

BEHRE DOLBEAR
BEHRE DOLBEAR ASIA, INC.

founded 1911 MINERALS INDUSTRY ADVISERS
999 Eighteenth Street – Suite 1500, Denver, CO 80202 USA
Telephone +1.303.620.0020 Fax +1.303.620.0024

BEIJING DENVER GUADALAJARA HONG KONG LONDON NEW YORK SANTIAGO SYDNEY TORONTO VANCOUVER

www.dolbear.com

7 March, 2011

The Directors
China Kingstone Mining Holdings Limited
Cricket Square, Hutchins Drive
P.O. Box 2681
Grand Cayman, KY1-1111
Cayman Islands

Gentlemen,

Behre Dolbear Asia, Inc. (“BDASIA”), a wholly owned subsidiary of Behre Dolbear & Company, Inc. (“Behre Dolbear”), herewith submits a competent person’s report (“CPR”) on the Independent Technical Review of the Jiangyou Limestone Dimension Stone Project (the “Jiangyou Project”) in Jiangyou City, Sichuan Province, the People’s Republic of China. The address for BDASIA is noted above. This letter of transmittal is part of the CPR.

This CPR covers the Jiangyou Project in Jiangyou City, Sichuan Province in China that is 100% owned and operated by Sichuan Jiangyou Jinshida Company Limited, which is an indirectly 100%-owned subsidiary of China Kingstone Mining Holdings Limited (the “Company”). This mining property constitutes the primary mining asset of the Company. The Jiangyou Project is a limestone dimension stone mining project currently under construction. BDASIA’s project team visited the Jiangyou Project in March 2010 and June–July 2010.

The purpose of this CPR is to provide an independent technical assessment of the Company’s Jiangyou Project to be included in the prospectus for the Company’s initial public offering (“IPO”) on the main board of The Stock Exchange of Hong Kong Limited (“SEHK”). This CPR has been prepared in accordance with the Rules Governing the Listing of Securities on the SEHK (the “Listing Rules”). The reporting standard adopted by this CPR is the VALMIN Code and 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 limestone resources and reserves defined for the property have been reviewed for conformity with 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, the Australian Institute of Geoscientists, and the Minerals Council of Australia in 1999 and revised in 2004.

The evidence upon which the estimated limestone resources and reserves are based includes the deposit geology, drilling and sampling information, and project economics. BDASIA formed its view of the limestone resource and reserve estimates based on the site visits of BDASIA's professionals to the subject mining property, interviews with the Company's management, site personnel and outside consultants, analysis of the drilling and sampling database, and the procedures and parameters used for the estimates by the Company's outside consultants.

The BDASIA project team consisted of senior-level mining professionals from Behre Dolbear's Denver office and New York office in the United States and the Sydney office in Australia. The scope of work conducted by BDASIA included site visits to the reviewed mining property, technical analysis of the project geology, limestone resource and reserve estimates, and review of limestone dimension stone mining, limestone slab and other by-products production, operating costs, capital costs, environmental and social management and occupational health and safety.

BDASIA did not audit the Company's data, re-estimate the limestone resources, or review the tenement status with respect to any legal or statutory issues.

BDASIA's CPR comprises an Introduction, followed by reviews of the technical aspects of Geology, Limestone Resources and Reserves, Limestone Dimension Stone Mining, Limestone Slab and Other By-Products Production, Operating and Capital Costs, Environmental and Social Management, and Occupational Health and Safety, and a Risk Analysis of the mining property. BDASIA believes that the CPR adequately and appropriately describes the technical aspects of the mining project and addresses issues of significance and risk.

BDASIA is independent of the Company and its Jiangyou Project. Neither BDASIA nor any of its employees or associates involved in this project holds any share or has any direct or indirect pecuniary or contingent interests of any kind in the Company or its Jiangyou Project. BDASIA is to receive a fee for its services (the work product of which includes this CPR) at its normal commercial rate and customary payment schedules. The payment of BDASIA's professional fee is not contingent on the outcome of this CPR.

The effective date of this CPR is December 31, 2010 and the Company has advised BDASIA that there is no material change for the Jiangyou Project since the effective date. The sole purpose of this CPR is for the use of the Directors of the Company and its sponsor and advisers in connection with the Company's IPO prospectus and should not be used or relied upon for any other purpose. Neither the whole nor any part of this CPR nor any reference thereto may be included in or with or attached to any document or used for any other purpose, without BDASIA's written consent to the form and context in which it appears. BDASIA consents to the inclusion of this CPR in the Company's IPO prospectus for the purpose of the IPO on the SEHK.

Yours faithfully,

BEHRE DOLBEAR ASIA, INC.

Qingping Deng, *Ph.D., CPG*
Project Manager

Behre Dolbear Project 10-051

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1.0 INTRODUCTION

China Kingstone Mining Holdings Limited (the “Company”) is a company registered in the Cayman Islands. Through its subsidiaries, the Company owns a 100% interest in the Jiangyou limestone (commercially referred to as marble) dimension stone project (the “Jiangyou Project”) in Jiangyou City, Sichuan Province of the People’s Republic of China (“PRC” or “China”) that is 100%-owned and operated by the Company’s indirect subsidiary, Sichuan Jiangyou Jinshida Company Limited (“Jinshida”). The location of the Jiangyou Project is shown in Figure 1.1.

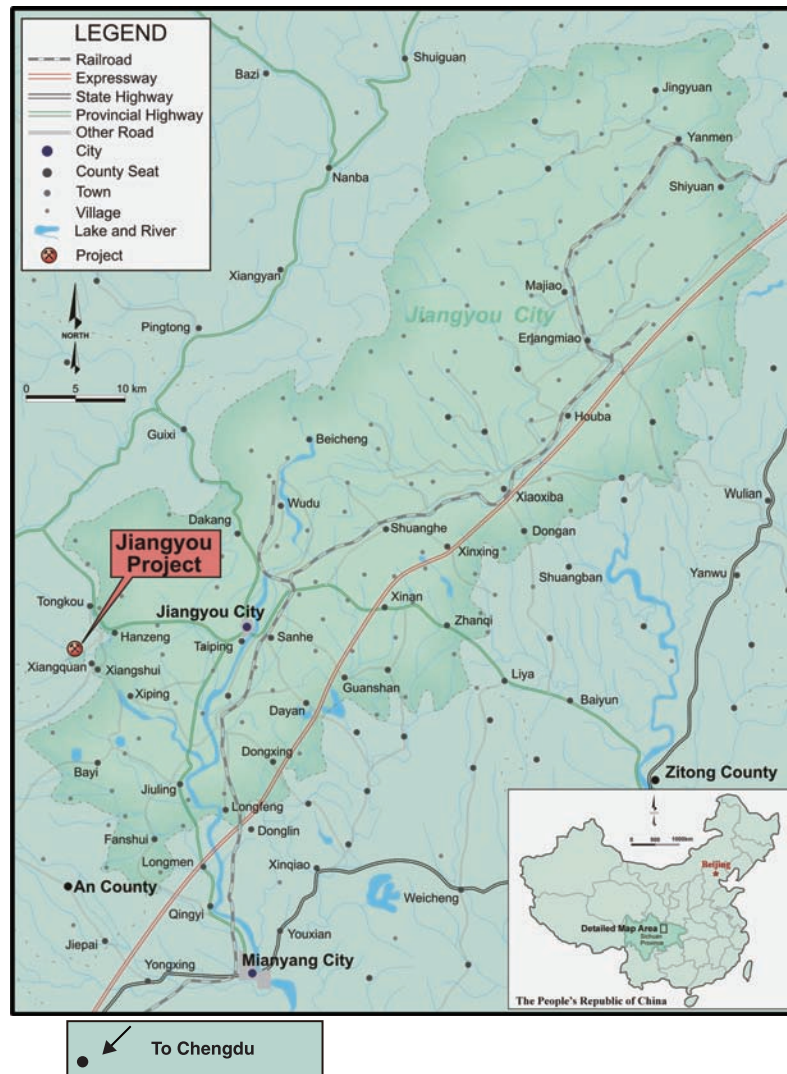


Figure 1.1 Location map of the Jiangyou Project

Geologically, limestone is rock of sedimentary origin primarily composed of calcium carbonate without or with limited magnesium; dolomite is a rock of sedimentary origin primarily composed of calcium magnesium carbonate; marble is defined as metamorphosed limestone or dolomite that is thoroughly recrystallized and much or all of the sedimentary and biologic textures are obliterated. However, commercially in the stone industry, marble also includes unmetamorphosed limestone and dolomite that is capable of taking a polish. The limestone resources and reserves discussed in this CPR refer to limestone that is commercially classified as marble in the stone industry.

The Jiangyou Project is a limestone dimension stone mining project currently under development. The project will have a designed production capacity of 150,000 cubic meters per annum (“m³pa”) of limestone blocks, 3.0 million square meters per annum (“Mm²pa”) of limestone slabs, including standard 2-centimeter (“cm”) thick one-side-polished limestone slab, 2-cm thick cut-to-size limestone tiles, and 1-cm thick one-side-polished limestone slabs, and 200,000 pieces per annum of shaped stone products. In addition, the large quantity of smaller pieces of limestone that are generated from the limestone block and slab production process can be used to produce smaller cut-to-size limestone tiles and raw materials for calcium carbonate powders and cement production. There will also be some contract limestone slab production on an as needed basis. The project will use a combination of block cutting techniques in open pits, including diamond wire cutting, chain saw cutting, and disc saw cutting to produce limestone blocks. Limited preliminary mine construction for the Jiangyou Project started in July 2008, but full-scale mine construction did not start until January 2010. Mine construction is expected to be completed at the end of 2013. Limited commercial production of limestone blocks from the Jiangyou started in September 2010; mine production for limestone blocks is forecasted to ramp up from 45,000 cubic meters (“m³”) in 2011, to 90,000 m³ in 2012, to 135,000 m³ in 2013, and to 150,000 m³ in 2014. Construction of the limestone slab processing plant will start in early 2011 and is expected to be partially completed in December 2011 and totally completed in December 2012. Limestone slab production from the plant is expected to start in early 2012 and to ramp up from 1.8 Mm²pa in 2012 to 3.0 Mm²pa in 2013.

The Company proposes to prepare a prospectus to be issued in support of an initial public offering (“IPO”) for a listing on the main board of The Stock Exchange of Hong Kong Limited (“SEHK”) and to raise capital for project development, expansion and acquisition.

The Board of Directors of the Company engaged Behre Dolbear Asia, Inc. (“BDASIA”), a wholly-owned subsidiary of Behre Dolbear & Company, Inc. (“Behre Dolbear”), as their independent technical adviser to undertake an independent technical review of the Company’s Jiangyou Project and to prepare a competent person’s report (“CPR”) in connection with the Company’s IPO. This BDASIA CPR is intended to be included in the Company’s IPO prospectus.

BDASIA’s project team for this technical review consists of senior-level professionals from Behre Dolbear’s offices in Denver, Colorado and New York, New York in the United States and Sydney in Australia. Behre Dolbear personnel contributing to the study and to this CPR include:

- **Dr. Qingping Deng** (B.S., M.S. and Ph.D.), a senior associate of BDASIA, was BDASIA’s **Project Manager** and a **Project Geologist** for this technical review. Dr. Deng is a geologist with more than 26 years of professional experience in the areas of exploration, deposit modeling and mine planning, estimation of mineral resources and ore reserves, geostatistics, cash-flow analysis, project evaluation/valuation, and feasibility studies in North, Central, and South America; Asia; Australia; Europe; and Africa. Dr. Deng is a Certified Professional Geologist with the American Institute of Professional Geologists, a Qualified Professional

Member of The Mining and Metallurgical Society of America and a Registered Member of The Society of Mining, Metallurgy, and Exploration, Inc. (“SME”) and meets all the requirements for “Competent Person” as defined in the 2004 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (“the JORC Code”) and all the requirements for “Qualified Person” as defined in Canadian National Instrument 43-101. In recent years, he has managed a number of CPR studies for filing with SEHK and other securities exchanges. Dr. Deng is fluent in both English and Chinese. He was the President and Chairman of the board of directors of BDASIA before June 30, 2010.

- **Mr. Reinis Sipols** (B.S.), a senior associate of Behre Dolbear’s New York office, was BDASIA’s **Project Mining Engineer** for this review. Mr. Sipols is a mining engineer with over 20 years of operational experience in the mining and construction materials industry with most of those managing urban mining operations. Responsibilities included mine planning, operations management, budgeting, capital improvement project management, environmental compliance, safety and public relations. He was Operations Manager for Tilcon New York with responsibility for integrating and consolidating several acquired companies with a transaction value of US\$200 million. Since moving into the consulting industry, he was a Vice President of Spectra Environmental Group responsible for the 30-person Poughkeepsie, New York office from 2002 to 2006; he was a Business Development Manager for Behre Dolbear & Company, Inc., then the President and CEO for Behre Dolbear & Company (USA), Inc. from 2006 to 2010. Mr. Sipols holds Professional Engineer licenses in New York, New Jersey and Pennsylvania. He is a licensed blaster in the State of New York, a member of Society of Mining, Metallurgy and Exploration and Society of Explosive Engineers.
- **Mr. Sergio Matteoli** (B.S. and M.S.), a senior consultant of Behre Dolbear’s Denver office, was BDASIA’s **Project Limestone Dimension Stone Geology, Mining and Processing Specialist** for this review. Mr. Matteoli is a dimension stones and industrial minerals specialist, based in San Miniato, Italy, with more than 27 years of professional experience in the field of geology and processing of ornamental stones and industrial minerals. He has extensive worldwide experience in the evaluation of deposits for ornamental stone production, and in the establishment of ornamental stone quarries. Mr. Matteoli is a founder and technical director of Geofield srl in Italy, an internationally recognized firm of geological, geo-mechanical and market consultants specializing in the dimension stones and industrial minerals industries. He is a Certified Professional Geologist with the Italian Professional Geologists Association and a member of the Italian Mining Engineers Association. Mr. Matteoli has published extensively on the geology, production and marketing of ornamental stones and industrial minerals and he still cooperate with the Pisa and Florence universities with workshops and seminars dedicated to the post-degree students.
- **Ms. Janet Epps** (B.S. and M.S.), a senior associate of Behre Dolbear’s Sydney, Australia office, was BDASIA’s **Project Environmental, Social, Occupational Health and Safety Specialist**. She has over 30 years experience in environmental and community issues management, sustainability, policy development and regulatory consultancy services. Ms. Epps has worked extensively with the private sector, government and the United Nations, the World Bank, the IFC, and the Multilateral Investment Guarantee Agency (“MIGA”), as well as with the mining industry. She has provided policy advice to governments of developing countries on designated projects and contributed toward sustainable development and

environmental management strategies. She has completed assignments in Australasia, the Pacific, Asia, the Middle East, the CIS countries, Africa, Eastern Europe, South America, and the Caribbean. Ms. Epps is a Fellow of the Australasian Institute of Mining and Metallurgy.

- **Mr. David Abbott, Jr.** (A.B. and M.S.), a senior associate of Behre Dolbear's Denver, Colorado, USA office, was BDASIA's **Project Adviser** for this study. His expertise is in reserve and resource definition and classification, securities disclosure requirements, and professional ethics and practices. He spent 21 years as a geologist with the U.S. Securities and Exchange Commission ("SEC") prior to joining Behre Dolbear in 1996. Much of his work at the SEC involved the investigation of and litigation support for precious and base metals, coal, and industrial minerals mining frauds. Since joining Behre Dolbear, Mr. Abbott has worked on a number of ore reserve audits for financial institutions and/or for filings to be made with the SEC, on due diligence inquiries, and mineral property valuations. He has also worked on litigation support cases involving ore reserve estimates and mining claim validity. Mr. Abbott is a Certified Professional Geologist by the American Institute of Professional Geologists, is a Fellow of and a Chartered Professional (Geology) by the Australasian Institute of Mining and Metallurgy, and is a licensed Professional Geologist in Texas, Utah, and Wyoming. He meets all the requirements for "Competent Person" in Australia and "Qualified Person" in Canada.

BDASIA's project team, with the exception of Mr. Abbott, traveled to China to visit the Company's Jiangyou Project in Jiangyou, Sichuan that is reviewed in this CPR. Dr. Deng visited the Jiangyou Project from March 23 to March 24, 2010. Dr. Deng, Messrs Sipols and Matteoli, and Ms Epps visited the Jiangyou Project from June 29 to July 2, 2010. During BDASIA's visits, discussions were held with technical and management personnel of Jinshida as well as with Jinshida's outside consultants. Budgets and forecasts from 2010 to 2014 were reviewed, together with longer-term development plans.

This BDASIA CPR contains forecasts and projections prepared by BDASIA, based on information provided by the Company. BDASIA's assessment of the projected production schedules and capital and operating costs is based on technical reviews of project data and project site visits.

The metric system is used throughout this CPR. The currency used is the Chinese Yuan ("RMB") and/or the United States dollar ("US\$"). The exchange rate used in the CPR is RMB6.62 for US\$1.00, the rate of the People's Bank of China prevailing on December 31, 2010.

2.0 QUALIFICATIONS OF BEHRE DOLBEAR

Behre Dolbear & Company, Inc. is an international minerals industry advisory group which has operated continuously in North America and worldwide since 1911. Behre Dolbear and its parent, Behre Dolbear Group Inc., currently have offices in Beijing, Denver, Guadalajara, London, New York, Santiago, Sydney, Toronto, Vancouver, and Hong Kong.

The firm specializes in performing mineral industry studies for mining companies, financial institutions, and natural resource firms, including mineral resource/ore reserve compilations and audits, mineral property evaluations and valuations, due diligence studies and independent expert reviews for acquisition and financing purposes, project feasibility studies, assistance in negotiating mineral agreements, and market analyses. The firm has worked with a broad spectrum of commodities, including base and precious metals, coal, ferrous metals, and industrial minerals on a worldwide basis. Behre Dolbear has acted on behalf of numerous international banks, financial institutions and mining clients and is well regarded worldwide as an independent expert engineering consultant in the minerals industry. Behre Dolbear has prepared numerous CPRs for mining projects worldwide to support securities exchange filings of mining companies in Hong Kong, China, the United States, Canada, Australia, the United Kingdom, and other countries.

Most of Behre Dolbear's associates and consultants have occupied senior corporate management and operational roles and are thus well-experienced from an operational view point as well as being independent expert consultants.

BDASIA is a wholly-owned subsidiary of Behre Dolbear established in 2004 to manage Behre Dolbear's projects in China and other Asian countries. Project teams of BDASIA commonly consist of senior-level professionals from Behre Dolbear's offices in Denver, Colorado, of the United States, Sydney of Australia, London of the United Kingdom and other worldwide offices. Since its establishment, BDASIA has conducted over 50 technical studies for mining projects in China or mining projects located outside of China to be acquired by SEHK-listed Chinese companies, including preparing CPRs for the SEHK IPO prospectuses of Hunan Nonferrous Metals Corporation Limited, Zhaojin Mining Industry Company Limited, Hidili Industry International Development Limited, Real Gold Mining Limited, China Vanadium Titano-Magnetite Mining Company Limited, and China Gold International Resources Corporation Limited, and for the Shanghai Stock Exchange ("SSE") IPO listing of Western Mining Company Limited. These seven companies were successfully listed on the SEHK/SSE from 2006 to 2010.

3.0 DISCLAIMER

BDASIA has conducted an independent technical review of the Company's Jiangyou Project and holdings. Site visits have been made to the project site by BDASIA professionals involved in this study. BDASIA has exercised all due care in reviewing the supplied information and believes that the basic assumptions are factual and correct and the interpretations are reasonable. BDASIA has independently analyzed the Company's data, but BDASIA did not perform an audit on the Company's data. BDASIA has relied on the data provided by the Company, and the accuracy of the conclusions of the review largely relies on the accuracy of the supplied data. The Company has guaranteed that the data provided for BDASIA's review is true, accurate, and complete.

4.0 PROPERTY DESCRIPTION

4.1 Location, Access and Infrastructure

The Jiangyou Project is located at the southwestern portion of Jiangyou City, Sichuan Province in China and at the boundary between the Jiangyou City in the east and Beichuan County in the west (Figure 1.1). The project is at a 255° azimuth direction from the Jiangyou City urban area with a linear distance of approximately 15 kilometers (“km”). The geographic location of the property center is at the longitude of 104°33'42"E and latitude of 31°45'30"N. The project area is administrated by Zhenjiang Village, Xiangshui Township of Jiangyou City, and is an exclave surrounded by the Xiangquan Township of Beichuan County. The limestone slab processing plant of the Jiangyou Project will be located in an industrial park at the south side of the Jiangyou City urban area, with a road distance of approximately 30 km from the Jiangyou Project site. The Jiangyou City has a total area of 2,719 square kilometers (“km²”) and a population of approximately 880,000.

Access to the Jiangyou Project site is good. There is a local gravel road at the southeastern side of the property; approximately 5.5 km along the road to the northeast from the project site is the town of Hanzeng, where the local gravel road connects with the provincial highway S302. The road distance via the local gravel road then S302 from the project site to the Jiangyou City urban area in the east is approximately 19 km. At the time of BDASIA project team's site visit to the Jiangyou Project at the end of June 2010, the local gravel road was being upgraded to a paved highway by the local government. Road distance on provincial highway and expressway from Jiangyou is approximately 40 km to Mianyang in the south, which is a local economic center in north-central Sichuan Province, and approximately 160 km to Chengdu, the capital city of Sichuan Province in the south. Jinshida has constructed a gravel mine access road from the local gravel road to the open pit mining area on top of the property. The nearest rail station is at Jiangyou on the Baoji-Chengdu Railroad with a road distance of approximately 24 km. Access to the limestone slab processing plant is excellent as it is located in a developed industrial park on the south side of the Jiangyou City urban area.

Electricity for the project area is currently supplied by a 10-kilovolt (“kV”) power transmission line passing through the south of the property, which connects to the Tongkou substation in Beichuan County located approximately 5.5 km to the north. There is another 6-kV power transmission line passing through near the property from the An County substation located approximately 30 km to the south, which can also be used as the alternative electricity source of the project. Jinshida had advised BDASIA that electricity supply is sufficient for planned mining and slab production operations.

Water for the Jiangyou Project area was supplied by a sink hole near the Shuangtangou located approximately 1.3 km south of the property when BDASIA conducted the site visit in June 2010. Jinshida has recently drilled a 50-m-deep water well at the south side of the property, which is expected to supply sufficient water for the planned mine production and domestic use in the project area.

Electricity and water for the limestone slab processing plant will be supplied by the industrial part of Jiangyou City.

4.2 Climate and Physiography

The Jiangyou Project is located in a low-mountain region at the southeastern edge of the middle section of the Longmen Mountains. The highest point in the local area is the Erzishan at the north of the property with an elevation of approximately 939 m above mean sea level (“MSL”), and the lowest point is the Zhangjiaba in the south with an elevation of approximately 590 m above MSL. The property is

located at a southeast-facing slope with a slope angles generally between 20° to 30°, and locally up to 40°. The northern portion of the property is rugged with locally developed cliffs and the southern portion of the property has numerous karst caves and sink holes. The project area is generally covered by dense bushes and trees, but the mining area has generally been de-vegetated by Jinshida in preparation for the open-pit mining operation.

The Jiangyou Project area has a subtropical monsoonal climate with four distinct seasons. Average annual temperature is approximately 15.7°C; July is the hottest month with the highest temperature of approximately 34.5°C and January is the coldest month with the lowest temperature of approximately -3.0°C. Annual precipitation averages approximately 1,300 millimeters (“mm”), which mostly occurs as rain between June and September. There are on average 211 frost-free days in a year.

Jiangyou is a relatively well-developed city in Sichuan Province. Primary industry in the area includes production of iron and steel, cement, chemical fertilizer, casting, and electricity generation. There are numerous small dimension stone mining and calcium carbonate powder production operations along the local gravel road near the Jiangyou Project. The Jiangyou City is also designated as a cultural heritage city as it is the hometown of the famous Tang-Dynasty poet Li Bai, and Shaolin temple martial art Master Haideng. The area also supports crops such as rice, wheat, corn, peanuts, and silkworm mulberry. Labor supplies are relatively abundant in the area.

Development of the Jiangyou Project is generally supported by the government and local residents because of the tax revenue, employment opportunities, and stimulation for the local economy.

4.3 Property Ownership

Under the “Mineral Resource Law of the PRC”, all mineral resources in China are owned by the state. A mining or exploration enterprise may obtain a permit for the mining or exploration right for conducting mining or exploration activities in a specific area during a specified period of validity. The permits are generally extendable at the expiration of their period of validity. The renewal application must be submitted to the relevant government authorities at least 30 days before the expiration of a permit. To renew an exploration permit, all exploration permit fees must be paid and the minimum exploration expenditure must have been made for the area designated under the exploration permit. To renew a mining permit, all mining permit fees and resource compensation fees must be paid to the state for the area designated under the mining permit. A mining permit has both horizontal limits and elevation limits, but an exploration permit has only horizontal limits.

Jinshida currently holds a permit for a mining right of 0.4436 km² in area for the Jiangyou Project; this permit was issued by the Land and Resource Bureau of Sichuan Province. The horizontal boundary of the mining license is defined by 8 corner points and its elevation ranges from 590 m to 938 m above MSL. The license number is C5107002009017120004753. This license is valid until February 21, 2021 and is extendable thereafter. The license permits Jinshida to conduct open-pit limestone mining at a rate of 400,000 tonnes per annum (“tpa”), which is sufficient for the designed capacity of producing 150,000 m³pa based on an average bulk density of 2.61 tonnes per cubic meter (“t/m³”) for the limestones at the Jiangyou Project. All limestone resources and reserves reviewed in this CPR are covered by the mining license.

Land use right for the mining operation of the Jiangyou Project as well as the limestone slab processing plant in the Jiangyou City industrial park is being obtained by Jinshida. Jinshida was actively working with the relevant government agencies to secure the necessary land use right during BDASIA's site visit in late June 2010. No problem was foreseen by Jinshida in leasing the land for the Jiangyou Project and the slab processing plant.

According to information provided by Jinshida, limestone dimension stone production from the Jiangyou Project will be subject to a resource tax of RMB10.00/m³ (US\$1.47/m³) and a resource compensation levy of 2% of the revenue. A value added tax ("VAT") of 17% will be included in the sale price of limestone blocks, limestone slabs and other by-products produced from the Jiangyou Project, and there is also a city-maintenance-and-construction tax of 7% of the VAT, an education levy of 3% of the VAT, and a local additional education fee of 1% of the VAT. The corporate income tax rate for Jinshida is 25%.

BDASIA has not undertaken a legal due diligence review of Jinshida's mining license as such work is outside the scope of BDASIA's technical review. BDASIA has relied upon the Company's advice as to the validity of the mining license. BDASIA understands that the legal due diligence review of the mining license has been undertaken by the Company's PRC legal advisers.

4.4 History

The Jiangyou Project was a small limestone quarry producing raw material for cement manufacturing and was facing economic difficulties before 2005. Jinshida was invited by the Jiangyou City government to invest in the project in August 2005 and found that the property has potential to produce high-quality limestone dimension stones because of the beige and light gray color of the limestones. Jinshida decided to convert the property to produce primarily limestone dimension stones from the original sole cement raw material producer.

In order to provide the resource/reserve support for the planned limestone dimension stone operation, Jinshida engaged the Northwestern Sichuan Geology Brigade of Sichuan Provincial Bureau of Geology and Mineral Resources (the "Northwestern Sichuan Brigade") to conduct an exploration program for the Jiangyou property in March 2008. A geology report with limestone resource estimates was completed by the Northwestern Sichuan Brigade in October 2008. The Jiangyou Project mining license was issued to Jinshida by the Land and Resources Bureau of Mianyang City on August 24, 2009. Further more detailed exploration was conducted by the Northwestern Sichuan Brigade in March and April 2010 and a new geology report with updated limestone resource estimation was completed on April 30, 2010.

Based on the updated April 2010 Northwestern Sichuan Brigade geology report, China Building Materials Industry Planning Institute (the "Building Materials Institute") in Beijing conducted a feasibility study for the development of the Jiangyou Project in May 2010. This updated Northwestern Sichuan Brigade geology report and the Building Materials Institute feasibility study report formed the primary basis for BDASIA's review of the Jiangyou Project in this CPR.

5.0 GEOLOGY AND DATABASE

5.1 Geology

The Jiangyou Project limestone deposit for the proposed dimension stone production is a marine sedimentary carbonate deposit of Middle Triassic age. The limestone deposit occurs as the northwest dipping limb of a northeast-striking anticline and is generally a massive to thick-bedded, beige to light gray, stratiform deposit. Within the current Jiangyou Project mining license boundary, the deposit is approximately 850 m long along the northeastern strike direction (extending further out of the mining license boundary on both ends), 500 m to 650 m wide on surface out crops, and over 300 m thick.

5.1.1 Regional Geology

The rocks outcropping in the region surrounding the Jiangyou Project include, in stratigraphically ascending order, the Middle-Upper Silurian Hanjiadian Formation shales with limestone interbeds; the Lower Devonian Pingyipu Formation quartz sandstones, siltstones and mudstones, the Ganxi Formation siltstones and mudstones with some thin limestone interbeds, and the Ertai Formation limestones; the Lower-Middle Devonian Yangmaba Formation shales with oolitic hematite and limestones with quartz sandstone, siltstone, and black shale interbeds; the Middle Devonian Jinbashi Formation quartz sandstones, siltstones with limestone lenses and thin hematite interbeds, and the Guanwushan Formation limestones with dolomite interbeds; the Lower Carboniferous Zongchanggou Formation limestones with dolomite interbeds; the Upper Carboniferous Huanglong Formation limestones with dolomite interbeds; the Lower Permian Yangxin Formation limestones and dolomites; the Upper Permian Wujiaping Formation limestones, siliceous rocks, and mudstones; the Lower Triassic Feixianguan Formation limestones, calcareous siltstones, and calcareous mudstones; the Jialingjiang Formation dolomites and limestones with mudstone and siltstone interbeds; the Middle Triassic Leikoupu Formation dolomites; and the Tianjingshan Formation limestones with dolomite interbeds; the Upper Triassic Maantang Formation limestone, calcareous mudstones, and siltstones; the Middle Jurassic Qianfoyan Formation siltstones, marlstones, limestones, and mudstones, and the Shaximiao Formation siltstones, mudstones, and greywackes; the Upper Jurassic Suining Formation greywackes, siltstones, and mudstones; and the Lianhuakou Formation conglomerates, sandstones, siltstones, and mudstones; and the Quaternary alluviums, diluviums, and eluviums.

Structures in the region are complex and are characterized by a serious of northeast-trending, northwest-dipping thrust faults and northeast-trending non-symmetric and overturned folds.

5.1.2 Deposit Geology

Stratigraphy within the current Jiangyou Project mining license area include the upper section of the Middle-Triassic Leikoupu Formation dolomites, the lower section of the Middle-Triassic Tianjingshan Formation limestones with dolomite interbeds and the Quaternary alluviums, diluviums, and eluviums.

The Middle-Triassic rocks in the deposit occur on the northwestern limb of the northeast-trending Niuxingshan anticline with a northwest dip at angles from 22° to 36°. No obvious fault and fold structures have been observed in the Jiangyou Project mining license area.

There are two sets of conjugate shear joints developed in the deposit area. The first set is northwestern and southeastern dipping with various dip angles, and is generally parallel to the regional structures. Joint fracture surfaces for this set are generally straight and flat, they are generally closed

joints with only a thin layer of calcareous fillings. The southeastern dipping joints are generally predominant in this set; the joint density is generally 0.3 to 0.9 per meter, and can be as high as 2 to 3 per meter at the surface.

The second set of conjugate shear joints dip to the northeast and southwest at various dip angles, and is perpendicular to the regional structures. Joint fracture surfaces are generally straight and flat, but some are curved. They are generally closed joints with or without calcareous fillings. The southwestern dipping joints are better developed in this set; the joint density ranges from 0.08 to 0.9 per meter, and are generally less than 0.5 per meter.

Some weathering joints are developed near the surface. These joints generally have variable orientations; the joint surfaces are generally not straight and flat; the joint width decreases rapidly to depth and they generally disappear at a depth of several meters. The open portion of the joint surface is generally filled by yellowish clays. Because of these weathering joints as well as the karst caves, the near surface portion of the limestone deposits will have a very low limestone blocks rate. However, these weathering joints will decrease rapidly to depth, and the blocks rate should increase below the first couple of benches.

5.1.3 The Limestone Deposit

The lower section of the Middle Triassic Tianjingshan Formation is the limestone deposit targeted for dimension stone production in the area. This section is further divided into the following five lithological layers in a stratigraphic ascending order:

Layer No. 1 of the lower section of the Tianjingshan Formation is located in the southeastern portion of the property, near the foot of the hill, and consists of beige and milk-white, thick-bedded to massive, micritic limestones and bioclastic limestones with some grain limestone and dolomitic limestone interbeds. Total thickness of the layer ranges from 124 m to 150 m.

Layer No. 2 is located above Layer No. 1 and in the middle of the hill; it consists of grayish white, thick-bedded to massive calcareous dolomites with micritic sandy limestone interbeds. The appearance of the dolomite in this layer is very similar to that of the surrounding limestones; the dolomite has a slightly lighter color, but it is more tenacious and difficult to break. It is difficult to distinguish the slabs produced from the dolomite and that from the surrounding limestones under the naked eyes. The thickness of the layer is from 18 m to 23 m.

Layer No. 3 is located above Layer No. 2; it consists of milk-white and beige, intermediate- to thick-bedded micritic limestones with some interbedded dolomite-bearing micritic limestones. Total thickness of the layer is from 158 m to 164 m.

Layer No. 4 outcrops on the top of the hill as well as the slopes near the top; it is comprised of beige and grayish white, thick-bedded to massive, sparitic bioclastic limestones with small amount of grain limestone and dolomitic limestone interbeds. Its thickness is from 140 m to 160 m.

Layer No. 5 is located northwest of the mining license area. It consists of grayish white to light gray, thick-bedded to massive, micritic dolomites with a thickness of more than 160 m. This layer is not considered as the mining target as its color is relatively dark than the other layers.

The lower four layers (Layers No. 1, No. 2, No. 3, and No. 4) are considered as the limestone resource for dimension stone production in the Jiangyou Project mining license area. They are separated into the upper limestone resource unit (the "Upper Unit", including Layers No. 3 and No. 4) and the

lower limestone resource unit (the “Lower Unit”, including Layers No. 1 and No. 2). These limestone resource layers have a northeastern strike length of approximately 850 m, and are 500-m to 650-m wide in the northwestern direction and over 300-m thick vertically within the Jiangyou Project mining license area. They dip to the northwest at angles from 22° to 36°. The footwall of the limestone resources is the upper section dolomites of the Middle Triassic Leikoupu Formation, and the hanging wall is the Layer No. 5 dolomites of the lower section of the Tianjingshan Formation.

Karst caves are well developed in the Jiangyou Project area. Some karst caves have been observed at the surface. Each of the 16 drill holes completed on the property has all encountered a number of cave intervals. Based on the statistics from the Northwestern Sichuan Brigade, a total of 130 cave (or fissure) intervals were found in the 16 drill holes, with an interval length of 0.4 m to 8.3 m. The depth of the cave intervals range from 5.4 m to 270.3 m, and the elevation of these caves is from 493.2 m to 897.4 m above MSL. The karst cave percentage for individual drill holes ranges from 2.5% to 14.7% with an average of 8.0%. For limestone resource estimation of the Jiangyou Project, the karst cave volume was deducted from the total limestone volume.

Figure 5.1 is the surface geology map showing the distribution of the different limestone layers in the Jiangyou Project mining license area, and Figures 5.2 and 5.3 are two cross sections showing the vertical distribution of the limestone layers. BDASIA would note that the mining license lower elevation limit shown in Figures 5.2 and 5.3 represents the revised mining license to be issued to the Jiangyou Project.

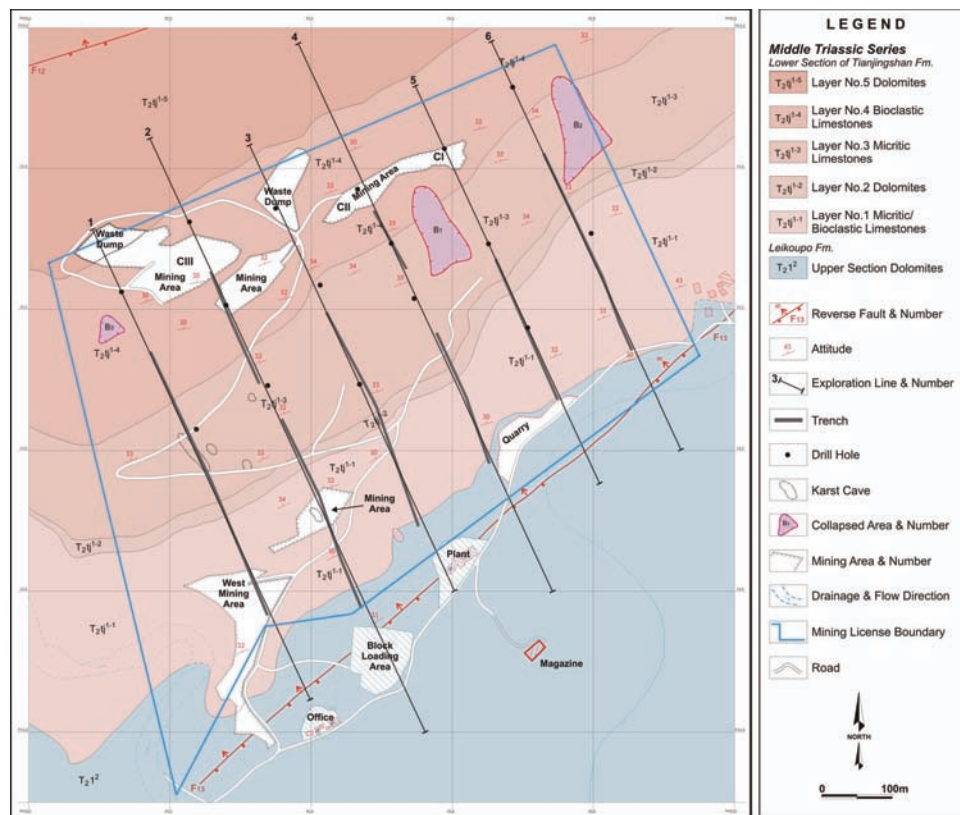


Figure 5.1 Geology map of the Jiangyou Project mining license area

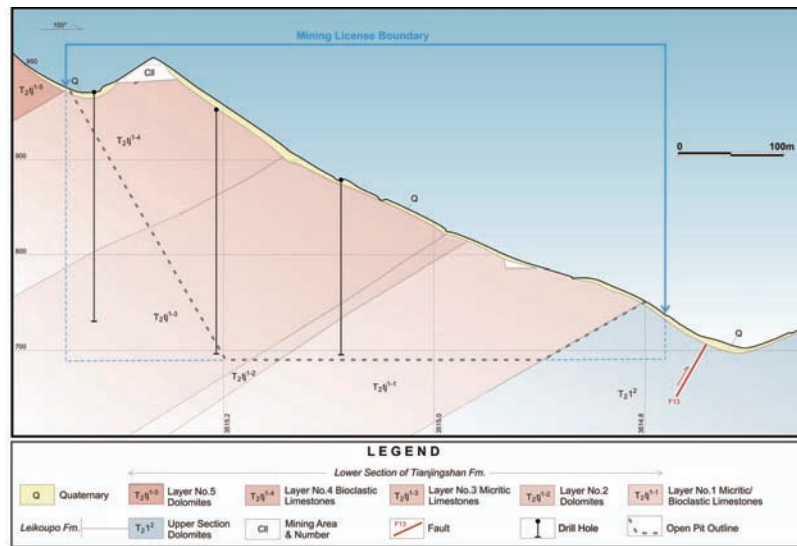


Figure 5.2 Exploration Line 2 section of the Jiangyou Project looking northeast
(Location of the section is shown in Figure 5.1.)

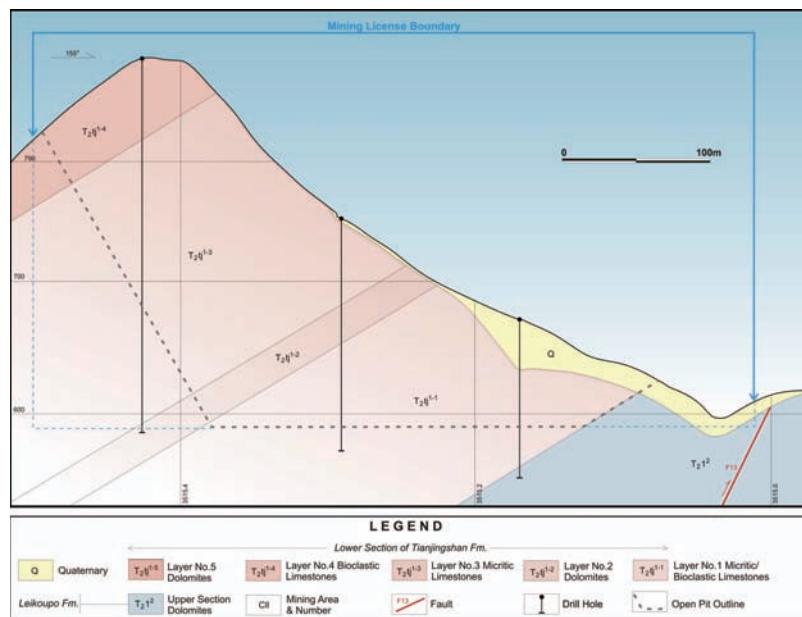


Figure 5.3 Exploration Line 5 section of the Jiangyou Project looking northeast
(Location of the section is shown in Figure 5.1.)

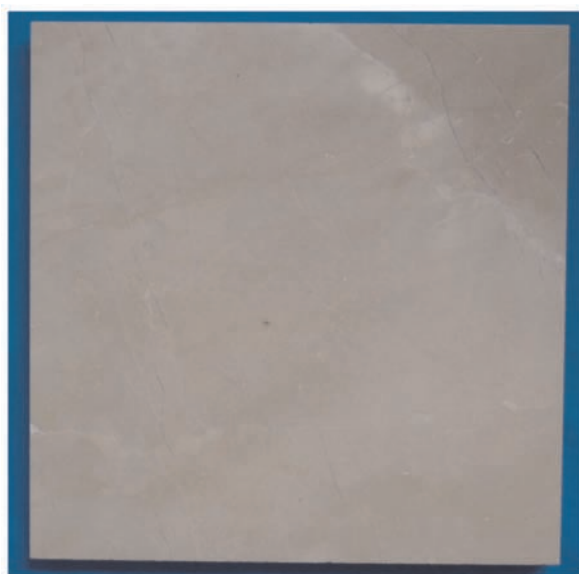
5.1.4 Color and Texture of the Limestone Resource

Color and texture are the two most important parameters for evaluating the limestone quality for dimension stone production. The primary and basic color of the limestone resource in the Jiangyou Project mining license area is beige. Some limestone is pure beige and some is mixed with milk-white or grayish white colors. Based on the color variation, the limestone is classified as Pure Beige and Mixed Beige. Some of the limestones have well developed depositional lamination consisting of alternating

color bands similar to the wood grain, which is referred to as Wood Grain limestone. Locally, there are some calcite veins and veinlets filling the fractures in the limestone, forming a netted texture, which is referred to as the Gray Net limestone. Therefore, there will be four types of color and texture combinations based on commercial products that will be produced from the limestones in the Jiangyou Project area, that is, the Pure Beige, the Mixed Beige, the Wood Grain, and the Gray Net (Figure 5.4). Based on statistics compiled by the Northwestern Sichuan Brigade, of the total limestone resources and reserves of the Jiangyou Project, the Pure Beige is approximately 51.0%, the Mixed Beige 32.7%, the Wood Grain 6.4%, and the Gray Net 9.9%.

These different types of color and texture are generally gradational in the deposit. In general, in the western portion of the deposit (west of the Exploration Line 4), the primary color is relatively pure beige; the color is getting deeper to the east with more color variation. The wood grain texture is unstable in a limestone layer and it can disappear along strike within a short distance of 20 m to 30 m.

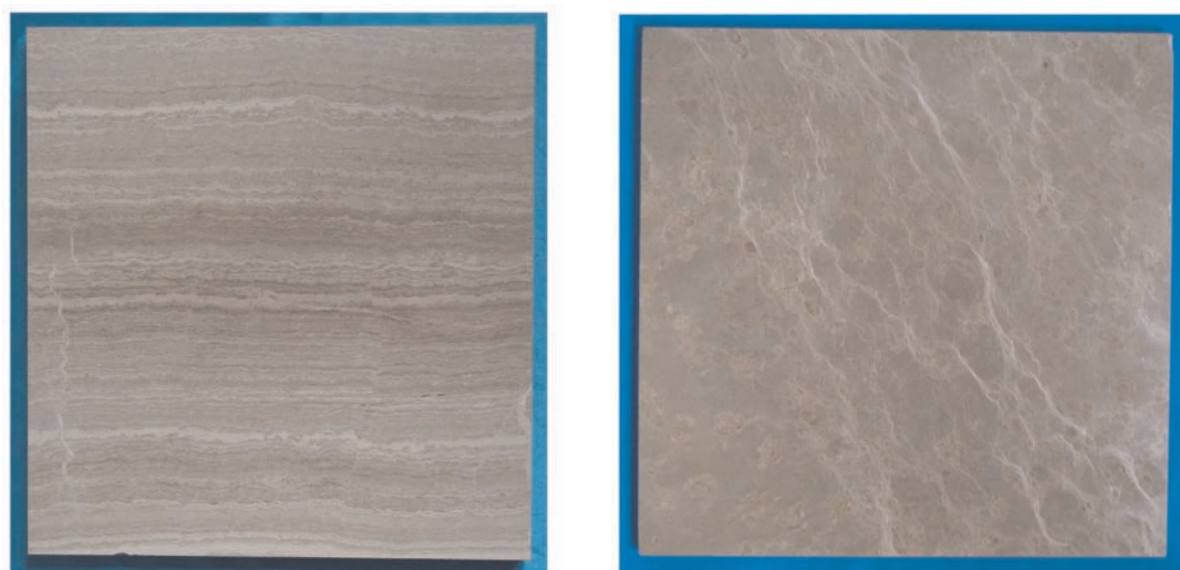
It was expected that the Pure Beige limestone will achieve the highest sale price, followed by the Mixed Beige, the Wood Grain and the Gray net.



The Pure Beige



The Mixed Beige



The Wood Grain

The Gray Net

Figure 5.4 Four Types of Dimension Stone Products of the Jiangyou Project

5.1.5 Mineralogical and Chemical Composition of the Limestone Resource

The mineralogical composition of the limestones in the Jiangyou Project area is generally very pure, consisting of over 99% calcite with no detrimental minerals. The calcite is primarily micritic calcite with small amounts of sparitic calcite and aphanitic calcite. The micritic calcite was deposited from the sea water directly and it has a dirt appearance; some of them have been recrystallized. The sparitic calcite is the cement of grains in the rock or occurs as veins and veinlets; it is generally clear in appearance. The aphanitic calcite is generally the components of the fossils and other fragments in the rock, and it also looks dirty. These fragments are generally sub-angular to sub-rounded in shape and are generally 0.12 mm to 0.25 mm in size. Dolomite becomes the primary mineral in the dolomite layers.

Table 5.1 shows the chemical analytical results of the limestones and dolomites in the Jiangyou Project mining license area. These analytic results also indicate that the limestones are very pure with high CaO content and very minor other components. The dolomite contains some MgO and lower CaO content than the limestones, but the concentrations of other components are also very low in the rock, similar to the limestones. The appearance of the dolomite is very similar to that of the limestone and is also commercially referred to as marble, and Jinshida believes that the different in chemical composition should not affect its use as a dimension stone, with which BDASIA concurs.

Table 5.1 Chemical Analytical Results of Limestones and Dolomite of the Jiangyou Project				
Component	Beige Micritic Limestone	Mixed-Beige Micritic Limestone	Milk-White Bioclastic Limestone	Calcareous Dolomite
CaO	53.27–55.20	52.23–53.86	51.78	37.40–39.79
MgO	0.21–1.88	1.52–2.54	3.38	13.42–15.79
SiO ₂	0.16–0.82	0.10–0.15	0.08	0.14–0.16
Fe ₂ O ₃	0.07–0.15	0.01–0.07	0.01	0.08
Al ₂ O ₃	0.02–0.08	0.01–0.03	0.85	0.04–0.05
K ₂ O	< 0.05	< 0.05	< 0.05	< 0.05
Na ₂ O	< 0.05	< 0.05	< 0.05	< 0.05
S	< 0.01	< 0.01	—	< 0.01
P	< 0.01	< 0.01	—	< 0.01
<i>Note:</i> for comparison, the chemical composition of pure calcite is 56% CaO and 44% CO ₂ , and chemical composition of pure dolomite is 30.4% CaO, 21.9% MgO and 47.7% CO ₂ .				

5.1.6 Bulk Density, Hardness and Water Absorption of the Limestone Resources

Based on measurements on 19 core/rock samples, the bulk density of the limestone resources in the Jiangyou Project area ranges from 2.51 to 2.73 t/m³ with an average of 2.61 t/m³. The hardness of the limestone is 3. The natural water absorption of the limestones is generally from 0.2% to 0.8%, averaging 0.54%.

5.1.7 Mechanic Properties of the Limestone Resources

Based on the measurements on selective samples, the compressive strength of different types of limestones ranges from 27.5 to 63.7 million pascals (“MPa”), averaging 41.9 MPa. The bending strength ranges from 16.3 to 39.7 MPa, averaging 23.3 MPa. The abrasion resistance is 57/cm² for the Pure Beige, 56/cm² for the Mixed Beige, 28/cm² for the Wood Grain, and 64/cm² for the Gray Net. The abrasion resistance of all four types of limestones satisfies the minimum requirement of 10/cm² for natural marble construction material in China (GB/T 19766-2005).

5.1.8 Radioactivities of the Limestone Resource

Based on sample measurements on the Pure Beige, the Mixed Beige, the Wood Grain, and the Gray Net, the internal exposure index (“IRa”) of the specific radioactivity of natural radioactive nuclides Ra-226, Th-232 and K-40 ranges from 0.03 to 0.34, and the external exposure index (“Ir”) ranges from 0.02 to 0.19. Based on the National Standard for Construction Material of the PRC (GB6566-2001), the material with IRa less than 1.0 and Ir less than 1.3 is classified as Class A construction material, which means that there is no restriction for its production, sale and utilization. The all four types of limestones of the Jiangyou Project satisfy the radioactivity requirements of Class A construction material. These radioactivity levels also fall within the European Union’s acceptable limit range.

5.2 Geological Database

5.2.1 Database Used for the Jiangyou Project Limestone Resource Estimates

Databases used for the mineral resource estimation are generated by licensed exploration entities and/or by the mining companies themselves in China. Guidelines specifying the appropriate sampling, sample preparation, and assaying techniques and procedures for different types of mineral deposits are issued by the relevant government authorities. The databases used for mineral resource estimation are generally produced following these set guidelines.

The principal sample types included in the geological database for the Jiangyou Project reviewed in this CPR comprise core samples from surface drilling and surface trench channel samples.

Table 5.2 summarizes the geological database used for the limestone resource estimation for the Jiangyou Project reviewed in this CPR.

Table 5.2 Geological Database Statistics for the Jiangyou Project	
Sample Type	Jiangyou Project
<i>Surface Core Drilling</i>	
Holes	16
Meters	3,469
<i>Surface Trenching</i>	
Cubic Meters	5,989
<i>Core/Rock Limestone Color/Texture Samples</i>	
Standard Samples	8
Basic Samples (at 5-m interval)	394
<i>Chemical Analyses</i>	11
<i>Bulk Density Measurements</i>	19
<i>Water Absorption Measurements</i>	19
<i>Compressive Strength Tests</i>	9
<i>Bending Strength Tests</i>	8
<i>Gloss Tests</i>	8
<i>Radioactive Measurements</i>	8
<i>Abrasion Resistance Tests</i>	4

5.2.2 Drilling, Logging and Survey

The 16 diamond drill holes used for the current limestone resource estimation were completed in 2008 and 2010 by the Northwestern Sichuan Brigade. These holes were drilled on six exploration lines oriented at the azimuth of 155° and with a line spacing of 125 m. These exploration lines were numbered as Line 1 to Line 6 from the southwest to northeast. Drill hole spacing on the exploration lines ranges from 84 m to 250 m.

The drilling was conducted using Chinese-made drill rigs equipped with wireline core barrels. Drill hole size was generally 130 mm or 110 mm at the top, reducing to 91 mm then to 75 mm to depth. Core recovery was generally good, but was strongly affected by the presence of karst caves. Average drill hole core recovery generally ranges from 73.3% to 93.3%, only one drill hole, ZK6-2 has a core recovery of only 65.4%. Considering the karst cave percentage in the drill holes of 2.5% to 14.9% (averaging 8.0%), the actual core recoveries excluding the karst cave intervals will improve significantly.

All surface drill holes were drilled vertically. Drill hole collar locations were surveyed by a total station after drilling, and down-hole deviation was generally measured in 100-m intervals using down-hole survey techniques with drill hole depth checks at the same intervals. Drill cores were logged in detail by a project geologist at the drill site before sampling.

5.2.3 Sampling, Sample Preparation and Assaying/Testing

Surface drilling was the primary exploration method used for the Jiangyou Project geological database. Surface trenches were also developed along the six exploration lines. Samples for limestone dimension stone types, chemical analyses and physical property measurements were collected from the drill holes and the surface trenches.

5.2.3.1 Limestone Type Standard Samples and Basic Samples

The limestone dimension stone type samples include the standard samples and the basic samples. The standard samples were collected by Jinshida from the mining surface at the property. Two sets of standard sample slabs for the Pure Beige, the Mixed Beige, the Wood Grain, and the Gray Net were prepared; the first set consists of slabs of 30 × 30 cm in size, and the second set consists of slabs of 10 × 5 cm in size. These standard samples were polished and their gloss tests were performed by the Central Laboratory of the Environmental and Resource Institute of the Southwestern University of Science and Technology in Mianyang, Sichuan.

The basic samples were collected from drill cores and surface trenches at a samples interval of approximately 5 m. Half core samples were collected by a diamond rock saw, and the core samples were cut to 10 × 5 × 1 cm (for drill hole size more than 75 mm) or 10 × 4 × 1 cm (for drill hole size of 75 mm) blocks by Mianyang Geology and Resource Test Center of Sichuan Geology and Resource Bureau, in Mianyang, Sichuan. Trench basic samples were cut to 10 × 20 × 1 cm blocks. A total of 394 basic samples were collected, approximately 51.0% of the basic samples are the Pure Beige, 32.7% the Mixed Beige, 6.4% the Wood Grain, and 9.9% the Gray Net. Approximately 10% of the basic samples were polished on one surface.

5.2.3.2 Chemical Analysis Samples

Eleven selective grab samples for the Pure Beige, the Mixed Beige, the Wood Grain, and the Gray Net were collected from the mining surface at the property. These samples were prepared and analyzed for the content of CaO, MgO, SiO₂, Fe₂O₃, Al₂O₃, K₂O, Na₂O, S, and P using the wet chemical analysis method by the Mianyang Geology and Resource Test Center. Results of the chemical analysis are summarized in Table 5.1 of this CPR.

5.2.3.3 Samples for Physical Property Measurements

Nineteen selective limestone samples from drill core, surface trenches, and surface outcrops were collected for bulk density measurements. The bulk density of the samples was measured using the wax-coated water immersion method by the Mianyang Geology and Resource Test Center. Results of the measurements are summarized in Section 5.1.6 of this CPR.

Natural water absorption for the 19 selective limestone samples was measured by the Testing Center of the Southwest Geotechnical and Engineering Institute of China Nuclear Industry in Chengdu, Sichuan. The results are summarized in Section 5.1.6.

Compressive strength were measured on 9 sets (two tests each set) of selective limestone sample blocks of each limestone type with a size of 5 × 5 × 5 cm by the Rock and Soil Test Center of the Northwestern Sichuan Engineering and Exploration Institute in Mianyang, Sichuan. Bending strength tests on 8 sets (two tests each set) of selective samples were performed by the Central Laboratory of Environmental and the Resource Institute of the Southwestern University of Science and Technology and the Rock and Soil Test Center of the Northwestern Sichuan Engineering and Exploration Institute in Mianyang, Sichuan. The test results are summarized in Section 5.1.7.

Specific radioactivity, internal exposure index, and external exposure index were measured on four selective samples of each limestone type by the Central Laboratory of Environmental and the Resource Institute of the Southwestern University of Science and Technology. The test results are summarized in Section 5.1.8.

Abrasion resistance on four sets (four samples on each set) of selective samples of each limestone type was tested by the National Construction Material Test Center in Beijing. The test results are summarized in Section 5.1.7.

6.0 LIMESTONE RESOURCES AND RESERVES

6.1 Limestone Resource/Reserve Classification

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia in September 1999 and revised in December 2004 (“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 previously in CPRs for mineral resource and ore reserve statements for other Chinese companies reporting to SEHK. The JORC Code is used by BDASIA to report the limestone mineral resources and ore reserves of the Company’s Jiangyou Project in this CPR.

A Mineral Resource is defined in the JORC Code as an identified *in-situ* mineral occurrence from which valuable or useful minerals may be recovered. Mineral Resources are classified as Measured, Indicated, or Inferred according to the degree of confidence in the estimate:

- a Measured Resource is one which has been intersected and tested by drill holes or other sampling procedures at locations which are close enough to confirm continuity and where geoscientific data are reliably known;
- an Indicated Resource is one which has been sampled by drill holes or other sampling procedures at locations too widely spaced to ensure continuity, but close enough to give a reasonable indication of continuity and where geoscientific data are known with a reasonable level of reliability; and
- an Inferred Resource is one where geoscientific evidence from drill holes or other sampling procedures is such that continuity cannot be predicted with confidence and where geoscientific data may not be known with a reasonable level of reliability.

An Ore Reserve is defined in the JORC Code as that 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 figures incorporate mining dilution and allow for mining losses and are based on an appropriate level of mine planning, mine design and scheduling. Proved and Probable Ore Reserves are based on Measured and Indicated Mineral Resources, respectively. 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 summarized in Figure 6.1.

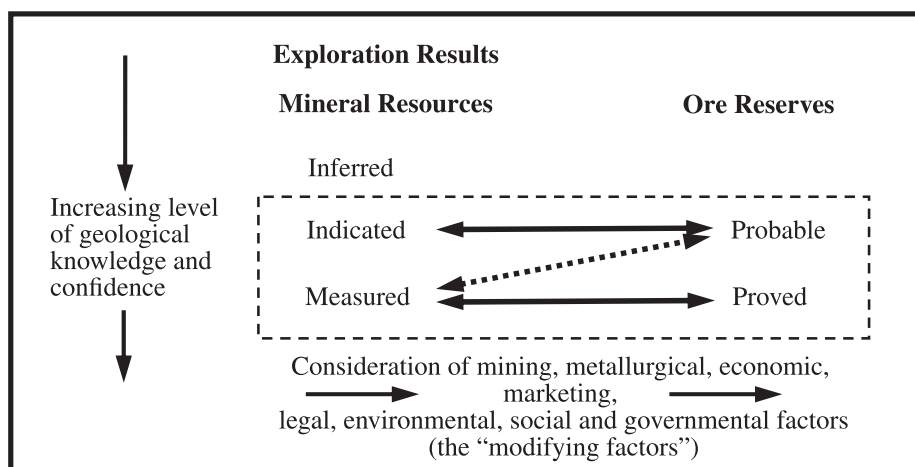


Figure 6.1 Schematic Mineral Resources and Their Conversion to Ore Reserves

Generally, ore reserves are quoted as comprising part of the total mineral resource rather than the mineral resources being additional to the ore reserves quoted. The JORC Code allows for either procedure, provided the system adopted is clearly specified. In this BDASIA CPR, all of the ore reserves are included within the mineral resource statements.

The limestone deposit at the Jiangyou Project is an industrial mineral primarily for dimension stone production, physical properties, such as color and texture, are the most important parameters for the dimension stone limestone quality. Basic samples of color and texture for each 5-m intervals were collected from drill holes and surface trenches for the Jiangyou property. Analytical result of chemical composition is generally not a critical criterion for limestone quality. The limestone deposit is a marine sedimentary deposit with good continuity and homogenous chemical composition and physical properties. Only selective samples were collected to determine the chemical composition and various physical properties of the limestone deposit. The limestone resource will be reported as its volume in unit of cubic meters in this CPR as it is the unit of the limestone dimension stone blocks being sold.

For the limestone dimension stone reserve, mining dilution factor is not relevant, but mining recovery factor is very important and is sometimes difficult to determine accurately, especially at the early stage of the project. Limestone dimension stone reserve will also be reported as its volume in unit of cubic meters.

6.2 General Procedures and Parameters for the Limestone Resource Estimation

The methods used to estimate mineral resources and the parameters used to categorize the mineral resources for a particular type of mineral deposit are generally prescribed by the relevant PRC government authorities in China. The mineral resource estimates are based on strictly 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.

The 2008 and 2010 exploration work as well as the limestone resource estimation for the Jiangyou Project were conducted by the Northwestern Sichuan Brigade, which holds a Class A exploration license for solid minerals issued by the Ministry of Land and Resources of China.

The drill hole or channel sampling density required to define a certain class of mineral resource depends on the type of deposit. Based on the mineralized body size and complexity, a deposit is classified into certain exploration type before mineral resource estimation. As the limestone deposit at the Jiangyou Project area comprises large stratiform mineralized bodies of hundreds to thousands of meters in dimension with good continuity in both chemical composition and thickness, the deposit was categorized as exploration type I under the Chinese classification system for industrial mineral deposits.

Cross sections and plans with drilling and sampling information for mineral resource estimation were produced by AutoCAD by the Northwestern Sichuan Brigade.

The parallel section method, a polygonal method based on projected cross sections, was used for the limestone resource estimation of the Jiangyou Project by the Northwestern Sichuan Brigade. Based on the limestone resource estimation report provided by the Northwestern Sichuan Brigade and discussions with the Northwestern Sichuan Brigade technical personnel, the general procedures and parameters used in the mineral resource estimation are described below.

6.2.1 Determination of Limestone Resource Industrial Requirements

The limestone in the Jiangyou Project area is a very-fine grained rock. After polishing, it generally shows a pure beige color and a glossy appearance, sometimes with a wood grain or netted texture. The color, texture, and gloss of the limestone make it a good quality decorating rock. The limestone is amenable to mining and processing; it is not easy to break during the mining and cutting process, and can be polished easily. Joints and fissures are relatively under developed in the rock and they are often sealed by late calcite veinlets.

Jinshida has determined that four types of commercial dimension stone products based on color and texture combinations will be produced from the property, that is, the Pure Beige, the Mixed Beige, the Wood Grain, and the Gray Net. Similar limestone products are popular on the market in China and abroad with premium sales prices. According to CSMA, the Pure Beige, which is very similar to the Royal Botticino, a popular and top-end beige dimension stone products from Iran, is expected to have the highest sale price of the four limestone types, followed by Mixed Beige, the Wood Grain, and the Gray Net.

The limestones at Jiangyou are very pure in chemical composition, consisting mostly of calcite. It is a very good source material for calcium carbonate powder and cement production.

The above discussion indicates that the limestone resources meet the industrial requirements for dimension stones as well as for other industrial uses, such as calcium carbonate powder and cement production.

6.2.2 Determination of Block Boundaries and Confidence Levels

In the parallel section mineral resource estimation, a limestone body on a cross section was separated into a number of blocks, with each block assigned a resource confidence level based on the type, density and quality of available geological data. A Measured resource block was defined by surface drilling and surface channel sampling with a data spacing of 100 m to 150 m in both the strike and the dip directions. An Indicated block was defined by a data spacing of 200 m to 300 m. Because of the relatively high drilling and surface trench density at the property, all limestone resource blocks have

been classified as either Measured or Indicated categories. There is no Inferred limestone resource within the Jiangyou Project mining license area. Figure 6.2 shows the resource classification for the Jiangyou Project on a projected plan map.

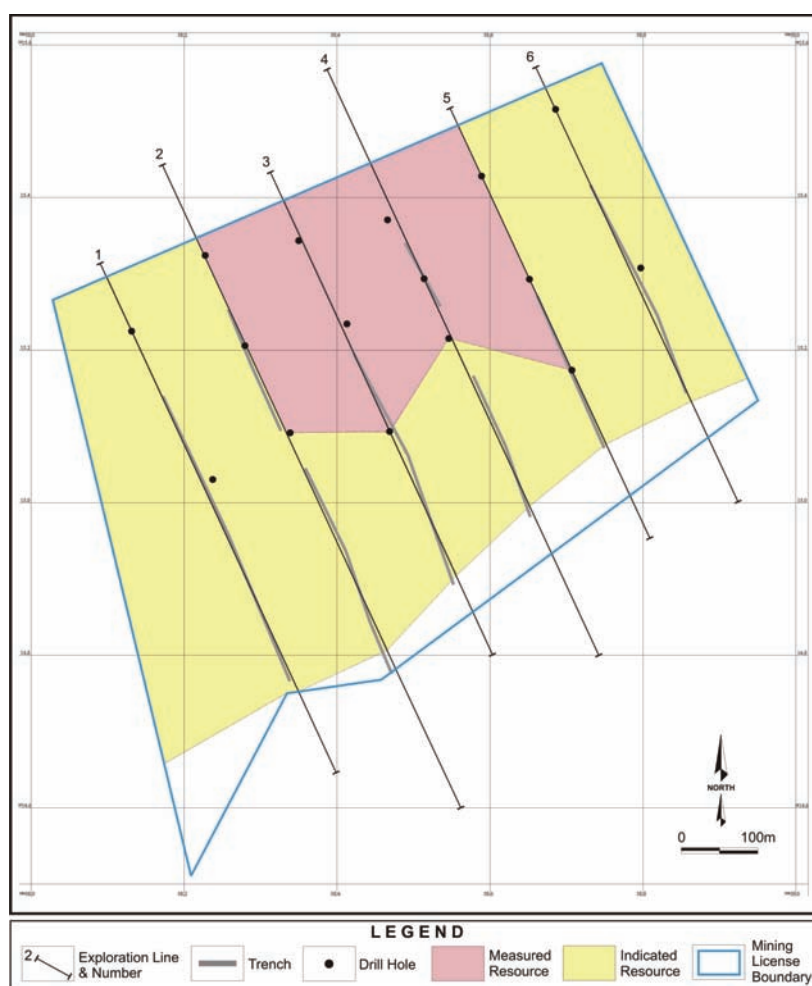


Figure 6.2 Resource classification on the projected plan map for the Jiangyou Project

The limestone resource estimation was limited to a lower MSL elevation of 590 m, which is approximately the lower erosion base in the area. Surface topography of the Jiangyou Project mining license area was surveyed by the Northwestern Sichuan Brigade in March 2010, which was used as the topographic control of the current resource estimation. A pit slope angle of 60° was also used to limit the boundary for the limestone resource estimate.

BDASIA believes that the geological interpretation for the Jiangyou Project limestone deposit is reasonable and reliable, which provides a solid basis for the resource/reserve estimation and mine planning.

6.2.3 Limestone Resource Estimation

In the limestone resource estimation process, the corresponding two-dimensional blocks on two neighboring parallel cross sections were used to define a three-dimensional block. The area of the three-dimensional block (S) was calculated from the areas of the two-dimensional blocks on cross sections (S1

and S2), which were measured by computer from AutoCAD drawings. When the area difference for the two blocks on cross sections was less than 40%, the following trapezoid formula was used for the three-dimensional block sectional area calculation:

$$S = \frac{S_1 + S_2}{2}$$

When the area difference for the two blocks on cross sections was more than 40%, the following frustum formula was used for the three-dimensional block sectional area calculation:

$$S = \frac{S_1 + S_2 + \sqrt{S_1 \times S_2}}{3}$$

When a block on a cross section pinches out, the three-dimensional block sectional area was half the two-dimensional block area if the block pinches out to a line or one third of the two-dimensional block area if the block pinches out to a point.

The volume of the three-dimensional block was determined by multiplying the sectional area (S) by the distance (L) between the two sections. The volume of the mineralized body and deposit were based on the sum of the block volumes.

Volumes occupied by the karst caves were subtracted from the limestone volume estimation based on the average karst cave percentage determined from the 16 existing drill holes.

6.2.4 Discussion

Based on BDASIA's review, BDASIA considers the geological interpretation and the limestone resource estimation procedures and parameters applied by the Northwestern Sichuan Brigade to the Jiangyou Project to be generally reasonable and appropriate. The deposit is a marine sedimentary deposit with good spatial, chemical composition, and physical property continuity. The Measured category blocks were defined by drill holes and crosscut channels at a data spacing of 100 m to 150 m in both strike and dip directions and have good geological control. The Indicated category blocks were defined by a data spacing of 200 m to 300 m and have a reasonable level of geological control.

Based on reviewing the deposit geology, drilling and sampling data, and procedures and parameters used for the estimation of limestone resources, BDASIA is of the opinion that the Measured and Indicated limestone mineral resources estimated under the 1999 Chinese mineral resource system for the Jiangyou Project by the Northwestern Sichuan Brigade conform to the equivalent JORC mineral resource categories. The economic portion of the Measured and Indicated limestone resources can accordingly be used to estimate Proved and Probable limestone dimension stone reserves.

6.3 Mineral Resource Statement

The mineral resource estimates under the JORC Code as of December 31, 2010 for the Jiangyou Project, as reviewed by BDASIA, are summarized in Table 6.1. The April 2010 Northwestern Sichuan Brigade limestone resource estimation was dated March 31, 2010. As there was only negligible mine production from March 31, 2010 to December 31, 2010 at the Jiangyou Project, the mineral resources as of December 31, 2010 are exactly the same as that on March 31, 2010. The limestone resource estimates are inclusive of limestone mineralization comprising the limestone dimension stone reserves. The Measured and Indicated limestone resources can be used for limestone dimension stone reserve estimation and mine planning.

Table 6.1 Jiangyou Project Limestone Resource Summary, as of December 31, 2010	
JORC Resource Class	Limestone Resource (Mm³)
Measured	16.50
Indicated	28.38
Total	44.88

It should be noted that limestone resources that are not limestone reserves do not have demonstrated economic viability. Investors should be cautioned that the limestone resources may not ultimately be extracted at a profit.

6.4 Limestone Dimension Stone Reserve Estimation

Under the JORC Code, limestone dimension stone reserves comprise that portion of the Measured and Indicated limestone resources that are planned to be mined economically as dimension stones and delivered to the plant for processing or sold in a dimension stone market. Limestone dimension stone reserves and the mine plan for the Jiangyou Project were developed by the Building Materials Institute in Beijing in a feasibility study dated May 2010 using the April 2010 Northwestern Sichuan Brigade limestone resource estimates. Only the Measured and Indicated limestone resources were considered as potential ore in the Building Materials Institute's limestone dimension stone reserve estimation and mine planning.

Based on the Building Materials Institute's feasibility study, the limestone deposit will be mined in open pits by a combination of different cutting techniques, including diamond wire cutting, chain saw cutting, and disc saw cutting, which will cut the limestone deposit into rectangular dimension stone blocks of different sizes. Limestone blocks were classified into three size classes in China: Class I, or large, blocks have a block volume of more than 3 m³; Class II, or medium, blocks have a block volume from 1 m³ to 3 m³; Class III, or small, blocks have a block volume from 0.5 m³ to 1 m³. The sales price of the limestone blocks is related to the block size, and the larger blocks can generally sell for a higher price. Therefore, the project will try to produce Class I, large, limestone blocks as much as possible, but some smaller blocks will have to be produced because of presence of fractures (including joints) and karst caves in the limestone deposit.

A final open pit was designed by the Building Materials Institute based on the Northwestern Sichuan Brigade's limestone resource model and an overall pit slope angle of 60°. Other parameters used for the pit design include a bench height of 20 m, a safety berm of 4 m on each bench and a cleaning berm of 8 m on every third bench, and a bench face angle of approximately 72.7°. The designed final pit is approximately 840-m long in the northeast direction and 580-m wide in the northwestern direction at the surface; it is 760 m long and 335 m wide at the pit bottom. The pit contains 17 benches (from 590-m to 910-m). Only the lowest two benches are closed benches for the designed pit. Limestone resources within the designed final pit (excluding the karst cave volume) are approximately 44.15 Mm³ (Table 6.2), of which 15.74 Mm³ is the Measured limestone resource and 28.41 Mm³ is the Indicated limestone resource. There is also a small volume of overburden (consisting of Quaternary soils and weathered limestones with numerous open weathering joints) above the limestone deposit of approximately 3.10 Mm³, resulting in a waste:ore strip ratio of 0.07.

Table 6.2		
Jiangyou Project Limestone Resource Inside the Final Pit Design, as of December 31, 2010		
JORC Resource Class	Limestone Resource (Mm³)	Waste (Mm³)
Measured	15.74	—
Indicated	28.41	—
Total	44.15	3.10

Mining dilution factor is not applicable for limestone dimension stone block mining, but mining recovery factor or the blocks rate, that is, the percentage of the limestone resources that can be mined out as limestone stone blocks, is a very important parameter to convert the limestone resources in the designed open pit into limestone dimension stone reserves. Accurately determining the blocks rate is not an easy task, especially at the early stage of the operation.

Blocks rate was estimated for the Jiangyou Project by the Northwestern Sichuan Brigade using the graphic methods as well as using the actual preliminary production results. The graphic methods include a two-dimensional estimate and a three-dimensional estimate.

The theoretical graphic two-dimensional and three-dimensional blocks rate calculation for selected areas result in a two-dimensional blocks rate of 24.0% to 53.5%, averaging 39.9%, and an average three-dimensional blocks rate of 51.4%; whereas an actual production blocks rate of 40.5% was calculated from data provided by Jinshida for a small trial mining area comprising a total of 427.0 m³ in volume with a total of 172.9 m³ of limestone blocks produced.

The trial mining area is at the upper portion of the limestone deposit. The Building Materials Institute believes that the limestone deposit should generally become more cohesive to depth and a blocks rate of 38% (consisting of a blocks rate of 40% and a block handling loss of 5%) was selected for the limestone dimension stone reserve estimation. BDASIA considers that the selected blocks rate to be generally reasonable at this stage. BDASIA notes that the blocks rate is generally difficult to be determined accurately, and variation could occur to depth in the Jiangyou Project limestone deposit. BDASIA recommends to closely monitor the actual blocks rate in production and adjust the limestone dimension stone reserve estimate according to the actual production blocks rate if necessary. BDASIA would also note that the Jiangyou Project has a limestone resource sufficient for over one hundred years of production at the designed production rate of 150,000 m³/pa; variation in the blocks rate should not have a significant impact for mine production for the first 20–30 years of the mine life.

Economic test was conducted on Measured and Indicated limestone resources based on the economic conditions assumed in the May 2010 Building Materials Institute feasibility study for the Jiangyou Project. These assumptions include an average limestone block sales price of RMB3,419/m³ (US\$516/m³) (before VAT) and an estimated average mining operating cost of RMB622/m³ (US\$94.0/m³) and G&A and others cost of approximately RMB100/m³ (US\$15.1/m³). This test indicates that mining the limestone resources as dimension stone shall be a very profitable operation for the Jiangyou Project.

After applying the estimated blocks rate of 38% on the *in-situ* limestone resources in Table 6.2, the Proved and Probable limestone dimension stone reserves were estimated from the Measured and Indicated limestone resources in the Jiangyou Project mining license area.

6.5 Limestone Dimension Stone Reserve Statement

Limestone dimension stone reserves as of December 31, 2010 for Jinshida' Jiangyou Project as estimated by the Building Material Institute and adopted by BDASIA in this CPR are summarized in Table 6.3. The limestone dimension stone reserve estimates include both Proved and Probable reserves, which were converted from Measured and Indicated limestone resources, respectively. Mining recovery factor or the blocks rate for the limestone dimension stone reserve estimates is 38%.

Table 6.3 Jiangyou Project Limestone Dimension Stone Reserves, as of December 31, 2010	
JORC Reserve Class	Limestone Dimension Stone Reserve (Mm ³)
Proved	5.98
Probable	10.80
Total	16.78

In addition to limestone dimension stone reserves estimated in Table 6.3, the smaller pieces of limestones that are insufficient for limestone block production can also be used to produce other by-products, such as small cut-to-size limestone tiles, limestone mosaics, and as raw materials for calcium carbonate powders and cement production, which will also contribute to the project economics of the Jiangyou Project. Therefore, minimum waste material will be produced from the Jiangyou Project mining operation.

6.6 Mine Life Analysis

The limestone dimension stone reserve mine life of the Jiangyou Project reviewed in this study based on the December 31, 2010 limestone dimension stone reserve estimates of 16.78 million cubic meters ("Mm³") and the planned production rate of 150,000 m³/pa is approximately 112 years. However, as there is a production ramp up process in the beginning and a production ramp down process at the end, the actual mine life of the Jiangyou Project will be several years longer. This limestone reserve mine life may change significantly in the future due to the following reasons:

- acquiring additional mining license area and conduct appropriate level of exploration work can increase the limestone resources and limestone dimension stone reserves of the Jiangyou Project. However, this is obviously not a priority task for the Jiangyou Project at this stage as the current limestone dimension stone reserves have a mine life of approximately 112 years;

- the actual mining recovery factor, or the blocks rate, might be different from that used for the limestone dimension stone reserve estimation. The reserve mine life will be reduced if the actual mining recovery factor is lower than the planned mining recovery rate, and the reserve mine life will be increased if the actual mining recovery factor is higher than the planned mining recovery rate;
- changes in the production rate would also change the mine life. The mine life would be shortened if the production rate is increased to a level higher than the anticipated long-term production level; and
- changes in the limestone dimension stone mining recovery rate, or the blocks rate, would also change the projected mine life. The mine life would be increased if the blocks rate increases when mining gets into the heart of the limestone deposit.

7.0 POTENTIAL FOR DEFINING ADDITIONAL LIMESTONE RESOURCES

The limestone resources within the Jiangyou Project mining license and exploration license area has been well defined by the Northwestern Sichuan Brigade, therefore, there is no additional exploration potential for limestone resources within the current mining license and exploration license area.

The limestone deposit that constitutes the limestone resources and limestone dimension stone reserves continuous along strike and in the dip direction outside the current Jiangyou Project mining license and exploration license area, therefore, acquiring additional mining license or exploration license area in the surrounding area of the current Jiangyou Project mining license and exploration license area and conduct appropriate exploration work can significantly increase the limestone resources and reserves for the Jiangyou Project.

8.0 MINING

8.1 Mine Design

The Jiangyou Project is a limestone dimension stone quarry designed to extract 150,000 m³ of limestone blocks annually. The blocks will then be used primarily as a raw material for a processing plant where limestone slabs and other products will be produced.

The limestone deposit is made up the lower section of the Tianjingshan Formation and the upper section of the Leikoupo Formation of the Triassic Period exposed on four rocky hills located on the northwestern limb of the Niuxingshan anticline. There are no obvious folds and faults within the Jiangyou Project mining license area. The stratigraphic occurrence is stable with a northeastern strike at the azimuth from 62° to 72° and a northwestern dip at angles from 22° to 36°.

The designed final open pit has a bench height of 20 m, a safety bench width of 4 m, and a cleaning bench width of 8 m for every third bench. Working benches are recommended to be between 9 m and 12 m in height to maximize the production of large blocks particularly in areas heavily fractured and containing significant karst caves. Working benches will be vertical with the final mined out slope pulled back to an overall 60° angle. BDASIA considers that this is a conservative final pit slope for a quarry of this type.

Virtually all vegetation has been removed from the mining license area and there is very little overburden. Some weathered limestone with abundant weathering fractures was noted in the top benches of the quarry. This material was being actively stripped off and stockpiled for internal use (such as fill, roads, ramps, etc) or for eventual by-product sale.

A wide haul road has been developed that reaches the top of the central and eastern portions of the mining area with a second spur road being developed to reach the top of the western end of the deposit. The road is adequate for both haulage of equipment and supplies and for moving mined blocks to the staging area at the base of the mountain. Drainage ditches and retaining walls have been installed at various locations along the road to insure its stability.

A large staging area for mined blocks has been constructed at the base of the mountain. It has good access to the local road that runs on the southeastern side of the property. This area will also contain various support facilities and maintenance shops for the mine. There is adequate room to expand these support areas as the quarry is developed and production increases. Adequate water and electrical power resources are available to sustain the mining and support activities on site.

Initial production benches have been developed mostly on the eastern and central portions of the deposit with one bench being developed on the western portion of the deposit. Mining of blocks will ramp up to eventually include several active faces with the mountain being slowly mined down to the elevation of the staging area. The top benches currently in production are affected by karst caves and weathering fractures. Drilling has indicated that there are substantial karst caves throughout the deposit and will have to be managed during the life of the mine. The weathering fracture problem, however, will be minimized once the highest benches of the mine are removed.

According to the mine plan, the mineral resource volume within the designed final pit is approximately 44.15 Mm³ and the anticipated yield of blocks will be approximately 16.78 Mm³ over the life of the mine. Rock that is not suitable for dimension stone production will be used for by-product production or sold as raw materials for cement or calcium carbonate powder manufacturing.

The limited preliminary quarry construction started in July 2008, but full scale quarry construction did not start until January 2010. The construction is expected to be completed in 2013. Limited commercial production of limestone blocks started in September 2010, and the annual production capacity is expected to ramp up from 45,000 m³ in 2011, to 90,000 m³ in 2012, and to 135,000 m³ in 2013. Full production at the rate of 150,000 m³pa of limestone blocks will be reached in 2014. At this production rate the mine life is estimated over 110 years.

Quarrying operations are scheduled to be 300 days per year (taking into account holidays, weather downtime and equipment maintenance) with sawing taking place in three 8-hour shifts per day and other activities in two 8-hour shifts per day.

Once quarry development is completed, haul roads finalized, mining equipment installed, and the work force trained, BDASIA believes that the quarry should be able to meet its production targets from this deposit.

8.2 Mining Method

The project feasibility study illustrates that the permitted deposit is large enough and of suitable quality to guarantee that annual production goals can be achieved. This was confirmed by a field visit by BDASIA personnel. The critical element to achieving the desired annual production of 150,000 m³ of limestone blocks is the proper development of the required several independent quarry working faces. The quarry is designed to be operated in a descending multi-bench architecture taking into account the morphological and geologic conditions within the deposit.

Quarrying will be organized by the opening of many independent extraction benches progressing from east to west (with one area in the southwest of the deposit) equipped with adequate saws, diamond wires, front end loaders, excavators, and cranes to guarantee that production goals will be achieved. This will be difficult in the upper portion of the deposit due to it being extremely cracked and crossed by several karst caves that will limit the production of blocks (especially large higher value blocks). It is therefore planned to expedite the mining of these benches to open up the heart of the deposit and develop adequate working faces. The fracturing pattern of the deposit indicates that a recommended minimum working bench height of 9 m to 12 m be maintained wherever possible to allow for the maximization of large block production. As mining progresses bench widths will be increased to allow the application of additional equipment to expand production.

The feasibility study indicates that extraction will start from the eastern side of the deposit progressing to the west by initially opening up of smaller production faces. These will be enlarged as the upper levels are removed and rock quality improves. Each production face will be approximately 40 m to 60 m in length with a height of 6 m to 9 m. Faces will be oriented 90° from the layering dip (this direction is also marked by the colour veins general direction).

The block mining and cutting equipment needed to guarantee a production volume of up to 1,000 m³ per month for each active face with two-daily working shifts includes:

- 1 chain saw cutting machine
- 2 diamond wire cutting machine (75 KW)
- 3 diamond wire cutting machine (37 KW)
- 1 disc saw cutting machine

- 1 drilling machine
- 1 bench overturning equipment
- 1 pneumatic block cutter
- 2 electric generator
- 1 air compressor

Front end loaders and excavators will be shared between two or three active faces. Approximately seven to eight loaders and an equal number of excavators will be needed when the mine is fully ramped up for mining operations to proceed efficiently. Additional units may be required as spares and to complete development and support tasks. BDASIA understands that a significant portion of the equipment to be used for the Jiangyou Project will be high-quality commercial products imported from Italy.

As indicated earlier the quarry will be developed by descending benching, so the heavy equipment and the chain saw machines will be shared among active faces being mined on the same level. The horizontal cut required to mine the blocks will be accomplished by means of a chain saw cutting machine and the main vertical cuts by means of two diamond wire cutting machines.

As the benches are developed they will be cut in slices. Thicknesses of slices will be determined by quarry management taking into account the geologic characteristics of the limestone block. The slice cutting will be carried out by the light diamond wire cutting machine after detailed analysis of the slice to avoid the presence of cracks in the blocks to maximize block recovery.

The quarry will be organized into several smaller independent active mining faces equipped with the required assets to maximize block production. Mined blocks will be loaded onto trucks and hauled to the staging area at the base of the mountain for shipment to the processing plant or the customers.

Maintenance of the various cutting tools and mobile equipment and having adequate supplies of spare parts and consumables is critical for maintaining the required monthly production volumes. Repair and support facilities will be constructed to support the planned mining operations.

8.3 Geotechnical and Hydrological Issues

The deposit is constituted of a thick-bedded to massive micritic limestones and micritic bioclastic limestones; the bulk density of the limestones ranges from 2.51 to 2.73 t/m³ with an average of 2.61; the compressive strength is from 27.5 to 63.7 MPa and bending strength is from 16.3 to 39.7 MPa. The structural plane is mainly joint fissure, and the fracture of layer surface is obsolete. According to the project feasibility study, there is a northwest-southeast and a northeast-southwest conjugated joint, which divides the deposit into wedge-shaped or square block. According to the statistics for 5 fractures point within 165 m², the fracture frequency is from 0.54 to 0.93 pieces/m, with an average of 0.73 pieces/m.

Drill core data indicates substantial voids and karst caves with an average cavity rate of approximately 8.0%. These features do not appear to affect overall slope stability but should be taken into account as specific active mining benches are developed. Local slope instability could be encountered and allowances in the overall production scheduling needs to take these factors into account. The overall deposit is considered competent and stable with very good slope stability. Working

benches will be vertical but the final overall pit slope angle will be 60°. This is considered conservative and very adequate for this operation. Slope stability, except for local anomalies, is considered excellent and should not materially affect ongoing life of mine operations.

Hydro-geologic factors are not considered to be a significant factor negatively affecting the life of mine operations of the quarry. All of the mining of dimension stone blocks is well above the ground water aquifer and local karst caves and drainage features will move rainwater away from active mining and support facilities. The Building Material Institute did discuss the affects of mine waste water (generally consisting of clean water mixed with rock powders) from cutting operations entering the karst caves and being introduced into the local water system. It is currently felt that the rock powder in the mine waste water will mostly deposit out from the water flows where the flow rate reduces and the remaining water should not have any significant impact on the ground water system.

8.4 Mine Production

The quarry is currently mining the upper benches of the eastern portion of the deposit. The deposit in this area is very cracked because of the presence of the abundant weathering joints. When the BDASIA project team visited the project site in late June 2010, bench heights were no more than 4 m. Recoveries are low and the blocks recovered are relatively small. The current recovery rate cannot be used as a realistic reference as the quarry is in its early stages of development. Using the Italian Botticino quarries as reference, it is possible to forecast that stone from the first two benches will remain highly cracked and that realistic production rates will only be achieved beginning with the third bench. The Company management and BDASIA staff concur that it will take up to 12 months at the current production rate to open up the third bench in the eastern portion of the deposit. Other areas will require additional time to reach quality *in-situ* stone. Block recovery rates should reach the projected 38% with the opening of this bench but at least 20% of these blocks will be medium or small blocks. The full development of the deposit to the third and lower benches will be required for large block production to be maximized. This process is estimated by management and BDASIA to take up to three years from the end of 2010.

Table 8.1 illustrates the actual block production for the first eleven months of 2010 and scheduled block production from December 2010 to 2015 by volume of various uses as well as the actual and forecast color and texture type split for the limestone block production. BDASIA's review of the feasibility study, its field visit, meetings with management, and its independent review indicate that these assumptions are reasonable and achievable if the mining plan is fully implemented, staffing is adequate, required equipment is procured, and operated effectively and efficiently.

Table 8.1 Historical and Forecast Limestone Blocks Production for the Jiangyou Project, 2010–2015							
Item	Actual	Forecast					
	2010 Jan-Nov	2010 Dec	2011	2012	2013	2014	2015
Limestone Block Production (m³)	415	730	45,000	90,000	135,000	150,000	150,000
Blocks Used for Self Slab Production (m ³)	—	—	—	53,374	88,957	88,957	88,957
Blocks Used for Contract Slab Production (m ³)	391	730	45,000	30,000	40,000	40,000	40,000
Blocks Used for Shaped Stone Products (m ³)	—	—	—	1,800	3,000	3,000	3,000
Blocks to be Sold Directly to Customer (m ³)	24	—	—	4,826	3,043	18,043	18,043
Color and Texture Type Split for Limestone Block Production							
Pure beige	25.0%	25.0%	25.5%	30.0%	55.0%	55.0%	55.0%
Mixed beige	75.0%	75.0%	64.5%	60.0%	35.0%	35.0%	35.0%
Gray net	0.0%	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Wood grain	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

9.0 LIMESTONE SLAB AND OTHER BY-PRODUCTS PRODUCTION

9.1 Limestone Slab Processing

The quarry will produce 150,000 m³ of small (Class III), medium (Class II), and large (Class I) limestone blocks annually when it is fully developed with the large blocks having the highest value. The majority of this volume will be processed into limestone slabs by Jinshida' processing facility (to be constructed) in Jiangyou City. Limestone slab processing from the plant is projected at 3 Mm²pa, of which 55% will be standard, 2-cm-thick, one-side-polished limestone slabs, 35% 2-cm-thick, cut-to-size limestone tiles, and 10% 1-cm-thick, one-side-polished limestone slabs. Contract processors will also be used on an as needed basis for additional limestone slab processing or special orders, especially during the construction and ramp-up period for the Company's own processing facility.

Small blocks will be processed by block cutting machines to produce the thin slabs and cut-to-size tiles. Medium and large blocks will be processed by gang saws and will be typically used to produce 2-cm-thick one-side-polished limestone slabs. In addition, approximately 200,000 pieces (sets) per year of shaped stone products will also be produced. These include curved plates, moldings, fireplace components, tables, and special order products.

Limestones from the upper benches of the open pit production are characterized with small defects such as holes, cracks, fossils, etc. Therefore, blocks produced in the early years will often need to be treated with resin to insure final product quality. This will double polishing time as the slabs will need to be polished twice. As limestone quality improves with mining depth, this added polishing step will be reduced but not eliminated.

To accomplish the required polishing, the 2-cm slab polishing processing plant flow sheet would be:

Slabs are pre-polished by an 8-head polishing machine (at a speed of 2 m/min)



Resin application and drying



Slabs cleaned by an 8-head polishing machine (speed 2 m/min)



Slabs are polished by a 14-head polishing machine (speed 1.4 m/min)

The 8-head polishing machine processing slabs with an average width of 1.6 m and 2-cm thickness will have a capacity greater than 1Mm²pa (3 shifts per day for 300 days per year).

The 12-head polishing machine processing slabs with an average width of 1.6 m and 2-cm thickness will have a capacity greater than 800,000 m²pa (3 shifts per day for 300 days per year).

BDASIA has reviewed the detailed design of the processing facility that will be constructed in Jiangyou City in the project feasibility study. BDASIA considers that the design, proposed layout and the scale and quantity of equipment designated is suitable to achieve the finished product production targets detailed in Table 9.1.

Table 9.1 Historical and Forecast Limestone Slab Production for the Jiangyou Project, 2010–2015							
Item	Actual	Forecast					
	2010 Jan-Nov	2010 Dec	2011	2012	2013	2014	2015
Jiangyou Project Slab Processing Plant							
2-cm One-Side-Polished Limestone Slab (m ²)		—	—	990,000	1,650,000	1,650,000	1,650,000
Limestone Blocks Consumed (m ³)	—	—	—	27,500	45,833	45,833	45,833
Slab/Block Ratio (m ² /m ³)	—	—	—	36	36	36	36
2-cm Cut-to-Size Limestone Tile (m ²)	—	—	—	630,000	1,050,000	1,050,000	1,050,000
Limestone Blocks Consumed (m ³)	—	—	—	21,874	36,457	36,457	36,457
Tile/Block Ratio (m ² /m ³)	—	—	—	28.8	28.8	28.8	28.8
1-cm One-Side-Polished Limestone Slab (m ²)	—	—	—	180,000	300,000	300,000	300,000
Limestone Blocks Consumed (m ³)	—	—	—	4,000	6,667	6,667	6,667
Slab/Block Ratio (m ² /m ³)	—	—	—	45	45	45	45
Total Slab Production (m²)	—	—	—	1,800,000	3,000,000	3,000,000	3,000,000
Limestone Blocks Consumed (m³)	—	—	—	53,374	88,957	88,957	88,957
Slab/Block Ratio (m²/m³)	—	—	—	33.7	33.7	33.7	33.7
Shaped Stone Products (piece)	—	—	—	120,000	200,000	200,000	200,000
Limestone Blocks Consumed (m ³)	—	—	—	1,800	3,000	3,000	3,000
Piece/Block Ratio	—	—	—	66.7	66.7	66.7	66.7
Contract Slab Processing							
2-cm One-Side-Polished Limestone Slab (m ²)	3,165	9,287	1,620,000	1,080,000	1,440,000	1,440,000	1,440,000
Limestone Blocks Consumed (m ³)	90	251	45,000	30,000	40,000	40,000	40,000
Slab/Block Ratio	35.2	37	36	36	36	36	36

Since the facility has not been constructed or commissioned, BDASIA cannot comment on plant operations but the proposed work scope and methodology detailed in the feasibility study is reasonable. Management also has the experience and depth of support to construct and commission the facility in the detailed time line and to achieve steady state operation to meet the project finished product production schedule.

9.2 Other By-Products Production

The block yield from the quarry is estimated to be approximately 38%. The remaining 62% will be made up of unsuitable or damaged blocks, eroded limestone, limestone affected by karst caves, and smaller broken material.

In addition to the primary limestone slab processing plant in Jiangyou City, Jinshida will also construct a small processing plant near the Jiangyou Project site, which will employ some of the local labor to produce small cut-to-size limestone tiles using the remaining limestones of various shape and size. This will enable the Company to achieve additional value from blocks that in many cases would have a very low value. This is due to the labor intensive nature of manufacturing products from small blocks. The waste material from the limestone slab, tile, and shaped stone product production will be sold at very low prices as raw material for cement and calcium carbonate powder production. Table 9.2 summarizes the projected production for the small, 2-cm-thick, cut-to-size limestone tiles and the raw materials for cement and calcium carbonate powder production from 2011 to 2015. The intent is that virtually the entire volume of the limestone mined from the deposit will be used in some form and the final waste rocks from the project will be minimized.

Table 9.2 Forecast Other By-Product Production for the Jiangyou Project, 2011–2015					
Item	2011	2012	2013	2014	2015
Small 2-cm Cut-to-Size Limestone Tile (m ²)	—	60,000	100,000	100,000	100,000
Raw Material for Calcium Carbonate Powder/Cement (t)	—	375,600	563,400	626,000	626,000

10.0 OPERATING COSTS

Based on information in the Building Materials Institute's feasibility study report, BDASIA has developed forecast unit limestone block production costs, self limestone slab production costs, contract limestone slab production costs, and production costs for other by-products for the Jiangyou Project from December 2010 to 2015 (Tables 10.1 to 10.4). The actual production costs from January to November 2010 are also summarized in the tables for comparison.

The unit product operating cash costs include mining costs, processing costs, G&A costs, selling costs, environmental protection costs, production taxes, resource compensation levy, and other cash cost items. The total production costs comprise the operating cash costs and depreciation/amortization costs.

Table 10.1 Actual and Forecast Limestone Block Operating/Production Costs for the Jiangyou Project, 2010–2015							
Item	Actual	Forecast					
	2010 Jan-Nov	2010 Dec	2011	2012	2013	2014	2015
Mining Cost							
Workforce Employment and Transportation of Workforce ⁽¹⁾ (RMB/m ³)	419.2	253	253	253	253	253	253
Consumables (RMB/m ³)	87.6	62	62	62	62	62	62
Fuel, Electricity and Water (RMB/m ³)	234.7	128	128	128	128	128	128
Equipment Maintenance (RMB/m ³)	93.2	94	94	94	94	94	94
Others (RMB/m ³)	51.0	84	84	84	84	84	84
Total Mining Cost (RMB/m³)	885.7	622	622	622	622	622	622
(US\$/m ³)	133.8	94.0	94.0	94.0	94.0	94.0	94.0
G&A and Other Cost							
On and Off-Site Administration (RMB/m ³)	11,200.2	1,361	307	26	22	30	35
Production Taxes and Governmental Charges (RMB/m ³)	16.0	321	516	7	3	17	17
Environmental Protection and Monitoring (RMB/m ³)	722.4	0	111	7	5	8	13
Product Marketing and Transport (RMB/m ³)	333.0	137	486	32	26	36	39
Others (RMB/m ³)	1,512.2	215	151	21	15	17	20
Total G&A and Other Cost (RMB/m³)	13,783.9	2,033	1,572	94	71	106	123
(US\$/m ³)	2,082.16	307.1	237.4	14.1	10.7	16.0	18.6
Total Operating Cash Cost (RMB/m³)⁽²⁾	14,669.6	2,655	2,194	716	693	728	745
(US\$/m ³)	2,215.94	401.1	331.4	108.1	104.7	110.0	112.6
Total Production Cost (RMB/m³)	14,917.1	2,939	2,397	966	1,000	1,098	1,147
(US\$/m ³)	2,253.34	443.9	362.0	145.9	151.0	165.9	173.3

Notes:

- (1) Transportation of workforce is not separated from the workforce employment cost in the original feasibility study report.
- (2) Contingency allowances are included in each item and are not listed separately in the original feasibility study report.

Table 10.2 Actual and Forecast Limestone Slab Operating/Production Costs for the Jiangyou Project, 2010–2015							
Item	Actual	Forecast					
	2010 Jan-Nov	2010 Dec	2011	2012	2013	2014	2015
Self Limestone Slab Costs							
Blocks Operating Cash Cost⁽¹⁾ (RMB/m ²)	—	—		21	21	21	22
(US\$/m ²)	—	—	—	3.2	3.1	3.3	3.3
Slab Processing Cost							
Workforce Employment and Transportation of Workforce ⁽²⁾ (RMB/m ²)	—	—	—	12	7	7	7
Consumables (RMB/m ²)	—	—	—	11	11	11	11
Fuel, Electricity and Water (RMB/m ²)	—	—	—	10	10	10	10
Product Transport (RMB/m ²)	—	—	—	3	3	3	3
Equipment Maintenance (RMB/m ²)	—	—	—	9	7	7	7
Total Slab Processing Cost (RMB/m²)	—	—	—	45	38	38	38
(US\$/m ²)	—	—	—	6.7	5.7	5.7	5.7
G&A and Other Cost							
On and Off-Site Administration (RMB/m ²)	—	—	—	13	11	11	12
Production Taxes and Governmental Charges (RMB/m ²)	—	—	—	33	32	33	33
Environmental Protection and Monitoring (RMB/m ²)	—	—	—	3	2	2	2
Product Marketing (RMB/m ²)	—	—	—	15	13	13	13
Others (RMB/m ²)	—	—	—	6	6	6	6
Total G&A and Other Cost (RMB/m²)	—	—	—	70	63	65	66
(US\$/m ²)	—	—	—	10.6	9.6	9.8	10.0
Total Operating Cash Cost (RMB/m²)⁽³⁾	—	—	—	136	122	124	126
(US\$/m ²)	—	—	—	20.5	18.4	18.8	19.0
Total Production Cost (RMB/m²)	—	—	—	153	140	145	148
(US\$/m ²)	—	—	—	23.1	21.2	21.9	22.3
Contract Limestone Slab Costs							
Blocks Operating Cash Cost ⁽¹⁾ (RMB/m ²)	407.1	79	61	20	19	20	21
(US\$/m ²)	61.49	11.9	9.2	3.0	2.9	3.1	3.1
Contract Slab Processing Charge (RMB/m ²)	60.0	50	51	51	51	51	51
(US\$/m ²)	9.06	7.5	7.7	7.7	7.7	7.7	7.7
Product Marketing and Transportation Cost (RMB/m ²)	110.7	67	60	60	60	60	60
(US\$/m ²)	16.72	10.2	9.0	9.0	9.0	9.0	9.0
Total Operating Cash Cost (RMB/m²)	577.7	196	172	131	130	131	132
(US\$/m ²)	87.27	29.6	26.0	19.8	19.7	19.8	19.9
Total Production Cost (RMB/m²)	584.8	204	178	138	139	142	143
(US\$/m ²)	88.33	30.8	26.8	20.8	21.0	21.4	21.6

Notes:

- (1) Unit Blocks Mining Cost was calculated based on the limestone blocks Total Operation Cash Costs as listed in Table 10.1.
- (2) Transportation of workforce is not separated from the workforce employment cost in the original feasibility study report.
- (3) Contingency allowances are included in each item and are not listed separately in the original feasibility study report.

Table 10.3 Forecast Shaped Stone Products Operating/Production Costs for the Jiangyou Project, 2011–2015					
Item	2011	2012	2013	2014	2015
Blocks Operating Cash Cost⁽¹⁾ (RMB/piece)	—	11	10	11	11
(US\$/piece)	—	1.6	1.6	1.6	1.7
Processing Cost					
Workforce Employment and Transportation of Workforce ⁽²⁾ (RMB/piece)	—	46	27	27	27
Consumables (RMB/piece)	—	35	35	35	35
Fuel, Electricity and Water (RMB/piece)	—	12	12	12	12
Equipment Maintenance and Others (RMB/piece)	—	14	11	11	11
Product Transport (RMB/piece)	—	3	3	3	3
Total Processing Cost (RMB/piece)	—	109	88	88	88
(US\$/piece)	—	16.5	13.3	13.3	13.3
G&A and Other Cost					
On and Off-Site Administration (RMB/piece)	—	3	3	3	3
Production Taxes and Governmental Charges (RMB/piece)	—	7	7	7	7
Environmental Protection and Monitoring (RMB/piece)	—	1	1	1	1
Product Marketing (RMB/piece)	—	4	3	3	3
Others (RMB/piece)	—	2	1	2	2
Total G&A and Other Cost (RMB/piece)	—	16	15	15	16
(US\$/piece)	—	2.4	2.2	2.3	2.4
Total Operating Cash Cost (RMB/piece)⁽³⁾	—	136	113	114	115
(US\$/piece)	—	20.5	17.1	17.2	17.4
Total Production Cost (RMB/piece)	—	145	123	125	126
(US\$/piece)	—	21.9	18.5	18.9	19.1

Notes:

- (1) Unit Blocks Mining Cost was calculated based on the limestone blocks Total Operation Cash Costs as listed in Table 10.1.
- (2) Transportation of workforce is not separated from the workforce employment cost in the original feasibility study report.
- (3) Contingency allowances are included in each item and are not listed separately in the original feasibility study report.

Table 10.4 Forecast By-Products Operating/Production Costs for the Jiangyou Project, 2011–2015					
Item	2011	2012	2013	2014	2015
Small Cut-to-Size Limestone Tile Costs					
Slab Processing Cost					
Workforce Employment and Transportation of Workforce ⁽¹⁾ (RMB/m ²)	—	32	19	19	19
Consumables (RMB/m ²)	—	9	9	9	9
Fuel, Electricity and Water (RMB/m ²)	—	9	9	9	9
Product Transport (RMB/m ²)	—	5	5	5	5
Equipment Maintenance and Others (RMB/m ²)	—	35	25	25	25
Total Slab Processing Cost (RMB/m²)	—	91	67	67	67
(US\$/m²)	—	13.7	10.2	10.2	10.2
G&A and Other Cost					
On and Off-Site Administration (RMB/m ²)	—	6	4	4	4
Production Taxes and Governmental Charges (RMB/m ²)	—	4	4	4	4
Environmental Protection and Monitoring (RMB/m ²)	—	1	1	1	1
Product Marketing (RMB/m ²)	—	6	4	5	5
Others (RMB/m ²)	—	3	2	2	3
Total G&A and Other Cost (RMB/m²)	—	20	15	16	18
(US\$/m²)	—	3.0	2.2	2.4	2.6
Total Operating Cash Cost (RMB/m²)⁽²⁾	—	110	82	83	85
(US\$/m²)	—	16.6	12.4	12.6	12.8
Total Production Cost (RMB/m²)	—	159	127	132	133
(US\$/m²)	—	24.0	19.2	19.9	20.1
Calcium Carbonate Powder/Cement Raw Material Costs					
Raw Material Production Cost					
Workforce Employment and Transportation of Workforce ⁽¹⁾ (RMB/t)	—	1.1	0.7	0.7	0.7
Consumables (RMB/t)	—	0.5	0.5	0.5	0.5
Fuel, Electricity and Water (RMB/t)	—	2.6	2.6	2.6	2.6
Product Transport (RMB/t)	—	5.4	5.4	5.4	5.4
Equipment Maintenance and Others (RMB/t)	—	1.3	1.2	1.1	1.1
Total Raw Material Production Cost (RMB/t)	—	10.8	10.3	10.2	10.2
(US\$/t)	—	1.63	1.56	1.54	1.54

Table 10.4 (continued) Forecast By-Products Operating/Production Costs for the Jiangyou Project, 2011–2015						
Item	2010	2011	2012	2013	2014	2015
G&A and Other Cost						
On and Off-Site Administration (RMB/t)	—	—	1.4	1.1	1.1	1.2
Production Taxes and Governmental Charges (RMB/t)	—	—	0.7	0.7	0.7	0.7
Environmental Protection and Monitoring (RMB/t)	—	—	0.3	0.2	0.2	0.2
Product Marketing (RMB/t)	—	—	1.7	1.2	1.2	1.4
Others (RMB/t)	—	—	0.8	0.6	0.6	0.7
Total G&A and Other Cost (RMB/t)	—	—	4.9	3.8	3.8	4.2
(US\$/t)	—	—	0.74	0.58	0.57	0.64
Total Operating Cash Cost (RMB/t)⁽²⁾	—	—	15.7	14.1	14.0	14.5
(US\$/t)	—	—	2.37	2.14	2.11	2.18
Total Production Cost (RMB/t)	—	—	16.1	14.6	14.4	14.9
(US\$/t)	—	—	2.44	2.20	2.18	2.25

Notes:

- (1) Transportation of workforce is not separated from the workforce employment cost in the original feasibility study report.
- (2) Contingency allowances are included in each item and are not listed separately in the original feasibility study report.

The detailed costs show a standard pattern of being front loaded during the development and ramp-up phases of the project with a gradual steady decline to a steady state situation by 2014. BDASIA has reviewed the operating cost data projections and found them to be generally reasonable and achievable. Overruns of the detailed projections, if any, will most likely be caused by construction and ramp up delays (equipment delivery delays, unforeseen weather delays, material shortages, etc), shake out issues while new equipment is deployed, and untrained work force issues increasing operating and repair costs. Management has allowed and budgeted for these contingencies and BSASIA concurs that the detailed schedule is reasonable.

11.0 CAPITAL COSTS

Actual capital expenditure from 2008 to November 2010 and current forecast capital cost from December 2010 to 2014 for the Jiangyou Project are shown in Figure 11.1. Total capital cost for constructing the 150,000 m³pa Jiangyou Project (including the limestone mine, primary limestone processing facility and the small limestone processing plant) is currently estimated at RMB788.4 M (US\$119.10 M).

Table 11.1 Actual and Forecast Capital Costs for the Jiangyou Project, 2008–2014								
Item	Actual		Forecast					Total
	2008–2009	2010 Jan-Nov	2010 Dec	2011	2012	2013	2014	
Limestone Mine (M RMB)								
Mine Construction	12.08	31.57	4.59	33.34	30.81	31.13	9.13	152.65
Mining Equipment	7.06	28.35	0.13	33.59	34.57	15.59	8.28	127.57
Mining Right	2.32			39.00				41.32
Land		1.40		3.60	15.00	10.00	10.00	40.00
Others		0.18		5.00				5.18
Subtotal	21.46	61.50	4.72	114.52	80.38	56.73	27.41	366.72
Limestone Processing Plants (M RMB)								
Processing Plant Construction				87.73	43.00			130.73
Processing Equipment				70.55	120.00	51.40		241.95
Land		1.00		19.00				20.00
Others				4.02	25.00			29.02
Subtotal		1.00	0.00	181.30	188.00	51.40		421.70
Total (M RMB)	21.46	62.50	4.72	295.83	268.38	108.13	27.41	788.42
(M US\$)	3.242	9.441	0.713	44.688	40.541	16.334	4.140	119.097

The majority of capital spending has taken or will take place from 2010 to 2012 as facilities are constructed and equipment is delivered and installed. The project development schedule is:

- *July 2008 – December 2009:* Limited preliminary mine construction activities.
- *January 2010 – December 2013:* Complete the construction of the main production facilities of the quarry. Quarry commissioning and ramp-up will begin during this period with full production by 2014. The capital cost in 2014 covers limited equipment replacement and additional land payment.
- *January 2011 – December 2011:* Processing plant construction is commenced, equipment is procured, delivered, and installed with plant construction being partially completed.
- *January 2012 – December 2012:* Processing plant is ramped up, shaken out and workforce is trained. Construction is totally completed and production of various products expands and reaches planned capacity.

BDASIA has reviewed the detailed capital cost estimates in the project feasibility study and found them to be reasonable with adequate contingencies for unanticipated issues. The detailed equipment, structures and timeline to deploy and construct these assets is reasonable.

12.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT

12.1 Environmental Management

Environmental regulatory requirements for the Jiangyou Project under PRC laws and regulations comprises compliance with the National Air Quality Standard (GB3095-1996), Integrated Emission Standard for Air Pollutants (GB16297-1996), Integrated Wastewater Discharge Standard (GB8978-1996), Noise Standard at Boundary of Industrial Enterprises (GB12348-90) and Energy Conservation Law.

The Jiangyou Project has had an Environmental Impact Statement (“EIS”) for a 150,000 m³pa production rate approved, and an Environmental Consent issued, by Sichuan Province Environmental Protection Bureau (“EPB”) for the mining activities. Environmental measures to be implemented at the planned operations comprise:

- Dust mitigation: measures comprise use of water with drilling, cutting, and sawing activities; use of water sprays at material transfer points; and water trucks to spray the roads during dry periods. Personal protection devices (“PPE”) to provide additional personal protection from dust are provided to workers as necessary;
- Water supply and waste water treatment: the site has been designed to recycle used water for production activities and dust suppression. Production water and rain falling on the mine area are drained to a central sump where the water is settled and cleared of sediment before being recycled back into ongoing production activity. No toxic or hazardous substances are contained in the drainage water. Total water consumption for the site is estimated at approximately 34,066 m³/day and make-up water comprises approximately 3,200 m³/day. Top up and domestic water is taken from wells on the minesite which can provide a good supply. Domestic wastewater is treated to comply with national standards and discharged to the municipal wastewater system;
- Solid waste: there will be little ultimate waste from this operation as smaller sized stones and rubble will be used for by-product production, or sold as raw materials for calcium carbonate powder and cement production. The waste rock will be temporarily stored in the waste rock dump in a valley adjacent to the mine and will be shipped out regularly to ensure the minimum waste storage. This waste rock dump will be provided with appropriate water diversion measures, such as peripheral rainfall diversion drains, to minimize any risk of waste material saturation and associated potential for rock and mudslides;
- Noise control: methods of noise control will include use of silencers, noise and vibration dampening and absorbing materials, isolation and enclosure of noisy equipment, and regular equipment maintenance. Company policy requires PPE use, such as ear muffs or ear plugs, for noise-affected workers;
- Radioactivity of the Limestone Resource: the internal exposure index (“IRa”) of the specific radioactivity of natural radioactive nuclides Ra-226, Th-232 and K-40 ranges from 0.03 to 0.34, and the external exposure index (“Ir”) ranges from 0.02 to 0.19. These levels fall within the European Union’s acceptable limit range.
- Environmental monitoring: regular noise, water and air quality monitoring is undertaken under the auspices of the Jiangyou EPB, with random checks conducted by the Sichuan Provincial EPB; and

- Rehabilitation: a reclamation and re-planting program for disturbed areas will be ongoing. Waste rock dumps are to be properly rehabilitated upon either completion of their active lives or mine closure.

12.2 Social Management

The Company states that core corporate principles of its mining and processing operations include: the integration of social and economic benefits derived from the operations, the integration of enterprise and local economic development (including local farmers' income growth) and the demonstration of corporate social responsibility.

In support of these principles, the workforce is and will continue to be largely drawn from the local community — a well established and extensive mining area with many mines, both large and small. The community, therefore, is supportive of mining which is a major contributor to the prosperity of the district. In addition, as a co-operative venture with local residents, the Company will construct a small processing plant, which will employ some of the local labor to produce small cut-to-size tiles using the smaller limestone blocks of various shape and size. The waste material from limestone slab, tile, and shaped stone product production will be sold at very low prices to the local factories as raw material for cement and calcium carbonate powder production.

13.0 OCCUPATIONAL HEALTH AND SAFETY

Jinshida implements a corporate safety policy which incorporates national safety standards. Jinshida holds a current safety permit for the mine, issued by the Sichuan Provincial Administration of Work Safety on September 7, 2010, which is valid until June 16, 2012.

Jinshida conducts its operations in accordance with the relevant national laws and regulations covering occupational health and safety (“OH&S”) in mining, production, blasting and explosives handling, mineral processing, waste rock disposal, environmental noise, emergency response, construction, fire protection and fire extinguishment, sanitary provision, power provision, labor and supervision. Regular reports are submitted to the local health administration department, who also conducts random inspections, as required by law.

The project has maintained a good safety record in the three years since its purchase by Jinshida, with no fatalities or major injuries being sustained. A clinic is maintained on site, with part-time medical personnel supported by a community hospital 5-km away.

14.0 RISK ANALYSIS

When compared with many industrial and commercial operations, mining is a relatively high risk business. Although the volume of the limestone in the Jiangyou Project mining license area is relatively easy to determine, the volume percentage of the limestone resources that can be mined out as dimension stones, that is, the blocks rate, is relatively difficult to determine, especially at the early stage of the project.

Estimations of project capital and operating costs are rarely more accurate than $\pm 10\%$ and will be at least $\pm 15\%$ for projects in the development stages. Limestone mining project revenues are subject to variations in limestone block and limestone slab prices and exchange rates, though some of this uncertainty can be removed with long-term contracts.

Jinshida' Jiangyou Project reviewed in this CPR is at the development stage and the limited commercial production has just occurred. This brings an additional risk for the project.

In reviewing Jinshida' Jiangyou Project, BDASIA has considered areas where there is perceived technical risk to the operation, particularly where the risk component could materially impact the projected production and resulting cashflows. The assessment is necessarily subjective and qualitative. Risk has been classified as low, moderate, or high based on the following definitions:

- 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.
- 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.
- Low Risk: the factor, if uncorrected, could have little or no effect on project cash flow and performance.

Risk Component	Comments
Limestone Resources <i>Low Risk</i>	The Jiangyou Project limestone deposit is a marine sedimentary deposit; it consists of large, stratiform mineralized bodies of generally thousands of meters in dimension along both the strike and dip directions and with good continuity in thickness, chemical composition and physical properties. The current limestone resources of the deposit were estimated by a polygonal method using surface drill holes and surface trenches. The Measured resource was estimated by drilling and trench sampling at a data spacing of 100 m to 150 m and the Indicated resources was estimated by a data spacing from 200 m to 300 m. The karst cave volume was deducted from the resource estimates based on an averaging karst cave percentage determined from the drill hole data. BDASIA considers the limestone resource estimate reasonable and acceptable.

Risk Component	Comments
Limestone Dimension Stone Reserves <i>Low to Moderate Risk</i>	<p>Proved and Probable limestone dimension stone reserves under the JORC Code have been defined for the Jiangyou Project based on the Northwestern Sichuan Brigade April 2010 resource estimation and the Building Materials Institute's May 2010 feasibility study report. The Proved reserve and Probable reserve were estimated from the Measured resource and Indicated resource within the designed open pit, respectively. The planned mining method is diamond wire saw/chain/disc saw cutting in open pit. A mining recovery factor, or the blocks rate, of 38% was used in reserve estimation, which BDASIA considers reasonable at this stage. BDASIA suggests to closely monitoring the mining recovery factor during the actual mining process of the Jiangyou Project, and to use more accurate mining recovery factors based on actual mining to adjust the limestone dimension stone reserve estimation for the project, if necessary.</p> <p>Currently defined limestone dimension stone reserves for the Jiangyou Project are sufficient to support a mine production at the designed production capacity of 150, 000 m³pa for over 110 years.</p>
Limestone Block Mining <i>Low Risk</i>	<p>The Jiangyou Project uses standard and tested equipment to mine the limestone blocks. The new workforce will need significant training but the Company has currently engaged an operational consultant from Italy to train the workforce and shake out the new equipment. He will also aid in setting up quarry operating procedures and guidelines.</p>
Limestone Slab and Other By-Products Production <i>Low to Moderate Risk</i>	<p>The proposed processing plant will use standard and accepted equipment but workforce development and plant layout will be critical to achieve production targets. Management of the Company has sufficient experience in the limestone industry and many members of the senior management are industry veterans and experts. Management has planned an extensive employee training program as the facility is ramped up to mitigate this risk. By-product production should have no problem achieving or exceeding projections.</p>
Infrastructure <i>Low Risk</i>	<p>Access to both the Jiangyou Project mine site and the proposed limestone slab processing plant is good. Electricity and water supplies for both sites are readily available and sufficient.</p>
Production Targets <i>Low to Moderate Risk</i>	<p>The quarry production targets are achievable if the quarry is organized, staffed and equipped from its earlier phases. The development of the higher quality stone benches is critical as is the large number of working faces. The ramp up period to 2014 should be adequate to mitigate this risk.</p>

Risk Component	Comments
Operating Cost <i>Low to Moderate Risk</i>	Operating cost estimates appear to be reasonable but development and startup delays could significantly impact these costs in the short to medium term. A new workforce will typically increase maintenance costs and reduce productivity of the mining and processing equipment. Management has applied reasonable contingencies to mitigate these factors but workforce development for the higher skilled staff is critical.
Capital Cost <i>Low to Moderate Risk</i>	Budgeted capital costs appear to be reasonable but overruns could occur if construction and shake out issues delay steady state operations. Additional mobile equipment or cutting equipment may need to be deployed to achieve steady state operations. Management appears to have budgeted adequate numbers of cutting tools but delays could occur if additional saws are unavailable. Used mobile equipment or contractors could be used in the short term if additional mobile equipment is required.
Environment and Social Issues <i>Low Risk</i>	<p>Mitigation measures are being put in place to ensure environmental and social risks are minimized and regulatory environmental requirements are satisfied. Buildings and infrastructure are being constructed to withstand a seismic intensity of 8 and a peak ground acceleration of 0.01 g; however, any waste from this mine will be chemically benign, should a seismic or any other natural hazard occur. The Project appears to be in compliance with PRC laws and regulations, to have appropriately conducted the necessary permitting process and to have minimized any potential liabilities.</p> <p>The Project also complies with requirements outlined in the IFC's Environmental Health & Safety ("EHS") Guidelines for Construction Materials Extraction.</p>
Occupational Health and Safety <i>Low Risk</i>	Jinshida holds a valid safety permit, seeks to conduct its operations in accordance with national safety regulations and has maintained a good safety record.