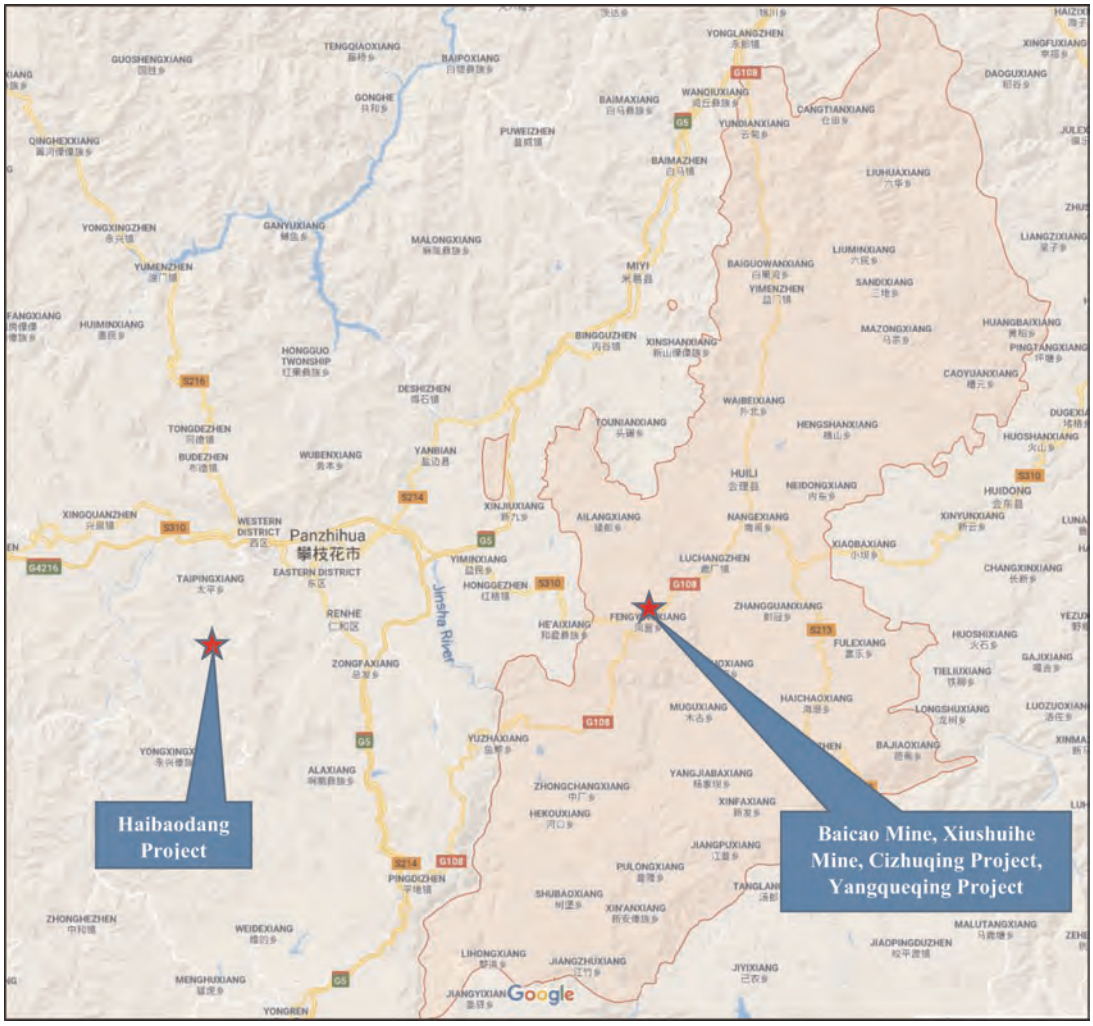
Table 2-1 Mining Properties controlled by CVT in Sichuan Province of the PRC

Property Name	License	Ownership *(%)*	Location
Baicao	Mining Right	100	Huili County, Sichuan Province
Xiushuihe (including Xiushuihe Expansion)	Mining Right	95	Huili County, Sichuan Province
Yangqueqing	Mining Right	100	Huili County, Sichuan Province
Cizhuqing	Mining Right	100	Huili County, Sichuan Province
Haibaodang	Exploration Right	100	Panzhihua City, Sichuan Province
Maoling*	Mining Right	100	Wenchuan County, Sichuan Province
Yanglongshan*	Exploration Right	100	Wenchuan County, Sichuan Province
Shigou*	Exploration Right	100	Hanyuan County, Sichuan Province

(*) *is not required for CVT's disclosure and is thus not included in the scope of this CPR*

Among those properties, Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project, which are located in the southern part of Sichuan Province as shown in Figure 2-1, are covered in the scope of this CPR.

Figure 2-1 Location map of CVT's mining properties in southern Sichuan Province



2.2 Property ownership

Pursuant to the "Mineral Resource Law of the PRC", all mineral resources in the PRC are owned by the nation. All types of exploration and mining activities in the PRC generally requires approval from the relevant government agencies in the form of exploration permits or mining permits granted for a specific area during a specified period of validity. In general, the permits are extendable at the expiration of their period of validity, given that the renewal application is submitted to the relevant state or provincial authorities with sufficient time prior to the expiry date of the permit.

The licenses of Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project were provided by CVT for our review. The Xiushuihe Mine is composed of a mining license and an exploration license. The license details such as license ID, effective dates, area and valid period of each mining property are summarized in Table 2-2 below.

Table 2-2 License details of CVT's mining properties

Property Name	License Type	License ID	Area (km^2)	Elevation (m)	Valid Period
Baicao	Mining	C5100002009092120035281	1.8818	2,100-2,525	Sep 2009 to Dec 2027
Xiushuihe	Mining	C5100002010122120093719	0.5208	2,230-2,580	May 2008 to Dec 2027
Xiushuihe Extension	Exploration	T51520090702031514	1.73	NA	Jun 2017 to Jun 2019
Cizhuqing Project	Mining	C5100002014012210136436	1.279	2,300-2,575	Jan 2014 to Jan 2031
Yangqueqing Project	Mining	C5100002009092120035281	0.25	2,000-2,250	Sep 2008 to Dec 2027
Haibaodang Project	Exploration	T51120080402005289	26.197	NA	Jul 2015 to Jul 2017

BAW was given to understand that CVT has been in the midst of applying for renewing the exploration license for the Haibaodang Project since 5 July 2017 and the application process was still on-going as of the effective date of the CPR.

It is worth to point out that BAW has not undertaken any legal due diligence review of the licenses of these mining properties, which is outside the current scope of this CPR. BAW has relied upon the CVT's advice as to the validity of the exploration and mining licenses. BAW understands that the legal due diligence review of the exploration and mining licenses has been undertaken by the CVT's PRC legal advisers, namely Canway Law Firm, Sichuan (四川康維律師事務所).

3 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

3.1 Location

The Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project are located in the southern region of Sichuan Province of the PRC as shown in Figure 2-1. The Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project are located in Huili County, as much as 30km northwest to west to the Township of Huili County. The Haibaodang Project is located in the southwestern part of Panzhihua City with a linear distance of around 16km.

3.2 Access and infrastructure

The Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project are located in Huili County which is situated in the most southern division of the Liangshan Prefecture, bordering the Panzhihua City of Sichuan Province and Yunnan Province. The county has a total area of 4,522 square kilometers ("km^2").

The Baicao Mine and Xiushuihe Mine are located in the mid-western, mountainous area of Huili County, as much as northwest to the Township of Huili County with a linear distance of around 20km to 25km. However, the paved road distance from the Baicao Mine and from the Xiushuihe Mine to the Township, is around 109km and 59km respectively because of the mountainous terrain in the area.

The Cizhuqing Project is located around 25km west to the Township of Huili County and 80km north to the Panzhihua City, administered by the local government of Daao Village, Xiaoheiqing Village, Huili County. Access to the property can be made through Provincial Highway 108 from the Township to the Fengying Village for 35km followed by an unpaved road from the Fengying Village to the property for 30km.

The Yangqueqing Project is located as much as 24km northwest to the Township of Huili County, administered by the local government of Daao Village, Xiaoheiqing Village, Huili County. Access to the property can be made through the Provincial Highway from the Township of Yanbian County leading to the Panzhihua City for 52km followed by an unpaved road for 15km.

The Haibaodang Project is located southwest to the Panzhihua City with a linear distance of around 16km, administered by the local government of Taiping Village. Access to the property can be made through the Provincial Highway from the Panzhihua Railway Station for 60km followed by an unpaved road for 42km.

Power supply in Huili County and Panzhihua City is generally sufficient to support the mining operation. At present, electricity for the Xiushuihe and Baicao Mines is currently supplied through a 220 kV substation near the Xiushuihe Mine by the Huili County power grid. Power supply and telecommunication service are available in the area of the Haibaodang Project.

Water supply for the Baicao Mine is from Baicaogou, a semi-permanent stream located on the western side of the property. Water supply for the Xiushuihe Mine is available from the Ailang River located 1.8km southeast to the mine. These streams can generally provide sufficient water for the mining operation except dry season in April and early May. As such, a reservoir with a capacity of approximately 1.0 million cubic metres (m^3) was constructed in 2009 near the Baicao Mine. In addition, water from the tailings ponds, in both mines, is recycled for production use.

In the area of the Haibaodang Project, water supply can be made available from the Madijing stream to the north, Yangqueqing stream in the center and Lanmuqiao stream to the southwest. These streams can generally provide sufficient water for future mining operation.

3.3 Climate and physiography

The Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project are located in the mountainous region of Huili County, which has a total area of 4,522km^2 and a population of approximately 420,000. Elevation ranges from 839m along the Jinsha River to 3,920m at Mount Beimu.

Similar to other mining properties, the Haibaodang Project is located in the mountainous region of the southwestern part of the Panzhihua City, which is a mountain city with an elevation ranging from 1,100m to 2,700m. The Panzhihua City has an administrative area of 74,423km^2 and a population at the 2010 census of 1,214,121. It is the only city in China named for a flower. Its economy relies dominantly on mining of vanadium and titanium resources.

The climate of Huili County and Panzhihua City is classified as semi-arid subtropical with distinct dry and wet seasons. Annual precipitation approximately ranges from 700 millimeters ("mm") to 1,200mm, which mostly occurs during the wet seasons from late May to early October accounting for more than 90% of the total precipitation. The average annual temperature is generally around 15°C to 18°C, with a summer high of 39°C and winter low of -4°C.

Drainage systems are widely developed in the region with major rivers including Anning River, Ailang River and Jinshajiang River. Water supply for the mining operation is sufficient. Vegetation is widespread in the region.

Agricultural activities are dominant and are the key economic drivers in the region of Huili County. Primary crops are wheat and corn. Population in the area consists of Li minority and Han Chinese and the local economy is relatively underdeveloped.

Natural resources development, steel industry and tourism development are the major economic drivers for the Panzhihua City. Population in the area consists of Li minority and Han Chinese. The local economy of the area surrounding the Haibaodang Project is relatively underdeveloped.

4 HISTORY

4.1 Baicao mine

The Baicao Mine is currently 100% owned by CVT through its subsidiary, Huili Caitong Iron and Titanium Limited Company (Huili Caitong). The mineralization of the Baicao Mine is marked by the vanadium-bearing titano-magnetite mineralization hosted in layered mafic-ultramafic intrusions which was first discovered by the national regional geological reconnaissance in 1958. During the period from 1980 to 1986, the 106 Geological Team carried out a systematic exploration of the mineralization to delineate the resources by surface trenches at a 100m-spacing and diamond drilling at a spacing of 200m × 100m to 200m. The mineral resource estimation was subsequently approved by Sichuan Provincial Geology and Mineral Resource Bureau in 1990. Further detailed production exploration of the current mining area was conducted by the 106 Geological Team in 2007, with infill drilling at a spacing of 100m × 80m to 100m over the central portion of the deposit and infill surface trenching program at a spacing of 50m.

The Baicao Mine is an open-pit operation mining vanadium-bearing titano-magnetite ore by using magnetic separation method to produce iron concentrates and titanium concentrates. The initial construction, with a designed production capacity of 300,000 tonnes per annum ("tpa"), was completed in 1999. The mine was expanded significantly to a designed production capacity of 4.3 million tonnes per annum ("Mtpa") in 2008.

Approximately 3.26 Mt of vanadium-bearing titano-magnetite ore was processed in 2008 and 4.80 Mt in 2009. Production for the Baicao Mine was 5.20 Mt, 5.57 Mt, 5.51 Mt, 3.97 Mt, 1.57 Mt, 0.17 Mt, 1.15 Mt, 1.56 Mt and 1.50 Mt of ore in 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018 respectively. The mining operation at Baicao was suspended at the end of January 2015 due to depressed iron ore concentrate prices. In March 2016, production was resumed in response to the gradual recovery of iron ore concentrate sales prices.

The initial JORC-compliant resource classification and estimation for the Baicao Mine was made in 2009 for the purpose of public disclosure during its Initial Public Offering ("IPO") on HKEX. Thereafter CVT has engaged competent persons to annually update the resource and reserve estimates for the property in accordance with the JORC Code. Details of the updated resource and reserve estimates are available from the J11-010 CVT Resource and Reserve Update Report, J11-220 CVT Resource Report for Cizhuqing and Yangqueqing Projects, J11-220 CVT Resource and Reserve Update Report, J12-318 CVT Resource and Reserve Update Report, J13-251 CVT Resource and Reserve Update Report, J14-213 CVT Resource and Reserve Update Report, J15-121 CVT Resource and Reserve Update Report, J17-002 CVT Resource and Reserve Update Report and J17-100 CVT Resource and Reserve Update Report.

BAW was given to understand that there has been no further exploration drilling for resource estimation purpose at the property since 2009.

4.2 Xiushuihe mine

The Xiushuihe Mine is currently 95% owned by CVT through its subsidiary, Huili Caitong Iron and Titanium Limited Company (Huili Caitong). The mineralization of the Xiushuihe Mine is marked by the vanadium-bearing titano-magnetite mineralization hosted in layered mafic-ultramafic intrusives which was first discovered by the national geological reconnaissance following up on an airborne-magnetic anomaly first observed in 1966. During the period from 1978 to 1981, the 601 Geological Team and 603 Geological Team of the Sichuan Provincial Metallurgical Geology Exploration Corporation carried out an initial exploration of the mineralization to delineate the resources by surface trenches and diamond drilling at a 200m × 200m to 400m spacing. The mineral resource estimates were subsequently approved by Sichuan Provincial Metallurgical Geology Exploration Corporation in 1981. Further detailed exploration at Xiushuihe was conducted by the 106 Geological Team in 2006 and 2007 with an infill surface trenching program at a spacing of 100m and an infill drilling at a spacing of 100m × 100m to 200m.

The Xiushuihe Mine is an open pit operation, mining mafic-ultramafic intrusive-hosted vanadium-bearing titano-magnetite ore and using magnetic and gravity separation methods to produce iron ore concentrates and titanium concentrates. Initial construction with a designed production capacity of 100,000 tpa of ore started in 1999. The production capacity was increased significantly to a designed production capacity of 3.2 Mtpa in later 2010.

Production from the Xiushuihe Mine was 2.17 Mt of ore in 2009, 2.28 Mt in 2010, 3.54 Mt in 2011, 3.14 Mt in 2012, 3.25 Mt in 2013, 3.21 Mt in 2014, 1.45 Mt in 2015, 2.77 Mt in 2016, 3.75 Mt in 2017 and 2.77 Mt in 2018. The mining operation at Xiushuihe was suspended at the end of January 2015 due to depressed iron ore concentrate prices. In 2016, production was resumed in response to the gradual recovery of iron ore concentrate sales prices.

The initial JORC-compliant resource classification and estimation for the Xiushuihe Mine was made in 2009 for the purpose of public disclosure during its Initial Public Offering (''IPO'') on HKEX. Thereafter CVT has engaged competent persons to annually update the resource and reserve estimates for the property in accordance with the JORC Code. Details of the updated resource and reserve estimates are available from the J11-010 CVT Resource and Reserve Update Report, J11-220 CVT Resource Report for Cizhuqing and Yangqueqing Projects, J11-220 CVT Resource and Reserve Update Report, J12-318 CVT Resource and Reserve Update Report, J13-251 CVT Resource and Reserve Update Report, J14-213 CVT Resource and Reserve Update Report, J15-121 CVT Resource and Reserve Update Report, J17-002 CVT Resource and Reserve Update Report and J17-100 CVT Resource and Reserve Update Report.

BAW was given to understand that there has been no further exploration drilling for resource estimation purpose at the property since 2009.

4.3 Cizhuqing project

The Cizhuqing property is currently 100% owned by CVT through its subsidiary, Huili Caitong Iron and Titanium Limited Company (Huili Caitong). The property was acquired by CVT in February 2010.

The mineralization of the Cizhuqing Project is marked by the vanadium-bearing titano-magnetite mineralization hosted in layered mafic-ultramafic intrusives which was first discovered during a regional geological reconnaissance program in the 1960s to 1970s. During the period from 2005 to 2009, the previous owner of the Cizhuqing property engaged the 403 Geological Team of the Sichuan Provincial Geology and Mineral Resource Bureau (403 Team) to carry out a systematic exploration program, in order to delineate the resources by surface trenching and diamond drilling at a spacing of 100m to 400m along-strike by 70m to 200m along-dip. The mineral resource estimation was then prepared by the 403 Team and subsequently approved by the Land and Mineral Resources Bureau of Sichuan Province in 2009.

The initial JORC-compliant resource classification and estimation for the Cizhuqing Project was made in 2011. Thereafter CVT has engaged competent persons to annually update the resource and reserve estimates for the property in accordance with the JORC Code. Details of the updated resource and reserve estimates are available from the J11-010 CVT Resource and Reserve Update Report, J11-220 CVT Resource Report for Cizhuqing and Yangqueqing Projects, J11-220 CVT Resource and Reserve Update Report, J12-318 CVT Resource and Reserve Update Report, J13-251 CVT Resource and Reserve Update Report, J14-213 CVT Resource and Reserve Update Report, J15-121 CVT Resource and Reserve Update Report, J17-002 CVT Resource and Reserve Update Report and J17-100 CVT Resource and Reserve Update Report.

BAW was given to understand that there has been no further exploration drilling for resource estimation purpose at the property since acquisition in 2010.

4.4 Yangqueqing project

The Yangqueqing property is currently 100% owned by CVT through its subsidiary, Huili Caitong Iron and Titanium Limited Company (Huili Caitong). The property was acquired by CVT in February 2010.

The mineralization of the Yangqueqing Project is marked by the vanadium-bearing titano-magnetite mineralization hosted in layered mafic-ultramafic intrusives which was first discovered during a regional geological reconnaissance program in the 1950s. Subsequently, a number of exploration programs including geophysical surveys were conducted by the 106 Team of the Sichuan Provincial Geology and Mineral Resource Bureau during the period from the 1960s to 1990s. From 2008 to 2009, the 106 Team carried out a more detailed exploration program to delineate the resources by surface trenching and diamond drilling at a spacing of 100m to 400m along-strike by 50m to 200m along-dip above the elevation of 2,000m at the property. The mineral resource estimation was then prepared by the 106 Team and subsequently approved by the Land and Mineral Resources Bureau of Sichuan Province of China in 2010.

The initial JORC-compliant resource classification and estimation for the Yangqueqing Project was made in 2011. Thereafter CVT has engaged competent persons to annually update the resource and reserve estimates for the property in accordance with the JORC Code. Details of the updated resource and reserve estimates are available from the J11-010 CVT Resource and Reserve Update Report, J11-220 CVT Resource Report for Cizhuqing and Yangqueqing Projects, J11-220 CVT Resource and Reserve Update Report, J12-318 CVT Resource and Reserve Update Report, J13-251 CVT Resource and Reserve Update Report, J14-213 CVT Resource and Reserve Update Report, J15-121 CVT Resource and Reserve Update Report, J17-002 CVT Resource and Reserve Update Report and J17-100 CVT Resource and Reserve Update Report.

BAW was given to understand that there has been no further exploration drilling for resource estimation purpose at the property since acquisition in 2010.

4.5 Haibaodang project

The Haibaodang Project is 100% indirectly owned by CVT through its subsidiary company, Panzhihua Yixingda Industrial Trading Co Ltd which was acquired by CVT in 2013.

During the period from 1955 to 1957, the Southwest Geophysics Prospecting 302 Team initiated a regional-scale magnetic survey and identified initial exploration targets. During the period from late 1950s to early 1960s, Panzhihua Exploration Team carried out a systematic exploration program and delineated the massive Panzhihua vanadium-bearing titano-magnetite deposit. In 1959, Yunnan Geophysics Exploration team conducted a magnetic survey to geological structures and potential mineralization in the area. In 1965, No 1 Team of the Yunnan Geological Bureau completed a regional survey report at a scale of 1:200,000 for the region. In 1990, Panzhihua Geological team of Sichuan Geological Bureau conducted a detailed geological survey at a scale of 1:50,000 for the region.

During the period from 2008 to 2011, the 601 Team of Sichuan Metallurgical Geological Exploration Bureau carried out a systematic exploration program and delineated the sedimentary-style vanadium-bearing titano-magnetite mineralization at the property. During the period from 2011 to 2012, the 107 Geological Team of Chongqing Bureau of Geology and Mineral Exploration Development conducted a more detailed exploration program including geological mapping, topographic survey, high-resolution ground magnetic survey, drilling, trenching and sampling, so as to further delineate the resources. In 2013, the 601 Team conducted re-logging, data compilation, additional trenching, additional and infill drilling, sampling and resource estimation for the property.

The original area of the exploring right of the Haibaodang Project was 20.37km^2 which was subsequently expanded to 26.197km^2 in 2011.

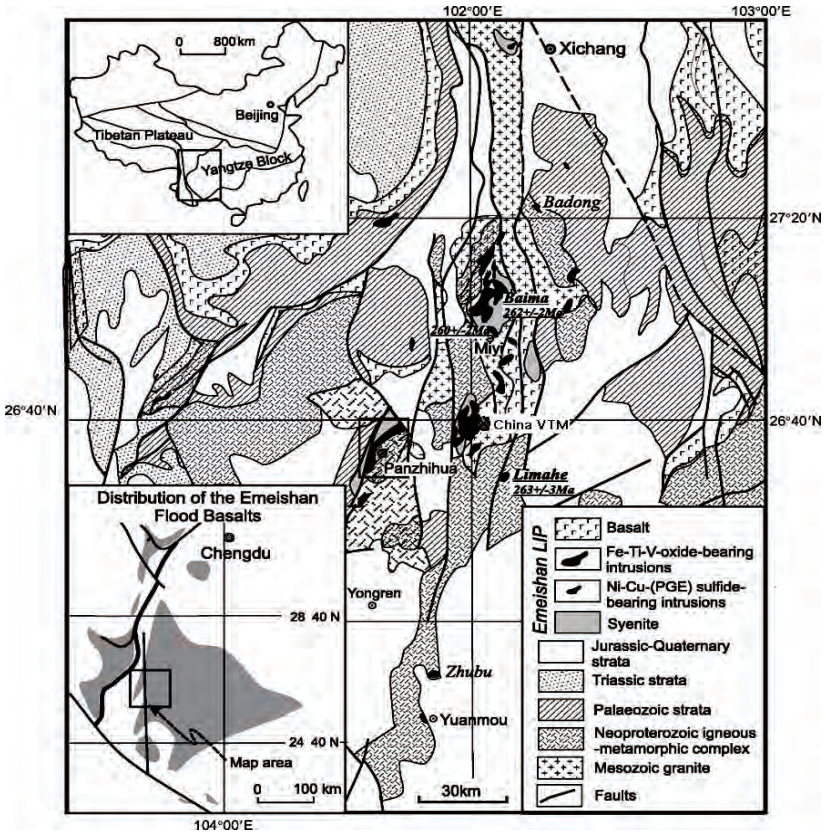
BAW is given to understand that no JORC-compliant resource estimation has been attempted previously and that there has been no further exploration drilling for resource estimation purpose at the property since acquisition in 2013.

5 GEOLOGICAL SETTING

5.1 Regional Geology

The southern part of Sichuan Province, tectonically, comprises the Yangtze Block in the east and the Tibetan Plateau in the west. The western margin of the Yangtze Block is marked by abundant Neoproterozoic granites and associated metamorphic complexes, known as the Kangdian complexes, which were probably uplifted at approximately 175 Ma. During the Cenozoic, block faulting and shallow level shearing dominated in the eastern part of the Yangtze Block, whereas thrusting and strike slip faulting dominated in the western part. The Emeishan Large Igneous Province covers an area of 5×10^5 km^2 in southwest China and northern Vietnam and includes the Emeishan Continental Flood Basalts and associated mafic-ultramafic intrusions in the western part of the Yangtze Block and the eastern margin of the Tibetan Plateau. In the Panxi (Panzhihua-Xichang) District along the western margin of the Yangtze Block Figure 5-1, several north-south trending faults have exposed Emeishan dykes and large intrusions over a considerable range of emplacement depths. Several of these bodies, such as the Xinjie, Baima, Panzhihua, and Limahe intrusions and the Miyi syenite complex, have been dated at approximately 259 Ma to 263 Ma. This western region is the most important iron-titanium-vanadium metallogenic district in China. The ore-bearing mafic and ultramafic rock bodies extend from Mianning in the north, through Xichang, Miyi, and Panzhihua in Sichuan Province, to Mouding in Yunnan Province in the south, during the Early Hercynian Metallogene. They constitute a mineralized zone as much as 300 km long and 10 km to 30 km wide, previously referred to as the Panxi rift zone. Several large vanadium-bearing titano-magnetite deposits have been found in the Panxi District: Panzhihua (1,333 Mt ore reserves), Baima (1,497 Mt ore reserves), and Hongge (4,572 Mt ore reserves (Zhou et. al., 2005)).

Figure 5-1 Regional geological map of the PanXi District, southern Sichuan, PRC



This type of vanadium-bearing titano-magnetite mineral resources is the primary ore for the state-run Panzhihua Steel Group (Pan Steel) in Panzhihua, the largest modern steel manufacturer in southwestern China. There are numerous other similar mining operations in the area.

5.2 Property geology

This section of the CPR is largely based on the CVT's IPO disclosure in 2009 (Behre Dolbear 2009) and CVT Resource Report for Cizhuqing and Yangqueqing Projects (Behre Dolbear 2011), as no additional systematic exploration work has been performed for the properties since then.

Vanadium-bearing titano-magnetite mineralization of the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project is generally hosted in the Early Late Paleozoic layered mafic-ultramafic intrusions which are well-differentiated with well-developed layered structure. From top to bottom, the intrusive rock type varies gradually from mafic to ultramafic; the mineral grain size varies from fine to coarse; the total iron content varies from low to high; and the concentration of other useful elements, such as titanium and vanadium, also increases gradually. The mafic-ultramafic intrusions contain two facieses in general, gabbro facies in the upper part and pyroxenite facies in the lower part. The gabbro facies consist of mostly gabbro while the pyroxenite facies consists of feldspar-bearing pyroxenite, pyroxenite, olivine pyroxenite and peridotite in a descending order. The rock-forming minerals for the gabbro facies include mafic feldspar (primary mineral), titanium-bearing augite (secondary mineral), titanium-bearing hornblende (minor mineral), apatite (trace) and olivine (trace); the rock-forming minerals for the pyroxenite facies include titanium-bearing augite (primary mineral), titanium-bearing hornblende (secondary mineral) mafic feldspar (minor), and olivine (trace). Metallic minerals disseminated in the layered intrusive rocks include vanadium-bearing titano-magnetite, ilmenite, spinel, magnetite and minor amounts of sulphide minerals, such as pyrrhotite, pyrite, chalcopyrite, pentlandite, siegenite, linnaeite, and cobaltite. These metallic minerals are disseminated throughout the intrusive rock.

5.2.1 Baicao mine

The stratigraphy of the region is dominated by the Pre-Cambrian Huili Group (metamorphic rocks), Quaternary alluvium and colluvium. The Huili Group was intruded by Early Hercynian layered mafic-ultramafic intrusions, which in turn was intruded by the Permian Emeishan basalts. There are also some Late Permian and Mesozoic mafic and felsic dikes cutting the older sequences.

The layered mafic-ultramafic intrusions exposed at the Baicao Mine is approximately 3.1km long in the north-northeast to north-south direction and 90 m to 780m wide in the east-west direction with a total area of approximately 1.18km^2. The intrusion dips towards northwest in the northern part of the intrusion and towards west in the south, with a dip angle ranging from 35° to 45°. The intrusion was offset by some north-south faults and east-west faults in the deposit area.

Based on the TFe content, the mineralization has been classified into higher-grade (TFe ≥ 20%) and lower-grade (TFe = 15% to 20%) zones. The higher-grade zone, lower-grade zone and the waste are gradational with no clear contact within the host rock. The characteristics of the No. I mineralized layer and No. II mineralized layer are summarized as below:

1. Regarding the No. I mineralized layer, its length is approximately 1,500m along the strike, and 30m to 90m wide on the surface. It extends for 230m to 660m along the dip direction. The upper and middle portions of the mineralized layer contain the highest grade of mineralization. The mineralized bodies are generally stratiform and conform to the bandings in the intrusive rocks. Thickness of individual higher-grade zones generally ranges from 4m to 18m, with a minimum of 2m and a maximum of 50m; thickness of individual lower-grade zones generally ranges from 3m to 8m, with a maximum of 17m; thickness of the waste zones (TFe < 15%) ranges from 2m to 28m. The accumulated thickness of all the higher-grade zones ranges from 2m to 50m with an average of 23.6m; its average metal grades are 28.8% for TFe and 12.0% for TiO_2 respectively. The total thickness of the entire lower-grade zone ranges from 4m to 28m with an average of 11m; its average metal grades are 16.5% for TFe and 6.7% for TiO_2 respectively. Within the No. I mineralized layer, approximately 54% of the volume is in the higher-grade zone, 18% is in the lower-grade zone, 20% is waste and 8% is post mineral dikes.

2. Regarding the No. II mineralized layer, its length is approximately 1,940m along the strike, and 65m to 200m wide on the surface. It extends for 50m to 660m along the dip direction. Mineralization in the mineralized layer is lower-grade in nature. The mineralized bodies are generally lenticular or stratiform; they mostly occur in the middle and lower portions of the layer. The higher-grade, lower-grade and waste zones occur as interbeds. There are generally two to four higher-grade zones with a zone thickness of 2m to 32m and a total thickness of 3m to 36m, averaging 18.2m. There are generally two to five lower-grade zones with a zone thickness of 2m to 35m and a total thickness of 4m to 60m.

Geology of the Baicao Mine in Figure 5-2 shows the spatial distribution of the vanadium-bearing titano-magnetite mineralization. Figure 5-3 is the cross-section of Exploration Section Line P57 showing the sectional view of the mineralized zones of the deposit.

Figure 5-2 Geology of the Baicao Mine

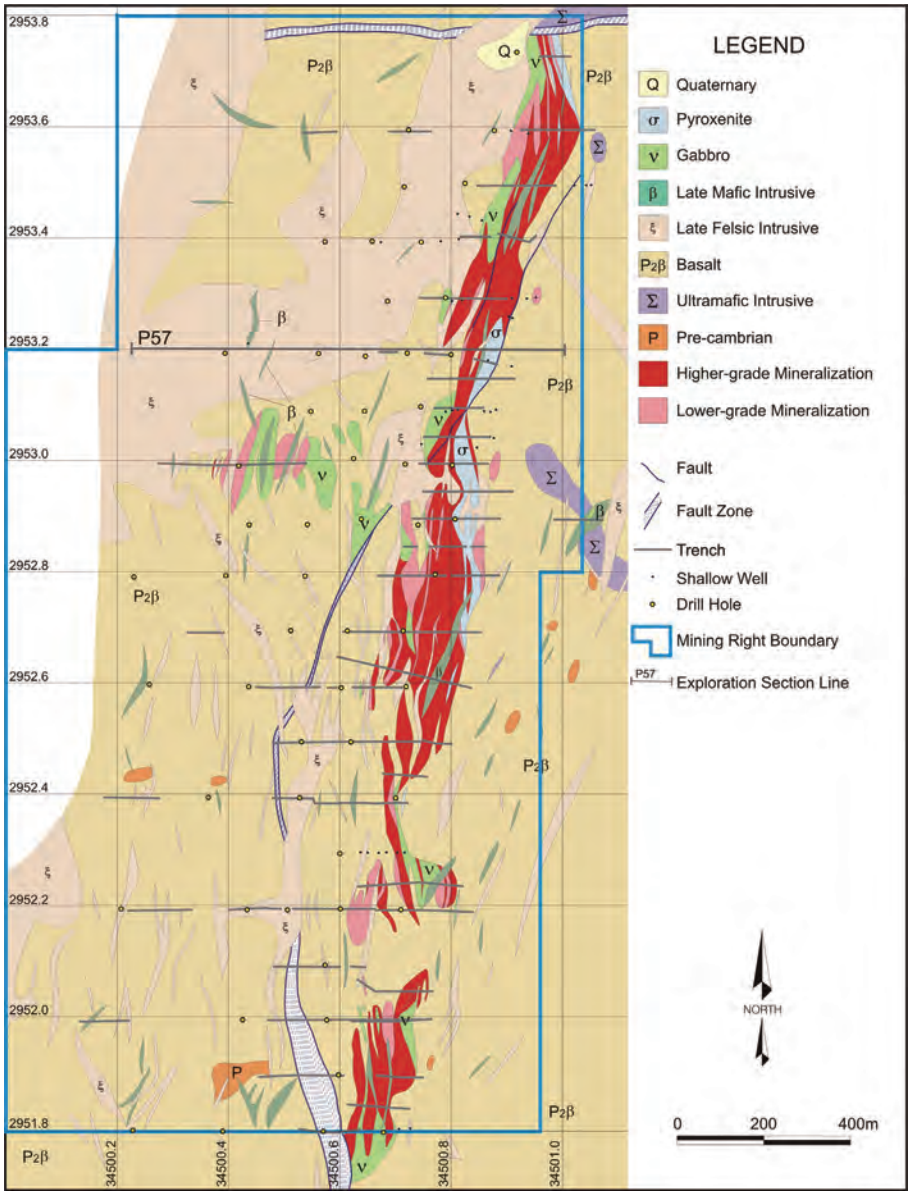
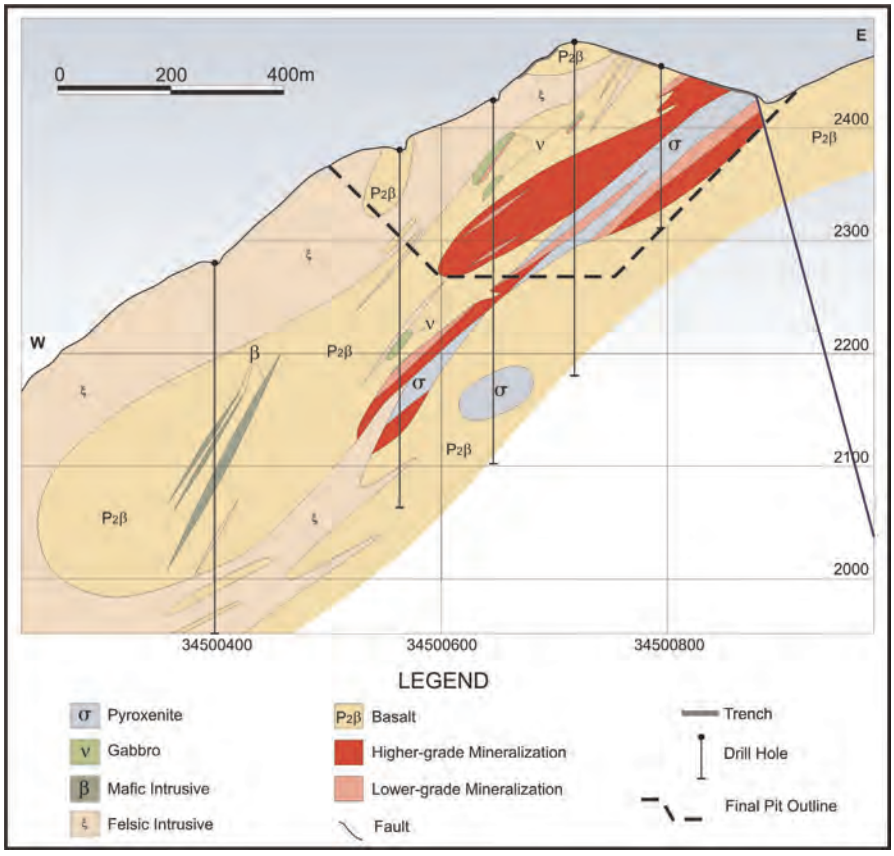


Figure 5-3 Cross-section of the Baicao Mine (its location is shown in Figure 5-2)



5.2.2 Xiushuihe mine

Similar to the Baicao Mine, the vanadium-bearing titanomagnetite mineralization in the Xiushuihe Mine and the nearby Xiushuihe Expansion are hosted in the Early Hercynian layered mafic-ultramafic intrusions. Rock outcroppings in the Xiushuihe Mine and Expansion are all intrusions, including Early Hercynian layered mafic-ultramafic intrusions, Late Hercynian (Late Paleozoic) fine-grained gabbros, and Indo-Chinese (Early Mesozoic) granites.

The layered mafic-ultramafic intrusions occur as an irregular basin-shaped body, as much as approximately 1.4km long in the east-west direction and 250 m to 1,000 m wide in the north-south direction with an outcropping area of approximately 1 km^2. The intrusion strikes east-west. Its northern portion dips to the south at a dip angle of 10° to 45°, whilst its southern portion dips to the north at a dip angle of 20° to 55°. The intrusive body exposes at the surface without cover by any other rocks. The CVT's mining license covers the east portion of the intrusive body and the exploration license covers the west portion. The footwall of the layered mafic-ultramafic intrusive body is occupied by a Late Hercynian fine-grained gabbro intrusive body, and this gabbro body also locally intruded into the layered mafic-ultramafic intrusions, probably along structural zones.

Six vanadium-titano-magnetite mineralized bodies have been identified, which are denoted as the I, II, III, IV, V, and VI mineralized bodies. The V and VI mineralized bodies are the concealed bodies located in the adjacent Xiushuihe Expansion. The I, II, III, and IV mineralized bodies are exposed at the surface. The Number I mineralized body is the main mineralized body in the central area of the deposit. The other three are small and distributed around the south-east area of the deposit. The characterises of the mineralized bodies are summarized as below:

1. The No. I mineralized body occurs between exploration lines P8 and P9. It is in an irregular triangle shape, which is narrow in the north and wide in the south on the surface and in a layered basin shape on the crossing section. It has the same occurrence as the hosting intrusive rock. It extends along the east-west direction. Both lateral sides of the mineralized body dip to the inside. The south side dips to the north at an angle of 20° to 50° and the north side dips to south at an angle of 10° to 45°. Total length is 1,050m (430m in the mining license and 620m in the exploration right) along the east-west strike, and the width is 60m to 960m. The elevation is from 2,220m to 2,664m. The east portion of the Number I mineralized body is the target for current mining at Xiushuihe Mine. Its grade variation is small, and thickness variation is large. The waste partings in the deposit are mainly distributed in the south part, east and west edge areas. The TFe% grade in the partings is usually 11% to 14.5%.

2. The No. II mineralized body locates in the east-south area of the Xiushuihe deposit. It is preserved in the peridotite facies. It consists of interbedded, higher grade mineralization and low-grade material and waste. It also has the same occurrence as the hosting intrusive body. It extends along the east-west direction. The mineralized body dips to 340° with the dip angle of 35°. It is in a lenticular shape and occurs between elevations of 2,300m and 2,362m. The length is 200m to 240m along the east-west strike, and the width is 30m on the surface. The average total iron (TFe%) grade is 21.75%, with 5.8% TiO_2 and 0.17% V_2O_5.

3. The No. III mineralized body is located in the east area of the Xiushuihe deposit. It is preserved in the hornblende pyroxenite facies. It has the same occurrence as the hosting intrusive body. It extends along the east-west direction. The mineralized body dips to south at an angle of 30° to 45°. It is in a lenticular shape and occurs between 2,447m and 2,514m elevations. The length is 60m to 156m along the east-west strike direction, and the width is 88m on the surface. The average TFe% grade is 21.81%, with 7.7% TiO_2 and 0.2% V_2O_5.

4. The No. IV mineralized body is located in the northeast area of the deposit along the east-west direction. It dips to the south at an angle of 20° to 40°. It is a lenticular mineralized body distributed between 2,463m NS 2,542m. It occurs in hornblende pyroxenite facies. The mineralized body length is 120m to 140m, with 70m width. The average TFe% grade of the mineralized body is 40.17%, with 15.46% TiO_2 and 0.34% V_2O_5.

5. The No. V mineralized body is a concealed body between exploration lines P5 and P2. The length is 400m along the east-west direction, and the width is 160m to 600m in the north-south direction (average around 400m). The thickness is 0.72m to 14m (average 5.28m). The average TFe% grade of the mineralized body is 16.09%, with 4.51% TiO_2 and 0.11% V_2O_5.

6. The No. VI mineralized body is a concealed body between exploration lines P1 and P0. The length is around 100m along the east-west direction, and the width is 160m to 400m in the north-south direction (average around 300m). The thickness is 2m to 14m (average 6.31m). The average TFe% grade of the mineralized body is 16.03%, with 4.78% TiO_2 and 0.12% V_2O_5.

The near surface portion of the mineralized zone at Xiushuihe is also oxidized. Previous mining activities removed a significant portion of the strongly-oxidized zone in the current mining area. The current and future production will be primary in the weakly-oxidized or primary zones for the Xiushuihe Mine.

Figure 5-4 shows the geology of the Xiushuihe Mine with the spatial distribution of the vanadium-bearing titano-magnetite mineralization. Figure 5-5 is a cross-section of the Exploration Section Line P4 of the Xiushuihe Mine.

Figure 5-4 Geology of the Xiushuihe Mine and Xiushuihe Expansion

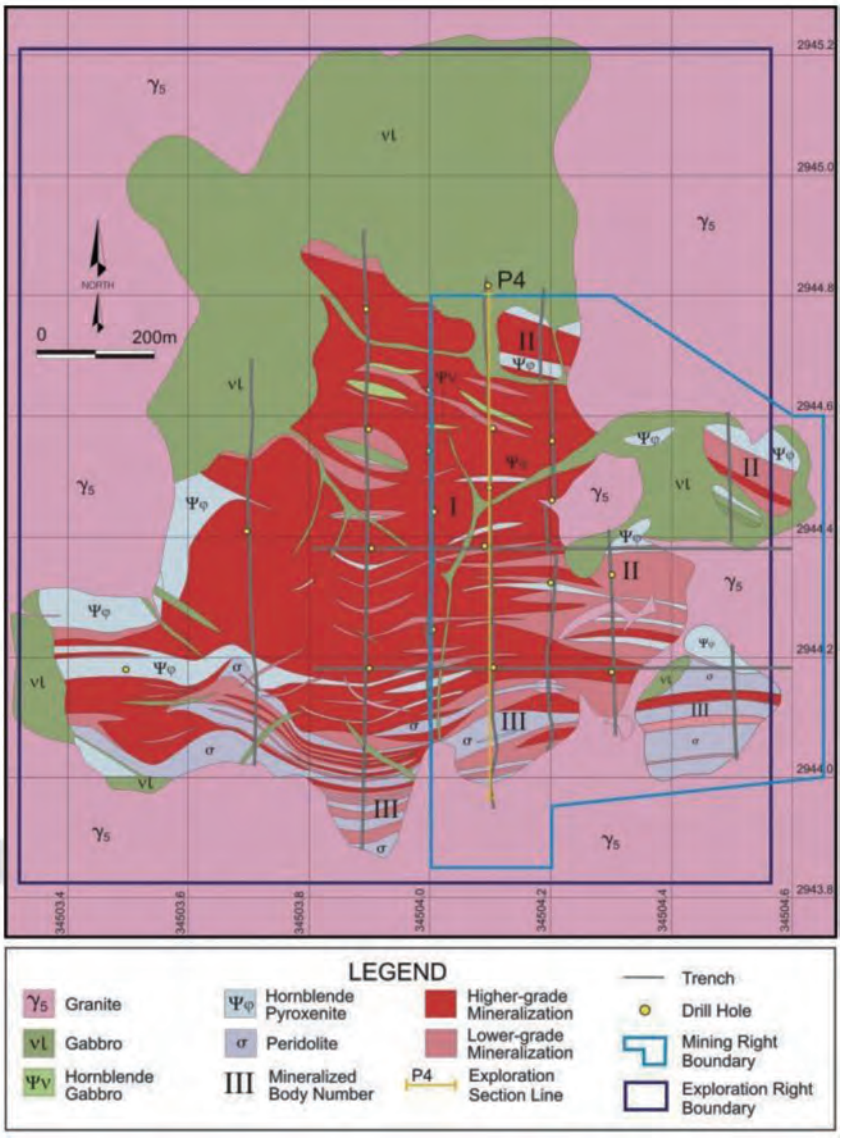
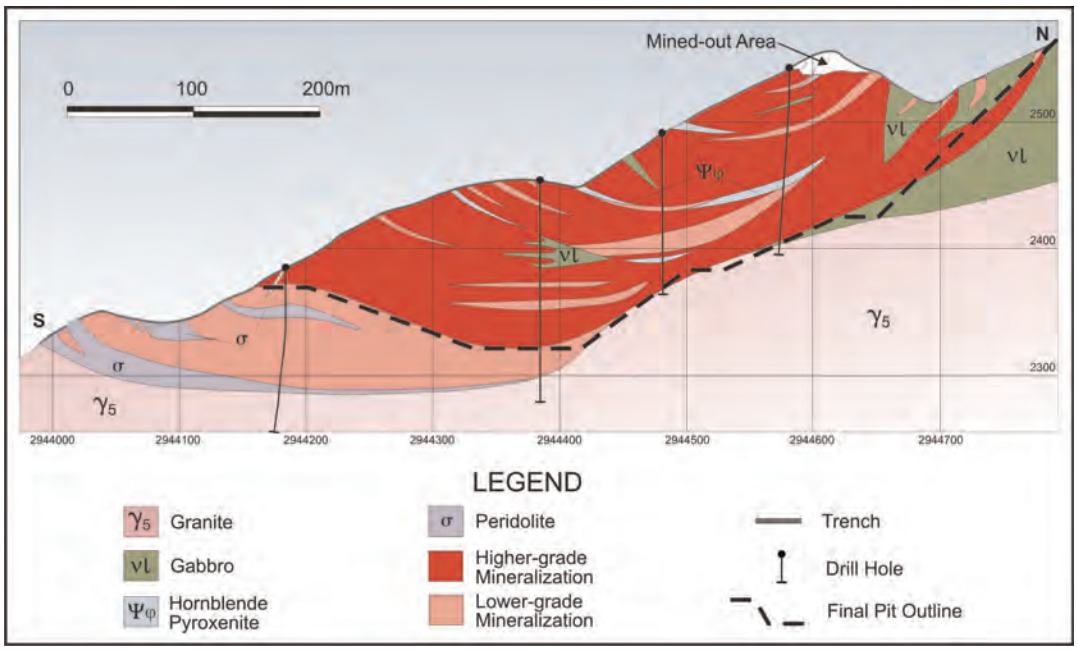


Figure 5-5 Cross-Section of the Xiushuihe Mine (its location is shown in Figure 5-4)



5.2.3 Cizhuqing project

The geology of the Cizhuqing Project is predominantly marked by the north-south trending, well differentiated Early Hercynian (early Late Paleozoic) mafic-ultramafic intrusions and Permian Emeishan flood basalt overlain by Quaternary unconsolidated colluvial and alluvial deposits. Sedimentary and metamorphic rocks are absent in the property. The vanadium-bearing titano-magnetite mineralization is hosted in mafic-ultramafic intrusions and is located to the north of the well-known vanadium-titano-magnetite-bearing Hongge Intrusion.

A total of five vanadium-bearing titano-magnetite mineralized bodies have been identified in the property, denoted as No. I, II, III, IV, and V mineralized bodies. No. IV and V mineralized bodies are concealed. No. I, II, and III mineralized bodies are all exposed at surface. No. II mineralized body is the largest and is located near the center of the property. The spatial distribution of the mineralized bodies appears to be in a synclinal structure with the No. II mineralized body located along the fold axis. The characteristics of the mineralized bodies are summarized as follow:

1. The No. I mineralized body is lens-shaped and stratiform, striking north-south and dipping 30° to 50° eastward. The No. I mineralized body outcrops at an elevation between 2,440m and 2,480m. It is exposed on the surface over an area with 500m long and 22m to 90m wide. The thickness is around 50.61m with a variation coefficient of 51.47%. The mineralization averages in 21.66% TFe, 9.86% TiO_2, and 0.18% V_2O_5.

2. The No. II mineralized body is the largest among the five orebodies. It is located near the center of the property. Being stratiform and striking north-south. The Mineralized body outcrops at an elevation between 2,410m and 2,540m. The length is approximately 1,160m, and the width is 7.4m to 320m. The geometry was delineated by 17 surface trenches and 11 drill holes. It appears to be in a north-south striking synclinal structure with a nearly vertical fold axis. It has a thickness of 45.71m with a variation coefficient of 80.52%. The mineralization averages in 21.67% TFe, 9.17% TiO_2 and 0.17% V_2O_5.

3. The No. III mineralized body is the second largest in the property and is located in the eastern part of the property and east of the No. II mineralized body. No. III mineralized body is lens-shaped and stratiform, striking north-south and dipping between 40° to 50° westward, cropping out at an elevation between 2,460m and 2,570m and averaging 20.38% TFe, 8.14% TiO_2, and 0.16% V_2O_5. Its length is approximately 1,000m, and the width is 13m to 130m.

4. The No. IV mineralized body is located further east of the No. III mineralized body. No. IV mineralized body is lens-shaped and stratiform, striking north-south and dipping between 40° to 50° westward. No. IV Mineralized body outcrops at an elevation between 2,490m and 2,590m, and is as much as 200m long and 16m to 23m wide. Because of its small size, only limited exploration work has been completed and the average grade of the mineralization remains uncertain.

5. The No. V mineralized body is located in the western part of the property and is lens-shaped and stratiform, striking north-south and dipping 20° to 35° westward. No. V mineralized body crops out at an elevation between 2,400m and 2,470m, and is approximately 400m long and 22m to 98m wide averaging 21.1% TFe, 8.12% TiO_2, and 0.16% V_2O_5.

Figure 5-5 shows the geology of the Cizhuqing Project with the spatial distribution of the vanadium-bearing titano-magnetite mineralization. Figure 5-6 is a cross-section of the Exploration Section Line +0 of the Cizhuqing Project.

Figure 5-6 Geology of the Cizhuqing Project with spatial distribution of the vanadium-bearing titano-magnetite mineralization.

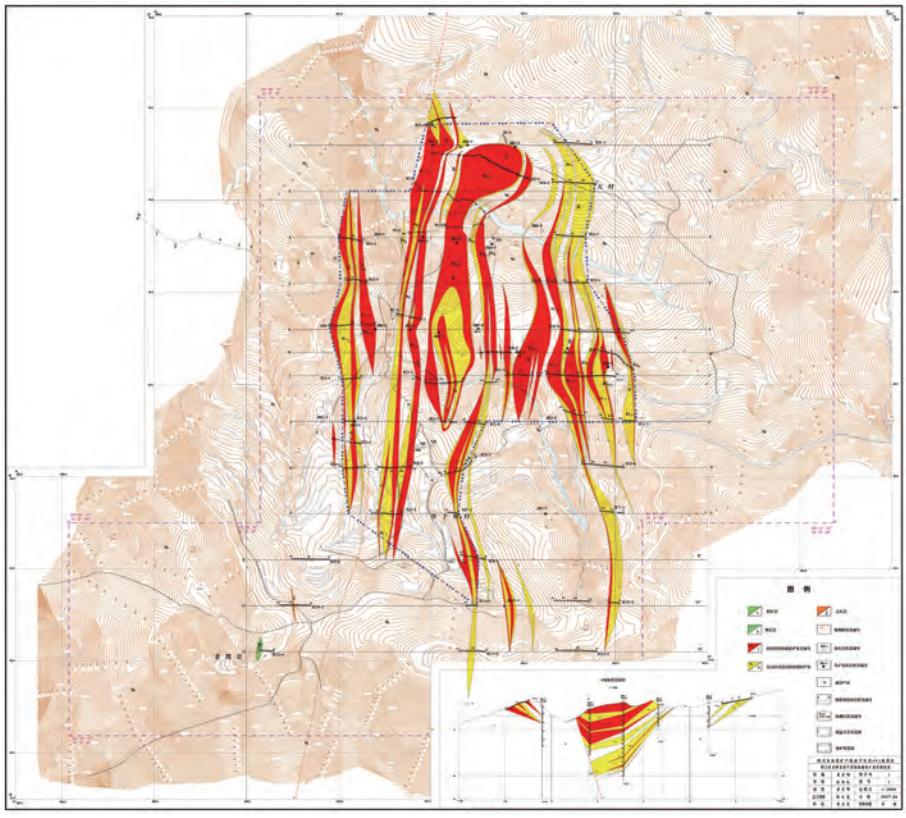
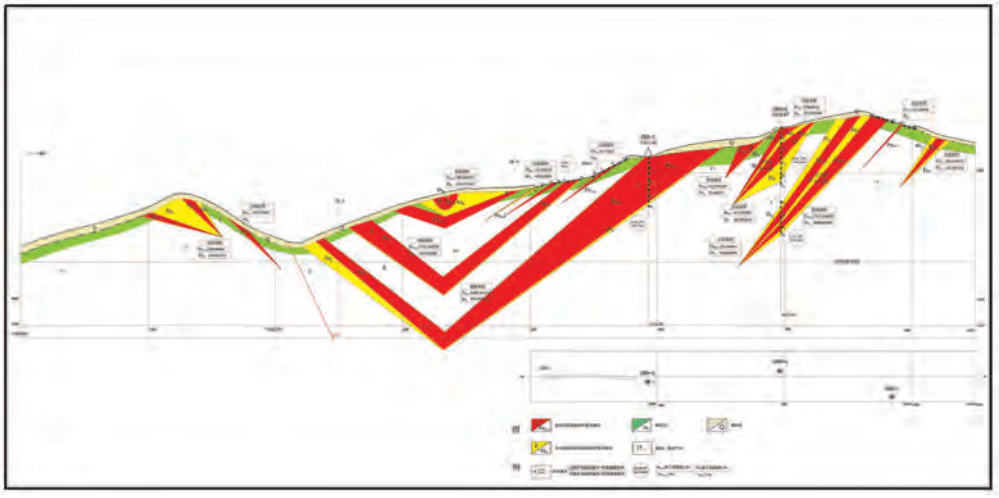


Figure 5-7 Cross-section of the Exploration Line +0 of the Cizhuqing Project.



5.2.4 Yangqueqing project

Geology of the Yangqueqing Project is predominantly represented by the layered Early Hercynian (early Late Paleozoic) mafic-ultramafic intrusions, alkaline intrusions and Permian Emeishan flood basalt with subordinate Precambrian Huili Group (amphibolite) and Quaternary unconsolidated colluvium and alluvium.

The layered mafic-ultramafic intrusion is roughly north-south striking and lens-shaped. Its length is approximately 3.1km in the north-south direction and 90 m to 780 m wide in the east-west direction, with an area of around 1.18km^2. The intrusion dips northwesterly in the north to southwest in the south at an angle ranging from 35° to 45°. Because of the late volcanic and igneous activities as well as structural movements in the area, the layered mafic-ultramafic intrusion occurs as isolated remnants within the Emeishan flood basalt. The intrusion is locally truncated by late-stage north-south and east-west trending faults.

The vanadium-titano-magnetite mineralization is hosted in mafic and ultramafic units of the intrusion. The mineralized ultramafic unit is denoted as No. 1 mineralized body, whereas the mineralized mafic unit is denoted as No. 2 mineralized body. The mineralization is disseminated with local heavy dissemination and massive mineralization. The characteristics of the mineralized bodies are summarized as below:

1. The No. 1 mineralized body, extending from 230 m to 450 m along-dip, is locally truncated at depth by late-stage faulting. The upper and middle portions of the mineralized body contain the highest-grade mineralization. The ore zones are generally stratiform and conform to the banding in the intrusive rocks. Thickness of high-grade zones generally ranges from 4m to 25m, with a minimum of 3.5m and a maximum of 48m. The thickness of low-grade zones is 3m to 8m, with a maximum of 36m. The thickness of the waste zones (TFe < 15%) ranges from 2m to 28m. The accumulated thickness of all the high-grade zones ranges in 3.5m to 48m with average metal grades of 29.23% TFe and 12.02% TiO_2. The total thickness of the entire low-grade zone ranges from 1.57m to 36m with an average grade of 17.33% TFe. The combined volume of the high-grade and low-grade zones account for over 70% of the total volume of the mineralized body.

2. The No. 2 mineralized body extends from 50m to 660m along-dip. Its grade is generally lower than that of No. 1 mineralized body. No. 2 mineralized body is generally in lenticular or stratiform, with a varying thickness. The mineralized body is locally truncated by late faulting, which disrupts the continuity of mineralization. Total iron content commonly increases with depth. There are two to four high-grade zones identified in the No. 2 mineralized body, of which thickness ranges from 4m to 16m. The total thickness is 1.57m to 36m averaging 18.2m. Additionally, there are two to five low-grade zones, of which thickness ranges from 2m to 35m. The total thickness is 1.57m to 60m.

The geology and cross section of the Yangqueqing Project are shown in Figure 5-7 and 5-8. The near surface portion of the mineralized zone is generally oxidized. The strongly-oxidized zone generally extends to a depth of 30m whereas the weakly-oxidized zone extends to a depth of 80 m to 100 m. Oxidized zones are deeper along structures. In the strongly-oxidized zone, silicate minerals have generally been weathered and altered to clays, whereas iron-titanium oxide minerals (such as titano-magnetite) have been oxidized to titano-magnetite, hematite and limonite. Oxidation reduces the magnetism of iron-titanium oxide minerals, resulting in a lower recovery rate. On the other hand, oxidation also reduces the hardness of the ore, resulting in decreasing crushing and grinding costs. This is demonstrated at the adjacent Baicao Mine where the ore from the strongly-oxidized zone can still be processed by magnetic separation methods with only a slightly reduced concentrating recovery.

Figure 5-8 Geology of the Yangqueqing Project

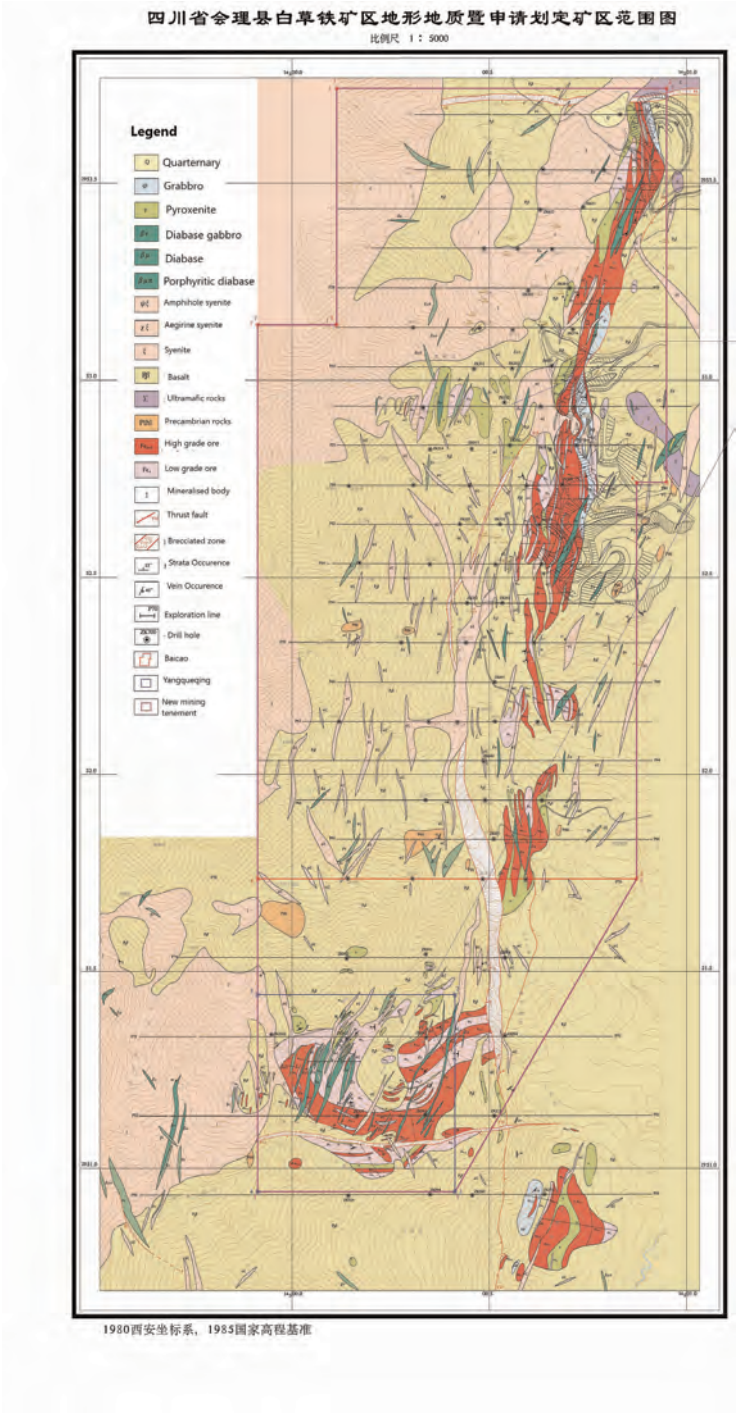
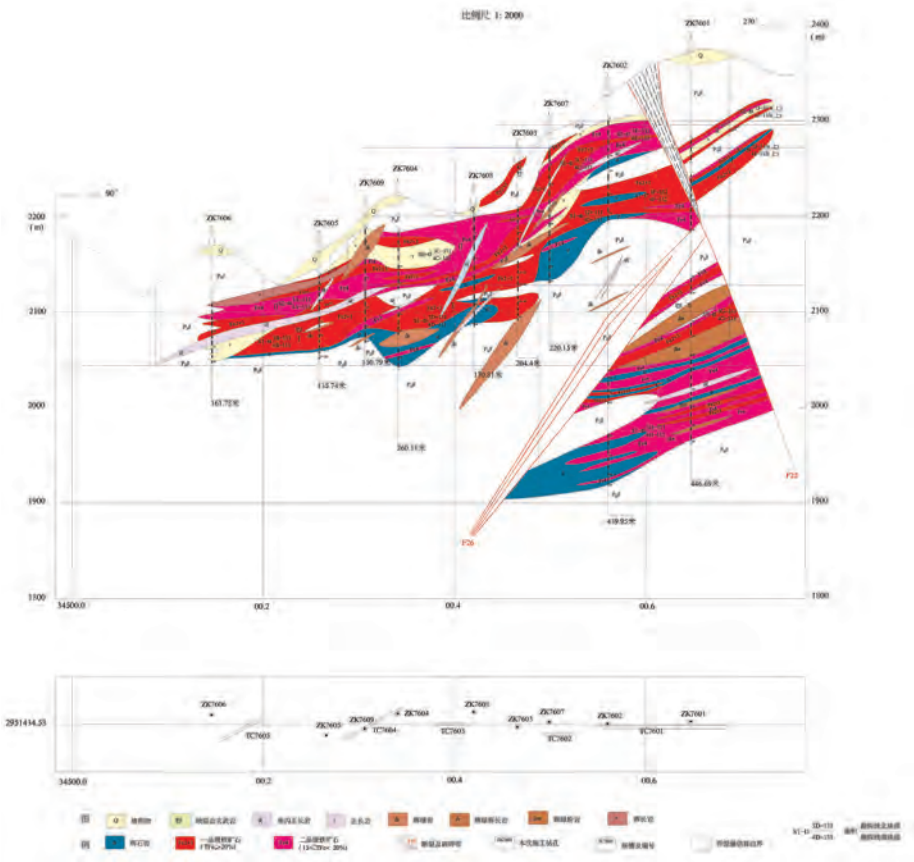


Figure 5-9 Cross-section of Exploration Line 76 of the Yangqueqing Project



5.2.5 Haibaodang project

The geology of the Haibaodang Project is predominantly represented by the Triassic sedimentary sequences which comprise of the Late Triassic Daqiaodi Formation and Early Triassic Baoding Formation. The lower part of the Daqiaodi Formation is chiefly composed of conglomerate with subordinate sandstone. The clasts vary greatly in composition and size. The upper part of the Daqiao Formation is mainly composed of conglomerate, sandstone, mudstone, shale and thinly-bedded coal seam on the upper part. The total thickness is around 310m to 648m. The Early Triassic Baoding Formation is composed of mainly greyish thickly-bedded coarse-grained sandstone in the lower part with a thickness of 33m to 526m and greyish mudstone in the upper part with a thickness of 523m to 1360m. Cross-bedding are widely developed in different sub-units of the sedimentary sequence.

The mineralization of the Haibaodang Project is the ilmenite-bearing clastic sedimentary sequences which are classified as the upper part of the Daqiaodi Formation. The mineralization is mainly present in three prospects identified within the exploration tenement of the Haibaodang Project, namely, Cangfang, Lizifei and Ganhaizi. The characteristics of the mineralization in these three prospects are summarized as below.

Cangfang Prospect

The Cangfang Prospect is located on the northwestern limb of the Daqiaodi anticline which is exposed in the western part of the Haibaodang Project (Figure 5-10). The mineralization is generally hosted in the detrital sandstone and sandy conglomerate of the Upper Daqiaodi Formation. Two mineralized bodies have been identified, namely, CI-1 mineralized body and CI-2 mineralized body.

The CI-1 mineralized body is conformable with the sedimentary sequence, extending from the northeast to southwest with a strike length of about 1,550m, a maximum width of 440m and an area of around 0.47km^2. It dips towards northwest or southwest with a dip angle ranging from 19º to 32º. The thickness of the mineralization varies, particularly in the surface oxidized portion. The maximum apparent thickness is 391m. The TFe grade of the mineralization varies from 10.41% to 27.97% whereas TiO_2 grade varies from 3.45% to 16.79%.

The CI-2 mineralized body is located in the hanging wall of the F1 fault, exposed only between exploration line C13 and C00. A large part of it is concealed. The mineralized body extends from the northeast to southwest with a strike length of about 662m, a maximum width of 175 and an area of around 0.05km^2. It dips towards northwest or southwest with a dip angle ranging from 18º to 35º. The maximum apparent thickness is around 700m. The TFe grade of the mineralization varies from 10.01% to 26.32% whereas TiO_2 grade varies from 1.96% to 15.22%.

Lizifei Prospect

The Lizifei Prospect is located in the southeastern part of the Haibaodang Project, sitting on the southeastern limb of the Daqiaodi anticline (Figure 5-10). The mineralization is generally hosted in the detrital sandstone and conglomerate of the Upper Daqiaodi Formation. Four mineralized bodies have been identified, namely, LI mineralized body, LII mineralized body, LIII mineralized body and LIV mineralized body.

The LI mineralized body is the main mineralized body of the Lizifei Prospect, extending from the south to west with a strike length of 980m, a maximum width of 720m and an area of around 0.277km^2. The TFe grade of the mineralization varies from 12.72% to 21.74% whereas TiO_2 grade varies from 3.56% to 9.87%.

The LII mineralized body is lens-shaped with a strike length of about 100m. It dips towards east with a dip angle ranging from 22º to 36º. The apparent thickness is around 1.49m to 4.32m. The TFe grade of the mineralization varies from 13.20% to 15.11% whereas TiO_2 grade varies from 3.98% to 5.03%.

The LIII mineralized body is also lens-shaped with a strike length of about 100m. It dips towards east with a dip angle ranging from 22º to 36º. The apparent thickness is around 2.65m to 5.03m. The TFe grade of the mineralization varies from 13.44% to 16.97% whereas TiO_2 grade varies from 3.90% to 7.84%.

The LIV mineralized body is located between the exploration line 4 to 7. It is conformable with the sedimentary sequence, dipping towards east with a dip angle ranging from 21º to 36º with a strike length of around 660m. The maximum apparent thickness is around 310m. The TFe grade of the mineralization varies from 12.20% to 18.09% whereas TiO_2 grade varies from 2.20% to 8.24%.

Ganhaizi Prospect

The Ganhaizi Prospect is located in the southeastern of the Haibaodang Project, sitting on the southeastern limb of the Daqiaodi anticline (Figure 5-10). Similar to the other prospects, the mineralization is generally hosted in the detrital sandstone and sandy conglomerate of the Upper Daqiaodi Formation. Two mineralized bodies have been identified, namely, GI-1 mineralized body and GI-2 mineralized body.

The GI-1 mineralized body is located in the hanging-wall of the F2 fault, extending from the south to west with a strike length of 196m and a maximum width of 63m. The apparent thickness ranges from 11.44m to 13.11m. The TFe grade of the mineralization varies from 10.31% to 38.08% whereas TiO_2 grade varies from 3.34% to 17.59%.

The GI-2 mineralized body located in the footwall of the F2 fault, extending from the south to west with a strike length of 147m and a maximum width of 36m. A large part of the mineralized body is concealed. The apparent thickness ranges from 2.21m to 42.59m. The TFe grade of the mineralization varies from 10.06% to 30.32% whereas TiO_2 grade varies from 3.04% to 17.29%.

Cross-sections of the Cangfang Prospect and Ganhaizi Prospect are illustrated in Figure 5-11 and 5-12 respectively.

Figure 5-10 Plan-view geological map of the Haibaodang Project

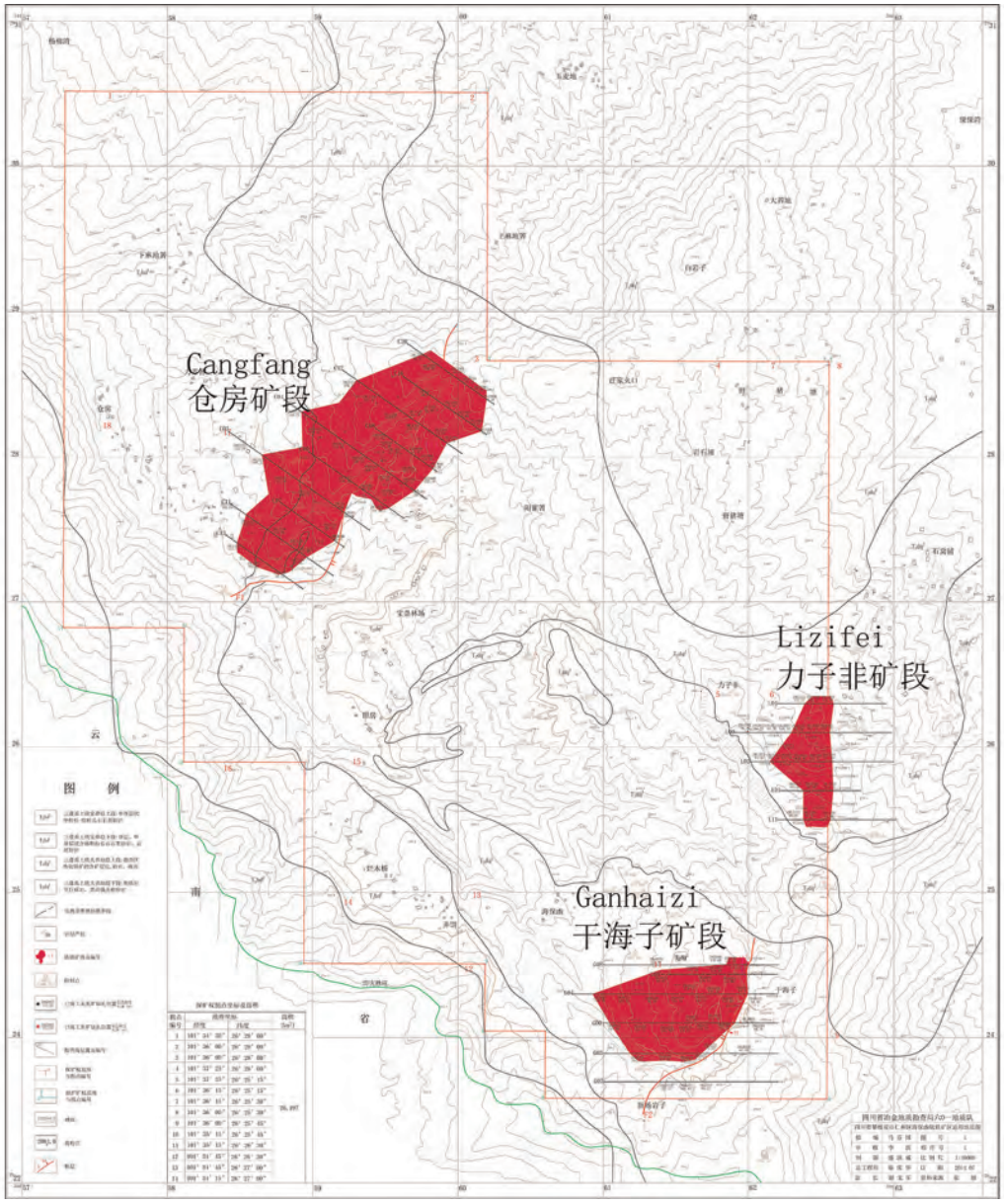


Figure 5-11 Cross-section of the Exploration Line C04 of the Cangfang Prospect of the Haibaodang Project

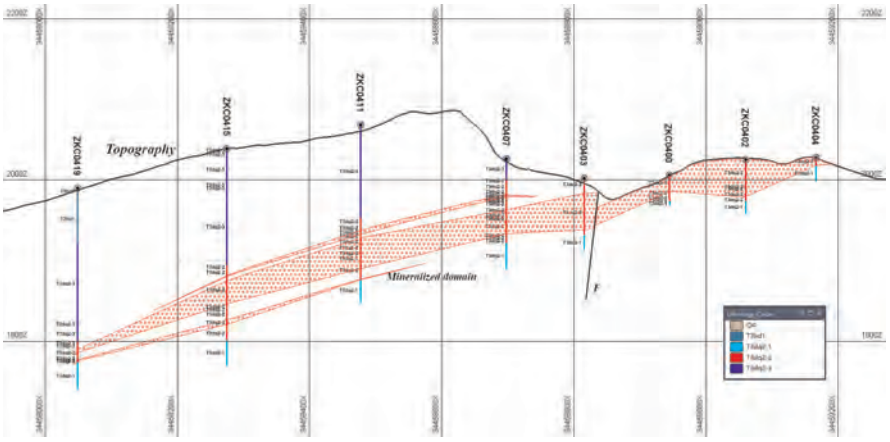
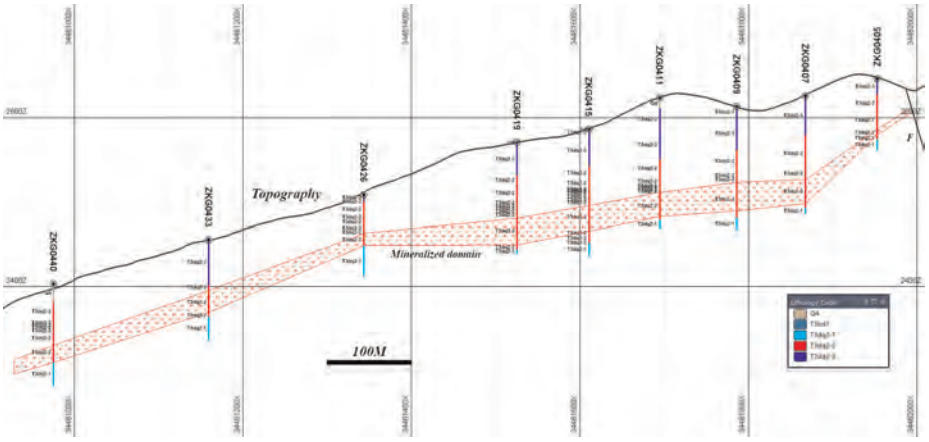


Figure 5-12 Cross-section of the Exploration Line G04 of the Ganhaizi Prospect of the Haibaodang Project



6 GEOLOGICAL DATABASE

6.1 Database used for mineral resource estimation

In China, exploration programs and the associated geological databases used for resource estimation are conducted by independent, licensed exploration entities and/or by the mining companies, in accordance with the guidelines specifying the appropriate sampling, sample preparation and assaying techniques and procedures for different types of mineral deposits issued by the relevant government authorities. The databases used for Mineral Resources estimation for CVT's mining properties are generally prepared in compliance with these guidelines, as stated in previous technical reports prepared by Behre Dolbear in 2009 (Behre Dolbear Asia, 2009) and 2011 (Behre Dolbear Asia, 2011).

The exploration program and resource estimation for the Baicao Mine and Xiushuihe Mine were carried out by the Northwestern Sichuan Geological Team of Sichuan Provincial Geology and Mineral Exploration and Development Bureau in 2007. The exploration program and resource estimation for the Cizhuqing Project were carried out by the 403 Geological Team of Sichuan Provincial Geology and Mineral Exploration and Development Bureau retained by the previous owner before CVT's acquisition in 2010. The exploration program and resource estimation for the Yangqueqing Project were carried out by the 106 Geological Team of Sichuan Provincial Geology and Mineral Exploration and Development Bureau before CVT's acquisition in 2010. The exploration program and resource estimation for the Haibaodang Project were carried out by the 601 Team of Sichuan Metallurgical Geological Exploration Bureau before CVT's acquisition in 2013.

It is clear that the exploration work and resource estimation were completed a few years ago before BAW's engagement for this CPR. As such, BAW is not able to be involved with the exploration program such as review of original drill hole locations, drill hole collar survey, sampling procedures, sample preparation, Quality Assurance and Quality Control ("QAQC") protocol, geochemistry analysis and resource estimation methods.

However, CVT in 2009 engaged Behre Dolbear to independently classify, estimate and report the initial JORC-compliant Mineral Resources estimation for the Baicao Mine and Xiushuihe Mine (Behre Dolbear Asia, 2009) for the purpose of CVT's IPO public disclosure. Subsequently, CVT engaged Behre Dolbear to independently classify, estimate and report the initial JORC-compliant Mineral Resources estimation for the Cizhuqing Project and Yangqueqing Project in 2011 (Behre Dolbear Asia, 2011).

BAW understands that the drill hole locations, drill hole collar survey, sampling procedure, sample preparation, QAQC protocols, analytical methods, bulk density measurements and resource estimation method have been previously reviewed by Behre Dolbear for independent reporting JORC-compliant resource estimation. This geological database prepared by various exploration entities together with the subsequent review by Behre Dolbear form the basis of the geological database used for Mineral Resources estimation for CVT's mining properties covered in this CPR.

In relation to the assay composite procedures for the Baicao Mine, Xiushuihe Mine, Cizuqing Project and Yangqueqing Project, BAW reviewed such assay composite procedures and is of the opinion that the calculated composite grads reasonably matched with composite grades indicated on the longitudinal polygonal maps that were used to estimate the Mineral Resources for those mining properties.

In addition, BAW reviewed the geological database of the Haibaodang Project and established a new 3D resource model for JORC-compliant classification, estimation and reporting of Mineral Resources.

6.2 Database statistics

The principal sample types included in the assay and thus resource database for the mining properties reviewed in this CPR comprise cores of drilling from the surface and channel sampling from the surface trench. The statistics of the geological database used for Mineral Resources estimation for the CVT's mining properties reviewed in this CPR are summarized in Table 6-1 below.

Table 6-1 Statistics of the Geological Database used for Mineral Resources Estimation for the CVT's Mining Properties

Sample Type	Baicao	Xiushuihe	Cizhuqing	Yangqueqing	Haibaodang
Core Drilling					
Holes	139	133	49	56	116
Meters	29,946	15,803	6,139	13,986	14,001
Surface Trenching					
Cubic Meters	2,284	2,107	19,170	5,300	1,927.43
Assays					
Core Samples	4,013	340	764	1,372	3,168
Channel Samples	187	251	1,954	42	n/a
Density Measurements					
Core/Rock	250	107	70	52	30

6.3 Drilling, logging and survey

In relation to CVT's five mining properties reviewed in this CPR, surface diamond core drilling is the principal exploration and sampling method. The Baicao mine was drilled out on 100m spaced east-west exploration lines; there are a total of 20 exploration lines for the deposit and drill hole spacing on each exploration line mostly ranges from 80 m to 150 m. The Xiushuihe Mine was drilled out on 100m spaced north-south exploration lines. The Cizuqing Project was defined by drill holes and trench spacing of 100m x 50m to 100m. In the Yangqueqing Project and Yangqueqing Expansion, it is defined by drill holes and trench spacing of 100m x 50m. In the Haibaodang Project, the resources are defined by drill holes and trench range from 100m x 200m to 200m x 400m.

Drilling was conducted using Chinese-made drill rigs. Drill hole size was generally 108mm-130mm at the top, reducing to 89mm then 75mm until the bottom of the hole. Core is recovered from the drill hole via wireline, and then core is emptied into open-top wooded core trays (or more recently plastic trays). The end of each drill run is recorded on a tag placed at the end of material extracted from the core barrel. Generally, the tag is a small plastic tag with pre-labeled places to record the drill-hole number and the meters from, meters to, and the length of the drill run. Core is geologically and geotechnically logged, recoveries are determined by measuring the core length recovered versus the amount drilled, and all data is recorded on hard-copy drill logs by the geological staff. Core recovery was generally good, averaging around 90% for the mineralized intervals.

Drill hole collar locations were surveyed and down-hole deviation was generally measured using down hole survey techniques. Drill cores were logged in detail by a project geologist before sampling.

BAW was given to understand that no drilling and thus no resource delineation programs were completed for the Baicao Mine, Xiushuihe Mine and Xiushuihe Expansion after 2009 and for the Cizhuqing Project and Yangqueqing Project after acquisition in 2010.

With respect to the Haibaodang Project, the exploration program including, drilling, sampling, trenching and assay were mainly completed during the period between 2010 and 2013. Details of the drill holes of the Haibaodang Project is available in Section 15.2.

6.4 Sampling, sample preparation and assay

Generally, drill core was split by a diamond core saw along the central line of the core. Sample tags are placed into the core trays and the half core is taken and placed in numbered sample bags for delivery to the analytical laboratory. The other half of the drill core was retained for record and for subsequent metallurgical tests. Typically, the core was sampled in 4-m lengths, although variation in intervals may occur to coincide with geological contacts. Generally, the entire layered mafic/ultramafic interval was sampled and assayed.

In addition to drilling, surface trenches have also been excavated on each exploration line to sample the layered mafic-ultramafic intrusions. Trench channel samples were generally taken at the trench bottom and were cut 7 centimeters ("cm") wide and 3cm deep. The sample length for surface trenches was generally 4m to 5m, but variable lengths may be used based on geological characteristics. Surface trench and sample locations were surveyed.

Sample preparation and analysis were mostly conducted by the assay laboratories which hold the Geology Rock and Mineral Sample Test Certification from the Land and Mineral Bureau of Sichuan Province, China and Quality and Quantity Certification from the Quality and Technology Inspection Bureau of Sichuan Province, China.

Analytic methods adopted included wet chemical analyses, colorimetric analyses and atomic absorption spectrometry. TFe, TiO_2, and V_2O_5 grades were determined for each sample. In addition, Cu, Co, Ni, S, Cr_2O_5 or P_2O_5 grades were also determined for some composite samples to understand the distribution of these components in the two deposits. These analytical methods are widely used in the mining industry in China and generally produce reliable results if conducted correctly.

Based on BAW's observations and data review, exploration core drillings of the five mining properties has been conducted to international standard. Drillcore reviewed by BAW was maintained in good condition for the Haibaodang Project. Little information was available to BAW regarding the drilling methods or logging.

As mentioned in Section 6.1, BAW was not able to observe the work during the course of drilling, sampling and sample preparation. However, BAW has reviewed the protocol applied and considers that the methods to be generally conformable with industry practice and appropriate for use in Mineral Resources and Ore Reserves estimation in accordance with the requirement of the JORC Code 2012.

6.5 Quality control and quality assurance

The QAQC protocol for assay generally includes internal check assays, external check assays, and analysis of assay standards. Among the samples analyzed for the CVT's mining properties, approximately 10% were subject to an internal check assay, and approximately 5-10% were sent for external check assays.

The internal check assays were conducted by a different operator at the same laboratory and the external check assays for Baicao and Xiushuihe samples were conducted by Chengdu Rock and Mineral Analytic Center, an unpaired assay laboratory, located in Chengdu City of Sichuan province.

The external check assays for Cizhuqing and Yangqueqing samples were conducted by Southwest Geology Metallurgy Analytic Center and Chengdu Rock and Mineral Analytic Center respectively. The external check assays for Haibaodang samples were conducted by Deyang Rock and Mineral Analytic Center.

To determine the assay quality, check assay results were compared with the original assay results, and the variance was compared to permitted random error limits specified by government regulation for various grade ranges. It was reported that the internal and external checks assay results for CVT's five mining properties were all within the permitted range.

Through examination of sampling, sample preparation, analytical procedures and check assay results as well as CVT's production data, BAW concludes that the analytical methods used for the Baicao Mine, Xiushuihe Mine, Cizhuqing Project Yangqueqing Project and Haibaodang Project produce acceptable results with no material bias.

6.6 Bulk density measurements

Bulk density data were collected using drillcore and rock samples. The bulk density of core or rock samples was generally measured using a wax-coated water immersion method. The number of bulk density measurements is 250 for the Baicao Mine, 107 for the Xiushuihe Mine, 70 for the Cizhuqing Project, 52 for the Yangqueqing Project and Yangqueqing Expansion and 30 for the Haibaodang Project.

The bulk density data generally ranges from 3.2 to 4.0 tonnes per cubic meter ("t/m^3") for the Baicao Mine. As bulk density and the TFe grade displays a strongly positive correlation for the Baicao samples, regression formula, as shown in Table 6-2, between the TFe grade and bulk density were developed for the higher-grade resources and lower-grade resources respectively. Bulk density used for mineral resources estimates were calculated from the average TFe grade by using the formula in each resource block.

Table 6-2 Regression Formula for Bulk Density Measurement at Baicao Mine

Resource Type	Regression Formula
Higher-grade	Bulk Density = 2.57731 + 0.03996 × TFe
Lower-grade	Bulk Density = 2.73512 + 0.0335 × TFe

The bulk density determined for the Xiushuihe Mine averages $3.61t/m^3$ for the higher-grade resources and $3.26t/m^3$ for the lower-grade resources. These average bulk density values were used in Mineral Resources estimation for the deposit.

In previous exploration programs, a total of 70 samples were collected from the Cizhuqing Project for bulk density calculation, yielding an arithmetic mean of $3.6g/cm^3$. However, those samples were not fully analyzed for their TFe content and thus, the variance relationship between TFe content and density was not clearly defiend for each sample. As a result, those 70 samples were not directly used for a complete defined determination. The current bulk density calculation involved the arithmetic mean of those 70 samples plus the density data derived from the Baicao Mine, arriving at a bulk density of $3.12g/cm^3$ for the Cizhuqing Project. This average bulk density value was used in the Mineral Resources estimation.

At the Yangqueqing Project and Yangqueqing Expansion, 52 samples were collected for bulk density measurements. Among those 52 samples, there are 26 samples yielding greater than 20% TFe, 11 samples yielding 15% to 20% TFe and 15 samples of barren rocks. The TFe content was then applied to the regression formula shown in Table 6-3 below.

Table 6-3 Regression Formula for Bulk Density Measurement at the Yangqueqing Project and Yangqueqing Expansion

TFe Range	Regression Formula
TFe ≥ 20%	Bulk Density = 2.57731 + 0.03996 × TFe
15% < TFe < 20%	Bulk Density = 2.73512 + 0.0335 × TFe

At the Haibaodang Project, a total of 92 samples were collected for bulk density measurements. Among those samples, 66 samples and 26 samples were collected from the Cangfang prospect and Ganhaizi prospect respectively. The samples from both prospects display a strongly positive correlation between bulk density and TFe grade and therefore, regression formula between the TFe grade and bulk density were developed for the two prospects as shown in Table 6-3. The bulk density used for Mineral Resources estimation were calculated from the average TFe grade using the formula for each prospect.

Table 6-4 Regression Formula for Bulk Density Measurement at the Haibaodang Project

Prospect	Regression Formula
Cangfang	Bulk Density = 2.4199 + 0.0344 × TFe
Ganhaizi	Bulk Density = 2.5809 + 0.0215 × TFe

BAW considers that the ranges of bulk densities adopted are reasonable and appropriate for Mineral Resources estimation, based on the mineral composition of the ore deposits and the methodology of bulk density measurement.

6.7 Discussion

Considering the previous exploration work including drilling, logging, drillhole collar survey, sampling, sample preparation, assay, QAQC protocol and bulk density measurements which were independently reviewed and verified by competent persons historically, BAW is of the opinion that the overall geological database is fair, reasonable and conformable with the industry practice and therefore, the database can appropriately serve as the foundation for subsequent Mineral Resources estimation.

7 MINERAL RESOURCES ESTIMATION

7.1 Introduction

The initial JORC-compliant estimation of Mineral Resources for the Baicao Mine and Xiushuihe Mine were independently classified and prepared by Behre Dolbear in 2009 (Behre Dolbear Asia, 2009) for the purpose of CVT's IPO public disclosure.

The initial JORC-compliant estimation of Mineral Resources for the Cizhuqing Project and Yangqueqing Project were independently classified and prepared by Behre Dolbear in 2011 (Behre Dolbear Asia, 2011) subsequent to the acquisition by CVT. The Haibaodang Project was acquired by CVT in 2013. However, JORC-compliant estimation of Mineral Resources has not been commenced since then.

Subsequently, the Mineral Resources of the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project have been continuously estimated by the same competent persons in accordance with the requirements set out by the JORC Code.

The classification, reporting and estimation of Mineral Resources for the Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project presented in this CPR are also made in conformity with the requirements of the JORC Code 2012 which is conformable with the requirements for the natural resource companies listed on the HKEX.

7.2 Mineral resources definitions and classification

The JORC Code is a mineral resource/ore reserve classification system that has been widely used and is internationally recognized. It has also been used in independent technical reports for Mineral Resources and Ore Reserves statements for natural resources companies listed on the HKEX. In accordance with the JORC Code 2012, the definitions of Mineral Resources and classification of Mineral Resources are summarized as below.

- *A "Mineral Resource" defined in the JORC Code as a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual 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 Resources are sub-divided, in order of increasing geological confidence, into Measured, Indicated and Inferred categories.*

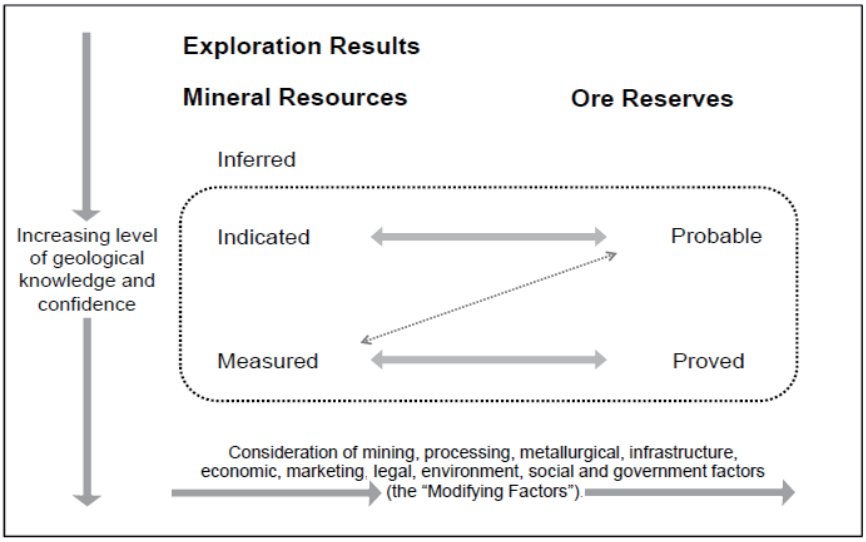
- *A "Measured Mineral Resource" is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.*

- *An "Indicated Mineral Resource" is that part of a Mineral 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.*

- *An "Inferred Mineral Resource" is that part of a Mineral 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.*

The general relationships between exploration results, Mineral Resources and Ore Reserves under the JORC Code are illustrated in Figure 7-1.

Figure 7-1 General relationship between Exploration Results, Mineral Resources and Ore Reserves.



Generally, Ore Reserves can be presented as part of the total Mineral Resources or as additional to the Mineral Resources. In this CPR, all of the Ore Reserves are included within the Mineral Resources.

The Ore Reserves estimations for CVT's mining properties are reported in Chapter 8 of this CPR.

7.3 Methodology and parameters used in mineral resources estimation

The methods used to estimate Mineral Resources and the parameters used to define the Mineral Resources for a particular type of mineral deposit are generally prescribed by the relevant Chinese government authorities. The estimation of Mineral Resources is principally based on strictly pre-defined parameters, which include minimum grades and minimum thicknesses. The Mineral Resources for a deposit are generally estimated by an independent engineering entity with a government-issued license in China.

7.3.1 Baicao mine, xiushuihe mine, cizhuqing project and yangqueqing project

The estimation of Mineral Resources for the Baicao Mine and Xiushuihe Mine was conducted in 2008 by Northwestern Sichuan Geological Team (the "Northwestern Sichuan Team") of Sichuan Provincial Geology and Mineral Exploration and Development Bureau, which is an independent, licensed, government-owned exploration entity in China, using the polygonal estimation method, for the purpose of IPO public disclosure.

The estimation of Mineral Resources for the Cizhuqing Project and Yangqueqing Project were carried out by the 403 Geological Team of Sichuan Provincial Geology and Mineral Exploration and Development Bureau and 106 Geological Team of Sichuan Provincial Geology and Mineral Exploration and Development Bureau respectively, which are independent, licensed, government-owned exploration entities in China, using the polygonal estimation method, in prior to CVT's acquisition in 2010.

Such estimation work was subsequently reviewed and accepted by Behre Dolbear to classify, estimate and prepare the initial JORC-compliant Mineral Resources for the mining properties (Behre Dolbear Asia, 2009 and 2011). Detailed review and discussion of the polygon estimation method in relation to the determination of "Deposit Industrial Parameters", determination of "Block Boundaries and Confidence Level" and estimation process were documented in Behre Dolbear Asia, 2009 and 2011.

Behre Dolbear Asia (2009 and 2011) concluded that the procedures and parameters of the Mineral Resources estimation applied by various exploration entities were generally reasonable and appropriate. The deposits are large mafic-ultramafic intrusive hosted stratiform or lenticular iron deposits generally with good spatial and grade continuity. The Measured Resource blocks for the four deposits were defined by drill holes and surface trench channel samples at a data spacing of no more than 100 m × 100 m and have a high level of geological control. The Indicated Resource blocks were also reasonably defined based on drill holes and surface trench channel samples at a data spacing of no more than 100m × 200m. There was no extrapolation from data points for the Measured and Indicated Resource blocks. The Inferred Resource blocks were defined by wider-spaced sampling or by limited extrapolation from Measured and Indicated resource blocks.

The original estimation work served as the foundation for subsequent depletion of Mineral Resources, together with the production data kept by CVT's management. CVT engaged independent consultant to update and report the Mineral Resources estimates for Baicao Mine and Xiushuihe Mine on an annual basis to reflect the continuous mining depletion of mineral resources from 2011 to 2017 (Behre Dolbear Asia 2011, 2012, 2013, 2014, 2015 and Behre Dolbear Australia 2017). This forms the basis for BAW's update and estimation of Mineral Resources reported in this CPR.

In this CPR, BAW reviewed the estimation through verification of geological sections against resource estimates. BAW additionally updated the Mineral Resources estimates as of 31 December 2018 which represent an overall reduction compared to the resource estimates for the Baicao Mine and Xiushuihe Mine as of 1 January 2018, due to CVT's mining depletion during the period (Figure 7-2 and 7-3). No mining activities were carried out in the Xiushuihe Expansion, Cizhuqing Project and Yangqueqing Project during the period from 1 January to 31 December 2018, as such, there is no material change of Mineral Resources for those properties since 1 January 2018.

Figure 7-2 Mining depletion of the Baicao Mine from 1 January through 30 June (left) to 31 December 2018 (right)

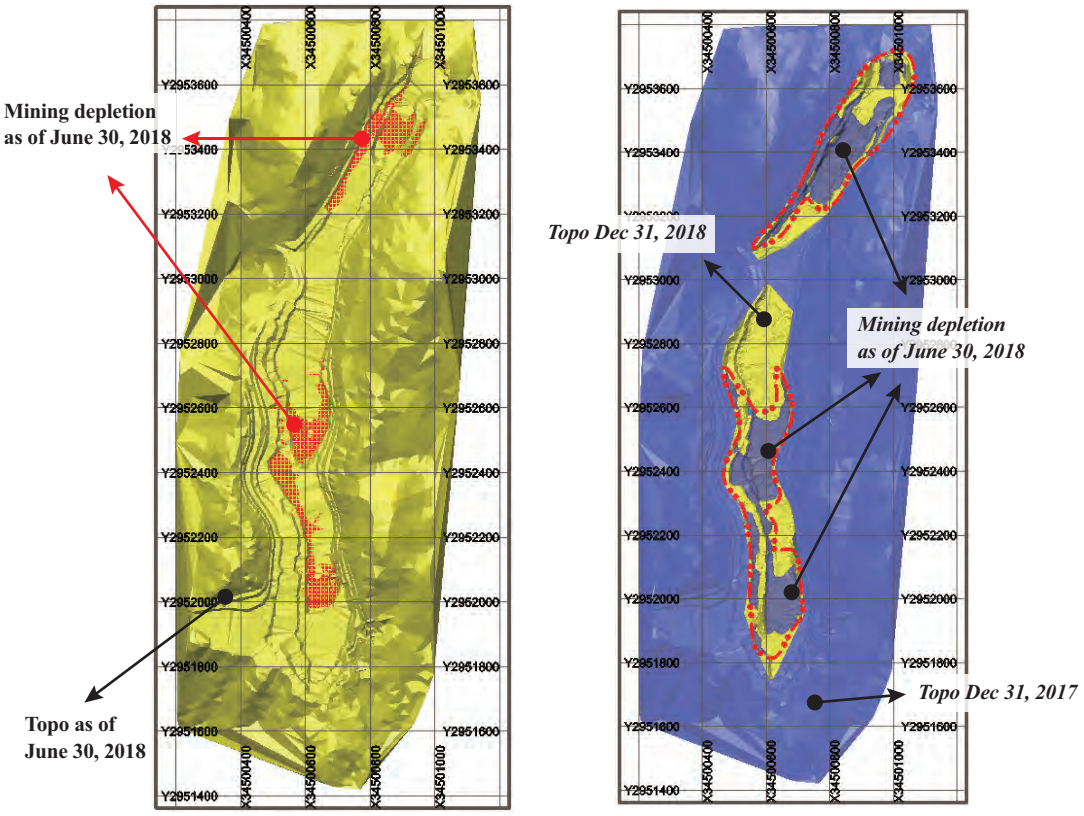
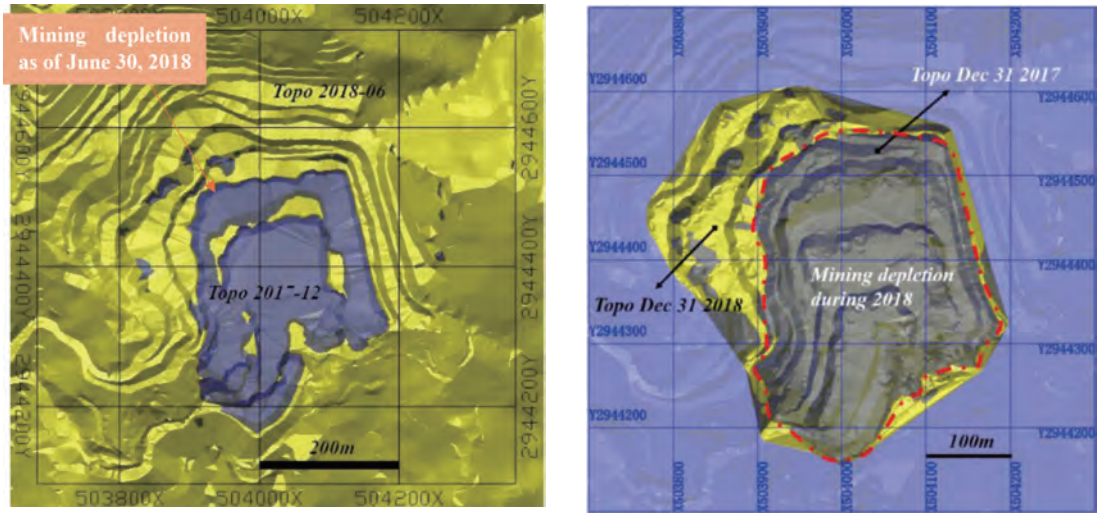


Figure 7-3 Mining depletion of the Xiushuihe Mine from 1 January through 30 June (left) to 31 December 2018 (right)



The cut-off grade used in the Mineral Resources estimation varies among the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project. 15% TFe and 18% TFe cut-off grades for oxide and sulphide were used for the resource estimation for the Baicao Mine and Xiushuihe Mine (including its Expansion), which BAW considered to be reasonable and appropriate for this type of deposits in the region. 15% TFe cut-off grade was used for the Yangqueqing Project to distinguish ore and waste. 8% TFe cut-off grade was used for the Cizhuqing Project, which is much lower than those used for other deposits.

7.3.2 Haibaodang project

The exploration program and resource estimation for the Haibaodang Project were carried out by the 601 Team of Sichuan Metallurgical Geological Exploration Bureau before CVT's acquisition in 2013, using the polygonal estimation method. BAW additionally generated a 3D wireframe model and block grade interpolation for the Haibaodang Project, using modern geostatistics method (Figure 7-4).

Geological Database

The exploration program conducted by the Company between 2008 and 2014 comprised 116 holes totaling 14,000.8m and 27 trenches totaling 2,808m. BAW compiled all drillhole, geological and assay data into a geological database which were then mapped into Surpac. The geological database is composed of collar coordinates of each drillhole, down hole surveys, assay data and lithology information.

Data validation was performed before construction of the geological database which was subsequently used for modeling and resource estimation. Among those 116 drillholes, 96 drillholes were validated and accepted for subsequent modelling and thus resource estimation. The trench data were only used to aid interpretation of the geology.

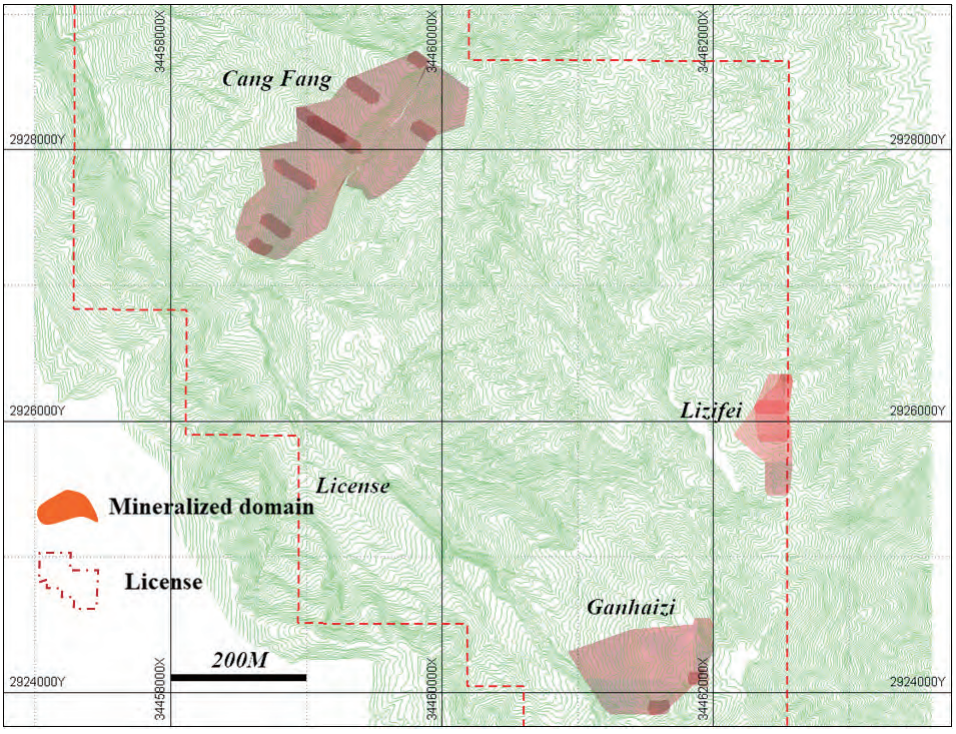
Wireframe Model

A cut-off grade of 10% TFe or 5% TiO_2 was applied for modeling the vertical extent of the mineralization. The lateral extent of the mineralization is generally is determined based on lithology and grade distribution. Occasionally mineralization with a grade lower than 10% TFe was included to maintain lithological and structural zonal continuity along strike and down dip. In the case there is no drillhole intercepts, the interpreted mineralized body were extrapolated to 40m from the nearest drillhole along dip and 20m along strike.

Three-dimensional envelopes were thereafter used to assign a specific envelope code to all assays within each block model. The wireframe polylines were snapped to drill hole assay limits in the three-dimensional space. The wireframe was generated using tied polylines and validated. The resulting domains were employed for subsequent statistical analysis, compositing, rock coding and resource estimation.

The wireframe model constructed by BAW consist of three mineralized domains including the Cangfang, Ganhaizi and Lizifei prospects (Figure 7-4). Wireframe models for all domains were generated using multiple drill holes.

Figure 7-4 Location of the Cangfang, Ganhaizi and Lizifei prospects of the Haibaodang Project



Geostatistics

The statistics of constrained assays and composites of each domain are tabulated as below:

Table 7-1: Statistics of constrained assays and composites of the Cangfang, Ganhaizi and Lizifei prospects

Original Assays

Data	No of Samples	Mean	SD	Variance	Coefficient of Variance	Mode	Min	Median	Max	Range
CF_intervals	917	1.49	0.38	0.15	0.26	1.5	0.17	1.45	5.89	5.72
CF_TFe_%	917	15.82	3.59	12.86	0.23	12.52	4.52	15.43	27.97	23.45
CF_TiO_2_%	917	7.36	2.85	8.11	0.39	3.95	0.92	7.03	17.81	16.89
GHZ_intervals	338	1.58	0.25	0.06	0.16	1.5	0.71	1.6	3	2.29
GHZ_TFe_%	338	18.32	3.93	15.44	0.21	16.47	5.03	18.055	30.32	25.29
GHZ_TiO_2_%	338	7.42	2.48	6.13	0.33	6.16	1.56	7.065	17.29	15.73
LZF_intervals	79	1.85	0.39	0.15	0.21	2	0.58	1.9	3.58	3
LZF_TFe_%	79	15.96	1.82	3.32	0.11	15.05	12.2	15.38	21.74	9.54
LZF_TiO_2_%	79	5.75	1.42	2.01	0.25	5.08	3.26	5.57	9.87	6.61

Composites

Data	No of Samples	Mean	SD	Variance	Coefficient of Variance	Mode	Min	Median	Max	Range
CF_TFe%	751	15.86	3.05	9.28	0.19	12.06	4.8554	15.4939	27.88	23.0246
CF_TiO_2%	751	7.45	2.44	5.95	0.33	6.67	0.9869	7.1604	16.2772	15.2903
GHZ_TFe%	294	18.31	3.43	11.76	0.19	19.70	8.4056	18.098	29.17	20.7644
GHZ_TiO_2%	294	7.41	2.12	4.51	0.29	6.16	3.1189	7.197	13.9577	10.8388
LZF_TFe%	84	15.94	1.54	2.39	0.10	15.04	13.222	15.4311	21.462	8.24
LZF_TiO_2%	84	5.74	1.31	1.72	0.23	4.43	3.56	5.51275	9.707	6.147

No grade capping was applied for mineralized domains. The composites were calculated for TFe over 1.5-meter lengths starting at the first point of intersection between drill hole and hanging wall of the 3-D zonal constraint in the Cangfang and Ganhaizi prospects, while 2m were applied in the Lizifei prospect.

A semi-variogram study was performed by BAW to guide search strategy of grade interpolation. The variogram was plotted for the composites of each domain as shown below in Figure 7-5 to 7-7. Down-hole variogram and omnivariogram were developed to access the nugget effect. Reasonable dimensional variograms were developed along strike and down dip.

Figure 7-5: Variogram along-strike of the Cangfang prospect

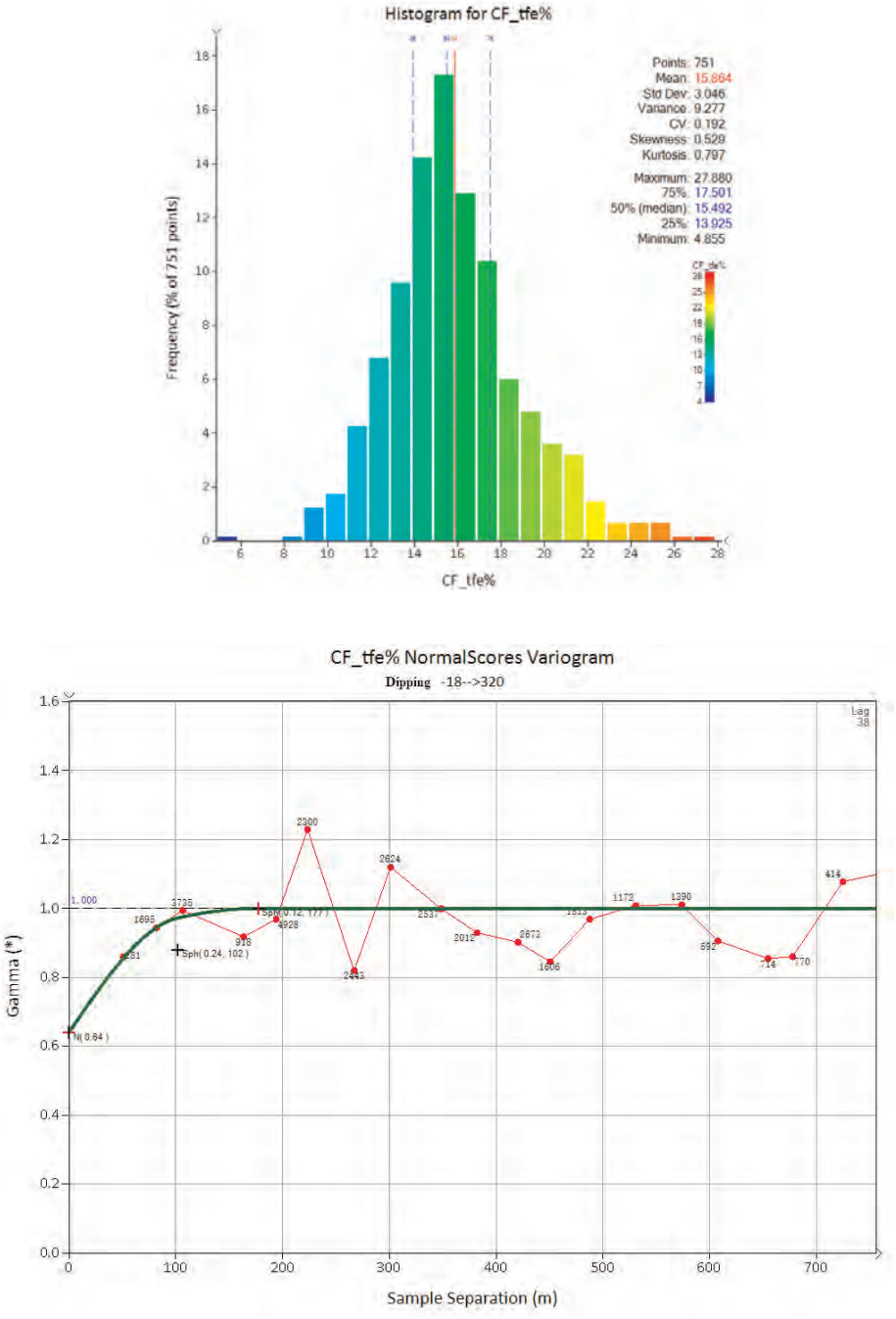
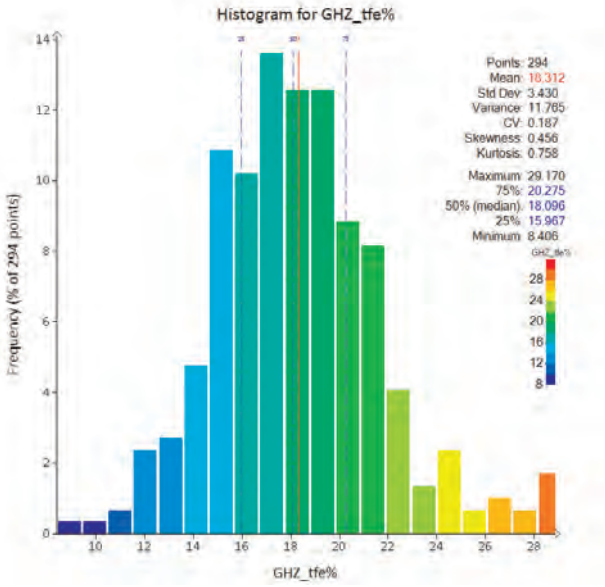


Figure 7-6: Variogram along-strike of the Ganhaizi prospect



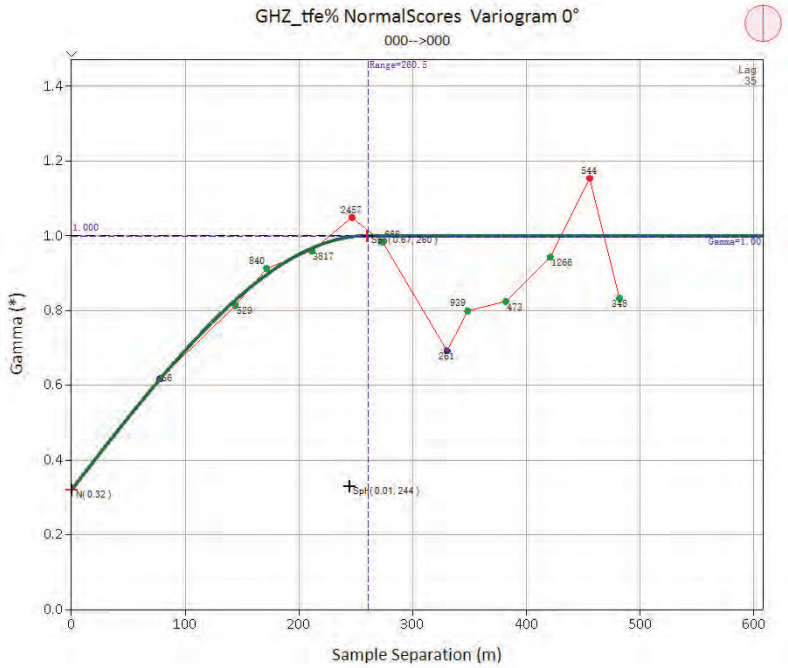
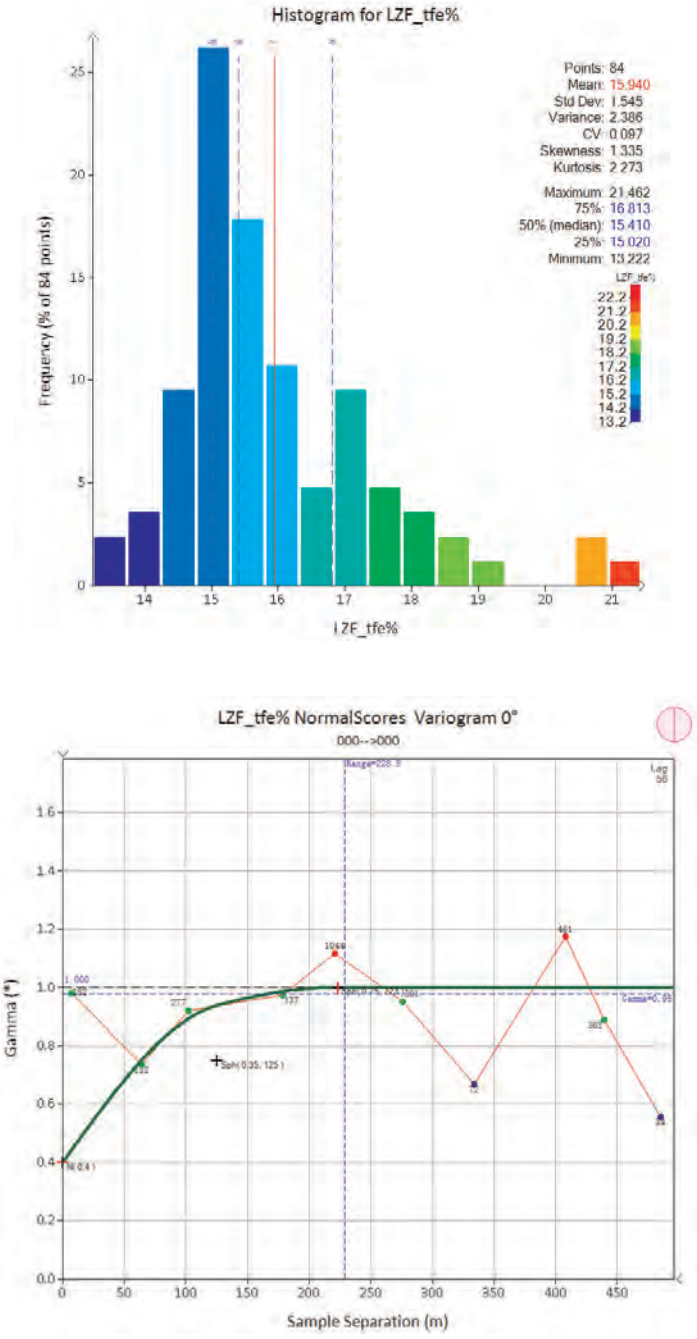


Figure 7-7: Variogram along-strike of the Lizifei prospect



Block Model

Block modeling was conducted using the Gemcom software. The block model parameters are summarized in the following table.

Table 7-2: Parameters used in block model

Prospect	Attributes	Northing	Easting	RL (m)
Cangfang	Min	2927460	34458200	1,450
	Max	2929460	34459500	2,350
	Block Size	40	20	2
	Sub-block	20	10	1
	Rotation	34.52	0	0
Ganhaizi	Min	2923800	34460800	2,200
	Max	2924600	34462000	2,700
	Block Size	40	20	2
	Sub-block	20	10	1
	Rotation	0	0	0
Lizifei	Min	2925400	34462000	2,300
	Max	2926400	34462600	2,700
	Block Size	40	20	2
	Sub-block	20	10	1
	Rotation	0	0	0

The mineral resource of the Haibaodang Project was estimated using the method of Inverse Distance (IDW2) which was considered by BAW to be appropriate for the mineralization showing strong geological continuity along-strike.

Interpolation

Three interpolation passes were used for each domain. Pass was implemented in the way that blocks with a higher level of confidence is allowed to first interpolated first. The information typically includes search ellipse parameters for interpolating the minimum and maximum composites of a given block and the largest composite sample associated with each hole. By considering the minimum number of composites and maximum number of composites of each hole, the minimum number of drill holes involved in the evaluation can be managed during the interpolation process.

Table 7-3: Interpolation process for the Cangfang, Ganhaizi and Lizifei prospects

Prospect/Domain	Pass	Strike Range (m)	Down Dip Range (m)	Across Dip Range (m)	Max No of Sample	Min No of Sample	Max # composites per hole
Cangfang	**I**	89	36	10	12	5	2
	II	178	72	20	6	3	2
	III	356	144	40	3	1	1
Lizifei	**I**	110	60	25	9	5	2
	II	220	120	50	5	3	2
	III	330	180	75	3	1	1
Ganhaizi	**I**	130	130	22	9	5	2
	II	260	260	44	6	3	2
	III	390	390	66	3	1	1

Validation

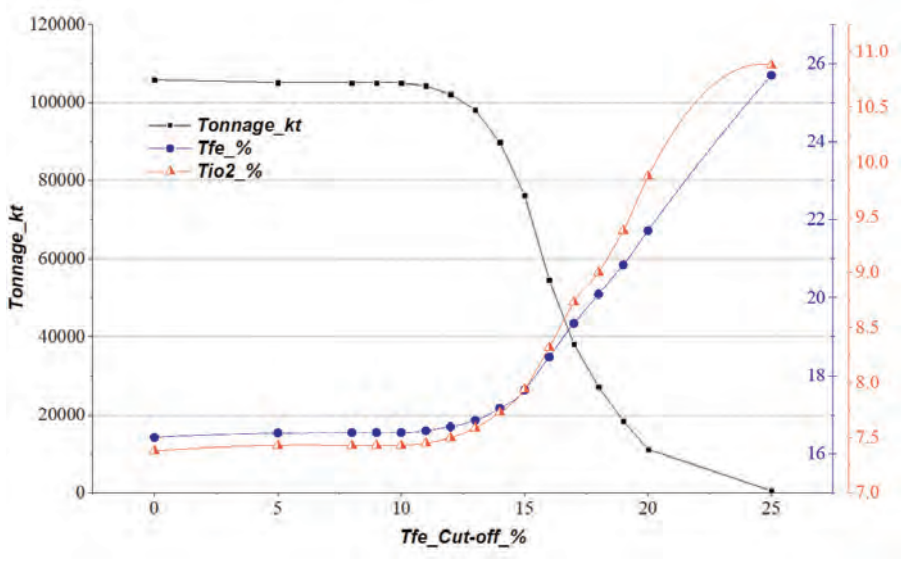
The block model was validated using a number of industry standard methods including visual and statistical methods.

(1) Visual examination of composites and block grades on plans and sections on-screen was exercised together with review of parameters including:

- Number of composites used for estimation;
- Number of holes used for estimation;
- Mean distance to the composites used;
- Number of passes used to estimate grade;
- Mean value for composites used.

(2) Grade-tonnage curve

Figure 7-8 Grade-Tonnage curve for Haibaodang Project



(3) BAW carried out a reasonableness test of the resource estimates. The average grade of the block model using IDW2 method was highly comparable to the average grade of assays and composites for each domain as shown in table below (Table 7-4). BAW considers that TFe grade of the block model using IDW2 method is more representative than the TFe grade of the composites since the IDW2 method can effectively reflect the spatial distribution of grades.

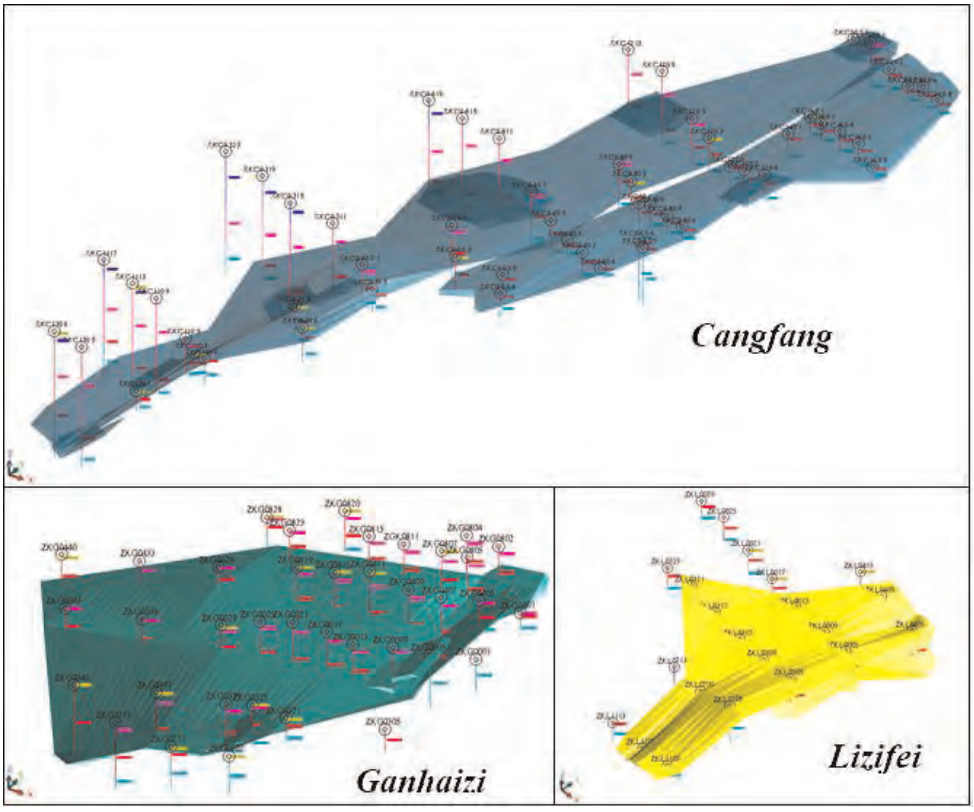
Table 7-4: Comparison of average grade of the block model using IDW2 method and average grade of assays and composites

Prospect/Domain	Data Type	TFe %
Cangfang	**Assays**	15.82
	Composite	15.86
	Block Model (IDW2)	15.65
Ganhaizi	**Assays**	18.32
	Composite	18.31
	Block Model (IDW2)	18.63
Lizifei	**Assays**	15.96
	Composite	15.94
	Block Model (IDW2)	15.86

Resource Classification

A 3D resource model was generated for the Haibaodang Project as shown in Figure 7-9 below. Considering the low grades of TFe and TiO_2 content, capital investment is expected to be significant (given relatively remote infrastructures), expired exploration license which is pending regulatory review of renewal of application, BAW anticipates that an absence of reasonable prospects for an eventual economic extraction is very likely and therefore, classified the mineral resource estimates for the Haibaodang Project as an Exploration Result.

Figure 7-9 3D resource model generated for the Haibaodang Project



7.3.3 Drillhole spacing and resource category classification

The relationship of drillhole spacing and resource category classification for the Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project are summarized in Table 7-5.

Table 7-5 Drillhole Spacing and Resource Category Classification for the Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project

Properties	Drillhole Spacing	Resource Category
Baicao Mine	50m × 50m	Measured
	100m × 200m	Indicated
	> 100m × 200m	Inferred
Xiushuihe Mine	50m × 50m	Measured
	100m × 100m	Indicated
	> 100m × 100m	Inferred
Yangqueqing Project	50m × 50m	Measured
	100m × 100m	Indicated
	> 100m × 100m	Inferred
Cizhuqing Project	100m × 100m	Indicated
	> 200m × 100m	Inferred
Haibaodang Project	100m × 100m	Exploration Results only
	200m × 200m	Exploration Results only

7.4 Mineral resources statement

Mineral Resources of the Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project were estimated as of 31 December 2018. The key assumptions used for the resource estimation are:

- The estimate of Mineral Resources may be materially affected by environmental, permitting, legal title, taxation, socio-political, marketing, or other relevant issues and therefore, Mineral Resources which are not defined as Ore Reserves may not have demonstrated economic viability.

- The quantity and grade of Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Resources and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Resources category.

- Mineral Resources are constrained to the mining license or exploration license held by CVT.

- Mineral Resources are estimated on an in-situ basis (i.e. as an in-situ tonnage and not adjusted for mining recovery).
- Mineral Resources are depleted by mined out tonnage.
- Mineral Resources are estimated based on the topographic survey data made available as of 31 December 2018.
- Totals may not add up due to rounding.

Table 7-6 Mineral Resources Statement for the Baicao Mine, Xiushuihe Mine, Xiushuihe Expansion, Cizhuqing Project and Yangqueqing Project as of 31 December 2018

Properties	Cut-off	JORC Mineral Resource Category	Tonnage	Grade			Contained Metal		
				TFe	TiO_2	V_2O_5	TFe	TiO_2	V_2O_5
	TFe%		*Mt*	*%*	*%*	*%*	*kt*	*kt*	*kt*
		Measured	16.09	23.37	10.73	0.20	3,759	1,726	32
		Indicated	21.76	23.42	10.02	0.21	5,097	2,180	45
Baicao Mine	15	M + I	37.85	23.40	10.32	0.21	8,856	3,906	78
		Inferred	9.51	23.00	10.98	0.24	2,187	1,044	22
		Total	47.36	23.32	10.45	0.21	11,043	4,950	100
		Measured	1.59	32.74	12.17	0.25	520	193	4
		Indicated	1.18	22.51	8.54	0.18	267	101	2
Xiushuihe Mine	15	M + I	2.77	28.37	10.62	0.22	787	294	6
		Inferred	–	–	–	–	–	–	–
		Total	2.77	28.37	10.62	0.22	787	294	6
		Measured	38.62	24.33	8.90	0.22	9,397	3,437	85
		Indicated	21.91	23.56	8.00	0.19	5,162	1,753	42
Xiushuihe Expansion	15	M + I	60.53	24.05	8.57	0.21	14,559	5,190	127
		Inferred	–	–	–	–	–	–	–
		Total	60.53	24.05	8.57	0.21	14,559	5,190	127
		Measured	–	–	–	–	–	–	–
		Indicated	2.01	27.32	11.71	0.23	549	235	5
Cizhuqing Project	8	M + I	2.01	27.32	11.71	0.23	549	235	5
		Inferred	23.56	20.90	8.74	0.17	4,924	2,059	40
		Total	25.57	21.40	8.97	0.18	5,473	2,294	45
		Measured	7.34	30.40	12.50	0.29	2,231	918	21
		Indicated	10.27	19.70	11.90	0.18	2,023	1,222	19
Yangqueqing Project	15	M + I	17.61	24.16	12.15	0.23	4,254	2,140	40
		Inferred	3.57	29.49	11.84	0.14	1,053	423	5
		Total	21.18	25.06	12.10	0.21	5,307	2,563	45

Considering the low grades of TFe and TiO_2 content, capital investment is expected to be significant (given relatively remote infrastructures), expired exploration license which is pending regulatory review of renewal of application, it is anticipated that there is absence of reasonable prospects for an eventual economic extraction is very likely and therefore, classified the mineral resource estimates for the Haibaodang Project as an Exploration Result.

The Exploration Results of the Haibaodang Project contain 105.6Mt of mineralized material at 16.54% TFe and 7.43% TiO_2 with contained metal of 17,374kt of TFe and 7,807kt of TiO_2.

8 ORE RESERVES ESTIMATION

8.1 Introduction

The initial JORC-compliant estimation of Mineral Resources and Ore Reserves for the Baicao Mine and Xiushuihe Mine were independently classified and prepared by Behre Dolbear in 2009 for the purpose of CVT's IPO public disclosure (Behre Dolbear Asia, 2009). Subsequently, the Ore Reserves of the Baicao Mine and Xiushuihe Mine have been continuously estimated by the same competent persons in accordance with the requirements set out by the JORC Code.

The classification, reporting and estimation of Ore Reserves for the Baicao Mine and Xiushuihe Mine presented in this CPR are also made in conformity with the requirements of the JORC Code 2012 which is conformable with the requirements for the natural resource companies listed on the HKEX.

8.2 Ore reserves definitions and classification

In accordance with the JORC Code 2012, the definitions of Ore Reserves and the classification of Ore Reserves are summarized as below.

- *An Ore Reserve is defined in the JORC Code as part of a Measured or Indicated Resource which could be mined and from which valuable or useful minerals could be recovered economically under conditions reasonably assumed at the time of reporting. Ore reserve includes dilution of materials and allow for mining losses which may occur based on engineering studies at Pre-Feasibility or Feasibility level as appropriate that include the application of Modifying Factors. Modifying Factors are considerations used to convert Mineral Resources to Ore Reserves, which include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.*

- *A "Probable Ore Reserve" is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.*

- *A "Proved Ore Reserve" is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.*

- *Under the JORC Code, Inferred Mineral Resources are deemed to be too poorly delineated to be transferred into an Ore Reserve category, and therefore no equivalent Possible Ore Reserve category is recognized or used.*

The general relationships between exploration results, mineral resources and ore reserves under the JORC Code are illustrated in Figure 7-1.

Generally, Ore Reserves are quoted as comprising part of the total Mineral Resources rather than the Mineral Resources being additional to the Ore Reserves quoted. In this CPR, all of the Ore Reserves are included within the Mineral Resources.

8.3 Methodology and parameters used in ore reserves estimation

8.3.1 Introduction

BAW's Ore Reserve estimation generally involves the consideration of the Mineral Resource estimation with its associated resource model and the "Modifying Factors" including mine planning, historic production data, reconciliation of resource estimation and production, processing, infrastructures, economic, marketing, legal, environmental, social and governmental factors.

8.3.2 Resource model

The Mineral Resource estimation for the Baicao Mine and Xiushuihe Mine was originally carried out by the Northwestern Sichuan Team of Sichuan Provincial Geology and Mineral Exploration and Development Bureau, an independent, licensed, government- owned exploration entity in China, in 2008, using the polygonal estimation method, which is the national practice in the PRC. Such estimation work was subsequently reviewed and accepted by Behre Dolbear to classify and prepare the initial JORC-compliant Mineral Resources estimation for the Baicao Mine and Xiushuihe Mine for the purpose of IPO public disclosure in 2009 (Behre Dolbear Asia, 2009). In addition, the estimation work became the foundation for subsequent mine planning and ultimate pit design discussed in Section 8.3.3.

Afterwards, Behre Dolbear was further engaged to continue to update the Mineral Resources on an annual basis throughout the period from 2010 to 2017.

BAW understands that there is no 3D resource model that has been attempted since the original resource estimation was completed in 2008 despite of the fact that an advanced computerized pit optimization for the ultimate pit design should further improve the economics of the project was stated in the previous technical reports.

8.3.3 Mine planning and open-pit design

Subsequent to the resource estimation by the Northwestern Sichuan Geological Team, CVT engaged Sichuan Provincial Metallurgical Engineering and Research Institute (the "Sichuan Institute") to conduct a mine planning and ultimate open-pit design for the defined resources, which were reviewed and accepted by Behre Dolbear to classify and prepare the initial JORC-compliant Mineral Resources and Ore Reserves estimation for the Baicao Mine and Xiushuihe Mine for the purpose of IPO public disclosure in 2009 (Behre Dolbear Asia, 2009).

Pursuant to the Behre Dolbear technical report 2009, the technical parameters used by the Sichuan Institute for the ultimate open pit design are summarized in Table 8-1. The higher-grade portion (TFe >= 20%) of the Measured and Indicated mineral resources within the designed final pits for the Baicao Mine and the Xiushuihe Mine is used to define the Proved and Probable Ore Reserves for the two deposits. The lower-grade mineralization (TFe from 15% to 20%) was considered sub-economic and was treated as waste during pit design and long-term production scheduling.

Table 8-1 Technical Parameters Used for Ultimate Open Pit Design of the Baicao Mine and Xiushuihe Mine

Parameters	**Baicao Mine**	**Xiushuihe Mine**
Maximum Economic Strip Ratio (waste m^3/ore m^3)*(1)*	6.0	N/A
Dilution Factor *(%)(2)*	6.4	6.4
Mining Recovery Factor *(%)*	91.0	94.0
Bench Height *(m)*	12	12
Crest Elevation of the Top Pit Bench *(m)*	2,524	2,534
Crest Elevation of the Top Pit Bench *(m)*	2,206	2,306
Number of Benches	22	19
Ultimate Pit Surface Outline Length *(m)*	2,100 (north-south)	800 (north-south)
Ultimate Pit Surface Outline Width *(m)*	440 (east-west)	400 (east-west)
Bench Face Slope Angle *(degree)*	70	67
Maximum Overall Pit Slope Angle *(degree)*	26-44	19-46
One-way/Two-way Minimum Haul Road Width *(m)*	4.5/8.0	4.5/8.0
Maximum Haul Road Slope *(%)*	7.5	7.5
Minimum Pit Working Face Width *(m)*	35	35

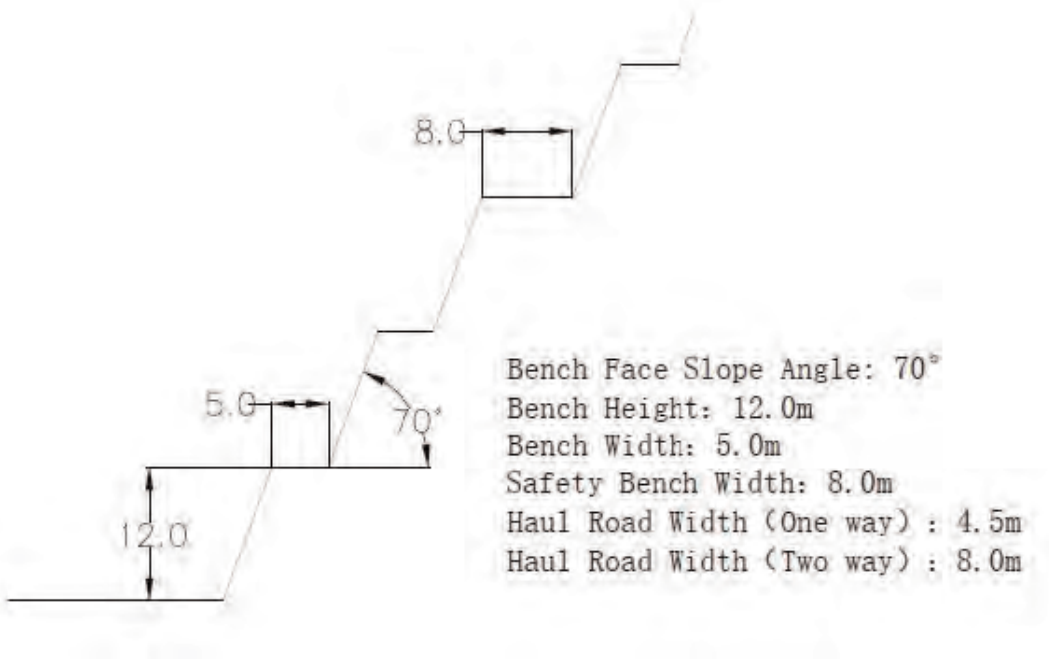
Notes:

(1) The Baicao open pit is designed based on a maximum economic strip ratio of 6 as the deposit dips to the west at a moderate angle; The Xiushuihe open pit was designed without using a maximum economic strip ratio as the deposit is basin-shaped with limited overburden.

(2) Western mining dilution definition is used in this table and the diluting waste is assumed to have zero metal grades.

The schematic illustration of the open-pit design parameters for the Baicao Mine are shown in Figure 8.1 below. The open-pit design parameters for the Baicao Mine and Xiushuihe Mine are very similar except that the bench face slope angle of the Baicao Mine is 70° whereas that of the Xiushuihe Mine is 67°.

Figure 8-1 Schematic illustration of the open-pit design parameters for the Baicao Mine



Subsequent to the initial JORC-compliant Ore Reserve estimation, Behre Dolbear was further engaged to continue to update the Mineral Resources and Ore Reserves on an annual basis throughout the period from 2010 to 2017.

BAW understands that there is no 3D resource model that has been attempted since the original resource estimation was completed in 2008. As such, BAW is not able to review the details of the historic movement of the Mineral Resources and Ore Reserves that were depleted by the mining operation of the Baicao Mine and Xiushuihe Mine.

8.3.4 Production data

As discussed in Section 7.3 and 8.3.2, CVT engaged Behre Dolbear to update the Mineral Resources and Ore Reserves on an annual basis throughout the period from 2010 to 2017. As of 1 January 2018, the Ore Reserves estimation for the Baicao Mine and Xiushuihe Mine are respectively 10.63 Mt of ore and 48.41 Mt of ore.

BAW reviewed the January to December 2018 production data for the Baicao Mine and Xiushuihe Mine provided by the CVT's management. During the period from 1 January to 31 December 2018, a total of 1.50 Mt of ore and 2.77 Mt of ore was mined and extracted from the Baicao Mine and Xiushuihe Mine respectively.

Based on this review, BAW estimated the Ore Reserve for the Baicao Mine and Xiushuihe Mine as of 31 December 2018 after the mining depletion throughout 2018.

8.4 Ore reserves statement

The key assumptions used in our Ore Reserves estimation include:

- All of the Ore Reserves are included within the Mineral Resources.
- Reserves do not include any Inferred Resources which has been treated as waste (i.e. its mining costs have been covered but no revenue has been assumed for the Inferred Resources).
- Mining method selected is a truck-and-shovel open pit terrace mining operation.
- The ultimate pit design and its associated parameters are used.
- Cut-off grade for TFe is assumed to be 15%.
- A mining recovery factor of 91% and a mining dilution factor of 6.4% are applied in the Ore Reserve estimates for the Baicao Mine.
- A mining recovery factor of 94% and a mining dilution factor of 6.4% are applied in the Ore Reserve estimates for the Xiushuihe Mine.
- Reserves are estimated to account for ore and waste that was mined as of 31 December 2018.
- Totals may not add up due to rounding.

Table 8-2 Ore Reserves Statement for the Baicao Mine and Xiushuihe Mine as of 31 December 2018

Properties	JORC Ore Reserve Category	Tonnage	Grade			Contained Metal		
			TFe	TiO_2	V_2O_5	TFe	TiO_2	V_2O_5
		(Mt)	*(%)*	*(%)*	*(%)*	*(kt)*	*(kt)*	*(kt)*
Baicao Mine	Proved	2.27	20.76	10.70	0.23	472	243	5
	Probable	6.86	20.98	10.32	0.22	1,440	708	15
	Total	9.13	20.93	10.41	0.22	1,911	951	21
Xiushuihe Mine	Proved	28.10	24.19	9.32	0.22	6,797	2,618	62
	Probable	17.54	23.98	8.61	0.20	4,205	1,509	35
	Total	45.64	24.11	9.04	0.21	11,002	4,127	97
Combined	Proved	30.37	23.93	9.42	0.22	7,269	2,861	67
	Probable	24.40	23.13	9.09	0.21	5,645	2,217	51
	Total	54.77	23.58	9.27	0.21	12,913	5,078	118

9 MINING

9.1 Introduction

The Baicao Mine and the Xiushuihe Mine are both conventional open pit mining operations as the orebodies lie at or close to the surface. Following the resource estimation by the Northwestern Sichuan Geological Team in 2007, CVT engaged the Sichuan Institute in 2008 to develop a long-term mine planning, production schedule and ultimate open-pit design for the defined resources of these two mines. CVT has contracted a mining contractor to carry out the mining and excavation work based on those long-term mine planning and production schedule.

9.1.1 Open pit mining

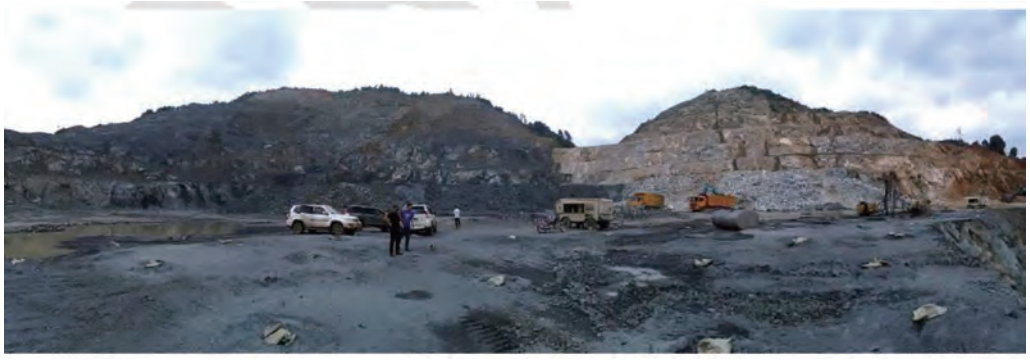
Mining is planned on classical benches, which is typically 12 m high, with a 65-degree bench slope angle and a 43-degree to 46-degree overall slope angle. This will enable grade control of the mineralised zones to be completed. A typical mining cycle would involve:

- Drilling of a blast pattern;
- Sampling of drill hole cuttings for grade control;
- Blasting to fragment rock;
- Marking out mineralised zones based on grade control results; and
- Digging, loading and hauling mineralised material and waste rock to the surface.

Typical open pit of the Baicao Mine and Xiushuihe Mines are shown in Figure 9-1 and 9-2.

Figure 9-1 Open pit operation at the Baicao Mine

Figure 9-2 Open pit operation at the Xiushuihe Mine



9.1.2 Haulage

The mining contractors engaged by CVT is responsible for all ore haulage from the pits. Because of the site topography, the ore is planned to be hauled from the pits to the processing facilities located about 2km away, in order to minimise haulage costs. The mining trucks can carry around 30t to 40t of material in each run. Waste Rock Dumps ("WRD") are planned for each open pit.

9.2 Historic and forecast production

The historic production of the Baicao Mine and Xiushuihe Mine is summarized in Table 9-1 below. The annual production of the Baicao Mine and Xiushuihe Mine generally varies among years in response to the varying iron ore prices regionally and thus CVT's management decision of production to the market. The TFe grade presented here represents an average number because of the absence of a 3D resource model.

Table 9-1 Historic Production of the Baicao Mine and Xiushuihe Mine

Mine		Unit	2013	2014	2015	2016	2017	2018
Baicao	Ore	Mt	3.97	1.57	0.17	1.15	1.56	1.50
	TFe Grade	%	21.1	21.1	21.1	21.1	21.1	22.02
	Contained TFe	Mt	0.84	0.33	0.04	0.24	0.33	0.33
Xiushuihe	Ore	Mt	3.25	3.21	1.45	2.77	3.75	2.77
	TFe Grade	%	27.7	27.7	27.7	27.7	27.7	26.67
	Contained TFe	Mt	0.9	0.89	0.4	0.77	1.04	0.74

Source: the historic production data from 2013 to 2018 is provided by the CVT's management.

9.3 Life-of-mine analysis

With reference to the Ore Reserve estimates as of 1 January 2018 and 31 December 2018, BAW has updated the Life-of-Mine ("LOM") for the Baicao Mine and Xiushuihe Mine, using the CVT's management latest annual production guidance as shown in Table 9-2. The Ore Reserves of the Baicao Mine and Xiushuihe Mine are sufficient to support production at the current production level for 5.4 years and 15.2 years respectively.

Table 9-2 Life-of-Mine Analysis for the Baicao Mine and Xiushuihe Mine

Mine	CVT's Management Annual Production Guidance *(Mt)*	Ore Reserves as of 31 December 2018 *(Mt)*	Life-of-Mine *(Year)*
Baicao	1.7	9.13	5.4
Xiushuihe	3.0	45.64	15.2

As the Baicao Mine is currently operating at a reduced capacity lower than the full planned capacity, the actual LOM of the Baicao Mine is possibly longer than the LOM estimated above.

BAW is of the opinion that a detailed technical study together with an optimized operation management practice should be carried out to achieve the full planned production, using an advanced computerized software for 3D modelling, pit optimization and production scheduling.

10 METALLURGICAL PROCESSING

10.1 Introduction

CVT is currently operating two processing plants for the ore from the Baicao and Xishuihe Mines. The processing plant at the Baicao Mine is called Baicao processing plant and was constructed in 2008 and upgraded subsequently. The processing plant at the Xiushuihe Mine is called Xiushuihe processing plant and was constructed in 1999 and upgraded in 2011. As of to date, the processing facilities have a combined throughput capacity of approximately 4.2Mtpa.

The separation method for both the processing plant is similar, involving wet, low-intensity magnetic separation to recover iron in vanadium-bearing titanomagnetite and wet, high-intensity magnetic separation to recover titanium in ilmenite. These concentrators produce two types of concentrates: an iron concentrate, assaying approximately 54% to 55% TFe and recovering approximately 57% to 59% of the TFe in ore and a medium-grade titanium concentrate, assaying 27% to 40% TiO_2 and extracting approximately 15% to 24% of the metal from the ore.

10.2 Processing and flowsheet

The major economic minerals of the ore are titano-magnetite and ilmenite. Titano-magnetite is strongly magnetic while ilmenite is weakly but sufficiently magnetic. They are recovered by simple inexpensive and environmentally friendly magnetic separation methods. Titano-magnetite is readily recoverable by wet, low-intensity magnetic separation drums. Ilmenite requires wet, high-intensity magnetic separation, an efficient approach as well. CVT has been using this processing method since its IPO on Hong Kong in 2009.

The run-of-mine ("ROM") is initially crushed in three stages. The primary and secondary stages are open-circuit whereas the tertiary crushing is in a closed circuit with a 20-mm screen. The crushed ore is then ground in two stages to an appropriate liberation size to allow for mineral grain separation and optimum concentrate grades and recoveries, both in closed circuit with classifiers. In the primary grinding/classification stage, the liberated titano-magnetite particles are magnetically separated from the ground ore. The tail from this primary titano-magnetite separation is subsequently reground and sent for additional iron recovery, through the use of low-intensity magnetic separation. The tail from this stage feeds high-intensity magnetic separators where ilmenite is recovered. The titanium concentrates are then subjected to sulfide flotation that removes impurities and thus upgrades the concentrates. Both iron and titanium concentrates are dewatered by thickening and filtration. The simplified processing flowsheet is presented in Figure 10-1. Selected processing facilities are shown in Figure 10-2 to 10-8.

Figure 10-1 Processing Flowsheet at CVT

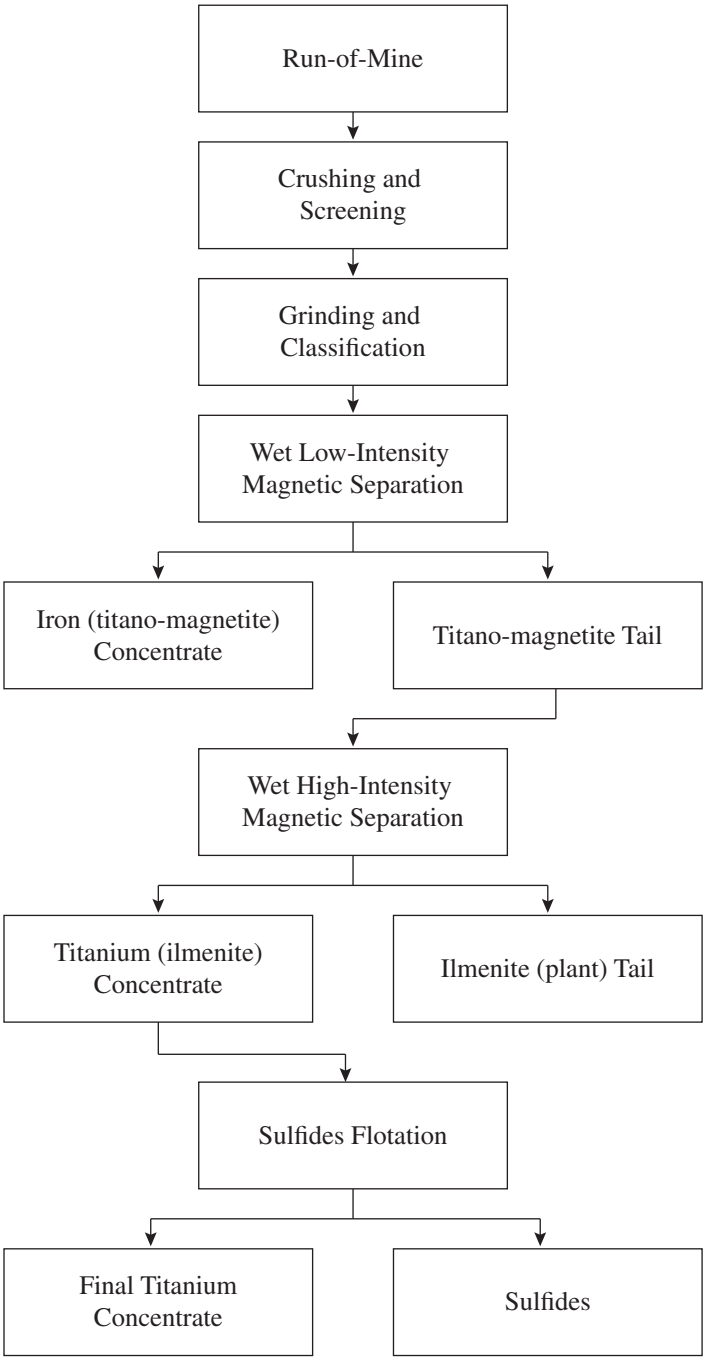


Figure 10-2 Primary crusher of the Baicao Processing Plant

Figure 10-3 Secondary crusher of the Baicao Processing Plant

Figure 10-4 Screening facilities of the Baicao Processing Plant

Figure 10-5 Ball mills of the Baicao Processing Plant

Figure 10-6 Magnetic separation circuit of the Baicao Processing Plant

Figure 10-7 Flotation circuit of the Baicao Processing Plant

Figure 10-8 Tailings thickener of the Baicao Processing Plant

10.3 Recovery and production

10.3.1 Baicao processing plant

The iron recovery ranges from approximately 43% to 46%, compared to the 58.4% iron recovery reported in CVT's IPO prospectus in 2009. The decline of the iron recovery is probably attributed to the decline of the ROM TFe grade and an increased portion of oxidized ore. The titanium recovery ranges from approximately 16% to 22%, which is in line with the 16%-18% titanium recovery reported in CVT's IPO prospectus in 2009.

In 2018, the Baicao Processing Plant produced a total of 327,400 tons (dry-basis) of iron concentrates and 81,900 tons (dry-basis) of titanium concentrates. The total tonnage of processed ROM ore in 2018 was 2.26 million tons. In general, the performance of the Baicao Processing Plant is comparable to the historic records. The key metrics of the Baicao Processing Plant is summarized in Table 10-1.

Table 10-1 Key Metrics of the Baicao Processing Plant

Key Metrics	Unit	2017	As of June 2018	2018
TFe% in Feed	%	21.08	21.26	21.0
TFe% in Iron Concentrates	%	55.13	54.86	54.94
Produced Iron Concentrates wet-basis	'0,000 t	32.85	15.91	35.6
Moisture in Iron Concentrates	%	8.45	8.55	8.03
Produced Iron Concentrates dry-basis	'0,000 t	30.07	14.55	32.74
Iron Separation Utilization Rate	%	79.98	88.23	89.59
Concentration Ratio		5.59	5.94	6.02
Processed ROM ore dry-basis	'0,000 t	167.40	86.43	226.91
TiO_2% in Titanium Concentrates	%	46.11	46.79	46.52
Titanium Separation Utilization Rate	%	82.56	89.39	90.89
Produced Titanium Concentrates	'0,000 t	5.18	3.65	8.19
Iron Recovery	%	46.79	43.44	37.75
TiO_2% in Feed	%	8.56	8.56	8.96
Titanium (TiO_2) Recovery	%	16.60	22.51	18.77

10.3.2 Xiushuihe Processing Plant

The Xiushuhe Processing Plant comprised of two workshops, namely, No 1 workshop and Hailong workshop. The Xiushuihe ore is relatively easy to process and is expected to yield satisfactory results.

The iron recovery is approximately 53.55% to 54.55%, compared to the 54% to 57% iron recovery reported in CVT's IPO prospectus in 2009. The decline of the iron recovery is probably attributed to the decline of the ROM TFe grade and an increased portion of oxidized ore.

In 2018, the Xiushuihe Processing Plant produced a total of 817,400 tons (dry-basis) of iron concentrates and 21,100 tons (dry-basis) of titanium concentrates. There were no titanium concentrates produced in 2017. The total tonnage of processed ROM ore in 2018 was 2.83 million tons. In general, the performance of the Xiushuihe Processing Plant is comparable to the historic records. The key metrics of the Xiushuihe Processing Plant is summarized in Table 10-2 and Table 10-3.

Table 10-2 Key Metrics of the No 1 Workshop of the Xiushuihe Processing Plant

Key Metrics	Unit	2017	As of June 2018	2018
TFe% in Feed	%	27.68	28.04	26.83
TFe% in Iron Concentrates	%	53.23	54.39	54.39
Produced Iron Concentrates wet-basis	'0,000 t	54.90	28.69	58.09
Moisture in Iron Concentrates	%	10.00	10.00	9.36
Produced Iron Concentrates dry-basis	'0,000 t	49.41	25.82	52.65
Iron Separation Utilization Rate	%	87.02	95.54	96.47
Concentration Ratio		3.53	3.09	3.39
Processed ROM ore dry-basis	'0,000 t	174.18	79.77	174.06
TiO_2% in Titanium Concentrates	%	0.00	0.00	46.02
Titanium Separation Utilization Rate	%	0.00	0.00	98.06
Produced Titanium Concentrates	'0,000 t	0.00	0.00	2.11
Iron Recovery	%	54.55	62.79	61.32
TiO_2% in Feed	%	8.56	8.56	8.55
Titanium (TiO_2) Recovery	%	0.00	0.00	15.55

Table 10-3 Key Metrics of the Hailong Workshop of the Xiushuihe Processing Plant

Key Metrics	Unit	2017	As of June 2018	2018
TFe% in Feed	%	27.68	28.04	27.33
TFe% in Iron Concentrates	%	53.26	54.36	54.36
Produced Iron Concentrates wet-basis	'0,000 t	30.66	17.72	32.1
Moisture in Iron Concentrates	%	10.00	10.00	9.36
Produced Iron Concentrates dry-basis	'0,000 t	27.6	15.95	29.09
Iron Separation Utilization Rate	%	86.62	97.70	97.62
Concentration Ratio		3.59	3.69	3.42
Processed ROM ore dry-basis	'0,000 t	99.17	58.88	108.8
TiO_2% in Titanium Concentrates	%	0.00	0.00	0.00
Titanium Separation Utilization Rate	%	0.00	0.00	0.00
Produced Titanium Concentrates	'0,000 t	0.00	0.00	0.00
Iron Recovery	%	53.55	52.52	53.18
TiO_2% in Feed	%	8.56	8.56	8.55
Titanium (TiO_2) Recovery	%	0.00	0.00	0.00

10.4 Plant and Equipment

The processing equipment can be generally divided into three main sections:

- crushing and screening with ore stockpiles;
- grinding, classification and concentration with dewatering and iron concentrate stockpiles; and
- titanium magnetic concentration – flotation with dewatering and titanium concentrate stockpiles.

Crushing and Screening

The crushing equipment includes PEF 1200 × 1500 jaw crusher, CS430EC, CH660F, H4800 cone crushers with 2YK2460 vibrating screen.

Grinding, Classification and Concentration

Wet grinding ball mills are MQG2740 and MQG2739 which, with their respective spiral classifiers, provide ground ore to wet, low-intensity magnetic separation, i.e., the titano-magnetite concentration. These concentrates are separated after each primary and secondary grinding stage. The wet, low-intensity magnetic separators are permanent drums including CT1024, CT1224, CT1015 and CT1221. The produced iron concentrates are filtered in a GP-60 disc filter.

Titanium Magnetic Concentration

The tails from the titano-magnetite separation are the feed to wet, high-intensity magnetic separators CTB-1224, CTB1024 and CTB1015 that recover ilmenite. After sulfide flotation upgrading the concentrates are thickened in NXZ 16-m thickener and filtered in a 45-m^2 ceramic filter. The tails are thickened in GZN-53 thickener, whose overflow is the plant recycles water and the underflow is the final plant tail sent to TSF.

11 PERMITTING, ENVIRONMENTAL, HEALTH AND SOCIAL IMPACTS

11.1 Operational licenses and permits

11.1.1 Business licenses

Details of the business licenses for the Baicao Mine, Xiushuihe Mine and Haibaodang Project are presented in Table 11-1 below.

Table 11-1 Details of the Business Licenses held by CVT

Property	Business License No	Issue Date	Expiry Date	Permitted Activities
Baicao Mine	91510000709116588K	Sep 2006	Sep 2036	Iron ore mining and processing
Xiushuihe Mine	91513425665388070G	Jun 2007	Dec 2027	Iron ore mining and processing
Haibaodang Project	915104006899429028	Jul 2009	Jul 2059	Sales of ore, construction materials, metallic materials

11.1.2 Mining licenses

Details of the mining licenses for the Baicao Mine, Xiushuihe Mine and Cizhuqing Project are presented in Table 11-2 below.

Table 11-2 Details of the Mining Licenses held by CVT

Property	Mining License No	Area (km^2)	Issue Date	Expiry Date	Mining Method
Baicao Mine	C5100002009092120035281	1.8818	Dec 2010	Dec 2027	Open-pit or Underground
Xiushuihe Mine	C5100002010122120093719	0.5208	Dec 2010	Jan 2028	Open-pit or Underground
Cizhuqing Project	C5100002014012210136436	1.279	Jan 2014	Jan 2031	Open-pit

11.1.3 Exploration licenses

Details of the exploration licenses for the Xiushuihe Expansion, Yangqueqing Project and Haibaodang Project are presented in Table 11-3 below.

Table 11-3 Details of the Exploration Licenses held by CVT

Property	Exploration License No	Area (km^2)	Issue Date	Expiry Date
Xiushuihe Expansion	T51520090702031514	1.73	Jun 2017	Jun 2019
Haibaodang Project	T51120080402005289	26.2	Jul 2015	Jul 2017

BAW is aware that the exploration license of the Haibaodang Project has been expired for more than a year as of the reporting date of this CPR. Given that CVT has not been approved with mining license to conduct mining activities in the area as of to date, it remains uncertain whether CVT is qualified to maintain its right to implement further exploration programs in the property.

11.1.4 Safety production permits

Details of the Safety Production Permit are presented in Table 11-4 below.

Table 11-4 Details of the Safety Production Permits held by CVT

Property	Safety Production Permit No	Issue Date	Expiry Date
Baicao Mine	[2018]5702	Jun 2018	Jun 2021
Tailings Pond for Baicao Mine	[2018]6600	Jun 2018	Jun 2021
Xiushuihe Mine	[2018]5703	Jul 2018	Jul 2021
Tailings Pond for Xiushuihe Mine	[2015]7532	Nov 2015	Nov 2018

BAW understands that the safety production permit for the tailing pond at the Xiushuihe Mine will expire very soon by November 2018 and CVT will renew the permit in a timely manner to ensure an undisturbed production.

11.1.5 Water use permits

Details of the Water Use Permits held by CVT are presented in Table 11-5 below.

Table 11-5 Details of the Water Use Permits held by CVT

Property	Water Use Permit No	Issue Date	Expiry Date	Water Supply Source	Water Use Allocation (m^3)
Baicao Mine	[2017]00051	Jan 2017	Dec 2019	Surface	900,000
Xiushuihe Mine	[2017]00024	Jan 2017	Dec 2019	Surface	80,000

11.1.6 Temporary forestry land use permits

Details of the Temporary Forestry Land Use Permits held by CVT are presented in Table 11-6 below.

Table 11-6 Details of the Temporary Forestry Land Use Permits held by CVT

Property	Land Use Permit No	Issue Date	Expiry Date	Land Use	Area (ha)
Baicao Mine	[2009]065	Jan 2009	No specification	Exploration, mining and construction of mining facilities	14.691
Baicao Mine	[2010]0042	Feb 2010	No specification	Construction of dumping site	26.3698
Xiushuihe Mine	[2007]349	Dec 2017	No specification	Exploration, mining and construction of mining facilities	26.42

11.1.7 Site discharge permits

Details of the Site Discharge Permits held by CVT are presented in Table 11-7 below.

Table 11-7 Details of the Site Discharge Permits held by CVT

Property	Site Discharge Permit No	Issue Date	Expiry Date	Pollutant Discharge Type
Baicao Mine	W00416	Mar 2015	Mar 2020	Waste water and solid waste
Xiushuihe Mine	W00372	Mar 2015	Mar 2020	Waste water and solid waste

11.2 Environmental management

11.2.1 Environmental permits

The Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project have acquired the Environmental Impact Assessment ("EIA") approved and subsequently obtained environmental permits from the Huili County Environment Protection Bureau ("EPB"), for mining and processing activities in the properties.

The Baicao Mine Environment Permit and Xiushuihe Mine Environment Permit have been granted since 2010. The Cizhuqing Environment Permit has been granted in 2011 whereas the Yangqueqing Environment Permit has been granted in 2007. These permits are extendable at the expiration of their period of validity.

11.2.2 Tailings storage facilities

The Tailings Storage Facilities ("TSF") have been constructed in a valley adjacent to the concentrator site and will provide storage of tailings over a certain period, after which one of several available sites nearby will be utilized for ongoing storage. Tailings are gravity fed to the TSF from the processing plant at a density of 50% solids by weight, and the supernatant water, together with any collected rainwater, returned to the processing plant for recycling.

Since completion, as discussed in Section 11.1.4 Safety Production Permits, the TSF for the Baicao and Xiushuihe Mines have satisfied the requirements by the relevant government agencies and have been approved with safety production permits for operation.

11.2.3 Water and soil conservation

Before the commencement of production and throughout the period of CVT's ownership and management, CVT prepared proposal of water and soil conservation regularly and implemented the proposed engineering work accordingly. The engineering work completed for water and soil conservation at the Baicao and Xiushuihe Mines have satisfied the requirements by the relevant government agencies and have been approved consequently.

11.2.4 Rehabilitation

A rehabilitation and re-planting program for disturbed areas and for forest replacement is ongoing. TSFs and waste rock dumps are to be properly rehabilitated upon mine closure.

11.3 Occupational health and safety

CVT implements corporate safety policy and conducts its operations in accordance with the PRC's laws and regulations covering occupational health and safety ("OH&S") in mining, production, blasting and explosives handling, mineral processing, TSF design, environmental noise, emergency response, construction, water and soil conservation, fire protection and fire extinguishment, sanitary provision, power provision, labor and supervision. Regular update reports are submitted to the County Safety Bureau, who also conducts random on-site inspections, as required by the regulations.

CVT's corporate policy requires the contractors to carry out the work in compliance with the PRC's laws and regulations, in particular, safety standards. CVT holds current permits for the safety of the TSFs while safety permits are the responsibility of the mining contractor.

11.4 Social aspects

The Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project are located in the southern region of Sichuan Province of the PRC. The Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project are located in Huili County, as much as 30km northwest to west to the Township of Huili County. The Haibaodang Project is located in the southwestern part of Panzhihua City with a linear distance of around 16km. The general surrounding land comprises mainly forest and farmland.

The main administrative body for the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project is the government of Huili County whereas that for the Haibaodang Project is the government of Panzhihua City. BAW has not sighted any historical or current non-compliance notices issued by the relevant government agencies in relation to the development and operation of the mines.

12 ECONOMIC ANALYSIS

12.1 Introduction

Considering the economic viability of the reserve estimated in this CPR resulted from the latest mine plan and production schedule, BAW has performed an economic analysis for the Baicao and Xiushuhe Mines to assess the economic viability with respect to the Ore Reserves estimated throughout the life-of-mine ("LOM").

Determination of the economic viability involves the sum of discounted annual free cash flow projected from the start year till the end of the LOM. The revenue is based on the production of a vanadium-bearing iron concentrates and high-grade titanium concentrates. The operating costs are based on the actual production records. The estimates of sustaining capital expenditures have been developed specifically for the operation. The economic analysis uses the Probable and Proven Ore Reserves only as described in the section of Mineral Reserve Estimation of this CPR.

The economic analysis presented here is on a 100%-equity basis that shows the basic economics of the projects and do no incorporate financing items such as interest paid and loan principal paid back. The analysis also does not incorporate any losses carried forward for tax purposes and any refund of valued-added taxes previously or currently paid.

It should be emphasized that the results of the economic analysis represent forward-looking information that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here. Forward-looking statements in this section include statements with respect to the future price of metals, the timing and amount of estimated future production, costs of production, capital expenditures, results of the permitting process, currency exchange rate fluctuations, requirements for additional capital, government regulation of mining operations and taxation, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage.

Additional risk may derive from actual results of changes in parameters as plans continue to be refined, possible variations in ore reserves, grade or recovery rates, failure of processing and mining equipment, accidents, labour disputes and other risks of the mining industry, and potential delays in obtaining additional governmental approvals.

12.2 Revenue

Annual revenue is determined by applying estimated metal prices to the estimated annual payable metal for each operating year. Metal prices have been applied to all LOM production without hedging. The revenue is the gross value of payable metals sold before treatment factors and transportation charges.

CVT has provided BAW the sales contracts of vanadium-bearing iron concentrates dated May 2018 and July 2018. The unit selling price of the vanadium-bearing iron concentrates ranges from RMB 286/t to RMB 290/t on dry-basis and tax inclusive, which translates into RMB 192/t to 195/t on wet-basis and tax exclusive. In addition, CVT has provided BAW one of the processing contracts of the high-grade titanium concentrates dated March 2017 which has been effective till August 2018. The unit selling price of high-grade titanium concentrates is RMB 760/t on dry-basis and tax inclusive which translates into RMB 598/t on wet-basis and tax exclusive.

The metal prices which are adjusted by the CVT's management based on the executed contracts of 2018 and their forecasted sales contracts are used in the economic analysis to determine the economic viability of the Ore Reserves estimated throughout the LOM (Table 12-1).

Table 12-1 Actual and Forecasted Metal Prices for the Baicao Mine of the CVT's Operation

Finished Products	**2016 Prices** *(RMB/t)*	**2017 Prices** *(RMB/t)*	**2018 Prices** *(RMB/t)*	**2019 Prices** *(RMB/t)*	**2020 Prices** *(RMB/t)*
ROM Ore	15	25	25	25	25
Vanadium-Bearing Iron Concentrates (wet basis)	272	270	208	212	220
High-Grade Titanium Concentrates (wet basis)	598	575	599	629	648

Table 12-2 Actual and Forecasted Metal Prices for the Xiushuihe Mine of the CVT's Operation

Finished Products	2016 Prices *(RMB/t)*	2017 Prices *(RMB/t)*	2018 Prices *(RMB/t)*	2019 Prices *(RMB/t)*	2020 Prices *(RMB/t)*
ROM Ore	15	20	21	21	21
Vanadium-Bearing Iron Concentrates (wet basis)	278	272	227	232	241

12.3 Capital expenditure

BAW is given to understand that CVT does not have any projection of further capital expenditure ("CAPEX") for mine development, equipment and construction at the Baicao and Xiushuihe Mines. However, CVT's management has budgeted additional capital cost for sustaining capital purpose and environmental issues, which is reasonable and conformable with the industry practice.

The projected CAPEX estimated by CVT's management after BAW's adjustment for the Baicao Mine are summarized in Table 12-3 for the period from 2018 (Jul to Dec) to 2023.

Table 12-3 Projected CAPEX for the Baicao Mine

CAPEX	**2019 – 2023** *(RMB ¥)*
Environmental Works	1,333,000
Rehabilitation and Closure	13,736,000
Green Mining	4,500,000
Geotechnical Studies and Pit-Slope Maintenance	500,000
Sustaining Capital	825,000
Total	**20,894,000**

The projected CAPEX estimated by the CVT's management after BAW's adjustment for the Xiushuihe Mine are summarized in Table 12-4 for the period from 2019 to 2031.

Table 12-4 Projected CAPEX for the Xiushuihe Mine

CAPEX	2019 – 2031 *(RMB ¥)*
Environment Works	5,800,000
Mining Right	122,734,000
Forestry Compensation	10,000,000
Rehabilitation and Closure	14,800,000
Green Mining	2,800,000
Geotechnical Studies and Pit-Slope Maintenance	400,000
Tailings Storage Facility	29,000,000
Sustaining Capital	72,501,000
Total	**258,035,000**

12.4 Operating expenditure

The operating cash costs generally include mining costs, processing costs, G&A costs, selling costs, environmental protection costs, taxes, resource compensation levy, interests on loans and other cash cost items. The total production costs comprise the operating cash costs, depreciation/amortization costs and other non-cash cost items. These costs are expressed in RMB.

Based on the information provided by the CVT's management, the historic and forecasted mining costs for the Baicao Mine for the period from 2016 to 2020 are summarised in Table 12-5 below.

Table 12-5 Actual and Forecasted OPEX for the Baicao Mine

OPEX Items	Unit	2016	2017	2018	2019	2020
Unit mining cost	RMB/t ore	37.9	29.1	29.8	29.8	29.8
Unit processing cost of vanadium-bearing iron concentrates	RMB/t concentrates	128.9	149.1	154.2	154.2	154.2
Unit processing cost of high-grade titanium concentrates	RMB/t concentrates	353.0	366.0	417.5	417.5	417.5
Business surcharge	RMB/t concentrates	0.4	1.4	3.8	2.2	2.2
Distribution & selling expense	RMB/t concentrates	29.8	35.6	53.4	54.1	55.0
Depreciation, depletion and amortization (DD&A)	RMB/t concentrates	91.7	40.9	58.1	53.6	49.5
General & Admin (G&A)	RMB/t concentrates	53.8	29.5	29.8	27.5	25.4

Based on the information provided by the CVT's management, the historic and forecasted mining costs for the Xiushuihe Mine for the period from 2016 to 2020 are summarised in Table 12-5 below.

Table 12-6 Actual and Forecasted OPEX for the Xiushuihe Mine

OPEX Items	Unit	2016	2017	2018	2019	2020
Unit mining cost	RMB/t ore	20.7	17.1	16.4	16.4	16.4
Unit processing cost of vanadium-bearing iron concentrates	RMB/t concentrates	133.2	143.7	161.3	161.5	161.5
Distribution & selling expense	RMB/t concentrates	20.8	27.8	37.3	42.9	44.5
Depreciation, depletion and amortization (DD&A)	RMB/t concentrates	43.8	28.5	18.6	17.8	16.9
General & Admin (G&A)	RMB/t concentrates	13.1	12.1	9.8	9.4	8.9

12.5 Taxation

Since 2014, the Tax Bureau of Huili County, under the regional policy of the "Western Development Strategy", has approved a favourable tax rate of 15% for the Baicao Mine and Xiushuihe Mine which are the subsidiaries of the foreign-funded enterprise recognized by Sichuan Provincial Department of Commerce ("SPDC"). The Baicao Mine and Xiushuihe Mine enjoy the favourable tax rate of 15% from now till 2022 and from now till 2023 respectively. Thereafter, the tax rate shall return to the ordinary profit tax rate of 25% unless CVT are granted for a favourable tax rate again. As such, 15% tax rate is used our economic analysis for the Baicao Mine and Xiushuihe Mine till 2022 and 2023 respectively. 25% tax rate is subsequently applied for the Xiushuihe Mine thereafter.

12.6 Discounted cashflow projection

Based on the capital costs, operating costs, revenue, taxes and government charges described in previous sections, the Net Present Value ("NPV") for both the Baicao Mine and Xiushuihe Mine is estimated to be positive at a discount rate of 10% for the base case. It is demonstrated that the Ore Reserves presented in this CPR is justified with economic viability.

13 RISK ASSESSMENT

The mining industry is traditionally and inherently a high-risk business compared to other industries globally. The risk is an accumulated risk due to factors such as the nature of the orebodies, grade variations, natural disasters, geotechnical and hydrological risk, environmental, community, health and safety and water supply.

BAW's risk identification and assessment process focused on areas where there is perceived technical risk to the operation and exploration projects, including resources, reserves, operation, environmental, community, health and safety, particularly where the risk factor could materially impact the projected production and hence cashflow generated by the operation. The assessment is necessarily subjective and qualitative. Risk has been classified as low, moderate, or high based on the following definitions:

1. High Risk: the factor poses an immediate danger of a failure, which if uncorrected, could have a material impact (>15%) on the project cash flow and performance and could potentially lead to project failure.

2. Moderate Risk: the factor, if uncorrected, could have a significant impact (>10%) on the project cash flow and performance unless mitigated by some corrective action.

3. Low Risk: the factor, if uncorrected, could have little or no effect on project cash flow and performance.

Risk mitigation measures are recommended for each risk in order to reduce the risk's probability and/or impact to an acceptable or practical level.

BAW summarized the risk factors in Table 13-1:

Table 13-1 Risks Factors in association of CVT's Mines and Projects

Risk Factors	Level	Potential Impact	Methods of Mitigation
Commodity prices	High	Similar to other mining operations, commodity prices are the most important factors which materially affects the profitability of operations. Low commodity price may bring significant negative impact to financial health of the operation.	Using financial instruments to hedge if applicable A focus on efficiency upgrade throughout the operation will minimize the impact
Mineral Resources	Low	CVT's mining operation has been ongoing at the Baicao and Xiushuihe Mines for years. The geology, mineralization and resources of the properties are relatively well-known or defined in terms of spatial extent. No further exploration and drilling since acquisition of the exploration projects. The Inferred category resources were also reasonably estimated by limited extrapolation from the Measured and Indicated resource blocks or based on old sampling data.	Additional exploration and drilling activities may reduce the risk. Acquisition of exploration properties to expand the resource portfolio.
Mining Operation	Low	Extraction is carried out in the way of open-pit mining with relatively small mining equipment, which can readily be augmented as required. Mining operations are ongoing for years. Mine planning and production scheduling for the future have been carried out appropriately and properly. The risk of mining is minimal given that the orebodies characteristics remain unchanged.	
Processing	Low	At the Baicao and Xiushuihe Mines, ores are processed using the conventional and widely used separation methods including magnetic and sulfide flotation. The historic results have been reported to be in line with the past production parameters. Ore samples are regularly collected for testing. The risk of processing is minimal, if any, given that the ore characteristics remain unchanged.	

Risk Factors	Level	Potential Impact	Methods of Mitigation
Infrastructure	Low to Moderate	The mining properties are generally located in mountainous region. Part of the access roads are rugged near the mines. Water supply is generally sufficient but could be a problem during dry seasons. Electricity is generally sufficient for production.	Continuous and regular effort on maintenance and upgrade of the roads will allow better access for the mining trucks and other equipment. Construction of small-scale reservoir will reduce the risk of water shortage.
Capital Cost	Low	No capital expenditure has been budgeted for mine development, equipment and construction at the operating mines. However, additional capital cost has been budgeted for sustaining capital purpose and environmental issues.	
High materials and labour prices	Medium	The overall economics is founded on a combination of pricing for metals, materials and labor. Therefore, it is sensitive to materials and labor prices over which it has limited control.	Further optimization of all operation processes to minimize cost of production shall assist in reducing the economic impact of high materials and labor prices.
Environment	Low to Moderate	Increasing concern of environmental protection by the PRC Government may have negative impact on the mining activities.	Additional capital shall be budgeted to satisfy the latest regulatory environmental requirements.
Tax Rate	Low	The two operating mines are benefited from a favorable tax rate of 15% under the regional policy of "Western Development Strategy" which has been initiated by the PRC government since 1999 and is commonly expected to be perpetual.	
Occupational Health and Safety	Low to Moderate	To prevent injuries and hazards at workplace, CVT has been placing emphasize and allocating resources to ensure its operation is conducted in accordance with the national safety regulations.	Additional capital shall be budgeted to satisfy the latest regulatory requirements.

14 REFERENCE

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12. Behre Dolbear Australia Pty Ltd., 2018 Year-beginning Resource and Reserve Update for Baicao, Xiushuihe, and Maoling-Yanglongshan Iron Ore Properties of China Vanadium Titano-Magnetite Mining Company Limited; Behre Dolbear Project 17-100, February 2018 (J17-100 CVT Resource and Reserve Update Report).

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14. Zhou, Mei-Fu; Robinson, Paul T.; C.M. Lesher; Keays, Reid R.; Zhang, Cheng-Jiang and Malpas, John (2005). Geochemistry, petrogenesis and metallogenesis of the Panzhihua gabbroic layered intrusion and associated Fe-Ti-V oxide deposits, Sichuan Province, SW China. *Journal of Petrology* **46 (11)**, 2253-2280.

15 APPENDIX

15.1 Glossary and definitions

Element	Chemical symbols used in this report Al – Aluminium Au – Gold Ag – Silver As – Arsenic Ba – Barium Cu – Copper Fe – Iron K – Potassium Mg – Magnesium Mn – Manganese Na – Sodium O – Oxygen Pb – Lead S – Sulphur Si – Silicon Sr – Strontium Ti – Titanium Zn – Zinc
Exploration Target/Results	includes data and information generated by exploration programmes that may be of use to investors. The reporting of such information is common in the early stages of exploration and is usually based on limited surface chip sampling, geochemical and geophysical surveys. Discussion of target size and type must be expressed so that it cannot be misrepresented as an estimate of Mineral Resources or Ore Reserves
In-situ	means rock or mineralisation in place in the ground

Indicated Mineral Resource	is 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 drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed
Inferred Mineral Resource	is 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 drill holes.
Mineral Resource	is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals 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.

Measured Mineral Resource	is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and 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 drill holes that are spaced closely enough to confirm both geological and grade continuity
Metallurgy	Physical and/or chemical separation of constituents of interest from a larger mass of material. Methods employed to prepare a final marketable product from material as mined. Examples include screening, flotation, magnetic separation, leaching, washing, roasting etc.
Mineral Reserve	is 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. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined
Moisture	refers to moisture or inherent moisture content of coal as specified
Open-pit	means open cut mining which is mining from a pit open to surface and usually carried out by stripping of overburden materials

Ore	is the portion of a reserve from which a metal or valuable mineral can be extracted profitably under current or immediately foreseeable economic conditions
PFS	stands for Preliminary Feasibility Study
Probable Ore Reserve	A "Probable Mineral Reserve" is 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 Ore Reserve	A "Proven Mineral Reserve" is the economically mineable part of 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 is justified
Regolith	is a geological term for a cover of soil and rock fragments overlying bedrock
Qualified Person (QP)	A "Qualified Person" means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a professional association

Resource	A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals 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
RMB/t	stands for Chinese Renminbi per material tonne
ROM	stands for run-of-mine, being material as mined before beneficiation
Strip Ratio	refers to the ratio of the volume of overburden (or waste material) required to be handled in order to extract some tonnage of ore
UG	means underground mining which is an opening in the earth accessed via shafts, declines or adits below the land surface to extract minerals
Yuan	stands for the currency of People's Republic of China

15.2 Drillholes of haibaodang project

BHID	East	North	RL	Max_depth	Outcrop type	Location	Azimuth	Dip	Year of Drilling
ZKC0000	34459447.609	2927747.628	1957.498	49.370	SDH	Cangfang	0	90	2012
ZKC0003	34459310.493	2927775.219	1952.564	86.970	SDH	Cangfang	0	90	2012
ZKC0004	34459493.524	2927662.991	1963.661	58.760	SDH	Cangfang	0	90	2012
ZKC0007	34459270.189	2927825.580	1996.036	136.390	SDH	Cangfang	0	90	2013
ZKC0305	34459192.428	2927617.689	1911.834	61.460	SDH	Cangfang	0	90	2013
ZKC0307-1	34459141.508	2927659.403	1937.627	109.430	SDH	Cangfang	0	90	2013
ZKC0311	34459000.065	2927768.479	1951.310	180.120	SDH	Cangfang	0	90	2014
ZKC0315	34458836.641	2927858.296	1913.993	312.360	SDH	Cangfang	0	90	2014
ZKC0319	34458685.836	2927990.616	1877.306	277.150	SDH	Cangfang	0	90	2014
ZKC0323	34458525.658	2928100.742	1840.860	311.200	SDH	Cangfang	0	90	2014
ZKC0400	34459534.033	2927882.257	2005.567	37.300	SDH	Cangfang	0	90	2012
ZKC0402	34459607.366	2927821.717	2024.619	67.130	SDH	Cangfang	0	90	2014
ZKC0403	34459450.479	2927947.935	2002.043	89.320	SDH	Cangfang	0	90	2013
ZKC0404	34459681.999	2927775.878	2027.066	29.170	SDH	Cangfang	0	90	2014
ZKC0407	34459369.611	2928000.516	2025.851	136.550	SDH	Cangfang	0	90	2013
ZKC0411	34459222.621	2928107.350	2068.046	219.670	SDH	Cangfang	0	90	2014
ZKC0415	34459078.846	2928191.193	2038.919	269.840	SDH	Cangfang	0	90	2014
ZKC0419	34458927.328	2928299.207	1989.542	249.750	SDH	Cangfang	0	90	2014
ZKC0604	34459710.404	2927893.729	2050.492	151.570	SDH	Cangfang	0	90	2011
ZKC0606	34459744.727	2927853.250	2060.694	150.190	SDH	Cangfang	0	90	2012
ZKC0703	34459113.549	2927449.635	1871.578	90.580	SDH	Cangfang	0	90	2012
ZKC0705	34459051.715	2927521.418	1874.718	101.470	SDH	Cangfang	0	90	2013
ZKC0800	34459650.910	2928042.070	2050.039	54.420	SDH	Cangfang	0	90	2012
ZKC0803	34459562.946	2928106.013	2059.004	73.080	SDH	Cangfang	0	90	2012
ZKC0804	34459726.824	2927986.759	2074.048	49.100	SDH	Cangfang	0	90	2012
ZKC0806	34459795.338	2927935.903	2088.008	40.360	SDH	Cangfang	0	90	2014
ZKC0809	34459512.911	2928136.166	2071.692	114.620	SDH	Cangfang	0	90	2013
ZKC1100	34458943.628	2927314.977	1808.155	67.050	SDH	Cangfang	0	90	2013
ZKC1103	34458895.221	2927347.556	1793.940	62.730	SDH	Cangfang	0	90	2013

BHID	East	North	RL	Max_depth	Outcrop type	Location	Azimuth	Dip	Year of Drilling
ZKC1105	34458861.075	2927372.335	1809.275	94.100	SDH	Cangfang	0	90	2013
ZKC1109	34458719.987	2927479.945	1819.420	242.060	SDH	Cangfang	0	90	2014
ZKC1113	34458617.258	2927549.947	1794.951	282.750	SDH	Cangfang	0	90	2014
ZKC1117	34458474.462	2927664.879	1759.615	303.090	SDH	Cangfang	0	90	2014
ZKC1200	34459745.952	2928224.180	2090.871	100.320	SDH	Cangfang	0	90	2012
ZKC1202	34459815.440	2928169.977	2125.564	63.910	SDH	Cangfang	0	90	2014
ZKC1203	34459659.090	2928279.074	2111.422	91.460	SDH	Cangfang	0	90	2012
ZKC1204	34459895.222	2928120.684	2160.011	72.750	SDH	Cangfang	0	90	2014
ZKC1205	34459603.720	2928296.166	2137.652	119.390	SDH	Cangfang	0	90	2013
ZKC1209	34459459.051	2928409.153	2161.568	187.070	SDH	Cangfang	0	90	2014
ZKC1213	34459308.954	2928515.610	2123.902	208.370	SDH	Cangfang	0	90	2014
ZKC1301	34458828.854	2927215.781	1742.874	50.130	SDH	Cangfang	0	90	2013
ZKC1305	34458649.873	2927278.274	1772.121	303.830	SDH	Cangfang	0	90	2014
ZKC1309	34458520.023	2927379.191	1727.838	314.200	SDH	Cangfang	0	90	2014
ZKC1401	34459804.000	2928373.000	2119.647	82.800	SDH	Cangfang	0	90	2011
ZKC1601	34459830.036	2928425.121	2143.182	53.920	SDH	Cangfang	0	90	2013
ZKC1602	34459893.191	2928366.723	2173.681	45.900	SDH	Cangfang	0	90	2014
ZKC1604	34459980.054	2928303.226	2207.581	55.070	SDH	Cangfang	0	90	2014
ZKC1606	34460061.791	2928244.350	2227.106	69.910	SDH	Cangfang	0	90	2014
ZKC1608	34460130.785	2928193.201	2212.237	32.160	SDH	Cangfang	0	90	2014
ZKC2001	34459860.895	2928632.576	2242.965	156.900	SDH	Cangfang	0	90	2014
ZKC2002	34459938.704	2928579.848	2223.201	66.610	SDH	Cangfang	0	90	2014
ZKC2003	34459780.853	2928691.392	2201.302	80.520	SDH	Cangfang	0	90	2014
ZKC2004	34460020.596	2928523.903	2228.236	43.550	SDH	Cangfang	0	90	2014
ZKC2006	34460094.281	2928466.468	2274.582	55.620	SDH	Cangfang	0	90	2014
ZKC2008	34460161.289	2928415.572	2283.560	41.580	SDH	Cangfang	0	90	2014
ZKC401	34459605.792	2928067.957	2032.342	126.040	SDH	Cangfang	0	90	2008
ZGK0811	34461701.691	2924432.894	2607.437	128.400	SDH	Ganhaizi	0	90	2013
ZKG0001	34462049.530	2924107.387	2657.846	86.380	SDH	Ganhaizi	0	90	2012
ZKG0005	34461944.618	2924104.982	2631.404	136.900	SDH	Ganhaizi	0	90	2012

BHID	East	North	RL	Max_depth	Outcrop type	Location	Azimuth	Dip	Year of Drilling
ZKG0009	34461855.766	2924106.711	2615.907	126.690	SDH	Ganhaizi	0	90	2013
ZKG0013	34461761.768	2924106.291	2590.500	124.130	SDH	Ganhaizi	0	90	2013
ZKG0017	34461701.514	2924105.817	2600.389	138.150	SDH	Ganhaizi	0	90	2013
ZKG0021	34461624.658	2924100.702	2601.033	144.300	SDH	Ganhaizi	0	90	2013
ZKG0025	34461548.885	2924099.316	2574.849	136.670	SDH	Ganhaizi	0	90	2013
ZKG0029	34461460.348	2924094.689	2535.945	104.790	SDH	Ganhaizi	0	90	2013
ZKG0036	34461274.492	2924098.497	2480.224	134.750	SDH	Ganhaizi	0	90	2014
ZKG0043	34461091.352	2924101.976	2438.498	135.680	SDH	Ganhaizi	0	90	2014
ZKG0305	34461961.569	2923881.743	2596.052	61.000	SDH	Ganhaizi	0	90	2012
ZKG0321	34461719.775	2923897.875	2524.887	70.440	SDH	Ganhaizi	0	90	2014
ZKG0325	34461643.602	2923894.428	2531.611	111.290	SDH	Ganhaizi	0	90	2014
ZKG0329	34461589.334	2923881.127	2524.688	138.650	SDH	Ganhaizi	0	90	2014
ZKG0337	34461420.355	2923892.712	2483.585	151.970	SDH	Ganhaizi	0	90	2014
ZKG0345	34461232.500	2923884.239	2438.983	194.050	SDH	Ganhaizi	0	90	2014
ZKG0401	34462050.222	2924295.466	2651.261	64.500	SDH	Ganhaizi	0	90	2012
ZKG0405	34461952.796	2924296.937	2646.161	85.200	SDH	Ganhaizi	0	90	2012
ZKG0407	34461867.781	2924291.158	2625.710	140.030	SDH	Ganhaizi	0	90	2013
ZKG0409	34461786.274	2924298.316	2613.116	146.300	SDH	Ganhaizi	0	90	2013
ZKG0411	34461694.546	2924300.847	2623.522	155.710	SDH	Ganhaizi	0	90	2013
ZKG0415	34461610.828	2924306.017	2586.101	149.270	SDH	Ganhaizi	0	90	2013
ZKG0419	34461525.200	2924300.752	2570.622	131.140	SDH	Ganhaizi	0	90	2013
ZKG0426	34461343.511	2924295.470	2508.460	96.290	SDH	Ganhaizi	0	90	2014
ZKG0433	34461159.118	2924296.878	2455.860	119.250	SDH	Ganhaizi	0	90	2014
ZKG0440	34460974.929	2924297.862	2403.210	120.680	SDH	Ganhaizi	0	90	2014
ZKG0707	34461698.216	2923695.394	2553.665	98.550	SDH	Ganhaizi	0	90	2014
ZKG0711	34461562.118	2923695.066	2527.969	109.830	SDH	Ganhaizi	0	90	2014
ZKG0715	34461432.537	2923696.490	2541.794	167.430	SDH	Ganhaizi	0	90	2014
ZKG0802	34461885.942	2924500.749	2624.735	124.170	SDH	Ganhaizi	0	90	2013
ZKG0804	34461808.657	2924506.523	2620.160	138.680	SDH	Ganhaizi	0	90	2013
ZKG0805	34461849.380	2924436.086	2625.320	141.850	SDH	Ganhaizi	0	90	2012

BHID	East	North	RL	Max_depth	Outcrop type	Location	Azimuth	Dip	Year of Drilling
ZKG0807	34461789.709	2924435.453	2620.955	128.940	SDH	Ganhaizi	0	90	2013
ZKG0815	34461615.985	2924440.071	2590.819	104.480	SDH	Ganhaizi	0	90	2013
ZKG0820	34461522.938	2924506.422	2577.815	106.780	SDH	Ganhaizi	0	90	2014
ZKG0823	34461431.962	2924436.860	2541.706	86.070	SDH	Ganhaizi	0	90	2014
ZKG0828	34461348.467	2924492.761	2506.803	134.920	SDH	Ganhaizi	0	90	2014
ZKL0005	34462510.887	2926102.047	2523.278	116.970	SDH	Lizifei	0	90	2013
ZKL0009	34462434.300	2926103.094	2531.585	113.550	SDH	Lizifei	0	90	2013
ZKL0013	34462339.721	2926098.945	2549.854	102.190	SDH	Lizifei	0	90	2013
ZKL0017	34462250.776	2926102.894	2578.565	126.290	SDH	Lizifei	0	90	2013
ZKL0021	34462163.656	2926103.781	2612.198	92.260	SDH	Lizifei	0	90	2013
ZKL0025	34462077.065	2926104.723	2658.689	80.630	SDH	Lizifei	0	90	2013
ZKL0029	34461993.690	2926108.093	2651.604	75.260	SDH	Lizifei	0	90	2013
ZKL0305	34462529.254	2925902.534	2580.700	121.800	SDH	Lizifei	0	90	2012
ZKL0309	34462439.164	2925897.264	2582.524	121.670	SDH	Lizifei	0	90	2013
ZKL0313	34462356.069	2925896.847	2592.768	108.950	SDH	Lizifei	0	90	2013
ZKL0317	34462264.292	2925901.537	2613.372	136.550	SDH	Lizifei	0	90	2013
ZKL0321	34462181.208	2925901.084	2643.453	200.440	SDH	Lizifei	0	90	2013
ZKL0325	34462092.395	2925903.837	2635.985	84.360	SDH	Lizifei	0	90	2013
ZKL0405	34462533.174	2926299.548	2473.859	150.010	SDH	Lizifei	0	90	2013
ZKL0409	34462424.775	2926300.036	2512.226	101.860	SDH	Lizifei	0	90	2013
ZKL0413	34462349.832	2926300.998	2539.065	135.720	SDH	Lizifei	0	90	2013
ZKL0705	34462530.070	2925701.872	2626.601	124.230	SDH	Lizifei	0	90	2012
ZKL0709	34462430.294	2925700.718	2604.018	93.900	SDH	Lizifei	0	90	2012
ZKL0713	34462332.945	2925702.672	2612.265	60.890	SDH	Lizifei	0	90	2012
ZKL1105	34462526.906	2925498.916	2560.099	45.600	SDH	Lizifei	0	90	2012
ZKL1109	34462433.520	2925505.068	2545.066	85.310	SDH	Lizifei	0	90	2012
ZKL1113	34462326.728	2925506.401	2553.104	66.950	SDH	Lizifei	0	90	2012

15.3 Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	• Section 6.4: The drill core was sampled in 4-m lengths, although variation in intervals may occur to coincide with geological contacts. Generally, the entire layered mafic/ ultramafic interval was sampled and assayed.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where "industry standard" work has been done this would be relatively simple (eg "reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay"). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• Trench channel samples were generally taken at the trench bottom and were cut 7 centimeters ("cm") wide and 3cm deep. The sample length for surface trenches was generally 4m to 5m, but variable lengths may be used based on geological characteristics. Surface trench and sample locations were surveyed. • The mineralization style is classified as magmatic deposit. The region is long renowned with this kind of vanadium-bearing titano-magnetite mineralization which has been widely studied by multiple research institutes globally for over 30 years.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• Section 6.3: In relation to the Company's five mining properties reviewed in this CPR, surface diamond core drilling is the principal exploration and sampling method. Drilling was conducted using Chinese-made drill rigs. Drill hole size was generally108mm-130mm at the top, reducing to 89mm then 75mm until the bottom of the hole.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Section 6.3: Core is geologically and geotechnically logged, recoveries are determined by measuring the core length recovered versus the amount drilled, and all data is recorded on hard-copy drill logs by the geological staff. Core recovery was generally averaging around 90% for the mineralized intervals. • In problematic ground, drilling was completed in generally shorter runs to maximize recovery. The previous resource definition program was carried out in 2009. • No evidence to indicate the relationship between sample recovery and grade at this time was known
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• Section 6.3: In relation to the Company's five mining properties reviewed in this CPR, drill core is geologically and geotechnically logged. Recoveries are determined by measuring the core length recovered versus the amount drilled, and all data is recorded on hard-copy drill logs by the geological staff. Core recovery was generally good, averaging around 90% for the mineralized intervals. • Logging is both qualitative and quantitative • No core photography was prepared • With a high core recovery, all drill core was logged

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Section 6.4: In relation to Company's five mining properties reviewed in this CPR, core was sawn and half core was taken for sampling. • Not applicable • Section 6.4: BAW was not able to observe the work during the course of drilling, sampling and sample preparation of the Company's five mining properties which were completed in 2009. However, BAW has reviewed the protocol applied and considers that the methods to be generally conformable with the industry practice and the regulations and specifications set out by the PRC government. Sample preparation technique is appropriate for use in Mineral Resources and Ore Reserves estimation in accordance with the requirement of the JORC Code 2012. • The sample size is considered to be appropriate to correctly represent the nature style of mineralization and grain size of the mineralized mafic/ultramafic rocks being sampled.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• Section 6.5: Analytic methods adopted included wet chemical analyses, colorimetric analyses and atomic absorption spectrometry. TFe, TiO_2, and V_2O_5 grades were determined for each sample. In addition, Cu, Co, Ni, S, Cr_2O_5 or P_2O_5 grades were also determined for some composite samples to understand the distribution of these components in the two deposits. These analytical methods are widely used in the mining industry in China and generally produce reliable results if conducted correctly. • No geophysical tools or handheld XRF instruments were used to estimate the mineral resource. • Section 6.5: The QAQC protocol for assay is regulated by the specifications set out by the government, including internal check assays, external check assays, and analysis of assay standards. Among the samples analyzed for the Company's mining properties, approximately 10% were subject to an internal check assay, and approximately 5-10% were sent for external check assays. The internal check assays were conducted by a different operator at the same laboratory and the external check assays for Baicao and Xiushuihe samples were conducted by Chengdu Rock and Mineral Analytic Center, an unpaired assay laboratory, located in Chengdu City of Sichuan province. The external check assays for Cizhuqing and Yangqueqing samples were conducted by Southwest Geology Metallurgy Analytic Center and Chengdu Rock and Mineral Analytic Center respectively. The external check assays for Haibaodang samples were conducted by Deyang Rock and Mineral Analytic Center.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• Section 6.5: The sampling and verification work were completed by independent entities.
	• The use of twinned holes.	• No twinned holes were drilled
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Geologists on site entered data from paper logs into excel spreadsheet as the database. All historic data was migrated into this database system and validated. Electronic data is stored using excel spreadsheets and stored at the physical sties managed by the exploration entities
	• Discuss any adjustment to assay data.	• No adjustment was made to data
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• Section 6.3: Drill hole collar locations were surveyed and down-hole deviation was generally measured using down hole survey techniques. The topography was surveyed at 1:2,000 scale.
	• Specification of the grid system used.	– Datum: Xi'an 1980
	• Quality and adequacy of topographic control.	– Projection: Xi'an 80 Gauss Kruger
		– Height datum: 1985 national elevation datum (China)
		• Topographical surveys were conducted at a scale of 1:2000, which was conducted in accordance with the Specification of Topography and Geology Exploration Engineering Survey issued in 1978 (China). The survey is considered to be adequate.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Section 6: The Baicao mine was drilled out on 100m spaced east-west exploration lines; there are a total of 20 exploration lines for the deposit and drill hole spacing on each exploration line mostly ranges from 80m to 150m. The Xiushuihe Mine was drilled out on 100m spaced north-south exploration lines. The Cizhuqing Project was defined by drill holes and trench spacing of 100m x 50m to 100m. In the Yangqueqing Project and Yangqueqing Expansion, it is defined by drill holes and trench spacing of 100m x 50m. In the Haibaodang Project, the resources are defined by drill holes and trench range from 100m x 200m to 200m x 400m. The data spacing and continuity of geology are sufficient to support the definition of a Mineral Resource classifications contained in the JORC Code • No sample compositing was done during sampling process.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Not applicable • Not applicable
Sample security	• The measures taken to ensure sample security.	• Samples were stored on site and then are transferred to the physical and chemical testing laboratories. Whilst in storage, they were kept in order. Register sheets was set up to track the progress of batches of samples.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Review of sampling techniques and data were completed and documented in the Company's prospectus in 2009 as part of the Resource estimate and the database is considered by the competent persons to be of sufficient quality to carry out Resource estimation. • Mineral Resource estimate is reviewed annually by independent competent persons

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The details are documented in Section 2.2
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The details are documented in Section 4.1, 4.2, 4.3, 4.4, 4.5
Geology	• Deposit type, geological setting and style of mineralisation.	• Geological Setting: Vanadium-bearing titano-magnetite mineralization of the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project is generally hosted in the Early Late Paleozoic layered mafic-ultramafic intrusions which are well-differentiated with well-developed layered structure. From top to bottom, the intrusive rock type varies gradually from mafic to ultramafic; the mineral grain size varies from fine to coarse; the total iron content varies from low to high; and the concentration of other useful elements, such as titanium and vanadium, also increases gradually. The mafic-ultramafic intrusions contain two facieses in general, gabbro facies in the upper part and pyroxenite facies in the lower part. The mineralization style is classified as magmatic deposits.

Criteria	JORC Code explanation	Commentary
		• The geological setting of the Haibaodang Project is predominantly represented by the Triassic sedimentary sequences which comprise of the Late Triassic Daqiaodi Formation and Early Triassic Baoding Formation. The lower part of the Daqiaodi Formation is chiefly composed of conglomerate with subordinate sandstone. The clasts vary greatly in composition and size. The upper part of the Daqiao Formation is mainly composed of conglomerate, sandstone, mudstone, shale and thinly-bedded coal seam on the upper part. The mineralization style of the Haibaodang Project is the ilmenite-bearing clastic sedimentary sequences which are classified as the upper part of the Daqiaodi Formation • Further details are documented in Section 5.1, 5.2

Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
	  • easting and northing of the drill hole collar
	  • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
	  • dip and azimuth of the hole
	  • down hole length and interception depth
	  • hole length.
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.
		• Regarding the Haibaodang project, drill hole collar, assay, lithology, hole length, dip and azimuth of the hole, hole log and density data are made available electronically for review for preparation of this CPR with several diagrams showing the location of all work done to date in Section 6 and 7. The details of drill hole information is documented in Section 15.2
		• The public reporting of Haibaodang project has been made previously by the Company. However, it is the first time for the Company to report JORC-compliant Exploration Result in relation to the resource estimate of the Haibaodang project.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Further details are documented in Section 6 and 7 • Not applicable • Not applicable
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Not applicable • Further details are documented in Section 5 and 6 • All lengths of mineralized body are reported as apparent width
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Figure 5-3, 5-4, 5-5, 5-6, 5-7, 5-9, 7-2, 7-3 and 7-4
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• The exploration data and quality of the database are sufficient for establishment of a resource model. However, considering the low grades of TFe and TiO_2 content, capital investment is expected to be significant (given relatively remote infrastructures), expired exploration license which is pending regulatory review of renewal of application, BAW anticipates that an absence of reasonable prospects for an eventual economic extraction is very likely and therefore, classified the mineral resource estimates for the Haibaodang Project as an Exploration Result.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• All exploration data generated to date is made available for BAW's review via a cloud-based data room.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Not applicable • Not applicable

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• Drill cores were logged on paper and later entered into Excel spreadsheets. Laboratory test data were provided as hard copies. Spot cross checking was undertaken to minimise the potential of manual typing errors. Data transfer is electronic via e-mail. • BAW was not able to observe the work during the course of drilling, sampling, sample preparation, data input and database construction, QAQX protocols, analytical methods, bulk density measurements and resource estimation which were completed in 2009. However, BAW understands the procedures, protocols and database management were independently reviewed by competent persons and documented in the Company's prospectus in 2009 and were concluded to be generally conformable with the industry practice and the regulations and specifications set out by the PRC government. As such, the exploration data managed is appropriate for use in Mineral Resources and Ore Reserves estimation. • In relation to the assay composite procedures for the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project, BAW reviewed such assay composite procedures and is of the opinion that the calculated composite grade reasonably matched with composite grades indicated on the longitudinal polygonal maps that were used to estimate the Mineral Resources for those mining properties through the method of polygonal estimation. • BAW reviewed the geological database of the Haibaodang Project and established a new 3D resource model for JORC-compliant classification, estimation and reporting of Mineral Resources. Data validation and geostatistical analysis were performed.

Criteria	JORC Code explanation	Commentary
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• In August 2018, BAW visited the mining properties for Baicao Mine, Xiushuihe Mine, Xiushuihe Extension, Cizhuqing Project, Yangqueqing Project and Haibaodang Project
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• With respect to the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project, the confidence in the geological interpretation is considered good as the mineralization style is magmatic deposit and the deposit as well regional geology has been widely studied for long time. • With respect to the Haibaodang Project, the confidence in the geological interpretation is considered to be a reasonable representation as the mineralization style is ilmenite-bearing clastic sediment-hosted mineralization with minimal structural disruption. • The layered mafic-ultramafic intrusions are the distinctive host rock to the vanadium-bearing titano-magnetite mineralization, offering itself as a guidance to the extent of the mineralization and assist estimation of Mineral Resource. • Factors that potentially affect the continuity of grade and geology include: – Structural disruption/termination/ dislocation of mineralised zones by faults – Sedimentological pinching out of the host units at the Haibaodang Project – Extreme natural grade variability
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• With respect to the Baicao Mine, Xiushuihe Mine, Cizhuqing Project and Yangqueqing Project, there are multiple near-surface orebodies identified in each of the mining property with varying length and plan width. Details of the dimensions of the Mineral Resource are documented in Section 5.2.1 to 5.2.4. • With respect to the Haibaodang Project, there are three prospects identified in total. In each prospect, there are multiple mineralized bodies identified with varying length and plan width. Details of the dimensions of the Mineral Resource are documented in Section 5.2.5.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	• Polygonal estimation had been used to update the resource in Baicao Mine and Xiushuihe Mine. This method used to estimate Mineral Resources and the parameters used to define the Mineral Resources for a particular type of mineral deposit are generally prescribed by the relevant Chinese government authorities. The estimation of Mineral Resources is principally based on strictly pre-defined parameters, which include minimum grades and minimum thicknesses. The Mineral Resources for a deposit are generally estimated by an independent engineering entity with a government-issued license in China. Further details are documented in Section 7.3
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• BAW reviewed the estimation through verification of geological sections against the previous resource estimates for the Baicao Mine and Xiushuihe Mine, Xiushuihe Expansion, Cizhuqing Project and Yangqueqing Project. BAW updated the Mineral Resources estimates as of December 31, 2018 with verification of the production records for the Baicao Mine and Xiushuihe Mine. No mining activities have been carried out in the Xiushuihe Expansion, Cizhuqing Project and Yangqueqing Project. Further details are documented in Section 7.3.1 and 7.3.2.
	• The assumptions made regarding recovery of by-products.	• No assumptions made regarding recovery of by-products
	• Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	• No other deleterious elements were modelled.
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	• 3D modelling and block grade estimation was performed by BAW using Surpac to update the resource estimate for the Haibaodang Project.
	• Any assumptions behind modelling of selective mining units.	• No assumptions have been made.
	• Any assumptions about correlation between variables.	• No assumptions have been made
	• Description of how the geological interpretation was used to control the resource estimates.	• Section 7.3.2
	• Discussion of basis for using or not using grade cutting or capping.	• An assessment was carried out for the grade distribution which was to be relatively uniform. As such, no grade capping was used for the Xiushuihe Mine, Baicao Mine Xiushuihe Expansion, Cizhuqing Project, Yangqueqing Project and Haibaodang Project.
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• The process of validation is documented in Section 7.3

Criteria	JORC Code explanation	Commentary
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages are estimated on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• Since the Baicao and Xiushuhe Mine have been operating in the region for 10 years, they have developed the cut-off grade with consideration of the actual operation costs and sales contract. As such the use of cut-off grade has been tested by practice. • The cut-off grade used in the Mineral Resources estimation varies among the Baicao Mine, Xiushuihe Mine, Xiushuihe Expansion, Cizhuqing Project and Yangqueqing Project. • 15% TFe and 18% TFe cut-off grades for oxide and sulphide were used for the resource estimation for the Baicao Mine, Xiushuihe Mine (including its Expansion), which BAW considered to be reasonable and appropriate for this type of deposits in the region. • 15% TFe cut-off grade was used for the Yangqueqing Project to distinguish ore and waste. • 8% TFe cut-off grade was used for the Cizhuqing Project, which is much lower than those used for other deposits. • 10% TFe cut-off grade was used for the Haibaodang Project.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• The Baicao Mine and the Xiushuihe Mine are both conventional open pit mining operations as the orebodies lie at or close to the surface. • Mining is planned on classical benches, which is typically 12 m high, with a 65-degree bench slope angle and a 43-degree to 46-degree overall slope angle. This will enable grade control of the mineralised zones to be completed. Further details are documented in Section 7.3.1 and 9.1

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Section 10, The major economic minerals of the ore are titano-magnetite and ilmenite. Titano-magnetite is strongly magnetic while ilmenite is weakly but sufficiently magnetic. They are recovered by simple inexpensive and environmentally friendly magnetic separation methods. Titano-magnetite is readily recoverable by wet, low-intensity magnetic separation drums. Ilmenite requires wet, high-intensity magnetic separation, an efficient approach as well. • The recoveries have been tested by practice since 2009
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• No assumptions regarding waste and process residue options have been made other than the Company was disposing tailings into the predefine Tailings Storage Facility – Section 10.2
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Section 6.6 · Bulk density measurements had been developed for the higher-grade samples and lower-grade samples respectively using wax-coated water immersion method. • The number of bulk density measurements is 250 for the Baicao Mine, 107 for the Xiushuihe Mine, 70 for the Cizhuqing Project, 52 for the Yangqueqing Project and Yangqueqing Expansion and 30 for the Haibaodang Project. • Regression formula between TFe and density for higher grade and lower grade zones had been built respectively and applied in Baicao Mine, Yangqueqing Project and Haibaodang project, while average value was applied in Xiushuihe Mine and Cizhuqing Project. • Further details are documented in Section 6.6

Criteria	JORC Code explanation	Commentary
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• Resource classification mainly based on hole spacing summarized as below

Properties	Drillhole Spacing	Resource Category
Baicao Mine	50m x 50m	Measured
	100m x 200m	Indicated
	>100m x 200m	Inferred
Xiushuihe Mine	50m x 50m	Measured
	100m x 100m	Indicated
	>100m x 100m	Inferred
Yangqueqing Project	50m x 50m	Measured
	100m x 100m	Indicated
	>100m x 100m	Inferred
Cizhuqing Project	100m x 100m	Indicated
	>200m x 100m	Inferred
Haibaodang Project	100m x 100m	Exploration Results only
	200m x 200m	Exploration Results only

- Further are documented in Section 7.3.3 and Table 7-5
- It is considered that the classification of Resources as presented is appropriate for the level of confidence in the available data in terms of quantity and quality.
- The quantity and grade of Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Resources and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Resources category. Further details are documented in Section 7.3 and 7.4.
- The results of this study appropriately reflect the view of the Competent Person with regard to data veracity/integrity, geological interpretation, estimation methodology, and resource classification.

Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• Mineral Resource estimate is reviewed annually by independent competent persons

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Details are documented in Section 7 • Polygonal estimation was applied for the Baicao Mine, Xiushuihe Mine, Xiushuihe Expansion, Cizhuqing Project and Yangqueqing Project, while 3D modelling and block grade estimate was used for Haibaodang Project. • Mineral Resources are depleted by mined out tonnage, which were verified by the on-going topographic survey and the production data on annual basis. • Visual examination and statistical test were performed for Haibaodang Project for verification of the Resource estimate. • Complete infill drilling in parts of the deposit where the historic drilling is sparse or nor deep enough to intersect continuations of the known ore bodies. • Total mineral resource estimate is based on global estimate • Production data was compared with the estimate except for the Xiushuihe Expansion, Cizhuqing Project, Yangqueqing Project and Haibaodang Project where no production data is available.

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	• Details are documented in Section 8
	• Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The Mineral Resource estimate stated as of December 31, 2018 is inclusive of this Ore Reserve.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• All team members of the Competent Person completed a site visit to the five mining properties in August 2018. This site visit included inspection of mining and processing operation and discussion with the site technical personnel.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • Ore Reserves. • The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	• Section 8.3.2 and 8.3.3. Baicao Mine and Xiushuihe Mine has been subject of extensive studies at feasibility level. This includes the pre-feasibility study, update of the resource and reserves, the life of mine study. Most of them were approved by the relevant authorities, including MEP (Ministry of Environmental Protection), SAWS (State Administration of Work Safety of the PRC) and MLR (Ministry of Land and Resources of the PRC). It is the basis of retaining the license. They are reported and reviewed. BAW reviewed the latest resource and reserve update report provided by CVT. • Section 8.3.1, 8.3.3 and 8.3.4. These studies have assessed all applicable modifying factors and have established technical and economic viability in the long term.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Section 8.3.3 and Table 8-1. The Baicao and Xiushuihe Mine have been in production for years, The basis of the cut-off grade for TFe considers multiple items including, production capacity, selling price, recovery, production costs, government charges and tax liabilities

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	• Section 8.3.3, 8.3.4, and Section 9. The Baicao Mine and the Xiushuihe Mine are both conventional open pit mining operations as the orebodies lie at or close to the surface. Following the resource estimation by the Northwestern Sichuan Geological Team in 2007, CVT engaged the Sichuan Institute in 2008 to develop a long-term mine planning, production schedule and ultimate open-pit design for the defined resources of these two mines. CVT has contracted a mining contractor to carry out the mining and excavation work based on those long-term mine planning and production schedule. • The major assumptions and parameters used for pit optimization are presented as below: Parameters | Baicao Mine | Xiushuihe Mine Bench Height (m) | 12 | 12 Bench Face Slope Angle (degree) | 70 | 67 Maximum Overall Pit Slope Angle (degree) | 26-44 | 19-46 One-way/Two-way Minimum Haul Road Width (m) | 4.5/8.0 | 4.5/8.0 Maximum Haul Road Slope (%) | 7.5 | 7.5 • The dilution factors, mining ore recovery, as applied to the resource model were evaluated as per mine. Parameters | Baicao Mine | Xiushuihe Mine Mining Dilution | 6.4% | 6.4% Mining Recovery | 91.0% | 94.0% Minimum mining width | 35m | 35m • All Inferred material is considered as waste. • All required infrastructure is currently in place for mining operations.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements. • The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. • For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• The separation method for both the processing plant is similar, involving wet, low-intensity magnetic separation to recover iron in vanadium-bearing titano-magnetite and wet, high-intensity magnetic separation to recover titanium in ilmenite. This process is appropriate for this type of mineralization has been practiced for a decade at the mine site and across the industry. • The metallurgical process was well studied with solid track record. • No assumptions were made for deleterious elements. • This recovery process has been practiced for more than a decade at the mine site. Before production expansion in 2008, CVT engaged the Institute of Multipurpose Utilization of Mineral Resources of the Chinese Academy of Geological Sciences located in Chengdu, Sichuan to conduct metallurgical test work. The objective of the test work was to examine the mineralogy and characteristics of the ore, to evaluate the fineness of grinding required for adequate liberation of mineral grains and to determine the optimum conditions for magnetic concentration of the iron and titanium minerals followed by the upgrading of the concentrates where required and economically feasible. The test work at that time was considered to be reliable with a sound basis by the competent persons.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• Section 11.1 and 11.2. The Baicao and Xiushuihe Mines have been granted with environmental permits, site discharge permits, safety production permits, water use permits and land use permits. • Rehabilitation and its associated capital costs have been planned in the CVT's budget plan. • Tailings Storage Facilities for the Baicao and Xiushuihe Mines have satisfied the requirements by the relevant government agencies and have been approved with safety production permits for operation.

Criteria	JORC Code explanation	Commentary
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	• Section 11.1 and 11.2. All required infrastructure is currently in place for mining operations.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. • The methodology used to estimate operating costs. • Allowances made for the content of deleterious elements. • The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products. • The source of exchange rates used in the study. • Derivation of transportation charges. • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• Section 12.3 and 12.4: The projected cost items are in line with actual production record and operating costs provided by CVT. • No exchange rate is used
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. • The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• Section 12.2 and 12.3. The projected revenue factors are in line with actual sales record and production record provided by CVT. • Metal prices used in projection are in line with the current contracts
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• Section 12. The Baicao Mine and the Xiushuihe Mine have been in operation in the region for more than a decade. CVT has established its own sales team and strong network in the region. • The projected revenue factors are in line with actual sales record and production record provided by CVT. • Not applicable
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• Details are documented in Section 12.6
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	• Details are documented in Section 11.4

Criteria	JORC Code explanation	Commentary
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	• Details are documented in Section 13
	• Any identified material naturally occurring risks.	
	• The status of material legal agreements and marketing arrangements.	
	• The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories.	• Details are documented in Section 8.4 and Table 8-2
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	• The result reflects the Competent Person's view.
	• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• Not applicable
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• Review of Ore Reserve estimates were completed and documented in the Company's prospectus in 2009 as part of the Reserve estimate. Ore Reserve estimate is reviewed annually. The work was considered by the competent persons to be of sufficient quality to carry out Reserve estimation.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Details are documented in Section 8 • Total Ore Reserve estimate is based on global estimate. • The Baicao Mine and Xiushuihe Mine have been in production for more than a decade. The applied Modifying Factors have a high level of confidence and have been tested by practice. • The projected revenue factors are in line with actual sales record and production record provided by CVT. • Metal prices used in projection are in line with the current contracts • The projected cost items are in line with actual production record and operating costs provided by CVT. • Production data was compared with the estimate except for the Xiushuihe Expansion, Cizhuqing Project, Yangqueqing Project and Haibaodang Project where no production data is available.

The following is the text of a Valuation Report prepared by Asia-Pacific Consulting and Appraisal Limited, an independent qualified valuer, in respect of the valuation of the Disposal Group.

10 October 2018

The Directors
China Vanadium Titano-Magnetite Mining Company Limited
Unit A on 4th Floor
E168
Nos. 166-168 Des Voeux Road Central
Hong Kong

Dear Sirs,

INDEPENDENT VALUATION OF THE MINERAL ASSET FOR DISPOSAL BY CHINA VANADIUM TITANO-MAGNETITE MINING COMPANY LIMITED

INTRODUCTION

In accordance with your instructions, Asia-Pacific Consulting and Appraisal Limited ("APA") has prepared an independent opinion of the Market Value of the 100% interest ownership in the disposal group (the "Disposal Group"), held by China Vanadium Titano-Magnetite Mining Company Limited ("CVT"), as at 30 June 2018 (the "Valuation Date"). The major assets of the Disposal Group include four mines, one of which includes extra exploration acreage, one separate advanced exploration property and one processing plant. The report which follows is dated 30 June 2018 (the "Report Date").

The Mineral Asset is defined as *"all property including but not limited to real property, intellectual property, mining and exploration rights held by or acquired in connection with the development of and the production from those mining and exploration rights together with all plant, equipment and infrastructure owned or acquired for the development, extraction and processing of mineral resources in connections with those rights"*.

The valuation was carried out on a Market Value basis. Market Value is defined as *"the amount of money (or the cash equivalent of some other consideration) determined by the Expert for which the Mineral Asset or Security should change hands on the Valuation Date in an open and unrestricted market between a willing buyer and a willing seller in an "arm's length" transaction, with each party acting knowledgeably, prudently and without compulsion*".

The valuation complies with all relevant standards of the VALMIN Code (2015) and is based on accepted valuation procedures and practices that rely substantially on the use of numerous assumptions and consideration of various factors that are relevant to the operation of CVT. Considerations of various risks and uncertainties that have potential impact on the business have also been considered.

No opinion has been expressed on matters which require legal or other specialized expertise or knowledge, beyond what is customarily employed by valuers. The conclusions assume continuation of prudent management over whatever period of time that is reasonable and necessary to maintain the character and integrity of the assets valued.

The work completed to date includes acquisition and interpretation of all data pertaining to the Mineral Asset, retrieved from the relevant CVT Circulars on the Hong Kong Stock Exchange ("HKSE"), and the Independent Geologist's Report produced by an independent consultant, BAW, dated 8 October 2018, which indicates as table below:

Table 1: Mineral Resources Statement for the Baicao, Xiushuihe, Xiushuihe Expansion, Cizhuqing Project, Yangqueqing Project and Haibaodang Project as of 30 June 2018

Assets	Cut-off *TFe%*	JORC Mineral Resource Category	Tonnage *Mt*	Grade *TFe%*	Contained Metal *TFe (kt)*
Baicao Mine	15	Measured	16.51	23.37	3,858
		Indicated	22.16	23.43	5,191
		M+I	38.68	23.42	9,057
Xiushuihe Mine	15	Measured	2.12	30.51	646
		Indicated	2.32	23.40	543
		M+I	4.44	28.21	1,253
Xiushuihe Expansion	15	Measured	38.62	24.33	9,397
		Indicated	21.91	23.56	5,162
		M+I	60.53	24.05	14,559
Cizhuqing Mine	8	Measured	–	–	–
		Indicated	2.01	27.32	549
		M+I	2.01	27.32	549
Yangqueqing Mine	15	Measured	7.34	30.40	2,231
		Indicated	10.27	19.70	2,023
		M+I	17.61	24.16	4,254

The Exploration Results of the Haidaodang Project contain 105.6Mt of mineralized material at 16.54% TFe and 7.43% TiO_2 with contained metal of 17,374kt of TFe.

PURPOSE OF VALUATION

This report is being prepared solely for the use of the directors and management of CVT for its inclusion in the circular to its shareholder in relation to the disposal of the mineral asset held by China Vanadium Titano-Magnetite Mining Company Limited. In addition, APA acknowledges that this report may be made available to the Independent Financial Advisor and used by such adviser as one of the sources of information for formulating its advice to the IBC and Independent Shareholders, and, if requested, the regulators.

BASIS OF OPINION

In order to form an opinion on the value of the Disposal Group, it is vital to make assumptions of certain future events, e.g. economic and market factors. All matters essential to the proper understanding of the valuation will be disclosed in the valuation report.

The following factors form an integral part of our basis of opinion:

- Assumptions on the market conditions and the subject assets that are considered to be fair and reasonable;
- Financial performance that shows a consistent trend of the operation;
- Consideration and analysis on the micro and macro economy affecting the subject assets;
- Analysis on tactical planning, management and synergy of the subject assets;
- Analytical review of the subject assets; and
- Assessment of the leverage and liquidity of the subject assets.

We planned and performed our valuation so as to obtain all the information which we considered necessary in order to provide us with sufficient evidence to express our opinion on the subject assets.

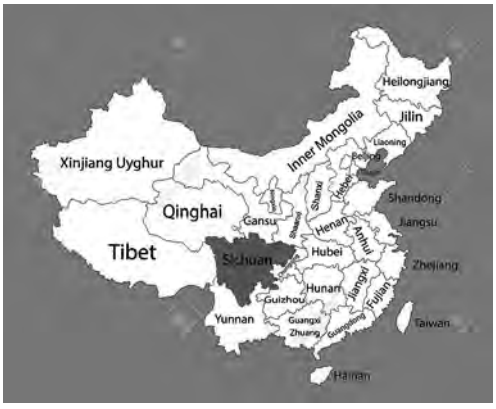
GEOGRAPHIC AND INDUSTRY BACKGROUND

Location

The People's Republic of China ("PRC") is located in East Asia and is the world's most populous country, with a population of around 1.404 billion. China has been among the world's fastest-growing economies, with annual average GDP growth between 2001 and 2010 of 10.5%. Between 2007 and 2011, China's economic growth rate was equivalent to all of the G7 countries' growth combined. In China, more than 100,000 mining enterprises have extracted 30 million tonnes of mineral products every day and delivered 10 billion tonnes of mineral products to the country every year, making a major contribution to the country's economic development. From 2005 to 2011, the total output value of China's mining industry increased from 1.05 trillion yuan to 3.02 trillion yuan, which was a nearly three-fold increase and represents the golden period for China's mining development. Since 2011, the mining situation in China has shown a downward trend. The total output value of the mining industry dropped from 3.02 trillion yuan to 2.83 trillion yuan in 2013. In 2015, the total output value of China's mining industry may be less than 2 trillion yuan, down about 40% from 2011. Its currency is the Renminbi (CNY), which as at the Valuation Date had a closing foreign exchange rate of 0.1511 against the US Dollar.

Sichuan province ("SC") is located in the southwest of the Chinese mainland, which is south of Shaanxi, Gansu and Qinghai provinces, north of Yunnan and Guizhou provinces, west of Chongqing municipality and east of Tibet autonomous region (See Figure 1). Sichuan is an important economic, cultural, industrial, agricultural, military, and tourist province in China. In addition to mineral resources, it has a China (Sichuan) Pilot Free Trade Zone, Tianfu New District and other economic development highlands. It is a distribution center for western China, a part of the Yangtze River Economic Belt and it is the hometown of the National Treasure Giant Panda.

Figure 1: Sichuan Province



Source: Google Images

Domestic Iron Ore Industry

During the year 2018, the Group observed certain industrial development and market statistics that:

According to the National Bureau of Statistics of the PRC, China's economy maintained a steady growth momentum in the first half of 2018 with gross domestic product growth of 6.8%, keeping at the similar level with the same period in 2017.

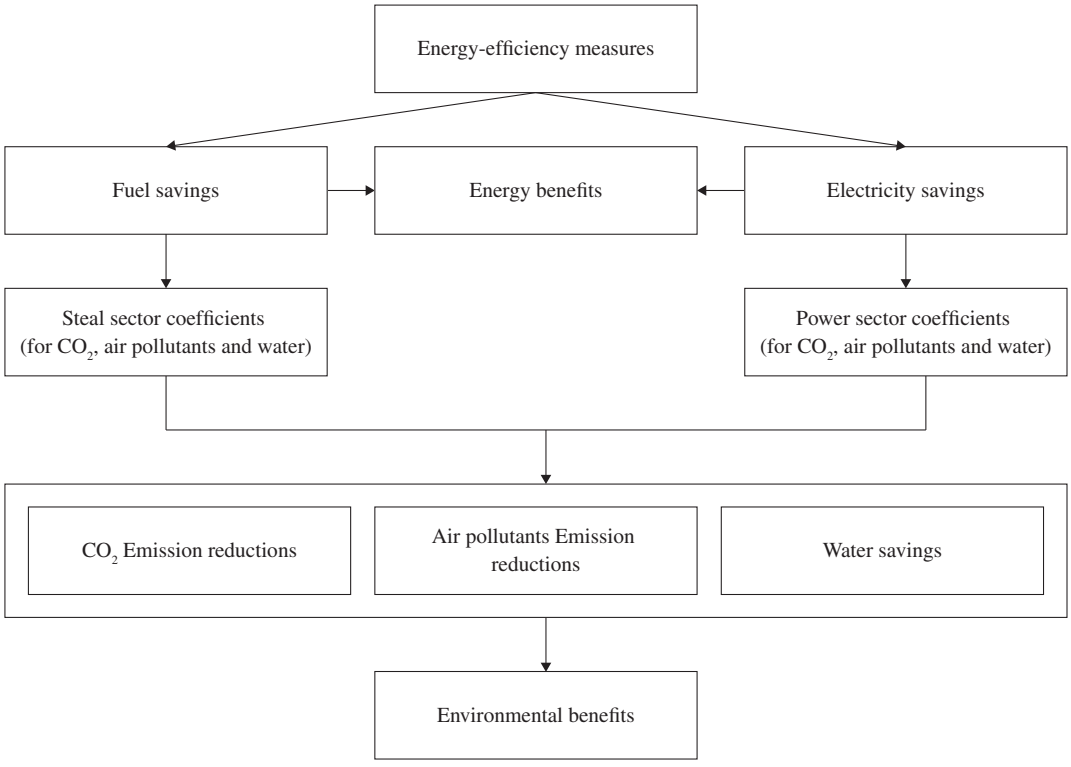
In order to strengthen the efforts in eliminating excessive steel capacity and deepen the nationwide supply-side reform, the National Development and Reform Commission of the PRC ("NDRC") issued "Notice Concerning Properly Undertaking Work for the Dissolution of Excessive Capacity in Key Sectors in 2018" in April 2018, which set explicitly the target to further cut steel capacity by 30 Mt in 2018. It also called for the firm clearance of "zombie enterprises" and maintenance of balanced steel capacity.

Despite the achievement of eliminating around 140 Mt of substandard steel in 2017, it was noted that the illegal steel producers resumed producing steel of poor quality in certain regions in China, which captured the attention of the government at all levels.

In May 2018, the Ministry of Ecology and Environment of the PRC issued a consultation paper on the "Ultra-low Emission Renovation Plan for Steel Enterprises". Under the draft plan, the well-qualified iron and steel enterprises have to implement ultra-low emission renovations and to strive to complete the renovation of steel production capacity by 480 million metric tons (tonnes) by the end of 2020, and 580 million tonnes by 2022, and 900 million tonnes by 2025 (See Figure 2).

According to research reports, the overall market for ultra-low emission renovation in the steel industry exceeds 80 billion yuan. Measured by investment required for lower emission standards, the market for the steel flue gas transformation is 43.6 billion yuan, 9.1 billion yuan and 29.1 billion yuan, respectively, in the period of 2018 to 2020, 2020 to 2022, and 2022 to 2025.

Figure 2: Evaluation framework for quantifying energy and environmental benefits



Source: science direct online library

China has been increasingly emphasising its focus on environmental protection. To achieve green mine construction in China, the Ministry of Natural Resources of the PRC announced the "Non-metal Mining Industry Green Mine Construction Code" and nine other guidelines in June 2018. It was the first national green mine construction industry standard released to promote the green development of China's mining industry.

Sichuan Iron Ore Industry

The assets of the Disposal Group are located in Sichuan Province. Sichuan is rich in mineral resources and has an extensive range of resources. Energy, non-ferrous, rare, precious metals, chemicals, building materials and other minerals are found. 132 kinds of metal and non-metal minerals have been found, accounting for 70% of the total number found in the country; 94 species have been proved to have significant reserves, accounting for 60% of the national total, and these are distributed in most parts of the province.

There are 32 types of mineral reserves found in Sichuan that rank in the top 5 in the country. Among them, 7 types of minerals such as natural gas, titanium ore, vanadium ore and pyrite rank first in the country. Vanadium and titanium have world significance, titanium reserves account for 82% of the world's total reserves, vanadium reserves account for one-third of the world's total reserves; 11 types of minerals, such as lithium ore and thenardite rank second in the country; platinum group metals, iron ore and other 5 kinds of mineral resource rank third in the country; 8 minerals such as dolomite and light rare earth ores for magnesium smelting rank fourth in the country; phosphate mining ranks fifth in the country.

As mentioned, the iron ore industry is a major component of the economy of Sichuan. The sector has been experiencing strong growth, and since 2012, Sichuan has become the third largest producer of iron ore in China (see Figure 3).

Figure 3: Overview of the China iron ore industry in 2018

Source: science direct online library

The majority of the iron mines in China are located in the Sichuan province; although productive iron mines have been established in other provinces of China (see Table 1).

Table 2: Distribution of Iron Ore Resource Reserves in China (by province)

Unit:100 million

Region	Basic Reserves	Resource Volume	Proven Resource Reserves	% of National Total
Nationwide	222.32	504.67	726.99	100
Liaoning	75.46	107.84	183.30	25.21
Sichuan	28.73	68.11	96.84	13.32
Hebei	37.49	50.12	87.61	12.05
Anhui	8.19	39.72	47.91	6.59
Shandong	10.31	36.94	47.25	6.50
Yunnan	3.82	33.50	37.32	5.13
Inner Mongolia	12.12	24.93	37.05	5.10
Shanxi	12.13	21.40	33.53	4.61
Hubei	3.73	26.26	29.99	4.13
Henan	1.65	14.7	16.35	2.25
Xinjiang	3.57	8.01	11.58	1.59
Hunan	1.63	9.67	11.30	1.55
Beijing	0.88	9.00	9.89	1.36
Total (13 provinces)	199.72	450.2	649.92	89.40

Source: metalbulletin

Domestic Price and Supply/Demand Trends

The shift in demand to high-grade or high Fe iron ore from low-grade or low Fe iron ore has fragmented the iron ore market and driven up the prices for iron ore with higher iron content, which is less pollutive during steel production. While at the same time the Chinese government has stepped up efforts in anti-smog policies to control emissions and protect the environment.

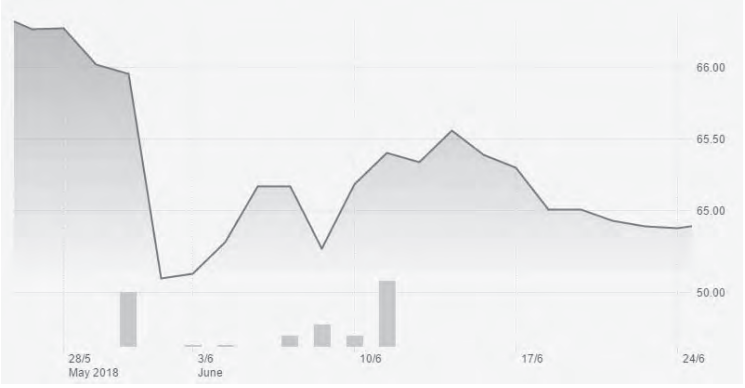
Actually, in the five years through 2018, revenue for the Iron Ore Mining industry in China has been declining 6.4% per year on average. In 2014 and 2015, sharply falling downstream demand and iron ore prices led revenues to decline 4.9% and 20.4%, respectively (See Figure 4).

Figure 4: China Iron Price Trend in recent years (USD)

Source: Financial Times

In 2018, revenue is estimated to remain stable at $115.8 billion. There are over 3,700 enterprises operating in the industry, with total employment of 585,267 and expected total output of 1.3 billion tonnes of iron ore in 2018. China covers over one-third of its domestic demand with imported iron. The iron ore price has been falling since 2012, therefore, import values decreased from $117.8 billion in 2013 to an estimated $57.3 billion in 2018.

Figure 5: Latest China Iron Price Trend (USD)



Source: Financial Times

The China Iron Ore Price Index compiled by the CISA rose to 273.65CNY at the end of February 2018 as the market expected a hike in steel demand after the Chinese New Year holidays, but it fell to 235.02CNY in March 2018 and continued to remain relatively stable to reach 238.01CNY at the end of June 2018 (see Figure 5). The price stagnation was mainly due to the relatively high level of iron ore supply, which continued to prevent the iron ore price from going upward.

MINERAL ASSETS OF THE DISPOSAL GROUP

The Disposal Group owns four mines, one of which includes extra exploration acreage, one separate advanced exploration property and one processing plant, all of them are located in Huili County, Sichuan Province of PRC. The current major business scope of Disposal Group includes that of mining, beneficiation and sale of ore products. The valuation properties include five mines and one processing plant. All the mines can be divided into two parts: Two of them, Baicao and Xiushuihe mines, are in production and contain Mineral Resources and Reserves estimations according to the Competent Person's Report prepared by BAW; and the other three projects, Cizhuqing, Yangqueqing and Haibaodang, are in advanced exploration stages with Mineral Resources only according to the Competent Person's report prepared by BAW. The overall information about all mineral assets are shown in the tables below:

Table 3: Mines belonging to the Disposal Group

	Name	Location	Area	Type of Resources
A1	Baicao Mine	Huili County, Sichuan	Mining area: 1.88sq.km	Vanadium-bearing titano-magnetite
A2	Xiushuihe Mine (including expansion)	Huili County, Sichuan	Exploration area: 1.73sq.km. (including a mining area of 0.52sq.km.)	Vanadium-bearing titano-magnetite
A3	Yangqueqing Mine	Huili County, Sichuan	Mining area: 0.25sq.km.	Vanadium-bearing titano-magnetite
A4	Cizhuqing Mine	Huili County, Sichuan	Mining area: 1.279sq.km.	Vanadium-bearing titano-magnetite
A5	Haibaodang Project	Huili County, Sichuan	Exploration area: 26.2sq.km.	Vanadium-bearing titano-magnetite

Table 4: Processing Plant belonging to the Disposal Group

No.	Name	Location	Capacity
B1	Heigutian Processing Plant	Near the Yangqueqing Mine	Low-grade vanadium-bearing iron concentrates: 800.0 Ktpa; titanium concentrates: 120.0 Ktpa

The most recent status from the CVT report issued in June 2018 are shown in the table below:

Table 5: Mines status as at 30 June 2018

No.	Mine/project	Status as at 30 June 2018
A1	Baicao Mine	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
A2	Xiushuihe Mine (including expansion)	Producing vanadium-bearing iron concentrates of low Fe contents (within the range of 53% TFe to 55% TFe)
A3	Yangqueqing project	Inactive; vanadium-bearing titano-magnetite of low Fe contents (average grade of 25.09% TFe)
A4	Cizhuqing project	Inactive; vanadium-bearing titano-magnetite of low Fe contents (average grade of 21.41% TFe)
A5	Haibaodang project	Inactive; vanadium-bearing titano-magnetite of low Fe contents (average grade of 16.50% TFe)

Table 6: Plant status as at 30 June 2018

No.	Processing Plant	Status as at 30 June 2018
B1	Heigutian Processing Plant	Suspended since 2015 and has no intention to resume production

Mineral Resources

Mineral Resources of the Baicao Mine, Xiushuihe Mine, Cizhuqing Project, Yangqueqing Project and Haibaodang Project were estimated as of 30 June 2018. The key assumptions used for the resource estimation are:

- The estimate of Mineral Resources may be materially affected by environmental, permitting, legal title, taxation, socio-political, marketing, or other relevant issues and therefore, Mineral Resources which are not defined as Ore Reserves may not have demonstrated economic viability.

- The quantity and grade of Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Resources and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Resources category.

- Mineral Resources are constrained to the mining license or exploration license held by CVT.

- Mineral Resources are estimated on an in-situ basis (i.e. as an in-situ tonnage and not adjusted for mining recovery).

- Mineral Resources are depleted by mined out tonnage.

- Mineral Resources are estimated based on the topographic survey data made available as of 30 June 2018.

- Totals may not add up due to rounding.

Table 7: Mineral Resources Statement for the Baicao, Xiushuihe, Xiushuihe Expansion, Cizhuqing Project, Yangqueqing Project and Haibaodang Projects as of 30 June 2018 (JORC, 2012)

Assets	Cut-off	JORC Mineral Resource Category	Tonnage	Grade		Contained Metal	
	TFe%		*Mt*	*TFe%*	*TiO_2%*	*TFe (kt)*	*TiO_2 (kt)*
Baicao Mine	15	Measured	16.51	23.37	10.73	3,858	1,771
		Indicated	22.16	23.43	10.02	5,191	2,221
		M+I	38.68	23.42	10.33	9,057	3,994
Xiushuihe Mine	15	Measured	2.12	30.51	12.17	646	257.8
		Indicated	2.32	23.40	8.54	543	198.5
		M+I	4.44	28.21	10.27	1,253	456.3
Xiushuihe Expansion	15	Measured	38.62	24.33	8.90	9,397	3,437
		Indicated	21.91	23.56	8.00	5,162	1,753
		M+I	60.53	24.05	8.57	14,559	5,190
Cizhuqing Mine	8	Measured	–	–	–	–	–
		Indicated	2.01	27.32	11.71	549	235
		M+I	2.01	27.32	11.71	549	235
Yangqueqing Mine	15	Measured	7.34	30.40	12.50	2,231	918
		Indicated	10.27	19.70	11.90	2,023	1,222
		M+I	17.61	24.16	12.15	4,254	2,140

The Exploration Results of the Haibaodang Project contain 105.6Mt of mineralized material at 16.54% TFe and 7.43% TiO_2 with contained metal of 17,374kt of TFe.

VALUATION APPROACH AND METHODOLOGY

We have considered three generally accepted approaches for the valuation of the Mineral Asset, namely market approach, cost approach and income approach.

Market Approach considers prices recently paid for similar assets with adjustments made to reflect condition and utility of the appraised assets relative to the market comparative. Assets with an established secondary market may be valued by this approach.

Benefits of using this approach include its simplicity, clarity, speediness and it requires only a few or no assumptions. It also introduces objectivity in application as publicly available inputs are used. However, one has to be wary of the hidden assumptions in those inputs as there are inherent assumptions on the value of those comparable assets. It can also be difficult to find comparable assets. Furthermore, this approach relies exclusively on the *efficient market* hypothesis.

There are several different methods and variations under this approach:

Broad-based Method It consists of determining the value of mineral assets by comparing it with the values of similar mineral assets under similar circumstances. This method is more difficult when applied to mineral assets because the underlying mineral assets have a number of unique characteristics that make it complicated to perform direct comparisons between different situations; characteristics such as quality and quantity of each mineral, mining and processing systems and costs, production quantities and products, and location and schedule of mining.

Comparable Transaction Method Value is determined on a per unit basis, such as value per tonne. Differences in the mineral and property characteristics are reflected in the unit value of the mineral.

Industry Multiples Method This method involves comparing the value of two or more publicly traded companies on the basis of stock price. If one of the companies is not publicly traded, financial and performance ratios taken as indicators of stock worth can be determined and compared. This method has the drawback that market capitalisation can represent a discount or premium to the underlying asset value. Currently, for example, uranium stocks are trading at a discount to their asset backing.

Cost Approach considers the cost to reproduce or replace in new condition the assets appraised in accordance with current market prices for similar assets, with allowance for accrued depreciation or obsolescence, whether arising from physical, functional or economic causes. The cost approach generally furnishes the most reliable indication of value for assets without a known secondary market.

Despite the simplicity and transparency of this approach, it does not directly incorporate information about the economic benefits contributed by the subject assets.

Income Approach is the conversion of expected periodic benefits of ownership into an indication of value. It is based on the principle that an informed buyer would pay for the asset no more than an amount equal to the present worth of anticipated future benefits (income) from the same or a substantially similar asset with a similar risk profile.

This approach allows for the prospective valuation of future profits and there are numerous empirical and theoretical justifications for the present value of expected future cash flows. However, this approach relies on numerous assumptions over a long time horizon and the result may be very sensitive to certain inputs, and it only presents a single scenario.

Selection of Valuation Methodology

A. Mineral assets

In our opinion, due to the varying operational status of the mines, both the market approach and income approach are appropriate for valuing the fair value of the equity interest of the Disposal Group. For the two developed mines (Baicai and Xiushuihe), we used the income approach to the valuation as the future economic income can be predicted by using identified Resources and Reserves data. But for the other three projects (Yangqueqing, Cizhuqing and Haibaodang), which only have the Resources data available and no development plans, we determined that it was unreasonable to use the income approach because of the lack of pertinent mining data. As we could identify a number of similar mineral assets to these three mines, we determined that we could use the comparable transactions method, under the market approach, to estimate the values of these three mines.

Market Approach – Comparable Transactions method

Of relevance to the valuation of projects and tenements is the price paid in recent comparable transactions. Under appropriate circumstances, this method can be used as an alternative valuation method for cross checking purpose. We accepted the market approach – Comparable Transaction Method for the valuation of the Yangqueqing project, Cizhuqing project and Haibaodang project on the following bases:

a. There are sufficient number of comparable transactions to be identified with similar mineral assets to the subject assets; and

b. Important characteristics of mineral assets are considered and reflected in this method

Income Approach – Discounted Cash Flow method

Income Approach should be considered when valuing an operating business. In this exercise, Baicao and Xiushuihe mines are in production. In this study, the value of the two mines was developed through the application of an income approach technique known as Discounted Cash Flow ("DCF") method to devolve the future value of the mining operation into a present market value. This method eliminates the discrepancy in time value of money by using a discount rate to reflect all business risks including intrinsic and extrinsic uncertainties in relation to the operation.

B. Processing plant

In our opinion, as the assets are different in Heigutian Processing Plant, we have used different methods to develop our valuation. The methods are named: ''Machinery and Equipment'' and ''Land and Buildings''.

Machinery and Equipment

We have used both the cost approach and the market approach in arriving at our estimate of machinery and equipment market value.

Application of the market approach involves an analysis of the used market to measure the value level of exchanges of comparable property. An estimated amount is added to or deducted from the market price to reflect the difference in condition and utility between the item appraised and its normal used market comparatives.

In arriving at a fair estimate of value of the equipment for which there is no active second-hand market, we have adopted cost approach.

Where the basis is the cost approach, an estimate is made on the cost of reproducing new or replacement cost, less allowance for depreciation or loss of value arising from condition, utility, age, wear and tear, and obsolescence, taking into consideration past and present maintenance policy, and rebuilding history, if any, and current utilization.

Land and buildings

We have adopted the comparison approach in our valuation by making reference to comparable market transactions in our assessment of the market value of property interest. This approach rests on the wide acceptance of the market transactions as the best indicator and pre-supposes that evidence of relevant transactions in the market place can be extrapolated to similar properties, subject to allowances for variable factors.

Where, due to the nature of the buildings and structures of the properties, there are no market sales comparables readily available, we have valued the property on the basis of its depreciated replacement cost.

The table below sums the valuation methods used in this exercise:

Table 8: Valuation Methods used

Assets	Resource/Reserve	Valuation Method
Baicao mine	2P reserve	Income Approach – based on 2P reserve
Xiushuihe mine	2P reserve	Income Approach – based on 2P reserve
Yangqueqing project	No reserve, Measured and indicated resource	Comparable Transactions approach based on M+I resource
Cizhuqing project	No reserve, Measured and indicated resource	Comparable Transactions approach based on M+I resource
Haibaodang project	No Measured and indicated resource	Comparable Transactions approach based on M+I resource
Heigutian Processing Plant		Cost Approach and Market Approach

SOURCE OF INFORMATION

In conducting our valuation of the Market Value of the Mineral Asset, we have reviewed information from several sources, including, but not limited to:

- Background/Operational
    - Description of the operating businesses; and
    - Other background and research materials.

- Financials
    - Audited Financial Statements of the Disposal Group;
    - Other operations and market information in relation to the business;
    - Iron market demand and supply study and forecasts from the Government, internet, news, academic papers and other sources;
    - Iron ore price forecasts from CVT and other sources; and
    - Comparable analysis
- Geological/Technical
    - Independent Geologists' Report from BAW;
    - Definitive Feasibility Study Results Circular ("DFS") from CVT;
    - Production planning and scheduling;
    - Consultation with industry consultants contacted by APA

We conducted a site visit in August 2018. This valuation exercise is based on the available public documentation and consultations with the industry consultants. We also held discussions with the management of the Company and have relied to a considerable extent on the information provided by the parties in arriving at our opinion of the value.

ASSUMPTIONS

General Assumptions

– APA was not provided with private information from CVT. Instead, the data used for the valuation exercise utilizes only information released to the public domain (e.g. exchange circulars, annual reports, financial reporting articles, industry papers and studies).

– In order to realise the growth potential of the business and maintain a competitive edge, additional manpower, equipment and facilities are necessary to be employed. For the valuation exercise, we have assumed that all proposed facilities and systems will work properly and will be sufficient for future expansion.

- APA has not been provided with copies of the operating licenses and incorporating documents; we have assumed that the information provided in the public domain documents regarding said licenses and documents are accurate and up to date. We have relied to a considerable extent on such information in arriving at our opinion of the Value.

- We have assumed that there will be no material change in the existing political, legal, technological, fiscal or economic condition which may adversely affect the business of CVT.

- We have assumed that operational and contractual terms bound by the contracts and agreements entered into by CVT will be honored.

- We have assumed that CVT's competitive advantages and disadvantages will not change significantly during the period under consideration.

- The valuation is done on a nominal basis, with inflation considered in the prices of inputs and outputs.

These assumptions have been made following discussions with Company Management, and the industry consultants. Additionally, we conducted market research into the financial performance of comparable companies and believe that the projections offered by CVT represent reasonable forecasts as compared to other companies in this field.

Please also refer to the specific assumptions that are discussed below regarding the subject assets.

a) Mines – Baicao and Xiushuihe

Income approach – DCF Method

The income approach is an economic measure reflecting the market value of the business. Our development of the market value using the income approach will be determined by using the DCF methodology, which requires a number of parameters, including revenue and expense forecasts, working capital requirements and CAPEX requirements. DCF requires an explicit forecast of the future benefit streams over a reasonably foreseeable short-term and an estimate of a long-term benefit stream that is stable and sustainable, i.e. not varying from period to period and the benefit stream is determined to continue into the future without compromise.

The value of a mineral asset is based on the future income that it is projected to generate. This is a primary method under the income approach and should be considered in priority to all other methods whenever applicable.

The essential elements of DCF are: (1) the expected earnings stream to be discounted, and (2) the discount rate.

The net cash flows from the Projects were estimated, and we discounted the sum to a present value at the appropriate discount rate, as illustrated below:

$$PV = \frac{E_1}{(1+K)} + \frac{E_2}{(1+K)^2} + \frac{E_3}{(1+K)^3} + \ldots + \frac{E_n}{(1+K)^n}$$

PV = Sum of the present value

E_1, E_2, E_3, etc. = Expected economic income in the 1st, 2nd, 3rd, and etc.

En = Expected economic income in the last period

K = Discount Rate

The total present value of the discounted cash flows represents the business enterprise value ("BEV"). We assume the value of the mineral assets equals the BEV on a standalone basis.

Production Schedule Assumptions

Our estimate of the value of Baicao and Xiushuihe mines was performed using a DCF methodology, which requires a number of assumptions, including revenue and expenses forecasts, as well as CAPEX requirements. Data derived under these assumptions has been used as inputs in the DCF method. The nature and underlying rationale for these assumptions are discussed below:

The initial JORC (2012) – compliant estimation of Mineral Resources and Ore Reserves for the Baicao Mine and Xiushuihe Mine were independently classified and prepared by BAW as of 30 June 2018:

Table 9: JORC (2012) Ore Reserves Statement for the Baicao Mine and Xiushuihe Mine as of 30 June 2018

JORC Ore Reserve		Grade			Contained Metals		
Category	Tonnage	TFe	TiO_2	V_2O_5	TFe	TiO_2	V_2O_5
	(Mt)	*(%)*	*(%)*	*(%)*	*(kt)*	*(kt)*	*(kt)*
Baicao Mine							
Proved	2.68	20.94	10.59	0.22	561.70	284.00	6.00
Probable	7.25	21.04	10.28	0.22	1525.40	745.40	16.00
Total	9.93	21.01	10.37	0.22	2087.00	1030.30	22.10
Xiushuihe Mine							
Proved	29.06	24.59	9.39	0.22	7144.10	2727.20	63.80
Probable	17.73	23.85	8.60	0.20	4228.70	1524.90	35.70
Total	46.79	24.43	9.09	0.21	11432.00	4252.10	99.50
Combined							
Proved	31.74	24.28	9.49	0.22	7705.70	3011.20	69.80
Probable	24.98	23.03	9.09	0.21	5754.10	2270.20	51.70
Total	56.72	23.83	9.31	0.21	13519.00	5282.40	121.50

The table below outlines the key assumptions adopted in the DCF valuation:

Table 10: Mining schedule parameter assumptions

	Baicao	**Xiushuihe**
Mine Life *(Years)*:	5.5	14.5
Total Deposit Ore Reserves *(Mt)*:	9.93	46.79

Price Forecast

It is very difficult to obtain long term iron ore prices forecasts that are updated with ongoing global developments in the public domain although there are technical consultants that offer subscription services for their predictions of forecast iron ore prices. Given the sensitivity of iron ore prices to many, largely uncontrollable factors and the difficulty of accurately forecasting prices APA has decided to use price forecasts based on the Competent Person's Report in this exercise. It should be noted that the value of the project is very sensitive to price changes as illustrated in the sensitivity analysis section of this report.

Table 11: Actual and Forecasted Metal Prices for the Baicao's Operation

	Unit price of Raw ore *(CNY/t)* *(Wet basis)*	**Unit processing fees of vanadium-bearing iron concentrates** *(CNY/t)*	**Unit processing fees of High-Grade Titanium concentrates** *(CNY/t)*
2018.7-12	25	222	598
2019	24	219	598
2020	24	214	598
2021	23	210	598
2022	23	210	598
2023	23	210	598

Table 12: Actual and Forecasted Metal Prices for the Xiushuihe's Operation

	Unit price of Raw ore *(CNY/t)* *(Wet basis)*	**Unit processing fees of vanadium-bearing iron concentrates** *(CNY/t)*
2018.7-12	20	222
2019	20	219
2020	19	214
2021	19	210
2022	19	210
2023	19	210
2024	19	210
2025	19	210
2026	19	210
2027	19	210
2028	19	210
2029	19	210
2030	19	210
2031	19	210
2032	19	210

Revenue

The total undiscounted revenue, in nominal terms, for the Baicao mines over the 5.5-year life-of-mine is CNY908 million, with average annual gross revenue of CNY19 million. And for the Xiushuihe mineral over the rest 14.5-year life-of-mine is CNY4,173 million, with average annual gross revenue of CNY82 million.

The revenues of the Baicao mine are as follows:

Table 13: Total revenue of Baicao mine

Baicao	**2018.7-12**	**2019**	**2020**	**2021**	**2022**	**2023**
Raw ore *(kt)* (Wet basis)	784	1,647	1,811	1,992	2,391	1,305
Unit price of raw ore *(CNY/t)* (Wet basis)	25	24	24	23	23	23
Vanadium-bearing iron concentrates *(kt)* (Wet basis)	175	368	404	445	534	291
Unit processing fees of vanadium-bearing iron concentrates *(CNY/t)*	222	219	214	210	210	210
High-grade titanium concentrates *(kt)* (Wet basis)	36	60	60	60	60	60
Unit processing fees of high-grade titanium concentrates *(CNY/t)*	598	598	598	598	598	598
Total Revenues *(CNY'000)*	79,907	155,930	165,072	175,756	203,731	127,522

The revenues of the Xiushuihe mine in recent years are as follows:

Table 14: Five-year revenue of Xiushuihe mine

Xiushuihe	**2018.7-12**	**2019**	**2020**	**2021**	**2022**	**2023**
Raw ore *(kt)* (Wet basis)	1,473	3,020	3,171	3,325	3,325	3,325
Unit price of raw ore *(CNY/t)* (Wet basis)	20	20	19	19	19	19
Vanadium-bearing iron concentrates *(kt)* (Wet basis)	487	999	1,049	1,100	1,100	1,100
Unit processing fees of vanadium-bearing iron concentrates *(CNY/t)*	222	219	214	210	210	210
Total Revenues	137,888	278,222	285,801	294,980	294,980	294,980

Operating Cost

According to the Competent Person's Report, operating costs for the Baicao mineral is expected to be CNY684 per tonne of concentrates ore on average, of which, CNY569 are costs for mining and processing, CNY1 for Business surcharge, CNY40 for rail transport and port handling, inclusive of demurrage costs. Corporate overhead, marketing and closure costs were estimated to be CNY23 per tonne, and CNY51 are cost for Depreciation, depletion and amortization costs.

For another mineral – Xiushuihe, operating costs is expected to be CNY230 per tonne of concentrates ore on average, of which, CNY160 are costs for mining and processing, CNY0.04 for Business surcharge, CNY33 are costs for rail transport and port handling, inclusive of demurrage costs. Corporate overhead, marketing and closure costs were estimated to be CNY6 per tonne, and CNY31 are cost for Depreciation, depletion and amortization costs.

The OPEX details of Baicao and Xiushuihe as below:

Table 15: Operating cost figures for Baicao

OPEX Items *(CNY/t) (concentrates)*	Unit cost of Raw ore	Unit cost of processing of vanadium-bearing iron concentrates	Unit cost of processing of High-grade titanium concentrates	Business surcharge	Selling and distribution expense	Depreciation, depletion and amortization	General & Admin
2018.7-12	33	158	378	1	40	46	25
2019	33	158	378	1	40	49	25
2020	33	158	378	1	40	48	23
2021	33	158	378	1	40	47	21
2022	33	158	378	1	40	42	18
2023	33	158	378	1	40	75	30

Table 16: Operating cost figures for Xiushuihe

OPEX Items *(CNY/t)* *(concentrates)*	**Unit cost of Raw ore**	**Unit cost of processing of vanadium-bearing iron concentrates**	**Business surcharge**	**Selling and distribution expense**	**Depreciation, depletion and amortization**	**General & Admin**
2018.7-12	16	144	0	33	18	7
2019	16	144	0	33	30	6
2020	16	144	0	33	29	6
2021	16	144	0	33	29	6
2022	16	144	0	33	29	6
2023	16	144	0	33	30	6
2024	16	144	0	33	31	6
2025	16	144	0	33	32	6
2026	16	144	0	33	33	6
2027	16	144	0	33	34	6
2028	16	144	0	33	34	6
2029	16	144	0	33	33	6
2030	16	144	0	33	33	6
2031	16	144	0	33	32	6
2032	16	144	0	33	41	8

Capital Expenditure, Depreciation and Amortization

According to the DFS, Baicao's initial capital expenditures will total CNY21.32 Million, and a total of CNY266.47 Million for Xiushuihe.

CVT has not provided construction and capital expenditure schedules; APA therefore assumes that the capital expenditure will be spent in equal parts over later years. A breakdown of capital expenditures is presented below:

Table 17: Capital expenditures for Baicao

Capital Expenditures *(RM'000)*	**Maintenance expenditure**	**Replacement expenditure**	**Future additional capex due to gov. policy and/or consider the macro environment of mining industry**
2018.7-12	22	0	400
2019	380	0	7,067
2020	224	0	4,167
2021	224	0	4,167
2022	0	0	3,167
2023	0	0	1,500

Table 18: Capital expenditures for Xiushuihe

Capital Expenditures *(RM'000)*	**Maintenance expenditure**	**Replacement expenditure**	**Future additional capex due to gov. policy and/or consider the macro environment of mining industry**
2018.7-12	275	2,758	5,400
2019	4,684	5,564	133,234
2020	466	5,716	8,100
2021	280	5,900	2,400
2022	270	5,900	2,100
2023	270	5,900	2,100
2024	270	5,900	2,100
2025	270	5,900	2,100
2026	334	5,900	4,000
2027	469	5,900	8,000
2028	405	5,900	6,100
2029	405	5,900	6,100
2030	0	0	9,100
2031	0	0	100
2032	0	0	0

Corporate Income Tax

The standard corporate income tax for China is 25%. Since 2014, the Tax Bureau of Huili County, under the regional policy of the "Western Development Strategy", has approved a favorable tax rate of 15% for the Baicao Mine and Xiushuihe Mine, which are the subsidiaries of the foreign-funded enterprise recognized by Sichuan Provincial Department of Commerce ("SPDC"). The Baicao Mine and Xiushuihe Mine enjoy the favorable tax rate of 15% until 2022 and 2023 respectively. 25% tax rate is subsequently applied for the Baicao and Xiushuihe Mine thereafter respectively.

Sensitivity Analysis

The tables below show the results of the Net Present Value ("NPV") sensitivity analysis runs for possible changes in iron prices. The iron price analysis considers changes of -20% to +20% relative to the projected, the schedule delay analysis considers delays of six months to three years. The analyses were all performed on the High Case, and are presented below:

Table 19 Sensitivity analysis of price (-20 to 20%, 10% increments) for Baicao and Xiushuihe Value *(CNY '000)*

Iron Ore Price Condition	Value	Baicao	Xiushuihe
	-20%	**-103,876**	**-85,459**
	-10%	**-33,517**	**137,342**
	0%	**36,843**	**360,143**
	10%	**107,202**	**582,944**
	20%	**177,561**	**805,745**

Discount Rate

In applying the discounted cash flow method, it is necessary to determine an appropriate discount rate for the assets under review. The discount rate represents an estimate of the rate of return required by a third-party investor for an investment of this type. The rate of return expected from an investment by an investor relates to perceived risk. Risk factors relevant in our selection of an appropriate discount rate include:

1. Interest rate risk, which measures variability of returns, caused by changes in the general level of interest rates.

2. Purchasing power risk, which measures loss of purchasing power over time due to inflation.

3. Liquidity risk, which measures the ease with which an instrument can be sold at the prevailing market price.

4. Market risk, which measures the effects of the general market on the price behavior of securities.

5. Business risk, which measures the uncertainty inherent in projections of operating income.

Consideration of risk, burden of management, degree of liquidity, and other factors affect the rate of return acceptable to a given investor in a specific investment. An adjustment for risk is an increment added to a base or safe rate to compensate for the extent of risk believed involved in the investment.

The tables below show the results of the Net Present Value ("NPV") sensitivity analysis runs for possible changes in iron prices and discount rate. The iron price analysis considers changes of -20% to +20% relative to the projected forecast and the discount rate analysis considers changes of -2% to +2% relative to the projected forecast. The analyses are presented below:

Table 20: Sensitivity analysis of price (-20 to 20%, 10% increments) and discount rate changes (-2% to 2%, 1% increments) for Baicao

Baicao Iron Project Value (CNY'000)

Iron Ore Price Condition \ *Discount Rate*	-2%	-1%	0%	1%	2%
-20%	**-107,645**	**-105,730**	**-103,876**	**-102,083**	**-100,346**
-10%	**-33,779**	**-33,653**	**-33,517**	**-33,372**	**-33,218**
0%	**40,087**	**38,424**	**36,843**	**35,339**	**33,909**
10%	**113,953**	**110,500**	**107,202**	**104,050**	**101,037**
20%	**187,820**	**182,577**	**177,561**	**172,761**	**168,165**

Table 21: Sensitivity analysis of price (-20 to 20%, 10% increments) and discount rate changes (-2% to 2%, 1% increments) for Xiushuihe

Xiushuihe Iron Project Value (CNY '000)

Iron Ore Price Condition \ *Discount Rate*	-2%	-1%	0%	1%	2%
-20%	**-78,796**	**-82,357**	**-85,459**	**-88,159**	**-90,505**
-10%	**169,555**	**152,658**	**137,342**	**123,434**	**110,784**
0%	**417,905**	**387,673**	**360,143**	**335,027**	**312,074**
10%	**666,256**	**622,688**	**582,944**	**546,620**	**513,364**
20%	**914,607**	**857,704**	**805,745**	**758,213**	**714,653**

Required Return on Equity Capital

We have used Capital Assets Pricing Model (the "CAPM") to estimate the required return on equity capital.

The CAPM is a fundamental tenet of modern portfolio theory which has been the generally accepted basis for marketplace valuations of equity capital. The CAPM technique is widely accepted in the investment and financial analysis communities for the purpose of estimating a company's required return on equity capital.

The equation of CAPM is shown as follow:

Expected Required Return on Equity	=	Risk Free + Nominal Beta (β) × Risk Premium + Special Risk (ε)

The return on equity required of a company represents the total rate of return investors expect to earn, through a combination of dividends and capital appreciation, as a reward for risk taking. The Capital Asset Pricing Model ("CAPM") is used to calculate the required rate of return on equity investment by using publicly-traded companies.

Parameters for CAPM

In determining the equity discount rates for CVT as at the Valuation Date, the following parameters have been used:

Table 22: Weighted Average Cost of Capital parameters

Data as of 30-06-2018		**Source**
Risk free rate	3.49%	10 year china government bond @ 20180630
Equity Risk Premium	7.07%	2018 U.S. Valuation Book
D/E ratio	0.37	Average of comparable companies
Levered beta	1.16	
Unlevered beta	0.93	
Relevered Beta	1.18	
Market Return	11.85%	Cost of equity
Cost of debt	4.90%	Long-term borrowing costs per People's Bank of China
Cost of debt (tax adjusted)	3.68%	
Discount Rate	10.00%	

Estimated Beta was calculated as the average of the comparable companies' adjusted Beta values. Comparable companies were selected primarily on the basis of their major activity being the exploration and production of iron ore.

Average CAPM cost of equity is 11.85%. With debt to equity ratio of 37%, the weighted average cost of capital ("WACC") equals 10.02%. We believe this to be a reasonable WACC given the subject assets industry, its forecasts, and its particular situation.

b) Projects – Cizhuqing, Yangqueqing and Haibaodang

Market Approaches

In this valuation, three mineral assets of the three projects, Cizhuqing, Yangqueqing and Haibaodang, have resource estimations only, but lack reserves data, Definitive Feasibility Study Results Circular ("DFS") or any supporting documentation that can prove that these three mineral assets can bring any anticipated future benefits (income), so the income approach is not appropriate on these three mineral assets.

The market approach was therefore applied in arriving at the value of the Cizhuqing, Yangqueqing and Haibaodang project.

Comparable Transaction Method

Data and related information are available for comparatively recent completed market transactions for a number of iron ore mine projects with similar characteristics to the subject assets. Therefore, we considered these to be appropriate to use as a basis for a Comparable Transaction valuation. In each case, the transaction costs in RMB per tonne of Fe have been established.

Since transactions occur at different times when the iron price can differ greatly from that on the Valuation Date, an adjustment is needed. To compare any project transaction to the subject assets as at the Valuation Date, it is necessary to establish what the likely transaction value could have been if it had occurred on the date of that transaction. Therefore, iron price adjustment is used to reflect the difference in valuation due to differences in iron ore prices at the time of each transaction. This is accomplished by applying a "Price Adjustment Factor" to the transaction parameters, which in this case is derived by the following equation:

Price Adjustment Factor = Iron price on the Valuation Date/Iron price on the date of the comparable transaction

General steps in applying the comparable transactions method is outlined below:

Step 1. Screening and identifying comparable transactions

Step 2. Obtaining information of the selected transactions, including Measured & Indicated (M&I) Resources (in terms of quantity of Fe), consideration paid, percentage of interest acquired, iron ore price at the time of each transaction

Step 3. Considerations of each transaction are then adjusted for percentage of interest acquired (% adjustment) and iron ore price at the time of each transaction (Fe P transaction date/Fe P valuation date), which is then divided by the total amount of M&I Resources to get the unit price of consideration for each transaction

Step 4. Determine the median of the above-mentioned unit prices of each transaction as the equivalent price to value the subject asset (ie. Cizhuqing mine)

There are five transactions of iron mineral assets in recent years that APA adopted to provide five comparable transactions. These are set out in the table below:

Table 23: Summary of Comparable Transactions

Deal No.	Date	Target Name	Acquirer Name	Percentage *(%)*	Consideration	Value of 100% assets *(CNY)*
1	2014/3/7	Gindalbie Metals Ltd	Mount Gibson Iron Limited	47.84%	15,000,000 AUD	174,848,453
2	2012/12/18	The Nullagine Joint Venture	BC Iron Limited	25%	190,000,000 AUD	4,990,616,000
3	2011/12/31	Benxi Iron and Steel (Group) Co., Ltd.	Bengang Steel Plates Co., Ltd.	100%	1,302,373,100 CNY	1,302,373,100
4	2007/9/30	Wugang Zhongjia Mining Development Co., Ltd.		100%	923,780,800 CNY	923,780,800
5	2008/12/31	Shandong Jinling Mining Co., Ltd.		100%	595,647,400 CNY	595,647,400

Source: Capital IQ, Circular or other public information

As Fe is traded on an open market, like many other commodities, the price on 30 June 2018 is 65.4, which is publicly available at Wind. APA used it as a Price adjustment factor to adjust the trading unit price. And the spot exchange rate is used to calculate the transaction unit price in CNY. The Resources (Measured and Indicated), Grade, Contained Metal (kt), adjusted consideration (100% basis adjusted for percentage acquired and Fe price) and equivalent unit price (CNY/t of Fe) of the Comparable Transactions are listed in the table below.

Table 24-1: Details of Comparable Transactions

Deal No.	Target Name	Resources (M&I) *(kt)*	Grade	Contained Metal *(kt)*	Price/unit *(CNY/t)*
1	Gindalbie Metals Ltd	6.82	59.09%	4,030	43.39
2	The Nullagine Joint Venture	123.1	55.40%	68,193	73.18
3	Benxi Iron and Steel (Group) Co., Ltd.	87.1043	68.50%	59,666	21.83
4	Wugang Zhongjia Mining Development Co., Ltd.	20.4777	51.46%	10,538	87.66
5	Shandong Jinling Mining Co., Ltd.	15.408	66%	101,698	58.57

Table 24-2: Details of Comparable Transactions

Deal No.	Target Name	Metal price	Price adjustment factor	Adjusted Price/unit *(CNY/t)*
1	Gindalbie Metals Ltd	124	0.53	22.89
2	The Nullagine Joint Venture	114	0.57	41.98
3	Benxi Iron and Steel (Group) Co., Ltd.	141	0.46	10.11
4	Wugang Zhongjia Mining Development Co., Ltd.	91	0.72	62.93
5	Shandong Jinling Mining Co., Ltd.	90	0.73	42.69

Source: Bloomberg, Capital IQ

Based on the above analysis, the median equivalent unit price of consideration is CNY41.98 per tonne of Fe.

To utilize the comparable transactions above in valuing the Yangzhuqing, Ciqueqing and Haibaodang project, it is necessary to establish the iron resources of our targets.

Table 25: Iron Resources Statement of the Projects

Property	JORC Mineral Resource Category	Tonnage *(Mt)*	Grades *(TFe%)*	Contained Metal *(TFe kt)*
Cizhuqing	Measured	0.0	0.0	0
	Indicated	2.01	27.32	549
	M+I	**2.01**	**27.32**	**549**
Yangqueqing	Measured	7.34	30.40	223
	Indicated	10.27	19.70	2023
	M+I	**17.61**	**24.16**	**4254**
Haibaodang	Measured	–	–	–
	Indicated	–	–	–
	M+I	**–**	**–**	**–**

Source: Competent Person's Report, BAW October 2018.

Using an attributable iron of 549.0 kt on Cizhuqing, and the comparable transaction price of CNY 41.98/t Fe, the indicated valuation of the Cizhuqing is CNY23,055,000. Using an attributable iron of 4254.576 kt on Yangqueqing, and the comparable transaction price of CNY 41.98/t Fe, the indicated valuation of the Yangqueqing is CNY178,625,000. And because the attributable iron of Haibaodang is zero, the indicated valuation of the Haibaodang is insignificant.

During the valuation period, we also reviewed the geological data on the Haibaodang exploration property. Although the project, as at the valuation date, contains only JORC (2012) compliant Inferred resources, but its metal content is low and in particular its TiO_2 and V_2O_5 contents are particularly low. Given this situation, it would be a very long time before a company would move to develop these ore bodies and therefore, we believe that the value of the project as at 30 June 2018 would be insignificant.

The estimated values are listed in the table below.

Table 26: The Value of Cizhuqing, Yangqueqing and Haibaodang project

Subject assets	Resource (Measured + Indicated) *(Mt)*	Grade	Contained Metal *(kt Fe)*	Estimated value *(CNY'000)*
Cizhuqing	2010	27.32%	549	23,055 – 34,556
Yangqueqing	17610	24%	4254.6	178,625 – 267,737
Haibaodang	0		0	Insignificant

This value is considered to be inclusive of all commercial discounts or premiums as all the comparable transactions studied are considered to include all these discounts or premiums.

Sum of Major Mineral Assets

According to different characteristics of each mineral asset, we have used different approach to come up with the most accurate result. The values for the five iron mines, on a rounded basis, are as follows:

Table 27: Major mineral assets' value

CNY'000	Low	High
Baicao	37,633	38,424
Xiushuihe	373,908	387,673
Cizhuqing	23,055	34,556
Yangqueqing	178,625	267,737
Haibaodang	Nil	Nil
Total:	**613,221**	**728,390**

c) Plant – Heigutian Processing Plant

Machinery and Equipment

The assets appraised for the Heigutian Processing Plant include machinery and equipment.

In the situation where we could identify and collect sufficient data on certain plant and equipment that make a direct contribution to revenue generation, APA applied the income approach in order to cross-check the results from the cost approach and the market approach to determine the value.

We considered and excluded the income approach due to insufficient financial data being available for this exercise. We used both the cost approach and the market approach in arriving at our estimate of machinery and equipment market value.

The approaches used and results of machinery and equipment are as follows:

Table 28: Approaches selected in valuation Equipment group of Fixed assets

	Valuation Approach
Fixed asset – Machinery and Equipment	Cost approach and Market approach
Fixed asset – Vehicles	Market approach

Table 29: Results of Equipment group value

	Book value		**Fair value**
	Initial value	**Net value**	**Net value**
Fixed asset – Machinery and Equipment	98,570,864.84	15,975,737.20	21,260,220.00
Fixed asset – Vehicles	177,418.21	8,870.91	30,000.00
Total	98,748,283.05	15,984,608.11	21,290,220.00

Land and buildings

We adopted the comparison approach in our valuation by making reference to comparable market transactions in our assessment of the market value of property interests.

This approach rests on the wide acceptance of the market transactions as the best indicator and pre-supposes that evidence of relevant transactions in the market place can be extrapolated to similar properties, subject to allowances for variable factors.

Where, due to the nature of the buildings and structures of the properties, there are no market comparable sales readily available, APA valued the property on the basis of its depreciated replacement cost.

The approaches used and results of Land and buildings are as follows:

Table 30: Approaches selected in valuation Building and Structures group of Fixed assets

	Valuation Approach
Fixed asset – Buildings	Cost approach
Fixed asset – Structures	Cost approach

Table 31: Results of Building and Structures group value

	Book value		**Fair value**
	Initial value	**Net value**	**Net value**
Fixed asset – Buildings	18,017,798.57	11,523,987.69	11,752,000.00
Fixed asset – Structures	502,559,881.50	229,195,879.24	245,590,000.00
Total	520,577,680.07	240,719,866.93	257,342,000.00

Land Use Right

In our valuation of land use rights, we use comparable market transactions in our assessment of the market value of property interest.

The result of Land use right is as follows:

Table 32: Results of Land use right group of fixed assets value

	Book value		**Fair value**
	Initial value	**Net value**	**Net value**
Fixed asset – land use rights	3,970,512.00	3,295,524.96	6,710,000.00

The sum of fixed assets value of Heigutian processing plant are as follows:

Table 33: Results of fixed assets value of Heigutian

	Book value		Fair value
	Initial value	Net value	Net value
Fixed asset – Machinery and Equipment	98,570,864.84	15,975,737.20	21,260,220.00
Fixed asset – Vehicles	177,418.21	8,870.91	30,000.00
Total M&E Group	98,748,283.05	15,984,608.11	21,290,220.00
Fixed asset – Buildings	18,017,798.57	11,523,987.69	11,752,000.00
Fixed asset – Structures	502,559,881.50	229,195,879.24	245,590,000.00
Total B&S Group	520,577,680.07	240,719,866.93	257,342,000.00
Fixed asset – land use rights	3,970,512.00	3,295,524.96	6,710,000.00
Total Fixed assets	623,296,475.12	260,000,000.00	285,342,220.00

d) Summary of valuation results

Table 34: Valuation Results

	As at 30 June 2018		
	CNY'000	*CNY'000*	
	Book value	**Fair value**	**Remarks**
CURRENT ASSETS			
Assets classified as held for sale	260,000	285,000	Heigutian Processing Plant.
Other current assets	1,349,372	1,349,372	Mainly comprised of inventories, receivables, prepayments and cash and cash equivalents.
Total current assets	1,609,372	1,634,372	
NON-CURRENT ASSETS			
Property, plant and equipment	403,091		Mineral assets including PPE and intangible assets (mining and exploration rights).
Intangible assets	316,020	613,221~728,390	
Other non-current assets	78,604	78,604	Mainly comprised of prepaid land lease payments.
Total non-current assets	797,715	691,825~806,994	
Total assets	2,407,087	2,326,197~2,441,366	

	As at 30 June 2018		
	CNY'000	*CNY'000*	
	Book value	**Fair value**	**Remarks**
CURRENT LIABILITIES			
Total current liabilities	1,572,550	1,572,550	Mainly comprised of trade and bills payables and other payables.
NON-CURRENT LIABILITIES			
Total non-current liabilities	315,916	315,916	Mainly comprised of interest-bearing bank and other loans.
Total liabilities	1,888,466	1,888,466	
EQUITY			
Net assets	518,621	437,731~552,900	

In summary, the fair value of the 100% interest ownership of the Disposal Group as at 30 June 2018 took into consideration of the following:

1. Fair value of Heigutian Processing Plant using cost approach and/or market approach;

2. Fair value of several mineral assets using income approach and/or market approach; and

3. Fair value of the other assets and liabilities is referring to its book value.

VALUATION COMMENTS

The valuation of an interest in a Mineral Asset requires consideration of all relevant factors affecting the operation of the business and its ability to generate future investment returns. The factors considered in the valuation included, but were not limited to, the following:

– the nature of the business;

– the financial condition of the business and the economic outlook in general;

– the operational contracts and agreements in relation to the business;

– the projected operating results; and

– the financial and business risk of the mining operation including the continuity of income and the projected future results.

The estimate of the value is based on relevant standards of the VALMIN Code (2015) and relies substantially on the use of numerous assumptions and the consideration of many uncertainties, not all of which can be easily quantified or ascertained. Further, while the assumptions and consideration of such matters are considered by us to be reasonable, they are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond the control of the Company and APA.

RISK FACTORS

Reliance on key executives

The future success of the subject assets is dependent, to a large extent, upon the continued service of its key executives and technical personnel as it operates in an industry where there is intense competition for experienced managerial and technical personnel. The loss of the services of these personnel without immediate and adequate replacements could have a material adverse effect on the business.

Economic considerations

Because the price of natural resources is strongly determined by broader macroeconomic forces, companies engaged in the extraction and sale of natural resources are exposed to considerable market risk with respect to the predictability of their future revenue streams. There is no guarantee that future movements in the market for natural resources, and the broader global economy, will result in favorable circumstances for the subject's assets and its various projects. Any major movements therein will unquestionably have material effects on the business. The sensitivity of the value of the project to movements in the Iron Ore Price is illustrated in the Sensitivity Analysis section.

Realisation of forecast and future plans

This calculation is premised in large part on the historical financial information and future plans provided by the Management. We have assumed the accuracy of the information provided and relied to a considerable extent on such information in arriving at our calculation of the Value. Since projections are related to the future, there will usually be differences between projections and actual results, and in some cases, those variances may be material. Accordingly, to the extent any of the above-mentioned information requires adjustments, the resulting value may differ.

INDEMNITIES

The Company is required to indemnify and hold us and our personnel harmless from any claims, liabilities, costs and expenses (including, without limitation, attorney's fees and the time of our personnel involved) brought against, paid or incurred by us at a time and in any way based on the information made available in connection with our report except to the extent any such loses, expenses, damages or liabilities are ultimately determined to be the result of gross negligence of our engagement team in conducting its work. This provision shall survive even after the termination of this engagement for any reason.

Our maximum liability relating to services rendered under this engagement (regardless of form of action, whether in contract, negligence or otherwise) shall be limited to the charges paid to us for the portion of our services or work products giving rise to liability. In no event shall we be liable for consequential, special, incidental or punitive loss, damage or expense (including without limitation, lost profits, opportunity costs, etc.), even if it has been advised of their possible existence.

OPINION OF VALUE

Based on the results of investigation and analysis outlined in this report, it is our opinion that the Market Value of the 100% interest ownership in the Disposal Group, as at the Valuation Date, is reasonably stated between **CNY420,000,000 to 560,000,000 (CHINESE RENMINBI YUAN FOUR HUNDRED AND TWENTY MILLION TO FIVE HUNDRED AND SIXTY MILLION).**

Yours faithfully,
For and on the behalf of
Asia-Pacific Consulting and Appraisal Limited

Ian D. Buckingham
Principal Senior Consultant

Jack Li
Executive Director

Note:

Mr. Buckingham holds Associateship and Fellowship Diplomas in Geology (RMIT) with extra studies in mining engineering and primary metallurgy, B.App.Sc.(Applied Geology) and MBA from RMIT University. Mr. Buckingham is a Fellow of AusIMM, Member of PESA and AAPG and member AAPG Energy Minerals Division. Mr. Buckingham has undertaken over three hundred valuation assignments involving iron ore, coal, oil and gas, precious and base metals and specialty minerals. In addition, he has provided Specialist's advice to many Advisory companies engaged in mergers and acquisitions within the resources industry and acted in the capacity of Project Director where he managed project teams engaged in the review of geological, mining and processing operations, legal, environmental and economic issues associated with very large resources projects. Mr. Buckingham has also undertaken a number of strategic development assignments evaluating several minerals commodities on behalf of global mining groups.

Mr. Buckingham is currently a senior consultant of APA and is the Competent Evaluator for the purpose of fulfilling the requirements under Rule 18.23 of the Listing Rules.

Mr. Li has extensive work experience in valuation and corporate advisory industries. He has provided a wide range of valuation services to numerous listed and listing companies of different industries in China, Hong Kong, Singapore and the United States. Jack has also participated in certain large-scale IPOs of State-owned and privately-owned enterprises in China. He has extensive valuation experience in mineral assets, mining rights and corresponding project investments. He has participated in various mining companies' project investments in China. He is a member of Chartered Financial Analyst (CFA) and Member of Royal Institution of Chartered Surveyors.

All of the above individuals disclose that they have no interest in CVT and its subsidiaries, or its assets; nor are they currently or previously employed, in any capacity, by CVT or its subsidiaries. The Competent Evaluators' remuneration is not dependent on the present valuation results.

1. RESPONSIBILITY STATEMENT

This circular, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Listing Rules for the purpose of giving information with regard to the Company. The Directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in this circular is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this circular misleading.

2. DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY OR ANY ASSOCIATED CORPORATION

As at Latest Practicable Date, the interests and short positions of the Directors and chief executives of the Company in the shares, underlying shares and debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) which (a) were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which were taken or deemed to have under such provisions of the SFO) or (b) were required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein or (c) were required, pursuant to the Model Code, to be notified to the Company and the Stock Exchange, are as follows:

Long positions in share options granted by the Company

Number of share options held by the Directors and chief executives of the Company as at Latest Practicable Date:

Name	Capacity	Number of share options held	Number of underlying Shares	Percentage of the Company's issued share capital
Mr. Jiang Zhong Ping	Beneficial owner	17,000,000	17,000,000	0.76%
Mr. Wang Hu	Beneficial owner	2,200,000	2,200,000	0.10%
Mr. Hao Xiemin	Beneficial owner	100,000	100,000	0.00%
Mr. Yu Haizong	Beneficial owner	100,000	100,000	0.00%
Mr. Liu Yi	Beneficial owner	100,000	100,000	0.00%

Save as disclosed above, as at Latest Practicable Date, so far as is known to any Directors and chief executives of the Company, none of the Directors and chief executives of the Company had any interests or short positions in the shares, underlying shares and debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) which (a) were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they were taken or deemed to have under such provisions of the SFO) or (b) were required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein or (c) were required, pursuant to the Model Code to be notified to the Company and the Stock Exchange.

Since 31 December 2018 (being the date to which the latest published audited consolidated financial statements of the Group are made up) and up to the Latest Practicable Date, none of the Directors or proposed directors of the Company (if any) had any interest, direct or indirect, in any assets which had been acquired or disposed of by or leased to any member of the Group, or were proposed to be acquired or disposed of by or leased to any member of the Group.

None of the Directors or proposed directors of the Company (if any) was materially interested in any contract or arrangement subsisting as at the Latest Practicable Date and which is significant in relation to the business of the Group taken as a whole.

3. SUBSTANTIAL SHAREHOLDERS' INTERESTS IN SHARES AND UNDERLYING SHARES

To the best knowledge of the Directors or chief executives of the Company, as at Latest Practicable Date, persons (other than the Directors or chief executives of the Company) who had interests or short positions in the Shares or underlying Shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or as recorded in the register required to be kept by the Company under Section 336 of the SFO are as follows:

Long positions in Shares:

Name	*Notes*	Directly beneficially owned	Through parties acting in concert	Held in the capacity of person having a security interest in Shares	Total	Percentage of the Company's issued share capital
Trisonic International	*1, 5 & 6*	1,006,754,000	–	–	1,006,754,000	44.76%
Kingston Grand Limited	*1, 5 & 6*	–	1,006,754,000	–	1,006,754,000	44.76%
Mr. Wang Jin	*1, 5 & 6*	–	1,006,754,000	–	1,006,754,000	44.76%
Mr. Yang Xianlu	*5*	–	1,006,754,000	–	1,006,754,000	44.76%
Mr. Wu Wendong	*5*	–	1,006,754,000	–	1,006,754,000	44.76%
Mr. Li Hesheng	*1 & 5*	–	1,006,754,000	–	1,006,754,000	44.76%
Mr. Shi Yinjun	*1 & 5*	–	1,006,754,000	–	1,006,754,000	44.76%
Mr. Zhang Yuangui	*1 & 5*	–	1,006,754,000	–	1,006,754,000	44.76%
Long Sino International Limited	*2, 3 & 5*	–	1,006,754,000	–	1,006,754,000	44.76%
Mr. Zou Hua	*3, 4 & 5*	–	1,006,754,000	–	1,006,754,000	44.76%
Ms. Jiang Hua	*4 & 5*	–	1,006,754,000	–	1,006,754,000	44.76%
四川信托有限公司		–	–	614,080,000	614,080,000	27.30%
Erie Investments Limited		202,892,000	–	–	202,892,000	9.02%

Notes:

1. The issued share capital of Trisonic International was owned as to 3% by Mr. Li Hesheng, 42.6% by Mr. Wang Jin, 7.2% by Mr. Shi Yinjun, 7.2% by Mr. Zhang Yuangui and 40% by Kingston Grand Limited.

2. The issued share capital of Kingston Grand Limited was owned as to 100% by Long Sino International Limited.

3. The issued share capital of Long Sino International Limited was owned as to 100% by Mr. Zou Hua.

4. Ms. Jiang Hua was the spouse of Mr. Zou Hua.

5. As at Latest Practicable Date, 1,006,754,000 Shares were held by Trisonic International. Since Trisonic International, Kingston Grand Limited, Messrs. Wang Jin, Yang Xianlu, Wu Wendong, Li Hesheng, Shi Yinjun and Zhang Yuangui, Long Sino International Limited, Mr. Zou Hua and Ms. Jiang Hua were parties acting in concert, each of Kingston Grand Limited, Messrs. Wang Jin, Yang Xianlu, Wu Wendong, Li Hesheng, Shi Yinjun and Zhang Yuangui, Long Sino International Limited, Mr. Zou Hua and Ms. Jiang Hua was deemed to be interested in 1,006,754,000 Shares held by Trisonic International.

6. Mr. Wang Jin was a director of Trisonic International.

Save as disclosed above, as at the Latest Practicable Date, the Company has not been notified by any persons (other than the Directors or chief executives of the Company) who had interests or short positions in the Shares or underlying Shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or as recorded in the register required to be kept by the Company under Section 336 of the SFO.

4. SERVICE AGREEMENTS

As at the Latest Practicable Date, none of the Directors had a service contract with any member of the Group which was not determinable by the Company or the relevant member of the Group within one year without payment of compensation other than statutory compensation.

5. MATERIAL LITIGATIONS

As at the Latest Practicable Date, neither the Company nor any of its subsidiaries were engaged in any litigation, arbitration or claim of material importance and no litigation, arbitration or claim of material importance was known to the Directors to be pending or threatened by or against the Company or any of its subsidiaries.

6. COMPETING INTEREST

As at the Latest Practicable Date, none of the Directors and his associates was interested in any business apart from the business of the Group, which competes or is likely to compete, either directly or indirectly, with that of the Group which would otherwise be required to be disclosed under Rule 8.10 of the Listing Rules if any of such Directors or his associates was a controlling Shareholder.

7. EXPERTS' QUALIFICATIONS AND CONSENTS

As at the Latest Practicable Date, each of Messis Capital Limited, Ernst & Young, Asia-Pacific Consulting and Appraisal Limited and BAW Mineral Partners Limited has given and has not withdrawn its written consent to the issue of this circular with the inclusion of its letter and/or report and references to its name in the form and context in which it appears.

Name	Qualification
Messis Capital Limited	a corporation licensed to carry out Type 1 (dealing in securities) and Type 6 (advising on corporate finance) regulated activities under the SFO
Ernst & Young	certified public accountants
Asia-Pacific Consulting and Appraisal Limited	qualified independent valuer
BAW Mineral Partners Limited	competent person

As at the Latest Practicable Date, each of Messis Capital Limited, Ernst & Young, Asia-Pacific Consulting and Appraisal Limited and BAW Mineral Partners Limited did not have any direct or indirect interest in any asset which had been acquired, disposed of by, or leased to any member of the Group, or was proposed to be acquired, or disposed of by, or leased to any member of the Group, since 31 December 2018, being the date to which the latest audited financial statements of the Group was made up; and was not beneficially interested in the share capital of any member of the Group and did not have any right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of the Group.

8. MATERIAL CONTRACTS

The following contracts (not being contracts entered into in the ordinary course of business) were entered into by the members of the Group within two years immediately preceding the date of this circular, and are or may be material:

(a) the sale and purchase agreement dated 29 September 2017 entered into between the Company and Mr. Toe Teow Heng, pursuant to which Mr. Toe Teow Heng had conditionally agreed to sell, and the Company had conditionally agreed to purchase, 1,920,000 shares, representing 32% of the entire issued share capital, of Mancala Holdings Limited at an aggregate consideration of HK$25,000,000; and

(b) the SPA.

9. DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents are available for inspection at the head office and principal place of business of the Company in Hong Kong at Unit A on 4th Floor, E168, Nos, 166-168 Des Voeux Road Central, Hong Kong during normal business hours from 9:30 a.m. to 5:00 p.m. on any business day from the date of this circular up to and including the date of the EGM:

(a) the memorandum and articles of association of the Company;

(b) the annual reports of the Company for years ended 31 December 2015, 2016, 2017 and 2018;

(c) the letter from the Board, the text of which is set out on pages 8 to 27 to this circular;

(d) the letter from the IBC to the Independent Shareholders, the text of which is set out on pages 28 to 29 of this circular;

(e) the letter from the IFA to the IBC and the Independent Shareholders, the text of which is set out on pages 30 to 64 of this circular;

(f) the unaudited combined financial information of the Disposal Group, the details of which are set out in Appendix I to this circular;

(g) the report on the unaudited pro forma financial information of the Remaining Group prepared by Ernst & Young, the full text of which is set out in Appendix II to this circular;

(h) the competent person's report prepared by BAW Mineral Partners Limited, the full text of which is set out in Appendix IV to this circular;

(i) the valuation report prepared by Asia-Pacific Consulting and Appraisal Limited, the full text of which is set out in Appendix V to this circular;

(j) the written consents referred to in the paragraph headed "Experts' Qualifications and Consents" in this appendix;

(k) the material contracts referred to in the paragraph headed "Material Contracts" in this appendix; and

(l) this circular.

10. MISCELLANEOUS

(a) The registered office of the Company is located at Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman KYI-1111, Cayman Islands.

(b) The head office and principal place of business of the Company in Hong Kong is situated at Unit A on 4th Floor, E168, Nos, 166-168 Des Voeux Road Central, Hong Kong.

(c) The principal share registrar and the transfer agent of the Company is SMP Partners (Cayman) Limited at Royal Bank House – 3rd Floor, 24 Shedden Road, P.O. Box 1586, Grand Cayman KY1-1110, Cayman Islands.

(d) The share registrar and the transfer office of the Company in Hong Kong is Computershare Hong Kong Investor Services Limited at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong.

(e) The company secretary of the Company is Mr. Kong Chi Mo. Mr. Kong is a fellow member of The Association of Chartered Certified Accountants (United Kingdom), a member of The Hong Kong Institute of Directors, a fellow of each of The Hong Kong Institute of Chartered Secretaries and The Institute of Chartered Secretaries and Administrators (United Kingdom), an ordinary member of Hong Kong Securities and Investment Institute and a full member of Hong Kong Investor Relations Association.

(f) In the event of inconsistency, the English text of this circular shall prevail over the Chinese text thereof.

China Vanadium Titano-Magnetite Mining Company Limited
中國釩鈦磁鐵礦業有限公司

(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 00893)

NOTICE OF EXTRAORDINARY GENERAL MEETING

NOTICE IS HEREBY GIVEN that the extraordinary general meeting of China Vanadium Titano-Magnetite Mining Company Limited (the "**Company**") will be held at Victoria Room I, 3/F., Regal Hong Kong Hotel, 88 Yee Wo Street, Causeway Bay, Hong Kong at 10:00 a.m. on Friday, 28 June 2019 for the purposes of considering and, if thought fit, approving the following ordinary resolution:

ORDINARY RESOLUTION

1. "**THAT** the sale and purchase agreement dated 29 January 2019 entered into among Sichuan Lingyu Investment Co., Ltd.*(四川省凌御投資有限公司)(the "**Vendor**"), Chengyu Vanadium Titano Technology Ltd.*(成渝釩鈦科技有限公司) and Huili County Caitong Iron and Titanium Co., Ltd.*(會理縣財通鐵鈦有限責任公司)("**Huili Caitong**") in relation to the disposal by the Vendor of entire equity interest in Huili Caitong (a copy of which has been produced to the meeting marked "**A**" and signed by the chairman of the meeting for the purpose of identification), on and subject to the terms and conditions thereof, and the transactions contemplated thereby be and are hereby approved and that the directors of the Company be and are hereby authorised to take any action and sign any document (under seal, if necessary) as they consider necessary, desirable or expedient in connection therewith or with the transactions contemplated thereby."

By order of the Board of
China Vanadium Titano-Magnetite Mining Company Limited
Teh Wing Kwan
Chairman

Hong Kong, 10 June 2019

Head office and principal place of business in Hong Kong:
Unit A on 4th Floor, E168,
Nos, 166-168 Des Voeux Road Central,
Hong Kong

Notes:

1. A member of the Company entitled to attend and vote at the meeting (the "**Meeting**") above is entitled to appoint in written form one or, if he is the holder of two or more shares (the "**Shares**") of the Company, more proxies to attend and vote instead of him. A proxy need not be a member of the Company.

2. In the case of joint holders of Shares, any one of such joint holders may vote, either in person or by proxy, in respect of such Shares as if he/she were solely entitled thereto, but if more than one of such joint holders are present at the Meeting, whether in person or by proxy, then one of the said persons so present whose name stands first on the register in respect of such Shares shall alone be entitled to vote in respect thereof.

3. In order to be valid, the form of proxy must be in writing under the hand of the appointor or of his/her attorney duly authorised in writing, or if the appointor is a corporation, either under seal, or under the hand of an officer or attorney duly authorised, and must be deposited with the Hong Kong share registrar and transfer office (the "**Hong Kong Share Registrar**") of the Company, Computershare Hong Kong Investor Services Limited at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong (together with the power of attorney or other authority, if any, under which it is signed or a notarially certified copy thereof) not less than 48 hours before the time fixed for holding of the Meeting (i.e. at or before 10:00 a.m. on Wednesday, 26 June 2019 (Hong Kong time)) or any adjournment thereof.

4. For the purpose of determining members who are qualified for attending the Meeting, the register of members of the Company will be closed from Tuesday, 25 June 2019 to Friday, 28 June 2019 (both days inclusive), during which period no transfer of the Shares will be effected. In order to qualify for attending the Meeting or any adjournment thereof, all transfers of Shares accompanied by the relevant share certificates must be lodged with the Hong Kong Share Registrar at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong by no later than 4:30 p.m. on Monday, 24 June 2019.

5. Delivery of an instrument appointing a proxy should not preclude a member from attending and voting in person at the Meeting or any adjournment thereof and in such event, the instrument appointing a proxy shall be deemed to be revoked.

As at the date of this notice, the Board comprises Mr. Teh Wing Kwan (Chairman) as non-executive Director; Mr. Jiang Zhong Ping (Chief Executive Officer), Mr. Hao Xiemin (Financial Controller) and Mr. Wang Hu as executive Directors; Mr. Yu Haizong, Mr. Wu Wen and Mr. Liu Yi as independent non-executive Directors.