THIS DOCUMENT IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION. If you are in any doubt about the contents of this Document or the action you should take, you are recommended to take advice from your stockbroker, bank manager, solicitor, fund manager or other independent financial adviser who is authorised under the Financial Services and Markets Act 2000 and who specialises in advising in connection with shares and other securities, or from another appropriately authorised financial adviser if you are taking advice outside the United Kingdom.

If you have sold or otherwise transferred all of your Polymetal Shares please send this Document, together with the accompanying Form of Proxy, to the purchaser or transferee or to the stockbroker, bank, or other agent through whom the sale or transfer was effected, for transmission to the purchaser or transferee. However, such documents should not be forwarded or transmitted in or into any jurisdiction in which such act would constitute a violation of the relevant laws in such jurisdiction. If you have sold or transferred only part of your holding of shares in Polymetal you should retain this Document and the accompanying Form of Proxy and consult the stockbroker, bank or other agent through whom the sale or transfer was effected.

This Document should be read in its entirety.

This Document does not constitute or form part of any offer or invitation to purchase, otherwise acquire, subscribe for, sell, otherwise dispose of or issue, or any solicitation of any offer to sell, otherwise dispose of, issue, purchase, otherwise acquire or subscribe for, any security.

POLYMETAL INTERNATIONAL PLC

(a public no par value limited liability company incorporated under the laws of Jersey with registered number 106196)



Proposed acquisition of the entire issued share capital of Altynalmas Gold Ltd

Circular to Shareholders and Notice of General Meeting

This is not a prospectus but a shareholder circular. The distribution of this Document in jurisdictions other than the United Kingdom may be restricted by the laws of those jurisdictions and therefore persons into whose possession this Document comes should inform themselves about and observe any such restrictions. Failure to comply with these restrictions may constitute a violation of the securities laws of any such jurisdiction. This Document does not constitute an offer or an invitation to purchase or subscribe for any securities or a solicitation of an offer to buy any securities pursuant to the Document or otherwise in any jurisdiction in which such offer or solicitation is unlawful.

Your attention is drawn to the letter from the Chairman of Polymetal which is set out on pages 1 to 10 of this Document, which contains the unanimous recommendation of the Directors that you vote in favour of the Acquisition and the resolution to be proposed at the General Meeting convened by the notice set out in this Document. Please read the whole of the Document. You should not rely solely on the information summarised in this Document.

Notice of the General Meeting, which is to be held at 11.00 a.m. on 14 August 2014 at the offices of White & Case LLP, 5 Old Broad Street, London EC2N 1DW is set out at the end of this Document. A Form of Proxy for use in relation to the General Meeting is enclosed. To be valid, the Forms of Proxy should be completed, signed and returned in accordance with the instructions printed on them as to be received by the Company's registrars, Computershare Investor Services (Jersey) Limited, c/o The Pavilions, Bridgewater Road, Bristol BS99 6ZY or at the electronic address provided on the proxy form at www.polymetalinternational.com, in each case no later than 11.00 a.m. on 12 August 2014. Completion and return of a Form of Proxy will not preclude Polymetal Shareholders from attending and voting in person at the General Meeting, should they so wish.

Morgan Stanley is acting exclusively for Polymetal as sponsor and as financial adviser and for no one else in connection with the proposed Acquisition and other matters described herein and will not be responsible to anyone other than Polymetal for providing the protections afforded to clients of Morgan Stanley, nor for providing advice to any other person in relation to the Acquisition, the contents of this Document or any other matter referred to herein.

Save for the responsibilities and liabilities, if any, of Morgan Stanley under FSMA or the regulatory regime established thereunder, Morgan Stanley assumes no responsibility whatsoever and makes no representations or warranties, express or implied, in relation to the contents of this Document, including its accuracy, completeness or verification or for any other statement made or purported to be made by Polymetal or on Polymetal's behalf or by Morgan Stanley or on Morgan Stanley's behalf and nothing contained in this Document is, or shall be relied on as, a promise or representation. Morgan Stanley accordingly disclaims to the future, in connection with Polymetal or the proposed Acquisition. Morgan Stanley accordingly disclaims to the fullest extent permitted by law all and any responsibility and liability whether arising in tort, contract or otherwise which it might otherwise be found to have in respect of this Document or any such statement.

Dated: 14 July 2014

TABLE OF CONTENTS

PART 1	CHAIRMAN'S LETTER	1
PART 2	RISK FACTORS	10
PART 3	PRINCIPAL TERMS OF THE ACQUISITION	18
PART 4	FINANCIAL INFORMATION ON ALTYNALMAS	23
PART 5	UNAUDITED PRO FORMA STATEMENT OF NET ASSETS	58
PART 6	COMPETENT PERSON'S REPORT FOR ALTYNALMAS	63
PART 7	ADDITIONAL INFORMATION	280
PART 8	DEFINITIONS AND GLOSSARY	284
PART 9	NOTICE OF GENERAL MEETING	292

EXPECTED TIMETABLE

Expected timetable for the Acquisition

Date of this Document Latest time and date for receipt of Forms of Proxy General Meeting of Polymetal International plc Expected effective date of the Acquisition 14 July 2014 11.00 a.m. on 12 August 2014 11.00 a.m. on 14 August 2014 Fourth quarter 2014

Cautionary note regarding forward-looking statements

This Document contains a number of "forward-looking statements" relating to Polymetal and Altynalmas the business sectors in which they operate. Generally, the words "will", "may", "should", "continue", "believes", "expects", "intends", "anticipates", "forecast", "plan" and "project" or similar expressions identify forward-looking statements. Such statements reflect the relevant company's current views with respect to future events and are subject to risks, assumptions and uncertainties that could cause the actual results to differ materially from those expressed or implied in the forward-looking statements. Many of these risks, assumptions and uncertainties relate to factors that are beyond the companies' abilities to control or estimate precisely, such as future market conditions, changes in general economic and business conditions, introduction of competing products and services, lack of acceptance of new products or services and the behaviour of other market participants. Although Polymetal believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Polymetal Shareholders should not, therefore, place undue reliance on these forward-looking statements, which speak only as of the date of this Document.

Save for those forward-looking statements required by the Listing Rules, the Disclosure and Transparency Rules and the Prospectus Rules of the FCA, the Company undertakes no obligation to update these forward-looking statements, and will not publicly release any revisions it may make to these forward-looking statements that may result from events or circumstances arising after the date of this Document. The Company will comply with its obligations to publish updated information as required by law or by any regulatory authority but assumes no further obligation to publish additional information.

The forward-looking statements contained in this Document do not in any way seek to qualify the working capital statement set out in paragraph 2 of Part 7 (Additional Information) of this Document.

PART 1

CHAIRMAN'S LETTER



(a public no par value limited liability company incorporated under the laws of Jersey with registered number 106196)

Directors: Bobby Godsell (Chairman) Vitaly Nesis (Chief Executive Officer) Jean-Pascal Duvieusart (Non-Executive Director) Jonathan Best (Independent Non-Executive Director) Leonard Homeniuk (Independent Non-Executive Director) Konstantin Yanakov (Non-Executive Director) Marina Grönberg (Non-Executive Director) Russell Skirrow (Independent Non-Executive Director) Christine Coignard (Independent Non-Executive Director) Registered Office: Polymetal International plc Ogier House The Esplanade St. Helier Jersey JE4 9WG Channel Islands

Headquarters:

Prospect Narodnogo Opolcheniya 2 St. Petersburg, 198216 Russian Federation

14 July 2014

Dear Shareholder,

Proposed Acquisition of Altynalmas (the "Acquisition")

1. Introduction

On 22 May 2014, the Board announced that it had agreed the terms of the recommended proposal by Polymetal to acquire the entire issued share capital of Altynalmas from the Sumeru Group and certain loans owed by Altynalmas to the Sumeru Group.

Altynalmas is the holding company for the Kyzyl gold project (the "**Kyzyl Project**"). The Kyzyl Project comprises the Bakyrchik and Bolshevik gold deposits and is located in north-eastern Kazakhstan.

The Acquisition constitutes a Class 1 transaction (as defined in Chapter 10 of the Listing Rules of the UKLA) for Polymetal and therefore requires the approval of Polymetal Shareholders. Accordingly, a general meeting of Polymetal Shareholders has been convened for 11.00 a.m. on 14 August 2014 at the offices of White & Case LLP, 5 Old Broad Street, London EC2N 1DW, to approve the necessary Resolutions to implement the Acquisition. An explanation of the Resolutions to be proposed at the meeting is set out in paragraph 10 below. The Board unanimously considers that the Resolutions are in the best interests of the Company and recommends that Polymetal Shareholders vote in favour of the Resolutions.

I am writing to give you further details of the Acquisition, including the background to and reasons for it, to explain why your Board considers it to be in the best interests of Polymetal and to seek your approval of the Resolutions.

2. Terms of the Acquisition

The Acquisition will be implemented pursuant to a number of agreements between Polymetal and members of the Sumeru Group. On 21 May 2014, Polymetal together with PMTL Mining Limited and PMTL Netherlands B.V. (two newly incorporated, wholly owned subsidiaries of Polymetal) entered into binding conditional agreements to acquire 100 per cent. of the common shares of Altynalmas from the Sumeru Group, together with the Sumeru Shareholder Loans owed by Altynalmas to the Sumeru Group.

Pursuant to the terms of a sale and purchase agreement dated 21 May 2014 between Polymetal, PMTL Mining Limited (the "Share Buyer"), PMTL Netherlands B.V. (the "Debt Buyer") and Sumeru Gold B.V. (the "SPA"), Sumeru Gold has agreed to sell the Altynalmas SPA Shares (which represent 50 per cent. of the issued share capital of Altynalmas) to the Share Buyer. Sumeru Gold has also agreed to assign to the Debt Buyer all of the rights of the Sumeru Group to the Sumeru Shareholder Loans (the aggregate principal and accrued interest of which as at 21 May 2014 (the date of the SPA) being approximately US\$70.1 million). The Sumeru Shareholder Loans will accrue additional interest between the date of the SPA and Completion, which will be assigned on Completion.

Additionally, Sumeru has offered to sell the Altynalmas KASE Shares (which represent 50 per cent. of the issued share capital of Altynalmas) to the Share Buyer on the terms of the Bidding Agreement. Under the Bidding Agreement, Sumeru agrees to offer the Altynalmas KASE Shares for sale on KASE and, if the Share Buyer's bid is successful, to sell such shares and the Share Buyer agrees to bid for, and if its bid is successful, to acquire the Altynalmas KASE Shares, in each case on KASE by way of the Open Trade. Each of the Altynalmas KASE Shares shall be acquired at the Offer Price (which shall be determined in accordance with the provisions of the Bidding Agreement).

If the Share Buyer acquires any of the Altynalmas KASE Shares on the terms of the Bidding Agreement by way of the Open Trade, it shall be required to complete the purchase of all of the Altynalmas SPA Shares on the terms of the SPA and will accordingly become the holder of more than 50 per cent. of the Altynalmas Shares.

It should be noted that due to the structure of the Acquisition, in particular the offer of the Altynalmas KASE Shares by way of the Open Trade, Sumeru cannot guarantee that all of the Altynalmas KASE Shares to be sold by it will be acquired by PMTL under the Bidding Agreement. If PMTL is not successful in acquiring all of the Altynalmas KASE Shares held by Sumeru by way of the Open Trade, it has agreed to (or will cause Altynalmas to) acquire any remaining Altynalmas KASE Shares pursuant to a squeeze-out mechanism in the Altynalmas Articles (allowing PMTL to compulsorily acquire, or Altynalmas to compulsorily redeem and cancel, any shares not acquired pursuant to the Open Trade purchases on the KASE).

Conditions

The Agreements are conditional upon certain matters including:

- (i) obtaining a waiver from the Republic of Kazakhstan of its pre-emptive right in respect of the sale of Altynalmas SPA Shares by Sumeru Gold;
- (ii) the receipt of a written permission from the Ministry of Industry and New Technologies of the Republic of Kazakhstan ("MINT") to transfer the Altynalmas SPA Shares to be sold by Sumeru Gold to PMTL;
- (iii) the receipt of a written consent for the acquisition of Altynalmas by PMTL from the Agency of the Republic of Kazakhstan for Competition Protection ("Antimonopoly Agency");
- (iv) the approval of the transactions being the subject of the Agreements by Polymetal Shareholders;
- (v) admission of the Consideration Shares to the Official List and to trading on the London Stock Exchange; and
- (vi) certain other tax related and customary conditions.

Assuming all conditions are satisfied or waived, the Acquisition is expected to complete in the fourth quarter of 2014.

Consideration

The aggregate consideration for the acquisition of the Altynalmas SPA Shares, the Altynalmas KASE Shares and the assumption of the Sumeru Shareholder Loans comprises:

- (a) an initial consideration ("Initial Consideration") of US\$618.5 million, comprising (i) US\$318.5 million payable in cash; and (ii) the issue by Polymetal of New Polymetal Shares with an aggregate value of US\$300 million (the "Consideration Shares"), as determined in the Agreements; and
- (b) deferred additional cash consideration of up to an agreed maximum cap (the "Additional Consideration") contingent on certain conditions being met and dependent on the relative dynamics of the gold price and the price of Polymetal Shares over up to the next seven years.

The additional consideration is intended to compensate Sumeru for any negative difference between the market performance of the Consideration Shares and the gold price in the sevenyear period following completion of the Acquisition.

The number of Consideration Shares will be determined by dividing US\$300 million by the unweighted mean average closing price of Polymetal Shares on the main market of the London Stock Exchange in the twelve calendar months ending three trading days before Completion (the "Initial Share Price"). The number of Consideration Shares is subject to a maximum of 9.99 per cent. of the number of Polymetal Shares in issue during the period of one year prior to Completion. If the number of Consideration Shares which would otherwise have been issued exceeds this limit, the excess Consideration Shares will not be issued and Sumeru Gold will be paid a cash amount equal to the Initial Share Price multiplied by the number of excess Polymetal Shares.

Further details on the terms of the consideration are set out in Part 3 (*Principal Terms of the Acquisition*) of this Document.

Sumeru Lock-Up and Sumeru Put Option

Sumeru has agreed not to dispose of any interest in any of the Consideration Shares during the oneyear period commencing on the Completion Date (the "Lock-up Period") subject to customary terms and exclusions.

Sumeru is entitled to a put option giving it a right to require Polymetal to acquire the Consideration Shares by notice to Polymetal during the one month period immediately following the end of the Lock-up Period (subject to adjustment in certain circumstances) at a price, in cash, per Consideration Share equal to the Initial Share Price.

Further details on the lock-up and put option arrangements are set out in paragraphs 1.5 and 1.6 of Part 3 (*Principal Terms of the Acquisition*) of this Document.

Other points to note

Each of Sumeru Gold and Sumeru has provided certain warranties and indemnities concerning itself and, in the case of Sumeru Gold, Altynalmas and its subsidiaries (subject to customary limitations on liability) and Sumeru Gold has given undertakings in relation to the operation of the business of Altynalmas and its subsidiaries during the period between the date of the Agreements and the Completion Date.

No representative from Sumeru will be appointed to Polymetal's board of directors as a result of the issue of the Consideration Shares or under the terms of the Agreements.

Further details on the terms of the Agreements are set out in Part 3 (*Principal Terms of the Acquisition*) of this Document.

3. Information on Altynalmas

Altynalmas was incorporated in British Columbia, Canada, on 17 November 2004 with registered number BC0708772. Altynalmas indirectly owns the Kyzyl gold project in north-eastern Kazakhstan, comprising the Bakyrchik and Bolshevik gold deposits, the rights in respect of which are derived pursuant to the Contracts.

Altynalmas indirectly owns 100 per cent. of the share capital or participation interests of BMV, an entity incorporated in Kazakhstan. Altynalmas owns 100 per cent. of the share capital of each of CAML, a company incorporated in the British Virgin Islands (which Altynalmas acquired in 2008), and IGC, an entity incorporated in Kazakhstan, and CAML holds participation interests in BMV. BMV and IGC in aggregate directly hold a 100 per cent. of the Kyzyl Project.

Location

The Kyzyl Project is located in north-eastern Kazakhstan, 750 km east of the capital city of Astana, and 75 km west of the mining and metallurgical industry centre of Oskemen (formerly known as Ust-Kamenogorsk, population of approximately 300,000). The Kyzyl Project site is adjacent to the village of Auezov (population of approximately 3,000), 120 km from the Kazakhstan-Russia border and 330 km from the Kazakhstan-China border. There is a railway station and railhead operational at Chalobai, six kilometres from the Kyzyl Project site, on the new railway line connecting Oskemen to Shar (in eastern Kazakhstan). This line provides rail connections to Russia, China, and Europe. The Kazakhstan-China railway crossing at Alashankou is 510 km away.

The Bakyrchik mining licence covers an area of 5.6 km^2 and is valid until October 2020, which can be extended until the exhaustion of the reserves in the mining licence area. There is a further exploration licence covering an area of 47.5 km^2 , which is valid until April 2026. Altynalmas has made an application to convert two areas covered by this exploration licence into mining areas. The Bolshevik mining licence covers an area of 4.31 km^2 (which adjoins the Bakyrchik exploration licence area) and is valid until May 2016, but may be prolonged by approval of the relevant authorities in Kazakhstan.

The location of the Kyzyl Project is illustrated in the map below:



History

The Kyzyl Shear was discovered in the early 1950s by surface trenching. Surface drilling began in 1955. Open pit production at Bakyrchik commenced in 1956 at approximately 19,000 tpa (grading 9.4 g/t Au) and increased to 165,000 tpa (grading 8.5 g/t Au) by 1969. By the time open pit production ceased in 1994, approximately 2.1 Mt of ore grading 7.6 g/t Au had been produced. Underground mining at Bakyrchik commenced in 1963 with production ranging from 20,000 tpa to 95,000 tpa. At the suspension of underground mining in 1997, approximately 1.7 Mt grading 7.4 g/t Au had been produced. Ore was mostly sold to smelters as gold-bearing flux.

In 1992, an international joint venture was formed to operate Bakyrchik. A pilot-scale processing plant with a capacity of 150,000 tpa was constructed in 1994, incorporating conventional flotation, nitric-acid sulfide oxidation (Redox) and CIP. Operating results overall were negative and this option was abandoned in 1996. Since 1996, extensive metallurgical testwork and multiple scoping studies were undertaken to determine a potentially viable development approach to Bakyrchik. A number of options were investigated, including combinations of open pit and underground mining at various production rates, and rotary kiln or fluidised-bed roasting processes. A 100,000 ktpa single-stage roaster using a rotary kiln operated at Bakyrchik in 2009 and 2010. Gold recoveries between 30 per cent. and 60 per cent. were achieved at less than the designed throughput rate.

Open pit production at Bolshevik commenced in 1985 and ceased in 2004. Approximately 1.1 Mt of ore grading 5 g/t Au were produced. Ore was mostly sold to smelters as gold-bearing flux. A 100 ktpa pilot plant involving flotation followed by bioleaching and CIL operated in 2003-2004, but did not achieve positive economic results.

No meaningful production activity has taken place at the Kyzyl Project after 2010.

Geology

The Kyzyl gold deposits are a result of intrusions, shearing, and hydrothermal activity. Compressional forces along regional structures resulted in a deformation zone where the Kyzyl Shear Zone ("KSZ") was formed. Gold mineralisation in the Kyzyl Project area is predominantly hosted in the KSZ.

The East-West striking KSZ is 11.5 km long, dips 30° to 40° north and attains widths of 10 m to 240 m. From drilling it has been identified by shear foliation, brecciation, alteration, and sulphide mineralisation. The KSZ has been traced to depths of 1.0 km to 1.5 km in the West and 3.0 km to 3.5 km in the East.

Potentially economic mineralisation is represented by fine-grained gold associated with arsenopyrite and pyrite. Disseminated gold-sulphide mineralisation is irregular in shape and thickness and occurs predominantly in foliated mudstone, siltstone, and sandstone with quartz veining.

Reserves and Resources

The Bakyrchik drill hole database contains 3,855 records consisting of 2,713 diamond drill holes and 1,142 chip-sampled crosscuts represented as drill holes, totalling 822,477 m.

According to the Competent Person's Report, Bakyrchik had estimated Mineral Resources (exclusive of Mineral Reserves) of approximately 3.8 Moz of gold as at 31 July 2013. The Mineral Resources summary table presented below is extracted from the Competent Person's Report:

Mineral Resources Summary (Mineral Resources are exclusive of Mineral Reserves)¹

	Tonnes (Mt)	Au Grade (g/t)	Au Metal (Moz)
Indicated	3.22	7.97	0.82
Inferred	13.83	6.63	2.95
Total	17.05	6.88	3.77

1 Estimated at a cut-off grade of 3.0 glt Au and using an average gold price of US\$1,400/oz. for resources

According to the Competent Person's Report, Bakyrchik had estimated Mineral Reserves of approximately 6.7 Moz of gold as at 31 July 2013. The estimate is based on 1.5 Mtpa steady state production using an underground drift and fill mining operation with ore processed by flotation followed by BIOX[®]-Carbon-in-Leach (CIL). The Mineral Reserves summary table presented below is extracted from the Competent Person's Report:

Mineral Reserves Summary¹

	Tonnes (Mt)	Au Grade (g/t)	Au Metal (Moz)
Probable	27.55	7.53	6.66
Total	27.55	7.53	6.66

1 Estimated at a cut-off grade of 3.0 glt Au and using an average gold price of US\$1,300/oz. for reserves

According to the Competent Person's Report, there are no current Mineral Resources as defined by the JORC Code at Bolshevik. Sulphide resources under GKZ statutory rules (2 category) at Bolshevik are estimated at 5.3 Mt of ore grading 4.63 g/t Au containing 0.8 Moz of gold as at 31 July 2013.

Financial Information

For the year ended 31 December 2013, Altynalmas did not produce any gold and accordingly had nil revenue, resulting in a net loss of US\$23.7 million. As at 31 December 2013, Altynalmas had gross assets of US\$100.7 million.

Mining

Polymetal believes that, given the flat dip and high grade of the deposit, Bakyrchik may initially be amenable to open-pit mining. Challenging underground mining conditions may make the open-pit mining option more attractive from the point of view of risk mitigation and capital expenditure reduction, despite the expected high stripping ratio. Polymetal plans to pursue geotechnical and other studies to define the optimal mining method with the goal to make this choice by the time the revised feasibility study is ready in Q4 2015.

Processing

The Competent Person's Report prepared by Roscoe Postle Associates is based on a flotation-BIOX[®] CIL process as the main production method.

Polymetal intends, as part of its post-Completion feasibility study, to investigate the potential to apply pressure oxidation ("**POX**") as an alternative processing technology for the Kyzyl Project. The Company has successfully deployed this technology at its Amursk pressure oxidization facility and believes it may bring certain material metallurgical, economic and environmental benefits for the Kyzyl Project. Polymetal intends to assess and compare various processing options including whole-ore POX, flotation followed by POX and sale of flotation concentrate to third-party off-takers with the goal to make the final choice by the time the revised feasibility study is ready in Q4 2015.

Development plan

Polymetal envisages the following development timeline for the Kyzyl Project:

- Revised feasibility study with updated reserve estimate: Q4 2015;
- Start of construction: Q1 2016; and
- First production: 2018, to be confirmed upon completion of the feasibility study.

4. Background to, and reasons for, the Acquisition

The Board believes that the Kyzyl Project represents an excellent opportunity to expand the Company's existing reserve base with the addition of high grade gold deposits in Kazakhstan characterised with a long expected mine life and significant exploration upside. The Board believes there is the opportunity to create significant added value for Polymetal shareholders from the Kyzyl Project, based on the following:

- Expansion of existing reserves and mine life: The Acquisition will increase Polymetal's gold equivalent reserves by approximately 50 per cent. with a single large high-grade property containing 6.7 Moz gold at 7.5 g/t (JORC), and a life of mine of 20 years based on reserves at Bakyrchik;
- **Exploration upside**: The Kyzyl Project offers further substantial potential of additions to existing reserves, through resource-to-reserve conversion at Bakyrchik from additional Inferred Resources of 2.9 Moz gold at 6.6 g/t and mineralisation not closed at depth, and the exploration of the mineralised potential at adjacent properties which are covered by the Bakyrchik and Bolshevik exploration licences;
- Access to infrastructure: The Bakyrchik and Bolshevik gold deposits are located within a traditional mining region with good infrastructure including easy access to power and rail;
- **Potential optimisation of mining methods**: A substantial part of the Kyzyl Project is potentially amenable to conversion from underground mining to conventional open-pit mining;
- **Processing technology**: The Acquisition leverages Polymetal's core competencies in pressure oxidation processing and refractory gold concentrate trading; and
- Core jurisdiction: The Kyzyl Project will strengthen Polymetal's position in Kazakhstan, a country in which it has successfully operated since 2009.

5. Current trading and prospects

As stated in the 2013 Annual Report, Polymetal exceeded its original annual production guidance for the second year in a row and produced 1.28 Moz of gold equivalent in 2013, an increase of 21 per cent. year on year and 7 per cent. above original expectations. This was driven by the Amursk POX plant achieving design throughput and recovery in the second half of 2013 and the Mayskoye underground mine and processing plant ramping up to full capacity, as well as strong performance by the Dukat hub. Production has continued to increase in 2014 with Polymetal producing 316 Koz of gold equivalent in the first quarter of 2014, which represents an increase of 34 per cent. compared to the same period in 2013. This increase in production has been driven by strong performance at the Amursk POX plant, which has enabled steady processing of Albazino concentrate at design throughput and recovery. The growth in production is also supported by increased throughput and grade at the Dukat hub, as well as by a stronger grade profile at Omolon. Gold production for 2013 was 805 Koz and for the first quarter of 2014 was 191 Koz, an increase of 57 per cent. against the same period in 2013. Silver production in 2013 was 27.2 Moz and in the first quarter of 2014 was 7.3 Moz, representing an increase of 14 per cent. against the same period in 2013.

The Amursk POX plant has successfully performed pilot processing of Mayskoye concentrate. As a result, the concentrate produced at Mayskoye in 2014 is likely to be split between third party off-take and processing at the Amursk POX plant. During the second quarter of 2014, Polymetal entered into binding contracts with three different counter-parties with respect to off-take of Mayskoye concentrate.

Sales fell behind production in the first quarter of 2014 by 46 Koz of gold equivalent. This is due to seasonal factors, in particular, closure of refineries due to a number of public holidays at the beginning of 2014. However, Polymetal expects that sales will increase during the course of 2014 to match production.

With respect to Polymetal's debt position, net debt was US\$1,041 million as at 31 March 2014 compared to net debt of US\$1,045 million as at 31 December 2013. The net debt position has remained almost flat since 31 December 2013, primarily due to sales falling behind production in the first quarter of 2014, however, Polymetal expects net debt to decrease as sales increase during the course of the year.

As stated in the 2013 Annual Report and in Polymetal's first quarter production results released on 22 April 2014 (the "Q1 Production Results"), Polymetal's target for 2014 is to achieve a production guidance of 1.3 Moz of gold equivalent. On the basis of Polymetal's Q1 Production Results, the Directors believe that Polymetal is on track to achieve its target.

No meaningful production activity has taken place at the Kyzyl Project after 2010. Accordingly, there are no significant recent trends affecting production and sales for, and the financial prospects for, Altynalmas.

6. Financial effects of the Acquisition

For the year ended 31 December 2013, Altynalmas did not produce any gold and accordingly had nil revenue, resulting in a net loss of US\$23.7 million. As at 31 December 2013, Altynalmas had gross assets of US\$100.7 million. Unaudited *pro forma* financial statements showing the expected impact of the Acquisition on the assets and liabilities of Polymetal are set out in Part 5 (*Unaudited Pro Forma Statement of Net Assets*) of this Document.

The Acquisition will increase Polymetal's gold equivalent reserves by approximately 50 per cent. with a single large high-grade property containing Mineral Reserves of approximately 6.7 Moz of gold at 7.5 g/t (JORC).

As the Kyzyl Project is not currently in production and no material capital expenditure is planned until 2016, the Board does not expect the Acquisition will have any material impact on the Group's earnings in 2014.

7. Expected transaction financing

Polymetal expects to fund the cash element of the initial consideration from its available undrawn facilities currently totalling US\$1.3 billion. Polymetal expects to finance the projected capital expenditure with debt and cash flows generated from its existing operations.

8. Directors, management and employees of Altynalmas

No representative from Sumeru will be appointed to Polymetal's board of directors as a result of the issue of the Consideration Shares or under the terms of the Agreements. The Company intends, following Completion, to evaluate the retention of the management and employees of Altynalmas in light of the preparation of the revised feasibility study and anticipated period to commencement of construction of works at the Kyzyl Project.

9. New Polymetal Shares

The New Polymetal Shares will be issued credited as fully paid and will rank *pari passu* in all respects with the Polymetal Shares in issue at the time the New Polymetal Shares are issued pursuant to the Acquisition.

Applications will be made to the UK Listing Authority and to the London Stock Exchange for the New Shares to be issued in connection with the Acquisition to be admitted to the Official List and to

trading on the London Stock Exchange's main market for listed securities ("Admission"). The New Polymetal Shares are expected to be issued on the Effective Date. It is expected that the Admission will become effective, and that dealings for normal settlement in the New Polymetal Shares will commence, on the date on which the Acquisition becomes effective.

10. General Meeting

The notice convening the General Meeting to be held at the offices of White & Case LLP, 5 Old Broad Street, London EC2N 1DW, on 14 August 2014 at 11.00 a.m. is set out at the end of this Document. The purpose of the meeting is to approve the Resolutions in connection with the Acquisition. A summary of the Resolutions is set out below.

The implementation of the Acquisition is conditional upon the passing of the Resolutions set out in the notice.

The Resolutions are to (a) approve the Acquisition (including authorising the Board to make such waivers and extensions and non-material amendments or variations to the terms and conditions of the Acquisition and to do all things as it considers necessary or expedient in connection with the Acquisition); and (b) authorise the Company to purchase the Polymetal Shares the subject of the Sumeru Put Option.

The resolution to approve the Acquisition is being proposed as an ordinary resolution, while the resolution to approve the purchase of the Polymetal Shares the subject of the Sumeru Put Option is being proposed as a special resolution. This authority to purchase such Polymetal Shares is specific to the Consideration Shares and is in addition to the general authority to make market purchases granted at the Company's annual general meeting (as such authority would not permit the Company to purchase the Consideration Shares if Sumeru exercises the Sumeru Put Option). At this stage, the Company has not decided whether it will seek to cancel or hold in treasury any Polymetal Shares purchased by it pursuant to any exercise of the Sumeru Put Option.

The full text of the Resolutions is set out in the notice convening the General Meeting at the end of this Document. In the event that the Resolutions are not passed, the Acquisition will not proceed.

11. Action to be taken

You will find enclosed with this Document a Form of Proxy for use at the General Meeting or at any adjournment thereof. You are requested to complete and sign the Form of Proxy whether or not you propose to attend the General Meeting in person in accordance with the instructions printed on it and return it as soon as possible, but in any event so as to be received no later than 11.00 a.m. on 12 August 2014, by the Company's Registrar, Computershare Investor Services (Jersey) Limited, c/o The Pavilions, Bridgewater Road, Bristol BS99 6ZY or at the electronic address provided on the proxy form at www.polymetalinternational.com.

CREST members may also choose to utilise the CREST electronic proxy appointment service in accordance with the procedures set out in the notice convening the General Meeting at the end of this Document. The lodging of the Form of Proxy (or the electronic appointment of a proxy) will not preclude you from attending and voting at the meeting in person if you so wish.

12. Financial advice

The Board has received financial advice from Morgan Stanley in relation to the Acquisition. In providing its financial advice to the Board, Morgan Stanley has relied upon the Board's commercial assessment of the Acquisition.

13. Further Information

Your attention is drawn to the further information set out in Parts 2, 3, 4, 5, 6, and 7 of this Document.

14. Recommendation

The Board considers the Acquisition to be in the best interests of the Company and the Polymetal Shareholders as a whole.

Accordingly, the Board unanimously recommends that Polymetal Shareholders vote in favour of the Resolutions to be put to the General Meeting as they intend to do in relation to their own individual holdings which amount in total to 3,177,000 Polymetal Shares, representing approximately 0.8 per cent. of the existing issued share capital of Polymetal as at 11 July 2014, the latest practicable date prior to publication of this Document.

Yours faithfully,

Bobby Godsell *Chairman*

PART 2

RISK FACTORS

The following risk factors should be considered carefully when deciding whether or not to vote in favour of the Resolution to be proposed at the General Meeting. The risk factors should be read in conjunction with all other information relating to the Acquisition and the Enlarged Group contained in this Document. The risks and uncertainties set out below are those which the Directors believe are the material risks relating to the Acquisition and to the Enlarged Group, material new risk factors for the Group as a result of the Acquisition and existing material risks for the Group which will be impacted by the Acquisition. If any or a combination of these risks actually materialise, the business, operations, financial conditions and prospects of the Group and, following Completion of the Acquisition, the Enlarged Group as appropriate could be materially and adversely affected. The following is not exhaustive and does not purport to be a complete explanation of all the risks involved. Additional risks and uncertainties not presently known to the Directors, or which the Directors currently consider to be immaterial, may also have a material adverse effect on the Acquisition and on the Enlarged Group if they materialise. If any of the risks actually materialise, the market price of the Polymetal Shares could decline and you may lose all or part of your investment.

RISKS RELATING TO THE PROPOSED ACQUISITION

The Acquisition may fail to realise anticipated benefits.

There can be no guarantee that the Enlarged Group will realise any or all of the anticipated benefits of the Acquisition, either in a timely manner or at all. The process of estimating reserves and resources that may be developed and produced with respect to the Kyzyl Project is based on calculations and analogies to similar types of assets and as a result, actual costs for development and production may be greater than anticipated. As a result, the estimation of the reserves and resources at the Kyzyl Project may be materially inaccurate. If this is the case, and the Enlarged Group has incurred significant costs, this could have an adverse impact on the business, results of operation and the financial condition of the Enlarged Group.

While Polymetal has successfully completed the integration of the businesses it has acquired thus far, it could experience difficulties in integrating the acquisition of Altynalmas and consolidating its operations as successfully, which could have an adverse effect on its financial condition and results of operations.

The proposed development of the licence areas may not be successful.

Polymetal envisages first production for the Kyzyl Project being capable of commencing in 2018, depending upon completion of the feasibility study due in late 2015. While the open pit production commenced at the Bakyrchik gold deposit in 1956 and at the Bolshevik gold deposit in 1985, no meaningful production activity has taken place at the Kyzyl Project since 2010. Previous owners of the gold deposits have utilised both open pit and underground mining, as well as a variety of processing technologies. For each site, gold recovery rates and throughput rates were lower than designed for the relevant flotation and/or roasting processes and production ceased after failing to achieve positive economic results.

Polymetal believes that, given the flat dip and high grade of the deposit, Bakyrchik may initially be amenable to open-pit mining. Challenging underground mining conditions may make the open-pit mining option more attractive from the point of view of risk mitigation and capital expenditure reduction, despite the expected high stripping ratio. Polymetal plans to pursue geotechnical and other studies to define the optimal mining method with the goal to make this choice by the time the revised feasibility study is ready in Q4 2015. Polymetal further believes POX may be the most suitable processing technology for the Kyzyl Project, as it should enable a higher and a more sustainable gold recovery ratio. The Company has successfully deployed this technology at its Amursk pressure oxidation facility and believes it may bring certain material metallurgical, economic and environmental benefits for the Kyzyl Project. Polymetal intends to assess and compare various processing options including whole-ore POX, flotation followed by POX and sale of flotation concentrate to third-party off-takers with the goal to make the final choice by the time the revised feasibility study is ready in Q4 2015.

However, there can be no assurance that either open-pit mining will be capable of being undertaken in a commercially economic manner, or that Polymetal will be able to manage the challenging underground mining conditions at the Bakyrchik gold deposit if open-pit mining is not successful.

The Bakyrchik deposit is a well-known double refractory ore. Besides having the nature of a refractory gold ore, where gold is locked in sulphide minerals, a double refractory ore contains pregrobbing carbon, which captures gold dissolved during normal cyanidation procedures making the gold unavailable for recovery. As for any refractory sulphide, the extent of gold dissolution for a double refractory ore is also dependent on the sulphide oxidation achieved during the bio-oxidation treatment and the characteristics of the concentrate. A refractory sulphide concentrate normally has an optimum sulphide oxidation associated with an optimum gold dissolution and recovery, but for a double refractory ore, this relationship is more complex since the gold liberation does not always directly translate into gold dissolution or recovery. While the Company has successfully deployed the POX technology at its Amursk pressure oxidation facility, there can be no assurance that such technology, if selected as the most appropriate processing option for Bakyrchik, will be bring the anticipated benefits. Therefore, the successful economic recovery of ore in the Bakyrchik deposit might be outside of the control of the Enlarged Group.

If such mining approaches or use of processing technology are less successful than expected, the Company may fail to realise the anticipated benefits of the Acquisition and this could have an adverse effect on the business, results of operation and financial condition of the Enlarged Group.

Estimates of reserves, resources and forward looking statements.

The reserves and resources data and forward looking statements contained in this Document in respect of the Kyzyl Project are estimates only and should not be construed as representing exact quantities. They are based on ownership, entitlement, geophysical, geological and engineering data, and other information assembled by Polymetal, as well as Polymetal's assumptions based on its experience in developments of a similar nature. The estimates may prove to be incorrect and potential investors should not place undue reliance on the forward-looking statements contained in this Document concerning Altynalmas' reserves and resources. If the assumptions upon which the estimates for Altynalmas' mineral reserves and resources prove to be incorrect, the Enlarged Group may be unable to recover and produce the estimated levels or quality of mineral resources and the Enlarged Group's business, prospects, financial condition or results of operations could be adversely affected.

The Acquisition may not complete.

Completion of the Acquisition is subject to certain conditions, including:

- (i) obtaining a waiver from the Republic of Kazakhstan of its pre-emptive right in respect of the sale of Altynalmas Shares by Sumeru Gold;
- (ii) the receipt of written permission from MINT to transfer the Altynalmas Shares;
- (iii) the receipt of written consent for the acquisition of Altynalmas Shares by PMTL from the Antimonopoly Agency;
- (iv) admission of the Consideration Shares to the Official List and to trading on the London Stock Exchange;
- (v) the acquistion by the Share Buyer of at least one Altynalmas KASE Share on the terms of the Bidding Agreement by way of the Open Trade; and
- (vi) certain other tax related and customary conditions.

There is no guarantee that these (or any other) conditions will be satisfied (or waived, if applicable). A failure to satisfy any of the conditions may result in the Acquisition not completing.

In addition, the implementation of the Acquisition, as a class 1 transaction, is subject to the approval by the Shareholders in accordance with the rules of the UKLA. If shareholders do not vote in favour of the Resolutions at the General Meeting, which approval shall require a simple majority of those shareholders attending and voting (whether in person or by proxy), the Acquisition will not complete.

The terms of the Acquisition, including this condition, are more fully described in Parts 1 (*Chairman's letter*) and 3 (*Principal terms of the Acquisition*) of this Document.

There may be minority shareholders in Altynalmas following completion of the Acquisition.

Sumeru has offered to sell the Altynalmas KASE Shares to the Share Buyer on the terms of the Bidding Agreement by way of the Open Trade. If other bidders offer a higher price than the Offer Price for the Altynalmas KASE Shares during the period when the Altynalmas KASE Shares are offered in Open Trade by Sumeru, and consequently, the Share Buyer's bid for all of the Altynalmas KASE Shares is not successful, then Polymetal will not acquire 100 per cent. of the share capital of Altynalmas pursuant to the terms of the SPA and the Bidding Agreement. However, if the Share Buyer acquires any of the Altynalmas KASE Shares on the terms of the Bidding Agreement by way of the Open Trade, it shall be required to complete the purchase of all of the Altynalmas SPA Shares on the terms of the SPA and will accordingly become the holder of more than 50 per cent. of the Altynalmas Shares.

The Altynalmas Articles include appropriate squeeze out provisions, which should enable Polymetal to acquire any Altynalmas Shares not acquired from the Sumeru Group as part of the Open Trade (whether by way of acquisition by the Share Buyer or repurchase or redemption and cancellation by Altynalmas), but such provisions have not been tested in practice and there can be no assurance that Polymetal will be able to successfully acquire such shares.

Additionally, although the Altynalmas Articles provide that there is no transfer of shares (as a matter of applicable Canadian law) upon any redemption and cancellation of the relevant Altynalmas Shares by Altynalmas, the exercise of such squeeze out mechanism may be subject to receipt of further approvals from MINT in relation to the waiver of the pre-emptive right of the Republic of Kazakhstan and necessary permissions for transfer under the Subsoil Law if such redemption and cancellation of the shares is treated by MINT as a transfer of such shares and any such deemed transfer is not covered by the waiver provided by MINT on the acquisition of the Altynalmas Shares. While Altynalmas has received advice that no such waiver should be required, as there is no transfer of shares under the Altynalmas Articles, there can be no assurance that such approvals, if required, will be given. In such circumstances, Altynalmas will not be a wholly-owned subsidiary of the Enlarged Group and the minority shareholders in Altynalmas would be entitled to any distributions or dividends made by Altynalmas or any other returns of capital made by Altynalmas.

If any of the licences are suspended, restricted, terminated or not extended prior to expiry, this may have an adverse effect on the Enlarged Group.

MINT, as the Kazakh licensing authority, has a high degree of discretion in determining the validity of a licence or whether or not licence holders are in compliance with their legal obligations. Moreover, vague and inconsistent requirements of the Subsoil Law and the regulations thereunder can make it difficult to conclude that any given subsoil licence has been issued in full compliance with applicable law. While the law may be read to permit revocation of a licence based only on defects relating to the issuance of that licence, a more aggressive interpretation of the law would suggest that defects in the issuance of any predecessor licences could also constitute a basis for challenging an existing or successor licence.

Subsoil legislation, as well as all subsoil use contracts in Kazakhstan, prescribe obligations on subsoil users to comply with a work programme, which encompasses all varieties of plans prepared for the performance of subsoil use operations. Work programmes should be approved by the competent authority in Kazakhstan whenever a subsoil use contract is executed, an exploration period is extended or a previous work programme expires.

If MINT determines that the Enlarged Group has failed to fulfil the terms of its licences, or if the Enlarged Group operates in its licence areas in a manner that violates Kazakh law, MINT may impose fines on the Group, suspend or terminate its licences or refuse to extend the term of the licences. Furthermore, the Enlarged Group may have to increase spending to comply with licence terms.

BMV, as current owner of the Bakyrchik licence, and IGC, as current owner of the Bolshevik licence, have historically underperformed their contractual obligations under the terms of the relevant licences, in particular as regards the volume of production required from 2011 onwards. Each of BMV and IGC have received notices from MINT regarding such non-performance. Under the Subsoil Law, if a subsoil user fails to rectify more than two breaches of its contractual obligations within the terms specified in relevant notifications by MINT, MINT is entitled to unilaterally terminate a subsoil use contract.

Due to a lack of any approved work programme for the Bolshevik Project, the competent authority in Kazakhstan is entitled to file a notice of breach of legislative requirements. The Bolshevik Project is therefore currently prohibited from carrying out any exploration, appraisal and/or production without project documents approved in due order, which could have an adverse effect on the future prospects of the Enlarged Group.

BMV signed an amendment in April 2014 to the Bakyrchik Contract with MINT, whereby BMV's obligations under the work programme under the Bakyrchik Contract are partially suspended until January 2017. It is also proposed that IGC will enter into an amendment to the Bolshevik Contract in the second half of 2014 to agree a new work programme for the Bolshevik licence area.

The Directors believe that, while the existence of such historical breaches would technically allow MINT to terminate such licences at any time, entry into the recent amendment of the Bakyrchik Contract acts (and the proposed amendment of the Bolshevik Contracts will act) as an effective waiver of previous breaches of the relevant licence. However, if such licences are re-issued or amended in violation of the applicable legal requirements, the applicable acts of the licensing authorities could be challenged by any person whose rights or lawful interests were harmed by the violation. If the validity of the licences were to be challenged by a third party, such licences may be subject to suspension or revocation. There can be no assurance that the Bakyrchik and/or Bolshevik licences will not be challenged or revoked, for prior breaches or in the future.

Furthermore, although the Enlarged Group plans to extend the Bakyrchik and Bolshevik licences beyond the current term of the licences to the end of the currently estimated economic life of the fields, if MINT were to determine that the Enlarged Group has not complied with the terms of the respective licences, the authorities may refuse to extend these licences.

The suspension, non-extension and/or loss of any such licence would require the Enlarged Group to stop exploitation of the area covered by the relevant licence and, if the Enlarged Group were unsuccessful in lifting such suspension or re-obtaining the licence, the Enlarged Group would lose its right to exploit the area altogether. Accordingly, any suspension or loss of a licence could materially adversely affect the Enlarged Group's business, results of operations, financial condition and prospects and the trading price of the Shares.

The Sellers are special purpose vehicles.

The Sellers are special purpose vehicles. Although the SPA provides for certain remedies and contractual protections in favour of the Polymetal Group in respect of any breach of default on the part of the Sellers, in practice Polymetal may not have any recourse against the Sellers under the Agreements if it has a claim against them under the terms of the Agreements, as the entities may not own any other assets and may be wound up in due course following Completion prior to the expiry of the period in which such claims can be made by Polymetal.

The Company's ability to successfully negotiate contracts to sell concentrate of the Kyzyl Project may impact its economic success.

The majority of projected revenues in respect of the Kyzyl Project are derived from the sale of gold or gold concentrate containing these metals. Gold concentrate from the Kyzyl Project is expected to be priced at a discount to gold spot price (reflecting recovery level) and the contract will normally include treatment and/or refining charges. Therefore, depending on the level of discount and treatment/refining charges agreed with the potential off-takers, cash flows from mining operations may not be sufficient and Polymetal could be forced to discontinue production and may lose its interest in, or may be forced to sell, some of its properties.

Work stoppages, labour shortages and other labour relations matters may harm the success of the Kyzyl Project.

The development of new mines in geographic areas where Polymetal does not already have an established set of prior operations requires training of workers to staff these new mines, especially in respect of underground mining techniques. Although Polymetal places a high priority on hiring and retaining key talent, as well as embracing technology that diminishes the impact of workplace shortages, Polymetal's inability to attract and retain additional highly skilled employees for the development of the Kyzyl Project may adversely affect the business and future operations of the Enlarged Group.

Once development of the Kyzyl Project has commenced, work stoppages, labour union issues or labour disruptions at the Kyzyl Project's key service providers could impede its ability to produce and

deliver its products, to receive critical equipment and supplies or to collect payment. This may increase costs or impede the Enlarged Group's ability to operate such operations.

Development of the Kyzyl Project's mining operations is dependent on the availability of sufficient water supplies to support its mining operations.

The Kyzyl Project's mining operations are expected to require significant quantities of water for mining, ore processing and related support facilities. The proposed operations at the Kyzyl Project are located in areas where water is scarce and competition among users for continuing access to water is significant. Continuous production at the mines is dependent on the relevant licence holder's ability to maintain its water rights and claims and defeat claims adverse to its current water uses in legal proceedings.

BMV has been granted permits to use water for Bakyrchik from two sources near to the Kyzyl Project: the waters of the underground Kyzyltu water reservoir and the waters of the surface Kyzyltu water reservoir. The conditions of both water use permits impose, among other things, an upper limit on the volume of water that may be consumed from each of these sources. Although Polymetal concludes that the Enlarged Group has sufficient water rights and claims to cover Bakyrchik's operational demands, if the demand for water increases rapidly and significantly above the levels permitted under the water use permits, then BMV would have to seek an amendment to the water use permits to increase the water consumption levels. Obtaining the necessary amendments to the water use permits from the relevant governmental authorities may be a lengthy and time-consuming process. In addition, BMV may be required to comply with certain conditions imposed by the governmental authorities in order to be granted the amendments, such as ensuring that there are adequate water storage facilities, pumping facilities and reactivating old water wells or drilling new water wells. BMV may also be required to reclassify the underground Kyzyltu water supply from drinking and household use to service and industrial use, which would require approval from the relevant governmental authorities. These conditions and requirements may cause BMV to incur additional expenditure and potential shortages of water, which may require it to curtail or shut down mining production and could prevent it from pursuing expansion opportunities at the Kyzyl Project.

Increased global attention or regulation on water quality discharge applicable to the Enlarged Group's operations, and on restricting or prohibiting the use of certain hazardous substances in processing activities, could similarly have an adverse effect on its results of operations and financial position due to increased compliance and input costs.

The Group's results of operations from the Kzyzl Project will be significantly affected by changes in the market prices for gold.

The Group's revenues are principally derived from the sale of gold and silver. If Polymetal is able to develop successfully the Kyzyl Project, its revenues from sales of gold produced at the Kyzyl Project, and therefore the Enlarged Group's financial condition, results of operations, earnings and operating cash flow, will be sensitive to fluctuations in the market price for gold. The market price for gold can fluctuate widely. These fluctuations are caused by numerous factors beyond the Group's control, including:

- speculative positions taken by investors or traders in gold;
- changes in the demand for gold;
- changes in the supply of gold from production, disinvestment, scrap and hedging;
- financial market expectations regarding the rate of inflation;
- the strength of the US dollar (the currency in which gold trades internationally) relative to other currencies;
- changes in interest rates;
- actual or expected gold sales from or purchases by central banks;
- gold sales by gold producers in forward transactions;
- global or regional political or economic events; and
- the cost of gold production in major gold-producing nations, such as China, the United States, Australia and Russia.

The price of gold is often subject to sharp, short-term changes. While the overall supply of and demand for gold can affect its market price, due to the considerable size of above ground stocks of

gold, in comparison to other commodities, these factors typically do not affect the price of gold in the same manner or degree as the supply of and demand for other commodities tend to affect their market price.

Prolonged declines in world gold prices could have a material adverse effect on the Group's business, results of operations and financial condition. In particular, declining gold prices could result in significantly lower revenues for the Group and adversely affect the Group's profitability.

In the case of a significant and prolonged reduction in the price of gold, if gold prices fall below the costs of production at the Kyzyl Project's mines for a substantial period, the Group may determine that it is not economically feasible to develop the Kyzyl Project or undertake commercial production at the Kyzyl Project. In such a circumstance, the Group may curtail or suspend some or all of its exploration and production activities at the Kyzyl Project and/or be required to write off and/or restate downwards its reserves. This could have an adverse effect on production, profitability and the Enlarged Group's business, results of operations and financial condition.

RISKS RELATING TO OPERATING IN KAZAKHSTAN

The legal framework in Kazakhstan is less developed than in more economically developed countries.

Kazakhstan continues to develop its legal framework in accordance with international standards and the requirements of a market economy. Within the last 20 years in Kazakhstan, laws relating to foreign investment, subsoil use, licensing, companies, taxes, customs, currency, capital markets, pensions, insurance, banking and competition have been enacted or are still developing. Consequently, certain areas of judicial practice are not yet fully developed, are often difficult to predict and can result in arbitrary rulings.

Moreover, the delineation of authority and jurisdiction between national, regional and local authorities in Kazakhstan is, in many instances, unclear and contested, particularly with respect to regulatory matters. A lack of consensus between national, regional and local authorities often results in the enactment of conflicting legislation at various levels that may lead to further political instability, for example, in the areas of privatisation, securities, corporate legislation and licensing. Such instability may create uncertainties in the operating environments in Kazakhstan which could hinder the Enlarged Group's long-term planning efforts in relation to the Kyzyl Project and may prevent the Enlarged Group from carrying out its business strategy in relation to the Kyzyl Project effectively and efficiently.

The less developed legal system in Kazakhstan may result in risks such as: potential difficulties in obtaining effective legal redress in their courts whether in respect of a breach of law or regulation or in an ownership dispute a higher degree of discretion or arbitrary or unpredictable actions on the part of governmental authorities; a lack of judicial or administrative guidance on interpreting applicable rules and regulations; relative inexperience of the judiciary and courts in such matters; substantial gaps in the regulatory structure due to delays in implementing or the absence of implementing legislation; lack of independence of certain members of the judiciary; court systems that are understaffed and underfunded or bankruptcy procedures that are not well developed and are subject to abuse. In addition, the commitment of some local business people, government officials and agencies and the judicial system to abide by legal requirements and negotiated agreements is more uncertain, creating particular concerns with respect to licences and agreements for business. These may be susceptible to arbitrary revision or cancellation and legal redress may be uncertain or delayed.

All of these weaknesses could affect the Enlarged Group's ability to enforce its rights under contracts or to defend itself against claims by others, which could have a material adverse effect on the Enlarged Group's business, results of operations and financial condition.

The Enlarged Group could be subject to arbitrary government action.

Government authorities have a high degree of discretion in Kazakhstan and at times appear to act selectively or arbitrarily, without hearing or prior notice, and sometimes in a manner that may not be in accordance with the law or that may be influenced by political or commercial considerations. Moreover, government authorities also have the power in certain circumstances, by regulation or government act, to interfere with the performance of, nullify or terminate contracts. Unlawful, selective or arbitrary governmental actions have reportedly included denial or withdrawal of licences, sudden and unexpected tax audits, criminal prosecutions and civil actions. Federal and local government entities also appear to have used common defects in matters surrounding share issuances, regulatory licences or approvals as pretexts for court claims to invalidate or nullify such issuances, licences or approvals or to void transactions, seemingly for political purposes. Although arbitrary, selective or unlawful government action may be challenged or defended in court, such action, if directed at the Enlarged Group or the Polymetal Shareholders, could include challenges to the Enlarged Group's licences or approvals, or lead to termination or annulment of the affected transactions, loss of voting rights over shares, civil litigation, criminal proceedings and imprisonment of key personnel, any of which could have a material adverse effect on the Enlarged Group's business, results of operations and financial condition.

Title to some of the Enlarged Group's mineral rights, properties or production facilities may be challenged, impugned or invalidated.

The legal framework relating to the ownership and/or use of mineral rights, land and other real property in Kazakhstan is not yet developed to the same extent as is common in more developed market economies, such as those of North America and Western Europe. The validity of the Enlarged Group's right to title or use of its properties, mineral rights, licence areas, contracts and mining facilities may be challenged, affected, impugned or invalidated due to technical violations or defects in such title. Title insurance for mineral rights is generally not available. The government of Kazakhstan is the sole authority able to grant mineral rights in Kazakhstan. In order to use and develop mineral rights and property in Kazakhstan, approvals, consents and registrations of various governmental authorities are required, and this can be a lengthy and cumbersome process. It is not always clear which governmental body or official has the right to regulate the use of property. Failure to obtain or comply with the required approvals, consents, registrations or other regulations may cause the Enlarged Group to be unable to conduct its activities or operations in Kazakhstan or enforce its mineral or property rights. If any of the Enlarged Group's mineral rights, properties or production facilities are found not to be in compliance with all applicable approvals, consents, registrations or other regulations, the Enlarged Group may lose the use of such mineral rights, properties or production facilities, which could have a material adverse effect on the Enlarged Group's business, results of operations and financial condition.

Corruption in Kazakhstan could disrupt the Enlarged Group's ability to conduct its business.

In Kazakhstan, the bribery of officials remains at a high level relative to more economically developed markets. The Enlarged Group's business, results of operations and financial condition could be adversely affected by corruption or by claims, even if groundless, implicating the Enlarged Group in illegal activities.

Social instability caused by corruption could increase support for renewed centralised authority, nationalism or violence and thus materially adversely affect the Enlarged Group's ability to conduct its business effectively, including as a result of restrictions on foreign involvement in the economy of the countries in which the Enlarged Group operates. Any of these could restrict the Enlarged Group's operations and lead to a loss of revenue, which could have a material adverse effect on the Enlarged Group's business, results of operations and financial condition.

The export regime for gold bearing materials in Kazakhstan might be subject to change.

The Kazakh government may apply a new tax and/or revise the existing regulation to all gold bearing mining operations to export gold or gold concentrate, pay taxes, duties, and levies in accordance with their work programme(s).

Due to the limited smelting and refining facilities available at present sites, application of any new regulations to the Enlarged Group's operations could result in an inability to export gold, gold concentrate or the application of a significant export duty, which could adversely impact its future operating and financial results.

Environmental laws and regulations in Kazakhstan are uncertain and subject to change.

Due to the nature of its operations, the Enlarged Group is (and in relation to the Kyzyl Project will be) subject to extensive environmental laws and regulations in Kazakhstan, which in recent years have been and still are changing. In the past, new and stricter environmental requirements have been imposed and fines and other payments have been significantly increased. New laws and regulations, the imposition of more stringent requirements, increasingly strict enforcement or new interpretations of existing environmental laws, regulations or licences, or the discovery of previously unknown contamination, may require further expenditure by the Enlarged Group to modify operations, install pollution control equipment, perform site clean-ups, curtail or cease operations, or pay fees, fines, or make other payments for discharges or other breaches of environmental standards. Although the Company believes that the Enlarged Group's operations are currently in compliance in all material respects with applicable environmental laws and regulations in Kazakhstan, as laws are continually changing, the Company cannot be certain that the Kazakh state authorities will not impose additional, or amend existing, laws or regulations in the future, which may mean that the Enlarged Group is not in compliance with such law or regulations. In addition, the introduction of more stringent environmental laws and regulations could lead to the need for new or additional rehabilitation and decommissioning reserves or in an increase in the Enlarged Group's environmental liabilities. If any of these risks were to occur, they could have a material adverse effect on the Enlarged Group's business, results of operations and financial condition.

The Group's production, processing and product delivery rely on infrastructure being adequate and remaining available.

The Group's mining, processing, development and exploration activities depend on adequate infrastructure, including reliable roads, power sources and water supplies. However, some physical infrastructure in Kazakhstan (including rail and road networks, airports, power generation and transmission networks, communication systems and rolling stock) is old and has not been adequately funded and maintained. There can be no guarantee that power shortages or outages at the Group's mines will not occur. Any failure or unavailability of the infrastructure on which the Group's operations rely (for example, through equipment failure or disruption to its transportation arrangements) could adversely affect the production output from its mines or impact its exploration activities or the development of a mine or a project. If the infrastructure used by the Group is affected, it could have a material adverse effect on the Group's business, results of operations and financial condition.

PART 3

PRINCIPAL TERMS OF THE ACQUISITION

1. Principal terms of the SPA

On 21 May 2014, Sumeru Gold, PMTL (as the Share Buyer), PMTL BV (as the Debt Buyer) and Polymetal entered into the SPA pursuant to which the Share Buyer has conditionally agreed to buy the Altynalmas SPA Shares (which represent 50 per cent. of the issued share capital of Altynalmas) from Sumeru Gold and the Debt Buyer has conditionally agreed to receive an assignment of the Sumeru Shareholder Loans from Sumeru Gold.

1.1 Consideration

The aggregate consideration for the acquisition of the Altynalmas SPA Shares (under the SPA), the Altynalmas KASE Shares (under the Bidding Agreement and assuming all of the Altynalmas KASE Shares are acquired) and the Sumeru Shareholder Loans (to be acquired pursuant to the Deed of Assignment) comprises:

- (a) an initial consideration ("**Initial Consideration**") of (i) US\$318.5 million in cash; and (ii) the issue by Polymetal of New Polymetal Shares with an aggregate value of US\$300 million (the "**Consideration Shares**"), as determined in the Agreements; and
- (b) deferred additional cash consideration of up to an agreed maximum cap of US\$500 million (the "Additional Consideration") contingent on certain conditions being met and dependent on the relative dynamics of the gold price and the price of Polymetal Shares over up to the next seven years.

The number of Consideration Shares will be determined by dividing US\$300 million by the unweighted mean average closing price of Polymetal Shares on the main market of the London Stock Exchange in the calendar year ending three trading days before Completion (the "Initial Share Price"). The number of Consideration Shares is subject to a maximum of 9.99 per cent. of the number of Polymetal Shares in issue during the period of one year prior to Completion. If the number of Consideration Shares which would otherwise have been issued exceeds this limit, the excess Consideration Shares will not be issued and Sumeru Gold will be paid a cash amount equal to the Initial Share Price multiplied by the number of excess Polymetal Shares.

The consideration to be paid by PMTL also includes contingent deferred cash payments (the "Additional Consideration") payable to Sumeru Gold. The amount of the Additional Consideration is calculated as at each of the first five (or in certain circumstances seven) anniversaries of the Completion Date (as defined below) (each an "Adjustment Date" with the year ending on each Adjustment Date referred to as an "Adjustment Year").

The Additional Consideration is intended to compensate the Seller for any negative difference between the market performance of the Consideration Shares and the gold price in the five-year (or, in certain circumstances, seven-year) period following completion of the acquisition of the Altynalmas Shares by PMTL (the "**Completion Date**"), subject to a cap. The Additional Consideration is not payable in any event until certain further conditions have been satisfied.

The adjustment in respect of the average annual gold price (the "Gold Performance Adjustment") is calculated by reference to:

- (a) US\$500,000 multiplied by the amount by which the average annual gold price exceeds the threshold gold price of \$1,250/troy oz. at each of the first five Adjustment Dates; and
- (b) US\$700,000 multiplied by the amount by which the average annual gold price exceeds the threshold gold price of \$1,250/troy oz. on the sixth and seventh Adjustment Dates.

The adjustment in respect of the performance of the Consideration Shares (the "Share **Performance Adjustment**") is calculated by reference to the post-Completion increase in the value of the Consideration Shares (calculated using the difference between Polymetal's average share price during the year preceding the given Adjustment Date and Polymetal's Initial Share Price).

The Additional Consideration payable in respect of any Adjustment Year is the difference between the Gold Performance Adjustment and the Share Performance Adjustment, net of the cumulative additional cash payments made after previous Adjustment Dates. The Additional Consideration is payable in cash within 30 business days after each of the Adjustment Dates. No further cash payments are made if the total cash paid due to the Additional Consideration reaches the US\$450 million cap at any of the first five Adjustment Dates or the US\$500 million cap at the sixth or seventh Adjustment Dates.

The Additional Consideration calculation is subject to certain adjustments including adjustments for any split or consolidation of Polymetal Shares and any delisting of Polymetal Shares.

As an illustration, assuming all period prices move on a straight line basis, if the gold price were to increase in equal annual increments to US\$1,500 (representing a 3.7% CAGR to benchmark gold price of US\$1,250) by the end of the fifth year, provided Polymetal's share price at such time was equal to or greater than US\$13.49/share (7.6% CAGR from Polymetal's closing share price of US\$9.35/share on 19 May 2014 taken as the Initial Share Price for the purposes of this illustration), no Additional Consideration would be payable. Based on this illustrative gold price assumption, the maximum Additional Consideration to be payable if the Polymetal share price does not increase over the five year period would be US\$125 million.

1.2 Conditions precedent to Completion

Completion of the acquisition of the Altynalmas SPA Shares is conditional on the satisfaction (or waiver) of certain conditions, including the following:

- (a) the waiver by the Republic of Kazakhstan of its pre-emptive right in respect of the sale of the Altynalmas SPA Shares by Sumeru Gold;
- (b) the receipt by Sumeru Gold of a written permission from MINT to transfer the Altynalmas SPA Shares, in accordance with Article 36 of the Subsoil Law;
- (c) the receipt by the Share Buyer of a written consent for the economic concentration from the Antimonopoly Agency with respect to the acquisition of all the Altynalmas Shares in accordance with Article 50 of the Republic of Kazakhstan Law "on Competition" No. 112-IV dated 25 December 2008;
- (d) the dispatch of the Circular to the Polymetal Shareholders convening the General Meeting and the passing of the Resolutions at the General Meeting;
- (e) the FCA having acknowledged to Polymetal that the application for admission of the Consideration Shares to the premium listing segment of the Official List has been unconditionally approved and will become effective as soon as a dealing notice has been issued by the FCA and an acknowledgement by the London Stock Exchange that the Consideration Shares will be admitted to trading on the main market of the London Stock Exchange;
- (f) no legally binding decree, statute, order or regulation enacted by the parliament or the Government of Kazakhstan or the President of Kazakhstan being in effect which affects the consummation of the transactions contemplated by the Agreements;
- (g) no legally binding order or judgment being in effect which prohibits the consummation of the transactions contemplated by the Agreements; and
- (h) PMTL having acquired one or more Altynalmas KASE Shares on the terms of the Bidding Agreement by way of Open Trade.

1.3 Action pending Completion

Sumeru Gold has agreed to procure that until Completion each Altynalmas Group Company:

- (a) carries on its business in the ordinary course, as a going concern in the way carried on in the 12 months prior to 31 December 2013 and in accordance with applicable law;
- (b) maintains in force all existing insurance policies on the same material terms to provide a similar level of cover as in force at the date of the SPA for the benefit of the Altynalmas Group Companies; and
- (c) makes any insurance claim in relation to any Altynalmas Group Company promptly and in accordance with the terms of the relevant policy.

In addition, Sumeru Gold has agreed to procure that no Altynalmas Group Company undertakes certain actions prior to Completion without the Share Buyer's consent or as provided for in any budget agreed in writing between Sumeru Gold and Polymetal. Such actions include, for example, acquisitions and disposals of businesses or assets, issuing new shares, declaring a dividend, amending or terminating material contracts, borrowing money or incurring any indebtedness (other than pursuant to the Sumeru Shareholder Loans), amongst others.

1.4 Warranties and indemnities

Sumeru Gold has given warranties to Polymetal, PMTL and PMTL BV in relation to title to the Altynalmas Shares, power and capacity to enter into the SPA, the business and affairs of the Altynalmas Group and certain information contained in this Document which relates to the Altynalmas Group. Each of Polymetal, PMTL and PMTL BV has given limited warranties to Sumeru Gold in respect of (amongst other things) power and capacity to enter into the SPA and the financial standing and resources to satisfy its obligations under the SPA. The liability of Sumeru Gold is subject to certain exceptions and customary limitations.

Sumeru Gold has given an indemnity to the Share Buyer in respect of any loss incurred by any member of the Altynalmas Group or any member of the Polymetal Group as a result of acquiring the Altynalmas KASE Shares by way on an Open Trade. In addition, Sumeru has agreed to indemnify PMTL for certain tax liabilities arising in Kazakhstan and Canada and to pay to PMTL an amount equal to any indebtedness of any Altynalmas Group Company as at Completion (other than pursuant to the Sumeru Shareholder Loans). Polymetal, PMTL and PMTL BV have given an indemnity to Sumeru Gold and any other member of the Altynalmas Group prior to Completion as a result of certain activities of the personnel or contractors of Polymetal or certain matters done at their request. Polymetal, PMTL and PMTL BV have also agreed to indemnify Sumeru Gold for any stamp duty or withholding in respect of stamp duty payable by Sumeru Gold in Jersey on the issuance of the Consideration Shares.

1.5 Sumeru Gold Lock-up

Sumeru has agreed not to dispose of any interest in any of the Consideration Shares during the Lock-up Period subject to customary terms and exclusions.

1.6 Sumeru Put Option

Polymetal has granted Sumeru Gold the right to require Polymetal to purchase or procure purchasers for any or all of the Consideration Shares (such Consideration Shares being the "**Option Shares**") at the Initial Share Price (subject to certain adjustments including adjustments for any split or consolidation of Polymetal Shares, any takeover or merger of Polymetal or any delisting of Polymetal Shares) (being the "**Strike Price**"). The Sumeru Put Option can be exercised by Sumeru Gold by giving notice to Polymetal (the "**Option Exercise Notice**") during (a) the one month period immediately following the end of the Lock-up Period; or (b) if Sumeru Gold is in possession of any inside information relating to the Group and is therefore precluded from exercising the Sumeru Put Option, then Sumeru Gold may exercise the Sumeru Put Option within the one month period following the date upon which it ceases to be precluded from exercising the Sumeru Put Option (together with (a) being the "**Exercise Period**").

Completion of the exercise of the Sumeru Put Option is subject to the conditions that Sumeru Gold or Polymetal obtain any antitrust or regulatory consents or waivers required by applicable law (which are not yet known) in order for the transfer of the Option Shares pursuant to the exercise of the Sumeru Put Option to be effected (the "**Option Conditions**"). The parties have an obligation to use all reasonable endeavours to procure that any Option Conditions are satisfied as soon as reasonably practicable. If any of the Option Conditions are not satisfied by the date falling six months after the date on which the Option Exercise Notice is validly served in accordance with the terms of the SPA, the Sumeru Put Option will lapse and Polymetal will have no obligation to purchase or procure the purchase of the Option Shares. If the Sumeru Put Option is not validly exercised prior to the end of the Exercise Period it will lapse.

Sumeru Gold has agreed that neither it nor any member of the Sumeru Group will acquire any New Polymetal Shares during the Lock-up Period if it would result in such persons in aggregate owning or being entitled to control more than 9.99 per cent. of Polymetal's issued share capital.

1.7 Termination of the SPA

Polymetal or Sumeru Gold are entitled to terminate both the SPA and the Bidding Agreement (but not one only) if any of the conditions precedent to Completion under the SPA are not satisfied by 31 July 2014 (or if the conditions have not been satisfied by that date, such later date which either party may at any time prior to 1 July 2014 nominate in writing to the other being no later than 31 October 2014, or such later date beyond 31 October 2014 as Sumeru Gold and Polymetal may agree in writing). If the Bidding Agreement terminates prior to KASE Completion, then the SPA will terminate with immediate effect.

1.8 Redemption of minority shares

The Share Buyer has agreed to acquire any Altynalmas Shares which are not acquired by it pursuant to the SPA or the Bidding Agreement (the "Minority Shares") or to procure the repurchase, redemption or cancellation of the Minority Shares by Altynalmas. The Share Buyer shall in respect of the Minority Shares serve a redemption notice in accordance with the provisions of the Altynalmas Articles as soon as reasonably practicable and use all reasonable endeavours to procure that Altynalmas redeems any Minority Shares in accordance with provisions of the Altynalmas Articles (the "Redemption").

If PMTL (or Altynalmas) is notified by MINT or determines in its reasonable opinion that, the acquisition of the Minority Shares is subject to the waiver of the pre-emptive right of the Republic of Kazakhstan and/or requires permission from MINT (such waiver and/or consent being a "**MINT Consent**") for the transfer of the Minority Shares, the Share Buyer and the Company will only proceed with the Redemption following receipt from MINT of the MINT Consent (or MINT confirming in writing that no such consent is required). See also paragraph 4 below.

2. Principal terms of the Bidding Agreement

On 21 May 2014, Sumeru, the Share Buyer and Polymetal entered into the Bidding Agreement pursuant to which Sumeru agrees to offer the Altynalmas KASE Shares (which represent 50 per cent. of the issued shares capital of Altynalmas) for sale on KASE and, if the Share Buyer's bid is successful, to sell such shares and the Share Buyer agrees to bid for, and if its bid is successful, to acquire the Altynalmas KASE Shares, in each case on KASE by way of the Open Trade. Each of the Altynalmas KASE Shares shall be acquired at the Offer Price.

2.1 Consideration

If the Share Buyer is the successful bidder in the Open Trade in relation to the sale of all the Altynalmas KASE Shares, it shall procure the payment of the Offer Price per Share through the procedures applicable to trades conducted on the KASE. Any consideration paid for the acquisition of the Altynalmas KASE Shares under the terms of the Bidding Agreement is included in the aggregate consideration payable for the Acquisition as summarised in paragraph 1.1 of this Part 3 (*Principal terms of the Acquisition*).

2.2 Conditions and termination

The KASE Completion is conditional on, amongst other things, all the conditions precedent set out in the SPA (other than the acquisition of Altynalmas KASE Shares on the terms of the Bidding Agreement) having been satisfied or waived in accordance with the terms of the SPA.

The Bidding Agreement will terminate immediately if the SPA terminates. The Bidding Agreement may be terminated by the Share Buyer by notice to Sumeru prior to KASE Completion if there is a material breach of the warranties in the Bidding Agreement.

If the Share Buyer is the successful bidder in the Open Trade for Altynalmas KASE Shares, Sumeru will use its best endeavours to ensure that, among other things, the trading confirmations are delivered to designated representatives of the Share Buyer and Sumeru and a statement confirming that the KASE Shares are held in the Share Buyer's depo-account with the Depositary is delivered to the designated representative of the Share Buyer. If the Share Buyer does not acquire any KASE Shares in the Open Trade, other than in circumstances where KASE Completion is deferred or the Bidding Agreement is terminated, the parties shall immediately consult with a view to achieving KASE Completion as soon as reasonably practicable and in any event within three calendar weeks following the first attempt at KASE Completion and the Share Buyer shall follow the procedure set out in the Bidding Agreement with respect to the conversion of the consideration for the KASE Shares from KZT to USD.

2.3 Warranties

Sumeru has given warranties to the Share Buyer in relation to title to, amongst other things, the Altynalmas KASE Shares and power and capacity to enter into the Bidding Agreement. The Share Buyer has given limited warranties to Sumeru in respect of (amongst other things) power and capacity to enter into the SPA and the financial standing and resources to satisfy its obligations under the Bidding Agreement. The liability of Sumeru is subject to certain exceptions and customary limitations.

3. Principal terms of the Deed of Assignment

Sumeru Gold, Altynalmas and the Debt Buyer will, at Completion, enter into a Deed of Assignment. Pursuant to two loan agreements entered into between Altynalmas and Sumeru Gold in November 2013, Altynalmas is indebted to Sumeru Gold for an amount of approximately US\$70.1 million in principal and accrued interest as at 21 May 2014 (the date of the SPA) (the "Sumeru Shareholder Loans"). As agreed in the SPA, Sumeru Gold has agreed to assign the Sumeru Shareholder Loans comprising of the amount owed under the two loan agreements, including all accrued outstanding interest as at the Completion Date to the Debt Buyer. Pursuant to the terms of the Deed of Assignment, Sumeru Gold, as Assignor has agreed with the consent of Altynalmas, to sell and transfer to the Debt Buyer, as the Assignee, the Sumeru Shareholder Loans with the present and future benefits, right, title, interest and claims in and to the loans and free of any Encumbrance. The consideration payable by the Debt Buyer for the assignment of the Sumeru Shareholder Loans is determined and allocated in accordance with the terms of the SPA above).

Under the Deed of Assignment, Altynalmas has agreed with effect from the Completion Date to (i) repay the principal amount outstanding in respect of the Sumeru Shareholder Loans and (ii) pay all interest, fees and other amounts accrued on the principal amount or otherwise owing in respect of the Sumeru Shareholder Loans to the Debt Buyer. Altynalmas has also agreed to make any applicable filings, notifications and any such thing as may be required in respect of the its obligations or liability in respect of the Sumeru Shareholder Loans. Sumeru Gold will have no rights of recourse in respect of the obligations or liability of Altynalmas in respect of the Sumeru Shareholder Loans with effect from Completion and in the event that it has any claim under the Deed of Assignment, it will be subject to the limitations set out in the SPA.

4. Articles of Association of Altynalmas

The Altynalmas Articles include a provision whereby if at any time any person beneficially owns more than 50 per cent. of the outstanding Altynalmas Shares (the "**Majority Shareholder**"), then the Majority Shareholder shall have the right (but not the obligation) on one or more occasions to:

- (a) require any other shareholder to sell all of the Altynalmas Shares held by such shareholder (the "**Buy-out Shares**") to the Majority Shareholder; or
- (b) require Altynalmas to purchase the Buy-out Shares held by any other shareholder and such shareholder to sell such Buy-out Shares to Altynalmas (the "**Repurchase Right**"); or
- (c) require Altynalmas to redeem the Buy-out Shares (the "Redemption Right").

In each case, the per share price payable for the Buy-out Shares upon the exercise of the Buyout Right, the Repurchase Right or the Redemption Right shall be equal to the volume weighted average price paid in cash by the Majority Shareholder or any of its affiliates to purchase Altynalmas Shares in the 12 months prior to the date of the exercise of such right of acquisition.

The Share Buyer has agreed that if it does not acquire all of the Altynalmas KASE Shares on the terms of the Bidding Agreement it shall exercise the Redemption Right and require any such Buy-Out Shares to be redeemed by Altynalmas (*see paragraph 1.8 of this Part 3 (Principal terms of the Acquisition) above*).

PART 4

FINANCIAL INFORMATION ON ALTYNALMAS

Deloitte LLP 2 New Street Square London EC4A 3BZ United Kingdom

The Board of Directors on behalf of Polymetal International plc Ogier House The Esplanade St. Helier JE4 9WG Jersey

Morgan Stanley & Co. International plc 25 Cabot Square Canary Wharf London E14 4QA

14 July 2014

Dear Sirs

Altynalmas Gold Limited ("Target" and, with its subsidiaries, the "Target Group")

We report on the financial information for the three years ended 31 December 2013 set out in Part 4 of the Class 1 Circular relating to the acquisition of Target dated 14 July 2014 of Polymetal International plc (the "**Company**" and, together with its subsidiaries, the "**Group**") (the "**Circular**"). This financial information has been prepared for inclusion in the Circular on the basis of the accounting policies set out in Notes 2 and 3 to the financial information. This report is required by Listing Rule 13.5.21R and is given for the purpose of complying with that requirement and for no other purpose.

Responsibilities

The Directors of the Company are responsible for preparing the financial information in accordance with International Financial Reporting Standards as adopted by the European Union.

It is our responsibility to form an opinion on the financial information and to report our opinion to you.

Save for any responsibility which we may have to those persons to whom this report is expressly addressed and which we may have to Ordinary shareholders as a result of the inclusion of this report in the Circular, to the fullest extent permitted by law we do not assume any responsibility and will not accept any liability to any other person for any loss suffered by any such other person as a result of, arising out of, or in connection with this report or our statement, required by and given solely for the purposes of complying with Listing Rule 13.4.1R(6), consenting to its inclusion in the Circular.

Basis of opinion

We conducted our work in accordance with Standards for Investment Reporting issued by the Auditing Practices Board in the United Kingdom. Our work included an assessment of evidence relevant to the amounts and disclosures in the financial information. It also included an assessment of significant estimates and judgments made by those responsible for the preparation of the financial information and whether the accounting policies are appropriate to the entity's circumstances, consistently applied and adequately disclosed.

We planned and performed our work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial information is free from material misstatement whether caused by fraud or other irregularity or error.

Our work has not been carried out in accordance with auditing or other standards and practices generally accepted in jurisdictions outside the United Kingdom, including the United States of

America, and accordingly should not be relied upon as if it had been carried out in accordance with those standards and practices.

Opinion on financial information

In our opinion, the financial information gives, for the purposes of the Circular, a true and fair view of the state of affairs of the Target Group as at 31 December 2011, 31 December 2012 and 31 December 2013 and of its profits, cash flows and changes in equity for the three years ended 31 December 2013 in accordance with International Financial Reporting Standards as adopted by the European Union and has been prepared in a form that is consistent with the accounting policies adopted in the Company's latest annual accounts.

Yours faithfully

Deloitte LLP Chartered Accountants

Deloitte LLP is a limited liability partnership registered in England and Wales with registered number OC303675 and its registered office at 2 New Street Square, London EC4A 3BZ, United Kingdom. Deloitte LLP is the United Kingdom member firm of Deloitte Touche Tohmatsu Limited ("DTTL"), a UK private company limited by guarantee, whose member firms are legally separate and independent entities. Please see <u>www.deloitte.co.uk/about</u> for a detailed description of the legal structure of DTTL and its member firms.

Consolidated Statement of Comprehensive Loss (Stated in thousands of U.S. dollars)

		Years ended December 3		31,	
	Note	2013	2012	2011	
		\$	\$	\$	
Gold sales COST OF SALES				122 (52)	
EVDENCEC		—	—	70	
Other operating expenses Project care and maintenance Project feasibility Project execution	4 5 6	(8,333) (6,026) —	(13,354) (5,743) (5,865)	(17,634) (20,390) (6,440)	
Exploration	7	(110)	(4,197)	(16,513)	
General and administrative expense	8	(14,469) (781)	(29,159) (7,722)	(60,977) (6,668)	
Operating loss		(15,250)	(36,881)	(67,645)	
OTHER EXPENSES Net foreign exchange loss (gain) Finance expense Gain on sale of property, plant and	13	(120) (8,194)	(90) (7,234)	41 (5,249)	
equipment Impairment of carrying value of property, plant and equipment Impairment of carrying value of	12	(41)	(419)	288	
inventories Provision for doubtful receivables Impairment of carrying value of		(10) (65)		(71) (17)	
intangible assets			(708)		
LOSS BEFORE INCOME TAXES Deferred income tax recovery	15	(23,680)	(45,332)	(72,723)	
NET LOSS AND COMPREHENSIVE LOSS		\$(23,680)	\$(45,332)	\$(72,709)	
BASIC AND DILUTED LOSS PER Share		\$(0.24)	\$(0.45)	\$(0.73)	
Weighted average number of basic and diluted shares outstanding		100,384,688	100,000,000	100,000,000	

There were no other comprehensive income or loss other than those disclosed above.

The accompanying notes are an integral part of this consolidated financial information.

Consolidated Statement of Financial Position

(Stated in thousands of U.S. dollars)

		December 31,		
	Note	2013	2012	2011
ASSETS Cash Trade and other receivables Prepayments to suppliers Inventories	11	\$1,101 380 371 1 234	\$11,156 2,502 1,221 1,055	\$771 1,002 917 709
Total current assets	11	3,086	15,934	3,399
Property, plant and equipment Intangible assets Restricted cash	12	97,581	97,802	99,294 616 246
Total non-current assets		97,607	97,905	100,156
Total assets		\$100,693	\$113,839	\$103,555
LIABILITIES Accounts payable and accrued liabilities Current borrowings	13	\$2,640 63,310	\$3,781 252,393	\$11,277 188,159
Environmental obligations Deferred tax liability	14 15	15,824 12,024	20,066 12,024	21,188 12,024
Total non-current liabilities		27,848	32,090	33,212
Total liabilities		\$93,798	\$288,264	\$232,648
Net assets/(liabilities)		\$6,895	\$(174,425)	\$(129,093)
SHAREHOLDERS' EQUITY (DEFICIT) Stated capital account Capital reserve Accumulated deficit	17	434,805 18,229 (446,139)	229,805 18,229 (422,459)	229,805 18,229 (377,127)
Total equity (deficit) attributable to the parent		6,895	(174,425)	(129,093)
Total liabilities and shareholders' equity (deficit)		\$100,693	\$113,839	\$103,555

The accompanying notes are an integral part of this consolidated financial information.

Consolidated Statement of Changes in Equity (Stated in thousands of U.S. dollars)

Common	on Shares				
Number of shares	Number of shares Amount	Capital reserve	Accu- mulated deficit	Total	
	US\$'000	US\$'000	US\$'000	US\$'000	
100,000,000	\$229,805	\$18,229	\$(304,558)	\$(56,524)	
			(72,569)	(72,569)	
100,000,000	\$229,805	\$18,229	\$(377,127)	\$(129,093)	
			(45,332)	(45,332)	
100,000,000	\$229,805	\$18,229	\$ (422,459)	\$ (174,425)	
		_	(23,680)	(23,680)	
140,410,960	205,000			205,000	
240,410,960	\$434,805	\$18,229	\$(446,139)	\$6,895	
	Common Number of shares 100,000,000 100,000,000 100,000,000 100,000,000 100,000,000 140,410,960 240,410,960	Number of shares Amount US\$'000 100,000,000 \$229,805 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 100,000,000 \$229,805 100,000,000 140,410,960 205,0000 240,410,960	Number of shares Amount Capital reserve US\$'000 US\$'000 100,000,000 \$229,805 100,000,000 \$229,805 100,000,000 \$229,805 100,000,000 \$229,805 100,000,000 \$229,805 100,000,000 \$229,805 100,000,000 \$229,805 118,229	Common SharesNumber of sharesAmountCapital reserveAccu- mulated deficitUS\$'000US\$'000US\$'000100,000,000\$229,805\$18,229 $(72,569)$ $(72,569)$ 100,000,000\$229,805\$18,229 $(72,569)$ $(45,332)$ $(100,000,000)$ \$229,805\$18,229 $(100,000,000)$ \$229,805\$18,229 $(100,000,000)$ \$229,805\$18,229 $(45,332)$ $(422,459)$ $(100,000,000)$ \$229,805\$18,229 $(23,680)$ $(40,410,960)$ $205,000$ $(240,410,960)$ \$434,805\$18,229 $(446,139)$	

The accompanying notes are an integral part of this consolidated financial information.

Consolidated Information of Cash Flows (Stated in thousands of U.S. dollars)

		Years ended December 31,			
	Notes	2013	2012	2011	
OPERATING ACTIVITIES					
Net loss and comprehensive loss		\$(23,680)	\$(45,332)	\$(72,569)	
Items not involving use of cash:					
Depreciation	12	912	1,634	1,620	
Change in environmental obligation	14	(4,242)	(1,122)	4,765	
Accrued interest expense	13	8,194	7,234	5,249	
Gain on sale of property, plant and equipment Write-down of carrying value of property, plant			_	(288)	
and equipment Impairment of carrying value of intangible	12	41	419	_	
assets			708		
Write-down of carrying value of inventories		10		71	
Provision for doubtful receivables		75		17	
Other		2	(7)	5	
Deferred income tax recovery				(14)	
Operating cash flows before movements in					
working capital		(18,688)	(36,466)	(61,144)	
Decrease/(increase) in Trade and other					
receivables		2,047	(1,500)	151	
Increase/(decrease) in Prepayments to suppliers		850	(304)	774	
(Increase)/decrease in Inventories		(189)	(346)	15	
(Decrease)/increase in Accounts payable and					
accrued liabilities		(368)	(7,496)	5,219	
Cash used in operating activities		(16,348)	(46,112)	(54,985)	
INVESTING ACTIVITIES					
Expenditures on property, plant and equipment	12	(732)	(561)	(3,059)	
Expenditures on intangible assets			(92)	(616)	
Proceeds on disposal of property, plant and					
equipment				438	
Cash used in investing activities		(732)	(653)	(3,237)	
FINANCING ACTIVITIES					
Current borrowings	13	6,950	57,000	44,807	
Repayment of loans				(42)	
Return of restricted cash		75	150		
Cash generated from financing activities		7,025	57,150	44,765	
(Decrease) Increase in cash		(10.055)	10.385	(13.457)	
Cash, beginning of the year		11,156	771	14,228	
Cash. end of the year		\$1 101	\$11 156	\$771	
Sublig site of the Jenn		<i>_</i> 1,101	<i>\</i>	ψ//1	

Supplemental cash flow information (Note 22)

The accompanying notes are an integral part of this consolidated financial information

1. CORPORATE INFORMATION AND CONTINUANCE OF OPERATIONS

Altynalmas Gold Ltd. ("Altynalmas", or the "Company") was incorporated pursuant to the British Columbia Business and Corporations Act on November 17, 2004. Altynalmas was acquired by Turquoise Hill Resources Ltd. (formerly Ivanhoe Mines Ltd.) ("Turquoise Hill") as a vehicle for consolidating the interest of various shareholder groups in the Bakyrchik Mining Venture LLP ("BMV") which manages the Bakyrchik gold project ("Bakyrchik Project") and Inter Gold Capital LLP ("IGC") which owns the Bolshevik gold project ("Bolshevik Project"). The Bakyrchik Project and the Bolshevik Project are located in north-eastern Kazakhstan. The acquisitions were undertaken following the completion of an agreement (the "Vend -In Agreement") between Turquoise Hill, JSC AK Altynalmas ("JSC Altynalmas"), Sumeru LLP ("Sumeru") and Medoro Partners Inc. ("Medoro"). This agreement was executed on November 30, 2007 and closed on October 3, 2008. On November 29, 2013, Turquoise Hill sold its investment in the Company to Sumeru Gold B.V. ("Sumeru Gold").

Altynalmas is a private company incorporated in Canada with limited liability under the legislation of the Province of British Columbia. The Company together with its subsidiaries (collectively referred to as the "Group") is principally engaged in the exploration, development and production of gold properties in Kazakhstan.

The head office, principal address and registered and records office of the Company are located at #1110 - 1111 West Georgia Street, Vancouver, British Columbia, V6E 4M3.

The consolidated statement of financial position as at December 31, 2013, December 31, 2012 and December 31, 2011 and the consolidated statements of comprehensive loss, changes in equity and cash flows for the years then ended (collectively, the "Consolidated Financial Information") are presented in U.S. dollars and all values are rounded to the nearest thousand dollars, except where otherwise indicated.

This Consolidated Financial Information has been prepared on a going concern basis, which contemplates the realisation of assets and settlement of liabilities in the normal course of business. In assessing its going concern status, the Company has taken account of its financial position, anticipated future trading performance, its bank and other facilities, including funding expected to be available to the Company as part of the Enlarged Group, pursuant to the Acquisition and its capital expenditure commitments and plans, together with other risks facing the Company.

After making appropriate enquiries, the Directors consider that the Company has adequate resources to continue in operational existence for at least the next twelve months from the date of this Document, and that it is appropriate to adopt the going concern basis in preparing this financial information.

2. BASIS OF PRESENTATION

(a) Statement of compliance

This Consolidated Financial Information has been prepared in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the European Union. The accounting policies set out in Note 3 have been applied consistently in preparing the Consolidated Financial Information for the three years ended December 31, 2013.

(b) Basis of presentation

The Consolidated Financial Information has been prepared on the historical cost basis.

The Consolidated Financial Information includes the accounts of Altynalmas Gold Ltd. (B.C., Canada) and its 100% owned subsidiaries (collectively referred to as the "Group"):

- BKG Jersey Limited (Jersey) ("BKG")
- Central Asian Mining Limited (BVI) ("CAML")
- Bakyrchik Mine Venture (Kazakhstan)

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

• Inter Gold Capital LLP (Kazakhstan).

All intercompany balances and transactions, revenues and expenses have been eliminated upon consolidation.

(c) Adoption of new and revised standards and interpretations

Historically Altynalmas Gold Ltd.'s (the "**Company**") financial information was prepared in accordance with IFRS as issued by the IASB rather than IFRS as adopted by the European Union which is the basis under which Polymetal prepares its financial information. The Consolidated Financial Information has been prepared in accordance with the Polymetal basis of preparation and accounting policies that were applicable for the year ended 31 December 2013.

The Company's effective date of transition from IFRS as issued by the IASB to IFRS as adopted by the European Union is 1 January 2011, however there were no accounting differences arising and no restatement of the financial information was required. The only differences relate to the timing of adoption of a number of new and revised International Accounting Standards ("IASs"), amendments and related International Financial Reporting Interpretations Committee interpretations ("IFRICs") (hereinafter collectively referred to as the "new IFRS") issued by the IASB which were effective under IFRS as issued by the IASB for the year ended 31 December 2013 and will be effective under IFRS as adopted by the EU (and hence Polymetal) for the year ending 31 December 2014.

The new standards include:

- IFRS 10 Consolidated Financial Statements the Standard has no significant impact on the Company.
- IFRS 11 Joint Arrangements the Standard has no significant impact on the Company.
- IFRS 12 Disclosure of Interests in Other Entities the Standard has no significant impact on the Company.
- IAS 27 Consolidated and Separate Financial Statements the Standard has no significant impact on the Company.
- IAS 28 Investments in Associates and Joint Ventures the Standard has no significant impact on the Company.
- IFRS 13 *Fair Value Measurement* the Standard has no significant accounting impact on the Company given the existing asset and liability mix of the Company to which fair value accounting applies.
- IAS 1 *Presentation of Financial Statements* the Standard has no significant impact on the Company.
- IAS 36(amendments) *Recoverable Amount Disclosures for Non-Financial Assets* the Standard has no significant impact on the Company.

At the date of authorisation of this Consolidated Financial Information, the IASB and IFRIC has issued the following new and revised standards, amendments and interpretations which are not yet effective during the year ended December 31, 2013:

• IFRS 9 - New financial instruments standard that replaces IAS 39 for classification and measurement of financial assets, which was to be effective for annual periods beginning on or after January 1, 2015 however the effective date has been deferred. The Company is assessing the impact of the application of this standard on the results of operations and financial position of the Company.

3. SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies used in this consolidated financial information are as follows:

(a) Basis of consolidation

Subsidiaries

The consolidated financial information of the Group includes the financial information of the Company, its subsidiaries and, if applicable, special purpose entities, from the date that control effectively commenced until the date that control effectively ceased. Control is achieved where the Company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

Income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated income statement from the effective date of acquisition and up to the effective date of disposal, as appropriate.

When necessary, adjustments are made to the financial information of subsidiaries to bring their accounting policies into line with those used by other members of the Group.

All intra-group balances, transactions and any unrealised profits or losses arising from intragroup transactions are eliminated on consolidation.

Changes to the Group's ownership interests that do not result in a loss of control over the subsidiaries are accounted for as equity transactions. The carrying amount of the Group's interests and non-controlling interests are adjusted to reflect the change in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interest is adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to the owners of the Parent.

When the Group loses control of a subsidiary, the profit or loss on the disposal is calculated as the difference between 1) the aggregated fair value of the consideration received and the fair value of any retained interest and 2) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and non-controlling interests.

For non-wholly owned subsidiaries, non-controlling interests are initially measured at the noncontrolling interest's proportion of the fair values of net assets recognised at acquisition. Thereafter, a share of the profit or loss for the financial year and other movements in the net assets or liabilities of the subsidiary is attributed to the non-controlling interests as shown in the income statement and balance sheet.

(b) Business combinations

IFRS 3 Business Combinations applies to a transaction or other event that meets the definition of a business combination. When acquiring new entities or assets, the Group applies judgement to assess whether the assets acquired and liabilities assumed constitute an integrated set of activities, whether the integrated set is capable of being conducted and managed as a business by a market participant, and thus whether the transaction constitutes a business combination, using the guidance provided in the standard. Acquisitions of businesses are accounted for using the acquisition method. The consideration for each acquisition is measured at the aggregate of the fair values (at the date of exchange) of assets given, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree. Acquisitionrelated costs are recognised in the consolidated income statement as incurred. Transaction costs incurred in connection with the business combination are expensed. Provisional fair values are finalised within 12 months of the acquisition date.

Where applicable, the consideration for the acquisition may include an asset or liability resulting from a contingent consideration arrangement. Contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Subsequent changes in such fair values are adjusted against the cost of acquisition retrospectively with the corresponding adjustment against goodwill where they qualify as

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

measurement period adjustments. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed at the acquisition date. The measurement period may not exceed one year from the effective date of the acquisition. The subsequent accounting for contingent consideration that does not qualify for as a measurement period adjustment is based on how the contingent consideration is classified. Contingent consideration that is classified as equity is not subsequently remeasured. Contingent consideration that is classified as an asset or liability is remeasured at subsequent reporting dates in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets or IAS 39 Financial Instruments Recognition and Measurement with the corresponding amount being recognised in profit or loss.

The identifiable assets acquired and the liabilities assumed are recognised at their fair value at the acquisition date, except that:

- deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognised and measured in accordance with IAS 12 Income Taxes and IAS 19 Employee Benefits, respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share- based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 Share-based Payment at the acquisition date; and
- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations are measured in accordance with that Standard.

Where a business combination is achieved in stages, the Group's previously held interests in the acquired entity are remeasured to fair value at the acquisition date (i.e. the date the Group attains control) and the resulting gain or loss, if any, is recognised in the consolidated income statement. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in equity are reclassified to profit or loss, where such treatment would be appropriate if that interest was disposed of.

(c) Foreign currency

The Company's presentation currency and the functional currency of all of its subsidiaries is the U.S. dollar as this is the principal currency of the economic environment in which they operate.

Transactions in currencies other than the entity's functional currencies (foreign currencies) are recorded at the exchange rates prevailing on the dates of the transactions. All monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates prevailing at the reporting date. Non-monetary items carried at historical cost are translated at the exchange rate prevailing on the date of transaction. Non-monetary items carried at fair value are translated at the exchange rate prevailing on the date on which the most recent fair value was determined. Exchange differences arising from changes in exchange rates are recognised in the consolidated income statement.

(d) Interest income and borrowing costs

Interest income from financial assets is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in the consolidated income statement in the period in which they are incurred.

(e) Cash and cash equivalents

Cash and cash equivalents comprise cash balances, cash deposits and highly liquid investments with original maturities of three months or fewer, which are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

The Company does not have any cash equivalents at December 31, 2013, December 31, 2012, or December 31, 2011.

(f) Restricted cash

Restricted cash include term deposits with a Canadian bank, held as security against the Company's credit card program. Interest from restricted cash is recorded on an accrual basis.

(g) Inventories

Metal inventories

Inventories including refined metals, metals in concentrate and in process, doré and ore stock piles are stated at the lower of production cost or net realisable value. Production cost is determined as the sum of the applicable expenditures and expenses incurred directly or indirectly in bringing inventories to their existing condition and location. Refined metals are valued at the average total cost of production per saleable unit of metal. Work in-process, metal concentrate and doré are valued at the average total production costs at each asset's relevant stage of production. Ore stock piles are valued at the average cost of mining that ore. Where ore stock piles are not expected to be processed within 12 months, those inventories are classified as non-current.

Net realisable value represents the estimated selling price for that product based on prevailing spot metal prices, less estimated costs to complete production and selling costs.

Consumables and spare parts

Consumables and spare parts are stated at the lower of cost or net realisable value. Cost is determined on the weighted average moving cost. The portion of consumables and spare parts not reasonably expected to be used within one year is classified as a long-term asset in the Group's consolidated balance sheet. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

(h) Revenue

Revenue is derived principally from the sale of gold, gold concentrate and intermediary product and is measured at the fair value of consideration received or receivable, after deducting discounts.

Revenue from the sale of gold and gold concentrate is recognised when the risks and rewards of ownership are transferred to the buyer, the Group retains neither a continuing degree of involvement nor control over the goods sold, the amount of revenue can be measured reliably, and it is probable that the economic benefits associated with the transaction will flow to the Group. Revenue from the sale of gold represents the invoiced value of metal shipped to the buyer, net of value added tax (VAT).All sales from by-products are recognised as other revenue.

Other incidental revenue from providing accommodations and distribution of utilities are recognised when goods or services are provided.
Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

(i) **Property, plant and equipment ("PP&E")**

Mining assets

Mining assets and leases include the cost of acquiring and developing mining assets and mineral rights. Mining assets are depreciated to their residual values using the unit-of-production method based on proven and probable ore reserves according to the National Instrument 43-101 "Standards of Disclosure for Mineral Projects", issued by the Canadian Securities Administrators, which is the basis on which the Group's mine plans are prepared. Changes in proven and probable reserves are dealt with prospectively. Depreciation is charged on new mining ventures from the date that the mining asset is capable of commercial production. In respect of those mining assets whose useful lives are expected to be less than the life of the mine, depreciation over the period of the asset's useful life is applied.

Capital construction-in-progress assets are measured at cost less any recognised impairment. Depreciation commences when the assets are ready for their intended use. Mineral exploration and evaluation costs, including geophysical, topographical, geological and similar types of costs, are capitalised if management concludes that future economic benefits are likely to be realised and determines that economically viable extraction operation can be established as a result of exploration activities and internal assessment of mineral resources.

Other PP&E

PP&E is stated at cost less accumulated depreciation and accumulated impairment losses, if any. The cost of an item of PP&E consists of the purchase price, any costs directly attributable to bringing the asset to the location and condition necessary for its intended use and an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Depreciation is provided at rates calculated to write off the cost of PP&E, less their estimated residual value, using the straight line method or unit-of-production method over the following expected useful lives:

- Mobile equipment: 5 years
- Computer equipment: 2 to 5 years
- Furniture and fixtures: 5 years
- Machinery and equipment: 3 to 10 years
- Buildings and roads: 5 to 15 years
- Construction in progress: see below
- Plant:
 - Demonstration roaster plant: unit-of-production basis
 - Other plant 5 to 15 years
- Leasehold improvements: straight-line, based on length of lease plus one extension period
- Mineral assets: straight-line, based on period of when reclamation expected to be completed

Assets held under finance leases are depreciated over the shorter of the lease term and the estimated useful lives of the assets.

Gains or losses on disposal of property, plant and equipment are determined by comparing the proceeds from disposal with the asset's carrying amount at the date. The gain or loss arising is recognised in the consolidated income statement.

Stripping costs

When it has been determined that a mining asset can be economically developed as a result of established proven and probable reserves, the costs to remove any overburden and other waste materials to initially expose the ore body, referred to as stripping costs, are capitalised as a part of mining assets.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

During the production phase of a mine when the benefit from the stripping activity is the improved access to a component of the ore body in future periods, the stripping costs in excess of the average ore to waste ratio for the life of mine of that component are recognised as a non-current asset. After initial recognition, the stripping activity asset is depreciated on a systematic basis (unit-of-production method) over the expected useful life of the identified component of the ore body made accessible as a result of the stripping activity.

Estimated ore reserves

Estimated proven and probable ore reserves reflect the economically recoverable quantities which can be legally recovered in the future from known mineral deposits. The Group's reserves are estimated in accordance with JORC Code.

(j) Impairment of property, plant and equipment

An impairment review of property, plant and equipment is carried out when there is an indication that those assets have suffered an impairment loss. If any such indication exists, the carrying amount of the asset is compared to the estimated recoverable amount of the asset in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted. If the recoverable amount of an asset (or cash generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash generating unit) is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately in the consolidated income statement.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cashgenerating unit) is increased to the revised estimate of its recoverable amount, but only to the extent that the increased carrying amount does not exceed the original carrying amount that would have been determined had no impairment loss been recognised in prior periods.

A reversal of an impairment loss is recognised in the consolidated income statement immediately.

(k) Intangible assets

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from the development (or the development phase of an internal project) is recognised if all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial, and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

The amount is initially recognised for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses. Amortization is recognised on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

(l) Environmental obligations

An obligation to incur environmental restoration, rehabilitation and decommissioning costs arises when disturbance is caused by the development or ongoing production of mining assets. Such costs arising from the decommissioning of plant and other site preparation work, discounted to their net present value using a risk-free rate applicable to the future cash flows, are provided for and capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are recognised in the consolidated income statement over the life of the operation, through the depreciation of the asset in the cost of sales line and the unwinding of the discount on the provision in the finance costs line. Costs for restoration of subsequent site damage which is created on an ongoing basis during production are provided for at their net present values and recognised in the consolidated income statement as extraction progresses.

Changes in the measurement of a liability relating to the decommissioning of plant or other site preparation work (that result from changes in the estimated timing or amount of the cash flow or a change in the discount rate), are added to or deducted from the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the consolidated income statement.

The provision for closure cost obligations is remeasured at the end of each reporting period for changes in estimates and circumstances. Changes in estimates and circumstances include changes in legal or regulatory requirements, increased obligations arising from additional mining and exploration activities, changes to cost estimates and changes to the risk free interest rate.

(m) Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in the consolidated income statement.

Financial Instruments Designated as Fair Value Through Profit and Loss (FVTPL)

A financial instrument other than a financial instrument held for trading may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial instrument forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

• it forms part of a contract containing one or more embedded derivatives, and IAS 39 Financial Instruments: Recognition and Measurement permits the entire combined contract (asset or liability) to be designated as at FVTPL.

Financial instruments at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in profit or loss. Fair value is determined in the manner described in Note 30.

Effective interest rate method

The effective interest rate method is a method of calculating the amortised cost of a financial instrument and of allocating interest income or expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash receipts or payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

(n) Financial assets

Non-derivative financial assets are classified into the following specified categories: FVTPL, available for sale (AFS) financial assets and 'loans and receivables'. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. No financial instruments have been classified as available for sale.

Income is recognised on an effective interest basis for financial instruments other than those financial assets classified as at FVTPL.

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables are measured at amortised cost using the effective interest rate method, less any impairment. Interest income is determined by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial.

AFS financial assets

Investments other than those classified as held for trading, held-to-maturity or loans and receivables are classified as available for sale financial assets. These assets are subsequently measured at fair value and unrealised gains and losses are recognised in equity until the investment is disposed or impaired, at which time the cumulative gain or loss previously recognised in equity is included in the consolidated income statement.

Impairment of financial assets

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected. For equity investments classified as AFS, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For all other financial assets objective evidence of impairment could include:

significant financial difficulty of the issuer or counterparty; or breach of contract, such as a default or delinquency in interest or principal payments; or it becoming probable that the borrower will enter bankruptcy or financial re-organisation; or the disappearance of an active market for that financial asset because of financial difficulties.

For financial assets carried at amortised cost, the amount of the impairment loss recognised is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognised in the consolidated income statement.

For financial assets measured at amortised cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through the consolidated income statement to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

(o) Financial liabilities

Other financial liabilities

Other financial liabilities (including borrowings) are subsequently measured at amortised cost using the effective interest rate method.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in the consolidated income statement.

Derivative financial instruments

The Group may enter into a variety of derivative financial instruments to manage its exposure to certain risks. Further details of derivative financial instruments are disclosed in Note 30.

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognised in the consolidated income statement immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in the consolidated income statement depends on the nature of the hedge relationship.

Derivatives embedded in non-derivative host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the hybrid contracts are not measured at FVTPL.

(p) **Provisions**

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

(q) Related party transactions

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control, and related parties may be individuals or corporate entities. A transaction is considered to be a related party transaction when there is a transfer of resources, services, or obligations between related parties.

(r) Segment reporting

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Company's other components. All operating segments' operating results are reviewed regularly by the Company's CEO to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

(s) Income taxes

Income tax expense represents the sum of the tax currently payable and deferred tax. Income taxes are computed in accordance with the laws of countries where the Group operates.

Current tax

The tax currently payable is based on taxable profit for the period. Taxable profit differs from profit as reported in the consolidated income statement because of items of income or expense that are taxable or deductible in other periods and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date.

Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Current and deferred tax

Current and deferred tax is recognised in the consolidated income statement, except when they relate to items that are recognised in the consolidated statement of comprehensive income or directly in equity, in which case, the current and deferred tax also recognised in consolidated statement of comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

(t) Significant accounting judgements and estimates

The preparation of this Consolidated Financial Information in conformity with IFRS requires management to make judgements and estimates and form assumptions that affect the reported amounts of assets and liabilities at the date of the financial information and reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its judgements and estimates in relation to assets, liabilities, revenue and expenses. Management uses historical experience and various other factors it believes to be reasonable under the given circumstances as the basis for its judgements and estimates. Actual outcomes may differ from these estimates under different assumptions and conditions.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in material adjustments are as follows:

(i) Valuation of mineral properties and proven and probable ore reserves

The figures for mineral reserves and resources are determined in accordance with National Instrument 43-101, "Standards of Disclosure for Mineral Projects", issued by the Canadian Securities Administrators. There are numerous uncertainties inherent in estimating mineral reserves and resources, including many factors beyond the Company's control. The accuracy of any mineral resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgements used in engineering and geological interpretation. Differences between management's assumptions including economic assumptions such as metal prices and market conditions could have a material effect in the future on the Company's financial position and results of operation.

(ii) Current and deferred income tax assets and liabilities

In assessing the probability of realizing income tax assets recognised, management makes estimates related to expectations of future taxable income, applicable tax opportunities, expected timing of reversals of existing temporary differences and the likelihood that tax positions taken will be sustained upon examination by applicable tax authorities. In making its assessments, management gives additional weight to positive and negative evidence that can be objectively verified. Estimates of future taxable income are based on forecasted cash flows from operations and the application of existing tax laws in each jurisdiction. Forecasted cash flows from operations are based on life of mine projections internally developed and reviewed by management. Weight is attached to tax planning opportunities that are within the Company's control, and are feasible and implementable without significant obstacles. The likelihood that tax positions taken will be sustained upon examination by applicable tax authorities is assessed based on individual facts and circumstances of the relevant tax position evaluated in light of all

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

available evidence. Where applicable tax laws and regulations are either unclear or subject to ongoing varying interpretations, it is reasonably possible that changes in these estimates can occur that materially affect the amounts of income tax assets recognised. At the end of each reporting period, the Company reassesses unrecognised income tax assets. (note 15)

(iii) Expected economic lives of mineral properties and PP&E

Depreciation, depletion and amortization expenses are allocated based on assumed asset lives and depletion/depreciation/amortization rates. Should the asset life or depletion/depreciation rate differ from the initial estimate, an adjustment would be made in the statement of comprehensive loss. (note 12)

(iv) Anticipated costs of environmental obligations including the reclamation of mine sites

The cost estimates are updated annually during the life of a mine to reflect known developments, (e.g. revisions to cost estimates and to the estimated lives of operations), and are subject to review at regular intervals. Decommissioning, restoration and similar liabilities are estimated based on the Company's interpretation of current regulatory requirements, technical assessment of facts, constructive obligations and are measured at fair value. Fair value is determined based on the net present value of estimated future cash expenditures for the settlement of decommissioning, restoration or similar liabilities that may occur upon decommissioning of the mine. Such estimates are subject to change based on changes in laws and regulations and negotiations with regulatory authorities. (note 14)

Critical judgements exercised in applying accounting policies that have the most significant effect on the amounts recognised in the Consolidated Financial Information are as follows:

(i) <u>Recoverability of capitalized amounts and determination of the economic viability of the</u> <u>Company's projects</u>

Management uses several criteria in its assessments of economic recoverability and probability of future economic benefit including geologic and metallurgic information, history of conversion of mineral deposits to proven and probable reserves, scoping and feasibility studies, accessible facilities, existing permits and life of mine plans.

Management is confident that for all licences with minimum work commitments these will be met or will be successfully negotiated in line with past practice such that the subsoil license title will be retained.

(ii) Determination of functional currency

The functional currency for each of the Company's subsidiaries is the currency of the primary economic environment in which the entity operates. The Company has determined that the functional currency of each entity is the U.S. dollar, reflecting the currency in which companies' costs and funding are primarily denominated. Determination of functional currency may involve certain judgements to determine the primary economic environment and the Company reconsiders the functional currency of its entities if there is a change in events or conditions which determined the primary economic environment.

4. PROJECT CARE AND MAINTENANCE COSTS

	Year ended December 31,			
	2013	2012	2011	
Depreciation	\$837	\$1,549	\$1,537	
Change in environmental obligation	(4,242)	(1, 122)	4,765	
Salaries	5,978	6,938	6,200	
Consumables	1,724	1,909	2,030	
Contractors	1,303	1,259	344	
General and administrative	1,157	1,154	1,090	
Travel	444	692	846	
Utilities	1,455	1,402	1,380	
Other revenue	(323)	(427)	(558)	
Total project care and maintenance costs	\$8,333	\$13,354	\$17,634	

5. PROJECT FEASIBILITY COSTS

	Year ended December 31,			
	2013	2012	2011	
Contractors ⁽¹⁾	\$5,944	\$5,677	\$20,215	
Consumables		8	13	
General and administrative	3		3	
Travel	79	58	159	
Total project feasibility costs	\$6,026	\$5,743	\$20,390	

(1) Contractors costs of \$5.9million in the year ended December 31, 2013 is net of a \$1.5 million credit arising on the reversal of an accrual which was determined to no longer be payable in the current year.

6. PROJECT EXECUTION COSTS

Year ended December 31,			
2013	2012	2011	
\$—	\$4,901	\$4,825	
_	458	1,006	
_	54	78	
	452	531	
<u> </u>	\$5,865	\$6,440	
	Year en 2013 \$	Year ended Decembe 2013 2012 \$ \$4,901 458 54 452 \$ \$5,865	

7. EXPLORATION COSTS

	Year ended December 31,			
	2013	2012	2011	
Contractors	\$110	\$3,861	15,459	
Salaries		221	447	
Consumables			213	
General and administrative		1	102	
Travel	—	114	292	
Total exploration costs	\$110	\$4,197	\$16,513	

8. CORPORATE ADMINISTRATION COSTS

	Year ended December 31,			
	2013	2012	2011	
Salaries	\$477	\$5,800	\$3,234	
Professional fees	173	912	1,416	
Travel	53	476	1,271	
General and administrative	78	462	683	
Depreciation	1	85	83	
Miscellaneous income	(1)	(13)	(19)	
Total corporate administration costs	\$781	\$7,722	\$6,668	

9. SEGMENT REPORTING

At December 31, 2013 and prior periods, the Company has a single reportable operating segment, being the Kyzyl Gold Division, which is principally engaged in the exploration and development of gold properties. The Company's resource properties are located in Kazakhstan, as are substantially all other non-current assets.

The Company's corporate division, located in Canada, only earns revenues that are considered incidental to the activities of the Company and therefore does not meet the definition of an operating segment as defined in IFRS 8 'Operating Segments'.

For the year ended December 31, 2013, the Kyzyl Gold Division had no gold revenue (year ended December 31, 2012: nil; year ended December 31, 2011: all gold revenue was earned in Kazakhstan).

10. AUDITOR'S REMUNERATION

	Year ended December 31,			
	2013	2012	2011	
Fees payable to the auditor for the audit of the Company's annual Consolidated Financial Statements Fees payable to the auditor for the audit of the Company's	\$130	\$129	\$129	
half-year Consolidated Financial Statements	94			
Total audit fees	224	129	129	
Audit-related assurance - quarterly reviews		38		
Total non-audit fees		38		
Total fees	\$224	\$167	\$129	

11. INVENTORIES

The inventories for the Company are as follows:

	I	December 31,			
	2013	2012	2011		
Materials and supplies	1,234	1,055	709		
Total inventories	\$1,234	\$1,055	\$709		

The cost of inventories recognised as an expense during the year ended December 31, 2013 in respect of care and maintenance was \$0.8 million (year ended December 31, 2012: \$0.8 million, year ended December 31, 2011: \$0.9 million) and \$0.01 million (year ended December 31, 2012: nil, year ended December 31, 2011: \$0.07 million) in respects of write-downs of inventory to net realizable value.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

12. PROPERTY, PLANT AND EQUIPMENT

The property, plant and equipment for the Company are summarized as follows:

	Mineral properties	Mineral assets	Mobile equipment	Computer equipment	Furniture and fixtures	Machinery and equipment	Buildings and roads	Plant	Leasehold improve- ments	Land	Total
Cost	(a)										
As at December 31, 2010 Additions Disposals/Adjustments	\$91,034 	\$7,249	\$1,153 819 (1)	\$237 236	\$181 165	\$3,722 545 (1)	\$2,415 260	\$44,508 94 (148)	\$— 929 —	\$ 	\$150,499 3,059 (150)
As at December 31, 2011	\$91,034	\$7,249	\$1,971	\$473	\$346	\$4,266	\$2,675	\$44,454	\$929	\$11	\$153,408
Additions Disposals/Adjustments			(18)	91 (209)	72 (124)	254 (5)	87	1 18	32 (269)	24	561 (607)
As at December 31, 2012	\$91,034	\$7,249	\$1,953	\$355	\$294	\$4,515	\$2,762	\$44,473	\$692	\$35	\$153,362
Additions Disposals/Adjustments		_	218 (7)	191 (23)	33 (22)	290 (15)	26			_	732 (41)
As at December 31, 2013	\$91,034	\$7,249	\$2,164	\$523	\$305	\$4,790	\$2,788	\$44,473	\$692	\$35	\$154,053
Accumulated depreciation and impairment As at December 31, 2010	\$—	\$(7,179)	\$(482)	\$(103)	\$(120)	\$(1,982)	\$(1,609)	\$(41,019)	\$	\$—	\$(52,494)
Charge for the year		(70)	(349)	(64)	(47)	(257)	(69)	(721)	(43)		(1,620)
As at December 31, 2011	\$ <u> </u>	\$(7,249)	\$(831)	\$(167)	\$(167)	\$(2,239)	\$(1,678)	\$(41,740)	\$(43)	\$ <u> </u>	\$(54,114)
Charge for the year			(345)	(94)	(43)	(302)	(85)	(719)	(46)		(1,634)
Disposals/Adjustments	—	_	_	74	24	-	_	_	90	—	188
As at December 31, 2012	\$—	\$(7,249)	\$(1,176)	\$(187)	\$(186)	\$(2,541)	\$(1,763)	\$(42,459)	\$1	\$—	\$(55,560)
Charge for the year	_	_	(332)	(74)	(34)	(327)	(88)	(56)	(1)	_	(912)
As at December 31, 2013	\$—	\$(7,249)	\$(1,508)	\$(261)	\$(220)	\$(2,868)	\$(1,851)	\$(42,515)	\$—	\$—	\$(56,472)
Net book value									(
As at December 31, 2011	\$91,034	\$—	\$1,140	\$306	\$179	\$2,027	\$997	\$2,714	\$886	\$11	\$99,294
As at December 31, 2012	\$91,034	\$—	\$777	\$168	\$108	\$1,974	\$999	\$2,014	\$693	\$35	\$97,802
As at December 31, 2013	\$91,034	\$—	\$656	\$262	\$85	\$1,922	\$937	\$1,958	\$692	\$35	\$97,581

No borrowing costs were capitalized in the years presented.

(a) <u>Bakyrchik</u>

BMV's principal asset is a 100% interest in the Bakyrchik gold project ("**Bakyrchik**"). BMV owns various licenses that entitle it to explore for and produce gold and associated minerals.

Subsoil use rights are granted in accordance with the Republic of Kazakhstan Law dated January 27, 1996 "On Subsoil and Subsoil Use" (the "Subsoil Law"). Prior to August 1999, subsoil use rights were granted on the basis of both a license and subsoil use contract. Subsoil use rights to the Bakyrchik deposits were obtained prior to August 1999 on the basis of the following licenses and contracts:

- License No. 27 dated April 7, 1995 granted for the geological study of subsoil with further exploration and production of gold. The term of License No. 27 constitutes 31 years starting from the date of its issuance and can be prolonged on application.
- License No. 737 dated October 12, 1995 granted for the production and processing of gold ore. The term of License No. 737 is 25 years and can be prolonged on application.
- Contract for Exploration and Production of Gold and Associated Minerals in East Kazakhstan region registered under No. 120 dated July 2, 1997 executed on the basis of License No. 27 and License No. 737 with the Ministry of Energy and Natural Resources.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

Contract No. 120 is valid until the expiration of the term of License No. 27 and License No. 737. Since the Licenses contain different dates of expiry, the Kazakhstan State can argue that Contract No. 120 expires in respect to License No.737 in 25 years time and in respect to License No.27 – in 31 years' time. This can be rectified by extending the relevant terms.

On June 22, 2011, the Ministry of Industry and New Technologies of the Republic of Kazakhstan ("MINT") granted Amendment No. 3 to the subsoil use Contract No. 120.

This amendment:

- revised the Company's work program commitments in accordance with License No. 737 for the development of the project for up to \$713.3 million by December 31, 2014;
- extended the Company's exploration period, and work program commitments for \$25.0 million in accordance with License No. 27 for the exploration of the project; and

On February 17, 2014, MINT granted Amendment No. 4 to the subsoil use Contract No. 120, which extended the Company's exploration period for the appraisal of reserves of sulphide ores (lower horizons) for three years until February 17, 2017.

On April 21, 2014, the subsoil use Contract No. 120 was further amended pursuant to Amendment No. 5 granted by MINT. The amendment (amongst other things):

- revised the entire contract with the purpose of maximising its compliance with the provisions of the Model Contract on combined exploration and production approved by the Government Decree of the Republic of Kazakhstan dated 25 December 2010 No. 1412; and
- partially suspended BMV's obligations under Amendment No. 3 and its work program until January 1, 2017 with execution by BMV of other obligations related, among others, to the development of project documents, in the amount of USD 12,550,000. After obtaining approval from MINT with regard to the work program, the obligations set out under Amendment No. 3 will be replaced by commitments under the new work program to be agreed with MINT under Amendment No. 5.

(b) <u>Bolshevik</u>

The Bolshevik gold project ("**Bolshevik**") lies on the Kyzyl Shear, the same geological structure that controls gold mineralization at Bakyrchik. Although limited mining of the Bolshevik deposit occurred between 1960 and 1990, the project may best be considered an advanced exploration project that is complementary to Bakyrchik. IGC, the owner of the Bolshevik deposit, is the beneficiary of a subsoil license dated May 28, 1996 for the production and processing of gold ore from the Bolshevik deposit.

13. CURRENT BORROWINGS

	December 31, 2012	Advances / Adjustments	Interest accrued	Assignment of advances	Equity conversion	December 31, 2013
Deemed Loan Advance (Turquoise						
Hill Resources Ltd.)	\$61,096	\$773	\$1,804	\$(63,673)	\$—	\$ —
Turquoise Hill Resources Ltd.	95,655		2,824	(98,479)		_
Sumeru LLP	95,642		3,118	12,293	(102, 500)	8,553
Sumeru Gold B.V.		6,950	448	149,859	(102,500)	54,757
	\$252,393	\$7,723	\$8,194	\$—	\$(205,000)	\$63,310

	December 31, 2011	Advances / Adjustments	Interest accrued	December 31, 2012
Deemed Loan Advance (Turquoise Hill Resources Ltd.) Turquoise Hill Resources Ltd.	\$59,155 64,462	\$— 28,500	\$1,941 2,693	\$61,096 95,655
Sumeru LLP	64,542	28,500	2,600	95,642
	\$188,159	\$57,000	\$7,234	\$252,393
	December 31, 2010	Advances / Adjustments	Interest accrued	December 31, 2011
Deemed Loan Advance (Turquoise Hill Resources Ltd.)	December 31, 2010 \$57,275	Advances / Adjustments	Interest accrued \$1,880	December 31, 2011 \$59,155
Deemed Loan Advance (Turquoise Hill Resources Ltd.) Turquoise Hill Resources Ltd.	December 31, 2010 \$57,275 43,271	Advances / Adjustments \$	Interest accrued \$1,880 1,738	December 31, 2011 \$59,155 64,462
Deemed Loan Advance (Turquoise Hill Resources Ltd.) Turquoise Hill Resources Ltd. Sumeru LLP	December 31, 2010 \$57,275 43,271 1,405	Advances / Adjustments \$ 19,453 61,506	Interest accrued \$1,880 1,738 1,631	December 31, 2011 \$59,155 64,462 64,542
Deemed Loan Advance (Turquoise Hill Resources Ltd.) Turquoise Hill Resources Ltd. Sumeru LLP JSC AK Altynalmas	December 31, 2010 \$57,275 43,271 1,405 36,152	Advances / Adjustments 19,453 61,506 (36,152)	Interest accrued \$1,880 1,738 1,631	December 31, 2011 \$59,155 64,462 64,542

On November 29, 2013, Turquoise Hill sold its interests in the Company to Sumeru Gold, including all advances and accrued interest. As a result of the sale, the Shareholders' Agreement entered into between Turquoise Hill, JSC, Sumeru and Medoro, whereby Turquoise Hill agreed to advance funds to the Company until the earlier of an IPO, or the Vend-In date of October 3, 2008 (the "Deemed Loan Advance") was terminated.

Immediately following the close of the sale of Turquoise Hill's interests to Sumeru Gold, the Company entered into loan agreements with both Sumeru Gold and Sumeru. These loans are unsecured, bear interest at an annual rate of LIBOR plus three per cent. (3%), and are repayable on demand and hence classified as current. The directors consider that the amortised cost of the loans approximate their fair value.

Further, Sumeru Gold and Sumeru entered into an assignment agreement whereby Sumeru Gold assigned \$12.3 million of the amounts owed by the Company to Sumeru.

On December 30, 2013, Sumeru Gold and Sumeru completed a debt reorganization whereby they each converted \$102.5 million of principal of the amounts owed to them by the Company into common shares of the Company via a subscription agreement.

14. ENVIRONMENTAL OBLIGATIONS

Reclamation and closure costs have been estimated based on the Company's interpretation of current regulatory requirements and have been measured at fair value. Fair value is determined based on the net present value of future cash expenditures upon reclamation and closure. Reclamation and closure costs are capitalized into PP&E dependent on the nature of the asset related to the obligation and amortized over the life of the related asset.

The environmental obligations relate to reclamation and closure costs of the Company's Bakyrchik and Bolshevik projects located in Kazakhstan.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

The environmental obligations at Bakyrchik are calculated as the net present value of estimated future net cash flows of the reclamation and closure costs required to satisfy the obligations, which at December 31, 2013 total \$9.2 million, discounted at rates between 3.1% and 6.7% per annum. The settlement of the obligations is anticipated to occur in periods from 2014 to 2036.

The environmental obligations at Bolshevik are calculated as the net present value of estimated future net cash flows of the reclamation and closure costs required to satisfy the obligation, which at December 31, 2013 total \$6.6 million, discounted at rates between 4.8% and 6.7% per annum. The settlement of the obligations will occur through to 2036.

Balance, December 31, 2010	\$16,423
Change in estimate	3,818
Effect of unwinding of discount	947
Balance, December 31, 2011	\$21,188
Change in estimate	(2,149)
Effect of unwinding of discount	1,027
Balance, December 31, 2012	\$20,066
Change in estimate	(5,143)
Effect of unwinding of discount	901
Balance, December 31, 2013	\$15,824

At the time of mine closures, site restoration costs will be funded from the Company's cash from operations. For the Bolshevik project, the Company is required to transfer funds to a special deposit account (Note 19).

15. INCOME TAXES

The Company and its subsidiaries in Canada are subject to Canadian federal and provincial taxes which are calculated at 25.75%, 25% and 26.5% of the estimated taxable income for the years ended December 31, 2013, 2012 and 2011, respectively. The Company and its subsidiaries in Canada had no assessable profit for the periods presented in these Consolidated Financial Information.

The subsidiaries of the Company in Kazakhstan are subject to Kazakhstan corporate profit tax which is calculated at 20.0% of the estimated assessable profit for the years ended December 31, 2013, 2012 and 2011. The subsidiaries in Kazakhstan had no assessable profit for the periods presented in these Consolidated Financial Information.

Taxation for the relevant jurisdictions is calculated at the rates prevailing in each of those jurisdictions respectively.

The components of income tax expense of the Company for each of the years presented is as follows:

	Year E	Year Ended December 31,			
	2013	2012	2011		
Current income tax	\$—	\$—	\$—		
Deferred income tax recovery	\$	\$—	\$14		
Income tax recovery	<u> </u>	\$ —	\$14		

A reconciliation of the effective tax rate of the Company for each of the years presented is as follows:

	Year Ended December 31,					
	2013	2012	2011			
Loss before income tax	\$23,680	\$45,332	\$72,583			
Statutory tax rate	25.75%	25.00%	26.50%			
Expected income tax recovery	6,098	11,333	19,234			
Deduct:						
Lower tax rate in foreign jurisdictions	(1,514)	(1,834)	(4,219)			
Effect of income not taxable	431	359	508			
Impact of tax rate change	362		(30)			
Effect of tax losses and/or deductible temporary						
differences not recognized	(5,377)	(9,858)	(15,479)			
Income tax recovery	\$ —	\$ —	\$14			

The applicable federal and provincial statutory income tax rate used for the 2013, 2012, and 2011 reconciliations above is the corporate tax rate payable by corporate entities in the province of British Columbia on taxable profits under tax law in that jurisdiction. The rate increased on April 1, 2013 from 25% to 26% due to an increase in the BC income tax rate of 1%.

The Company has the following deductible temporary differences for which no deferred tax assets have been recognised:

	December 31,					
	2013	2012	2011			
Tax loss carry-forwards	\$129,219	\$157,487	\$120,278			
Mineral properties, plant and equipment	17,469	19,638	22,998			
Supplies inventory	9,558	11,109	11,274			
Site restoration and reclamation liability	17,109	19,876	21,188			
Compound interest	34,939	22,963	13,933			
Other assets	13,531	18,772	20,762			
Deductible temporary differences not recognized	\$221,825	\$249,845	\$210,433			

Deferred tax assets have not been recognised in respect of these items because of the uncertainty that future taxable profit will be available against which the Company can utilize the benefits therefrom.

As at December 31, 2013, taxable temporary differences of 32.8 million (2012 – 21.6 million; 2011 – 13.1 million) associated with investments in subsidiaries have not been recognised as the Company is able to control the timing of the reversal of these differences which are not expected to reverse in the foreseeable future.

Recognised deferred tax liabilities are attributable to the following:

December 31,						
2013	2012	2011				
(12,024)	(12,024)	(12,024)				
\$(12,024)	\$(12,024)	\$(12,024)				
	2013 (12,024) \$(12,024)	2013 2012 (12,024) (12,024) \$(12,024) \$(12,024)				

Movement in deferred income tax liabilities during the years presented is as follows:

	Property, plant and equipment	Mineral Properties	Total
As at December 31, 2010	\$(14)	\$(12,024)	\$(12,038)
Recognized in profit or loss	14		14
As at December 31, 2011		(12,024)	(12,024)
Recognized in profit or loss			
As at December 31, 2012		(12,024)	(12,024)
Recognized in profit or loss			
As at December 31, 2013	\$	\$(12,024)	\$(12,024)

At the end of the reporting period, the Company has unused tax losses which are available for offset against future profits as follows:

NON-CAPITAL LOSSES Canadian Dollars '000s Cdn\$ 23,034 22,585 2027 Kazakhstan Tenge '000s KZT 14,462,472 97,693 2012 As at December 31, 2011 \$120,278 Canadian Dollars '000s Cdn\$ 32,833 32,935 2027 Kazakhstan Tenge '000s Cdn\$ 32,833 32,935 2027 Canadian Dollars '000s KZT 18,774,982 124,552 2013 As at December 31, 2012 \$157,487 \$157,487 Canadian Dollars '000s Cdn\$ 27,613 25,820 2026 Kazakhstan Tenge '000s KZT 16,217,733 103,399 2014	y dates
Canadian Dollars '000s Cdn\$ 23,034 22,585 2027 Kazakhstan Tenge '000s KZT 14,462,472 97,693 2012 As at December 31, 2011 \$120,278 \$120,278 \$120,278 Canadian Dollars '000s Cdn\$ 32,833 32,935 2027 Kazakhstan Tenge '000s KZT 18,774,982 124,552 2013 As at December 31, 2012 \$157,487 \$157,487 Canadian Dollars '000s Cdn\$ 27,613 25,820 2026 Kazakhstan Tenge '000s KZT 16,217,733 103,399 2014	
Kazakhstan Tenge '000s KZT 14,462,472 97,693 2012 As at December 31, 2011 \$120,278 \$120,278 2027 Canadian Dollars '000s Cdn\$ 32,833 32,935 2027 Kazakhstan Tenge '000s KZT 18,774,982 124,552 2013 As at December 31, 2012 \$157,487 \$157,487 Canadian Dollars '000s Cdn\$ 27,613 25,820 2026 Kazakhstan Tenge '000s KZT 16,217,733 103,399 2014	to 2031
As at December 31, 2011 \$120,278 Canadian Dollars '000s Cdn\$ 32,833 32,935 2027 Kazakhstan Tenge '000s KZT 18,774,982 124,552 2013 As at December 31, 2012 \$157,487 \$157,487 Canadian Dollars '000s Cdn\$ 27,613 25,820 2026 Kazakhstan Tenge '000s KZT 16,217,733 103,399 2014	to 2021
Canadian Dollars '000s Cdn\$ 32,833 32,935 2027 Kazakhstan Tenge '000s KZT 18,774,982 124,552 2013 As at December 31, 2012 \$157,487 \$157,487 2026 Canadian Dollars '000s Cdn\$ 27,613 25,820 2026 Kazakhstan Tenge '000s KZT 16,217,733 103,399 2014	
Kazakhstan Tenge '000s KZT 18,774,982 124,552 2013 As at December 31, 2012 \$157,487 \$157,487 2026 Canadian Dollars '000s Cdn\$ 27,613 25,820 2026 Kazakhstan Tenge '000s KZT 16,217,733 103,399 2014	to 2032
As at December 31, 2012 \$157,487 Canadian Dollars `000s Cdn\$ 27,613 25,820 2026 Kazakhstan Tenge `000s KZT 16,217,733 103,399 2014	to 2022
Canadian Dollars'000s Cdn\$27,61325,8202026Kazakhstan Tenge'000s KZT16,217,733103,3992014	
Kazakhstan Tenge '000s KZT 16,217,733 103,399 2014	to 2033
	to 2023
As at December 31, 2013 \$129,219	

The use of the Canadian non-capital losses may be limited by a change in the Company ownership during the year ended December 31, 2013.

16. RELATED PARTY TRANSACTIONS

(a) Related party expenses

The Company incurred the following expenses with its shareholders, I2MS.NET ("I2MS"), Global Mining Management ("GMM") and JSC Altynalmas, companies related by way of directors or shareholders in common. As of November 29, 2013, due to the aforementioned sale of Turquoise Hill's interest in the Company, I2MS and GMM are no longer related parties as at December 31, 2013.

	Year Ended December 31,					
	2013	2012	2011			
Corporate administration	\$365	\$787	\$1,163			
Salaries and benefits		196	\$269			
Feasibility studies	2,270	796	\$—			
Interest (Note 8)	8,196	7,234	5,249			
Total related party expenses	\$10,831	\$9,013	\$6,681			

The corporate administration and salaries and benefits have been recorded on a cost recovery basis and the interest expenses have been recorded on the contractual amount basis.

The breakdown of the expenses between the different related parties is as follows:

	Year Ended December 31,					
	2013	2012	2011			
GMM	\$38	\$763	\$1,156			
I2MS	76	135	60			
Turquoise Hill	4,880	4,719	3,834			
Sumeru	3,118	2,600	444			
Sumeru Gold	449					
JSC Altynalmas	2,270	796	1,187			
Total related party expenses	\$10,831	\$9,013	\$6,681			

(b) Related party assets

The trade and other receivables of the Company include the following amounts due from related parties:

	December 31,					
	2013	2012	2011			
GMM	\$31	\$140	\$140			
Total assets due from related parties	\$31	\$140	\$140			

The amounts outstanding are unsecured and will be settled in cash. No guarantees have been given or received. No expense has been recognised in the year for bad or doubtful debts in respect of the amounts due from related parties.

(c) Related party liabilities

In addition to the amounts payable to the Company's shareholders (Note 13), the accounts payable and accrued liabilities of the Company include the following amounts due to related parties:

	December 31,					
	2013	2012	2011			
GMM	\$	\$43	\$50			
Turquoise Hill	2	2,329	2,410			
I2MS	6	2	17			
JSC Altynalmas	521	215				
Total liabilities owed to related parties	\$529	\$2,589	\$2,477			

(d) Compensation of key management personnel

The Company considers key management personnel to be those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly.

	Year ended December 31,					
	2013	2012	2011			
Salaries and short-term benefits	\$727	\$1,846	\$2,757			
Termination benefits	<u> </u>	\$3,505	\$			
Total compensation of key management personnel	\$727	\$5,351	\$2,757			

No share based compensation or other long-term benefits were paid to or recorded for key management personnel during the years ended December 31, 2013, 2012, and 2011.

17. STATED CAPITAL ACCOUNT

The Company's authorised share capital consists of an unlimited number of common shares and an unlimited number of preferred shares. As at December 31, 2013, the Company had 240,410,960 common shares outstanding (as at December 31, 2012 and December 31, 2011: 100,000,000 common shares) and no preferred shares outstanding (as at December 31, 2012 and December 31, 2012 and December 31, 2011: nil preferred shares).

On December 30, 2013, the Company issued 70,205,480 common shares to Sumeru Gold and 70,205,480 common shares to Sumeru with respect to a debt reorganization, whereby each shareholder converted \$102.5 million of principal of the amounts owed to them by the Company via a subscription agreement at a price of US\$1.46 per share.

18. ACCUMULATED DEFICIT AND DIVIDENDS

The Company has incurred losses since inception and at December 31, 2013, the Company has accumulated a deficit of \$446.1 million (December 31, 2012: \$422.5 million, December 31, 2011: \$377.1 million). No dividends have been paid or declared by the Company since inception.

19. COMMITMENTS AND CONTINGENCIES

(a) Social obligations

Bakyrchik Project

As part of the terms of BMV's Sub-Soil Use Contract No. 120 at Bakyrchik, over the life of the project, BMV is committed to spend at least \$8.4 million on professional training of Kazakh personnel employed at the Bakyrchik project. As of December 31, 2013, BMV has spent \$0.2 million of the required amount, leaving a future commitment of \$8.2 million.

Additionally, the Company has an agreement with the East-Kazakhstan Oblast Administration (local Kazakhstan government) where the Company agreed to fund, manage and operate a boiler plant, sewage treatment plant, water supply plant, and electrical infrastructure and distribute power, generate and distribute steam, and provide potable water and sewage services to the residents of Auezov (the town where Bakyrchik is located, population of approximately 3,500 persons) until the end of the project.

During 2011, the Company entered into an agreement with the East-Kazakhstan Oblast Administration to pay for the design, construction, and commissioning of a kindergarten with a capacity for 140 children in the village of Auezov. The total amount committed is not to exceed \$1.2 million. Construction has been deferred until 2014 at the earliest.

During the exploration and (or) production period, BMV is obliged to finance tuition, skills upgrade and retraining of workers who are citizens of the Republic of Kazakhstan and are involved in the execution of the contract, in the amount of not less than 0.1 % of the annual investment volume set out by the work program

Bolshevik Project

As part of the terms of IGC's Sub-Soil Use Agreement at Bolshevik, IGC has an obligation to spend not less than 10% of annual profits from operations in the social development of the region. At December 31, 2013, IGC's operations were in the development phase and no profit has been generated since inception.

(b) *Contractual obligations*

IGC has a land lease agreement with the Akimat of Ust-Kamenogorsk (government) for the land on which IGC's hydro-metallurgical plant is located. The lease expires in October 2022. For the period ended December 31, 2013, the annual lease amount is \$0.01 million, however the cost for future years is unknown as the payment amount is revised annually for inflation and foreign exchange fluctuations.

(c) *Liquidation fund*

According to the Sub-Soil Use Agreement for the Bolshevik project, the Company has an obligation to establish a liquidation fund by making an annual transfer of cash to a special bank account of an amount not less than 0.5% of operating expenses during the extraction period to meet provisions for future site restoration related to decommissioning. The Company has not made any contributions to this liquidation fund as at December 31, 2013, as it has not commenced extraction activities.

(d) <u>Minimum work programs</u>

Within its respective Sub-Soil Use Agreements, the Company has minimum work obligations at both Bakyrchik and Bolshevik projects. Periodically, work programs are reviewed and approved by

Kazakhstan's MINT. Non-compliance with these programs may, in certain circumstances, lead to the revocation of the Sub-Soil Use Agreements.

Bakyrchik Project

On June 22, 2011, MINT approved Amendment No. 3 to BMV's Sub-Soil Use Contract No. 120. The Amendment revises BMV work program commitments as follows:

- in accordance with License No. 737, BMV is required to invest no less than \$713.3 million over the period 2010 to 2014 on construction, exploration, mining and processing at the Bakyrchik project, and a minimum of \$0.3 million on the social needs of the East Kazakhstan region. Of this, \$103.8 million has been spent to December 31, 2013, with \$609.8 million remaining to be spent by December 2014. Due to changes in the development plans of the Kyzyl Gold Project, the Company is currently negotiating a further amendment to the sub-soil use contract with MINT;
- in accordance with License No. 27, BMV was committed to spend \$25.0 million by April 6, 2013 on geological and exploration works. The Company is negotiating a further amendment to the sub-soil use contract with MINT on conversion of certain areas to the mining license No. 737, therefore the exploration period, although passed, has not expired, and the license has not been terminated. Of the required spend, \$6.7 million has been incurred to December 31, 2013, with \$18.3 million remaining to be spent.

In accordance with Contract No. 17, BMV was committed to spend \$6.2 million by September 4, 2013 on construction and/or operation of the underground facilities for storage and burial ground disposal of industrial waste (tailings storage and arsenic burial site). Of this \$3.5 million was spent to December 31, 2013, leaving \$2.7 million to be spent. The existing Amendment #1 to Contract No. 17, which is currently in effect, was entered into taking into consideration the operation of the Company's now-decommissioned demonstration roaster plant. BMV is currently seeking an amendment to the contract to correspond with the planned construction project once the project is approved and validated.

In accordance with Contract No. 1316, BMV is committed to spend \$3.4 million on the exploration and production of underground water at Kyzyltu area in East Kazakhstan Region by January 11, 2032. Of this, \$1.7 million has been spent to December 31, 2013, leaving \$1.7 million to be spent by January 11, 2032.

On April 21, 2014, MINT approved Amendment No. 5 to BMV's subsoil use Contract No. 120, pursuant to which BMV's obligations under Amendment No. 3 and its work program were partially suspended until January 1, 2017, with execution by BMV of other obligations related, among others, to the development of project documents, in the amount of USD 12,550,000. After obtaining MINT approval with regard to the work program, the obligations set out in the work program under Amendment No. 3 will be replaced by commitments under a new work program.

Bolshevik Project

Under the terms of the existing work program at IGC's Bolshevik Project, the Company is committed to spend a total amount of \$145.3 million for the period 2008 to 2016 on both capital investments and operational expenditures. Of this, the Company has spent \$4.5 million to date, leaving \$140.8 million to be spent by May 2016.

However, following the completion of a Kazakh compliant feasibility study completed in May 2011, which highlighted a significant reduction in GKZ resources, the Company has engaged with the government to amend the work program to allow further geological evaluation of the license area, and for ore mined from the Bolshevik license to be toll treated at the planned Bakyrchik processing facility.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

(e) Legal matters

The Company is from time to time involved in various claims, legal proceedings and complaints arising in the ordinary course of business. The Company does not believe that adverse decisions in any pending or threatened proceedings related to any matter, or any amount which it may be required to pay by reason thereof, will have a material effect on the financial conditions or future results of operations of the Company.

20. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company's financial assets and liabilities consist of cash, restricted cash, trade and other receivables, accounts payable and accrued liabilities and current borrowings.

For trade and other receivables, and accounts payable and accrued liabilities, the carrying value is considered to be a reasonable approximation of their fair values due to the short-term nature of these instruments.

The current borrowings is a reasonable approximation of fair value as the amount is current and this is the amount that is required to settle the liability, which includes compounded interest.

Cash and restricted cash are carried at fair value, and are classified as level 1, with any unrealized gains or losses recorded on the Statement of Comprehensive Loss. The Company does not currently hold any available for sale or held to maturity instruments.

The Company manages its exposure to financial risks, including credit, liquidity, currency and interest risks. The following describes the type of risks that the Company is exposed to and its objectives and policies for managing those risk exposures.

(a) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's cash balance and trade and other receivables. The carrying amount of financial assets represents the maximum credit exposure.

	December 31,					
	2013	2012	2011			
Cash	\$1,101	\$11,156	\$771			
Trade and other receivables	380	2,502	1,002			
Restricted cash	26	103	246			
	\$1,507	\$13,761	\$2,019			

As the amounts are on deposit with large international financial institutions, and receivable from federal tax authorities, the Company does not believe any steps are necessary to mitigate this risk. The significant decline in trade and other receivables is due to the receipt of tax receivables from federal tax authorities and also due to reduced expenditures attracting these same goods and services taxes.

(b) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. The Company's approach to managing liquidity is through its planning and budgeting process which determines the periodic advances required from its shareholders in order to ensure it will have sufficient cash flows to fund its exploration and development activities. The Company does not currently have the resources available to repay its borrowings to shareholders if the shareholders demanded payment in the near term.

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

The Company's financial liabilities consist of accounts payable and accrued liabilities, which primarily arise as a result of its development and exploration activities on its mineral property interests and costs of administration. Accounts payable and accrued liabilities are paid in the normal course of business typically according to their terms (30 to 60 days) and do not bear interest. The Company's financial liabilities also include current borrowings (Note 13).

Contractual	obligated	cash	flow	requirements	as	at	December	31,	2013	are	as	follows:
-------------	-----------	------	------	--------------	----	----	----------	-----	------	-----	----	----------

	Total US\$'000	< 1 year US\$'000	1-2 years US\$'000	2-3 years US\$'000	3-4 years US\$'000	4-5 years US\$'000	Thereafter US\$'000
Trade and other payables	\$2,640	\$2,640	\$—	\$—	\$—	\$—	\$—
Current borrowings	63,310	63,310	_		_	_	
Decommissioning liabilities	41,837	2,335	_	—	7,764	_	31,738
Operating leases	78	24	7	7	7	7	26
Purchase commitments	56	56	_	—	_	_	_
Bakyrchik social obligations	1,237	1,237	_	_	_	_	_
Bakyrchik Minimum Work Program - License No.							
737	609,751	609,751	_	_	_	_	
Bakyrchik Minimum Work Program - License No. 27	18,310	18,310	_	—	_		_
Bakyrchik Minimum Work Program – Contract No.							
17	2,660	2,660	—	—	_	_	—
Bakyrchik Minimum Work Program- Contract No.							
1316	1,736	278	304	266	131	119	638
Bakyrchik Minimum Work Program – Contract No.	50						50
303	58						58
Bolshevik Minimum Work Program	140,789	102,049	20,210	18,530	-	_	-
Training commitments on Work Programs	8,239	8,210	14	15	—	_	_
Total contractual obligated cash flows requirements	\$890,701	\$810,860	\$20,535	\$18,818	\$7,902	\$126	\$32,460

Note that the minimum work program commitments include amounts not expended in prior years. These amounts have been included as an obligated commitment in the less than 1 year category.

(c) Currency risk

The Company operates on an international basis and therefore, foreign exchange risk exposures arise from transactions denominated in foreign currencies. Although the functional and presentation currency of the Company is the U.S. dollar, and the majority of contracts are negotiated in U.S. dollars, a significant amount of the Company's costs are transacted in Kazakh Tenge. The Company does not enter into any derivative instruments to mitigate its exposure to foreign currency fluctuations.

The Company is exposed to currency risk through the following financial assets and liabilities denominated in Kazakh Tenge (shown at their U.S. dollar equivalent):

	December 31,			
	2013	2012	2011	
Cash	\$156	\$409	\$69	
Trade and other receivables	370	2,494	792	
Accounts payable and accrued liabilities	(1,189)	(998)	(1,082)	
	\$(663)	\$1,905	\$(221)	

Based on the above net exposures at December 31, 2013, a 30% depreciation or appreciation of the Kazakh Tenge against the U.S. dollar would result in a \$0.2 million increase or decrease in the Company's net loss for the year ended December 31, 2013 (year ended December 31, 2012: \$0.57 million; year ended December 31, 2011: \$0.07 million).

Notes to the Consolidated Financial Information (Stated in thousands of U.S. dollars, except as otherwise noted)

(d) Interest rate risk

The Company is exposed to interest rate risk with respect to the variable rate of interest incurred on the current amounts payable to shareholders (Note 15). Based on the amount owing as at December 31, 2013, and assuming that all other variables remain constant, a 1% change in the LIBOR rate would result in an increase/decrease of \$0.6 million in the interest accrued by the Company per annum. The Company does not mitigate the balance of this risk.

(e) Price risk

The Company is exposed to price risk with respect to commodity prices. The Company closely monitors commodity prices to determine the appropriate course of action to be taken. The Company does not have any hedging or other commodity-based risks respecting its operations.

21. MANAGEMENT OF CAPITAL

The Company's objectives of capital management are to safeguard the entity's ability to continue as a going concern and to continue the development and exploration of its mineral properties and support any expansionary plans.

The Company currently depends on capital from its shareholders and will continue to do so while it evaluates financing alternatives. The capital of the Company consists of the items included in shareholders' deficiency and debt obligations net of cash. The Company manages the capital structure and makes adjustments in light of changes in economic conditions and the risk characteristics of the Company's assets.

To effectively manage the entity's capital requirements, the Company has in place a planning and budgeting process to help determine the funds required to ensure the Company has the appropriate liquidity to meet its development and growth objectives. Quantitative disclosures are included throughout these consolidated financial information.

22. SUPPLEMENTAL CASH FLOW INFORMATION

The following non-cash transactions were made during the reporting periods:

	Year ended December 31,			
	2013	2012	2011	
Common shares issued on conversion of shareholder debt	\$205,000	\$—	\$—	

During the years ended December 31, 2013, 2012 and 2011, no interest or income taxes were paid.

23. SUBSEQUENT EVENTS

Other than the licence status update disclosed in notes 12 and 19 respectively, there were no other subsequent events.

PART 5

UNAUDITED PRO FORMA STATEMENT OF NET ASSETS

Pro forma financial information

The unaudited *pro forma* statement of net assets of the Enlarged Group set out below has been prepared on the basis discussed below, and in accordance with the requirements of item 20.2 of Annex I and items 1 to 6 of Annex II of the Prospectus Directive, to illustrate the effect of the acquisition of Altynalmas on the Group's net assets as if it had occurred as at 31 December 2013. It has been prepared for illustrative purposes only and, because of its nature, addresses a hypothetical situation and therefore does not represent the Group's actual financial position or results as at such date. Future results of operations may differ materially from those presented below due to various factors.

Basis of preparation

The *pro forma* statement is based on the net assets of the Group as at 31 December 2013, which have been extracted without material adjustment from Polymetal's published audited annual accounts as at 31 December 2013. The net assets of Altynalmas as at 31 December 2013 have been extracted without material adjustment from the audited balance sheet of Altynalmas as restated under the Group's accounting policies as at 31 December 2013, as set out in Part 4 of this Document. The other adjustments are discussed in the notes below. The accounting policies used in the preparation of the unaudited *pro forma* statement are consistent with those used by Polymetal in its audited consolidated financial statements as at and for the year ended 31 December 2013.

			Adjustments			
	Notes	Polymetal net assets as at 31 December 2013 US\$000	Altynalmas net assets as at 31 December 2013 US\$000	Acquisition and Consideration US\$000 1	Consolidation adjustments US\$000 2	Enlarged Group Pro forma net assets as at 31 December 2013 US\$000 3
ASSETS						
Property, plant and equipment Goodwill		2,094,742 30,889	97,581		685,369	2,877,692 30,889
Investment in Altynalmas Investments in associates		15,651		618,500	(618,500)	15,651
Non-current loans and receivables		22.853	26	_		22.879
Deferred tax asset		88,484	_	_	_	88,484
Non-current inventories		53,142				53,142
Total non-current assets		2,305,761	97,607	618,500	66,869	3,088,737
Current assets						
Current inventories		727,144	1,234	—		728,378
Current VAT receivable		85,135	290			85,135
Prepayments to suppliers		44,520	380			44,906
Income tax prepaid		8 433				8 433
Cash and cash equivalents		65,567	1,101	_	_	66,668
Total current assets		948,975	3,086			952,061
Total assets		3,254,736	100,693	618,500	66,869	4,040,798
LIABILITIES Current liabilities Accounts payable and accrued liabilities Share repurchase obligation		(117,974)	(2,640)	(300,000)		(120,614) (300,000
Current borrowings		(81,331)	(63,310)	_	63,310	(81,331)
Income tax payable		(37,174)) —	—		(37,174)
Other taxes payable Environmental obligations		(56,885) (212)	· —			(56,885) (212)
Total current liabilities		(293,576)	(65,950)	(300,000)	63,310	(596,216)
Non-current liabilities						
Non-current borrowings Contingent consideration		(1,029,813)	—	(318,500)	_	(1,339,813)
liability		(15,523)				(15,523)
Deferred tax liability		(63,085)	(12,024)	—	(137,074)	(212,183)
Environmental obligations Other non-current liabilities		(65,152) (97)	(15,824)			(80,976) (97)
Total non-current liabilities		(1,173,670)	(27,848)	(318,500)	(137,074)	(1,662,294)
Total liabilities		(1,467,246)	(93,798)	(618,500)	(73,764)	(2,353,308)
NET ASSETS		1,787,490	6,895		(6,895)	1,787,490

Notes:

⁽¹⁾ The aggregate consideration for the acquisition of the Altynalmas SPA Shares, the Altynalmas KASE Shares and the Sumeru Shareholder Loans comprises an Initial Consideration of US\$318.5 million in cash (to be funded from non-current borrowings) and the issue by Polymetal of New Polymetal Shares with an aggregate value of US\$300 million. The US\$300 million adjustment to recognise a share purchase obligation reflects the Sumeru Put Option over the Consideration Shares, which grants Sumeru the right to sell the Consideration Shares back to Polymetal for US\$300 million during the one month period immediately following

the end of the one year period commencing on the Completion Date. No discounting has been reflected in valuing the total consideration.

The Additional Consideration comprises contingent deferred cash payments payable to Sumeru Gold. The amount of the Additional Consideration is calculated as at each of the first five (or in certain circumstances seven) anniversaries of the Completion Date and is intended to compensate the Seller for any negative difference between the market performance of the Consideration Shares and the gold price in the five-year (or, in certain circumstances, seven-year) period following Completion, subject to a cap. The Additional Consideration is not payable in any event until certain further conditions have been satisfied. Total Additional Consideration is capped at US\$450 million in the first five years after Completion and US\$500 million cap after years six or seven after Completion.

As the amount of any Additional Consideration is subject to significant uncertainty no adjustment has been made to the *pro forma* statement of net assets.

(2) The preliminary purchase price allocation to assets and liabilities assumed is as follows:

Adjustment in respect of excess purchase consideration Cash Initial Consideration Consideration Shares Total Consideration	US\$000 318,500 300,000 618,500
Net assets of Altynalmas as at 31 December 2013 Altynalmas debt to shareholders assigned to Polymetal	(6,895) (63,310)
Purchase consideration in excess of net assets	548,295
Excess purchase consideration recognised as mineral rights within property, plant and equipment Deferred tax gross up to mineral rights within property, plant and equipment	US\$000 548,295 137,074
Total adjustment to mineral rights within property, plant and equipment recognised on acquisition	685,369

The total adjustment to mineral rights recognised on acquisition is derived by grossing up the excess purchased consideration recognised as mineral rights with deferred tax using the Kazakhstan corporate tax rate of 20.0%.

The US\$685.4 million adjustment has been allocated to property, plant and equipment rather than goodwill as typically, on an acquisition of a mining asset, the company is paying for the attributable mineral reserves and resources of the target. As such, if there is a difference between the purchase price and the attributable net assets of the acquired company this would normally be allocated to the mineral rights of the business.

No account has been taken of any other fair value adjustments which may arise or the consequential impact of amortisation.

(3) No adjustment has been made to the unaudited *pro forma* statement of net assets to reflect the trading results of Polymetal or Altynalmas since the balance sheet dates shown.

Deloitte LLP 2 New Street Square London EC4A 3BZ

The Board of Directors on behalf of Polymetal International plc Ogier House The Esplanade St. Helier JE4 9WG Jersey

Morgan Stanley & Co. International plc 25 Cabot Square Canary Wharf London E14 4QA

14 July 2014

Dear Sirs,

Polymetal International plc (the "Company")

We report on the *pro forma* financial information (the "**Pro forma financial information**") set out in Part 5 of the Class 1 circular dated 14 July 2014 (the "**Investment Circular**"), which has been prepared on the basis described, for illustrative purposes only, to provide information about how the transaction might have affected the financial information presented on the basis of the accounting policies adopted by the Company in preparing the financial statements for the year ended 31 December 2013. This report is required by the Commission Regulation (EC) No. 809/2004 (the "**Prospectus Directive Regulation**") as applied by Listing Rule 13.3.3R and is given for the purpose of complying with that requirement and for no other purpose.

Responsibilities

It is the responsibility of the directors of the Company (the "**Directors**") to prepare the Pro forma financial information in accordance with Annex II items 1 to 6 of the Prospectus Directive Regulation as applied by Listing Rule 13.3.3R.

It is our responsibility to form an opinion as to the proper compilation of the Pro forma financial information and to report that opinion to you in accordance with Annex II item 7 of the Prospectus Directive Regulation as applied by Listing Rule 13.3.3R.

Save for any responsibility which we may have to those persons to whom this report is expressly addressed and which we may have to Ordinary shareholders as a result of the inclusion of this report in the Investment Circular, to the fullest extent permitted by law we do not assume any responsibility and will not accept any liability to any other person for any loss suffered by any such other person as a result of, arising out of, or in connection with this report or our statement, required by and given solely for the purposes of complying with Listing Rule 13.4.1R (6), consenting to its inclusion in the Investment Circular.

In providing this opinion we are not updating or refreshing any reports or opinions previously made by us on any financial information used in the compilation of the Pro forma financial information, nor do we accept responsibility for such reports or opinions beyond that owed to those to whom those reports or opinions were addressed by us at the dates of their issue.

Basis of Opinion

We conducted our work in accordance with the Standards for Investment Reporting issued by the Auditing Practices Board in the United Kingdom. The work that we performed for the purpose of making this report, which involved no independent examination of any of the underlying financial information, consisted primarily of comparing the unadjusted financial information with the source documents, considering the evidence supporting the adjustments and discussing the Pro forma financial information with the Directors.

We planned and performed our work so as to obtain the information and explanations we considered necessary in order to provide us with reasonable assurance that the Pro forma financial information

has been properly compiled on the basis stated and that such basis is consistent with the accounting policies of the Company.

Our work has not been carried out in accordance with auditing or other standards and practices generally accepted in jurisdictions outside the United Kingdom, including the United States of America, and accordingly should not be relied upon as if it had been carried out in accordance with those standards or practices.

Opinion

In our opinion:

- (a) the Pro forma financial information has been properly compiled on the basis stated; and
- (b) such basis is consistent with the accounting policies of the Company.

Yours faithfully

Deloitte LLP Chartered Accountants

Deloitte LLP is a limited liability partnership registered in England and Wales with registered number OC303675 and its registered office at 2 New Street Square, London EC4A 3BZ, United Kingdom. Deloitte LLP is the United Kingdom member firm of Deloitte Touche Tohmatsu Limited ("DTTL"), a UK private company limited by guarantee, whose member firms are legally separate and independent entities. Please see <u>www.deloitte.co.uk/about</u> for a detailed description of the legal structure of DTTL and its member firms.

COMPETENT PERSON'S REPORT FOR ALTYNALMAS

LR 13.4.6(1) LR 13.4.6(2)



Rock solid resources. Proven advice.™

POLYMETAL INTERNATIONAL PLC

COMPETENT PERSON'S REPORT KYZYL PROJECT, KAZAKHSTAN

July 14, 2014

RPA Inc. 55 University Ave. Suite 501 | Toronto, ON, Canada M5J 2H7 | T + 1 (416) 947 0907 www.rpacan.com



Report Control Form

Document Title	Competent Person's Report on the Kyzyl Project, Kazakhstan				
Client Name & Address	Polymetal International plc Ogier House The Esplanade St. Helier, Jersey JE4 9WG Channel Islands				
Document Reference	Project #2310	Status Issue N	& o.	FINAL Version	
Issue Date	July 14, 2014				
Lead Author	Ian Blakley, P.Geo. Jason Cox, P.Eng.		(Signed) (Signed))	
Peer Reviewer	Torben Jensen, P.Eng.		(Signed)		
Project Manager Approval	Deborah McCombe, P.Geo.		(Signed)		
Project Director Approval	Graham G. Clow, F	(Signed)			
Report Distribution	Name			No. of Copies	6
-					

Name	No. of Copies
Client	
RPA Filing	1 (project box)

RPA UK Ltd. One Fetter Lane, Suite 413 London, UK EC4A 1BR Tel: +44(0)203 440 5775 Fax: +44(0)203 440 5401 <u>mining@rpacan.com</u>

This document has been prepared in accordance with the scope of RPA's appointment with its client and is subject to the terms of that appointment. It is addressed to and for the sole and confidential use and reliance of the client and its shareholders. RPA accepts no liability for any use of this document other than by the client and its shareholders and only for the purposes for which it was prepared and provided. No person other than the client and its shareholders may copy (in whole or in part) use or rely on the contents of this document, without the prior written permission of RPA. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The contents of this document do not provide legal or tax advice or opinion.



TABLE OF CONTENTS

PAGE

1.	EX	ECUTIVE SUMMARY	1-1
	1.1.	Introduction	1-1
	1.2.	Cautionary Statements	1-2
	1.3.	Bakyrchik Mine	1-5
	1.4.	Bolshevik Deposit	1-21
	1.5.	Exploration Properties	1-23
2.	BA	KYRCHIK MINE	2-1
	2.1.	Introduction	2-1
	2.2.	Location, Access, Climate, Infrastructure and Physiography	2-2
	2.3.	Land Tenure	2-5
	2.4.	History	2-11
	2.5.	Geological Setting and Mineralization	2-13
	2.6.	Exploration	2-22
	2.7.	Mineral Resource Estimate	2-30
	2.8.	Mining	2-45
	2.9.	Ore Reserve Estimate	2-60
	2.10.	Life of Mine Plan	2-64
	2.11.	Mineral Processing and Metallurgical Testing	2-72
	2.12.	Project Infrastructure	2-85
	2.13.	Environmental Studies, Permitting, and Social or Community Impact.	2-88
	2.14.	Manpower	2-98
	2.15.	Capital and Operating Costs	2-100
	2.16.	Economic Assumptions	2-108
	2.17.	Risks and Opportunities	2-110
3.	BC	DLSHEVIK DEPOSIT	3-1
	3.1.	Introduction	3-1
	3.2.	Location, Access, Climate, Infrastructure and Physiography	3-2
	3.3.	Land Tenure	3-4
	3.4.	History	3-7
	3.5.	Geological Setting and Mineralization	3-12
	3.6.	Exploration	3-17
	3.7.	Mineral Processing and Metallurgical Testing	3-32
	3.8.	Mineral Resource Estimate	3-34
	3.9.	Environmental Studies, Permitting, and Social or Community Impact.	3-34
	3.10.	Conclusions and Recommendations	3-39
4.	EX	PLORATION PROPERTIES	4-1
	4.1.	Introduction	4-1
	4.2.	Location, Access, Climate, Infrastructure and Physiography	4-2
	4.3.	Ownership and Land Tenure	4-2
	4.4.	History	4-4
	4.5.	Geological Setting and Mineralization	4-4
	4.6.	Exploration	4-6



	4.7.	GKZ Mineral Resource and ore Reserve Estimates	4-12
	4.8.	Exploration Discussion	4-14
5.	RE	FERENCES	5-1
	5.1.	Regulatory and Legal	5-1
	5.2.	Previous Reports	5-1
	5.3.	Geology and Exploration	5-1
	5.4.	Mining	5-3
	5.5.	Processing	5-3
	5.6.	Environmental Studies	5-4
	5.7.	Bolshevik Deposit	5-4
6.	AP	PENDIX 1	6-1
	6.1.	List of Abbreviations	6-1
7.	AP	PENDIX 2	7-1
	7.1.	RPA Qualifications and Competent Persons	7-1
8.	AP	PENDIX 3	8-1
	8.1.	Glossary	8-1

LIST OF TABLES

PAGE

Table 1-1	Bakyrchik Mine Ore Reserves Summary	1-9
Table 1-2	Bakyrchik Mine Mineral Resource Summary Exclusive of Ore Reserves	1-10
Table 1-3	Capital Cost Summary	1-17
Table 1-4	Sustaining Capital Costs	1-17
Table 1-5	Operating Unit Costs	1-18
Table 1-6	Summary GKZ Results For Sites Within Licence No. 27 Exploration Are	a as of
June 1, 20 ⁻	13	1-26
Table 2-1	Bakyrchik Deposit Licence Area	2-8
Table 2-2	Kyzyl Deposit Lithologies	2-15
Table 2-3	Summary of Digital Drill Hole Database (July 31, 2013)	2-24
Table 2-4	Elements that May Impact Environment or Mineral Processing	2-27
Table 2-5	Bakyrchik Mine Mineral Resource Summary Exclusive of Ore Reserves	2-31
Table 2-6	Bakyrchik Mine Mineral Resource Summary Inclusive of Ore Reserves .	2-32
Table 2-7	Bakyrchik Mine Mineral Resource Summary Exclusive of Ore Reserves	Listed
by Area		2-33
Table 2-8	Bakyrchik Mine Mineral Resource Summary Inclusive of Ore Reserves I	_isted
by Area		2-33
Table 2-9	Summary of Drill Hole Intersections	2-34
Table 2-10	Drill Hole Summary by Lens	2-34
Table 2-11	Statistics for Gold Assays within the Resource Wireframes	2-35
Table 2-12	Block Grade Estimation Parameters	2-40
Table 2-13	Risk Premium Pits	2-50
Table 2-14	Mobile Equipment Fleet	2-60
Table 2-15	Probable Ore Reserves	2-60
Table 2-16	Dilution By Lens	2-61
Table 2-17	Reserve Schedule Results - Ramp-up Period	2-69
Table 2-18	Reserve Schedule Ore Production	2-71
Table 2-19	Head Assay	2-73
Table 2-20	Batch Flotation Results	2-75



Table 2-21	Pilot Plant Results – Week 3	2-76
Table 2-22	Republic of Kazakhstan Permits/Licences Granted for the Develo	oment of
Bakyrchik	Mine	2-91
Table 2-23	Tentative Work Plan for Kyzyl Project ESIA Completion	2-94
Table 2-24	Manpower at Steady State Production	2-99
Table 2-25	Capital Cost - Summary	2-101
Table 2-26	Capital Cost - Mining	2-102
Table 2-27	Capital Cost - Process	2-103
Table 2-28	Capital Cost - Infrastructure	2-104
Table 2-29	Capital Cost - Owner	2-105
Table 2-30	Capital Cost - Contingency	2-105
Table 2-31	Capital Cost - Sustaining	2-106
Table 2-32	Operating Cost - Summary	2-106
Table 2-33	Operating Cost - Mine	2-107
Table 2-34	Operating Cost - Process Plant	2-107
Table 2-35	Operating Cost - General and Administrative	2-108
Table 3-1	Mining Allotment	3-5
Table 3-2	Production Figures for Bolshevik Concentrator 2003–2004	3-9
Table 3-3	Bolshevik 2004 GKZ Approved Sulphide "Reserves"	3-10
Table 3-4	Bolshevik 2012 GKZ Approved "Reserves"	3-10
Table 3-5	Bolshevik 2012 GKZ Approved Sulphide Reserves	3-11
Table 3-6	Mineralogical Composition of WAI Sulphide Metallurgical Sample	3-15
Table 3-7	Bolshevik Grab Sample Assay Results	3-16
Table 3-8	Summary of Exploration and Percussion Drilling at Bolshevik	3-19
Table 3-9	Summary of Digital Drill Hole Database	3-25
Table 3-10	Bolshevik Project Land Reclamation and Rehabilitation - Sustaina	bility Pty
Ltd. Recon	nmendations	3-36
Table 4-1	Exploration Licence 27 Area	4-2
Table 4-2	Summary of Historical Exploration Digital Drill Hole Database	4-11
Table 4-3	Summary of BMV Exploration Digital Drill Hole Database	4-12
Table 4-4	Summary GKZ Results For Sites Within Licence No. 27 Exploration	n Area as of
June 1, 20	13	4-13

LIST OF FIGURES

PAGE

Figure 2-1	Location Map	2-4
Figure 2-2	Project Lease Map	2-7
Figure 2-3	Regional Geology	2-16
Figure 2-4	Property Geology	2-17
Figure 2-5	Typical Geological Cross Section	2-18
Figure 2-6	Schematic Bakyrchik Lenses	2-21
Figure 2-7	3D View of Deposit Looking Southeast	2-37
Figure 2-8	Plan View - DDH Traces and Block Model Grades	2-41
Figure 2-9	Plan View DDH Traces and Block Model Resource Class	2-43
Figure 2-10	3D View of Deposit	2-47
Figure 2-11	Longitudinal View of UCF Method (Lens 1)	2-48
Figure 2-12	Plan View of UCF Method (Lens 1)	2-49
Figure 2-13	Existing Underground Mine Infrastructure	2-53
Figure 2-14	Long Section of Project Ventilation System	2-56
Figure 2-15	Long Section of Paste Fill Reticulation System	2-58
Figure 2-16	Section 1575E, Showing HW/FW Dilution	2-62
Figure 2-17	Underground Mine Design	2-65



Figure 2-18	Drift-by-Drift Ore Design	2-67
Figure 2-19	Reserve Schedule Mining Sequence	2-70
Figure 2-20	Process Flow Sheet	2-80
Figure 2-21	Project Site Plan	2-86
Figure 3-1	Bolshevik Property Map	3-3
Figure 3-2	Bolshevik Typical Section	3-13
Figure 3-3	Bolshevik Geology and Structure	3-30
Figure 3-4	Bolshevik Section 49IG (Looking East)	3-31
Figure 4-1	Project Lease Map	4-3
Figure 4-2	Property Geology and Deposits	4-5



1.EXECUTIVE SUMMARY

1.1. INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Polymetal International plc (Polymetal) to prepare a Competent Person's Report (CPR) on the Kyzyl Project (the Project), located in northeast Kazakhstan. The Kyzyl Project comprises the Bakyrchik Mine, Bolshevik gold deposits, and additional exploration properties.

On May 22, 2014, Polymetal announced the acquisition of Altynalmas Gold Ltd. (AAG), the holding company for the Project, from the Sumeru Group. The purpose of this CPR is to support the filing of a Circular to shareholders containing details of the proposed acquisition of the entire issued share capital of AAG and other information as required for a Class 1 transaction under United Kingdom Listing Rules.

The operating entity for the Project is the Bakyrchik Mining Venture (BMV) which is 100% owned by AAG. AAG also owns 100% Inter Gold Capital LLP (IGC), which holds the Bolshevik deposits.

Mineral Resources and Ore Reserves in this CPR are prepared according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves standards and guidelines published and maintained by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (the JORC (2012) Code).

All currency in this report is US dollars (US\$) unless otherwise noted.


1.2. CAUTIONARY STATEMENTS

This report has been prepared by RPA at the request of Polymetal International plc ("the Client"). Conditions and limitations of use apply to this report. The report may be used by the Client and its shareholders in connection with their review of the Kyzyl Project and shall not be used nor relied upon by any other party, nor for any other purpose, without the written consent of RPA. RPA accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by the Client and other third party sources.

While it is believed that the information contained herein is reliable under the conditions and subject to the limitations set forth herein, this report is based in part on information not within the control of RPA and RPA does not guarantee the validity or accuracy of conclusions or recommendations based upon that information. While RPA has taken all reasonable care in producing this report, it may still contain inaccuracies, omissions, or typographical errors.

For the purpose of this report, RPA has relied on ownership and land tenure information provided by the Client in the form of an opinion by GRATA Law Firm dated June 5, 2014 entitled "Licenses and Permits for Conducting Subsoil Use Operations at the Bakyrchik and Bolshevik Deposits", and this opinion is relied on in Sections 2.3, 3.3, 4.3, and the Summary of this report. RPA has not researched property title or mineral rights for the Kyzyl Project and expresses no opinion as to the ownership status of the property.

RPA has relied on the Client for guidance on applicable taxes, royalties, and other government levies or interests, applicable to revenue or income from the Kyzyl Project.

The report is intended to be read as a whole, including the Executive Summary and Appendices, and sections should not be read or relied upon out of context.

CAUTIONARY NOTE WITH RESPECT TO FORWARD LOOKING INFORMATION

Certain information and statements contained in this report are "forward looking" in nature. All information and statements in this report, other than statements of historical fact, that address events, results, outcomes, or developments that Polymetal and/or the Competent Persons who authored this report expect to occur are "forward-looking statements". Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the use of forward-looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "projects", "potential", "believes" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will be taken", "occur" or "be achieved" or the negative connotation of such terms. Forward-looking statements include, but are not limited to, statements with respect to anticipated production rates; grades; projected metallurgical recovery rates; infrastructure, capital, operating and sustaining costs; the projected life of mine; the proposed pit design phase development and potential impact on cash flow; estimates of Ore Reserves and Mineral Resources; the future price of gold; government regulations; the maintenance or renewal of any permits or mineral tenures; estimates of reclamation obligations that may be assumed; requirements for additional capital; environmental risks; and general business and economic conditions.

All forward-looking statements in this report are necessarily based on opinions and estimates made as of the date such statements are made and are subject to important risk factors and uncertainties, many of which cannot be controlled or predicted. Material assumptions regarding forward-looking statements are discussed in this report, where applicable. In addition to, and subject to, such specific assumptions discussed in more detail elsewhere in this report, the forward-looking statements in this report are subject to the following assumptions: (1) there being no signification disruptions affecting the development operation of the mine; (2) the availability of certain consumables and services and the prices for diesel, natural gas, fuel oil, electricity and other key supplies being approximately consistent with current levels; (3) labour and materials costs increasing on a basis consistent with current expectations; (4) that all environmental approvals, required permits, licences and authorizations will continue to be held on the same or similar terms and obtained from the relevant governments and other relevant stakeholders within the expected timelines; (5) certain tax rates; (6) the timelines for exploration activities; and (7) assumptions made in Mineral Resource and Ore Reserve estimates, including geological interpretation, grade, dilution, mining extraction, metallurgical recovery rates, gold price assumption, and operational costs; and general business and economic conditions.



Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any of the future results, performance or achievements expressed or implied by forward-looking statements. These risks, uncertainties and other factors include, but are not limited to, decrease of future gold prices; cost of labour, supplies, fuel and equipment rising; adverse changes in anticipated production, including discrepancies between actual and estimated production, Reserves, Resources and recoveries; exchange rate fluctuations; title risks; regulatory risks, and political or economic developments in Kazakhstan; changes to tax rates; changes to; risks and uncertainties with respect to obtaining necessary permits, land use rights and other tenure from the State and private landowners or delays in obtaining same; risks associated with maintaining and renewing permits and complying with permitting requirements, and other risks involved in the gold exploration and development industry. All forward-looking statements herein are qualified by this cautionary statement. Accordingly, readers should not place undue reliance on forward-looking statements. Polymetal and the Competent Persons who authored this report undertake no obligation to update publicly or otherwise revise any forward-looking statements whether as a result of new information or future events or otherwise, except as may be required by law.



1.3. BAKYRCHIK MINE

The Bakyrchik Mine (the Mine) is located in Kazakhstan at a Former Soviet Union (FSU) open pit and underground gold mine. Currently, the major features and facilities associated with the Mine are as follows:

- The Bakyrchik and Bakyrchik East deposits
- A former producing underground mine accessible by ramp and shafts
- A number of open pits
- An old process plant
- The physical plant site including a number of mine shafts and associated facilities, workshops, warehouses, administration buildings, bunkhouse trailers and dining facilities
- Facilities providing basic infrastructure to the mine and neighbouring town, including electric power, heat, water supply and sewage treatment
- Waste rock, tailings facility, and ore stockpiles from historical mining
- Access by highway and gravel roads, and a nearby railhead with connections to Europe, Russia, and China.

RPA, SENET, and Wardell Armstrong International (WAI) were retained by Bakyrchik Mining Venture (BMV) to prepare a Feasibility Study (the FS) for the Bakyrchik Mine. The FS was completed on October 31, 2013. The basis for the FS is the development of a 1.5 million tonnes per year (Mt/a) underground mine and processing plant that produces an average of 310,000 ounces of gold per year over a 20 year mine life. The mining method would be mechanized underhand cut and fill. The processing method will be flotation, followed by BIOX[®], followed by Carbon-in-Leach (CIL) gold recovery. The FS was based on award of contracts and commencement of work in late 2013. This timetable has not been achieved, however, for the purposes of this CPR, all dates and concepts refer to those in the FS.

In addition to the delay in timing, Polymetal has indicated its intent to review various options for mining and processing through an updated FS. Polymetal believes that, given the flat dip and high grade of the deposit, Bakyrchik may initially be amenable to open-pit mining, particularly from the point of view of risk mitigation and capital expenditure reduction, despite the expected high stripping ratio. Polymetal plans to pursue geotechnical and other studies to define the optimal mining method with the goal to make this choice by the time the revised feasibility study is ready in Q4 2015.



For processing, Polymetal intends, as part of its post-Completion feasibility study, to investigate the potential to apply pressure oxidation (POX) as an alternative. The Company has successfully deployed this technology at its Amursk pressure oxidization facility and believes it may bring certain material metallurgical, economic, and environmental benefits. Polymetal intends to assess and compare various processing options, including whole-ore POX, flotation followed by POX, and sale of flotation concentrate to third-party off-takers with the goal to make the final choice by the time the revised feasibility study is ready in Q4 2015.

In the context of the updated FS, Polymetal envisages the following development timeline for the Kyzyl Project:

- Revised feasibility study with updated Ore Reserve estimate: Q4 2015
- Start of construction: Q1 2016
- First production: 2018, to be confirmed upon completion of the feasibility study.

1.3.1. PROPERTY LOCATION, ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Project is located in the northeastern region of the Republic of Kazakhstan (RoK), 750 km east of the capital city of Astana, 1,100 km north of the business centre Almaty, and 75 km southwest of the mining and metallurgical industrial centre Oskemen (formerly known as Ust-Kamenogorsk). The Mine is adjacent to the town of Auezov (population nearly 3,000).

International air access to Kazakhstan is via Almaty or Astana which are serviced by major international carriers from Europe and Asia. The national carrier Air Astana has direct daily flights from both Almaty and Astana to Oskemen. From Oskemen, access to the Project site takes one hour and 30 minutes by paved highway and gravel roads utilizing BMV transportation department vehicles or private taxis. A railway station and railhead is operational at Shalobay, six kilometres from the Project site on the new railway line connecting Oskemen to Shar.

The Project is situated in the steppe country of Central Asia, a gently undulating grassland plain ranging in elevation from 400 masl to 500 masl. The Project area experiences a continental climate, with extremes of temperature ranging from -40°C to +40°C and annual precipitation of 250 mm. Annual evaporation from open water bodies in the Project area is approximately 500 mm. Climatic conditions are not expected to significantly limit exploration, open pit, or underground mining activities.



Qualified mining and processing personnel are available within Kazakhstan as well as in the surrounding FSU states. Recent industrial development in Kazakhstan provides lowcost local consumables such as cement, fuel, and explosives. Mining operational supplies such as drilling and ground support consumables are, with a few exceptions, available within the country. Much of the process and heavy equipment is imported, although some equipment is available locally.

1.3.2. LAND TENURE

RoK Licences No. 47 and No. 737 and Contract No. 120 form the basis for subsoil use operations of BMV on gold exploration extraction at the Bakyrchik deposit. Among other things, BMV must comply with terms of the licences and contract, as well as with terms of the corresponding work programs, in order to procure good standing of its subsoil use rights.

- Licence Series MG No. 27 dated April 7, 1995 for geological survey of the licence territory in the Charsk District of Semipalatinsk Region with subsequent exploration and production of gold ores (Licence No. 27). The authorities issued the geological allotment with the area of 86 km² for operations to be performed under this licence, which has subsequently been reduced to 47.5 km². The overall term of the licence is 31 years from the date of issuance (i.e., until April 7, 2026) with possible prolongation. Currently BMV is at the exploration period prolonged for appraisal of reserves of sulphide ores until February 17, 2017.
- 2) Licence Series MG No. 737 (gold) dated October 12, 1995 for production and processing of gold ores at the Bakyrchik field in the Charsk District of Semipalatinsk Region (Licence No. 737). The authorities issued the mining allotment with the area of 75.38 ha for operations to be performed under this licence. The overall term of the licence is 25 years from the date of issuance (i.e., until October 12, 2020) with possible prolongation. Currently BMV is under the period of partial suspension to last until January 1, 2017. Within this period BMV shall finish certain testing works, finalize the feasibility study, and elaborate project(s) of industrial (commercial) development of the mine(s).
- 3) Contract No. 120 dated June 30, 1997 entered with the Ministry of Energy and Natural Resources of the RoK for exploration and production of gold and associated minerals within the contract territory in the Eastern Kazakhstan Region (Contract No. 120). The contract has been amended five times. The amendments dealt, among other things, with (i) extension of exploration term; (ii) approval of amended work programs; (iii) tax matters; and (iv) local content matters.

Contract No. 120 is valid until expiry of Licence No. 27 (with regard to its licensing territory, currently represented by the geological allotment) and Licence No. 737 (with regard to its licensing territory, currently represented by the mining allotment).



1.3.3. GEOLOGY AND MINERALIZATION

The Project is located in the central portion of the Kalbinsky synclinorium. The region contains a series of northwest trending metallogenic zones that include three gold trends. The Kyzyl gold deposits occur in the easternmost trend, the Western Kalba belt. The area is underlain by tightly folded and faulted sedimentary rocks from the Lower and Middle Carboniferous Period. Granite basement rocks underlie the sedimentary rocks at depths of one kilometre to four kilometres.

Most of the deposits are hosted in the Kyzyl Shear Zone (KSZ), which is an 11.5 km long zone that dips 30° to 40° north and ranges in width from 10 m to 240 m. The KSZ has been traced to depths of 1.5 km in the west and 3.5 km in the east and is suggested to terminate at the granite basement.

The deposits are shear zone-hosted epigenetic deposits in which the gold is fine grained and associated with arsenopyrite and, to a lesser extent, pyrite. Gold is intimately associated with the sulphides. Sulphide distribution is related to host rock permeability and coarse-grained sandstone contains greater concentrations of sulphide mineralization and gold. The host rock averages 3% total carbon, of which approximately 50% is organic.

Metallurgical testing has shown that the gold mineralization is refractory. Furthermore, the active carbon content of the host rocks is sufficient to significantly affect the cyanide leach-carbon recovery process. For this reason, the deposit is considered to be "double refractory".

1.3.4. DRILLING

There have been three main stages of drilling and sampling at the Project. FSU standard drilling was carried out on the Bakyrchik property from March 1955 to April 1992. Confirmation drilling was completed in 1996 to verify FSU results and to generate metallurgical test samples. From October 2009 to August 2012, BMV commenced an extensive diamond drilling program on the mining and exploration licences to both explore new areas and increase the confidence of the known mineralization.

The Bakyrchik drill hole database contains 3,855 records consisting of 2,713 diamond drill holes and 1,142 chip-sampled crosscuts represented as drill holes, totalling 822,477 m. The FSU drilling accounts for 74% of the total length and includes surface exploration



and delineation drilling, underground definition drilling, as well as production grade control sampling.

For the purpose of estimating resources for the Bakyrchik deposit, 2,515 drill holes were used. The FSU drilling accounts for 78% of the total drilled, however, recent drilling by BMV accounts for a larger proportion of holes that intersect the resource wireframe models and thus used to estimate block grades. Underground drilling accounts for one percent of the total.

1.3.5. ORE RESERVES AND MINERAL RESOURCES

RPA reviewed data for the Bakyrchik Mine and has independently prepared Ore Reserve and Mineral Resource estimates using drill hole data available to July 31, 2013. Tables 1-1 and 1-2 list Ore Reserves and Mineral Resources, respectively. The Mineral Resources are exclusive of Ore Reserves. Ore Reserves are all classified as Probable.

Lens	Tonnes (millions)	Grade (Au g/t)	Ounces (millions)
1	17.97	8.03	4.64
7	1.01	3.49	0.11
8	1.33	3.72	0.16
9	2.97	6.58	0.63
12	4.08	8.06	1.06
Low-Grade Development	0.11	4.61	0.02
Total	27.55	7.53	6.66

TABLE 1-1BAKYRCHIK MINE ORE RESERVES SUMMARYKyzyl Project

Notes:

1. JORC (2012) definitions were followed for Ore Reserves.

2. Ore Reserves are estimated at a cut-off grade of 3.0 g/t Au.

3. Ore Reserves are estimated using an average long-term gold price of US\$1,300 per ounce.

4. A minimum mining width of five metres was used.

5. Bulk density is 2.7 t/m³.

6. Numbers may not add due to rounding.

The Ore Reserves consist of the selected portions of the Indicated Resources that are above a 3.0 g/t Au cut-off grade. This cut-off grade was applied at the level of stoping solids, after including waste and fill dilution. Averaging all lenses together, the extraction relative to the total Indicated Resources is 88%, while the dilution averages 17%.

At a cut-off grade of 3.0 g/t Au, Indicated Mineral Resources exclusive of Ore Reserves (Table 1-2) are estimated to total 3.2 million tonnes at a grade of 7.97 g/t Au containing 820,000 ounces of gold. At the same cut-off grade, Inferred Mineral Resources are



estimated to total 13.8 million tonnes at a grade of 6.63 g/t Au containing 2,950,000 ounces of gold.

TABLE 1-2 BAKYRCHIK MINE MINERAL RESOURCE SUMMARY EXCLUSIVE OF ORE RESERVES Kyzyl Project

Mineral Resource	Area	Tonnes	Grade	Contained Gold
Classification		(million)	(g/t Au)	(oz million)
Indicated	Bakyrchik	3.22	7.97	0.82
	Bakyrchik East	0.0	0.00	0.00
	Total Indicated	3.22	7.97	0.82
Inferred	Bakyrchik	5.82	7.12	1.33
	Bakyrchik East	8.00	6.28	1.62
	Total Inferred	13.83	6.63	2.95
Total Indicated and Inferred		17.05	6.88	3.77

Notes:

- 1. JORC 2012 definitions were followed for Mineral Resources.
- 2. Mineral Resources are estimated at a cut-off grade of 3.0 g/t Au.
- 3. Mineral Resources are estimated using an average gold price of \$1,400 per ounce.
- 4. A minimum mining width of two metres was used.
- 5. Bulk density is 2.67 t/m³.
- 6. Mineral Resources are exclusive of Ore Reserves.
- 7. Numbers may not add due to rounding.

Mineral Resources have been estimated from a depth of approximately 35 m to a depth of approximately 950 m. Reported Mineral Resources are exclusive of previously mined stopes.

1.3.6. MINING

1.3.6.1. MINE DESIGN

The orebody (lens) geometry, generally poor ground conditions, and desire for high reserve extraction preclude consideration of caving methods and most other bulk mining methods. The requirement for high productivity, mechanized mining essentially leaves the choice of mining method between long-hole stoping and cut and fill. Past studies have confirmed that underhand cut and fill method (UCF) is the most advantageous providing for maximum ground stability. UCF was used as the base case mining method for the FS. The Mine production rate is 1.5 Mt/a utilizing UCF with cemented tailings paste backfill.



1.3.6.2. CURRENT UNDERGROUND INFRASTRUCTURE

Current access to the underground mine is located in the footwall and begins via a ramp driven from a portal in Open Pit No. 4 (above Lens 1) at 330 mRL. Three main levels have been developed in the footwall (FW) at 330 mRL, 290 mRL and 250 mRL.

The existing underground infrastructure includes five vertical shafts located in the FW. Collared along strike near the FW of the KSZ at surface, the shafts are increasingly distant from the lenses at depth. Mine development includes use of some of the existing shafts for transportation of personnel and ventilation purposes only, not for rock hoisting.

1.3.6.3. MOBILE MINING EQUIPMENT

Waste and ore development will be driven using two-boom jumbos. The jumbos will be used for all lateral development at the Mine. Mucking of development and ore rounds will be accomplished with 7.5 m³ load-haul-dump units (LHDs), which will tram the ore and waste to remucks/dump drifts where the trucks will be direct loaded for transportation of the ore and waste to surface via the open pit.

Cable bolting will be installed using specialized bolting rigs. Shotcreting of the headings will be achieved by electro-hydraulic, diesel-propelled shotcrete sprayers. Low-profile remix trucks will deliver shotcrete to the sprayers.

1.3.7. PRODUCTION SCHEDULE

The Ore Reserves (see Table 1-1) were used to produce the base case FS production schedule for an underground drift and fill mining operation with a steady-state production of 1.5 Mt/a. RPA forecasts that there are sufficient Ore Reserves to support a mine life of 20 years. Pre-production development of the Mine was scheduled to commence in 2014 and plant start-up was scheduled to be in April 2016. Polymetal has indicated its intent to review various options for mining and processing. Please refer to the current Polymetal development timeline on page 1-6.

Total gold produced over the mine life amounts to 5.5 million ounces at a metallurgical recovery of 82%.

The Inferred to Indicated Resource conversion rate for BMV's diamond drilling programs has been almost 100%. In RPA's opinion, a one to one resource conversion rate is a reasonable expectation for future drilling, based on the continuity seen within the geological model.



1.3.8. METALLURGICAL TESTWORK AND PROCESSING

Feasibility testwork was conducted on ore samples from Bakyrchik in order to develop testwork data to design a gold processing plant. The Bakyrchik process plant is designed to treat 1.5 Mt/a gold ore.

The comminution circuit of the process plant will consist of two crushing sections: the decline ore section and the Skip shaft ore section. Each crushing section will comprise a primary jaw crusher and both will discharge crushed ore into the common mill feed storage bin, followed by semi-autogenous grinding (SAG) and ball mills.

The flotation tails will be pumped to the cyanide-free tailings storage facility (TSF) and the flotation sulphide concentrate will be transferred to the BIOX[®] plant. The BIOX[®] process oxidizes the sulphide minerals and exposes the gold for subsequent cyanidation thereby increasing the overall gold recovery that can be achieved. The BIOX[®] product contains high concentrations of dissolved ions and must be washed in a three-stage Counter Current Decantation (CCD) circuit before cyanide leaching. The arsenic in the BIOX[®] tails solution is precipitated to form arsenate and gypsum in the neutralization stage subsequent to being mixed with flotation tails and pumped to the flotation TSF.

1.3.9. ENVIRONMENTAL CONSIDERATIONS

As part of Project design and development, two permitting and evaluation processes have been undertaken in parallel: an Environmental Impact Assessment procedure (OVOS) to comply with RoK environmental legislation; and an International Finance Corporation (IFC) compliant Environmental and Social Impact Assessment (ESIA) process. The planned new developments at the Bakyrchik Mine site may be expected to comply with national legislative requirements and the expectations of good international industry practice embodied in the IFC Performance Standards (PS). As such, two final reports may be produced during the detailed design phase: the OVOS, for submission to the national authorities, and the ESIA, for submission to international stakeholders.

Based on progress to date and the experience with previous site development approvals, BMV does not expect any impediment to the successful granting of in-country environmental approvals.

In general, the environment within and surrounding the gold deposits in the KSZ, including the Bakyrchik deposit, has been significantly influenced by mining activity that has occurred since the 1950s through to present day. Existing environmental impacts



from historical mine activities are primarily associated with mine process waste disposal and mine water management.

Although BMV bears no liability for environmental impacts dating before 1994, the proposed redevelopment and commissioning of the Project includes the following measures to address historic environmental liabilities:

- Construction of an international standard community landfill site (in association with the community).
- Rehabilitation of stockpiles, waste rock dumps, abandoned pits, vehicular tracks, etc.
- Closure and reclamation of the existing TSF.

Developing the Project, as currently planned, is considered to provide a net environmental benefit to the site and surrounding area when compared with the no project option.

The major potential for environmental impacts associated with re-commissioning the Project may be associated with processing the ore and the subsequent disposal of processing waste streams which have the potential to adversely affect the surrounding environment, the Project workforce, and the community of Auezov.

Specifically, the potential environmental risks of greatest concern may be:

- Emission of SO₂, NO_x, and particulates to the atmosphere.
- Disposal of hazardous waste products, including cyanide containing slurry, created through the gold processing stream.
- Reduction in pasture land and decrease in biodiversity due to extension of site lease and access restrictions.
- Contamination of surface and groundwater due to surface runoff, reagent or hydrocarbon spills, process or waste water discharges, industrial waste and acid rock drainage (ARD) generation.
- Damage to flora and fauna due to ARD generation.
- Reduction in soil quality due to mineral dusts, erosion of exposed surfaces, and reagent/hydrocarbon spills.



The management and mitigation of these impacts will be addressed partly through Project design, but primarily by the development and implementation of specific operational management and mitigation strategies.

1.3.9.1. MINE CLOSURE AND RECLAMATION

The Bakyrchik Mine Decommissioning Liabilities Provision, January 2013, estimates the total closure cost for the Mine to be US\$12.0 million, however, the framework Mine Closure and Rehabilitation Plan, forming part of the ESIA, will identify further activities and processes which have not been considered in the current cost estimate.

An additional US\$7.2 million is included to cover general and administrative (G&A) costs during closure.

1.3.9.2. SOCIAL AND COMMUNITY CONSIDERATIONS

The Mine is expected to have long lasting positive effects on the local and regional economy both in terms of investment expenditures, exports, employment, and physical infrastructure. The Project is also expected to increase the skills base of local communities by providing training opportunities to employees and support for some of the local youth who wish to further their education.

Potential adverse impacts identified include:

- Increased traffic movement and potential for accidents.
- Risks to public health and safety.
- Vibration and noise causing nuisance to the community and potentially damaging structures.
- Potential contamination of water supplies.
- Economic and social decline at mine closure.

As with environmental risks, the management and mitigation of potential adverse social impacts will be addressed partly through Project design, but primarily through the development and implementation of specific operational management and mitigation strategies, which has commenced in August 2013.

It has been determined that although some expatriates are required for the first two years of mine life, thereafter all employees will be sourced locally, regionally, and nationally to meet the operational requirements of the Project, upon which some job-specific training will be



provided. BMV is committed to upholding its commitment to Kazakh content and procurement legislation, as well as its social commitments.

BMV will implement an integrated set of community engagement and sustainable development practices and programs in order to maximize the positive social and economic effects of the operation on the communities within the Project area. BMV will prepare a stakeholder engagement plan providing a detailed communication strategy for all external stakeholders. This plan will be reviewed and updated on a regular basis. In addition, BMV has a disclosure and consultation program, which began in February 2011 and will be ongoing for the life of mine.

The sustainable development of the community is targeted in four main areas:

- 1. Social infrastructure development
- 2. Education and training sponsorship scholarships and training for employees and non-employees
- 3. Capacity building working with NGOs
- 4. Business development small-scale loans program

A preliminary cost estimate for sustainability programs in 2013 totals nearly \$60,000. This figure and associated Memoranda of Understanding are agreed each year with the Akim. In addition, in 2013 BMV will transfer \$100,000 to the budget of the East Kazakhstan Oblast according to Amendment #3. In 2013, BMV also financed education of local youth in the amount of \$35,000.

1.3.10. EXECUTION PLAN AND SCHEDULE

The execution plan and schedule reviewed in this CPR are based on the FS which assumed award of contracts and commencement of work in late 2013. This timetable has not been achieved and Polymetal has indicated its intent to review various options for mining and processing. For the purposes of this CPR, all dates and concepts refer to those in the FS. Please refer to the current Polymetal development timeline on page 1-6.

Construction was scheduled to commence in early January 2015 after receipt of the construction licence. At the same time, preliminary underground mining works would commence.



Construction was forecasted to be completed at the end of 2015 and plant commissioning was to finish in the first quarter of 2016 when the first ore was to be introduced into the plant. Full production was expected by July 2016.

1.3.11. CAPITAL AND OPERATING COSTS

The timing of the capital and operating cost expenditures is based on the FS. Please refer to the current Polymetal development timeline on page 1-6.

1.3.11.1. CAPITAL COSTS

The capital cost estimate based on the FS is \$543 million, including Value-Added Tax (VAT). The estimate is reported at feasibility study level where the accuracy is defined as $\pm 15\%$ including contingency.

Salient points related to the Basis of Estimate are:

• The base date of the FS capital cost estimate is September 2013 utilizing the following exchange rates:

Exchange Rates	ROE
EUR : USD	1.30
GPB : USD	1.50
ZAR : USD	8.50
CAD : USD	1.00
AUD : USD	1.10
KZT : USD	155.00

- The KZT : USD exchange rate as of June, 2014 is 183.50. This could have a positivie economic effect on the FS.
- The costs incorporate all capital expenditures from the commencement of detailed engineering (Q1 2014) through to the commencement of ore processing in April 2016.
- VAT and custom duties are in accordance with RoK regulations.
- Costs are inclusive of non-recoverable VAT.
- Sustaining capital incorporates all capital expenditure after April 2016.

A summary of the capital cost estimate is presented in Table 1-3.



Area	Cost (\$ M)	%
Mine	140.1	26
Process Plant	147.9	27
Infrastructure	93.3	17
Indirects	78.9	15
VAT	34.7	6
Contingency	48.5	9
Total	543.3	100

TABLE 1-3 CAPITAL COST SUMMARY Kyzyl Project

The overall contingency allowance is 9.8% of the direct and indirect capital cost estimates. This figure is lower than most feasibility study contingency rates but it reflects the fact that most of the estimated costs were derived from firm quotations for equipment and construction services. Project execution costs are based on AAG's project experience in previous in-country projects.

Table 1-4 summarizes the lifetime sustaining capital cost by area.

Area	Sustaining Capital Costs (\$ M)
Mine	249.13
Infrastructure	22.98
Indirects	6.33
VAT	14.12
Closure and Reclamation	19.25
Total	311.81

TABLE 1-4 SUSTAINING CAPITAL COSTS Kyzyl Project Kyzyl Project

The sustaining capital cost estimates for the Mine comprise the following:

- Mobile equipment rebuilds \$79.6 million
- Mobile equipment replacement \$27.7 million
- Capitalized mine operating costs for waste development \$122.1 million
- Mine infrastructure \$19.7 million

No sustaining capital was included for the process plant, as all relevant equipment costs were included in operating costs.



1.3.11.2. OPERATING COSTS

Operating costs are summarized in Table 1-5.

TABLE 1-5OPERATING UNIT COSTSKyzyl Project

ltem	Operating Cost (\$/t)
Mining	39.01
Processing	39.59
G&A	18.61
VAT	8.76
Total	105.98

1.3.12. ECONOMICS

The timing of the economics information is based on the FS. Please refer to the current Polymetal development timeline on page 1-6.

A summary of the key criteria is provided below.

1.3.12.1. PRODUCTION SUMMARY

- Production starting in Q2 2016.
- Ramp-up to 1.5 million tonnes per year mining from underground (4,100 t/d) in 2017.
- 20 year mine life, including three years at a lower rate at the end of the mine life.
- Total production is 27.6 Mt, at a grade of 7.52 g/t Au.
- Recovery to doré: 82%.
- An average annual gold production of 310,000 ounces (full years only).

1.3.12.2. REVENUE

- \$9/oz charge for doré refining, transport, and insurance costs.
- Doré payable of 99.9%
- Kazakhstan Mineral Extraction Tax (MET) of 5% of the value of gold contained in the ore mined.

1.3.12.3. COSTS

- Pre-production period: two years and three months (January 2014 to March 2016)
- Project capital totals \$543 million, including \$35 million in VAT, and \$48 million in contingency.



- Sustaining capital of \$312 million, including \$14 million in VAT, and \$19 million in closure costs.
- Average unit operating costs over the mine life:
 - \$39 per tonne Mining
 - \$39 per tonne Processing
 - o \$19 per tonne G&A
 - <u>\$ 9 per tonne VAT</u>
 - o \$106 per tonne Total

1.3.12.4. TAXATION

- Corporate Income tax of 20%. See taxation discussion on page 1-21.
- No Excess Profits Tax assumed.
- VAT included in both operating costs and capital costs as separate line items.

1.3.12.5. UNIT COSTS

World Gold Council cost per ounce measures include an Adjusted Operating Cost of \$611 per ounce of gold, an All-In Sustaining Cost of \$678 per ounce of gold, and a Total Cost of \$711 per ounce of gold.

1.3.13. RISKS AND OPPORTUNITIES

1.3.13.1. RISKS

Permitting - General

The Project schedule presented in the FS allowed a period of 12 months for BMV to obtain construction permits. There is a risk that there may be delays or conditions attached to obtaining permits, which could affect the viability of the Project.

Similarly, BMV, which must obtain an operating permit by the end of the first quarter of 2016, does not anticipate any delays as the Government of Kazakhstan has placed the Kyzyl Project on the industrialization map of the East Kazakhstan Oblast, giving it a favoured project status that should assist with local and national permitting requirements considered.

Permitting – Flotation Tailings

The Project is based on using flotation tailings as backfill in the Mine. There is a risk that this plan will not be approved on the grounds of sterilizing the gold content in these tailings, albeit at a very low grade (approximately 0.6 g/t Au depending on the plant feed grade). There is a precedent for using flotation tailings as mine backfill at the other



operations in Kazakhstan. If not permitted, a quarry with a crushing, screening, and milling plant would have to be developed for providing backfill material and this would add significantly to both capital and operating costs.

Production Rate – Mining

A key Project risk in the achievement of the economic assumptions made in the FS is mine productivity. In RPA's opinion, the production rate of 1.5 Mt/a is at the upper end of what is achievable with the current mine configuration. The use of a high quality paste backfill and good mining control will be an important factor in achieving the assumed high productivity levels without incurring excess dilution.

The productivity risk can be mitigated by the development of alternative sources of mill feed from other deposits. In RPA's opinion, there is significant exploration potential near the lenses proposed for development, as well as within the region. This potential can mitigate the productivity risk and allow for a longer mine life.

Taxation

In the FS, a corporate income tax of 20% is used. Companies operating in the RoK have found that the effective corporate tax rate may be higher due to different expenses which might not be deductible and that they tend to pay 5% to 8% more than the base rate.

1.3.13.2. OPPORTUNITIES

The mining operating cost estimate is based on using 10% cement/slag in the mine backfill plant. Further testwork is required, however, RPA believes that there is an opportunity to reduce the cement content to 8%, which is a more common figure for the proposed mining method.

Ground support costs are significant, due to a conservative approach based on lack of data regarding the ground conditions, particularly in the footwall. As development proceeds, experience may show that less support may be sufficient, resulting in operating cost savings.

The ferric sulphate addition used in this study is based on testing of samples which were intended for comminution testwork and not considered fully representative of the whole orebody. The original sample test had a Fe:As molar ratio in the order of 3.0, whereas the subsequent testwork had a sample with a significantly lower ratio. RPA believes that the original sample was more representative of the whole orebody and thus provides an



opportunity to significantly reduce the quantity of ferric sulphate addition, one of the major contributors to reagent costs.

The TSF design and cost estimate is based on the conservative assumption that all tailings, including flotation tailings, will be directed to the TSF. This study is based on the flotation tailings being used for mine backfill. Accordingly, there is an opportunity to significantly reduce the size and consequently the capital costs of the flotation TSF.

The costs associated with providing heating to the town of Auezov and new surface infrastructure are based on the existing coal-fired boiler. Alternative, more efficient heating sources could be identified and there is an opportunity to significantly reduce these costs, albeit at an increased capital expenditure.

For the FS input, VAT related to the production of gold was assumed to not be recoverable. Polymetal reports that, in their experience, VAT is likely to be fully recoverable during operations. This would provide a positive impact on Project economics.

1.4. BOLSHEVIK DEPOSIT

The Bolshevik Deposit is a FSU open pit gold mine from which refractory carbonaceous, arsenical, auriferous siliceous material was mined for smelter flux from 1960 to 1994. The deposit is close to and along the KSZ strike from the Bakyrchik Mine. In 1996, the ownership of subsoil use rights for development of the Bolshevik gold deposit was transferred to Inter Gold Capital LLP (IGC). A 100,000 t/a pilot concentrator, based on gravity and flotation of sulphidic material, was commissioned in December 2002 and operated from 2003 to 2004. A bacterial heap leach pad and processing plant based on cyanide technology was also constructed and processed low-grade oxide material during 2002 and 2003. The mine was placed on care and maintenance in 2004. RPA notes that the concentrator equipment appears to still be in reasonable condition, however, the Bolshevik open pit is filling up with water. Some minor reclamation and rehabilitation work has been carried out on the property since the first RPA site visit in 2007.

There are no Mineral Resources at Bolshevik. RPA has prepared an opinion of the Project's exploration potential as an Exploration Target as defined in the JORC (2012) Code. In RPA's opinion, limitations on verifying data preclude any estimation of Mineral



Resources. Additional exploration, confirmation drilling, and data verification are required.

RPA visited the Bolshevik Project on May 7, 2007 and observed the surface infrastructure and Bolshevik open pit. RPA visited the property on numerous occasions between 2010 and 2012 during consulting advisory activities related to AAG's Kyzyl Project exploration program and most recently on July 30, 2013 as part of a consulting engagement to review the Bolshevik exploration potential and generate an exploration drilling plan.

1.4.1. LAND TENURE

IGC has Licence Series MG No. 345(D) dated April 12, 1995 for production of gold ore of the Bolshevik deposit in the Charskii district of the Semipalatinsk Region, later replaced by the similarly named Licence MG No. 345(D) dated May 28, 1996 (Licence No. 345). The Bolshevik Licence was issued to the name of Artel Trud CSJC for production of gold ore for 20 years (i.e., until May 28, 2016) with subsequent prolongation. Later, according to amendment No. 2 dated April 1, 2005 to Contract No. 47 (as defined below) the subsoil use right was transferred from Artel Trud CSJC in favour of IGC.

Contract No. 47 dated June 24, 1996 was issued for the development of the Bolshevik gold deposit and associated minerals (platinoids and shungite raw) in the Zharminsk district of the Semipalatinsk Region (Contract No. 47) covering an area of 431.1 ha for operations to be performed under this contract. Contract No. 47 is valid until expiry of Licence No. 345, i.e., until May 28, 2016. The contract has been amended seven times.

1.4.2. GEOLOGY AND MINERALIZATION

The Project is located in the central portion of the Kalbinsky synclinorium. The region contains a series of northwest trending metallogenic zones that include three gold trends. The Kyzyl gold deposits occur in the easternmost trend, the Western Kalba belt. The area is underlain by tightly folded and faulted sedimentary rocks from the Lower and Middle Carboniferous Period. Granite basement rocks underlie the sedimentary rocks at depths of one kilometre to four kilometres.

The deposits are shear zone-hosted epigenetic deposits in which the gold is fine grained and associated with arsenopyrite and, to a lesser extent, pyrite. Gold is intimately associated with the sulphides. Sulphide distribution is related to host rock permeability and coarse-grained sandstone contains greater concentrations of sulphide mineralization



and gold. The host rock averages 3% total carbon, of which approximately 50% is organic.

1.4.3. EXPLORATION AND DRILLING

Exploration drilling has been carried out at various times by the Kazan-Chunkur Exploration Team of the East Kazakhstan Territorial Geological Board (1953-1971); Bakyrchik Exploration Team of the Semipalatinsk Geological Expedition with the Production and Exploration Enterprise "Vostkazgeologia" (1978-1981), Auezov Exploration Team of the Altay Geological Expedition with the Ministry of Non-Ferrous Metallurgy of the Kazakh SSR (1971-1993), Artel Trud (1999-2003), as well as the Altay Geophysical Expedition, simultaneously with a 1:50000 survey. In 2008 and 2009, AAG conducted short hole surface drilling in order to fulfill commitments of the subsoil use agreement.

1.4.4. MINERAL RESOURCES

There are no current Mineral Resources as defined by the JORC Code at Bolshevik due to the limitations on validating historical data. GKZ 2012 sulphide "reserves", which are not JORC Code compliant, are reported as 5.3 Mt grading 4.63 g/t Au.

1.4.5. CONCLUSIONS AND RECOMMENDATIONS

The Bolshevik Project consists of a previously producing open pit and a large database of FSU and post-FSU drilling and sample data with no provenance. In RPA's opinion, the limitations on verifying data preclude any estimation of Mineral Resources that meet the requirements of JORC (2012).

In RPA's opinion, Bolshevik warrants additional exploration focused on defining JORC Code Mineral Resources.

1.5. EXPLORATION PROPERTIES

The strategic goal of the BMV 2009 to 2012 Licence No. 27 Exploration Program was to define near surface Mineral Resources that would be able to be converted to Kazakh Reserves (Categories C1 or higher) in order to secure the ground for future exploration at depth.



Work completed during the 2009 to 2012 Exploration Program has increased the understanding of the Kyzyl geological deposit model. The size and grade continuity of Bakyrchik Lens 1 is unique based on a number of factors – large regional east-west shear, intersection with the southeast to northwest structures, near surface (one to three kilometre deep) gold bearing granites, thick packages of tectonite within the shear zone, and the presence of an intraclastic rich sandstone marker horizon.

On a regional basis, there are a number of potential targets with structural features similar to Bakyrchik. Historical and recent drilling programs have not, however, been successful in defining significant potentially mineable oxide resources near surface or down to the approximately 200 m level in sulphides. The deposit with the most upside potential is Sarbas.

Prior to any significant drilling program below 300 m, RPA recommends that an advanced technology geophysical program be implemented such as the Quantec Titan 24 IP/MT 3D system. RPA recommends that, at a minimum, the Quantec survey be run over the Bakyrchik and Bakyrchik East Depth extensions in order to provide further definition of the mineralization at depth.

RPA, along with a team of specialized geological consultants, participated in a technical advisory role during the Kyzyl Project exploration program.

1.5.1. LAND TENURE

The exploration properties are held in various entities owned or controlled by AAG.

Licence Series MG No. 27 currently covers an area of 47.5 km² surrounding Mining Licence No. 737. In 2013, BMV applied to the competent authority to convert two areas of the exploration allotment to mining areas (Sarbas and Vein 31).

1.5.2. GEOLOGY AND MINERALIZATION

The Kyzyl Project is located in the central portion of the Kalbinsky synclinorium in Lower and Middle Carboniferous sedimentary rocks within the Kalba-Narymsk structural zone. A series of northwest trending metallogenic zones cross the region and contain three parallel gold trends. The Project occurs in the easternmost trend, within the northwest trending Western Kalba metallogenic belt, which extends across most of east Kazakhstan. This is part of the Late Palaeozoic Eastern Kazakhstan gold province where both orogenic and intrusive related gold deposits occur.



Deposits associated with the Kyzyl Shear Zone, and to a lesser extent, the NW Fracture, are of the epigenetic, shear-hosted lode gold-sulphide type, in which gold is very fine grained and is held mainly in arsenopyrite and, to a lesser extent, pyrite. Another minor deposit type is quartz vein hosted gold mineralization which is generally restricted to the Kyzyl South area.

1.5.3. EXPLORATION AND DRILLING

The exploration work carried out in 2010 to 2012 included high resolution stereo satellite imagery, geological mapping, data compilation into a Graphical Information System, review of the historic FSU geological studies, soil geochemistry, age dating, structural studies, and geophysics.

Exploration drilling was carried out periodically at the Kyzyl Project by exploration groups associated with the FSU as well as by smaller companies following the break-up of the Soviet Union. No drill core is available for review from this exploration work. The historical exploration drill hole database, comprising drilling from FSU to pre-2010, consists of 939 diamond drill core and reverse circulation drill holes totalling 102,345 m. The historical holes are generally utilized to guide new exploration drilling.

The AAG 2009 to 2012 exploration drilling was contracted to Australasian Independent Diamond Drilling (AIDD) and Iskander Mining Company LLP (Iskander), both based in Almaty, Kazakhstan. Collar locations were planned by AAG geologists to infill and extend the historical drill hole pattern to 50 m spacing. The BMV exploration drill hole database consists of 406 diamond drill core holes totalling 45,337 m.

Based on the exploration to date, the following groups of deposits have been identified on the Project:

- Kyzyl East Exploration Properties include Sarbas, Karmen, and Vein 31. The deposits have been explored by trenches and pits as well as drilling and are considered the most prospective near surface deposits on the Exploration Licence.
- Kyzyl West Exploration Properties include Zagadka, Kilometrovaya, and Kholodny Klyuch. A review of the drilling to date shows that no significant near surface mineralization has been observed at the Zagadka and Kilometrovaya deposits, however, there is potential at depth for both deposits and Kholodny Klyuch also requires additional review.



- Kyzyl North Exploration Properties include Dalni, Dalni-1, Dalni-2, and Dalni-3. Dalni and Dalni-1 have been mined by open pit in the past. Based on exploration to date, the deposits have low potential.
- Kyzyl South Exploration Properties consist mainly of small quartz vein related mineralization and are considered low priority as the mineralization models are not well understood and the potential size of the deposits is considered limited.

1.5.4. MINERAL RESOURCES

Soviet style classified "reserves" for the deposits have been evaluated over the life of the Project. The estimates do not conform to the JORC (2012) Code nor are they necessarily indicative of all of the mineralization on the Project. There are no current Mineral Resource estimates as defined by the JORC (2012) Code for the exploration properties on the Project.

Table 1-6 presents a summary of GKZ results.

Area	Type Tonnes (000)		Gold Grade (g/t Au)	Contained Gold (oz)	
	Oxidized	510.2	2.09	33,125	
Kyzyl East	Sulphide	374.7	6.24	72,695	
	Total	884.9	3.84	105,830	
	Oxidized	94.5	1.91	5,630	
Kyzyl West	Sulphide	70.0	3.96	8,575	
	Total	164.5	2.78	14,205	
	Oxidized	89.8	1.25	3,500	
Kyzyl North	Sulphide	19.5	5.7	3,500	
	Total	109.3	2.05	7,000	
	Oxidized	1,337.8	1.63	66,755	
Total	Sulphide	732.0	5.81	132,270	
	Total	2,069.8	3.10	199,025	

TABLE 1-6 SUMMARY GKZ RESULTS FOR SITES WITHIN LICENCE NO. 27 **EXPLORATION AREA AS OF JUNE 1, 2013 Kyzyl Project**

Notes

1. Kazakh GKZ Resource and Reserve estimate does not conform to JORC (2012).

2. There is no reported estimates on any of the Kyzyl South Deposits.

Numbers may not add due to rounding.
 Source: GEOS 2013, MINT 2013a, MINT 2013b.



2.BAKYRCHIK MINE

2.1. INTRODUCTION

The Bakyrchik Mine (the Mine) is located in Kazakhstan at a Former Soviet Union (FSU) open pit and underground gold mine. Currently, the major features and facilities associated with the Mine are as follows:

- The Bakyrchik and Bakyrchik East deposits
- A former producing underground mine accessible by ramp and shafts
- A number of open pits
- An old process plant
- The physical plant site including a number of mine shafts and associated facilities, workshops, warehouses, administration buildings, bunkhouse trailers, and dining facilities
- Facilities providing basic infrastructure to the Mine and neighbouring town, including electric power, heat, water supply, and sewage treatment
- Waste rock, tailings facility, and ore stockpiles from historical mining
- Access by highway and gravel roads, and a nearby railhead with connections to Europe, Russia, and China.

RPA, SENET, and Wardell Armstrong International (WAI) were retained by Bakyrchik Mining Venture (BMV) to prepare a Feasibility Study (the FS) for the Bakyrchik Mine. The FS was completed on October 31, 2013. The basis for the FS is the development of a 1.5 million tonnes per year (Mt/a) underground mine and processing plant that produces an average of 310,000 ounces of gold per year over a 20 year mine life. The mining method would be mechanized underhand cut and fill. The processing method will be flotation, followed by BIOX[®], followed by Carbon-in-Leach (CIL) gold recovery.

RPA has visited the Mine multiple times in the course of the FS as well as prior site visits. The most recent site visit was carried out on July 29 to August 1, 2013.

The FS was based on award of contracts and commencement of work in late 2013. This timetable has not been achieved, however, for the purposes of this CPR, all dates and concepts refer to those in the FS.

In addition to the delay in timing, Polymetal has indicated its intent to review various options for mining and processing through an updated FS. Polymetal believes that, given the flat dip and high grade of the deposit, Bakyrchik may initially be amenable to open-pit mining, particularly from the point of view of risk mitigation and capital expenditure



reduction, despite the expected high stripping ratio. Polymetal plans to pursue geotechnical and other studies to define the optimal mining method with the goal to make this choice by the time the revised feasibility study is ready in Q4 2015.

For processing, Polymetal intends, as part of its post-Completion feasibility study, to investigate the potential to apply pressure oxidation (POX) as an alternative. The Company has successfully deployed this technology at its Amursk pressure oxidization facility and believes it may bring certain material metallurgical, economic, and environmental benefits. Polymetal intends to assess and compare various processing options, including whole-ore POX, flotation followed by POX, and sale of flotation concentrate to third-party off-takers with the goal to make the final choice by the time the revised feasibility study is ready in Q4 2015.

In the context of the updated FS, Polymetal envisages the following development timeline for the Kyzyl Project:

- Revised Feasibility Study with updated Ore Reserve estimate: Q4 2015
- Start of construction: Q1 2016
- First production: 2018, to be confirmed upon completion of the feasibility study.

2.2. LOCATION, ACCESS, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

The Project is located in the northeastern region of the Republic of Kazakhstan (RoK), 750 km east of the capital city of Astana, 1,100 km north of the business centre Almaty, and 75 km southwest of the mining and metallurgical industrial centre Oskemen (formerly known as Ust-Kamenogorsk) as shown in Figure 2-1. The Mine is adjacent to the town of Auezov (population nearly 3,000).

International air access to Kazakhstan is via Almaty or Astana which are serviced by major international carriers from Europe and Asia. The national carrier Air Astana has direct daily flights from both Almaty and Astana to Oskemen. From Oskemen, access to the Project site takes one hour and 30 minutes by paved highway and gravel roads utilizing BMV transportation department vehicles or private taxis. A railway station and railhead is operational at Shalobay, six kilometres from the Project site on the new railway line connecting Oskemen to Shar.

The Project area experiences a continental climate, with extremes of temperature ranging from -40° C to $+40^{\circ}$ C and annual precipitation of 250 mm. Annual evaporation from open



water bodies in the Project area is approximately 500 mm. Climatic conditions are not expected to significantly limit exploration, open pit, or underground mining activities.

Qualified mining and processing personnel are available within Kazakhstan as well as in the surrounding FSU states. Recent industrial development in Kazakhstan provides lowcost local consumables such as cement, fuel, and explosives. Mining operational supplies such as drilling and ground support consumables are, with a few exceptions, available within the country. Much of the process and heavy equipment is imported, although some equipment is available locally.

The mine site, located adjacent to the town of Auezov, is well serviced by existing infrastructure, including electrical power, roads, and communications. The mine facilities provide power, potable water, heat, and sewage treatment to the town. ALS Minerals, an international analytical company, has established an independent sample preparation and assay laboratory in Auezov in order to service Bakyrchik Mining Venture (BMV) and other Kazakh clients.

The Project is situated in the steppe country of Central Asia, a gently undulating grassland plain ranging in elevation from 400 masl to 500 masl. There are no forests at the Project site.



www.rpacan.com



2-4



2.3. LAND TENURE

For the purpose of this report, RPA has relied on ownership and land tenure information provided by the Client in the form of an opinion by GRATA Law Firm dated June 5, 2014 entitled "Licences and Permits for Conducting Subsoil Use Operations at the Bakyrchik and Bolshevik Deposits" (GRATA (2014).

The operating entity for the Project is BMV, which is 100% owned by Altynalmas Gold Ltd. (AAG). AAG also owns 100% Inter Gold Capital LLP (IGC), which holds the Bolshevik deposits.

Under the RoK laws, all mineral resources belong to the state. A company may obtain a subsoil use contract for: (1) exploration; (2) mining; or (3) exploration and mining. The minerals extracted to the surface belong to the subsoil user. BMV has executed with the RoK government Contract No. 120 for the exploration and mining of gold and associated minerals in the Eastern Kazakhstan region of the RoK (Contract No. 120).

2.3.1. SUBSOIL USE RIGHTS FOR GOLD EXPLORATION AND EXTRACTION

Kazakhstan's legal regime governing the development of natural resources has evolved significantly over the years. Certain serious amendments were introduced to the old Subsoil and Subsoil Use Law dated January 27, 1996 and the Oil Law dated June 28, 1995 in 1999, 2004, 2007, 2008 and 2009. Under the Subsoil and Subsoil Use Law of 1996, subsoil use (mining) rights were granted under the two-tier regime, comprising (i) issuance of a licence by the Government and (ii) further execution of a subsoil use contract between a subsoil user and a competent body. The licensing-contractual regime was replaced by the contractual regime from September 1999, however, licences issued before September 1999 remain in effect until their expiry, including any periods of extension granted under legislation in effect at the time of their issuance. (Currently, licence provisions are considered in practice only with regard to the procedure of suspension and termination of subsoil use rights.)

The RoK Law on Oil dated June 28, 1995 was cancelled in connection with adoption of the new Subsoil and Subsoil Use Law in 2010. During different periods, different authorities acted as competent bodies. Currently, the competent body for the mining industry is the Ministry of Industry and New Technologies (MINT). Subsoil users' activities and work programs are regulated by the territorial department of the Geology Committee for subsoil users of the eastern part of Kazakhstan (VostKazNedra).



2.3.2. BMV LICENCES AND CONTRACTS

BMV has the following licences and the contract which entitle it to carry out gold exploration and extraction:

- 1) Licence Series MG No. 27 dated April 7, 1995 for geological survey of the licence territory in the Charsk District of the Semipalatinsk Region with subsequent exploration and production of gold ores (Licence No. 27). The authorities issued the geological allotment with the area of 86 km² for operations to be performed under this licence, which has subsequently been reduced to 47.5 km². The overall term of the licence is 31 years from the date of issuance (i.e., until April 7, 2026) with possible prolongation. Currently BMV is at the exploration period prolonged for appraisal of reserves of sulphide ores until February 17, 2017.
- 2) Licence Series MG No. 737 (gold) dated October 12, 1995 for production and processing of gold ores at the Bakyrchik field in the Charsk District of the Semipalatinsk Region (Licence No. 737). The authorities issued the mining allotment with the area of 75.38 ha for operations to be performed under this licence which has subsequently been reduced to 5.6 km². The overall term of the licence is 25 years from the date of issuance (i.e., until October 12, 2020) with possible extension. Currently BMV is under the period of partial suspension to last until January 1, 2017. Within this period, BMV shall finish certain testing works, finalize the feasibility study and elaborate project(s) of industrial (commercial) development of the mine(s).
- 3) Contract No. 120 dated June 30, 1997 entered with the RoK Ministry of Energy and Natural Resources for exploration and production of gold and associated minerals within the contract territory in the Eastern Kazakhstan Region (Contract No. 120). The contract has been amended five times. The amendments dealt, among other things, with (i) extension of exploration term; (ii) approval of amended work programs; (iii) tax matters; (iv) local content matters.

Contract No. 120 is valid until expiry of Licence No. 27 (with regard to its licensing territory, currently represented by the geological allotment) and Licence No. 737 (with regard to its licensing territory, currently represented by the mining allotment).

The above licences and the contract form the basis for subsoil use operations of BMV on gold extraction at the Bakyrchik deposit. Among other things, BMV must comply with terms of the licences and contract, as well as with terms of the corresponding work programs, in order to procure good standing of its subsoil use rights. BMV is currently in breach of its contractual obligations and has received relevant notices from MINT.

A map of the subsoil use area and local deposits is shown in Figure 2-2.



www.rpacan.com



2-7



2.3.3. BAKYRCHIK DEPOSIT LICENCE NO. 737

The Bakyrchik deposit licence boundaries were expanded in November 2010 and the licence now covers an area of 5.6 km^2 . Coordinates of the mining licence area are shown in Table 2-1.

	Coordinates		Coordinates		
Land Corner	North Latitude	East Longitude	Land Corner	North Latitude	East Longitude
1	49° 43'03''	81° 33'47"	18	49° 43'40"	81° 35'03"
2	49° 42'59''	81° 34'06''	19	49° 43'21"	81° 35'03"
3	49° 42'58''	81° 36'05"	20	49° 43'21"	81° 34'53"
4	49° 43'08''	81° 36'37"	21	49° 43'28"	81° 34'43"
5	49° 43'07''	81° 37'37"	22	49° 43'41"	81° 34'43"
6	49₀ 43'33''	81° 37'38"	23	49° 43'54"	81° 34'28"
7	49° 43'33''	81° 37'28"	24	49° 43'54"	81° 34'23"
8	49° 43'43''	81° 37'13"	25	49° 43'41"	81° 34'23"
9	49° 43'43''	81° 36'38"	26	49° 43'41"	81° 34'18"
10	49° 43'56''	81° 36'18"	27	49° 43'44"	81° 34'08"
11	49° 43'56''	81° 35'58"	28	49° 43'50"	81° 34'08"
12	49° 43'26''	81° 35'58"	29	49° 43'50"	81° 33'58"
13	49° 43'17''	81° 35'46"	30	49° 43'44"	81° 33'53"
14	49° 43'18''	81° 35'33"	31	49° 43'44"	81° 33'43"
15	49° 43'27''	81° 35'28"	32	49° 43'34"	81° 33'53"
16	49° 43'44''	81° 35'28"	33	49° 43'25"	81° 33'33"
17	49° 43'47"	81° 35'13"	34	49° 43'21"	81° 33'47"

TABLE 2-1 BAKYRCHIK DEPOSIT LICENCE AREA Kyzyl Project

Total Area = 5.6 km²

2.3.4. SURFACE USAGE/LAND LEASE

BMV has the land lease rights to the area related to Contract No. 120. The lease allows BMV to utilize the land within the limits of the lease for performance of subsoil use operations at the gold deposits of the Bakyrchik Mine in accordance with Contract No. 120.

2.3.5. OTHER SUBSOIL USE RIGHTS

In order to conduct its subsoil use operations, BMV has also entered into the following contracts:

 Contract No. 017 dated October 1, 2004 entered with the Committee on Geology and Subsoil Protection of the RoK Ministry of Energy and Mineral Resources for the construction and operation of underground facilities for storage and disposal of wastes at the tailing facility of BMV (the Underground Facilities Contract). Initially, the Underground Facilities Contract was executed for seven years. Subsequently,



the term of the Underground Facilities Contract was prolonged. According to the amendment No. 1 dated September 4, 2008, the term of the contract is 22 years and it is valid until expiry of Contract No. 120 in 2026); and

 Contract No. 303 dated October 10, 2007 entered with the Akim of the Eastern Kazakhstan Region for production of clay at the Ala-Aigyr field in the Zharma District in the Eastern Kazakhstan Region (the Clay Contract). The Clay Contract expires in 2028.

2.3.6. ENVIRONMENTAL PERMITS

2.3.6.1. PERMIT FOR EMISSIONS

Pursuant to the RoK Environmental Code dated January 9, 2007 (the Environmental Code), an individual or a legal entity may carry out emissions into the environment only after obtaining an Emissions Permit. An Emissions Permit consists of a set of documents including a Plan of Actions for Protection of the Environment and a Program of an Industrial Environmental Control. Accordingly, implementation of such a Plan and a Program is considered as maintaining compliance with the relevant Emissions Permit.

Emissions Permit No. 0000059 dated December 13, 2014 is valid from January 1, 2014 until December 28, 2015.

2.3.6.2. WATER USE PERMIT

According to the RoK Water Code dated July 9, 2003 (the Water Code), extraction of surface or underground water with special intake facilities as well as discharge of sewage water into surface water reservoirs refers to "special water use".

Special water use may be performed only under Special Water Use Permits issued by local departments of the Committee on Water Resources of the RoK Ministry of the Environment and Water Resources.

A Special Water Use Permit must be obtained before the commencement of the water use.

BMV has the following Special Water Use Permits:

- 1) Special Water Use Permit No. 03-1/SPL-102 dated May 14, 2013 for extraction and use of water from Kyzylsu water reservoir. The validity term of the permit is from May 14, 2013 until May 14, 2016.
- 2) Special Water Use Permit No. 03-1/SPL-115 dated February 28, 2013 for:
 - i) discharge of treated industrial, domestic, drainage and other sewage to surface water bodies in gold mining deposit of Bakyrchik; and



- extraction of underground mining water for the maintenance of occupational safety and drainage of mining roadways of Bakyrchik deposit. The validity term of the permit is from February 28, 2013 until February 28, 2016.
- Special Water Use Permit No. 03-1/SPL-134 dated October 8, 2013 for extraction of household and industrial subsoil water within limits from 50 m³/d up to 2,000 m³/d. The validity term of the permit is from October 8, 2013 until October 8, 2016.
- Special Water Use Permit No. 03-1/SPL-140 dated November 28, 2013 for discharge of treated domestic sewage water into the surface water body (the brook of Akbastaubulak). The validity term of the permit is from November 28, 2012 until November 28, 2015.

2.3.7. OPERATING LICENCES

The Law of the Republic of Kazakhstan on Licensing dated January 11, 2007 (the Licensing Law) specifies certain types of activities which are subject to licensing. Any income earned from that activity may be seized if a licence is not in place. BMV does not need to have a licence if the relevant works are conducted by a subcontractor which has all necessary licences.

2.3.7.1. HANDLING OF HAZARDOUS MATERIALS

State Licence No. 12000291 dated February 9, 2012 entitles BMV to carry out the activities connected with the handling of hazardous materials (including disposal, storage, acquisition, use, and transportation).

The licence is valid for a term of five years and applies to the entire territory of the RoK.

2.3.7.2. CONSTRUCTION WORKS

State Licence No. GSL 06-02380 dated June 14, 2011 which entitles BMV to carry out construction and assembly works of the third category.

The validity term of the licence is not limited.

2.3.7.3. MEDICAL ACTIVITIES

State Licence No. 002015 DF dated April 5, 2013 for the right to carry out the medical activities, specifically:

- primary healthcare
- pre-doctor care

The validity term of the licence is not limited.

2.3.7.4. MINING PRACTICES

State Licence No. 0003628 dated February 24, 2010 for exploitation of mining enterprises and mineral raw processing

The licence allows BMV to perform the following kinds of work:

- Production of solid minerals;
- Opening and development of deposits of solid minerals (open-cut and underground mining);
- Technological operations in deposits;
- Blasting operations for production of solid minerals;
- Liquidation of mines and pitshafts.

The validity term of the licence is not limited.

2.3.7.5. USE OF POISONS

State Licence № 0000985 dated June 26, 2002 for the right to perform the following activities: obtaining, transportation, storage, sale, use, and disposal of poisons (sodium cyanide). The validity term of the licence is not limited.

2.4. HISTORY

Gold has been known and mined in the Irtysh River area since the region came under the protection of the Czars over 200 years ago. Potential in the Bakyrchik area was known from geochemical surveys, mapping, and prospecting as early as 1945. The Kyzyl Shear Zone (KSZ), which hosts Bakyrchik among other deposits, was defined in the early 1950s by surface trenching. Surface drilling began in 1955.

FSU began open pit mining Lens 1 and Lens 12 in 1956 to provide gold-bearing siliceous smelter flux for smelters at Ust-Kamenogorsk (now Oskemen) and Sverdlovsk (now Ekaterinburg). Five major satellite open pits were mined, with additional ore coming from four smaller pits in the surrounding area. By the time open pit production ceased in 1994, approximately 2.1 million tonnes grading 7.56 g/t Au had been produced for a total of approximately 500,000 ounces of gold.

Underground mining of near surface oxidized ore commenced in 1963 from the upper portions of Lenses 9 and 10 with production ranging from 20,000 t/a to 47,000 t/a and was expanded in 1974 from 60,000 t/a to 95,000 t/a until 1995. In 1996, 133,000 tonnes


at a grade of 7.8 g/t Au were mined, even though the majority of production was suspended for the last six months of the year. The mining method used was underhand top slicing under a timber mat, with no backfill. At the suspension of underground mining in 1997, approximately 1.7 Mt grading 7.38 g/t Au had been produced, containing approximately 400,000 ounces of gold. At this point, most of the oxidized ore had been mined with sulphide ores remaining.

In 1992, a joint venture between Minproc, Chilewich International Inc., and the RoK Government was formed to operate Bakyrchik. A pilot-scale processing plant with a capacity of 150,000 t/a was constructed at the mine site in 1994, consisting of a comminution circuit, a conventional flotation system, a Redox oxidation circuit, and a conventional carbon-in-pulp circuit. Bakyrchik ore is considered double refractory due to the association of gold and arsenopyrite and the presence of a significant concentration of active carbonaceous material. The purpose of the pilot plant was to evaluate the effectiveness of the Redox process, which employs nitric acid as a catalyst for sulphide oxidation. Operating results overall were negative and this option was abandoned in 1996.

Since 1996, operators have conducted metallurgical testwork and commissioned scoping-level studies to determine a potentially viable process and production scenario. A number of options have been investigated, including combinations of open pit and underground mining at various production rates, and rotary kiln or fluidized-bed roasting processes.

A pilot roaster plant designed to assess the viability of single-stage roasting, using a rotary kiln operated periodically between February 2009 and September 2010. The objective of the pilot roasting project was to produce 20,000 ounces of doré alloy per year. Gold recoveries between 30% and 60% were achieved from historical oxidized stockpile ore at less than the designed throughput rate.

In the 2011 Fluor FS and the subsequent 2012 Verification and Optimization Phase (VOP) report, AAG proposed the adoption of a process route that used two-stage roasting of whole ore to oxidize both the sulphides and the active carbon. The roasting process would decompose sulphides and oxidize organic carbon and would then be followed by conventional cyanidation for gold recovery. Any materials with the potential to be contaminated with arsenic would be delivered to an arsenic treatment facility where they would be processed into a stabilized form of arsenic suitable for long-term storage. Arsenic would be stabilized using an innovative new method. Considerable bench-scale



and pilot plant testwork was conducted resulting in an average metallurgical recovery to doré of 88% Au.

The two-stage roasting studies resulted in marginal economic results for the Project, principally due to high capital costs. The current FS, using the BIOX[®] process, features lower capital costs at the expense of lower recovery, with much improved economic results.

2.5. GEOLOGICAL SETTING AND MINERALIZATION

2.5.1. REGIONAL GEOLOGY

The Kyzyl Project is located in the central portion of the Kalbinsky synclinorium in Lower and Middle Carboniferous sedimentary rocks within the Kalba-Narymsk structural zone (Figure 2-3). A series of northwest trending metallogenic zones cross the region and contain three parallel gold trends. The Project occurs in the easternmost trend, within the northwest trending Western Kalba metallogenic belt, which extends across most of east Kazakhstan. This is part of the Late Palaeozoic Eastern Kazakhstan gold province where both orogenic and intrusive related gold deposits occur.

2.5.2. LOCAL GEOLOGY

The Kyzyl District is underlain by tightly folded and faulted Carboniferous age sedimentary rocks from youngest to oldest, into the Bukon, Kokpekty, and Arkalyk formations. Seismic studies suggest that granitic basement rocks underlie the sedimentary rocks at depths of one kilometre in the west of the exploration licence and three to four kilometres in the east. Syn- and post-tectonic intrusions, shearing, and hydrothermal activity culminated in the formation of the Bakyrchik gold deposits (see Figure 2-2).

The Project area is bounded to the west by the northwest trending Kalbinsky Fault, which dips 60° to 70° to the northeast. Nine kilometres to the east, a parallel structure known as the Northwest Fracture has been identified, though its extent and regional significance are disputed. The KSZ lies between the Northwest Fracture and the Kalbinsky Fault. The Northwest Fracture is interpreted to turn westward into the east-west brittle-ductile deformation zones, known as the Parallel Shear Zone (PZ). Most of the gold deposits and occurrences in the Kyzyl District are hosted in the KSZ, the PZ, and intersections with the Kalbinsky and Northwest Faults.



The KSZ is an 11.5 km long zone that dips 30° to 40° north, transects lithological trends, and ranges in width from 10 m to 240 m. It is identified in drill core by shear foliation, brecciation, alteration, sulphides, white quartz veining and flooding, and a gouge zone at its hanging wall contact. The KSZ has been traced to depths of 1.5 km in the west and 3.5 km in the east. FSU seismic surveys suggest that the KSZ terminates at the granite basement.

The PZ, located five kilometres north of the KSZ, also strikes east-west and dips 40° north. Its width, however, is limited to tens of metres or less.

Limited exposures of Permian granite intruding the sedimentary rocks are located north and south of the KSZ. Porphyritic syn-mineralization dioritic and post-mineralization granitic sills and dikes are mapped adjacent to the KSZ.

2.5.3. PROPERTY GEOLOGY

Work by AAG geological staff and consultants (Crossing 2010 and 2011, IGM 2011, Goodman 2011), summarized below, has characterized the main lithologies encountered in the Bakyrchik, Globoki Log, and Promezhutochny deposits (Figure 2-4). This work has been correlated with that of Lewis Geosciences Services Inc. (2006). The deposit lithologies, coded into the current drill program and also revised within the historical drill hole database, are presented in Table 2-2. A typical geological cross-section through Lens 1 is presented in Figure 2-5.



Domain	Name	Abbreviation	Code
	Clay	CLAY	S0A
Unlithified Sediments	Loam to Sandy Loams	LM	S0B
•••••••	Clastic Material	CLST	S0C
	Sandstone	SS	S1
	Arkosic	ARK	S1A
	Quartzitic	QTE	S1B
	Shale	SH	S2
	Siltstone	SLST	S2
	Alternation of SS to SLST	TSLT	S4
Sediments	Alternation, SS>SH	RASS	S4A
	Alternation, SS <sh< td=""><td>RASH</td><td>S4B</td></sh<>	RASH	S4B
	Thin Alternation, SS>SH	TASS	S4C
	Thin Alternation, SS <sh< td=""><td>TASH</td><td>S4D</td></sh<>	TASH	S4D
	Conglomerate	CGL	S 5
	Marl	MARL	S6
	Sedimentary Breccia	SEDB	S7
	Tectonitic Friction Clay	TFC	T1
Testenites	Mylonite	MYL	T2
rectonites	Tectonite	ТСТ	Т3
	Tectonic Breccia	TBR	T4
	Gabbrodiorite	GABD	l1
	Diorite to Monzonite Porphyry	DMP	12
Intrusive	Plagiogranite-Porphyry	PLGP	13
Rocks	Albite Porphyry	AP	14
	Quartz Porphyry	QP	15
	Aplite	APL	16
Quartz Veins	Quartz Veins	QZ	QZ

TABLE 2-2 KYZYL DEPOSIT LITHOLOGIES Kyzyl Project

RPA

www.rpacan.com





110







²⁻¹⁷



www.rpacan.com





2.5.4. MINERALIZATION AND DEPOSIT TYPE

Gold-sulphide mineralization hosted within the KSZ occurs in foliated mudstones, siltstones, fine- to coarse-grained sandstones, interbedded units, and dioritic porphyries. Mineralization is characterized by quartz veining, with fine pyrite and acicular arsenopyrite disseminated in the rock matrix and coarse grains aggregated in more altered patches and bands. Lewis (2006) noted that, on the basis of textural and structural characteristics, many of the veins observed in drill core can be classified as either crack-seal stylolitic veins, extension veins, or stockworks to hydro-fracture breccias. All vein types may be associated with abundant arsenopyrite and elevated gold grades. Gangue minerals include quartz, carbon, siderite, clay, barite, and less abundant alteration minerals including sericite, chlorite, calcite, albite, and biotite.

Sulphide distribution appears to be related to host rock permeability. Coarser-grained sandstones tend to be higher grade in sulphur and gold. Gold is associated with the sulphides, and occurs as rounded blebs on the order of 10 µm in diameter.

FSU mineralogical and continued work by BMV has distinguished several styles of sulphide mineralization in drill core, corresponding to the episodes of quartz veining:

- Fine- to medium-grained pyrite disseminations are confined to small sandstone clasts and pebbles found in conglomerates/gravelites.
- Masses of early fine-grained pyrite are found in variously sized clasts, rotated sheared clasts, dismembered boudinage layers in tectonites/mylonites, and some quartz veins.
- Late fine-grained pyrite and fine-grained acicular arsenopyrite disseminations are found in carbonaceous stylolitic surfaces, rock clasts and remnants, as well as in wallrocks occurring in exocontact zones of larger quartz veins/stockworks/breccias. This is likely younger sulphide mineralization, and probably the most productive one for gold.
- Medium- to coarse-grained pyrite dissemination, locally with arsenopyrite, occurs in some local sectors and overprinting sedimentary rocks and dykes.
- Thin (less than one centimetre) quartz-stibnite (+arsenopyrite) veinlets cutting across other quartz veinlets.

Soloviev (2009) postulated that there were at least two events of hydrothermal sulphide and quartz mineralization. The early event may be associated with the formation of crack-seal and extension quartz veins and accompanying formation of early pyrite. In contrast, the second event was associated with intense "hydrofracture" brecciation (affecting the early quartz and pyrite) and accompanying formation of abundant arsenopyrite and some pyrite. An alternative theory is a longer sulphide mineralization



history, with the involvement of some very early (syn-sedimentary or volcanic-exhalative) mineralization.

2.5.4.1. MINERALIZED LENSES

A number of higher-grade gold zones along the KSZ form lenses that have been outlined by drilling and underground sampling. From west to east, they are Lenses 12, 4, 5, 7, 1, 8, and 9 forming the Bakyrchik deposit, and the Promezhutochny and Globoki Log lenses, referred to as the Bakyrchik East deposit (Figure 2-6). Descriptions of the mineralized lenses are provided in the resource section of this report.

2.5.4.2. DEPOSIT TYPES

The Bakyrchik and Bakyrchik East deposits are of the epigenetic, shear-hosted lode goldsulphide type, in which gold is very fine grained and is held mainly in arsenopyrite and, to a lesser extent, pyrite. Historical reports note that approximately three percent of the gold occurs free, however, free gold has not been identified in any of the recent BMV diamond drilling.

Previous studies (WSE 1996, Minproc 1997a, Lewis 2006) have emphasized the importance of structural control, with the tectonized rocks acting as conduits for hydrothermal fluid movement during deformation, and the location of mineralized lenses indicating the presence of high-permeability dilational zones. There is, however, also lithological control, with preferential mineralization of more permeable, coarser grained sediments. The presence of intrusive rocks as metal source and/or heat engine may also control the distribution and localization of mineralization.



www.rpacan.com

m 0002	Globoki Log Deposit 500 el	-500 el	gure 2-6 nternational plc	ect - Bakyrchik _{zakhstan} nematic hik Lenses
m 000 1	yrchik East		Polymetal I	(yzyl Proje Kaz Sch Bakyrc
u 005£	Prome			
u 000£				
uu 0052	Existing pevelopment			0
		Lens 8 Lens 9		600 800 10
m 00č1	akyrchik	Shaft Shaft		0 200 400 Me
m 0001				
u 005		Lens12		14
0 m 0 e 0 m	500 el	O el	-1500 el	-2000 el July 201

2-21



2.6. EXPLORATION

At the time of writing, no exploration is occurring at the BMV site or on the Exploration Licence areas. In May 2014, 17 diamond drillholes totalling 3,601 m were drilled for metallurgical testing purposes. Some 639 samples were selected and sent for assay, however, no results have been reported to date. The multi-year Kyzyl Project exploration program, which began in late 2009, concluded in the summer of 2012. This program included geological mapping, structural studies, geophysics, geochemistry and historical literature reviews in order to assist with target generation for diamond drilling. In 2013, BMV applied to the competent authority to convert two areas of the exploration allotment to mining areas (Sarbas and Vein 31).

2.6.1. DRILLING

Drilling was carried out periodically as exploration and development progressed at the Kyzyl Project. Exploration groups associated with the FSU drilled the property from March 1955 to April 1992 followed by a confirmation drilling program by Global Mining Services Inc. (GMSI) on behalf of Western Services Engineering, Inc. (WSE) and Minproc Engineering Ltd. (Minproc) from June to August 1996. From October 2009 to August 2012, BMV conducted an extensive diamond drilling program to both explore new areas and increase the confidence of the known mineralization.

2.6.1.1. FSU DRILLING

FSU drilling was carried out on the property from March 1955 to April 1992. Drilling and survey equipment evolved over time, but even the most recent FSU coring was done by standard drilling rather than wireline technology. Core diameters for surface holes were commonly 41 mm, 59 mm, or 76 mm. All FSU drill hole collars were surveyed. Downhole surveys were done according to FSU standards at the time and included acidetch dip tests or single-shot camera instrument readings.

Drill core was initially stored, however, with the break-up of the Soviet Union the drill core was discarded.

2.6.1.2. CONFIRMATION DRILLING BY GMSI

A confirmation drill program by GMSI on behalf of WSE and Minproc was required due to relatively poor core recovery reported in FSU drilling, a lack of available core, and the requirement for metallurgical samples. In 1996, drilling was carried out in areas of the deposits planned for exploitation during the first five to six years of mining. As no FSU



holes were twinned, the GMSI program appears to have been designed more to infill and confirm grade and zone continuity than to directly test FSU assays.

GMSI drilled 22 holes from surface to test Lens 1 and 69 holes underground from the 250 RL level to infill Lens 1 and test Lens 9. GMSI surface and underground holes were laid out by the mine surveyor using GPS total station equipment. A Sperry Sun 10° to 90° downhole survey instrument traced surface-hole deviation with camera shot measurements at nominal 30 m (20 m to 130 m) intervals taken below the casings

2.6.1.3. BMV DRILLING PROGRAMS 2009 TO 2013

From October 2009 to July 2013, HQ size core was drilled using western drill strings and bits. Collars locations were resurveyed after the drill moved off the pad and compared with the Fugro satellite DTM. Downhole orientation measurements were made with an EZ-Shot instrument supplied and operated by the diamond drilling contractors

2.6.1.4. BMV DIGITAL DRILL HOLE DATABASE

The Bakyrchik drill hole database contains 3,855 records consisting of 2,713 diamond drill holes and 1,142 chip-sampled crosscuts represented as drill holes, totalling 822,447 m (Table 2-3). The FSU drilling accounts for 74% of the total length, and includes surface exploration and delineation drilling, underground definition drilling, as well as production grade control sampling that is restricted to Lenses 8 and 9. RPA excluded the FSU underground chip and channel samples from resource estimation due to survey issues, different sampling standards compared to drill core, and spatial restrictions to sampling of primarily ore-grade material within a small area. Also excluded were several aborted BMV holes that did not intersect the KSZ and holes that were drilled for geotechnical, hydrogeological, or metallurgical purposes.



Drill Hole Type	Code	No. of Holes	Metres	% of Total m					
GMSI Surface Holes	1	22	7,102	<1					
GMSI Underground Holes	3,6,10	69	4,893	<1					
FSU Surface Holes	2	1,643	607,634	74					
FSU Underground Holes	4	638	39,325	5					
FSU Stope Samples*	5	1,057	9,785	1					
FSU Crosscut Samples*	7	79	2,699	<1					
FSU Drive Samples*	8	6	143	<1					
BMV Surface Holes	11	341	150,866	18					
Total		3,855	822,447						

TABLE 2-3 SUMMARY OF DIGITAL DRILL HOLE DATABASE (JULY 31, 2013) Kyzyl Project

Notes: *Chip and channel sampling represented as drill holes. These are not used to estimate mineral resources.

A total of 2,515 drill holes were used to estimate resources at the Bakyrchik and Bakyrchik East deposits. The FSU drilling accounts for 78% of the total drilled, however, recent drilling by BMV accounts for a larger proportion of holes that intersect the resource wireframe models and thus used to estimate block grades. Underground drilling accounts for less than one percent of the total.

2.6.1.5. ASSAY DATABASE

As of the database cut-off date of July 31, 2013, the assay table contains 135,920 records totalling 129,018 m of analyses.

2.6.2. SAMPLE PREPARATION, ANALYSES AND SECURITY

2.6.2.1. SAMPLING

FSU Sampling

Core logging and sampling were carried out according to FSU protocols. Although no FSU diamond drill core was available for review, RPA studied a number of FSU sites and found that they generally operated in a standard and professional manner. FSU use of non-wireline drilling equipment, however, resulted generally in poorer core recovery compared to western drilling methods.

GMSI Sampling

Drill core was logged and sampled using Kazakh protocols under the supervision of GMSI geologists. Core was photographed after logging and before splitting. Logging recorded geotechnical data such as rock quality designation (RQD), recovered lengths



and percent, hardness, fracture density, fillings and roughness, as well as geological data such as rock type and colour, structure, mineralization, alteration, quartz veining, and carbon contents. Geotechnical, geological, and assay logs were compiled in digital spreadsheets.

BMV Sampling

Exploration core was drilled using HQ size equipment (63.5 mm diameter core) using western drill rods and bits. Triple tube HQ3 (61.1 mm diameter core) was used for sampling and geotechnical logging within, and on the shoulders, of the mineralized zone.

In RPA's opinion, BMV's core logging and sampling procedures, including bulk density measurements, are well documented and meet industry standards.

Core sample preparation, consisting of crushing, splitting, pulverizing, and splitting, was similar for both FSU and GMSI work. Assaying methods were quite different. These are described below.

2.6.2.2. SAMPLE PREPARATION AND ANALYSIS FSU

FSU mineral laboratories operated under a structured system of government-certified procedures and protocols that governed work in all FSU republics. Surface and underground drill core was processed off-site at independent FSU facilities, but there is little information available as to which laboratories were used or which sample preparation and assay protocols were followed. Production grade control channel samples were handled on site at the Mine's analytical facility.

GMSI

Approximately 7,400 core samples were submitted to SGS Kazakhstan Ltd. (SGS Kazakhstan) in Pervomayka, Kazakhstan. Pulps were shipped air-freight to SGS XRAL Laboratory in Toronto, Ontario, with assaying carried out at XRAL's facility in Rouyn-Noranda, Quebec, Canada. SGS XRAL is an independent ISO/IEC Guide 25 accredited mineral laboratory.

In RPA's opinion, the GMSI sample preparation and assay procedures were of industry standard.



BMV Drilling Program

The issue of sample preparation and analysis was a critical step for the Bakyrchik resource estimate update. With no ISO certified laboratory in Kazakhstan, the samples had to be exported to an accredited overseas facility to ensure reliability.

Following Kazakhstan law, both an in-country gold assay certificate and documented approval are required before samples can be exported. An additional stipulation is that one percent of the assays have to be submitted to VNIITSVETMET (a Kazakhstan Government laboratory) for confirmation analysis. BMV followed RPA's recommendation that the BMV Mine Laboratory be utilized to crush the core samples into two splits, provide the internal FA gold analyses required for export licensing from one split, and then prepare the remaining split for export to ALS Vancouver, Canada. RPA compared results from the BMV analyses versus results from ALS and found acceptable repeatability.

BMV Mine Laboratory Independent Review

Analytical Solutions Ltd. of Ontario Canada, was contracted by BMV in April 2010 to review the BMV Mine Laboratory sample splitting, preparation, and assaying procedures. The scope of work also included a comparison of the BMV Mine Laboratory results versus the ALS results.

A series of changes in procedures and equipment upgrades in order for there to be adequate confidence in the BMV Mine Laboratory to use the internal assays in resource estimation work however, as ALS Minerals (ALS) began construction of independent assaying laboratory, with international accreditations, immediately outside the mine area not all of these were implemented.

ALS Laboratory Procedures

The one kilogram coarse reject splits of AAG's samples were forwarded to ALS Vancouver, Canada. The ALS Vancouver laboratory has received ISO 17025 accreditation from the Standards Council of Canada under CAN-P-4E (ISO/IEC 17025:2005

Upon receipt in Vancouver, the samples were sorted, logged in the Laboratory Information Management System (LIMS), weighed, dried to a maximum of 120°C, and crushed to more than 70% passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 250 g was taken and pulverized to better than 85% passing a 75 μ m (Tyler 200



mesh, US Std. No. 200) screen. Quality Control (QC) testing of pulverizing efficiency was conducted on random samples.

In addition to the BMV blank QC samples, the LIMS inserted QC samples (reference materials, blanks, and duplicates) on each analytical run, based on the rack sizes associated with the method. The rack size is the number of samples, including QC samples, included in a batch. The blank was inserted at the beginning, standards were inserted at random intervals, and duplicates were analyzed at the end of the batch. Regular FA methods included two standards, three duplicates, and one blank per rack of 40 samples. Regular AAS, inductively coupled plasma atomic emission spectroscopy (ICP-AES), and inductively coupled plasma mass spectroscopy (ICP-MS) methods included two standards, one duplicate, and one blank per rack of 84 samples.

The samples were analyzed for gold using FA fusion followed by a gravimetric finish (Au-GRA21). A multi-element ultra-trace level geochemical analysis (ME-MS41) was carried out using aqua regia digestion followed by ICP-AES and ICP-MS.

Elements Significant to the Environment or Mineral Processing System

Analyses of elements which could have a potential impact on the environment or mineral processing system were optimized for accuracy and precision using the methods listed in Table 2-4.

Element	Symbol	Units	Method	Lower Limit	Upper Limit
Arsenic	As	%	As-OG46	0.01	60
Carbon - Total	С	%	C-IR07	0.01	50
Carbon - Organic	С	%	C-IR06	0.01	100
Sulphur - Total	S	%	S-IR08	0.01	50
Sulphur - Sulphide	S	%	S-IR07	0.01	50
Iron	Fe	%	ME-MS41	0.01	50
Mercury	Hg	ppm	ME-MS41	0.01	10,000
Antimony	Sb	ppm	ME-MS41	0.05	10,000
Tungsten	W	ppm	ME-MS41	0.05	10,000
Silver	Ag	ppm	ME-MS41	0.01	100

TABLE 2-4 ELEMENTS THAT MAY IMPACT ENVIRONMENT OR MINERAL PROCESSING Kyzyl Project

BMV Quality Assurance/Quality Control Program

A Quality Assurance/Quality Control (QA/QC) program was introduced during the initial BMV 2009 drilling program and has been carried on in subsequent drilling campaigns.



Every batch of 20 samples consisted of one standard, one blank, and one duplicate. RPA considers the BMV QA/QC program to meet industry standard practice and the results to be acceptable.

Field blank material was sourced from two locations, whole granodiorite core from an abandoned Tantulum Mine in northeastern Kazakhstan and granite from a tombstone supplier in Oskemen. Blanks were inserted following intersections with visual estimations of high arsenopyrite.

Certified Reference Materials

In mid-2011, BMV began using two new certified reference materials (CRM) identified as BAK and BOL. Both CRMs were prepared by Canadian Resource Laboratories (CDN), Langley, British Columbia, Canada and certified by Analytical Solutions Ltd., Toronto, Ontario. The material for BAK and BOL reference material was collected from the Bakyrchik and Bolshevik coarse ore stockpiles respectively.

Security

No information is available regarding FSU security measures including chain of custody in reports reviewed by RPA. Minproc (1996b) reviewed documentation on comparative assaying at various FSU institutes, indicating that checks to assure reliable assaying were in place. Only limited information is available for the GMSI confirmation drilling.

For BMV projects, samples were sent to ALS Vancouver, Canada, via DHL, in trackable lots. Assay results were transmitted directly via the secure ALS "Webtrieve" internet system. The Geology Project Manager and Database Manager were authorized to receive assay data. Formal signed Laboratory Assay certificates were mailed to AAG's office in Vancouver, scanned, and emailed to site. Comparisons were made between shipped weights (BMV) and received weights (ALS) to reduce sample mix-up errors.

In RPA's opinion, the chain of custody and sample security measures are adequate based on the available information and previous FSU experience.

2.6.3. DATA VERIFICATION

2.6.3.1. HISTORICAL DRILL HOLE DATA SOURCES

Four benchmark studies including exploration data compilation, resource estimates, and feasibility studies were completed by FSU groups in 1965, 1976, 1987, and 1991. These, combined with further studies and confirmation drilling by western-based consulting firms, have resulted in an extensively documented and comprehensive resource database.



Eight main historical data sources of varying types are available at the Bakyrchik Mine:

- Russian/Kazakh surface and underground drill hole logs in hard copy format (premid-1990s) with accompanying GMSI spreadsheet transcriptions (1996). Minproc Definitive Feasibility Study (the 1996 Minproc DFS) (Minproc 1996b) collar, survey, and assay files in ASCII format (1996).
- 2. GMSI surface and underground confirmation drill hole logs in spreadsheet format (1996) (Sketchley and Tuvshintsengel, 2006).
- 3. Spreadsheets that pertain to groups of holes, checked by various individuals, comprise collar, survey, assay, geological, and geotechnical data. A master collar spreadsheet accompanied these data, but there were no master files for the remaining data. The survey and assay data were compiled together and, with the pre-existing collar data, were imported into a database as part of a review of mine resources. The database comprises 3,444 collar records.
- 4. BMV plotted paper and digital sections and plans in the data rooms and the geology and survey offices. These plotted data were used for checking purposes only.
- 5. Core and sample archives (1996 to 2007). A hard copy drill core inventory printout was located and has been translated into English.
- 6. Diamond drill hole collars. Generally, surface casings were left in situ after completion of the hole.
- 7. GMSI, Minproc, and BMV files comprising drill holes were used to delineate oxide resources (all years).

The first three data sources were used to compile the Bakyrchik drill hole database which in turn was used to estimate resources. The oxide hole data were excluded.

In late 2006, Ivanhoe Mines Ltd. (Ivanhoe) began recompiling all data in the general area of the Mine, excluding recent surface oxide drilling, by starting with the GMSI spreadsheet transcriptions of Russian/Kazakh surface and underground holes and then including additional holes from the GMSI surface and underground confirmation logs and the Minproc database. The Minproc data comprised mostly underground chip sampling pseudoholes that were compiled for the 1996 Minproc DFS. In May 2007, Ivanhoe provided RPA with updated Bakyrchik databases compiled from the historic data sources. RPA reviewed the Bakyrchik Mine area database and performed routine checks to verify the incorporation of the original data sources. The resource database has been maintained in Gemcom GEMS software since that time.



2.6.3.2. BMV DRILLING PROGRAM AND QA/QC

BMV exploration personnel instituted a rigorous check program for all new drill hole data. Final sign off of drill hole data was issued by the BMV Exploration Manager and Vice President of Exploration. During the November 2010 and May 2011 site visits, RPA reviewed all aspects of the drill sample flow including drill rig set-up, surveying, logging, and sampling procedures and found them to be at or above industry standard.

RPA visited the BMV Mine Laboratory and confirmed that internal laboratory QA/QC procedures were carried out. These procedures are similar to those used in FSU laboratories, at least for the latest assays on the Project. All equipment is from western suppliers and the laboratory is accredited by the Kazakh Government.

In RPA's opinion, results of the blanks, CRMs (standards), and duplicates of BMV's QA/QC program show overall adequate precision and accuracy by the ALS laboratory for gold analyses.

2.6.3.3. DISCUSSION

The BMV drill hole database recompilation and QA/QC processes have been thorough and well documented. The GMSI translated borehole logs appear to be of good quality and are considered a valid source of data. BMV personnel have made best efforts to validate the FSU gold assay values sourced from borehole logs, assay certificates, and plotted values. In RPA's opinion, the main limitations on verifying data from the various sources are the lack of available FSU core to examine as well as the lack of FSU QA/QC documentation.

2.7. MINERAL RESOURCE ESTIMATE

2.7.1. SUMMARY

RPA reviewed data for the Bakyrchik deposit and has independently estimated Mineral Resources as of July 31, 2013, are prepared according to the JORC 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves standards and guidelines published and maintained by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (the JORC (2012) code).

The Mineral Resource estimate is based on diamond drilling and core sampling data and employs three dimensional (3D) block modelling and ordinary kriging (OK) grade interpolation constrained by wireframes constructed at a nominal cut-off grade of 2.0 g/t



Au. High grade assays were capped to 35 g/t Au to avoid disproportionate influence of high grade values on the average grade. Resources were estimated for Lenses 1, 3, 4, 5, 8, 9, 12, Promezhutochny, and Globoki Log. The Mineral Resources form the basis for the Ore Reserve estimate at Bakyrchik.

RPA has reported the Mineral Resources both exclusive and inclusive of Ore Resources. At a cut-off grade of 3.0 g/t Au, Indicated Mineral Resources exclusive of Ore Reserves (Table 2-5) are estimated to total 3.2 million tonnes at a grade of 7.97 g/t Au containing 820,000 ounces of gold. At the same cut-off grade, Inferred Mineral Resources are estimated to total 13.8 million tonnes at a grade of 6.63 g/t Au containing 2,950,000 ounces of gold.

TABLE 2-5 BAKYRCHIK MINE MINERAL RESOURCE SUMMARY **EXCLUSIVE OF ORE RESERVES Kyzyl Project**

Mineral Resource	Area	Tonnes	Grade	Contained Gold
Classification		(million)	(g/t Au)	(oz million)
Indicated	Bakyrchik	3.22	7.97	0.82
	Bakyrchik East	0.0	0.00	0.00
	Total Indicated	3.22	7.97	0.82
Inferred	Bakyrchik	5.82	7.12	1.33
	Bakyrchik East	8.00	6.28	1.62
	Total Inferred	13.83	6.63	2.95
Total Indicated and Inferred		17.05	6.88	3.77

Notes:

- 1. JORC 2012 definitions were followed for Mineral Resources.
- 2. Mineral Resources are estimated at a cut-off grade of 3.0 g/t Au.
- 3. Mineral Resources are estimated using an average gold price of \$1,400 per ounce.
- A minimum mining width of two metres was used.
 Bulk density is 2.67 t/m³.
- 6. Mineral Resources are exclusive of Ore Reserves.
- 7. Numbers may not add due to rounding.

The Mineral Resources inclusive of Ore Reserves are disclosed in Table 2-6.



TABLE 2-6 BAKYRCHIK MINE MINERAL RESOURCE SUMMARY INCLUSIVE OF ORE RESERVES Kyzyl Project

Mineral Resource	Area	Tonnes	Grade	Contained Gold
Classification		(million)	(g/t Au)	(oz million)
Indicated	Bakyrchik	26.5	8.81	7.52
	Bakyrchik East	0.0	0.00	0.00
	Total Indicated	26.5	8.81	7.52
Inferred	Bakyrchik	5.8	7.12	1.33
	Bakyrchik East	8.0	6.28	1.62
	Total Inferred	13.8	6.63	2.95
Total Indicated and Inferred		40.3	8.06	10.47

Notes:

1. JORC 2012 definitions were followed for Mineral Resources.

2. Mineral Resources are estimated at a cut-off grade of 3.0 g/t Au.

3. Mineral Resources are estimated using an average gold price of \$1,400 per ounce.

- 4. A minimum mining width of two metres was used.
- 5. Bulk density is 2.67 t/m^3 .
- 6. Mineral Resources are inclusive of Ore Reserves.
- 7. Numbers may not add due to rounding.

At a cut-off grade of 3.0 g/t Au, Indicated Mineral Resources inclusive of Ore Reserves are estimated to total 26.5 million tonnes at a grade of 8.81 g/t Au containing 7,520,000 ounces of gold.

Based on RPA's evaluation of operating costs, metallurgical recovery, long term metal price forecasts, current economic factors and revenue criteria, the resources at the 3.0 g/t Au cut-off grade are reasonable for evaluation of economic potential and conversion to reserves. RPA classified the resources as Indicated and Inferred based on drill hole spacing, grade continuity, and reliability of data.

Previous Technical Reports described the Bakyrchik and Bakyrchik East deposits separately due to the historic precedence of studying each deposit individually. This report combines both deposits since they are located along strike close to each other, are thought to be part of the same mineralization system, and lie on the same mining permit. Table 2-7 presents a summary of Mineral of Resources exclusive of Ore Reserves listed by area. Table 2-8 presents a summary of Mineral of Resources inclusive of Ore Reserves listed by area.



TABLE 2-7	BAKYRCHIK MINE MINERAL RESOURCE SUMMARY
EXC	LUSIVE OF ORE RESERVES LISTED BY AREA
	Kyzyl Project

	Indicated			Inferred			
	Tonnes	Grade	Gold	Tonnes	Grade	Gold	
Area/Lens	(million)	(g/t Au)	(oz million)	(million)	(g/t Au)	(oz million)	
Bakyrchik							
Lens 1	1.30	8.24	0.34	4.04	7.06	0.92	
Lens 9	0.99	7.52	0.24	0.51	6.86	0.11	
Lens 12	0.72	9.04	0.21	1.07	7.50	0.26	
Lenses 4,5,7	0.10	4.16	0.01	0.09	4.71	0.01	
Lens 8	0.12	5.49	0.02	0.10	8.30	0.03	
Total Bakyrchik	3.22	7.97	0.82	5.82	7.12	1.33	
Bakyrchik East							
Promezhutochny				5.26	6.33	1.07	
Globoki Log				2.75	6.20	0.55	
Total Bakyrchik East				8.00	6.28	1.62	
Total Kyzyl Project	3.22	7.97	0.82	13.83	6.63	2.95	

Notes:

1. JORC 2012 definitions were followed for Mineral Resources.

2. Mineral Resources are estimated at a cut-off grade of 3.0 g/t Au.

3. Mineral Resources are estimated using an average gold price of \$1,400 per ounce.

4. A minimum mining width of two metres was used.

5. Bulk density is 2.67 t/m³.

6. Mineral Resources are exclusive of Ore Reserves.

7. Numbers may not add due to rounding.

TABLE 2-8 BAKYRCHIK MINE MINERAL RESOURCE SUMMARY INCLUSIVE OF ORE RESERVES LISTED BY AREA Kyzyl Project

		Indicate	d		Inferred		
Area/Lens	Tonnes (million)	Grade (g/t Au)	Gold (oz million)	Tonnes (million)	Grade (g/t Au)	Gold (oz million)	
Bakyrchik	((9, 7, 7, 6, 7	(((9,)	(•=	
Lens 1	17.18	9.14	5.05	4.04	7.06	0.92	
Lens 9	3.56	7.73	0.88	0.51	6.86	0.11	
Lens 12	4.51	9.47	1.37	1.07	7.50	0.26	
Lenses 4,5,7	0.51	4.15	0.07	0.09	4.71	0.01	
Lens 8	0.79	5.57	0.14	0.10	8.30	0.03	
Total Bakyrchik	26.54	8.81	7.52	5.82	7.12	1.33	
Bakyrchik East							
Promezhutochny				5.26	6.33	1.07	
Globoki Log				2.75	6.20	0.55	
Total Bakyrchik East				8.00	6.28	1.62	
Total Kyzyl Project	26.54	8.81	7.52	13.83	6.63	2.95	

Notes:

1. JORC 2012 definitions were followed for Mineral Resources.

2. Mineral Resources are estimated at a cut-off grade of 3.0 g/t Au.



- 3. Mineral Resources are estimated using an average gold price of \$1,400 per ounce.
- 4. A minimum mining width of two metres was used.
- 5. Bulk density is 2.67 t/m³.
- 6. Mineral Resources are inclusive of Ore Reserves.
- 7. Numbers may not add due to rounding.

Mineral Resources have been estimated from a depth of approximately 35 m to a depth of approximately 950 m. Reported Mineral Resources are exclusive of previously mined stopes. Channel samples exist for some of the underground drifts, but these were not used for grade interpolation as the channel survey data do not agree with the drilling survey data and the channel locations could not be verified.

2.7.2. RESOURCE DATABASE

Within the Bakyrchik resource wireframes, there are 1,500 diamond drill holes totalling 16,351 m of sampling (Table 2-9). A summary of drill hole intersections by lens is listed in Table 2-10. As discussed in the Section on Data Verification, several historic drill holes were removed due to missing survey data and/or missing assay data.

Diamond Drilling	Туре	No. of Intercepts	Length of Intercepts (m)	% of Total m
GMSI Surface Holes	1	35	651	4
GMSI Underground Holes	3,6,10	82	1,004	6
FSU Surface Holes	2	677	5,677	35
FSU Underground Holes	4	403	5,659	35
BMV Holes	11	303	3,370	20
Total		1.500	16.361	

TABLE 2-9 SUMMARY OF DRILL HOLE INTERSECTIONS Kyzyl Project

TABLE 2-10DRILL HOLE SUMMARY BY LENSKyzyl Project

Drill hole type	No. of Holes	Sampled Length (m)	No. of Holes	Sampled Length (m)								
	L	ens 1	Le	ens 9	Lens 12		Lenses 4,5,7,8		Glob	oki Log	Promezhutochny	
1	35	651										
2	164	2,125	101	959	101	720	48	286	74	471	189	1,116
3	16	309	31	349								
4	124	2,522	147	2,159	31	207	99	760			2	11
6			28	223								
10	2	41	3	72			2	11				
11	155	2,353	36	252	87	599	2	10	6	38	17	119
Total	496	8,002	346	4,013	219	1,526	151	1,067	80	508	208	1,246



Statistics for the assays located within the lenses, as delineated at a 2.0 g/t Au cut-off grade over a two-metre true width, are shown in Table 2-11. RPA notes that the coefficient of variation for the assays is relatively low with respect to other shear/vein hosted gold deposits and this is a positive factor in the reliability of resource estimation at Bakyrchik.

TABLE 2-11 STATISTICS FOR GOLD ASSAYS WITHIN THE RESOURCE WIREFRAMES Kyzyl Project

	Lens 1	Lens 9	Lens 12	Lenses 4,5,7,8	Globoki Log	Promezhut- ochny
No. of Cases	7,643	3,831	1,587	897	499	1,249
Minimum	0.01	0.01	0.01	0.00	0.01	0.01
Maximum	96.20	68.00	86.00	42.50	33.20	51.40
Median	6.42	4.80	6.00	3.50	4.30	4.60
Arithmetic Mean	8.78	7.25	9.19	4.85	6.08	6.63
Standard Deviation	8.23	7.70	10.07	4.88	5.40	6.51
Coef. of Variation	0.94	1.06	1.10	1.01	0.89	0.98

2.7.3. WIREFRAME MODELS

Wireframe models of the mineralized lenses serve in geological and grade continuity studies to constrain the block model interpolation, and as a basis for mine planning. Models of the Bakyrchik lenses were constructed in a collaborative effort by BMV and RPA. BMV made the preliminary interpretation using drill hole data available during the PFS. The preliminary wireframes were then verified and updated by RPA to incorporate BMV drilling available on July 31, 2013. RPA and BMV made an effort to preserve the historic lens names, however, some areas were renamed or reassigned due to the modified interpretation.

RPA created 100 west-looking vertical sections spaced 25 m apart, 80 inclined sections looking north, and 120 level plans. The preliminary wireframe solids were contoured on vertical sections. Nodes were then thinned and snapped to drill holes to generate a set of 3D wobbly polylines on each cross-section. At model extremities, polylines were extrapolated 25 m beyond the last drill hole. Polylines were joined together in 3D using tie lines and the continuity was checked using the longitudinal sections and level-plan views. The veins were modelled in their entirety, despite areas of low grade or narrow intersections.

Intercept grade, true thickness, and grade multiplied by thickness (GT) values were plotted on an inclined south-looking section. Manual contouring of GT and thickness



values outlined a steep rake to the north-northwest for most lenses. Sharp drop-offs in grade and/or thickness are common and suggest that block grades would be best estimated using hard boundaries. Resource panels within the vein wireframes were identified using a minimum criterion of 3 g/t Au cut-off. Several low grade intercepts were included to facilitate continuity. The resource panels were clipped and reassigned domain identifiers (Figure 2-7). All Mineral Resources estimated at Bakyrchik are located within these resource panels.

In 2010, BMV engaged Fugro NPA Limited, from Edenbridge, United Kingdom, to generate a high resolution stereo satellite imagery and supply elevation models of the Kyzyl Project area. Worldview-2 imagery was acquired on September 2, 2010, georeferenced, and stereo correlated. Several sets of contours were generated and used to generate one metre resolution three dimensional digital terrain models (DTM).



www.rpacan.com



131



2.7.4. RESOURCE CUT-OFF GRADE

RPA estimated a July 31, 2013 resource cut-off grade based on a consensus of longterm gold price forecasts, PFS production cost estimates, and expected metallurgical recovery. The cut-off grade is based on:

- Metallurgical recovery of 82%;
- Operating costs of \$100 per tonne milled, consisting of:
 - Mining costs of US\$40 per tonne;
 - Process costs US\$40 per tonne;
 - General and administration (G&A) costs of US\$20 per tonne;
- Price of US\$1,400 per ounce Au for Mineral Resources; and
- Mineral Extraction Tax of 5%.

The resource break-even cut-off grades are calculated as:

Cut-off = cost / (value x recovery)

The result is 2.85 g/t Au for Mineral Resources, rounded to 3 g/t Au.

A natural cut-off grade of approximately 2 g/t Au for the Bakyrchik mineralization is evident, particularly for the principal lenses, and this cut-off was used as an incremental cut-off, to internally dilute the lenses to minimum width where necessary. In some cases, small widths of incremental cut-off material were included on the walls of higher grade, thicker portions of the lenses, where it was interpreted that mining would break to the margin of the greater than 2 g/t Au mineralization.

RPA notes that the deposits are relatively insensitive to variations in cut-off grade between 2 g/t Au and 5 g/t Au, due to sharp boundaries on mineralization.

2.7.5. BULK DENSITY

A bulk density of 2.67 t/m³ was used to convert volume to tonnes. The factor is based on 1,138 measurements made by BMV on recent drilled core plus 186 measurements made by Ivanhoe in 2007 using GMSI's mineralized 1996 drill core. Both sets of measurements used the water immersion method.

2.7.6. ASSAY CAPPING (CUTTING)

To avoid any disproportionate influence of random, anomalously high grade assays on the resource average grade, RPA prepared histograms and grade cutting graphs to examine the assay grade distribution within the mineralized lenses to assess the need for grade capping.



The grade cutting curves and decile analysis show little impact on overall average grade of cutting to 35 g/t Au but increasing impact for capping at grades less than 35 g/t Au. The 35 g/t Au cap grade affects approximately 1.5% of the assays.

2.7.7. ASSAY INTERVAL COMPOSITING

Sample lengths range from 10 cm to 3.3 m within the wireframe models. Most samples were taken at one metre lengths. Given these distributions, and considering the width of the mineralization, RPA chose to composite to two metre lengths. Assays within the wireframe domains were composited starting at the first mineralized wireframe boundary from the collar and resetting at each new wireframe boundary. Grades were capped prior to compositing.

Orphan composites less than 0.5 m were removed from the database. The average grade of the discarded short composites and grade of the composites after discarding the short composites was examined with respect to the average grade of interpolation composites to ensure that ignoring the short composites would not introduce a grade bias.

2.7.8. MINERALIZATION CONTINUITY AND VARIOGRAPHY

RPA generated downhole, omni-directional, and directional variograms using the Lens 1 two-metre composites. The downhole variogram suggests a relative nugget effect of approximately 25%. The down-plunge variogram has an overall range of approximately 75 m, including a range of approximately 50 m at approximately 90% of the sill. The along-strike variogram has a range of approximately 60 m, including a range of almost 50 m at approximately 90% of the sill. The variogram perpendicular to the KSZ suggests a range of approximately 20 m at 90% of the sill.

2.7.9. BLOCK MODEL

A block model was created with a block size of 5 m cubed, with an origin at 540,406.89 m east, 509,528.29 m north and 600 m RL elevation. Block dimensions were selected on the basis of the engineering design criteria selective mining units. The vertical dimension of five metres is consistent with the proposed undercut mining stope height. The model comprises 1,050 blocks east-west by 390 blocks north-south by 250 blocks. The model extends to -550 m RL elevation (approximately 970 m depth). A single block model includes both Bakyrchik and the Bakyrchik East deposits.



2.7.10. INTERPOLATION SEARCH PARAMETERS AND GRADE INTERPOLATION

Interpolation of block model gold grades was by OK using search parameters based on variogram ranges for the two-metre composites. Block grade estimation parameters were similar for all lenses (Table 2-12). The search criteria populated most blocks within the resource wireframe models. A second pass using twice the search distances was run to fill all blocks. Example cross sections of the block model are illustrated in Figure 2-8.

Parameter	Value
Method	Ordinary Kriging
Boundary Type	Hard
Min. Num. Comps.	2
Max. Num. Comps.	8
Principal Azimuth	140°
Principal Dip	27 °
Intermediate Azimuth	240 °
Search Ellipse	
Range X (m)	100
Range Y (m)	60
Range Z (m)	20
Variogram Model	
Nugget (C0)	9.6
Relative Nugget	25%
Structure 1	
C1	7.2
Range X (m)	12
Range Y (m)	8
Range Z (m)	2
Structure 2	
C2	10.4
Range X (m)	100
Range Y (m)	60
Range Z (m)	15
Total Sill	37.2

TABLE 2-12BLOCK GRADE ESTIMATION PARAMETERSKyzyl Project



www.rpacan.com







2.7.11. CLASSIFICATION

Definitions for resource categories used in this report are consistent with those defined by JORC (2012). In JORC (2012) a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated, and Measured categories".

In JORC (2012) an Ore Reserve is defined as the "economically mineable part of a Measured or Indicated Mineral Resource. It includes diluting material and allowance for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of the Modifying factors. Such studies demonstrate that, at the time of the reporting extraction could reasonably be justified".

RPA classified the Bakyrchik Mineral Resources as Indicated and Inferred based on drill hole spacing, grade continuity, and reliability of data. The overall geologic continuity of the Bakyrchik deposit is consistent, striking east-west, dipping moderately to the north. The grade continuity for most lenses is also consistent, with higher grade or thicker shoots trending to the west-northwest in the plane of the mineralization. The consistent nature of the mineralization, for both the grade and geologic continuity, provides sufficient confidence in areas of relatively broad spaced drilling to be classified as Indicated. To confirm, composites located within the wireframes were plotted on an inclined south-looking section in the dip plane of the lenses and reviewed for their spatial distribution and spacing.

Indicated Mineral Resources lie above the 720 m, 375 m, and 640 m below surface in Lenses 1, 9, and 12 respectively (Figure 2-9). Within Lens 9, the drill hole spacing in areas of Indicated blocks is generally less than 50 m. Within Lenses 1 and 12, drill hole spacing in the down-plunge direction is on the order of 60 m, and in the along strike direction approximately 50 m. Parts of Lenses 4, 5, 7, and 8 were classified as Indicated where drill hole spacing is 50 m or less. A number of smaller subordinate lenses, intersected by as little as one drill hole, were classified as Inferred regardless of their distance to the closest hole(s).



www.rpacan.com







2.7.12. MODEL VALIDATION

RPA validated the block model by visual inspection, volumetric comparison, swath plots, and a comparison to alternative grade interpolation methods. Block model grades were visually examined and compared with composite and assay grades in cross section and in inclined sections. RPA confirmed that the block grades are reasonably consistent with local drill hole assay and composite grades.

RPA notes that there was a high conversion rate of Inferred to Indicated Resources for each round of diamond drilling and subsequent Mineral Resource updates. Between December 2011 and July 2013, the estimated amount of gold contained in the Bakyrchik deposit's Indicated Mineral Resources increased by approximately 162,000 ounces (2%) as a result of the successful upgrading of Inferred Mineral Resources. In the corresponding period, Inferred Mineral Resources decreased by approximately 72,000 ounces for a net result of more ounces of gold globally. This slight increase is a result of additional exploration drilling at depth on the flanks of the main Bakyrchik lenses.

2.7.13. OTHER ELEMENTS

RPA generated block models for the following ten elements that may impact the metallurgical processes or environmental controls:

- Arsenic for process design
- Total sulphur for process design
- Sulphide sulphur for process design
- Total carbon for process design
- Organic carbon for process design
- Iron for process design
- Silver for metal credits and/or environmental controls
- Mercury for environmental controls
- Antimony for environmental controls
- Tungsten for environmental controls

Results were reported to SENET for use as metallurgical design criteria.

Analytical data for the ten elements were only available from the BMV 2009 to 2011 drilling program. Historical drilling did not include analysis of these elements. Within the resource wireframes, there were a total of 155 BMV drill holes in Lens 1, 36 in Lens 9, 87 in Lens 12. Globoki Log and Promezhutochny included only 23 drill holes with the required analytical data. Given the spatial distribution, RPA estimated block grade in Lenses 1, 9, and 12 and relied on estimated global grades elsewhere.



2.8. MINING

Gold mineralization at the Project occurs within a series of lenses within the KSZ, a shallow to moderate (30° to 40°) dipping carbonaceous shear zone. Mineralization within Lens 1 is up to 50 m thick in plan view. The FS contemplates extraction from Lenses 1, 7, 8, 9, and 12 (Figure 2-10).

The KSZ consists of sheared and brecciated carbonaceous sediments with generally high intensity quartz veining within the orebody. Hangingwall rocks consist of blocky sandstone and siltstones, while footwall rocks typically consist of foliated carbonaceous shales.

The quality of the ore and footwall rock is characterized as Poor to Very Poor (Barton 2002) and will require significant ground support, while the hangingwall rock is characterized as having Poor to Fair rock mass conditions.

The block model developed for the FS and used for the mine design extends to -550 mRL elevation (approximately 970 m depth). Lenses 1, 9, and 12 extend to maximum depths of approximately -540 mRL, -140 mRL, and -440 mRL, respectively.

Indicated Mineral Resources in Lenses 1, 7, 8, 9, and 12 were converted to Ore Reserves and used as the Base Case for the FS.

Lens 1 comprises 65% of the Indicated Resources, and 65% of Ore Reserves. It is the thickest and highest-grade lens, and consequently the mine life and production schedule are primarily dependent on the rate at which ore in Lens 1 can be mined.

As described above, the resource upgrading drill programs carried out by BMV have shown that the deposit is very predictable and the conversion rate of Inferred Resources to Indicated Resources is high.

2.8.1. MINE DESIGN, MINING METHOD

The orebody (lens) geometry, generally poor ground conditions, and desire for high gold recovery preclude consideration of caving methods and most other bulk mining methods. The requirement for high productivity, mechanized mining essentially leaves the choice of mining method between long-hole stoping and cut and fill.



Past studies have confirmed that underhand cut and fill mining method (UCF) is the most advantageous for providing maximum ground stability, despite lower productivity and higher unit costs in comparison to long-hole stoping. There is a need to achieve tight backfilling in order to prevent the formation of large spans in production openings that would necessitate special ground support treatment. UCF remains the base case mining method for the FS.

2.8.1.1. UNDERCUT AND FILL MINING METHOD

The UCF method involves mining horizontal slices (cuts) with drifting in ore completed in a manner similar to excavation of development headings. In general, up to nine 5 m high cuts are accessed from a common level via access ramps, with levels located in the footwall, spaced 20 m to 45 m vertically (Figures 2-11 and 2-12) depending on the strike of the lens. Each cut has been further sub-divided into transverse and longitudinal mining blocks based on horizontal HW-FW distance criteria. Where ore lenses regularly exceed 15 m in width, transverse mining is employed, with ore drifts extracted perpendicular to the strike of the ore from a footwall ore drift driven along strike. Where lens widths are regularly less than 15 m, mining will be longitudinal, with single or double heading advance combined with slashing in order to follow irregular lens geometry. Longitudinal mining will be less efficient than transverse mining, due to limitations on the number of workplaces in a given area. Longitudinal mining blocks account for approximately 46% of the FS reserve tonnage.

Transverse ore drifting will follow a primary, secondary, tertiary sequence, with a backfill cycle after each drift is completed. Previous studies contemplated a simpler primary, secondary sequence, which was justified by analysis of ground conditions, however, mining regulations in Kazakhstan require pillars to be twice the width of extracted drifts. New mining fronts have generally been established every three to four levels vertically with some fronts established closer together early in the mine life in order to support a reasonable ramp-up period.

In order to successfully extract the many parallel ore drifts, a cemented tailings paste backfill system has been selected for completing backfilling activities.

Once mining of an ore drift is completed, a single barricade will be constructed across the drift mouth close to the FW ore drift and the drift will then be backfilled with paste fill. Once all ore drifts have been mined and filled, the footwall ore drift is filled on retreat toward the cut access. Drifts immediately below the final footwall ore drift floor are accessed after a 1.23 MPa fill strength is achieved in the ore drifts above.



www.rpacan.com






www.rpacan.com





www.rpacan.com







2.8.1.2. OPEN PIT POTENTIAL

As part of the FS on the Bakyrchik Project, RPA carried out a check on open pit mining potential.

Preliminary findings were consistent with previous assessments of open pit potential. While economic pits are possible on Lenses 1, 9, and 12, previous open pit mining has removed the best ore near surface. Currently, very high strip ratios would be incurred to generate significant ore tonnages, and underground mining provides an economic advantage over open pit mining.

Open pit quantities where economics are superior to underground mining total 0.9 Mt at 4.7 g/t Au with an 8:1 stripping ratio.

Bakyrchik East had not previously been assessed for open pit mining, however, almost no economic pits were generated in this area.

A reasonable argument can be made for reducing production rate risk via open pit mining, at the expense of reduced economic performance. Open pit mining may allow underground development to be deferred, or ramp up slowly. No backfill is required for open pit mining, and ground control issues may be dealt with more easily.

To evaluate this possibility, RPA applied a risk premium by increasing the underground mine operating cost. A \$40/t pit is taken as a base for further investigation; beyond this, the strip ratio jumps upwards. The \$10 pit also looks interesting, given that it produces about half the ore quantities.

These two pits are summarized in Table 2-13:

TABLE 2-13 RISK PREMIUM PITS Kyzyl Project

Risk Premium (US\$/t)	Material (000 t)	Ore (000 t)	Strip Ratio	Grade (g/t Au)	Contained (Oz)
10	51,481	3,499	13.7	6.77	762,000
40	126,647	6,768	17.7	7.02	1,527,000

The total mining costs for the \$40 pit would be \$325 million (\$48/t); for comparison, mining the same ore using underground methods at \$44/t would cost \$298 million, a difference of 9%.



This relatively modest increase suggests that the economic penalty for open pit mining may be worthwhile for the reduction in risk that would be realized. RPA notes that timing of costs and changes to the plant feed grade in the early years of operations may have a larger effect on the economic results than the net change in total mining costs.

2.8.2. GROUND SUPPORT

Itasca Consulting Canada Inc. (ICCI) provided geomechanics consulting services for the FS. ICCI carried out its ground support design assignment based on limited geomechanical data collected by AMC Mining Consultants (Canada) Ltd. (AMC). Ground support designs have therefore been estimated for costing purposes. As the Project advances to the construction stage, additional geomechanical data will need to be collected and analyzed to validate the generic ground support designs presented.

ICCI used a North American approach to ground support design, i.e., a combination of systematic bolting, screen, and shotcrete. Normally, a bolting pattern is first selected and shotcrete requirements are established based on expected variations in ground conditions.

For this Project, BMV indicated that wherever possible, the ground support design should favour the use of shotcrete, given the success observed in controlling small-scale unravelling in the current openings. ICCI produced dual ground support standards for most of the excavation types, allowing BMV to choose the support system that best meets their objectives.

Cable bolting is recommended for excavations or intersections with spans greater than seven metres and these support designs have been established from published empirical guidelines.

2.8.3. MINE INFRASTRUCTURE

2.8.3.1. EXISTING MINE INFRASTRUCTURE

Current access to the underground mine is located in the footwall and begins via a ramp driven from a portal in Open Pit No. 4 (above Lens 1) at 330 mRL. The existing footwall ramp has been driven from 330 mRL to 316 mRL, where it splits to access Lens 1 and Lens 9 at 290 mRL. Three main levels have been developed in the FW at 330 mRL, 290 mRL, and 250 mRL.

The existing underground infrastructure includes five vertical shafts located in the footwall of the KSZ: Skip Shaft, Capital Shaft, Central Ventilation Shaft, East Ventilation Shaft,



and West Ventilation Shaft, as illustrated in Figure 2-13. Collared along strike near the footwall of the KSZ at surface, the shafts are increasingly distant from the lenses at depth. RPA proposes to use some of the existing shafts for transportation of personnel and ventilation purposes only, not for rock hoisting.

The Skip Shaft, a concrete-lined, six-metre diameter circular shaft, was designed for highproduction hoisting of both ore and waste. Sunk to –159 mRL near Lens 1, this shaft is partially flooded. The headframe and hoisting equipment are incomplete and a bulkhead is installed at the collar. Rehabilitation would include replacement or refurbishing of all hoisting equipment, reinforcing the headframe, and making some adjustments to the underground loading pocket arrangements.

The Capital Shaft, a concrete-lined, six-metre diameter circular shaft, is sunk to -159 mRL near Lens 1 and is also partially flooded. It is currently used both as the main fresh air intake and the rock hoisting facility. The hoisting system consists of rail cars that are hoisted in a cage balanced by a counterweight. No ore pass systems or loading pockets have been developed underground for the Capital Shaft and high capital costs would be incurred to convert this to a high-productivity hoisting facility. The current plan proposes to continue use of the Capital Shaft for transportation of personnel and materials only, not rock hoisting.

The Central Ventilation Shaft, a 4.5 m diameter circular shaft, is currently filled with waste material. The shaft was previously used for personnel access to the 330, 290, and 250 mRL levels near Lens 8.

Shaft sinking operations on the East Ventilation Shaft, a concrete-lined, 4.5 m diameter circular shaft near Lens 9, were halted at 162 mRL in 1996. The East Ventilation Shaft is currently used as an exhaust airway.

The West Ventilation Shaft, a concrete-lined, 4.5 m diameter circular shaft, is currently used as an exhaust airway. Sunk to -150 mRL near Lens 12, this shaft is partially flooded. The existing hoist was partially installed, but has deteriorated due to water damage.



www.rpacan.com



2-53

147



2.8.3.2. NEW MINE INFRASTRUCTURE Electrical Distribution

The mine electrical reticulation will be fed from the main plant site substation at a transmission voltage of 35 kV. The main underground supply will be derived from two 4 MVA 35 kV/6 kV transformers installed at the mine decline portal and two 4 MVA 35 kV/6 kV transformers at the Capital Shaft substation. Power will be distributed underground at 6 kV with local skid-mounted portable substations and distribution panels.

Communications

A telephone communication system will be installed to provide communications between surface and the underground mine, with telephones located at the shaft station, shops, and in the refuge stations of the mine.

Underground Water Supply

The Kyzyl Su water reservoir is currently used to supply water for mining activities. The total underground water supply requirement for the Project is estimated to be 1,300 L/min, and is largely dependent on the water requirements for the jumbos (200 L/min per unit).

Mine Dewatering - Overall Requirements

Approximately 1,500 m³/d is being pumped from the existing mine, and this figure is estimated to rise to approximately 3,000 m³/d once the Mine is fully developed. Total dewatering requirements for the Mine are estimated to be 8,064 m³/d

A Schedule 80, 102 mm diameter dewatering line will be installed in each ramp system (supported beside the raw water supply lines) and will be routed via the mine portal to deliver mine water to the process plant area for settling/clarifying and disposal of excess water via the tailings storage facility. Mine water will be pumped from each lens to the portal from its highest elevation, permanent dewatering station.

Service Bays

Where possible, major maintenance work will be completed at one of the surface shops. Underground service bays for routine maintenance will be constructed for Lenses 1, 9, and 12. Each service bay will be equipped with a small consumables store, tools, lifting facilities, and hose manufacturing.



2.8.3.3. MINE VENTILATION CONFIGURATION

The Bakyrchik Mine is currently ventilated by one horizontally mounted, axial-flow intake fan at the top of the Capital Shaft. The fan is capable of delivering up to 240 m³/s to the underground workings. The fan house is equipped with a back-up fan and a hot-water mine air heating system. Air is currently exhausted from the mine via the East and West Ventilation shafts, and the portal in Pit #4. An existing mine air heating facility is located at the Capital Shaft and uses indirect heat transfer with hot water and heating coils.

Ventilation requirements for the Project have been determined based on expected diesel equipment exhaust dilution requirements and underground air residence time, as modelled in VentSim software. The diesel production and service fleet power and utilization have been estimated, and a factor of 3.7 m³/min per kW has been applied according to Kazakhstan regulations. The design air quantity, based on mine life peak requirements, is 1,990 m³/s, comprising 580 m³/s per orebody to handle peak demands for the major lenses and 250 m³/s for Lens 7.

The overall ventilation concept is based on a push-pull air system approach whereby main surface intake and exhaust air fans located at the ventilation raises are sized and operated to draw fresh air into the mine. The various development headings in the mine (ore and waste) will be ventilated using forced ventilation supplied by auxiliary, axial mine fans. A series of new fresh and return air raises will be excavated for each lens to ensure proper delivery and removal of uncontaminated/contaminated air to/from the working faces at reasonable velocities.

The Capital Shaft will be used to provide additional ventilation for the ramp system in Lenses 1 and 12. Each lens, except Lens 8, will have its own Fresh Air Raise (FAR) and Return Air Raise (RAR) system. Fresh Air will enter a level on the level access (~80 m³/s). Each exhaust raise will pull the required air to its raise (~35 m³/s). The remaining fresh air will go to the ramp and exhaust through a portal.

Figure 2-14 summarizes the new ventilation layout for the Project.



www.rpacan.com





2.8.3.4. PASTE BACKFILL SYSTEM

A paste backfill plant with a nominal throughput of 160 m³/h will be constructed on surface in the existing fine ore building. Paste will be produced using full-stream tailings. Thickened tailings will be dewatered to a solids content of 78.5% and the resulting filter cake will be mixed with water and 10% General Purpose Portland cement/Slag binder to produce a paste with a slump of 240 mm at a solids content of 68%.

From the backfill plant, paste will be transported approximately 900 m through surface 254 mm diameter pipelines to four sets of 203 mm diameter cased boreholes that will service each principal ore lens. Surface transport will be accomplished using a positive-displacement piston pump located in the backfill plant. The pump will be capable of moving 175 m³/h of paste over a lateral distance of 3,000 m.

Based on a steady-state production rate of 1.5 Mt/a, total paste fill demand is nominally 555,000 m³ per year. The paste plant will be capable of delivering 60 m³/h to 160 m³/h of paste fill, thereby providing the necessary flexibility to meet filling demands that will evolve over the mine life. Based on the above criteria, a typical 50 m long ore drift could be filled in one 12 hour shift.

Figure 2-15 is a long section of the paste fill reticulation system.



www.rpacan.com



2-58



2.8.3.5. MOBILE MINING EQUIPMENT

BMV will purchase and maintain an underground equipment fleet comprising the following key units:

- twin-boom, electro-hydraulic drill jumbos
- 7.5 m³ loaders
- 30 tonne capacity haul trucks.

Waste and ore development will be driven using two-boom jumbos equipped with telescopic slides to permit drilling of four metre rounds and drilling of ground support holes. The jumbos will be used for all lateral development at the Mine.

Cable bolting will be installed using specialized bolting rigs. To minimize spare parts holdings and align maintenance procedures, it is recommended that these units have the same carrier and rock drills as the drill jumbos.

Shotcreting of the headings will be achieved by electro-hydraulic, diesel-propelled shotcrete sprayers. Low-profile re-mix trucks will deliver shotcrete to the sprayers. At shallow mining depths, the re-mix trucks will be able to efficiently deliver shotcrete from surface to the sprayers. As the mine deepens, more deliveries will be made direct from the underground shotcrete holes.

Blast holes will be loaded with truck mounted ANFO loaders equipped with pressurized powder vessels, hoses, storage, compressors, and a lift platform.

Mucking of development and ore rounds will be accomplished with 7.5 m³ LHDs, which will tram the ore and waste to remucks/dump drifts where the trucks will be direct loaded for transportation of the ore and waste to surface via the open pit. Some crown pillar mining areas in Lens 9 will be mucked using 3.1 m³ LHDs thereby removing the requirement to slash out long sections of nominally 3 m wide x 4 m high drift to accommodate larger LHDs.

The number of major mobile equipment units (drill jumbos, LHDs, haul trucks) has been estimated based on the assumed productivities and the required daily production rate of 4,167t/d.

To support the mining operation, service vehicles such as cable bolters, road graders, explosive trucks, personnel carriers, 4x4 vehicles, shotcrete jumbos, and materials delivery vehicles have been included in the fleet.



The roads will be maintained using a low profile motor grader, and service vehicles will also be included in the mine fleet. Personnel carriers will transport the men to and from the working places. A fleet of 4x4 utility vehicles will be provided for use by management and technical services personnel.

Equipment is summarized in Table 2-14.

Equipment	Maximum number at steady-state production
Production/Development Drill Jumbo	8
Load Haul Dump - 7.5 m ³	6
Underground Haul Trucks - 30 tonnes	19
Explosives Loader	8
Load Haul Dump – 3.1 m ³	3
Bolter	5
Cable Bolter	3
Scissor Lift	5
Shotcrete Sprayer	5
Re-mix Trucks	9
Service Trucks	12
Grader	2
Longhole Drill	2
Alimak	3
Underground 4x4 Vehicles	13

TABLE 2-14 MOBILE EQUIPMENT FLEET Kyzyl Project

2.9. ORE RESERVE ESTIMATE

Ore Reserves for the Bakyrchik FS are based on the Mineral Resources as of July 31, 2013, mine designs, and external factors. Table 2-15 summarizes the Ore Reserves.

TABLE 2-15	PROBABLE ORE RESERVES
	Kyzyl Project

Lens	Tonnes (millions)	Grade (Au g/t)	Ounces (millions)
1	17.97	8.03	4.64
7	1.01	3.49	0.11
8	1.33	3.72	0.16
9	2.97	6.58	0.63
12	4.08	8.06	1.06
Low-Grade Development	0.11	4.61	0.02
Total	27.55	7.53	6.66

Notes:

1. JORC (2012) definitions were followed for Ore Reserves.

2. Ore Reserves are estimated at a cut-off grade of 3.0 g/t Au.



- 3. Ore Reserves are estimated using an average long-term gold price of US\$1,300 per ounce.
- 4. A minimum mining width of 5 metres was used.
- 5. Bulk density is 2.7 t/m^3 .
- 6. Numbers may not add due to rounding.

The reserves consist of the selected portions of the Indicated Resources that are above a 3.0 g/t Au cut-off grade. This cut-off was applied at the level of stoping solids (portions of each five metre slice of ore, separated into transverse and longitudinal types), after including waste and fill dilution.

Averaging all lenses together, the extraction relative to the total Indicated Resources is 88%, while the dilution averages 16.9%.

2.9.1. DILUTION

Dilution has been included in the reserve estimate through the following:

- Areas within the resource wireframes below 3 g/t Au. The wireframes were constructed at a cut-off grade of 2 g/t Au, and occasionally include material below that for continuity. This internal dilution is not quantified here, but can be seen in the resource reports at cut-off grades below 3 g/t Au.
- Hanging wall (HW)/footwall (FW) dilution is included in the cut excavation solids, which were designed to intersect the resource wireframe at the midpoint of the cut. The vertical HW/FW boundaries of the cuts therefore include a small wedge of waste, and leave behind a small wedge of ore (Figure 2-16).
- Fill dilution at 2% for longitudinal cuts and 4% for transverse cuts was added externally. These percentages were based on dilution of 0.1 m on each exposed fill surface.

In Figure 2-16, the green rectangles are the stoping solids, and the blue outline is the Lens 1 resource wireframe (at a location where it forks). The small wedges at the HW and FW corners represent dilution and losses.

Table 2-16 shows some dilution detail by lens.

	Feasibilit	y Study
Lens	HW/FW Dilution	Backfill Dilution
1	9.8%	3.4%
7	30.5%	2.2%
8	29.8%	2.0%
9	14.5%	3.4%
12	21.2%	2.0%
Weighted Average	13.4%	3.1%

TABLE 2-16 DILUTION BY LENS Kyzyl Project



www.rpacan.com







2.9.2. EXTRACTION

Extraction (mining recovery), averages 88% - an increase from previous studies. Losses include low-grade resource areas, unextracted wedges in the hanging wall and footwall, and mucking losses, as detailed below:

- Elimination of stoping solids below 3 g/t Au after dilution. Each 5 m cut is divided into a number of stoping solids typically two transverse and two longitudinal in Lens 1.
- Elimination of low-grade areas:
 - Groups of stoping solids near the cut-off grade in Lenses 4-5-7, 8, and 12 were evaluated to ensure that they could economically support the waste development required to mine them. Some of these groups failed the evaluation, and were excluded from reserves.
 - The following inputs were used to evaluate these areas:
 - Gold price of \$1,300 per oz, less the 5% Mineral Extraction Tax
 - Metallurgical recovery of 82%
 - Operating cost of \$105 per tonne, consisting of:
 - \$ 40 per tonne Mining
 - \$ 45 per tonne Process
 - \$ 20 per tonne G&A
 - Capital cost of \$2,200 per metre of 5 m x 5 m waste development required for access. Ramping was costed at \$2,600 per metre.
- HW/FW losses are included in the cut excavation solids, as noted above. These losses are proportional to the thickness of the ore in any given location. Dip also has an impact shallower dips create larger wedges (larger losses).
- Mucking losses of 1% were applied externally.

The parameters applied to the Ore Reserve estimate represent a reasonable balance between dilution and extraction, suitable for global application to the resource model. It is noted, however, that there is some flexibility in setting this balance:

- The wedges of waste taken and of ore left behind can be biased away from the midpoint, in favour of minimizing dilution or maximizing extraction. This could be done either systematically or individually by heading, based on local grade or economic conditions at that particular time.
- Efforts could also be made to extract something other than a vertical face at the HW/FW contacts, to make gains on minimizing dilution or maximizing extraction, although this is likely to reduce productivity (less efficient mining).

RPA considers these refinements best left to the operator, and has not included them in the FS

2.9.3. CUT-OFF GRADE

A cut-off grade of 3.0 g/t Au was used. For details, see Section 2.7.4.



2.10. LIFE OF MINE PLAN

The following LOM is based on the FS. Please refer to the current Polymetal development timeline on page 2-2.

2.10.1. PRE-PRODUCTION SCHEDULE

2.10.1.1. LATERAL WASTE DEVELOPMENT

In order to accommodate a large mobile equipment fleet and provide adequate ventilation at reasonable velocities, existing lateral development will be enlarged by slashing the current profiles to 5.5 m wide x 5.5 m high arched back profiles. Allowances for all slashing work have been provided for in the pre-production capital costs.

Access to the active workplaces is via ramp, level, access ramp, cut access, then into the ore along the FW drift and transverse or longitudinal ore drifts. Secondary egress is provided by drifts accessing the return air raise system, which is equipped with a series of ladders and landings.

2.10.1.2. VERTICAL DEVELOPMENT

Given anticipated ground conditions in the KSZ and the mining method selected for study, ore passes have not been considered in the mine design approach. The design includes raise development located on the FW side of the KSZ. Raises are required for ventilation purposes and for a second means of egress via the return air raise systems. Raise development will be excavated, supported, and equipped using Alimak raising equipment.

Vertical development is also required in the form of paste fill holes from surface to delivery points in each lens. The mine design includes allowances for drain holes from level to level to manage mine water from the KSZ, and from drilling and backfilling activities.

Figure 2-17 depicts the Bakyrchik Mine underground mine design.







2.10.1.3. ORE DEVELOPMENT

The current mine design assumes that all ore will be excavated in five metre high cuts using the UCF method. During the process of developing FS productivities for the various types of ore drifting, 12 cuts of ore in Lens 1 were designed drift-by-drift, as presented in Figure 2-18. The drift-by-drift design assumed flat backs in ore, i.e., 4 m wide by 5 m high when excavating under rock and 5 m wide by 5 m high when excavating under rock and 5 m wide by 5 m high when excavating under paste fill.

Mine-wide design and scheduling was based at the level of transverse and longitudinal mining blocks (portions of each 5 m cut in each lens). Mining blocks were generated with vertical walls to represent the excavation of ore from multiple ore drifts. This drift-by-drift ore design is presented in Figure 2-18.

2.10.2. PRODUCTION PLAN

In order to establish the number of active workplaces required to generate a ramp-up profile that satisfies processing requirements, development requirements during the preproduction period are high. In addition to new development, a program to enlarge existing development, and establish new ventilation and paste fill infrastructure is required.

The Reserve Case Schedule generated for this study is based on Ore Reserves within Lenses 1, 7, 8, 9, and 12 as estimated and described in this report. The Reserve Schedule has been designed to enable a steady-state production of 1.5 Mt/a using the UCF mining method. Early waste and ore development has been optimized to minimize the ramp-up period and the total amount of development required prior to the start of plant commissioning in April 2016. Underground mining activities begin with slashing of existing development in January 2015. The Reserve Schedule forecasts a mine life of 20 years from start of commercial production. At a steady-state production of 1.5 Mt/a, the required daily ROM ore production is 4,200 t/d.



2-67

161



RPA selected MineRP's software packages Mine2-4D and its integrated Enhanced Production Scheduler (EPS) for generation of the Project's underground mining schedule. Productivity assumptions forming the basis of EPS schedules have been estimated from first principles using conventional spreadsheet methods. The following assumptions were incorporated into the underground mining schedule:

- 1. Mine working days are based on 360 working days per year, 24 hours per day, seven days per week.
- 2. All necessary mobile equipment, qualified labour, and mining supplies are on site and ready to be deployed against mining tasks beginning January 1, 2015.
- 3. All other preparatory work required to support the Schedules is completed ahead of January 1, 2015 (e.g., shaft dewatering, stripping of track and services, local ground support rehabilitation, functioning ventilation, and dewatering systems).
- 4. Ore and waste development advance rates are based on ore block and crew productivities developed from first principles.
- 5. RPA has applied lower productivities to cuts in Lens 1 at 290 and 260 mRL as an allowance for the following:
 - o mining under rock
 - o ramp-up period to achieve a fully-qualified workforce
- 6. By April 1, 2016, the paste fill plant and surface and underground reticulation systems will be ready to deliver paste fill to Lens 1 production areas at the required rate (157 m3/h) and specification.

Project economics are based on Ore Reserves mined in the Reserve Schedule. The Reserve Schedule mining sequence is presented in Figure 2-19.

2.10.2.1. RAMP-UP PERIOD

The Mine's nameplate capacity of 1.5 Mt/a of ore will be achieved in Q3 2016. Through the use of ore stockpiles generated from the Mine prior to that date, ore deliveries have been matched to the process plant ramp-up period. Table 2-17 summarizes the results of the Reserve Schedule over the ramp-up period.



Development	Units	2015	2016	2017	2018
Lateral Waste	m	18,006	15,654	11,285	5,527
	t	1,226,800	1,122,500	794,400	380,900
Vertical Waste	m	1,711	1,222	807	491
	t	106,900	79,000	48,200	30,800
Transverse Ore	t	-	558,000	858,000	910,000
Longitudinal Ore	t	-	379,000	661,000	661,000
Development Ore	t	5,300	12,800	16,100	7,400
Total Ore	t	5,300	950,000	1,535,000	1,578,000
	t/d	-	2,639	4,263	4,384
Au	g/t	6.34	6.18	6.95	6.98
Other Element Grades					
As	%	-	0.71	0.71	0.71
Org C	%	-	1.70	1.78	1.66
Total C	%	-	3.13	3.21	2.99
Sulphide S	%	-	1.16	1.14	1.17
Total S	%	-	1.30	1.28	1.31
Fe	%	-	3.27	3.18	3.03
Paste Fill	t	-	651,000	1,052,000	1,087,000

TABLE 2-17 RESERVE SCHEDULE RESULTS - RAMP-UP PERIOD Kyzyl Project

2.10.2.2. RESERVE SCHEDULE RESULTS

Starting points for production from each lens were selected to minimize total development and the duration of the ramp-up period. First ore production occurs at 290 mRL and 250 mRL elevations in Lens 1, at 335 mRL and 290 mRL elevations in Lens 8, at 270 mRL elevation in Lens 9, and at 270 mRL and 240 mRL elevations in Lens 12. Ore production from Lens 7 is deferred until 2025.

Ore Reserves are extracted down to -305 mRL in Lens 1, 90 mRL in Lens 7, 245 mRL in Lens 8, 45 mRL in Lens 9, and -265 mRL in Lens 12. Below these elevations, only Inferred Resources have been defined.

Total ore production for the Reserve Schedule is 27.5 Mt at an average gold grade of 7.52 g/t as presented in Table 2-18. Maintaining the target production rate relies heavily on ore production from Lens 1, which provides higher tonnages per vertical metre.



www.rpacan.com





«RPA

						TABL	E 2-18 F	ESERVE	SCHEDU yzyl Projec	JLE ORE	PRODUC	TION							
Name	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Production Summary						•	•		•	•	•	•	•	•		•	•		•
	,		,															,	•
Z1 STOPE TONNES	414,372	712,537	741,932	940,384	793,357	842,641 7.07	830,392	1,210,848	1,230,101	1,215,058	1,293,938	1,314,417	1,132,628	1,074,572	1,048,830	942,445 5.45	803,187	536,873 7 05	542,591
Z1 g/t	6.87	.31	. /0	1.84 -	C8./	.87	c)./	6.5 ,	C8.8	8.96	9.51	8.92	8.10	- 20.8	7.54 -	8.12	9 <i>1.1</i>	C8.7	5.13 -
Z7 STOPE TONNES				,	,					104,426	64,060	69,052	173,261	202,206	174,630	112,090	119,496		
Z7 g/t		,				,	,			4.18	2.65	2.85	3.32	3.52	3.95	3.49	3.22		
Z8 STOPE TONNES	122,481	175,915	167,980	112,774	64,286	67,393	57,905	14,546									44,570	200,565	209,173
Z8 g/t	3.52	3.78	3.89	3.83	3.81	3.33	4.21	4.33	,	,			,	,		,	4.17	4.02	2.88
																			•
Z9 STOPE TONNES	273,600	423,510	469,667	310,840	468,925	427,935	402,267	82,994	61,000	60,800	18,622								•
Z9 g/t	6.62	7.46	6.34	7.05	6.37	6.26	5.91	7.12	8.91	5.32	5.25	,		,		,			•
																			•
Z12 STOPE TONNES	145,509	208,510	205,641	160,416	219,164	235,585	228,757	221,535	219,606	173,902	175,150	217,699	271,657	292,245	328,048	472,413	243,655	180,649	
Z12 g/t	5.74	7.79	8.24	7.87	7.94	7.71	7.82	8.31	8.60	8.94	8.11	7.93	7.56	6.98	7.02	8.74	10.40	8.91	
	,					,													•
PRODUCTION STOPE TONNE Au DILUTED STOPE	955,963 6.20	1,520,471 7.01	1,585,220 6.97	1,524,414 7.39	1,545,732 7.25	1,573,553 7.22	1,519,320 7.14	1,529,923 8.40	1,510,707 8.82	1,554,186 8.50	1,551,771 9.02	1,601,168 8.52	1,577,546 7.48	1,569,024 7.59	1,551,508 7.02	1,526,949 7.98	1,210,908 7.71	918,088 7.22	751,764 4.50
						,	•					,				,		,	•
Au Oz. Stope	190,467	342,665	355,008	362,025	360,235	365,054	348,567	412,951	428,155	424,656	449,821	438,822	379,428	382,896	350,284	391,529	300,253	213,214	108,867



2.11. MINERAL PROCESSING AND METALLURGICAL TESTING

2.11.1. METALLURGICAL TESTING

The feasibility metallurgical testwork was concluded in 2013 under the supervision of BMV at the following laboratories:

- AMMTEC (Australia) Comminution testwork on a composite sample, variability comminution testwork.
- Orway Mineral Consultants (Australia) Design and modelling of the comminution circuit
- Phillips Enterprises LLC (USA) Flotation optimization testwork, pilot plant flotation testwork, concentrate production
- SGS SA, Mineralogical testwork on the flotation concentrate
- BIOMIN SA BIOX[®] testwork on the flotation concentrate
- BIOMIN SA HiTeCC, Aster- Detox, Thickening, CIL

2.11.1.1. COMMUNITION RESULTS

Comminution testwork was conducted at AMMTEC on a composite sample and on variability samples. The comminution testwork results showed the following:

- Bond Ball Work Indices ranged from 17.1kWh/t to 18.3kWh/t indicating that the ore is hard.
- Axb values ranged from 55 to 79 indicating medium to soft ore.

2.11.1.2. OMC CIRCUIT DESIGN AND MODELLING

Based on the above comminution results, Orway Mineral Consultants (OMC) was requested to conduct modelling and design of the comminution circuit. Outcomes of the OMC evaluation are as follows.

- There will be two crushing tips, one for shaft ore and the other for the decline. Both crushing circuits have been designed for 0.9 Mt/a and both will have the same crusher type.
- For the primary crush SAB circuit, a 5.5 m dia. × 4.88 m effective grinding length (EGL), 2.2 MW SAG mill and a 5.0 m dia. × 8.27 m EGL, 3.4 MW overflow ball mill was selected. Use of the second hand mill is considered suitable for the secondary grinding duty but not for SAG mill duty.
- For the primary crush SABC circuit, a 5.5 m dia. × 4.23 m EGL, 1.9 MW SAG mill and a 5.0 m dia. ×8.27 m EGL, 3.6 MW overflow ball mill was selected.
- For the primary and secondary crush two stage ball milling circuit, a 4.88 m dia. x 6.40 m EGL, 2.6 MW primary grate discharge ball mill was selected for the primary duty and a 4.88 m dia. x 6.71 m EGL, 2.6 MW overflow ball mill for the secondary duty. These mills have been selected to have the same shell dimensions and are able to accommodate the same motor sizes. One of the



available second hand mills would be considered suitable for the secondary grinding duty, however, their use in the primary duty is not recommended.

- Based on the comminution circuits evaluated and the equipment sizes selected, OMC recommended the implementation of a primary crush, SAB circuit, with the ability to install the recycle crusher in future if required. The larger ball mill (suitable for the SABC circuit is thus recommended). The recommended equipment sizes are:
 - Primary Crusher: C125, 160 kW or equivalent unit
 - o SAG Mill: 5.5 m dia. x 4.88 m EGL, 2.2 MW
 - Ball Mill: 5.0 m dia. x 8.69 m EGL, 3.6 MW
 - o Recycle Crusher: Deferred
- The nominated equipment is suitable for use in the SAB and SABC circuit configuration. The slightly larger SABC ball mill will ensure that the ball mill power requirement can be supplied when the recycle crusher is on line.
- The effect on the grinding circuit given the change in crushing circuit product sizes is expected to be minimal and it is not considered necessary to modify previous predictions at this time.

2.11.1.3. FLOTATION TESTWORK

Flotation testwork was conducted at Phillips Enterprises LLC.

Head assays were performed on the composite sample received for the flotation testwork and the results are shown in Table 2-19.

TABLE 2-19 HEAD ASSAY

Kyzyl Project Total Total Organic Gold Silver Arsenic SO42-Sulphur Carbon Carbon (g/t) (g/t) (%) (%) (%) (%) (%) Initial assays 9.1 4 1.33 1.85 0.03 2.2 1.28 Repeat analysis 9.1 6 1.88 0.03 2.17 1.29

The head assays indicated the following:

- Arsenic in the ore was high at 1.33% As. Arsenic is detrimental to gold recovery as it is associated with arsenopyrite which encapsulates the gold.
- Organic carbon was very high at 1.29%.
- Total carbon was high at 2.2% C_T. Due to the high carbon content, a graphite prefloat prior to sulphide flotation had to be investigated as a means of removing the carbon which is detrimental for gold extraction after the cyanidation process.
- The ratio of gold to silver is low indicating that silver will not cause problems in elution and loading onto carbon.



Flotation tests were conducted to determine the effect of grind size on carbon flotation and sulphide flotation. The results indicated the following:

- In general, the flotation response showed minimal sensitivity to grind and an optimum grind of 80% -75 μm could be selected.
- Gold recovery to the sulphide concentrate was +95%.
- Organic carbon content in the sulphide concentrate was below 3%.
- Sulphide concentrate mass pull was approximately 20%.
- Carbon product mass pull was 5% to 6%.

Two tests were conducted with reagent modifications, one with the addition of sodium sulphide (sulphidizing agent) and the second with Cytec 3418 (sulphide collector). Both these reagents showed no benefit to sulphide/gold recovery.

Based on the conditions established from the initial scouting flotation testwork, bulk batch flotation tests, were performed to produce 10 kg of sulphide concentrate for BIOX[®] testwork at SGS-SA.

The batch flotation tests were performed under the following conditions:

- Carbon flotation time 37 minutes
- Sulphide flotation time 16 minutes
- MIBC addition 72 g/t
- Cu SO₄ addition 30 g/t
- Potassium xanthate (PAX) addition 100 g/t

A summary of the batch flotation testwork is shown below and in Table 2-20.

- Flotation performance on batch 1 was affected/compromised by an air supply problem.
- Batches 2 to 5 did not meet the expectations with regard to gold recovery. Gold recovery was lower ranging from 88% to 92 %.
- Organic carbon flotation was close to expectations with 39% to 52% $C_{\mbox{\scriptsize org}}$ reporting to the carbon product.



TABLE 2-20	BATCH FLOTATION RESULTS
	Kyzyl Project

		Carb	on Produ	uct			Sulphid	e Conce	ntrate	
Batch	Mass pull	C _{org}	Au (a/t)	Au Rec. (%)	Corg Rec.	Mass pull	C _{org}	Au (a/t)	Au Rec. (%)	C _{org} Rec. (%)
	(70)	(70)	(9/1)	(70)	(70)	(70)	(70)	(9/1)	(70)	(70)
1	2.3	28.6	3.7	1.0	38.5	10.0	5.68	54.3	66.0	33.6
2	6.6	11.8	2.7	2.3	50.3	13.0	3.29	53.6	88.6	27.8
3	5.1	12.8	2.3	1.4	47.8	10.6	3.24	67.4	88.1	25.1
4	6.2	10.1	2.6	1.9	52.3	11.8	2.89	65.1	91.3	28.5
5	6.5	9.34	2.5	1.8	47.4	13.6	2.76	60.2	91.9	29.5

2.11.1.4. FLOTATION PILOT PLANT

The pilot plant was set up to achieve the following objectives.

- To produce a sulphide concentrate for BIOX® testwork at SGS SA.
- To optimize the flotation process with focus on the carbon flotation process.
- To confirm previous metallurgical recoveries.
- To collect data for design criteria.

The pilot plant operated under the following conditions:

- Grind: 80% -75 µm.
- Carbon flotation time >45 min.
- 5 wt.% carbon froth mass pull.

The pilot plant was run for three weeks.

The following residence times were determined from the pilot plant operation

- 40 minutes for the carbon flotation
- 13 to 17 minutes for sulphide flash flotation.
- 36 to 47 minutes for rougher sulphide flotation
- 40 minutes for cleaner sulphide flotation

The pilot plant metallurgical balance for Week 3 is shown in Table 2-21.



5	Mass pull			Analyse	es			Distr	ibution	(%)	
Product	(%)	Au (g/t)	As (%)	ST (%)	СТ (%)	Corg (%)	Au	As	ST	ст	Corg
Carbon froth	4.15	1.9	0.26	0.96	ND	16.2	0.8	1.1	1.9	ND	51.1
Sulphide flash concentrate	7.00	92.0	8.00	19.7	ND	2.49	61.5	56.0	64.8	ND	13.2
Sulphide rougher concentrate (2-4)	13.89	25.2	2.65	4.25	ND	1.87	33.4	36.9	27.7	ND	19.7
Sulphide cleaner concentrate	5.52	61.5	6.48	10.3	ND	2.89	32.4	35.8	26.7	ND	12.1
Sulphide cleaner tail	8.38	1.40	0.13	0.29	ND	1.20	1.1	1.1	1.1	ND	7.6
Rougher tails	74.96	0.6	ND	0.16	ND	0.28	4.3	6.0	5.6	ND	15.9
Total concentrate	12.51	78.6	7.3	15.6	ND	2.67	93.9	91.8	91.4	ND	25.3

TABLE 2-21 PILOT PLANT RESULTS – WEEK 3 Kyzyl Project

ND - Not determined

2.11.1.5. SGS MINERALOGICAL TESTWORK

The bulk sulphide flotation concentrate produced was sent to SGS SA and before BIOX[®] testwork was done, a sub-sample was taken for mineralogy testwork.

The mineralogy testwork indicated the following:

- The Bakyrchik sulphide concentrate is mainly composed of SiO₂, Al₂O₃.
- The total sulphur content of the ore is 12.4% with pyrite and arsenopyrite as the significant sulphide phases.
- The gold grade was assayed in triplicate and the repeatability of these assays indicated that there are no significant amounts of coarse gold. Assayed gold grades were 67.6 g/t, 67.5 g/t, and 61.2 g/t and averaged 65.23 g/t.
- The gold is almost 15 times more abundant than the silver, suggesting that gold does not occur as electrum.
- The organic carbon concentrate is relatively high at approximately 2.5% and may contribute to preg-robbing during cyanidation.
- The screening and grading analysis indicated that a significant portion of the gold (approximately 37%) is found in the -25 µm fraction. There are slight differences in the gold and sulphur distribution, which indicates that not all the gold is associated with sulphides.
- Heavy liquid separation showed that gold moderately upgraded into the sinks fraction (61%) and sulphur successfully upgraded into the sinks fractions (approximately 90%).
- X-ray diffraction (XRD) showed that the concentrate was silica and sulphide rich, and was composed of mica, K-feldspar, plagioclase, arsenopyrite, and pyrite.



• The liberation and association characteristics indicated that the gold is poorly liberated and most of the gold is associated with the liberated sulphides, which is ideal for BIOX[®] in general. All the sulphides are well liberated, consisting mainly of pyrite and arsenopyrite.

2.11.1.6. BIOX®/CIL/HCC TESTWORK

The BIOX® pilot plant testwork has provided details of sulphide oxidation performance under various operating conditions, as well as the relationship between gold dissolution and sulphide oxidation. This data has been used to specify certain design criteria for the full scale plant design. A series of batch HiTeCC tests and basic modelling of the data have also been completed on the Bakyrchik BIOX® CIL tails. ASTER[™] cyanide and thiocyanate destruction testwork was also completed on the Bakyrchik CIL tails solution.

The Bakyrchik deposit is a well-known double refractory ore. Besides having the nature of a refractory gold ore, where gold is locked in sulphide minerals, a double refractory ore contains preg-robbing carbon, which captures gold dissolved during normal cyanidation procedures making the gold unavailable for recovery. As for any refractory sulphide, the extent of gold dissolution for a double refractory ore is also dependent on the sulphide oxidation achieved during the bio-oxidation treatment and the characteristics of the concentrate. A refractory sulphide concentrate normally has an optimum sulphide oxidation associated with an optimum gold dissolution and recovery, but for a double refractory ore, this relationship is blurred since the gold liberation does not always directly translate into gold dissolution or recovery. So in addition to the standard BIOX[®] flowsheet which typically has BIOX®-CIL with a Counter Current Decantation (CCD) and neutralization circuit, a new process step, High Temperature Caustic Conditioning (HiTeCC), has been introduced to treat the CIL residue to recover preg-robbed gold. HiTeCC is a heated caustic conditioning step applied to a CIL residue stream to cause the preg-robbed carbon to release gold into solution and then to capture that gold with activated carbon.

Objectives

Confirmation of the amenability of the Bakyrchik material to bacterial oxidation by:

- Performing a series of laboratory batch BIOX[®] amenability tests on a bulk concentrate sample from the Bakyrchik deposit.
- Performing a continuous BIOX[®] pilot plant run at different operating parameters to:
 - Determine the rate and extent of sulphide oxidation and the corresponding gold dissolution.
 - o Determine the acid and/or limestone consumption required for pH adjustment.
 - Adapt the bacterial culture to ensure maximum activity under various operating conditions.



Other aspects examined during the testwork program and directed at producing additional design information were:

- Batch and continuous neutralization tests of the BIOX[®] liquor using limestone and lime (AR grade and Bakyrchik site) to:
 - Produce environmentally acceptable precipitates for land disposal
 - Provide a source of water for re-use in the process
- Determination of the optimum conditions for the cyanidation of BIOX[®] products including:
 - Rate and extent of gold dissolution
 - Optimum cyanide addition rate and method
 - Cyanide and lime consumption
 - Optimum liquid/solid ratio
 - Establish the contribution that HiTeCC will make to the total gold dissolution
 - Measurement of the rheological properties of various slurries for use in pumping calculations and agitator design
 - Determination of thickening characteristics of various process slurries
 - Establish the Inco/SO₂ detox process requirements
 - Establish the ASTER[™] detox process requirements

Optimization Testwork Conclusions

- High levels of sulphide oxidation were achieved during most BAT BIOX[®] tests performed on the different variability samples despite the variability sample being of a significantly higher grade that the pilot plant concentrate sample.
- Concentrates produced from certain ore zones will require bacterial adaptation to ensure optimal performance.
- An average CIL gold dissolution of 85.3% was achieved on the different BAT Variability BIOX[®] product samples, with an average of 92.9% following HiTeCC treatment. The settling behaviour and flocculent requirements for the majority of the variability samples were different from the requirement for the Bakyrchik pilot plant sample.
- For the neutralized product solution on the variability BAT product solution, the average overflow solution value of 0.42 ppm and the average TCLP arsenic value of 4.12 ppm were within the overflow arsenic limit of 0.5 ppm and the arsenic concentration setpoint limit of 5 ppm.
- This was achieved at ferric sulphate addition rates of between 80 kg/t and 488 kg/t BIOX[®] that was required to achieve a Fe:As molar ratio of 3.5 : 1 for the respective BIOX[®] solutions. These can be regarded as excessive conditions that focus on neutralized product stability rather than reagent consumption optimization.
- It was possible to produce a stable neutralized product at a ferric sulphate addition rate as low as 60 kg/t BIOX[®] product for neutralization tests performed on the combined product solution of the different variability samples. Blending of ores from different mining zones will therefore reduce variability and produce solution that will reduce ferric sulphate consumption and produce stable neutralized product when a minimum Fe:As molar ratio of 3 is applied during neutralization.



- Blending pre-float carbon concentrate with sulphide concentrate at an addition of 333 g/kg sulphide concentrate did not affect either BIOX[®] performance or CIL-HiTeCC recovery during semi-continuous testwork.
- A decrease in CIL-HiTeCC recovery was experienced with an increase in grind size with a maximum CIL-HiTeCC recovery recorded on the sample with a grind size of 80% -75 μm.
- The ASTER[™] pilot plant Reactor System 1 was able to achieve complete SCN degradation from a SCN feed grade of 2,000 ppm by employing a re-cycle ratio of 0.75.
- An optimum flux rate of 0.2 t/m²/h and a high underflow density was achieved on the CIL-HiTeCC tailings slurry sample with a SF-2540 flocculant addition of 20 g/L.
- Cyanide destruction tests performed on a HiTeCC tailings sample at a seven times stoichiometric equivalent addition of SMBS resulted in a WAD CN concentration of 7.5 ppm in the INCO tails product.

2.11.2. PROCESS PLANT

2.11.2.1. INTRODUCTION

The Bakyrchik gold processing plant will treat 1.5 Mt/a of gold ore. The gold ore will be crushed, milled, and classified to produce a flotation feed slurry. During flotation, the slurry will be upgraded so that the high grade ore can be processed in a BIOX[®] circuit where the sulphide ore will be oxidized to liberate gold. The liberated gold will be leached in a CIL circuit, where a portion of the gold will be preg-robbed. A portion of the preg-robbed gold from the CIL will be salvaged in a high temperature caustic conditioning (HiTeCC) circuit. Carbon loaded with gold from the CIL and HiTeCC circuits will be subjected to acid wash, Anglo American Research Laboratory (AARL) elution, electrowinning, drying and smelting to produce the final gold bullion.

The processes are described in more detail in the following sections. The process flow sheet is shown in Figure 2-20.



2-80 174



The comminution circuit of the process plant will consist of two crushing sections: the decline ore section (crushed to 80% passing 100 mm) and the skip shaft ore section (crushed to 80% passing 120 mm). Each crushing section will comprise a primary jaw crusher and both will discharge crushed ore into the common mill feed storage bin. The crushing circuit will be designed to treat ore at a rate of 290 t/h and will operate for 24 hours a day at an overall utilization of 65%.

The grinding circuit, capable of treating 195 t/h ore, will consist of a 5.50 m dia. x 4.88 m EGL, 3,600 kW SAG mill and a 5.00 m dia. x 8.69 m EGL 3600 kW ball mill operating in closed circuit with four classification cyclones. The grinding circuit product, which is the cyclone overflow, will have a grind of P_{80} of 75 µm at a density of 35% solids by mass. The cyclone underflow, with a density of 70% solids by mass, flows back to the ball mill for further grinding.

The flotation circuit will consist of carbon pre-flotation and sulphide flotation sections. The carbon flotation concentrate will be pumped to a carbon concentrate thickener where the underflow will be filtered before being sent to carbon storage. The thickener overflow will be used as process water after a sand filtration step to remove any traces of carbon present in the overflow water. The carbon flotation tails will be pumped to the next stage of sulphide flotation.

The sulphide flotation circuit will consist of a rougher stage and a cleaner flotation stage operating in closed circuit. The pre-rougher concentrate and the cleaner concentrate will be pumped to the concentrate thickener. The thickener overflow will be recovered for reuse as process water. The flotation tails will be pumped to the cyanide-free tailings storage facility (TSF) and the flotation sulphide concentrate will be transferred to the BIOX[®] plant.

The BIOX[®] process oxidizes the sulphide minerals and exposes the gold for subsequent cyanidation thereby increasing the overall gold recovery that can be achieved. The BIOX[®] plant will have concentrate design capacity of 585 t/d. The plant will consist of two modules of six reactors each, split into three primary reactors and three secondary reactors.

The BIOX[®] product contains high concentrations of dissolved ions and must be washed in a three-stage Counter Current Decantation (CCD) circuit before cyanide leaching. The arsenic in the BIOX[®] tails solution is precipitated to form arsenate and gypsum in the



neutralization stage subsequent to being mixed with flotation tails and pumped to the TSF.

The last CCD thickener underflow will be pumped to the Leach/CIL section which will consist of eight tanks, each with an effective volume of 400 m³ giving a total residence time of 36 hours to ensure the efficient dissolution of gold and its subsequent adsorption onto activated carbon.

The HiTeCC processing stage relies on the availability and supply of relevant services and reagents for effective processing of the CIL slurry through HiTeCC for the additional gold recovery.

Eluted-regenerated carbon will be transferred in the prescribed amount to the desorption feed dewatering screen which will effect separation and transfer of carbon to the HiTeCC desorption tank 1.

Eluted-regenerated carbon will be transferred in the prescribed amount to the adsorption feed dewatering screen which will effect separation and transfer of carbon to the HiTeCC adsorption tank 3.

Tailings slurry from HiTeCC will flow into detox tanks where sodium metabisulphite and copper sulphates will be added to provide the necessary SO₂ and copper ions, respectively. The free cyanide and/or weakly bound metal cyanide complexes present in the tailings slurry will be oxidized to cyanate.

The ASTER[™] (Activated Sludge Tailings Effluent Remediation) process involves the continuous feeding of tailings solutions containing cyanide and thiocyanate to aerated reactors containing microorganisms to which nutrients are added to sustain and promote microbial growth. Principal constituents of the nutrient suite are phosphorous and potassium salts and molasses.

Solution containing the SCN contamination (solution for detox), will be pumped into the ASTER[™] surge tank from the CIL process water tank. The surge tank will have a capacity of six hours.

Loaded carbon from the first CIL tank will be pumped to a loaded carbon screen where the screen oversize; washed loaded carbon will fall into the acid wash batch tank and the slurry will report to the first CIL tank. Loaded carbon from the HiTeCC carbon loaded



screen will also fall into the wash batch tank at a different time frame from CIL loaded carbon wash cycle.

The AARL elution system will be used as the elution method mainly to be able to do two elution batches per day through a single elution plant. Loaded carbon will be transferred hydraulically from the Acid Wash Column into the Elution Column at the end of the acid wash procedure.

Once the eluate temperature exiting the elution column reaches the required temperature of 125°C, the eluant will then be directed to the electrowinning pregnant solution tanks. Gold will be electrowon from the eluant solution using a sludging electrowinning cell type. Gold sludge will be deposited on stainless steel wire mesh cathodes where it can easily be washed off.

Carbon will be hydraulically transferred from the elution column into the eluted carbon holding vessel at the end of elution cycle. Provision will be made to bypass the regeneration facility so that eluted carbon can be transferred to the last CIL tank or the HiTeCC carbon transfer tank.

Carbon will be withdrawn from the eluted carbon tank into the electric inclined Regeneration Kiln by the Kiln Screw Feeder. On entering the kiln, the wet carbon, which still contains about 50% moisture; will be dried and heated to the required temperatures that promote regeneration.

The regenerated carbon will be quenched immediately at the kiln discharge by adding water to the Carbon Quench Pan before reaction with atmospheric oxygen. The quenched carbon will be subjected to a wet screening process on a vibrating screen to remove fines that would have been generated during the transportation and regeneration processes. Virgin carbon will be added through a vibrating screen to a carbon transfer vessel from a carbon attrition tank. The oversize from the screen will be hydraulically transferred to the last CIL tank or HiTeCC transfer tank.

The filter cake from the pot filters will be placed in stainless steel drying trays, up to six trays at a time and the trays will be loaded into electric dryer ovens, operated at 120 to 150°C for drying. The dryer trays will then be removed from the oven and placed on a table and allowed to cool.


The dried sludge, once cooled, will be mixed with fluxes stored in Flux Storage Box in a determined ratio. The gold sludge/flux mix will then be transferred to a smelting crucible which in turn is placed in the induction smelting furnace, operated at 1200°C.

At the completion of a smelt the molten furnace charge will be poured into cascading bullion moulds, mounted on a cascading trolley. The bullion will collect in the first mould with any excess collected in the second mould while slag will flow and collect in a slag collection crucible. A steel slab will be allowed for to protect the concrete floor.

The bullion mould contents once cooled, will be cleaned, stamped, and dispatched. The gold room will be equipped with a self-contained Ventilation System.

2.11.3. POWER REQUIREMENTS

2.11.3.1. FIXED POWER

Installed power for each drive (except SAG mill and Ball mill) in the plant was obtained from vendors and reconciled with factors obtained from vendors and assumed factors where applicable. This was then used with the anticipated running time to determine the operating power. This was used to estimate the fixed power.

The total estimate of installed power including standby equipment is 32,911 kW. Excluding the standby equipment, the total installed power is 30,660 kW. The total installed operating power excluding standby equipment is 25,428 kW. The total installed power is 104.3 million kWh per year.

2.11.3.2. VARIABLE POWER

The variable power was determined by taking into account the type of ore being treated, and the projected power consumption based on the outcome from a simulation conducted by Orway Mineral Consultants (OMC). The gross power per year is 34.2 million kWh. The variable power usage per tonne is 22.80 kWh.

2.11.4. WATER REQUIREMENTS

Raw water for the process plant will be sourced from the main water reservoir. Raw water will be used for process water, gland water, reagents make-up, fire water distribution, carbon transport medium, electrowinning cathode wash, gold room cooling water, mills cooling water and safety shower.



Process water will be split into two systems. One will be the cyanide-free water (flotation process water) and other one cyanide containing water (CIL process water). The CIL process water will only be used in the cyanide process areas such as CIL, HiTeCC, and cyanide detoxification. The CIL process water will need a complete detoxification of thiocyanate, WAD cyanides, and free cyanide before being used in the BIOX[®] circuit.

2.11.4.1. PROCESS WATER REQUIREMENTS

Process water average hourly demand in the milling circuit is 387 m³/h, in the flotation circuit is 184.5 m³/h, in the BIOX[®] circuit is 246 m³/h, and in the CIL circuit is 157.5 m³/h.

2.11.4.2. PROCESS RETURN WATER

The total recoverable water from the flotation concentrate thickeners and flotation tails thickener average hourly is 689.2 m³/h, and the CIL tails thickener average hourly is 162.6 m³/h. The tailings dam average hourly recoverable water during summer period for flotation tailings is 20 m³/h and for CIL tailings is 52.1 m³/h. Water will not be recoverable during winter and commissioning periods.

2.11.4.3. RAW WATER REQUIREMENTS

Raw water average hourly demand in the milling circuit is 3.6 m³/h, in the flotation circuit is 32 m³/h, in the BIOX[®] circuit is 20.6 m³/h, and in the CIL circuit is 95.1 m³/h. The reagent make-up and gland service water are the main consumers of raw water.

The total raw water required during commissioning and winter periods will be 157 m³/h and during summer 87 m³/h.

2.12. PROJECT INFRASTRUCTURE

2.12.1. SITE PLAN

The Mine is adjacent to the town of Auezov (population: nearly 3,000) and four kilometres to the east of the town of Shalobay (population: 1,228). A site plan is included as Figure 2-21.

The mine site is well serviced by existing infrastructure, including electrical power, roads, and communications. The mine facilities provide power, potable water, heat, and sewage treatment to the town.



www.rpacan.com





2.12.1.1. POWER SUPPLY

The projected electrical power load for the Project is estimated to average 39 MW, with an overall demand of 44.1 MW. The annual energy usage is estimated to be 292,125 MWh/a.

BMV presently receives its power from AES Power Company (AES). Power is transmitted to BMV via two 110 kV power lines owned and operated by Eastern Kazakhstan Regional Energy Company (EKREC). EKREC was informed that the development of the Project will result in a power demand of 43.0 MW. EKREC has advised BMV that its 60 MVA, 220/110 kV transformer (AT-2) installed at PS-11 has insufficient capacity to supply the Project on an interrupted security category 1. EKREC has advised that it would need to upgrade transformer AT-2 to 125 MVA. The FS includes the cost for this upgrade.

The existing BMV 110 kV substation is over 40 years old. The FS has assumed the replacement of the existing substation at the BMV site.

Power distribution and interconnections throughout the site are considered to be traditional. The power system will include an emergency generator to support key operations, fire systems, life safety systems in the event of a power interruption.

2.12.1.2. WATER TREATMENT AND MINESITE SEWAGE

The water treatment plant was commissioned in 1984. The design capacity of the plant was set at 5,000 m³/d, but the current maximum capacity that can be handled by the facility is between $3,500 \text{ m}^3/\text{d}$ and $4,000 \text{ m}^3/\text{d}$.

The existing sewage treatment facility at Auezov was commissioned in 1984. The design capacity of the facility is $3,500 \text{ m}^3/\text{d}$. Currently, the facility is operating at a treatment rate of between $1,500 \text{ m}^3/\text{d}$ and $1,800 \text{ m}^3/\text{d}$.

Utility and domestic wastewater from the town and mine site passes through a gravity collection system as it initially enters the sewage pump station.

2.12.1.3. EMPLOYEE HOUSING AND TRANSPORTATION

Living accommodation will be provided for approximately 40 permanent senior expatriate and Kazakh operations staff in a new facility to be constructed to the southeast of the existing mine site area.



The site of the shift camp has been selected on the downwind side, at a distance of 200 m from the processing plant. The shift camp's site includes all buildings and structures necessary for its full-fledged functioning all year round.

2.12.1.4. WATER SUPPLY

Make-up water will be supplied from four main existing sources within the Project area:

- 1. The Kyzyl Su Dam, which is a State-owned facility located approximately nine kilometres south of the mine site.
- 2. The Kyzyltu Borefield located approximately 3.5 km north of the mine site.
- 3. Existing open pits (Far North Pit, No.2, No. 5, and No. 6).
- 4. Underground mine drainage water.

2.12.1.5. TAILINGS STORAGE FACILITY

The TSF is situated in a valley 1.2 km upstream from the confluence of the Bezymyannyi and Alaigyr streams and approximately 8.5 km upstream from the confluence of the Alaigyr stream and Kyzyl-Su River. The TSF consists of two parts with catchment dams located in the bottom part. The maximum height of the first dam wall is 33 m and will be designed for storage of flotation tailings. The maximum height of the second dam wall will be 17 m and will be used to store CIL tailings. Two additional secondary dams will also be constructed.

TSF construction will be carried out in two stages. The starter dam will provide sufficient capacity for approximately 2.5 years of operation and the further elevation of the dam will provide a final capacity for 20 years of operation.

Two by-products will be obtained in the course of development. At the designed level of operation, approximately 29 Mt of flotation tailings (combined with neutralization product) and 3.4 Mt of CIL tailings will be produced over the 20 year mine life. The tailings are expected to have a stabilized arsenic content; however, the submitted geochemical data is not enough for the adequate characterization of the tailings.

2.13. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

2.13.1. ESIA AND PERMITTING

As part of Project design and development, two permitting and evaluation processes have been undertaken in parallel: an Environmental Impact Assessment procedure



(OVOS) to comply with RoK environmental legislation; and an International Finance Corporation (IFC) compliant Environmental and Social Impact Assessment (ESIA) process, which classifies the Project as Category A. The planned new developments at the Bakyrchik Mine site may be expected to comply with national legislative requirements and the expectations of good international industry practice embodied in the IFC Performance Standards (PS). As such, two final reports may be produced: one, the OVOS, for submission to the national authorities and the other, the ESIA, for submission to international stakeholders.

2.13.1.1. OVOS

An OVOS to RoK legislation has been commissioned. RoK OVOS requirements are slightly different in terms of process, method, and presentation from those of an ESIA by international funding agencies. Therefore, the two processes will be undertaken based on common baseline data and Project parameters.

A Pre-OVOS was undertaken for the TSF and process plant at the Bakyrchik Project in 2012; however, a change to the processing technology meant that the report was not submitted for approval. The full OVOS, currently in preparation, will include the TSF and processing plant and thereby address this issue.

2.13.1.2. PERMITS AND LICENSING

The permits and licences currently held for the Bakyrchik Project have been detailed in Table 2-22.

This is not a complete list of permissions required, however, significant permissions which are currently not included in the list include (but are not limited to):

- Water abstraction permit.
- Subsoil use permit (when mining operations commence).
- Explosives production, storage and handling permits.
- Hazardous Goods transportation permit.
- State Ecology Expertise on OVOS.

2.13.1.3. ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

A comprehensive ESIA may be prepared for the Project, in line with international standards: the IFC PSs (2012 version) as well as the European Bank of Reconstruction



and Development's (EBRD) Performance Requirements which are generally aligned with the IFC PSs. The objective is that the Project will be acceptable to IFC and EBRD, and other financial institutions that are signatories to the Equator Principles (EPFIs). The scoping stage of the international ESIA has been completed.

2.13.1.4. PROJECT CATEGORIZATION

The Equator Principles apply the IFC's environmental and social screening criteria, to reflect the magnitude of impacts understood as a result of assessment:

- Category A projects with potential significant adverse social or environmental impacts that are diverse, irreversible or unprecedented and may affect an area broader than the site facilities subject to physical works.
- Category B projects with potential limited adverse social or environmental impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures.
- Category C projects with minimal or no social or environmental impacts.

The Bakyrchik Project is a brownfield development and as such it would not be expected to have major unprecedented impacts on the environment or surrounding communities.



TABLE 2-22 REPUBL	IC OF KAZAKHSTAN PERMITS/LICENCES GRANTED FOR THE DEVELOPM Kyzyl Project	IENT OF BAKYRCHIK MINE
Licence/Permit Title	Application/Provision	Status Comment
Mining Lease	Licence number 737. For the mining activities in a designated area.	Granted for an area of 3 km^2 . Valid until 2020 with possibility of extension.
Exploration and Mining Lease	Licence number 27. For the geological study of subsoil with further exploration and production of gold.	Granted April 7, 1995. Expired April 2013. Applied for an extension. Waiting for response.
Surface Usage Lease	Permit to utilize the land within the limits of the lease for anything BMV deems necessary to beneficiate the gold deposits of the Bakyrchik mine.	Granted in 1975. Assigned to BMV in 1995.
	The proposed new TSF is outside the pre-existing Surface Usage Lease. BMV has applied for and received Approval of land use design from Zharma district and a land use Grant from Auezov Municipality in summer 2013.	
Approval of Land Use Design	Granted by Land Relations Department of Zharma district, confirming the use of a 229 ha land allotment in Auezov for the construction and operation of a Tailings Dam, by BMV.	Granted February 29, 2013. Valid for 17 years.
Rights for Land Use	Granted by Akimat of Auezov, confirming BMV has rights to a 229 ha allotment of land in Auezov for the construction and operation of a Tailings Dam.	Granted April 1, 2013. Valid for 17 years.
Maximum Allowable Emissions to Air, Discharges, and Waste Disposal	Permit for emissions into the environment series S-12 No. 0035940	Valid until December 31, 2013



However, developing the preferred TSF site has required land acquisition by BMV, and has necessitated the consideration of drainage and diversion of surface water flows. As any of these activities may result in unprecedented, irreversible, or large scale impacts, the Bakyrchik Gold Project has been classified as a "Category A" project during early stages of the ESIA.

2.13.2. EXISTING ENVIRONMENTAL CONTAMINATION AND LIABILITIES

The Bakyrchik deposit has been mined in some form since 1956, with underground mining commencing in 1963. Environmental sampling at the site has indicated that the contamination is similar to that found at other mines of this size and age. The main areas of concern are described below, although BMV does not bear liability for contamination of the environment existing before September 1, 1994 (Contract 120, clause 20.9). Recommendations for addressing these liabilities are provided in Table 2-20.

Open Mine Pits – a total of nine pits have been opened at Bakyrchik since 1956 as well as several satellite pits in the surrounding area. Surface water quality in mine pit No. 2 has shown elevated levels of arsenic, cadmium, and selenium; however results indicate that the pits are not acid generating. Elevated levels of arsenic, cadmium, and selenium have not been detected in the groundwater surrounding pit No. 2.

Ore Stockpiles – these contain an estimated 130,000 tonnes of ore, some of which is potentially acid generating.

Old TSF 1 and 2 – TSF 1 was constructed and put into service in 1986. Starting from 1986 various process tailings were stored there (flotation, gravity, acid leaching, cyanide leaching). The bulk volume of cumulated wastes at the old TSF is 314,626.04 tons. Overflows of settled water to the surface occurred prior to 2008. Currently, in order to prevent the overflow during spring flood, settled water is pumped into old TSF 2. Test results show elevated levels of arsenic, cadmium, and sulphate in TSF water.

Arsenic waste burial facility – this was constructed in 2008 over an area of 2.56 ha. The facility is lined and contains bagged and covered arsenic waste. The use and subsequent reclamation of the facility is planned during the new developments at the site.

Former fuel station – the original fuel station was decommissioned and removed from site prior to a new facility being constructed in 2009. Visual evidence of hydrocarbon



contamination was noted in the area during 2009 but detailed investigations have not been carried out.

Other areas – these include vehicle workshops and compressor house, coal-fired boilers and coal stockpile area, out-load facility and rail siding, hazardous materials storage compound and the former calcine roaster.

2.13.3. IMPACTS AND TYPICAL MITIGATION MEASURES

In general, the environment within and surrounding the gold deposits in the Kyzyl Shear Zone, including the Bakyrchik deposit, has been significantly influenced by mining activity that has occurred since the 1950s through to present day. Existing environmental impacts from historical mine activities are primarily associated with poor mine process waste disposal and mine water management.

Although BMV bears no liability for environmental impacts dating before 1994, the proposed redevelopment and commissioning of the Project includes the following measures to address historic environmental liabilities:

- Construction of an international standard community landfill site (in association with the community);
- Rehabilitation of stockpiles, waste rock dumps, abandoned pits, vehicular tracks, etc.; and
- Closure and reclamation of the existing TSF.

Developing the Project as currently planned is considered to provide a net environmental benefit to the site and surrounding area when compared with the no project option.

The major potential for environmental impacts associated with the re-commissioning the Project are associated with processing the ore and the subsequent disposal of processing waste streams which have the potential to adversely affect the surrounding environment, the Project workforce and the community of Auezov.

Specifically, the potential environmental risks of greatest concern are:

- Emission of SO₂, NO_x, and particulates to the atmosphere.
- Disposal of hazardous waste products, including cyanide containing slurry, created through the gold processing stream.



- Reduction in pasture land and decrease in biodiversity due to extension of site lease and access restrictions.
- Contamination of surface and groundwater due to surface runoff, reagent or hydrocarbon spills, process or waste water discharges, industrial waste and acid rock drainage (ARD) generation.
- Damage to flora and fauna due to ARD generation.
- Reduction in soil quality due to mineral dusts, erosion of exposed surfaces and reagent/hydrocarbon spills.

The management and mitigation of these impacts will be addressed partly through Project design, but primarily by the development and implementation of specific operational management and mitigation strategies.

2.13.4. PLANNED FUTURE WORK

BMV is currently in the process of commissioning the remaining, post-scoping stages of an internationally compliant ESIA. A tentative timetable and work plan for completion international ESIA is presented in Table 2-23.

		Ryzyl i Toject
Milestone	Status	Tasks to complete
Final Draft Bakyrchik Gold ESIA Scoping Study	Completed	None
Stakeholder Engagement Plan (SEP)	SEP updated Final SEP for public release SEP implementation: on-going	Action item: BMV to update and implement the SEP.
Additional baseline data collection and management	To be commenced in summer 2013	See below for details
Draft ESIA for Bakyrchik Gold Project	Draft report to be produced	 Update the proposed Project description section Describe the Methodology for ESIA Compile the environmental and social baseline conditions section with available and new information. See below for additional baseline studies. Assessment of potential environmental and social impacts on all environmental and human resources Summary of potential significant environmental and socio-economic impacts

TABLE 2-23 TENTATIVE WORK PLAN FOR KYZYL PROJECT ESIA COMPLETION Kyzyl Project



Milestone	Status	Tasks to complete
		 Mitigation measures for potentially significant environmental and social impacts Environmental and Social Action Plan (ESAP) for construction, operation and closure stages of the Project Environmental and social monitoring plan Frameworks for management plans, including Air quality management plan, Traffic management plan, Water management plan, Waste management plan, Community health and safety plan, TSF management plan, Noise management plan, Biodiversity management plan and others.
Non-Technical Summary (NTS)	Final NTS document for public disclosure to be produced	Prepare NTS for the Bakyrchik Gold Project (in Kazakh and Russian) which will in a non-technical manner describe the proposed Project and present major findings of the ESIA. The document will provide a summary of environmental and socioeconomic conditions and of the how the Project could affect the environment and people. In addition, the NTS will describe what actions have to be taken to reduce the effects on the environment or people
Draft ESIA and NTS disclosure and public meetings	To be completed	Completed Draft ESIA and NTS for formal ESIA public consultations and meetings at Auezov and Shalobay
Draft ESIA Public consultations	Pending draft ESIA and NTS disclosure	 Non-technical summary (Kazakh and Russian), draft ESIA and SEP on BMV or AAG website Public meeting for stakeholders and other interested parties Receive comments/feedback
Final ESIA	Pending public and stakeholder comments	Revise ESIA, including responses to comments/feedback

The final international ESIA will cover additional baseline studies and analyses which have been identified as required for the ESIA, including:

- Suite of surface and groundwater baseline monitoring. This will include, monitoring at new TSF site, water abstraction and diverted water discharge points, water treatment plant, sewage treatment plant and other site areas at risk of water contamination, such as fuel stores, etc.
- A study of local users of surface water and groundwater resources, and a detailed study of water abstraction points as well as any other important locations, e.g., swimming areas, fishing holes, etc.
- Analysis of existing and future geochemical testwork of waste rock, particularly focusing on ARD generation potential.
- Additional soil sampling and analysis, including contaminated dust deposition analysis.
- Biodiversity assessment of the proposed TSF site as well as verification of biodiversity context of the existing operational land.



- Ecosystem services analysis of the proposed Project areas, including soil studies and agronomy.
- Site specific cultural heritage study.
- Site specific transport and traffic study.
- Air quality and noise baseline, with specific regard to potential sensitive receptors.
- Analysis of historical environmental liabilities.
- Demographic change analysis over BMV's years of operation.
- Skills audit and small business potential in the local area.
- Third party users (e.g., local residents) of areas under BMV's lease, such as disused open pits, waste dumps, Kyzyl-Su Dam.
- Land use and tenure study at TSF site, focusing on agricultural land needs and availability in Auezov municipality and to a lesser extent, Zharma district.
- Study on use of other natural resources by local residents.

As shown in Table 2-23 above, the ESIA work will also include the development of a SEP, a key requirement for an ESIA to international standards. An update to the community engagement and sustainable development plan produced by BMV in 2010 and its re-structure into a framework SEP format to meet IFC PS 1 requirements would be appropriate.

BMV is currently considering inclusion of the following Framework Management Plans in the ESIA work stream:

- Water and Wastewater Management Plan.
- Waste Management Plan.
- Air quality Management Plan.
- Tailings Management Plan.
- Cyanide Management Plan.
- Noise Management Plan.
- Biodiversity Management/Action Plan.
- Spill Prevention and Emergency Response Plan (including site drainage plan).
- Traffic Management Plan.
- Labour Management and Training Plan.
- Social Management Plan (including land tenure issues).
- Cultural Heritage Management Plan.



- Mine Closure and Reclamation Plan.
- Grievance Mechanism.

In addition to the above, an audit of BMV's cyanide transport, storage, and handling procedures to ICMI standards are considered advantageous, as well as further studies into greenhouse gas emissions from the site.

It is understood that the remaining ESIA work will commence in summer 2013, with key baseline data collection stages from July to November. A draft ESIA report for consultation is scheduled to be produced in early 2014.

2.13.5. SOCIAL OR COMMUNITY REQUIREMENTS

The Mine is expected to have long lasting positive effects on the local and regional economy both in terms of investment expenditures, exports, employment, and physical infrastructure. The Project is also expected to increase the skills base of local communities by providing training opportunities to employees and support for some of the local youth who wish to further their education.

Potential adverse impacts identified include:

- Increased traffic movement and potential for accidents.
- Risks to public health and safety.
- Vibration and noise causing nuisance to the community and potentially damaging structures.
- Potential contamination of water supplies.
- Economic and social decline at mine closure.

As with environmental risks, the management and mitigation of potential adverse social impacts will be addressed partly through Project design, but primarily through the development and implementation of specific operational management and mitigation strategies, which has commenced in August 2013.

It has been determined that although some expatriates are required for the first two years of mine life, thereafter all employees will be sourced locally, regionally and nationally to meet the operational requirements of the Project, upon which some job-specific training will be provided. BMV is committed to upholding its commitment to Kazakh content and procurement legislation, as well as its social commitments.



BMV will implement an integrated set of community engagement and sustainable development practices and programs in order to maximize the positive social and economic effects of the operation on the communities within the Project area. BMV will prepare a stakeholder engagement plan providing a detailed communication strategy for all external stakeholders. This plan will be reviewed and updated on a regular basis. In addition, BMV has a disclosure and consultation program, which began in February 2011 and will be ongoing for the life of mine.

The sustainable development of the community is targeted in four main areas:

- 1. Social infrastructure development
- 2. Education and training sponsorship scholarships and training for employees and non- employees
- 3. Capacity building working with NGOs
- 4. Business development small-scale loans program

A preliminary cost estimate for sustainability programs in 2013 totals nearly \$60,000. This figure and associated Memoranda of Understanding are agreed each year with the Akim. In addition, in 2013 BMV will transfer \$100,000 to the budget of the East Kazakhstan Oblast according to Amendment #3. In 2013 BMV also financed education of local youth in the amount of \$35,000.

2.13.6. MINE CLOSURE REQUIREMENTS

The Bakyrchik Mine Decommissioning Liabilities Provision, January 2013, estimates the total closure cost for the Mine to be US\$12.0 million, however, the framework Mine Closure and Rehabilitation Plan, forming part of the ESIA, will identify further activities and processes which have not been considered in the current cost estimate.

An additional US\$7.2 million is included to cover general and administrative costs during closure.

2.14. MANPOWER

2.14.1. MINE PERSONNEL

The FS has been prepared on the basis that the Mine will be primarily owner-operated and that the mine labour force will be drawn predominantly from labour resources within Kazakhstan.



Management will be a combination of expatriate and local staff, with some senior expatriate management required throughout the mine life, and others replaced by local staff after four years. Expatriate mining and maintenance trainers will be required in the early years. In the mining department, a maximum of 12 expatriates will be employed during the pre-production development and the first two years of production and will then remain steady at two for the duration of the mine life.

2.14.2. MINE LABOUR

The underground work schedule is based on two, 12 hour shifts, with clerical and technical employees working a regular, eight hour day shift.

Local employee work hours were estimated based on the following assumptions:

- 12 hour working shifts
- 14 day working cycle (7 days on/7 days off)
- No allowance for absenteeism or leave

To ensure coverage for on-site/off-site rotations of expatriate employees, two crews are required. Coverage for unit labour rotations requires four crews.

Managers will work nominal 40 hour weeks, one shift per day, and five days per week.

Salaries used in the cost estimate are based on information provided by AAG and expected compensation for expatriate staff.

Mine manpower (including staff and hourly employees) is estimated to peak at 588 employees, declining to approximately 400 employees at the end of the mine life. This excludes contractor workforces required for Project construction.

Mine manpower at steady-state production is summarized in Table 2-24.

TABLE 2-24 MANPOWER AT STEADY STATE PRODUCTION Kyzyl Project

Area	Total
Management	55
Equipment Operators	280
Mine Services	144
Admin	22
Technical Services	61
Total	562



Management comprises underground managers, shift bosses, engineering superintendents, engineering foremen, and trainers.

Equipment operators include operators of jumbos, LHDs, haul trucks, support equipment, the blasting crew, and the backfill operators. The number of machine operators varies from year to year depending on the numbers of machines in operation in that year.

Mine services include mechanical and electrical maintenance personnel, and shaft operators. It is assumed that support crews will be multitasking and will be trained to operate ancillary equipment as appropriate to their duties.

Technical services include mining engineers, geotechnical engineers, ventilation engineers, geologists, samplers, surveyors, and trainers.

2.14.3. TRAINING

In the early years of the mine life, expatriate personnel will operate as workplace trainers and assist the Safety/Training Officer in developing the skills of the local workforce, so that they can eventually take over all underground functions.

All personnel will be provided with on-going training to maintain their existing skills and to develop new skills as appropriate to the operation.

2.14.4. OCCUPATIONAL HEALTH AND SAFETY

Occupational Health and Safety will be given the highest priority by BMV. A Safety Management System that focuses on pro-active hazard identification and risk management will be implemented. All personnel will receive safety training appropriate to their position and duties.

Emergency procedures will be developed and a mine rescue team trained and equipped. Regular evacuation and other emergency drills will be conducted.

2.15. CAPITAL AND OPERATING COSTS

The timing of the capital and operating cost expenditures is based on the FS. Please refer to the current Polymetal development timeline on page 2-2.



2.15.1. CAPITAL COST

The capital cost estimate based on the FS is \$543 million, including Value-Added Tax (VAT). The estimate is reported at feasibility study level where the accuracy is defined as $\pm 15\%$ including contingency.

Salient points related to the Basis of Estimate are:

• The base date of the FS capital cost estimate is September 2013 utilizing the following exchange rates:

Exchange Rates	ROE
EUR : USD	1.30
GPB : USD	1.50
ZAR : USD	8.50
CAD : USD	1.00
AUD : USD	1.10
KZT : USD	155.00

- The KZT : USD exchange rate as of June, 2014 is 183.50. This could have a positive economic effect on the FS.
- The costs incorporate all capital expenditures from the commencement of detailed engineering (Q1 2014) through to the commencement of ore processing in April 2016
- VAT and custom duties are in accordance with Kazakhstan regulations
- Costs are inclusive of non-recoverable VAT
- Sustaining capital incorporates all capital expenditure after April 2016

A summary of the capital cost estimate is presented in Table 2-25.

DESCRIPTION	COST (\$ M)	%
Mine	140.1	26%
Process Plant	147.9	27%
Infrastructure	93.3	17%
Indirects	78.9	15%
VAT	34.7	6%
Contingency	48.5	9%
Total	543.3	

TABLE 2-25 CAPITAL COST - SUMMARY Kyzyl Project

The overall contingency allowance is 9.8% of the direct and indirect capital cost estimates. This figure is lower than most feasibility study contingency rates but it reflects



the fact that most of the estimated costs were derived from firm quotations for equipment and construction services. Project execution costs are based on AAG's project experience in previous in-country projects.

2.15.1.1. CAPITAL COST - MINING

The pre-production capital cost estimate for mining is summarized in Table 2-26. Capital costs are based on purchase of the mobile equipment fleet, mine development carried out by the owner, and a number of categories relating to mine infrastructure.

DESCRIPTION	COST (\$ M)
Mine Direct Capital	
Mobile Equipment	42.83
Existing Ramp Slashing	2.27
Mine Development	57.90
Main Ventilation Fans & Housing	12.66
Mine Air Heating	9.88
Underground Portable Equipment	3.99
Underground Infrastructure	2.98
Electrical Infrastructure	7.58
Subtotal	140.08
Mine Indirect Capital	
EPCM	0.60
Equipment Spares & First Fills	3.59
Freight	1.79
Other	1.00
Subtotal	6.98
TOTAL	147.06

TABLE 2-26 CAPITAL COST - MINING Kyzyl Project Kyzyl Project

2.15.1.2. CAPITAL COST – PROCESS

The aim of the process plant capital cost estimate is to provide costs to an accuracy level of \pm 15% that can be utilized to evaluate the economic viability of the Bakyrchik Project when treating 1.5 Mt/a of gold ore.

The total estimated cost of bringing the process plant into production is approximately US\$216 million and is inclusive of US\$21 million contingency. Table 2-27 presents a summary of capital requirements, per discipline.



TABLE 2-27	CAPITAL COST - PROCESS
	Kyzyl Project

DESCRIPTION	\$M	% CONTINGENCY	COST (\$ M)
Process Plant Direct Costs			
Earth works	8.52	20.0	10.23
Civil works	15.44	15.0	17.75
Structural Steel	18.59	12.5	20.91
Platework	11.60	12.5	13.05
Machinery and equipment	57.82	6.0	61.34
Piping	16.28	13.7	18.51
Valves	0.97	10.0	1.06
Insulation and Painting	3.50	10.0	3.84
Electrical	9.63	7.8	10.38
Instrumentation	4.79	8.5	5.20
Subtotal	147.83		162.36
Indirect Field Costs			
Mill installation contractor P&G	0.29	10.0	0.32
Main Erection contactor P&G – M&P and E&I	6.15	10.0	6.77
Spares – Commissioning	0.49	10.0	0.54
Transportation	8.56	15.0	9.84
Subtotal	15.49		17.47
Plant Pre-Production			
Plant First Fill	1.26	10.0	1.39
Spares – Insurance	2.12	10.0	2.33
Spares – 2 year operating	1.59	10.0	0.87
Assay Lab Mobilization	0.05	0.00	0.05
Subtotal	4.22		4.64
Other			
Insurances	2.50	0.00	2.50
Vendor Services	1.04	10.0	1.14
Subtotal	3.54		3.64
Project Management – EPCM	22.50	10.0	24.75
Consultants	0.36	10.0	0.39
BIOMIN - Licence Fee	1.50	0.00	1.50
Subtotal	24.36		26.64
TOTAL	195.53		215.50

2.15.1.3. CAPITAL COST – INFRASTRUCTURE

Capital costs for the infrastructure were provided by AAG, based on designs prepared by KDIs and quotations from local Kazakh contractors.

Table 2-28 summarizes the estimated capital costs for infrastructure.



DESCRIPTION	COST (\$ M)	
Direct Capital		
Site Preparation	1.00	
Water Supply	8.81	
Power Supply	28.15	
Communications	2.96	
Surface Mobile Equipment	5.51	
Buildings	19.63	
Tailings Storage Facility	13.54	
Backfill Plant	13.71	
Subtotal	93.32	
Indirect Capital		
EPCM	1.20	
Commissioning	0.50	
Equipment Spares	0.78	
Freight	3.36	
Subtotal	5.84	
TOTAL	99.16	

TABLE 2-28 CAPITAL COST - INFRASTRUCTURE Kyzyl Project

2.15.1.4. CAPITAL COST - OWNER

Owner's capital costs comprise the labour costs for the current OT and additional members required to execute the Project, plus permitting costs, construction insurance, translation services, consumables and services. These costs are considered indirect capital costs in the summary of capital costs.

G&A costs are incurred from the time the project is approved (assumed to be Q1 2014) until it is in operation. These costs include power supply, transport, security, site accommodation, catering, property tax, Auezov costs, and the Almaty office costs associated with the Bakyrchik Project, and are included under operating costs.

Table 2-29 summarizes the estimated Owner's capital cost.



TABLE 2-29	CAPITAL COST - OWNER
	Kyzyl Project

DESCRIPTION	
	COST (\$ M)
Labour	8.46
Permitting	3.35
Construction Insurance	5.50
Translation Services	0.28
Consumables and Services	0.90
Total	18.48

2.15.1.5. VAT

VAT totalling \$34.7 million was assessed at a rate of 12% on relevant capital costs:

- VAT is applicable to the salaries and benefits of expatriates seconded to BMV.
- VAT is applicable to goods and services procured within Kazakhstan.
- VAT is not applicable to imported capital goods both during the Project development phase and during the sustaining phase of operations as these imported capital goods are moved through a VAT/duty free warehouse.
- VAT is not applicable to services rendered to BMV outside of Kazakhstan.

VAT on capital costs was separated from quotes that included it, and estimated for items that did not.

2.15.1.6. CAPITAL COST - CONTINGENCY

Table 2-30 below shows the contingency allowed by area:

AREA	(%)	COST (\$ M)
Mine	10.0	15.57
Process	10.2	21.35
Infrastructure	8.9	11.54
Total	9.8	48.46

TABLE 2-30 CAPITAL COST - CONTINGENCY Kyzyl Project

The overall contingency allowance is 9.8% of the direct and indirect capital cost estimates. This figure is lower than most feasibility study contingency rates but it reflects the fact that most of the estimated costs were derived from firm quotations for equipment and construction services.



2.15.1.7. CAPITAL COST - SUSTAINING

Table 2-31 below summarizes the lifetime sustaining capital cost by area.

Area	COST (\$ M)	
Mine	249.13	
Infrastructure	22.98	
Indirects	6.33	
VAT	14.12	
Closure and Reclamation	19.25	
Total	311.81	

TABLE 2-31CAPITAL COST - SUSTAINING
Kyzyl Project

The sustaining capital cost estimates for the Mine comprise the following:

- Mobile equipment rebuilds \$79.6 million
- Mobile equipment replacement \$27.7 million
- Capitalized mine operating costs for waste development \$122.1 million
- Mine infrastructure \$19.7 million.

No sustaining capital was included for the process plant, as all relevant equipment costs were included in operating costs.

2.15.2. OPERATING COST

Operating costs are summarized in Table 2-32.

DESCRIPTION	COST (\$/t)
Mining	39.01
Processing	39.59
G&A	18.61
VAT	8.76
Total	105.98

TABLE 2-32 OPERATING COST - SUMMARY Kyzyl Project

2.15.2.1. OPERATING COST - MINE

Mine operating costs are summarized in Table 2-33.



DESCRIPTION		COST (\$/t)
Labour		6.65
Drift Mining Cycle	Drilling	2.10
	Load & Blast	2.24
	Loading	0.55
	Haulage	1.30
	Ground Control	4.29
Mine Services	Mobile Equipment Maintenance	3.44
	Fixed Equipment Maintenance	1.20
	Ventilation	0.22
	Support Vehicles	0.58
	Paste fill	7.44
	Power	7.48
	Mine Air Heating	0.37
	Safety	0.56
	Definition Drilling	0.48
	Assays	0.12
	Oil Delivery	0.01
	Total	39.01

TABLE 2-33 OPERATING COST - MINE Kyzyl Project Kyzyl Project

2.15.2.2. OPERATING COST – PROCESSING PLANT

Life of Mine process plant operating costs are summarized in Table 2-34:

TABLE 2-34 OPERATING COST - PROCESS PLANT Kyzyl Project Kyzyl Project

DESCRIPTION	COST (\$/t)
Labour	4.29
Consumables	27.50
Power	6.05
Maintenance Parts & Supplies Process Plant Assay Cost	1.51
(Excludes mining and environmental samples)	0.32
Total	39.67

2.15.2.3. OPERATING COST - GENERAL AND ADMINISTRATIVE

General and Administrative (G&A) operating costs include all BMV labour costs not associated with mining or processing.

Table 2-35 summarizes the G&A operating costs



TABLE 2-35OPERATING COST - GENERAL AND ADMINISTRATIVEKyzyl Project

DESCRIPTION	COST (\$/t)
Labour	3.89
Consumables	2.22
Contracts and Services	2.20
Catering	1.82
Auezov Costs & Community Projects	0.40
Power	0.98
Almaty Office	2.38
Insurance	2.04
Property Tax	2.68
Total	18.61

2.15.2.4. OPERATING COST - VAT

VAT totalling \$8.76/tonne (approximately \$13 million per year) was assessed at a rate of 12% on relevant operating costs:

- VAT is applicable to the salaries and benefits of expatriates seconded to BMV.
- VAT is applicable to goods and services procured within Kazakhstan.
- VAT is not applicable to imported equipment and consumables, as these items are moved through a VAT/duty free warehouse.
- VAT is not applicable to services rendered to BMV outside of Kazakhstan.
- There is some ambiguity in the Tax Code with respect to the VAT treatment of refined gold exports. Given this ambiguity, a conservative approach was modelled for the FS, where it is assumed that sales are exempt from VAT and that accordingly the input VAT related to the production of gold is not recoverable.
- Polymetal reports that, in their experience, VAT is likely to be fully recoverable during operations. This would provide a positive impact on Project economics.

2.16. ECONOMIC ASSUMPTIONS

2.16.1. MARKET STUDIES AND CONTRACTS

2.16.1.1. MARKET STUDIES

Gold is freely traded, at prices that are widely known, so that prospects for sale of any production are virtually assured.

Sales of refined gold to the Kazakhstan National Bank for the purpose of replenishing the National Bank's gold reserves will be subject to value-added tax (VAT) at a zero-percent rate. The financial model assumes that BMV will toll refine doré within Kazakhstan and sell refined gold to the Kazakhstan National Bank.



The gold price used for the economic assumptions is \$1,300/oz Au. The price is derived from consensus summaries based on long-term price forecasts from major banks and other financial institutions.

2.16.1.2. CONTRACTS

The Project currently has no contracts in place for services or for the sale of gold.

2.16.2. ECONOMIC ASSUMPTIONS

A summary of the key criteria is provided below.

2.16.2.1. PRODUCTION SUMMARY

- Production starting in Q2 2016.
- Ramp up to 1.5 million tonnes per year mining from underground (4,100 t/d) in 2017.
- 20 year mine life, including three years at a lower rate at the end of the mine life.
- Total production is 27.6 Mt, at a grade of 7.52 g/t Au.
- Recovery to doré: 82%.
- An average annual gold production of 310,000 ounces (full years only).

2.16.2.2. REVENUE

- \$9/oz charge for doré refining, transport, and insurance costs.
- Doré payable of 99.9%
- Kazakhstan Mineral Extraction Tax (MET) of 5% of the value of gold contained in the ore mined.

2.16.2.3. COSTS

- Pre-production period: two years and three months (January 2014 to March 2016)
- Project capital cost totals \$543 million, including \$35 million in VAT, and \$48 million in contingency.
- Sustaining capital cost of \$312 million, including \$14 million in VAT, and \$19 million in closure costs.
- Average unit operating costs over the mine life:
 - \$39 per tonne Mining
 - \$39 per tonne Processing
 - o \$19 per tonne G&A
 - <u>\$ 9 per tonne VAT</u>
 - \$106 per tonne Total



2.16.2.4. TAXATION

- Corporate Income tax of 20%. See taxation discussion on page 2-110.
- No Excess Profits Tax assumed.
- VAT included in both operating costs and capital costs as separate line items.

2.16.2.5. ALL-IN SUSTAINING COST

World Gold Council cost per ounce measures include an Adjusted Operating Cost of \$611 per ounce of gold, an All-In Sustaining Cost of \$678 per ounce of gold, and a Total Cost of \$711 per ounce of gold.

2.17. RISKS AND OPPORTUNITIES

2.17.1. RISKS

Permitting - General

The Project schedule allows a period of 12 months for BMV to obtain construction permits. There is a risk that there may be delays or conditions attached to obtaining permits that could affect the viability of the Project.

Similarly, BMV, which must obtain an operating permit by the end of the first quarter of 2016, does not anticipate any delays as the Government of Kazakhstan has placed the Kyzyl Project on the industrialization map of the East Kazakhstan Oblast, giving it a favoured project status that should assist with local and national permitting requirements considered.

Permitting – Flotation Tailings

The Project is based on using flotation tailings as backfill in the Mine. There is a risk that this plan will not be approved on the grounds of sterilizing the gold content in these tailings, albeit at a very low grade (approximately 0.6 g/t Au depending on the plant feed grade). There is a precedent for using flotation tailings as mine backfill at the other operations in Kazakhstan. If not permitted, a quarry with a crushing, screening, and milling plant would have to be developed for providing backfill material and this would add significantly to both capital and operating costs.

Production Rate – Mining

A key project risk in the achievement of the economic assumptions made in the FS is mine productivity. In RPA's opinion, the production rate of 1.5 Mt/a is at the upper end of



what is achievable with the current mine configuration. The use of a high quality paste backfill and good mining control will be an important factor in achieving the assumed high productivity levels without incurring excess dilution.

The productivity risk can be mitigated by the development of alternative sources of mill feed from other deposits. In RPA's opinion, there is significant exploration potential near the lenses proposed for development, as well as within the region. This potential can mitigate the productivity risk and allow for a longer mine life.

Taxation

In the FS, a corporate income tax of 20% is used. Companies operating in the RoK have found that the effective corporate tax rate may be higher due to different expenses which might not be deductible and that they tend to pay 5% to 8% more than the base rate.

2.17.2. OPPORTUNITIES

The mining operating cost estimate is based on using 10% cement/slag in the mine backfill plant. Further testwork is required, however, RPA believes that there is an opportunity to reduce the cement content to 8%, which is a more common figure for the proposed mining method.

Ground support costs are significant, due to a conservative approach based on lack of data regarding the ground conditions, particularly in the footwall. As development proceeds, experience may show that less support may be sufficient, resulting in operating cost savings.

The ferric sulphate addition used in this study is based on testwork of samples which were intended for comminution testwork and not considered fully representative of the whole orebody. The original sample test had a Fe:As molar ratio in the order of 3.0, whereas the subsequent testwork had a sample with a significantly lower ratio. RPA believes that the original sample was more representative of the whole orebody and thus provides an opportunity to significantly reduce the quantity of ferric sulphate addition, one of the major contributors to reagent costs.

The TSF design and cost estimate is based on the conservative assumption that all tailings, including flotation tailings, will be directed to the TSF. This study is based on the flotation tailings being used for mine backfill. Accordingly, there is an opportunity to significantly reduce the size and consequently the capital costs of the flotation TSF.



The costs associated with providing heating to the town of Auezov and new surface infrastructure are based on the existing coal-fired boiler. Alternative, more efficient heating sources could be identified and there is an opportunity to significantly reduce these costs, albeit at an increased capital expenditure.



3.BOLSHEVIK DEPOSIT

3.1. INTRODUCTION

The Bolshevik Deposit is a FSU open pit gold mine from which refractory carbonaceous, arsenical, auriferous siliceous material was mined for smelter flux from 1960 to 1994. The deposit is close to and along the KSZ strike from the Bakyrchik Mine. In 1996, the ownership of subsoil use rights for development of the Bolshevik gold deposit was transferred to IGC. A 100,000 t/a pilot concentrator, based on gravity and flotation of sulphidic material, was commissioned in December 2002 and operated from 2003 to 2004. A bacterial heap leach pad and processing plant based on cyanide technology was also constructed and processed low-grade oxide material during 2002 and 2003. The mine was placed on care and maintenance in 2004. RPA notes that the concentrator equipment appears to still be in reasonable condition, however, the Bolshevik open pit is filling up with water. Some minor reclamation and rehabilitation work has been carried out on the property since the first RPA site visit in 2007.

There are no Mineral Resources at Bolshevik. RPA has prepared an opinion of the Project's exploration potential as an Exploration Target as defined in the JORC (2012) Code. In RPA's opinion, limitations on verifying data preclude any estimation of Mineral Resources. Additional exploration, confirmation drilling, and data verification are required.

RPA visited the Bolshevik Project on May 7, 2007 and observed the surface infrastructure and Bolshevik open pit. RPA visited the property on numerous occasions between 2010 and 2012 during consulting advisory activities related to AAG's Kyzyl Project exploration program and most recently visited the site on July 30, 2013 as part of a consulting engagement to review the Bolshevik exploration potential and generate an exploration drilling plan.

In 2007, a digital database of exploration and development drilling and sampling data was obtained from Ivanhoe in Microsoft Access and Excel formats. RPA data support requests, including a digital terrain map, geological compilations, and surface plant details, were provided in digital format by Alexey Aristov of IGC via email from Kazakhstan. In 2013, a digital drill hole database used for the basis of a 2011 Kazakh FS was sourced from GEOS LLP (GEOS), an Ust-Kamenogorsk based Geological Institute.



The documentation reviewed, and other sources of information, are listed in Section 5, References.

3.2. LOCATION, ACCESS, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

The Project is located in the northeastern region of the RoK, 750 km east of the capital city of Astana, 1,100 km north of the business centre Almaty, and 75 km southwest of the mining and metallurgical industrial centre Oskemen (formerly known as Ust-Kamenogorsk). The mine is approximately two kilometres north of the village of Shalobay (population nearly 1,100) and approximately six kilometers west of the town of Auezov (population nearly 3,000). A plan of the Bolshevik site, including its relationship to Bakyrchik Mining and Exploration licences is illustrated in Figure 3-1.

The national carrier Air Astana has direct daily flights from both Almaty and Astana to Oskemen. From Oskemen, access to the Project site takes one hour and 30 minutes by paved highway and gravel roads utilizing BMV transportation department vehicles or private taxis. A railway station and railhead is operational at Shalobay, six kilometres from the Project site on the new railway line connecting Oskemen to Shar.

The Project is situated in the steppe country of Central Asia, a gently undulating grassland plain ranging in elevation from 400 masl to 500 masl. There are no forests at the Project site. The Project area experiences a continental climate, with extremes of temperature ranging from -40°C to +40°C and annual precipitation of 250 mm. Climatic conditions are not expected to significantly limit exploration, open pit, or underground mining activities.

Mining and processing personnel are available within Kazakhstan as well as in the surrounding FSU states. Recent industrial development in Kazakhstan provides low-cost local consumables such as cement, fuel, and explosives. Mining operational supplies such as drilling and ground support consumables are, with a few exceptions, available within the country. Much of the process and heavy equipment is imported, although some equipment is available locally.

The mine site can be well serviced by existing BMV infrastructure, including electrical power, potable water, roads, and communications.



www.rpacan.com



3-3



3.3. LAND TENURE

For the purpose of this report, RPA has relied on ownership and land tenure information provided by the Client in the form of an opinion by GRATA Law Firm dated June 5, 2014 entitled "Licences and Permits for Conducting Subsoil Use Operations at the Bakyrchik and Bolshevik Deposits" (GRATA (2014).

The Bolshevik deposits are held by IGC, which is 100% owned by AAG.

Under the RoK laws, all mineral resources belong to the state. A company may obtain a subsoil use contract for: (1) exploration; (2) mining; or (3) exploration and mining. The minerals extracted to the surface belong to the subsoil user. BMV has executed, with the RoK government, Contract No. 120 for the exploration and mining of gold and associated minerals in the Eastern Kazakhstan region of the RoK (Contract No. 120).

3.3.1. SUBSOIL USE RIGHTS FOR GOLD EXPLORATION AND EXTRACTION

For details see Section 2.3.1 of the CPR.

3.3.2. IGC LICENCES AND CONTRACTS

IGC has the following licence and the contract which entitle it to carry out operations of gold extraction:

- Licence Series MG No. 345(D) dated April 12, 1995 for production of gold ore of Bolshevik deposit in Charskii district of Semipalatinsk Region, later replaced by the similarly named Licence MG No. 345(D) dated 28 May 1996 (Licence No. 345). The Bolshevik Licence was issued to the name of Artel Trud CSJC for production of gold ore for 20 years (i.e., until May 28, 2016) with subsequent prolongation. Later, according to amendment No. 2 dated April 1, 2005 to Contract No. 47 (as defined below), the subsoil use right was transferred from Artel Trud CSJC in favour of IGC.
- 2) Contract No. 47 dated June 24, 1996 on carrying out development of Bolshevik gold deposit and associated minerals (platinoids and shungite raw) in the Zharminsk district of the Semipalatinsk Region (Contract No. 47). The authorities issued the mining allotment with the area of 431.1 ha for operations to be performed under this contract. Contract No. 47 is valid until expiry of Licence No. 345, i.e., until May 28, 2016. The contract has been amended seven times.

The above licence and the contract form the basis for subsoil use operations of IGC on gold extraction at the Bolshevik deposit. Among other things, IGC must comply with terms of the licence and the contract, as well as with terms of the corresponding work programs, in order to procure good standing of its subsoil use right.



IGC is currently in breach of its contractual obligations and has received relevant notices from MINT.

3.3.3. BOLSHEVIK DEPOSIT LICENCE NO. 47

The total mining allotment is 431.1 ha (4.311 km²). The borders for the area of subsoil use (aerially and to depth) are based on topographic corner marks (Table 3-1 and Figure 3-1), with a depth allocation of -300 m (equivalent to the +290 horizon).

Land corners	Land corner coordinates based on the 1942 System	
	North latitude	East longitude
1	55098'10''	144340'45"
2	55105'70''	144340'45"
3	55107'00''	144345'35"
4	55106'80''	144348'85"
5	55104'70''	144358'65"
6	55108'30''	144372'75"
7	55096'30''	144372'75"
8	55092'40''	144352'15"
9	55093'70''	144350'15"
10	55094'50''	144344'45"

TABLE 3-1 MINING ALLOTMENT Kyzyl Project

Total Area = 4.3 km²

3.3.4. SURFACE USAGE/LAND LEASE

IGC has the land lease rights within the area related to Contract No. 47. The lease allows BMV to utilize the land within the limits of the lease for performance of subsoil use operations at the gold deposits of the Bolshevik Mine in accordance with Contract No. 47.

3.3.5. ENVIRONMENTAL PERMITS

3.3.5.1. PERMIT FOR EMISSIONS

Pursuant to the Environmental Code, an individual or a legal entity may carry out emissions into the environment only after obtaining an Emissions Permit. An Emissions Permit consists of a set of documents including a Plan of Actions for Protection of the Environment and a Program of an Industrial Environmental Control. Accordingly, implementation of such a Plan and a Program is considered as maintaining compliance with the relevant Emissions Permit.



IGC has not provided GRATA with a copy of its Emissions Permit. According to IGC, it did not obtain an Emissions Permit for 2011-2014 due to suspension of its activities since December 2004.

3.3.5.2. SPECIAL WATER USE PERMITS

According to the Water Code, extraction of surface or underground water with special intake facilities as well as discharge of sewage water into surface water reservoirs refers to "special water use".

Special water use may be performed only under Special Water Use Permits issued by authorities. A Special Water Use Permit must be obtained before the commencement of the water use. Holders of such permits must not exceed the limits of water extraction set by their permits. GRATA understands that IGC did not obtain a Special Water Use Permit because of suspension of its activities and no need to perform "special water use".

3.3.6. OPERATING LICENCE

The Licensing Law specifies certain types of activities which are subject to licensing. According to Article 4.9 (General Principles of Licensing) of the Licensing Law, if a type of an activity is subject to licensing, performance of such an activity is permissible only after obtaining the relevant licence. Performance of the activity that is subject to licensing without the relevant licence may lead to the seizure of income earned from that activity.

BMV has State Licence for Designing of Mining Facilities and Performance of Mining Practices and Chemical Production No. 0003926 dated October 12, 2010 which allows IGC to perform the following kinds of work:

- 1) Designing for production of solid minerals (except for widely spread minerals).
- 2) Preparation of projects and process regulations for development of deposits of solid minerals.
- 3) Production of solid minerals (except for widely spread minerals).
- 4) Opening and development of deposits of solid minerals (open-cut and underground mining).
- 5) Technological operations in deposits (except for deposits of oil, gas and condensate of oil and gas).
- 6) Blasting operations for production of solid minerals.



7) Liquidation of mines and pitshafts (except for deposits of oil, gas and condensate of oil and gas).

The licence is valid for the whole territory of the RoK. The validity term of the licence is unlimited.

3.3.7. COMMENTS

At present, IGC does not have an Emissions Permit and a Water Use Permit for its further mining activities. When IGC decides to restart its activities, it will need to obtain these permits. For this reason obtaining of these permits may take a considerable amount of time (more than six months).

IGC has a licence for designing of mining facilities and performance of mining practices and chemical production, which is the main licence necessary for mining practices. However, GRATA cannot confirm that IGC has all licences necessary for its mining practices. It should be noted that IGC does not need to have a licence if the relevant works are conducted by a subcontractor which has all necessary licences.

3.4. HISTORY

3.4.1. BOLSHEVIK DEPOSIT HISTORY

The Bolshevik Project was discovered in 1944 during regional exploration by Soviet government agencies. Systematic exploration started in 1956 and included drilling, trenching, and pitting. Underground development and sampling were also completed in the Shalobay area. The deposits were explored to a depth of 600 m from 1985 to 1989. In general, 50 m by 100 m drill intersections were completed for Soviet C2 resource category classification and locally upgraded to 25 m to 50 m by 50 m intersection spacing required for Soviet C1 resource category classification.

The following history is taken from GEOS (2012) and IGC communication:

- Commercial mineralization was confirmed at Bolshevik in 1955, two years after discovery of Bakyrchik deposit in 1953.
- In the period from 1956 to 1984, small-scale exploration was conducted at the deposit including trenching, sinking of deep prospecting pits with cross-cuts and drifts, and core drilling. This work was primarily aimed at exploration of oxidized ores, mining of which started in 1960 by open-cut method (Oktyabrsky open-pit mine). Further exploration was then focused on flanks and deeper levels.




- Between 1984 and 1986, systematic exploration started on Chalobai, Kholodny Klyuch, Shalobay, and Western Bolshevik.
- Between 1986 and 1989, the deposits were explored by trenching, sinking of deep prospecting pits with crosscuts and an inclined shaft with horizontal workings, as well as by large-scale core drilling.
- Between 1989 and 1991, the preliminary exploration of the western flank of Kyzyl shear zone proceeded with driving of underground openings from the inclined shaft and core drilling.
- Between 1988 and 1993, large-scale prospect evaluation works were conducted in order to identify and estimate probable commercial values of gold-sulfide mineralization zones in Kyzyl shear zone.
- Between 1999 and 2000, exploration of low-grade oxidized ore was conducted at the deposit by trenching and drilling of shallow pneumatic holes.
- Exploration of oxidized ore continued from 2002 to 2003 by further trenching, clearing, pneumatic and core drilling.
- In 2008 and 2009, AAG conducted short hole surface drilling in order to fulfill commitments of the subsoil use agreement.

Intermittent mining of the deposit occurred between 1960 and 1990 by the industrial complex Altayzoloto and the production geological enterprise, Vostkazgeologia. The early operations focused on high grade oxide material, which is historically similar to Bakyrchik, where the oxide mineralization became exhausted and the remaining sulphidic mineralization was found to be difficult to process.

During Soviet times, sulphide mineralization assaying greater than 5 g/t Au was sold as flux to copper smelters in Armenia, Uzbekistan, and Kazakhstan. Between 1984 and 1994 sulphide material was processed at the Akjal pilot plant located 150 km south of the Bolshevik Project. It is reported that 150,000 tonnes of ore was processed using a combination of gravity and flotation methods, with a resulting gold recovery ranging from 80% to 88%. The concentrates were sold to the Balkhash copper smelter in Kazakhstan. No reliable historical production figures are available prior to 2002.

From 1996 to 2004, the Bolshevik Project was developed by Artel Trud Company (Artel). In December 2002, a \$1.3 million gravity and flotation concentrator plant, designed to process 100,000 tonnes per year of sulphide material from the open pit, was constructed and commissioned. This pilot plant operated from 2003 to 2004 and processed 35,000 tonnes of material with a feed grade of 5.05 g/t Au containing 0.90% As, 7.35% Fe, 1.35% S and 2.10% C (Wardell Armstrong International (WAI), 2007a). Approximately 5,000 tonnes of Bakyrchik ore, with similar metallurgy, were processed concurrently. The

production figures, supplied to WAI (Table 3-2) are for combined production and therefore the metallurgical performance of the mined Bolshevik mineralization cannot be validated. The gravity and flotation concentrates were sold separately, mainly to an Arsenic Plant.

	2003	2004	Total
Bakyrchik			
Head Grade	7.56	8.05	7.78
Tonnage Milled	3,009.8	2,365.9	5,375.7
Bolshevik			
Head Grade	5.04	5.07	5.05
Tonnage Milled	23,814.3	11,160.4	34,974.7
Total			
Head Grade	5.32	5.59	5.41
Tonnage Milled	26,824.1	13,526.3	40,350.4
Concentrate Grade, g/t	70.12	61.02	66.75
Gold Recovery, %	65.5	63.1	64.6

TABLE 3-2 PRODUCTION FIGURES FOR BOLSHEVIK CONCENTRATOR 2003–2004 Kyzyl Project

Source: WAI (2007a)

During 2002 and 2003, a total of 194,000 tonnes of low-grade oxide material at an average grade of 1.08 g/t Au were reportedly processed through a heap leach pad and processing plant based on cyanide technology. Gold was removed from the pregnant liquor using resin adsorption, and the resin was then sold to a processing facility in Almaty. Reported production was 858 kg of bullion grade gold.

3.4.2. GKZ MINERAL RESOURCE AND ORE RESERVE ESTIMATES

Soviet style classified "reserves" for the deposit have been evaluated over the life of the Project. In 2004, the Kazakhstan State Reserves Committee (GKZ) approved an evaluation of the Bolshevik deposit as submitted by Artel Trud in 2004. This estimate, which utilized a horizontal projection technique using FSU methodologies and classifications, does not conform to JORC (2012) nor is it necessarily indicative of all of the mineralization on the Project (Table 3-3).



TABLE 3-3 BOLSHEVIK 2004 GKZ APPROVED SULPHIDE "RESERVES" Kyzyl Project

Resource Category	Tonnes ('000)	Gold (g/t)	Contained Gold (oz)
C1	1,936	7.02	435,000
C2	3,004	6.08	585,000
Total:	4,940	6.45	1,020,00

Notes:

1. Historical Resource and Reserve estimate does not conform to JORC (2012).

2. Russian Reserves Category A is broadly equivalent to a Measured Resource Classification.

3. Russian Reserves Category B is broadly equivalent to a Measured Resource Classification.

4. Russian Reserves Category C1 is broadly equivalent to an Indicated Resource Classification, (nominal 25-50×50m intersection spacing).

5. Russian Reserves Category C2 is broadly equivalent to an Inferred Resource Classification, (nominal 50×100m for C2 intersection spacing).

6. 2.5 g/t Au cut-off grade (COG) for mineral definition with a 3.6 g/t Au minimum block average grade for reporting.

7. One metre minimum mining width.

8. Numbers may not add due to rounding.

9. Source: WAI, 2007a

Following the formation of AAG in November 2008, IGC completed a confirmation drilling program that resulted in conflicting interpretations as to the size and quality of the geological resource. Following this drilling, IGC commissioned GEOS LLP (GEOS) to carry out a Feasibility Study on the sulphide ore of the Bolshevik deposit. The Feasibility Study was approved by VostKazNedra in 2011 and by GKZ in 2012 (Tables 3-4 and 3-5).

TABLE 3-4 BOLSHEVIK 2012 GKZ APPROVED "RESERVES" Kyzyl Project

C2 GKZ Category	Tonnes ('000)	Gold (g/t)	Contained Gold (oz)
Sulphides	5,317	4.63	790,000
Oxides	282	1.15	10,400
Total:	5,599	4.46	800,400

Notes:

1. Historical Resource and Reserve estimate does not conform to JORC (2012).

 Russian Reserves Category C2 is broadly equivalent to an Inferred Resource Classification, (nominal 50×100m for C2 intersection spacing).

3. 2.0 g/t Au cut-off grade.

4. Two metre minimum mining width.

5. Numbers may not add due to rounding.

6. Source: GKZ (2012)



TABLE 3-5 BOLSHEVIK 2012 GKZ APPROVED SULPHIDE RESERVES Kyzyl Project

C2 GKZ Category	Tonnes ('000)	Gold (g/t)	Contained Gold (oz)
Bolshevik	2,153	4.56	315,000
Kholodny Klyuch	247	4.78	38,000
Shalobay	1,649	3.85	204,000
Western Bolshevik	732	7.04	16,500
Other Lenses	535	3.97	68,400
Total:	5,317	4.63	792,000

Notes:

1. Historical Resource and Reserve estimate does not conform to JORC (2012).

2. Russian Reserves Category C2 is broadly equivalent to an Inferred Resource Classification,

(nominal 50×100 m for C2 intersection spacing).

2.0 g/t Au cut-off grade.
 2.0 meter minimum mining width.

4. 2.0 meter minimum mining width.

5. "Other Lenses" consist of a summary total of 46 small discontinuous lenses.

6. Numbers may not add due to rounding.

7. Source: GKZ (2012)

GEOS completed its estimate using a polygonal method that included projecting the flat dipping zones onto a horizontal plane. The rationale for this method was that the drill holes were not oriented along strike.

At a cut-off grade of 3.0 g/t Au, the GEOS 2012 estimate shows a significant decline of approximately 50% of contained gold versus the previous RoK registered reserves. GKZ reported the following reasons for the reduction in Kazakh Mineral Reserves at 3.0 g/t Au cut-off grade:

- The significant difference between the previously estimated reserves and recently estimated reserves is explained by previous breaches of the exploration methodology (i.e., interpretation standards were not followed with respect to holes without mineralized intersections).
- Previous under-exploration of many orebodies.
- Most of the mineralized zones at Bolshevik were not delineated for dip and trend and require additional exploration.
- Poor core recovery affected the confidence of the estimation average of 73% in mineralized zones and 67% in host lithologies.

GKZ made the following recommendations:

• Continue exploration on Bolshevik to increase and upgrade the resource base.



• Continue study of processing properties of refractory, carbonaceous, arsenic bearing ores of Bolshevik mine on representative samples; paying special attention to safe disposal of arsenic-bearing waste.

In RPA's opinion, the historical estimates are relevant based on the previous production figures and knowledge of the geological environment. The historical estimates cannot, however, be considered reliable due to the lack of substantiated quality analyses and controls and the use of 2D inclined horizontal interpretations completed on a complex 3D deposit.

RPA also notes the inconsistency of reporting the Kholodny Klyuch deposit in both IGC Bolshevik Licence No. 47 and Bakyrchik Exploration Licence No. 27 as it appears that deposit straddles both licences.

3.5. GEOLOGICAL SETTING AND MINERALIZATION

3.5.1. REGIONAL GEOLOGY

For details on regional geology, see Section 2.5.1.

3.5.2. LOCAL GEOLOGY

For details on local geology, see Section 2.5.2.

3.5.3. PROPERTY GEOLOGY

The Bolshevik Deposit is located at the western end of the KSZ near the Kalbinsky Fracture. Work by AAG geological staff and consultants (Crossing 2010 and 2011, IGM 2011, Goodman 2011) characterized the main lithologies encountered in the Kyzyl Project deposits (Figure 3-2). This work has been correlated with that of Lewis Geosciences Services Inc. (2006). The revised deposit lithologies were coded into the Bolshevik historical drill hole database.



www.rpacan.com





3.5.4. MINERALIZATION AND DEPOSIT TYPE

Mineralization at Bolshevik is similar to that of Bakyrchik. Gold-sulphide mineralization hosted within the KSZ occurs in foliated mudstones, siltstones, fine- to coarse-grained sandstones, interbedded units, and dioritic porphyries. Mineralization is characterized by quartz veining, with fine pyrite and acicular arsenopyrite disseminated in the rock matrix and coarse grains aggregated in more altered patches and bands. Lewis (2006) noted that, on the basis of textural and structural characteristics, many of the veins observed in drill core can be classified as either crack-seal stylolitic veins, extension veins, or stockworks to hydro-fracture breccias. All vein types may be associated with abundant arsenopyrite and elevated gold grades. Gangue minerals include quartz, carbon, siderite, clay, barite, and less abundant alteration minerals including sericite, chlorite, calcite, albite, and biotite.

Sulphide distribution appears to be related to host rock permeability. Coarser-grained sandstones tend to be higher grade in sulphur and gold. Gold is associated with the sulphides, and occurs as rounded blebs on the order of 10 µm in diameter.

3.5.4.1. SULPHIDE MINERALIZATION

Sulphide mineralization is characterized by quartz veining, with fine pyrite and acicular arsenopyrite disseminated in the rock matrix and coarser grains aggregated in more altered patches and bands. Gold, the primary economic component of the mineralization, is intimately associated with the sulphides and silicification. Silver is also present in sulphide form. Similar to the Bakyrchik deposit, gangue minerals include quartz, carbon, siderite, sericite, chlorite, calcite, albite, and biotite.

Table 3-6 summarizes the mineralogical composition of the sulphide mineralization as assayed by WAI (2007b) from a composite collected from the Bolshevik Open Pit. The sample contained essentially silica and alumina, with minor levels of potassium, calcium, and iron. Of note was the particularly high gold, assaying 16.7 g/t Au, which should not be taken as representative of the deposit. No free gold was observed by WAI during the mineralogical examination. This sample also contained high levels of carbon at 0.50% and moderate levels of sulphur at 3.73%. The levels of base metals, such as copper, zinc, and nickel, were generally low.



Mineralogy	Volume
Atomic Absorption Spectroscopy (AAS)	
Gold, g/t	16.71
Silver, g/t	0.72
Copper, %	0.0028
Arsenic, %	1.48
Iron, %	6.29
Sulphur (total), %	3.73
Sulphur (soluble), %	0.03
Organic Carbon, %	0.5
X-Ray Fluorescence Spectroscopy (XRF)	
LOI, %	7.81
Na2O, %	0.32
MgO, %	0.8
Al ₂ O ₃ , %	13.88
SiO ₂ ,%	64.89
P ₂ O ₅ , %	0.17
K ₂ O, %	2.11
CaO, %	0.77
TiO2, %	0.35
V, %	0.01
Cr ₂ O ₃ , %	0.03
MnO, %	0.06
Fe ₂ O ₃ , %	5.95
Ni, ppm	50
Cu, ppm	49
Zn, ppm	54
Rb, ppm	34
Sr, ppm	123
Zr, ppm	73

TABLE 3-6 MINERALOGICAL COMPOSITION OF WAI SULPHIDE METALLURGICAL SAMPLE Kyzyl Project

Source WAI (2007b)

RPA notes that the provenance of the WAI (2007b) metallurgical sample is unknown. The tested assay results may not, therefore, be representative of the current Bolshevik mineralized exposures, nor of the potential subsurface mineralization. RPA recommends that future diamond drilling programs include the provision for the collection of representative mineralogical samples.

Non-representative grab samples were collected by RPA and Ivanhoe during the 2007 site visit and were prepared and analyzed by the BMV Assay Lab. The results illustrate a wide variation in gold grade (Table 3-7). Samples were later collected in 2011 from the Bolshevik stockpiles and used as CRMs for Kyzyl Project drilling.



TABLE 3-7	BOLSHEVIK GRAB SAMPLE ASSAY RESULTS
	Kyzyl Project

Sample Name	Location	Au g/t	As %	S %	C %	C _{org} %
BLC-1	Open Pit	50.3	8.28	24.2	25.0	23.8
BLC–2	Open Pit	10.6	3.15	3.12	4.50	4.04
BLC–3	Open Pit	12.0	3.57	3.97	3.91	3.72
BLC-4	Stockpile	9.63	2.86	3.72	6.05	5.76
BLC–5	Stockpile	26.6	4.39	14.5	6.31	5.93
BLC–6	Stockpile	9.76	3.00	3.89	3.97	3.61

3.5.4.2. OXIDE MINERALIZATION

Information on oxide mineralization was derived from RoK State Reserves Committee Report on Exploration of the Bolshevik Deposit Oxidation Zone (2004). Oxidized mineralization is known to occur to a depth of 20 m to 25 m. The lower boundary of oxidized mineralization, however, is not clearly defined. It appears that the transition from oxidized to sulphide mineralization occurs within a one metre to two metre boundary. Gold is the only mineral in oxidized ore. No additional mineralogical data are available for the oxide mineralization.

3.5.4.3. MINERALIZED LENSES

A number of higher-grade gold zones within Bolshevik, associated with the KSZ form lenses that have been outlined by drilling recent 3D reinterpretations. From east to west, historical deposits at Bolshevik include Kholodny Klyuch, Shalobay, Bolshevik, and Western Bolshevik. Descriptions of the mineralized lenses are provided in the Mineral Resource section of this report.

FSU interpretation consists of complex lenticular shapes with a strike ranging from 15 m to 150 m, true thicknesses ranging from 2.3 m to 6.0 m and a dip length up to 1,000 m. The mineralized lenses dip from 30° to 55°, with an average dip of approximately 40°.

3.5.4.4. DEPOSIT TYPES

The Bolshevik deposits are of the epigenetic, shear-hosted lode gold-sulphide type, in which gold is very fine grained and is held mainly in arsenopyrite and, to a lesser extent, pyrite. Historical reports note that approximately three percent of the gold occurs free, however, free gold has not been identified in any of the recent BMV diamond drilling.

Previous studies (WSE 1996, Minproc 1997a, Lewis 2006) have emphasized the importance of structural control, with the tectonized rocks acting as conduits for

hydrothermal fluid movement during deformation, and the location of mineralized lenses indicating the presence of high-permeability dilational zones. There is also, however, lithological control, with preferential mineralization of more permeable, coarser grained sediments. The presence of intrusive rocks as metal source and/or heat engine may also control the distribution and localization of mineralization.

3.6. EXPLORATION

The Bolshevik deposit was discovered in 1944 during exploration, and systematic prospecting started in 1956 by the Kazan-Chunkur Exploration Team of East Kazakhstan Territorial Geological Board. Between 1985 and 1989 the deposits were explored to a depth of 600 m by Auezov Exploration Team of Altay Geological Expedition. Exploration between 1995 and 2003, conducted by Artel Trud, focused on oxide mineralization. Exploration techniques consisted of various drilling methods as well as chip sampling in trenching and pits. Underground drifting and sampling were also undertaken in the Shalobay deposit. It is reported that geophysical surveys, designed to detect mineralized zones both within and on the flanks of the KSZ, covered the total deposit.

RPA is not aware of any recent exploration activities on the Bolshevik Project other than geological compilation work completed by IGC in 2007 and AAG's 2008/2009 diamond drilling program designed to fulfill commitments of the subsoil use agreement.

No significant geological exploration was undertaken at Bolshevik during the AAG Kyzyl Exploration project.

3.6.1. DRILLING

3.6.1.1. SUMMARY

Exploration drilling has been carried out at various times by the Kazan-Chunkur Exploration Team of the East Kazakhstan Territorial Geological Board (1953-1971); Bakyrchik Exploration Team of the Semipalatinsk Geological Expedition with the Production and Exploration Enterprise "Vostkazgeologia" (1978-1981), Auezov Exploration Team of the Altay Geological Expedition with the Ministry of Non-Ferrous Metallurgy of the Kazakh SSR (1971-1993), Artel Trud (1999-2003), as well as the Altay Geophysical Expedition, simultaneously with a 1:50000 survey. In 2008 and 2009, AAG conducted short hole surface drilling in order to fulfill commitments of the subsoil use agreement.



Table 3-8 presents a summary of exploration work sourced from geological reports of respective companies provided by IGC as well as GEOS (2012). Asterisks are placed next to the program values that might be unreliable, as they cannot be confirmed since the source data cannot currently be located in the archives. IGC reports that additional verifiable information on drilling by year and company can likely be found in the archives of the Semipalatinsk Inspection Commission of Territorial Board VostKazNedra.

					Kyzyl Project		
Year	Drilling	Metreage	Trenches	Prospect	U/G Openings	Company	Notes
-	Core	Percussion	(m³)	Pits (m)	(E)		
1956	2,606.4					Kazan-Chunkur Exploration Team of East Kazakhstan Territorial Geological Board	
1956	3,292.4		1,376.5	112.0		Kazan-Chunkur	
1958 to 1959	2,607.0					Kazan-Chunkur	
1960 to 1962	2,410.7		1,908.1			Kazan-Chunkur	
1964	1,814.3	356.0				Kazan-Chunkur	
1965	380.0					Kazan-Chunkur	
1966	610.1		431.5			Kazan-Chunkur	
1969 to 1971	2,485.0					Kazan-Chunkur	
1970	199.7			102.7		Auezov Exploration Team of Altay Geological Expedition	
		2,168.8*				Kazan-Chunkur	Exploration was carried out over the Bakvrchik mineralized area
							which included the Bolshevik deposit.
1971 to 1972	669.7			191.5		Auezov	
1975 to 1984		41,905.2*				Auezov	Information is not very accurate. Numbers are from hole documentation of all years.
1978 to 1981	19,891.0					Bakyrchik Exploration Team of Production and Exploration Enterprise "Vostkazgeologia" (Bakyrchik)	
1984 to 1986	37,200					Auezov	
1986	8,000					Auezov	
1986 to 1989	96,932.5		737.0	372.0	1,841.2	Auezov	



SUMMARY OF EXPLORATION AND PERCUSSION DRILLING AT BOLSHEVIK

TABLE 3-8

Notes		/ork carried out in the Bakyrchik inining district, including the olshevik deposit (1:50000 urvey).		portion of holes drilled on the arbas and Bakyrchik deposits.					
Company		Altay Geophysical Expedition V m B	Auezov	Auezov A	Artel Trud	Artel Trud	Altynalmas Gold	Altynalmas Gold	
U/G Openings	(m)		837.0						2,678.2
Prospect	Pits (m)								778.2
Trenches	(m³)				3,786.8	1,298.1			9,538.0
Aetreage	Percussion	79,490.0*			328.0	2,789.5			127,037.5
Drilling N	Core		23,279.0	97,351.2*		681.2	880.7	1,815.2	303,106.1
Year	I	1986	1989 to 1991	1988 to 1993	1999 to 2000	2002 to 2003	2008	2009 1 st Qtr.	Total





3.6.1.2. FORMER SOVIET UNION FSU Drilling

Very little information is available concerning the FSU drilling. Before 1974, mostly shot drilling was used. In the 1980s, diamond bits started being used and hole diameters were 76 mm and, more rarely, 59 mm. FSU drilling and survey equipment evolved over time, but even the most recent FSU coring completed at Bakyrchik was done by standard drilling rather than by current Western wire-line technology.

FSU Underground Chip and Channel Sampling

No information is available concerning FSU underground channel, drive, and grade control samples. The Republic of Kazakhstan State Reserves Committee Report on Exploration of the Bolshevik Deposit Oxidation Zone (2004) states that the cross-section of common trench samples from mine workings was 3 cm x 10 cm and their length varied within one m to two m. Technological sampling was performed by means of a trench with a cross-section of 14 cm x 5 cm.

Results of common trench sampling were then compared with results of technological sampling to verify whether these samples were representative or not. Analysis of main and check sampling results, however, were not considered as representative due to limited quantity of compared samples (26). Verification of exploration bulk sampling results was not performed. It is reported that sampling was occasionally performed only on one wall of underground workings.

FSU Open Pit and Trench Chip and Channel Sampling

No information is available concerning FSU open pit and trench channel sampling.

3.6.1.3. POST-FSU DRILLING

Post-FSU drilling was performed by both air percussion and rotary core drilling. From 1997 to 2003, exploration of the Bolshevik Deposit was carried out by Artel Trud.

Diamond core drill holes were drilled mainly for technological sampling and verification of historical FSU exploration holes. In 2001 through 2003, cored holes were drilled using Boart Longyear diamond bits. Core diameter was 47 mm. A total of 18 holes were drilled (681.2 m). No data on core recovery by holes and lithologies are available.



Post-FSU Percussion Drilling

From 2001 to 2003, full-hole pneumatic impact drilling was applied to 146 drill holes, with 60 holes in the Bolshevik area and 86 holes in the Shalobay area. Vertical holes from 16 m to 29 m deep were drilled to define mineralization to a depth within the oxidation zone.

Post-FSU Open Pit and Trench Chip and Channel Sampling

The Republic of Kazakhstan State Reserves Committee Report on Exploration of the Bolshevik Deposit Oxidation Zone (2004) states that post-FSU main ditches and trenches were excavated every 50 m to 100 m, or more densely (up to 20 m to 30 m) in some areas.

Trial pits were made in locations with thicker loose sediments (four to six metres) to study mineralization continuity to a depth of 10 m to 20 m. In 2001 to 2003, a total of 26 trenches were excavated, with nine in the Bolshevik area and 17 in the Shalobay area, for a total of 703.9 linear metres.

Chip sampling was also undertaken in the benches of the Bolshevik Open Pit, during the last phase of mining, and in the Shalobay area for mineralization definition. No information, other than MapInfo plots, was made available to RPA.

3.6.1.4. BMV DRILLING

In order to fulfill commitments of the subsoil use agreement, AAG reported that during the last quarter of 2008 a total of 3,203.5 m were drilled and that a further 1,881.7 m were drilled in the first quarter of 2009. These holes, drilled by IGC personnel under the supervision of AAG, were based upon a proposal submitted by RPA in September 2008 to drill below the Bolshevik Open Pit.

Collar and dip revisions were made on-site by AAG geologists due to inaccessible collar locations and additional drilling required for complying with the work program commitments. It was reported that this core was logged and sampled by BMV geological staff and assayed at the BMV laboratory. None of this core, however, is available for review or confirmation. BMV geologists report that the drill hole casings were pulled.

3.6.2. SURVEYS

3.6.2.1. SURVEY GRIDS

Two coordinate systems have been used on the Project, the Mine Grid, established in 1942 and the Geology Grid, established in 1962. All data were converted to the Mine Grid for resource modelling and mine planning purposes.



3.6.2.2. FSU DRILLING

No information is available concerning drill hole collar surveying, although standard FSU practices would likely have been followed wherein drill hole collars would be surveyed and downhole surveys would have included acid-etch dip tests or single-shot camera instrument readings. Measurements were taken at irregular intervals from approximately 5 m to 40 m but generally were on the order of 20 m to 30 m. Some relatively deep vertical and inclined holes were surveyed only at the toe, with readings taken at greater than 200 m to 1,037 m. Toe location of these holes will be uncertain.

3.6.2.3. UNDERGROUND AND CHIP AND CHANNEL SAMPLING

No information is available concerning underground channel, drive and grade control sample survey procedures. The drives and related sampling channels would have been likely based on surveyed points in relation to the Geology Grid.

3.6.2.4. OPEN PIT AND TRENCH CHIP AND CHANNEL SAMPLING

No information is available concerning open pit and trench chip and channel sampling survey procedures. Plotted channel sample information for Bolshevik and Shalobay pit sampling appears to be oriented perpendicular to the strike of the mineralized lenses.

3.6.2.5. POST-FSU DRILLING

No information is available concerning post-FSU drilling survey procedures. RPA was, however, able to locate concrete survey markers on the Bolshevik site.

3.6.2.6. BMV DRILLING

The 2008 and 2009 drill hole collars were reportedly surveyed by Bakyrchik Mine surveyors. Downhole magnetic azimuth and dip surveys were reportedly taken at nominal 25 m increments.

3.6.3. BOLSHEVIK PROJECT DIGITAL DRILL HOLE DATABASE

The Bolshevik Project digital drill hole database comprises two distinct data sources:

 Diamond and reverse circulation drilling and pseudo-drill holes consisting of Open Pit, Trench and Underground channel sampling provided by IGC. The provenance of the Bolshevik digital drill hole database is unclear. An included "README.XLS" file states that the database was compiled between July 20 and November 30, 1997. IGC has confirmed that drilling as well as open pit and trench chip and channel sampling conducted since 1997 are not incorporated into this database.



2. A digital drill hole database sourced from GEOS LLP, an Ust-Kamenogorsk based Geological Institute, which was the basis for the 2012 GKZ approved estimate.

3.6.3.1. IGC DRILL HOLE DATABASE COMPILATION

The Bolshevik digital drill hole database was compiled from Microsoft Excel spreadsheets supplied to RPA by IGC in November 2007. A Microsoft Access linked borehole database file was also provided by David Crane of Ivanhoe, an AutoCAD and Access expert, who compiled and co-ordinated the sampling information from the original spreadsheets provided by IGC. RPA recreated drill hole database from first principles in Gemcom (GEMS 6.1). This allowed for validation of all electronic data.

In order to include non-drill hole sampling information, pseudo-drill holes were created from traverse data of Open Pit, Trench and Underground sampling. The pseudo-drill hole database compilation was based on Microsoft Excel spreadsheets supplied to RPA by IGC. A Microsoft Access linked borehole database file, and AutoCAD plotting routine was also provided by David Crane of Ivanhoe.

3.6.3.2. GEOS DRILL HOLE DATABASE

In 2013, IGC provided RPA with GEOS' GKZ approved drill hole database for review and compilation. RPA compared the two available databases and found the following errors and inconsistencies:

Collar:

- Differences in XYZ data between databases.
- Extra digit in Y collar data for one hole.
- Inconsistent drill hole lengths between databases.

Survey:

- Duplicate survey data.
- Lack of survey data at collar for some holes.
- Inconsistent survey data between holes.

Geology:

- Overlapping from and to values.
- Different lithology codes used in GEOS.

Assay:

- Overlapping from and to values.
- Inconsistent assay values between GEOS & IGC.



An additional 105 drill holes were added to the IGC database. Where data was missing, or errors were deemed not material, RPA used the GEOS data as it is the basis for the approved GKZ estimate.

3.6.3.3. SUMMARY OF BOLSHEVIK DIGITAL DRILL HOLE DATABASE

The resulting re-compiled 2013 RPA-compiled Bolshevik drill hole database contains 1,441 holes consisting of diamond drill holes and pseudo-holes including trench, pit grade control, and underground chip samples (Table 3-9).

Diamond Drilling	Туре		No. of Holes	Metres	% of Total Metres
Western Bolshevik	WBL	1	441	68,330	25.4
Bolshevik	BOL	2	280	91,734	34.2
Shalobay	CHA	3	270	84,596	31.5
Kholodny Klyuch	CHK	4	3	1,266	0.5
Shalobay UG Drive Samples*	SMC	5	106	4,181	1.6
Bolshevik Pit Samples*	SMP	6	167	10,418	3.9
Shalobay Pit Samples*	SMP	7	35	471	0.2
Bolshevik Exploration Pit Samples*	SMPH	8	49	258	0.1
Shalobay Exploration Pit Samples*	SMPH	9	23	638	0.2
Bolshevik Trenching Samples*	SMT	10	24	2,084	0.8
Shalobay Trenching Samples*	SMT	11	9	533	0.2
Bolshevik AAG Drilling	ALT	12	34	4,072	1.5
Total			1,441	268,581	100

TABLE 3-9 SUMMARY OF DIGITAL DRILL HOLE DATABASE Kyzyl Project

*Chip and channel sampling represented as drill holes.

3.6.4. SAMPLE PREPARATION, ANALYSES AND SECURITY

3.6.4.1. SAMPLING METHOD AND APPROACH FSU Diamond Drilling

No information is available on the FSU diamond drilling sampling method and approach. FSU protocols at Bakyrchik consisted of core logging and sampling wherein rock types and structures were described and rock mass, recovery lengths and core diameter recorded. Core sample intervals were selected generally at 0.5 m to 1.5 m and manually split, with one half assayed and the other half stored. If less than one kilogram was recovered, the whole core interval was assayed. No data are available on core recovery from shot drill holes. It should be noted that interval lengths are based on core lengths and do not represent true thicknesses.



Post-FSU Percussion Drilling

The Republic of Kazakhstan State Reserves Committee Report on Exploration of the Bolshevik Deposit Oxidation Zone (2004) states that the drilling assembly design with a sludge trap ensured 90% to 100% of sludge yield. A reported 1,269 sludge samples were taken on two metre spacing from air percussion drill holes. After sludge mixing and quartering, a part of the sludge, with an average weight of 10.3 kg, was sampled.

The State Reserves Committee also reported that the reliability of air percussion drilling data could not be verified for a number of reasons:

- Since actual and theoretical weights of samples (including original size of sludge particles recovered) were not compared, sampling by quartering original material cannot be verified by calculation and is unreliable.
- It is impossible to define the lower boundary of the oxidation zone in wet zones.
- Air percussion drilling does not provide core for studying structural and textural ore properties and orientation of mineralized veins and veinlets.

Post-FSU Diamond Drilling

Core samples with a maximum length of 0.5 m to 2.0 m were geologically logged according to lithology, degree of silicification and sulphide mineralization. Core diameter was 48 mm while drilling with Boart Longyear drilling equipment. All available core was sampled except for a representative sample. Each sample weight varied from 3.3 kg to 9.0 kg (4.8 kg in average) subject to a sample length and core recovery. Since actual and theoretical weights of core samples were not compared, the reliability of core recovery was not verified. No core recovery data were recorded within the oxidation zone.

Recent Drilling

For the 2008 and 2009 diamond drill program, the following standards were outlined by Ivanhoe personnel and reportedly adhered to by BMV:

- The driller's depth markers should be checked as soon as possible to ensure that there are no metreage discrepancies.
- Core should not be logged, sampled, or assayed until the new on-site logging facility is set up, procedures are in place, appropriate supplies and equipment are on hand, and an independent sample and assay laboratory contract has been issued.



3.6.4.2. SAMPLING PREPARATION, ANALYSES AND SECURITY

In RPA's opinion, the preparation, analyses, and security of historical samples must be considered inadequate due to the limitations on verifying data. No information was available concerning FSU or post-FSU security measures including chain of custody in reports reviewed by RPA.

FSU

No information is available on the FSU sample preparation, analyses, and security.

Post-FSU

No information is available on the post-FSU sample preparation, analyses, and security prior to 2002.

The RoK State Reserves Committee Report on Exploration of the Bolshevik Deposit Oxidation Zone (2004) stated that, in general, the quality of chemical analysing can be considered as satisfactory.

BMV 2008-2009

The BMV 2008 to 2009 drilling program was reported to be prepared and sampled at the BMV Mine Laboratory. Standard procedures have previously been described in Section 2.6.2.

3.6.5. DATA VERIFICATION

Bolshevik drill hole data sources consist of original logs, sampling records, and transcriptions from plotted sections and plans. The IGC Bolshevik Project digital database consists of drill holes (shot, percussion, and diamond drilling) and pseudo-drill holes (open pit, trench and underground sampling).

RPA reviewed the IGC drill hole database and corrected numerous errors in the header, survey, assay, and lithologies. The pseudo-drill hole identifying numbers were created by giving unique values based on traverse information. No documentation was available to confirm methodology. RPA relied on this compilation as the basis of the pseudo-drill hole database.

RPA used Gemcom software routines to validate the digital data after importing files into the Gemcom Access database. This consisted of cross-referencing between data tables in the database, including downhole surveys versus hole lengths, and assay data



intervals versus survey lengths. This exercise confirmed the good integrity of database structure.

Visual inspection of the drill hole and pseudo-drill hole traces in 3D demonstrated appropriate trajectories and consistencies between lithological units. There were, however, a number of problematic holes (SMPT3, SMPT9, SMC68, SMC70, SMC73, and SMC74), generally related to survey trajectory issues that will require detailed review of source data.

RPA requested that IGC provide copies of the original geological logs and assay certificates from 17 arbitrarily selected drill holes.

- Generally, the holes have only been transcribed where the assay intervals started and ended. This has resulted in the missing lithological intervals at the start and end of the holes as well as in the absence of information on the depth of overburden and the oxide/sulphide boundary locations. Missing lithological intervals are also noted within the database where contiguous descriptions have been combined.
- Generally, the assay values were transcribed correctly. An error was shown in Hole WBL-5460, where the gold values were not recorded; the transcriber switched columns and recorded the sample weights as gold values.
- There are a high percentage of holes missing original core logging files. Out of the seventeen requested confirmatory holes, five had no original data logs and a further four were not submitted to RPA.

RPA also requested confirmatory assay certificates for these holes, however, IGC was unable to locate the requested data.

3.6.6. GEOLOGICAL MODEL

The RPA 2013 geological model for the Bolshevik deposit is based on results obtained from the 2010 to 2012 Kyzyl Project gold exploration program and experience gained from preparing the Bakyrchik geological deposit model. Three-dimensional modelling and GIS compilation including structural, geological, and geochemical data were used to revise a Bolshevik interpretation that provides continuity in both lithology and grade using the recompiled historical drill hole database.

A major breakthrough was the reorientation of sections to N30°W following the strong regional fabric seen in the geological mapping and on the hill-shaded high resolution satellite DTM (Figure 3-3). Historically, the deposit had been interpreted on 180° azimuth sections.



The resulting geological models illustrate a clear and consistent trend of both HW and FW bands (Figure 3-4). All dips average approximately 30°. The FW has been traced along a 370 m strike length down to the -375 Elevation. The HW has been traced along a 740 m strike length down to the -200 Elevation.

3.6.7. DIGITAL TERRAIN MODEL

In 2010, BMV engaged Fugro NPA Limited, from Edenbridge, United Kingdom, to generate high resolution stereo satellite imagery and supply elevation models of the Kyzyl Project area. Worldview-2 imagery was acquired on September 2, 2010, georeferenced, and stereo correlated. Several sets of contours were generated and used to generate one metre resolution, three dimensional DTM.

3.6.8. REVIEW OF HISTORICAL EXPLORATION RECORDS

Historical records indicate that over 200,000 m of drilling was conducted over the IGC Bolshevik Licence area between 1964 and 2009.

In RPA's opinion, results from this historical exploration cannot be relied upon due to the following issues:

- No systematic drilling pattern was used.
- Either poor drilling technology or technical practices.
- Exploration reports on the Bolshevik deposit contain only summary tables with results of internal and external geological control.
- It is assumed that original source materials (core, reject samples, QA/QC data, etc.) were lost due to multiple transfers from one subsoil user/organization to another.

In RPA's opinion, the scanned drill logs submitted for review are of very good quality and consistent with standards employed in other FSU properties. Obtaining and confirming base geological information is complicated by the nature of the FSU break-up, with the resulting loss of data and/or ownership issues.

RPA recommends that a complete re-transcription of the available drill logs be completed, including all lithological and structural information. Confirmation of the underlying geological data should be attempted from historical reports, sections, and logs, as well as from FSU governmental agencies.



www.rpacan.com



3-30

RPA

www.rpacan.com





237



Collar locations should be confirmed wherever possible. RPA did note diamond drill hole casings during the site visit but was unable to discern drill hole numbers.

The most critical verification aspect is the lack of confirmatory assay certificates.

RPA notes that the limitations on verifying data preclude any estimation of Mineral Resources that meet the requirements of JORC (2012).

3.7. MINERAL PROCESSING AND METALLURGICAL TESTING

Similar to Bakyrchik, metallurgical testing has shown that the Bolshevik deposit sulphide gold mineralization is refractory and that the active carbon content of the host rocks is sufficient to significantly affect cyanide leach-carbon recovery processing to the extent that the bulk of the deposit is considered to be double refractory.

Due to the nature of the Bolshevik mineralization, the main metallurgical focus has been to study potentially viable processing options. In November 2006, WAI's metallurgical test program confirmed the Bolshevik mineralization to be double refractory due to the association of gold with sulphide mineralization and the presence of inorganic carbon resulting in preg-robbing properties.

During the first quarter of 2007, IGC conducted tests on bacterial heap leaching on gold concentrates from Bolshevik ores. Testing conducted by the metallurgical laboratory of the Suzdalski Mine (Suzdal), owned by Alel Finance and Investment Corporation (Alel), concluded that the Bolshevik concentrates were amenable to bacterial leaching and that further studies were warranted.

The latest Bakyrchik metallurgical testwork, completed as part of the 2013 FS, is also potentially valid for the Bolshevik mineralization, given they are both double refractory. Any potential Bolshevik production would likely be treated in a joint facility.

RPA cautions that no representative Bolshevik mineralized samples have been tested using this process and the resulting mineralogical results may not be representative for Bolshevik. Further Bolshevik representative sample collection and testwork is required.



3.7.1. HISTORICAL METALLURGICAL TESTING

Bolshevik was once a producing deposit and available historical processing information is described in Section 3.4, History.

The concentrator plant at Bolshevik was designed to process 100,000 t/a, and consists of crushing, grinding, gravity, and flotation circuits. This plant has been on care and maintenance since 2004. Also on-site, although in poor condition, is a heap leach pad. A processing plant based on cyanide technology operated during 2002 and 2003 to process low-grade oxide material. This plant has been decommissioned and demolished.

3.7.2. WAI PRELIMINARY METALLURGICAL TESTWORK

In late 2006, WAI were commissioned by IGC to conduct preliminary metallurgical testwork on the Bolshevik deposit (WAI, 2007b). The metallurgical sample, reported to be taken from random locations throughout the Bolshevik Open Pit, was assayed at 16.71 g/t gold and was assumed to be representative of the mineralized zone. The sample weight was not reported.

WAI reported that the Bolshevik sample gave very poor recoveries by cyanidation, which was attributed to both the levels of organic carbon in the ore and the association of a proportion of the gold with sulphide mineralization. The recovery of gold by gravity was moderate at 32% to a low grade concentrate assaying 187 g/t Au.

WAI did, however, find that the Bolshevik sample responded favourably to flotation, giving a gold recovery of 94.6% to a concentrate assaying 142 g/t Au and 12.67% As. The weight recovery was 11%. The flotation concentrate did not respond to cyanidation, giving a 0.1% gold recovery.

WAI also recommended that flotation, followed by bioleaching, should be investigated for the Bolshevik mineralization type.

3.7.3. BACTERIAL LEACHING

During the first quarter of 2007, metallurgical testing was performed by Alel's Suzdalski Mine (Suzdal) metallurgical laboratory to check the possibility of processing Bolshevik and Suzdal flotation concentrates together, using bacterial leaching (Republic of Kazakhstan, 2007a), in their hydrometallurgical processing plant.



The reported gold grade in the sulphide quartz mineralized sample collected from within the Bolshevik Open Pit was 5.0 g/t, with 0.59% As, 7.35% Fe, 1.35% S, 2.1% C, and total sulphides between 3% to 5%. The mined sample was then flotation concentrated to provide a 196 kg sample grading 39.6 g/t Au, 7.52% S, 0.11% C, 12.78% C_{org} and 3.13% As. Additional grinding was required in the laboratory ball mill to provide optimum grain size composition for the test work.

Test results demonstrated that the Bolshevik concentrate can be processed by bacterial leaching. In the course of the tests, Fe^{2+} and redox potential indicated good bacterial activity as well as adaptation to the concentrate. During the analysis, no signs of any bacteria suppressing or toxic effects were observed. Gold recovery, after the end product cyanidation, was 74.0% to 76.81% at a cyanide concentration of 0.1%, and 74.28% to 77.94% at a cyanide concentration going up to 0.2%. Sulphur oxidation in the end product was 82.35%.

A preg-robbing test proved that 20% of the gold was not cyanided due to the high level of organic carbon in concentrate (12.78%). This testing explained the high gold grade content (10.42 g/t to 10.89 g/t) in the cyanidation residues.

Based upon the tests results, it was concluded that in order to reach gold recovery above 80%, the following should be completed:

- Achieve sulphur oxidation above 82% to 85%.
- Remove organic carbon from the solution (or depress it).

3.8. MINERAL RESOURCE ESTIMATE

There are no current Mineral Resources as defined by the JORC Code at Bolshevik due to the limitations on validating historical data.

3.9. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

3.9.1. ENVIRONMENTAL STUDIES

An environmental review was conducted by Sustainability Pty Ltd. (Sustainability) on behalf of Ivanhoe in 2007. Sustainability produced an Environmental Review Report (Sustainability, 2007) which identified areas of current and historical environmental impact and liabilities, determined obligations for land reclamation and rehabilitation, and provided recommendations and cost estimates for reclamation and rehabilitation of the



site in its present state. RPA has not reviewed the status of environmental permitting for the Project but has relied on GRATA (2014).

3.9.1.1. PRE-EXISTING CONDITIONS

The Bolshevik site was in intermittent production for over 45 years. Sustainability identified the following pre-existing environmental issues:

- Residual cyanide in ponded water within the Heap Leach and cyanide contamination of groundwater below the Heap Leach.
- Bolshevik Open Pit mine dewatering discharging into the nearby Kyzyllka River.
- Potential for ARD from the waste rock and sulphide mineralization stockpiles.
- Soil and groundwater contamination from fuels, oils, and lubricants at the workshop, heavy equipment maintenance yard, fuel farm and lubricant storage sites.
- Very little reclamation and rehabilitation has been carried out to return the land to its former use capabilities.

Pre-mining background water and air quality data are not available. It is reported that previous owners, including IGC, conducted water quality analyses during operations. The status of contamination of the Kyzylsu River is, however, unknown. Air quality is expected to be good, with the exception of naturally occurring dust storms.

3.9.1.2. REHABILITATION OBLIGATIONS

Sustainability noted the following in their report:

The Subsoil Use Agreement for the Bolshevik Deposit required that planning and design documentation was to include environmental measures for temporary and permanent mine closure be submitted to the State Subsoil Surveillance Agency. The project Environmental Impact Assessment (EIA) only described commitments to carry out land reclamation and rehabilitation in the broadest possible terms, with the detail on how rehabilitation would be carried out being considered later with the development of site-specific Rehabilitation Projects.

To date, Rehabilitation Projects have only been prepared for pits and waste rock dumps. Under these Rehabilitation Projects, the production pits would be retained and allowed to form water reservoirs whereas the exploration pits would be backfilled, graded and seeded. The Rehabilitation Projects for the waste rock



dumps specify that the tops would be graded, covered with topsoil and seeded to promote re-vegetation.

Apart from these rehabilitation commitments for the pits and the waste rock dumps, there appears to be no specific details as to how other areas are to be rehabilitated. In general terms, there would be an expectation for the Subsoil Use Agreement holder to remove and dismantle infrastructure and return the land to its former land use capability. Specific requirements would need to be negotiated with the government regulatory agency on a case-by-case basis.

3.9.1.3. MITIGATION MEASURES

Sustainability's recommendations to address the observed high and moderate risk liabilities, presented in Table 3-10, are based on the assumption that the mine will recommence operations.

Issue			Recommendations			
Не •	ap Leach: Residual cyanide in the ponded water and groundwater.	•	Test for the presence, concentration and form of cyanide in the Heap Leach Stockpile and associated pond. Test for the presence, concentration, form and spatial extent of cyanide contamination in the groundwater below the Heap Leach. If cyanide is detected in the Heap Leach stockpile, pond and groundwater, investigate remediation options that are commensurate with the risk it poses to the environment.			
Вс	Ishevik Open Pit Dewatering: Exchange of water between the Kyzyllka River, Bolshevik Open Pit and the Bolshevik Open Pit dewatering pond.	•	Conduct water quality testing of the mine pit water, dewatering pond and river to determine whether the river is being contaminated by mine pit dewatering, the concentration of contaminants, and the spatial extent of contamination. If water quality testing shows that contamination is occurring and exceeds acceptable standards, relocate the dewatering pond to an alternative location where the water is retained within the operational area.			
Wa	aste Rock Dumps: Proximity to the river, potential Acid Rock Drainage (ARD).	•	Conduct static and kinetic tests of the waster rock dumps to determine the potential for ARD and mobilization of metals and leachate to occur. If there is a high risk of ARD occurring,			

TABLE 3-10BOLSHEVIK PROJECT LAND RECLAMATION ANDREHABILITATION - SUSTAINABILITY PTY LTD. RECOMMENDATIONSKyzyl Project



	Becommendations
15500	investigate options to protect the river from ARD, for example constructing a protective berm using acid neutralizing materials.
 Workshop and Heavy Equipment Maintenance Yard: Contaminated soil and proximity to the river. 	 Construct a soil remediation facility (land farm) on site. Remove contaminated soil from the yard and treat in the land farm. Remove oily machinery and wastes. Decommission and demolish workshops and construct new facilities that include appropriate containment and recovery systems. Consider relocating the workshops and yard to an alternative location that is more distant from the river.
 Fuel Farm and Lubricant Storage: Leaking storage tanks and contaminated soil. 	 Decontaminate, decommission and remove fuel and lubricant storage tanks. Remove contaminated soil and treat in land farm. Construct new fuel, lubricant and waste oil facilities that incorporate appropriate containment and recovery systems.
 Sulphide Mineralization Stockpiles: Stormwater drainage from the Low Grade Ore and the Crushed Ore Stockpiles. 	 Carry out earthworks to ensure that storm water drainage from the sulphide ore stockpiles is retained within the operational area.
Hazardous Material Storage:Inadequate storage facilities.	 Conduct a detailed audit of all hazardous materials storage facilities on site. Decontaminate, decommission and remove facilities that are inadequate for their intended purpose. Construct new facilities that incorporate

3.9.1.4. COST ESTIMATE FOR CURRENT RECLAMATION AND REHABILITATION

Sustainability issued a preliminary cost estimate of \$8.26 million for reclamation and rehabilitation of the Project as of 2007. A more accurate and up to date cost estimate is necessary with unit costs derived from Kazakhstan based contractors.

appropriate containment and recovery systems, segregation of incompatible materials, ventilation, signage and security.

3.9.1.5. RECENT ENVIRONMENTAL VIOLATIONS

GRATA (2014) notes the following recent environmental violations:

• In 2011 there were several cases of exceeding the limits for discharge of sewage water set in the Emissions Permits. The total amounts of the fees for the exceeding of the limits was KZT 843,382 KZT (approx. US\$5,623).

- In July 2011 IGC, without an emission permit, discharged pit water which entered the Kyzyl Su River. In this regard, BMV was fined 75,600 KZT and obliged to follow the instructions given in the Act on the inspection results for compliance with environmental legislation of Kazakhstan No. 177, dated 25 July 2011.
- In June 2012 IGC was fined 1,134,305 KZT for dust emissions generated from the blowing erosion at the inoperable tailing pond.

GRATA (2014) recommends that IGC take measures for the prevention of emissions into the environment or to obtain an Emissions Permit.

3.9.1.6. DISCUSSION

RPA concurs with Sustainability's site observations on environmental impact. Going forward, RPA recommends that a baseline environmental monitoring program be initiated concurrently with any new exploration program.

Future concerns raised by Sustainability and WAI for a possible sustainable Project include:

- The Kyzyl Su River runs across the deposit area. Part of the groundwater incursion into the Bolshevik Open Pit is derived from this river. Full state permits would be required before the river could be diverted.
- The existing Tailings Management Facility has a limited capacity and would require expansion.
- The costs of backfilling the open pits would be substantially reduced if backfilling could be completed with development waste during possible future mining operations.
- The area surrounding the Project is pasture, and therefore the physical location and footprint are unlikely to significantly disrupt the activities of local land users.
- The Project site is located two kilometres north of the village of Shalobay, downstream of the village's water supply. Possible negative dust emissions, resulting from mining operations or increased vehicular traffic, would be expected to be minimal due to the prevailing wind directions and seasonal rainfall profile.

3.9.2. SOCIAL OR COMMUNITY REQUIREMENTS

RPA is unaware of any specific social or community requirements for the Bolshevik Deposit.



3.10. CONCLUSIONS AND RECOMMENDATIONS

The Bolshevik Project consists of a previously producing open pit and a large database of FSU and post-FSU drilling and sample data with no provenance. In RPA's opinion, the limitations on verifying data preclude any estimation of Mineral Resources that meet the requirements of the JORC (2012).

In RPA's opinion, Bolshevik warrants additional exploration focused on defining JORC Code Mineral Resources.

RPA has also completed a preliminary review of the geological continuity and resulting interpretation of the Shalobay and Western Bolshevik deposits. RPA concluded that sectional interpretation at the N30°W orientation is also suitable for these deposits, however, additional exploration and interpretation is required.



4.EXPLORATION PROPERTIES

4.1. INTRODUCTION

The strategic goal of the BMV 2009 to 2012 Licence No. 27 Exploration Program was to define near surface Mineral Resources that would be able to be converted to Kazakh Reserves (Categories C1 or higher) in order to secure the ground for future exploration at depth.

Work completed during the 2009 to 2012 BMV Exploration Program has increased the understanding of the Kyzyl geological deposit model. The size and grade continuity of Bakyrchik Lens 1 is unique based on a number of factors – large regional east-west shear, intersection with the southeast to northwest structures, near surface (one to three kilometres deep) gold bearing granites, thick packages of tectonite within the shear zone, and the presence of an intraclastic rich sandstone marker horizon.

On a regional basis there are a number of potential targets with structural features similar to Bakyrchik. In conjunction with advanced deep penetrating geophysics, additional geological (mapping, trenching, structural interpretation) and geochemical (soil sampling, rock sample assays) programs are required prior to any further drill campaigns.

Due to budgetary constraints, the BMV exploration program was halted in mid-2012 and a Western-based data compilation and summary review has not yet been completed.

Historical and recent drilling programs have not, however, been successful in defining significant potentially mineable oxide resources near surface or down to the approximately 200 m level in sulphides. The deposit with the most upside potential is Sarbas.

Prior to any significant drilling program below 300 m, RPA recommends that an advanced technology geophysical program be implemented such as the Quantec Titan 24 IP/MT 3D system. RPA recommends, that at a minimum, the Quantec survey be run over the Bakyrchik and Bakyrchik East Depth extensions in order to provide further definition of the mineralization at depth.

RPA, along with a team of specialized geological consultants, participated in a technical advisory role during the Kyzyl Project exploration program.



4.2. LOCATION, ACCESS, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

The exploration properties are located generally within a six kilometre radius from the Bakyrchik Mine area (Figure 4-1).

4.3. OWNERSHIP AND LAND TENURE

4.3.1. OWNERSHIP

The exploration properties are held in various entities owned or controlled by AAG. A map of the subsoil use area and local deposits is shown in Figure 4-1.

4.3.2. EXPLORATION LICENCE NO. 27

Licence Series MG No. 27 currently covers an area of 47.5 km² surrounding Mining Licence 737. In 2013, BMV applied to the competent authority to convert two areas of the exploration allotment to mining areas (Sarbas and Vein 31). Coordinates of the exploration licence area are listed in Table 4-1.

Land Corner	Coordinates		Land	Coordinates	
	North Latitude	East Longitude	Corner	North Latitude	East Longitude
Western 2	49° 45'21''	81° 30'10"	Tatar	49° 42'11"	81° 35'46''
Northern 2	49° 45'42''	81° 33'57"	Shalobay	49° 42'11''	81° 31'02''
Dalni-3	49° 44'45''	81° 37'20"	I	49° 44'00''	81° 31'00''
Carmen	49° 42'51''	81° 40'00"	V	49° 43'54"	81° 34'20''
VII	49° 40'05''	81° 40'52"	Dalni-2	49° 44'27''	81° 34'20''
VIII	49° 38'40''	81° 40'52"	Parallel	49° 44'38"	81° 30'08''
х	49° 38'38''	81° 38'42"			

TABLE 4-1 EXPLORATION LICENCE 27 AREA Kyzyl Project

Total Area = 47.5 km²



www.rpacan.com



4-3



4.4. HISTORY

Gold has been known and mined in the Irtysh River area since the region came under the protection of the Czars over 200 years ago. Potential in the Kyzyl Project area was known from geochemical surveys, mapping, and prospecting as early as 1945. The KSZ, which hosts Bakyrchik, among other deposits, was defined in the early 1950s by surface trenching. Surface drilling began in 1955.

Numerous FSU geological expeditions explored the Kyzyl Project area. The area has also been the subject of many technical studies by both Kazakh and Russian academics.

4.5. GEOLOGICAL SETTING AND MINERALIZATION

4.5.1. REGIONAL GEOLOGY

For details on regional geology, see Section 2.5.1.

4.5.2. LOCAL GEOLOGY

For details on local geology, see Section 2.5.2.

4.5.3. PROPERTY GEOLOGY

Work by AAG geological staff and consultants (Crossing 2010 and 2011, IGM 2011, Goodman 2011) has characterized the main lithologies encountered in the Kyzyl Project lithologies (Figure 4-2).

4.5.4. MINERALIZATION AND DEPOSIT TYPES

Gold-sulphide mineralization hosted within the KSZ occurs in foliated mudstones, siltstones, fine- to coarse-grained sandstones, interbedded units, and dioritic porphyries. Mineralization is characterized by quartz veining, with fine pyrite and acicular arsenopyrite disseminated in the rock matrix and coarse grains aggregated in more altered patches and bands. Lewis (2006) noted that, on the basis of textural and structural characteristics, many of the veins observed in drill core can be classified as either crack-seal stylolitic veins, extension veins, or stockworks to hydro-fracture breccias. All vein types may be associated with abundant arsenopyrite and elevated gold grades. Gangue minerals include quartz, carbon, siderite, clay, barite, and less abundant alteration minerals including sericite, chlorite, calcite, albite, and biotite.






4-5



Sulphide distribution appears to be related to host rock permeability. Coarser-grained sandstones tend to be higher grade in sulphur and gold. Gold is associated with the sulphides, and occurs as rounded blebs on the order of 10 μ m in diameter.

Deposits associated with the KSZ, and to a lesser extent, the NW Fracture, are of the epigenetic, shear-hosted lode gold-sulphide type, in which gold is very fine grained and is held mainly in arsenopyrite and, to a lesser extent, pyrite. Another minor deposit type is quartz vein hosted gold mineralization which is generally restricted to the Kyzyl South area.

4.6. EXPLORATION

The multi-year Kyzyl Project exploration program began in late 2009 and concluded in the fall of 2012. The program consisted of geological mapping, structural studies, geophysical surveys, geochemical surveys, and historical literature reviews in order to assist with target generation for diamond drilling. Integral to the exploration work, further geological programs were completed, within the immediate Bakyrchik mine area, in order to define a comprehensive geological deposit model for the entire exploration area. BMV is currently reviewing options for further exploration on both BMV Mining Licence No. 737 and Exploration Licence No. 27. At the time of writing, no exploration is occurring at the BMV site or on the Exploration Licence areas.

The geological work that was completed during the Kyzyl Project exploration program has been used to establish the unique distribution and timing of events that culminated in the deposition of gold mineralization. The resulting gold depositional model will help generate drill hole targets for future exploration programs as well as provide a basis for regional exploration.

4.6.1. EXPLORATION

4.6.1.1. 2010 HIGH RESOLUTION STEREO SATELLITE IMAGERY

In 2010, BMV engaged Fugro NPA Limited, from Edenbridge, United Kingdom, to generate high resolution stereo satellite imagery and supply elevation models of the Kyzyl Project area. Worldview-2 imagery was acquired on September 2, 2010, georeferenced, and stereo correlated. Several sets of contours were generated and used to generate one metre resolution three dimensional DTMs.



4.6.1.2. 2010 GEOLOGICAL MAPPING

In the summers of 2010 and 2011, John Crossing of Compass Geological was contracted to map the Kyzyl Project area. The main goal was to determine if gold mineralization within the two main shear zones was spatially related to, and possibly controlled by, folding in the host sediments. The original scope of work was to map the sequence only in the hangingwall of the KSZ, however, the mapping program was expanded to include the rocks in the footwall as it was felt that folds in the footwall had similar or greater potential to control mineralization. In 2011, the mapping area was extended to include the entire Exploration Licence No. 27 area.

Results of the mapping program indicated that the presence of a fold axis in either the hangingwall or footwall is not a prerequisite to mineralization, as many deposits do not appear to be closely associated with fold axes in the host sediments. Crossing (2010) concluded that the main features of the significant deposits are as follows:

- All deposits occur in mixed sediments.
- The largest deposits occur on bends in the two main shears.
- Most deposits are associated also with fault intersections.
- There is usually evidence of at least two directions of fault displacement.
- The majority of deposits are spatially associated with altered felsic dyke swarms.

4.6.1.3. 2011 DETAILED GEOLOGICAL MAPPING AND GRAPHICAL INFORMATION SYSTEM Several geological projects were initiated in 2011 to increase the understanding of the regional and local geology and formulate depositional models for the sedimentary package and gold mineralization in the area. The projects included several mapping, structural, stratigraphic, petrological, and age dating programs resulting in the compilation of all data into a Graphical Information System (GIS).

Detailed mapping around known deposits was carried out by professors from the Russian Academy of Science Institute of Geology and Mineralogy, Novosibirsk (IGM) and St. Petersburg University. Samples were collected for detailed lithological, petrographic, and geochronology studies. Lithological columns of the sedimentary package were created and correlated between the mapping sites. Biostratigraphic age dating of select sedimentary units to further refine the correlation of units across the Project area was, unfortunately, unsuccessful. An updated geological map of the Kyzyl Project area was compiled based on Crossing's and IGM's field data.



4.6.1.4. 2011 LITERATURE REVIEW OF FSU WORK

An important component of the 2011 exploration program was a detailed and systematic review of the historic FSU geological studies and deposit theories on both the Bakyrchik deposit and regional deposits. Discussions were also held with local Kazakh academics as well as members of the Oskemen based geological institutes.

4.6.1.5. 2011 GEOCHEMISTRY

During the summer of 2011, soil samples were collected at a 250 m by 250 m grid cell size over the Exploration Licence, and where possible, over the Mining Lease. The samples were collected by geology students from the East Kazakhstan State Technical University (EKSTU) under direction of IGM personnel. A total of 948 samples of whole soil or minus 40 mesh, C horizon, weighing 100 g, were collected. Sample locations (x, y, z) were determined using hand held GPS units. Location, rock type, sample depth, and soil colour were recorded. An ICP-MS 40 element assay analysis was completed by the A. P. Karpinsky Russian Geological Research Institute (VSEGEI) in St. Petersburg, Russia.

4.6.1.6. 2011 AGE DATING

Age dating of intrusive rocks within the area was led by Dr. Reimar Seltman from the Centre for Russian and Central EurAsian Mineral Studies (CERCAMS). The Sensitive High Resolution Ion Microprobe (SHRIMP) age dating was completed in St. Petersburg, Russia in late 2011. Results indicate that the intrusive rocks on the property are approximately 300 million years old.

4.6.1.7. 2011 STRUCTURAL STUDIES

Structural studies in the area of the Bakyrchik Mine were led by Dr. Sally Goodman, formerly of CAE Mining. Structural features mapped on surface and observed in drill core were used to create a 3D structural model of the Bakyrchik Mine. The model, used to determine kinematics of faults, shears, and vein suites in the area, can also be applied to future regional exploration.

4.6.1.8. 2011 GEOPHYSICS

The focus of the 2011 geophysical program was to collect information and determine which geophysical methods would be most appropriate to identify Bakyrchik style mineralization. Core samples were collected and sent to Zonge in Tucson, Arizona to determine physical properties of the Kyzyl units. This laboratory work was followed up



with a downhole survey to measure in-situ magnetic susceptibility, gamma ray intensity, apparent resistivity, self-potential and early response induced polarization (IP). Dr. Eldad Haber from the University of British Columbia, utilized the data to conduct Synthetic Modelling exercises to determine the optimum geophysical techniques and search parameters to identify Bakyrchik style mineralization at depth.

An electromagnetic (EM) survey was carried out over the KSZ east of the Bakyrchik Mine in the fall of 2011. Preliminary 3D inversion of the data identified an area of interest at depth on the western end of the KSZ, however, follow-up diamond drilling intersected only graphitic material associated with the KSZ.

As the majority of surface deposits were discovered with the FSU focus on exploration down to approximately 300 m depth, a direct current resistivity, IP, and magnetotelluric resistivity geophysical survey has been proposed for the Bakyrchik property. The objective is to maximize the use of all three parameters in developing realistic geologic interpretations at depth (IP and resistivity to depths of 750 m and MT depths down to 1,500 m). The results of the 3D geological inversion would then be integrated with the soil sampling results and geological frame work for the area in order to determine and prioritize new targets.

4.6.2. DRILLING

As described in Section 2.6 of the CPR, exploration drilling was carried out periodically at the Kyzyl Project by exploration groups associated with the FSU as well as by smaller companies following the break-up of the Soviet Union. No drill core is available for review from this exploration work.

The AAG 2009 to 2012 exploration drilling was contracted to Australasian Independent Diamond Drilling (AIDD) and Iskander Mining Company LLP (Iskander), both based in Almaty, Kazakhstan. Exploration drilling activities during this period were supervised by experienced expatriate professional registered geologists.

4.6.3. SURVEYS

4.6.3.1. SURVEY GRIDS

Two coordinate systems have been used on the Project, the Mine Grid, established in 1942 and the Geology Grid, established in 1962. All data were converted to the Mine Grid for resource modelling and mine planning purposes. The translation factors from the Mine Grid to the Geology Grid are -11,928.29 m for northing (Y) and -106,205.89 m for



easting (X). The 0 RL elevation at 410 m depth (with respect to Capital Shaft collar) refers to Baltic Sea mean sea level.

4.6.3.2. FSU DRILLING

All FSU drill hole collars were surveyed, however, not all the collars remain insitu. Downhole surveys were done according to FSU standards at the time and included acidetch dip tests or single-shot camera instrument readings. Measurements were taken at irregular intervals from approximately 5 m to 40 m but generally were on the order of every 20 m to 30 m. Some relatively deep vertical and inclined holes were surveyed only at the toe, with readings taken at greater than 200 m to 1,037 m. Deeper intersections in these holes may have location errors.

4.6.3.3. AAG DIAMOND DRILLING

Collar locations were planned by AAG geologists to infill and extend the historical drill hole pattern to 50 m spacing. Collar locations were pegged in the field by the BMV mine surveyors. Drill hole foresights and backsites were pegged by the Project geologists using a Brunton compass and tripod. Drill alignment was confirmed using the same method. Collars locations were resurveyed after the drill moved off the pad and compared with the Fugro satellite DTM. Downhole orientation measurements were made with an EZ-Shot instrument supplied and operated by the diamond drilling contractors. Instrument magnetic azimuths were corrected to true north by adding 6.47°.

4.6.4. SAMPLE PREPARATION, ANALYSES AND SECURITY

4.6.4.1. FSU

FSU procedures followed similar procedures as noted in Bakyrchik Section 2.6.2. No exploration core or rejects are available for review.

4.6.4.2. BMV

BMV procedures followed protocols as noted in Bakyrchik Section 2.6.2. All remaining core and sample rejects are securely stored at BMV.

4.6.5. DATA VERIFICATION

4.6.5.1. HISTORICAL DRILL HOLE DATA SOURCES

Data verification procedures for historical Exploration drilling followed the parameters set out in Bakyrchik Section 2.6.3.



4.6.5.2. BMV DRILLING QA/QC

The BMV Exploration drilling QA/QC procedures followed the same protocols as Bakyrchik.

4.6.6. EXPLORATION PROJECT DIGITAL DRILL HOLE DATABASE

The historical exploration drill hole database, comprising drilling from FSU to pre-2010, consists of 939 diamond drill core and reverse circulation drill holes totalling 102,345 m (Table 4-2). RPA notes that there are likely many holes missing from this database, especially in the Kyzyl North Dalni deposit areas. In many cases there is no provenance to the data itself. The historical holes are generally utilized to guide new exploration drilling. RPA recommends that a follow-up database review be completed in conjunction with the recent GEOS (2013) report.

TABLE 4-2 SUMMARY OF HISTORICAL EXPLORATION DIGITAL DRILL HOLE DATABASE Kyzyl Project

Area	Deposit	No. of Holes	Metres	% of Total m
Kuzul Egot	Sarbas	128	5,454	5.3
Ryzyi East	Karmen	104	6,230	6.1
	Zagadka ¹	383	37,200	36.3
Kyzyi wesi	Kholodny Klyuch ²	170	39,854	38.9
	Dalni	17	1,752	1.7
	Daln-1	4	689	0.7
Ryzyi Norui	Dalni-2	3	258	0.3
_	Dalni-3	6	635	0.6
Othor	Other	46	6,409	6.3
Other	Sarbas East	78	3,864	3.8
Total		939	102,345	100.0

Notes:

1. Zagadka includes deposits directly east of Bakyrchik Mine, with the majority of the holes being short for oxide exploration.

2. Kholodny Klyuch straddles the Exploration Licence No. 27 and IGC Bolshevik Licence No. 47 border but most of the holes are located on the Exploration Licence.

The BMV Exploration drill hole database (Table 4-3) consists of 406 diamond drill core holes totalling 45,337 m drilled during the period 2009 to 2012.



TABLE 4-3 SUMMARY OF BMV EXPLORATION DIGITAL DRILL HOLE DATABASE Kyzyl Project

Area	Deposit	No. of Holes	Metres	% of Total m
Kyzyl East	Sarbas	138	14,870	32.8
	Karmen	30	2,016	4.4
	Vein 31	86	5,348	11.8
Kyzyl West	Zagadka	56	8,120	17.9
	Kilometrovaya	3	614	1.4
	Kholodny Klyuch	29	3,365	7.4
Kyzyl North	Dalni	28	4,648	10.3
	Daln-1	36	6,355	14.0
Total		406	45,337	100.0

4.7. GKZ MINERAL RESOURCE AND ORE RESERVE ESTIMATES

Soviet style classified "reserves" for the deposits have been evaluated over the life of the Project. These estimates do not conform to JORC (2012) nor are they necessarily indicative of all of the mineralization on the Project. Table 4-4 presents a summary of GKZ results based on:

- GEOS LLP's Final Report on Geological Exploration Carried Out Under Bakyrchik Licence Area from April 7, 1995 to April 6, 2013 published July 22, 2013. RPA has not reviewed the GKZ estimation reports (GEOS 2013).
- Ministry of Industry and New Technologies, The Committee on Geology and Subsurface Resources Management, Proceedings No. 619, Review of Documentation on the Mining Feasibility Study and Report on Ore Reserves and Contained Gold Calculation for the Vein 31 Deposit as of July 1, 2012. Published July 25, 2013 (MINT 2013a).
- Ministry of Industry and New Technologies, The Committee on Geology and Subsurface Resources Management, Proceedings No. 624, Review of Documentation on the Mining Feasibility Study and Report on Ore Reserves and Contained Gold Calculation for the Sarbas Deposit as of July 1, 2012. Published August 28, 2013 (MINT 2013b).



TABLE 4-4SUMMARY GKZ RESULTS FOR SITES WITHIN LICENCE NO. 27EXPLORATION AREA AS OF JUNE 1, 2013
Kyzyl Project

Area	Deposit	Туре	GKZ Category	Cut-Off Grade (g/t Au)	Tonnes (000)	Gold Grade (g/t Au)	Contained Gold (oz)	Year(s)
		Oxidized	C1+C2	0.3	510.2	2.09	33,125	
	Sarbas	Sulphide	C2	2.0	374.7	6.24	72,695	2013
		Total	-	-	884.9	3.84	105,830	
		Oxidized	C1+C2	0.5	94.5	1.91	5,630	
Kyzyl Fast	Vein 31	Sulphide	C2	2.0	70.0	3.96	8,575	2013
Lust		Total	-	-	164.5	2.78	14,205	
		Oxidized	C2	0.3	89.8	1.25	3,500	
	Karmen	Sulphide	C2	2.0	19.5	5.7	3,500	2011 - 2012
		Total	-	-	109.3	2.05	7,000	2012
		Oxidized	C2	0.8	51.7	2.31	2,700	
	Zagadka	Sulphide	C2	2.0	7.4	5.68	1,300	2011 -
		Total	-	-	59.1	2.73	5,000	2012
		Oxidized	C2	0.3	143.6	0.9	4,000	
	Vein Kilometrovava	Sulphide	C2	2.0	5.5	4.69	800	2006
Kiometrovaya Kyzyl West Kholodny Klyuch Vein Sorokovaye	Kilometrovaya	Total	-	-	149.1	1.04	4,800	
		Oxidized	C2	0.3	250.0	1.06	8,300	
	Kholodny	Sulphide	C2	2.0	105.9	5.24	17,300	2006 - 2012
	Riyuen	Total	-	-	355.9	2.31	25,600	
		Oxidized	C2	0.3	68.7	1.08	2,300	
	Vein Sorokovave	Sulphide	C2	-	-	-	-	2006
	cononcorajo	Total	-	-	68.7	1.08	2,300	
		Oxidized	-	-	-	-	-	
	Dalni	Sulphide	-	-	-	-	-	2011 - 2012
		Total	-	-	-	-	-	
		Oxidized	C2	0.3	28.5	1.65	1,500	
	Dalni 1	Sulphide	C2	2.0	149.0	6.06	28,100	2011 - 2012
Kyzyl		Total	-	-	177.5	5.35	29,600	
North		Oxidized	C2	0.3	100.8	1.82	5,700	
	Dalni 2	Sulphide	-	-	-	-	-	2008
		Total	-	-	100.8	1.82	5,700	
-		Oxidized	-	-	-	-	-	
	Dalni 3	Sulphide	-	-	-	-	-	
		Total	-	-	-	-	-	
		Oxidized	-	-	1,337.8	1.63	66,755	
Total		Sulphide	-	-	732.0	5.81	132,270	
		Total	-	-	2,069.8	3.10	199,025	

Notes

1. Kazakh GKZ Resource and Reserve estimate does not conform to JORC (2012).

2. There is no reported estimates on any of the Kyzyl South Deposits.

3. Numbers may not add due to rounding.

4. Source: GEOS 2013, MINT 2013a, MINT 2013b.



4.8. EXPLORATION DISCUSSION

The strategic goal of AAG's Licence No. 27 Exploration Program was to define near surface Mineral Resources that would be able to be converted to Kazakh Reserves (Categories C1 or higher) in order to secure the ground for future exploration at depth. Unfortunately, due to budgetary constraints, the AAG exploration program was halted in mid-2012 and a Western-based data compilation and summary review has not yet been completed.

Work completed during the Kyzyl Project 2009 to 2012 Exploration Program has increased the understanding of the Kyzyl geological deposit model. The size and grade continuity of Bakyrchik Lens 1 is unique based on a number of factors – large regional east-west shear, intersection with the southeast to northwest structures, near surface (1 to 3 km deep) gold bearing granites, thick packages of tectonite within the shear zone, and the presence of an intraclastic rich sandstone marker horizon. On a regional basis, there are a number of potential targets with the structural features similar to Bakyrchik. In conjunction with advanced deep penetrating geophysics, additional geological surveys (mapping, trenching, structural interpretation) and geochemical surveys (soil sampling, rock sample assays) are required prior to any further drill campaigns.

Historical and recent drilling programs have not, however, been successful in defining significant mineable Oxide resources near surface or down to the approximately 200 m level in sulphides. The deposit currently seen as having the most upside potential is Sarbas.

Prior to any significant drilling program below 300 m, it is recommended that an advanced technology geophysical program be implemented such as the Quantec Titan 24 IP/MT 3D system. It is, however, recommended that at a minimum, the survey should be run over the Bakyrchik and Bakyrchik East Depth extensions in order to provide further definition of the mineralization at depth.

Brief descriptions of the deposits are presented in the sections below.

4.8.1. KYZYL EAST EXPLORATION PROPERTIES

The Kyzyl East deposits, including Sarbas, Karmen and Vein 31 are the most prospective near surface deposits on the Exploration Licence.



4.8.1.1. SARBAS

Sarbas is located on the eastern boundary of Exploration Licence No. 27. The deposit consists of varying degrees of altered sedimentary rocks with vein-disseminated sulphide mineralization. GEOS (2013) reports that systematic geological study at Sarbas began in 1962 and has included some 166 surface trenches and pits totalling 6,907 m as well as 166 drill holes totalling 19,730m. GEOS (2013) interpretations are based on ribbon-like structures striking from 90° to 120° with dips of 50° to 55° north.

4.8.1.2. KARMEN

Karmen, located within the KSZ at the junction of the Ala Aygyrskogo and Northwest faults, consists of a main and an offshoot vein structure. Early exploration included trenches and pits as well as single drill holes. In 2008, BMV drilled 47 holes totalling 1,375.9 m while exploring for oxides. In 2012, exploration drilling at Karmen focussed on sulphides, but was generally unsuccessful.

4.8.1.3. VEIN 31

Vein 31, located in the footwall of the KSZ, consists of narrow, 1.0 m to 1.5 m wide lenticular bodies hosted in siltstone and sandstone. GEOS (2013) reports that in general, the characteristic features for vein deposits are increased carbonaceous and carbonate contents as well as the presence of primary sedimentary pyrite in unoxidized rocks. Previous exploration work consisted of seven trenches and 26 drill holes completed in 2007.

4.8.2. KYZYL WEST EXPLORATION PROPERTIES

A review of the drilling to date shows that no significant near surface mineralization has been observed at Zagadka and Kilometrovaya. There is, however, potential at depth for Kilometrovaya as well as extension of Bakyrchik Lens 12 at depth under Zagadka. Kholodny Klyuch also requires additional review.

4.8.2.1. ZAGADKA

Zagadka is located within the KSZ directly west of Bakyrchik Mine. The vast number of Zagadka designated holes consist of short-hole core and RC drilling searching for near surface oxides in the area directly west of Bakyrchik Mine. Numerous small oxide mineralization occurrences have been interpreted, however, no significant deposits have been defined.



4.8.2.2. KILOMETROVAYA

Kilometrovaya is located on the footwall of the KSZ, two km west Bakyrchik Mine. Host rocks consist of interbedded sandstones, siltstones, and conglomerates. Mineralization is associated with quartz veining.

4.8.2.3. VEIN SOROKOVAYE

Vein Sorokovaye is a small deposit located in the footwall of the KSZ close to Kilometrovaya. It consists of a series of quartz veins and mineralized zones with a total strike length of 850 m. Host rocks are interbedded with sandstones and siltstones with rare lenses of conglomerates.

4.8.2.4. KHOLODNY KLYUCH

Kholodny Klyuch, located on the western flank of Exploration Licence No. 27 and the eastern flank of IGC Bolshevik Licence No. 47, lies within the KSZ and has a strike length of approximately 750 m. Continued exploration is warranted targeting deeper sulphides and refining the lower boundary for oxidized mineralization.

4.8.3. KYZYL NORTH EXPLORATION PROPERTIES

Kyzyl North exploration properties are confined to the North-West fault, a structure of the second order with respect to the KSZ. This area is referred to as the Parallel Zone (PZ) consisting of the following areas, from the northwest to southeast; Dalni-1, Dalni, Dalni-2 and Dalni-3 1. The total length of the PZ is approximately 5 km to the northwest and 5 km to southeast.

Recent interpretations at Dalni provide for potential for mineable resources below Dalni and Dalni-1 pits. The strike length of these potential resources do not appear to be amenable to reserve conversion and a hold has been put on any additional drilling. Deep target drilling is recommended at the flexure point between Dalni and Dalni-1 down to depths up to 1,100 m.

4.8.3.1. DALNI-1

Dalni-1, previously mined by open pit methods, has a mineralized strike length of approximately 1.3 km. The primary AAG exploration focus was to target mineralization below the pit and on the flanks.



4.8.3.2. DALNI

Dalni, which was also previously mined by open pit methods, has a mineralized strike length of approximately 1.3 km. The AAG exploration focus was to target mineralization below the pit and on the flanks, however, results were unfavourable.

4.8.3.3. DALNI-2 AND DALNI-3

Dalni-2 and Dalni-3 are located on the southwest section of the Parallel Zone. Dalni-2 and Dalni-3 have low potential. Initial results of the oxide potential at Dalni-2 are encouraging with a defined mineralized zone up to 50 m in width with a strike length of 900 m to a depth of 35 m. Dalni-3 has low potential, but would likely benefit from reverse circulation drilling.

4.8.4. KYZYL SOUTH EXPLORATION PROPERTIES

The Kyzyl South exploration properties consist mainly of small quartz vein related mineralization. In some cases, historical, very narrow vein mining appears to have been undertaken at some of the deposits.

Site access to Vein Tatarskaya and Fabrichnaya is complicated by Railway Land Ownership issues. The Lest occurrence is located underneath the potential tailings facility extension.

The Kyzyl South exploration properties are considered low priority as the mineralization models are not well understood and the potential size of the deposits is considered limited.



5.REFERENCES

5.1. REGULATORY AND LEGAL

- JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) [online]. Available from: http://www.jorc.org (The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia).
- ESMA (2013): ESMA update of the CESR recommendations, the consistent implementation of Commission Regulation (EC) No 809/2004 implementing the Prospectus Directive (ESMA/2013/319), March 20, 2013
- Baker & McKenzie CIS, Ltd. (2013): Licenses and Permits for Conducting Subsoil Use Operations at the Bakyrchik Deposit, a memorandum dated August 22, 2013.
- GRATA Law Firm (2014): Due Diligence Review Report for Polymetal OJSC with regard to Inter Gold Capital LLP and Bakyrchik Mining Venture LLP, June11, 2014.

5.2. PREVIOUS REPORTS

- Clow, G.G., Smith, D.J.F., Cox, J.J., Krutzelmann, H. (2010): Technical Report on the Kyzyl Gold Project, Eastern Kazakhstan Oblast, Kazakhstan, prepared for Altynalmas Gold Ltd., August 12, 2010.
- Cox, J.J., Ross, D., Krutzelmann, H. (2012): Technical Report on the Kyzyl Gold Project Feasibility Study, Kazakhstan, prepared by Roscoe Postle Associates Inc. for Ivanhoe Mines Ltd., March 31, 2012.
- Fluor Canada (2011): Kyzyl Gold Project Feasibility Study Report. Unpublished report and appendices, September 2011.
- RPA (2013): Feasibility Study of the Bakyrchik Project, Kazakhstan, Unpublished report prepared for Bakyrchik Mining Venture, prepared by RPA, SENET and Wardell Armstrong International., October 31, 2013.

5.3. GEOLOGY AND EXPLORATION

- Crossing, Dr. J. (2010): Geological Mapping of the Bakyrchik Project, Kazakhstan. Unpublished report, October 2010.
- Crossing, Dr. J. (2011): Geological Mapping of Bakyrchik South, Kazakhstan. Unpublished report, July 2011.
- Derry, D. R. (1980): World Atlas of Geology and Mineral Deposits. Mining Journal Books -John Wiley & Sons, Inc. New York, pp. 63-68.
- GEOS (2013): Final Report on Geological Exploration Carried Out Under Bakyrchik License Area from April 7, 1995 to April 6, 2013. Consists of two books and three folders. GEOS LLP, July 22, 2013.



Global Mining Services, Inc. (1997): Promezhutochny and Gluboki Log – Mining Pre-Feasibility Study. Unpublished report, project # CAN 009 229 663, November 1997.

Goodman, Dr. S (2011): Kyzyl Structural Study. Unpublished report, November 2011.

- Institute of Geology and Mineralogy (IGM) Siberian Branch of Russian Academy of Sciences, (2011): Report of Site Fieldwork Bakyrchik Mining Venture Lease Area, May 31 to July 10, 2011, Unpublished report, November 2011.
- Lewis Geoscience Services Inc. (2006): Site Visit Report, Bakyrchik Gold Project. Unpublished report, November 2006.
- Lycopodium Pty. Ltd. (1995): Bakyrchik Joint Venture Bakyrchik Oxide Project Feasibility Study. Unpublished report, May 1995, Volumes 1 and 2.
- MINT 2013a: Ministry of Industry and New Technologies, The Committee on Geology and Subsurface Resources Management, Proceedings No. 619, Review of Documentation on the Mining Feasibility Study and Report on Ore Reserves and Contained Gold Calculation for the Vein 31 Deposit as of July 1, 2012. Published July 25, 2013.
- MINT 2013b: Ministry of Industry and New Technologies, The Committee on Geology and Subsurface Resources Management, Proceedings No. 624, Review of Documentation on the Mining Feasibility Study and Report on Ore Reserves and Contained Gold Calculation for the Sarbas Deposit as of July 1, 2012. Published August 28, 2013. (MINT 2013b).
- Minproc Engineers Limited (1997a): Bakyrchik Gold plc Chapter 19 Report, Rev. 4. Unpublished report, February 1997.
- Minproc Engineers Limited (1997b): Lurgi Test Report No. 95/E-PL/W) 42. Unpublished letter, February 18, 1997.
- Minproc Engineers Limited (1996a): Bakyrchik Gold Project Resource Estimate. Unpublished draft report, Appendices 1-4, 8, 9. December 1996.
- Minproc Engineers Limited (1996b): Bakyrchik Gold Project Definitive Feasibility Study. Unpublished report, Volumes 1-4 and appendices, November 1996.
- Sketchley, D.A. (2007): Preliminary Assessment of GMSI Confirmation Drilling Check Assay Program. Internal report, August 2007, 12 pp.
- Soloviev, S., Dr (2009): Major Rock and Ore Types Distinguished on the Bakyrchik Gold Deposit, Eastern Kazakhstan. Internal report prepared for Altynalmas Gold. December 19, 2009.
- Sketchley, D.A., and Tuvshintsengel, A. (2006): Database Audit Report, Bakyrchik Mining Joint Venture, Auezov, Kazakhstan. Internal report, Ivanhoe Mines Ltd.
- Western Services Engineering, Inc. (1996): Bakyrchik Mining Joint Venture Interim Independent Geologist's Report, Bakyrchik Gold Mine Semipalatinsk Region, Kazakhstan. Unpublished report, November 14, 1996.



Western Services Engineering, Inc. (1996): Bakyrchik Mining Joint Venture Independent Geologist's Report, Bakyrchik Gold Mine Semipalatinsk Region, Kazakhstan. Unpublished report, October 1, 1996.

5.4. MINING

- Barton, N.R. (2002). Some new Q-value correlations to assist in site characterization and tunnel design. International Journal of Rock Mechanics and Mining Sciences 39 (2): 185–216.
- Grimstad, E., and Barton, N. (1993): Updating of the Q-System for NMT. Proceedings of the International Symposium on Sprayed Concrete - Modern Use of Wet Mix Sprayed Concrete for Underground Support, Fagernes, 1993 (Eds Kompen, Opsahl and Berg. Norwegian Concrete Association, Oslo).
- Golder Associates Ltd. (1996): Geotechnical Investigation Proposed Processing Plant Site Bakyrchik Gold Project in Kazakhstan, Referenced 962-1748, dated October 1996.
- Outotec (2013): Report on Bakyrchik Gold Project Paste Fill Stability and Stability, prepared for Bakyrchik Mining Venture LLP, September 2013.
- Revell Resources Pty Ltd (2011): Kyzyl Gold Project Paste Fill Feasibility Study Exposure Stability and Testwork. P172-R02.

5.5. PROCESSING

- Geronimo, J., (Altynalmas) (2013): mail to SENET re: DESIGN BASIS_LR Comments (January 6, 2013).
- Gold Fields Limited (2012): Bakyrchik BIOX® Pilot Plant Run, Volume 1 of 2 (September 20, 2012).
- JKTech Pty Ltd (2012): JKdrop-Weight & SMC Test Report, Report 12001/P116 (November 2012).
- Orway Mineral Consultants (2012): OMC Report No: 8943.30 Rev B (December 2012).
- Orway Mineral Consultants (2013): Comminution Circuit Sizing, Report 8943.3 Rev E (January 2013).

Outotec (2012): Thickening Test Report, Part A (July 12, 2012).

Phillips Enterprises LLC (2012): Report of Metallurgical Testing and Pilot Plant Programme, Report 114042 (March 31, 2012).

Rossouw, L. (Altynalmas) (2013): email to SENET re Caustic Soda (December 26, 2012).

- Roymec Technologies (Pty) Ltd (2013): Thickening Testwork Report, Report SEN-BAK-8342 R01 Rev0 (February 2013).
- Roymec Technologies (Pty) Ltd (2013): Tailings Thickening Testwork, Report PW201 (March 6, 2013).



- SGS-SA (2012): Au Deportment and Mineralogical Characterization of Head Concentrate from Bakyrchik, Report No. MIN 0412/074.
- SENET (2012): SP 505 Bakyrchik Mechanical Design Criteria, Report SP505-0000-0W3-001 (December 11, 2012).

5.6. ENVIRONMENTAL STUDIES

- Socio-Economic Baseline and Social Impact Assessment: Kyzyl Gold Project, Kazakhstan. ERM. January 2011
- Bakyrchik Mining Venture, Kyzyl Gold Project Environmental Feasibility Study. Sustainability. August 2011.
- Bakyrchik Gold Mine Project Environmental and Social Scoping Study. Wardell Armstrong International. April 2013.
- Bakyrchik Re-commissioning Project Gap Analysis. Wardell Armstrong International. February 2013
- BMV ESIA Chapters 1-8_16.05.12.pdf (document provided by the client with no title page. Footer states "Environmental Resources Management/Sustainability. Altynalmas Gold Ltd")

5.7. BOLSHEVIK DEPOSIT

- Blakley, I.T. (2009): , J.J., Ross, D., Krutzelmann, H. (2012): Technical Report on the Bolshevik Gold Deposit, Unpublished report prepared by Roscoe Postle Associates Inc. for Ivanhoe Mines Ltd., April 23, 2009.
- GEOS (2011): Feasibility Study of Commercial Conditions Of Bolshevik Gold Deposit Ores, East-Kazakhstan Region as of 01.01.2011. Geos LLP, 2011.
- GKZ (2012): Protocol No 1242-12-U Proceedings of the Ministry of Industry and New Technologies of the Republic of Kazakhstan, Committee of Geology. State Commission of Reserves on Reserve Calculations of Sulphide Ores of the Bolshevik Deposit. December 5, 2012.
- Sustainability Pty Ltd (2007): Bolshevik Gold Mine Environmental Review. Document No. IMM-010-EnvReviewRep-Rep0. June 12, 2007.
- Wardell Armstrong International (2007a): Competent Persons' Report on the Kazakhstan Assets Held by Sumeru Unpublished Draft Report. January 2007.
- Wardell Armstrong International (2007b): Preliminary Testwork on Samples from the Bolshevik, Balazgal and Aksakal/Beskempir Deposits Unpublished Draft Report Reference # 64-0179. January 2007.



6.APPENDIX 1

6.1. LIST OF ABBREVIATIONS

Units of measurement used in this report conform to the metric system. All currency in this report is US dollars (US\$) unless otherwise noted.

а	annum	kWh	kilowatt-hour
А	ampere	L	litre
bbl	barrels	lb	pound
btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C\$	Canadian dollars	Μ	mega (million); molar
cal	calorie	m²	square metre
cfm	cubic feet per minute	m ³	cubic metre
cm	centimetre	μ	micron
cm ²	square centimetre	masl	metres above sea level
d	day	μg	microgram
dia	diameter	m ³ /h	cubic metres per hour
dmt	dry metric tonne	mi	mile
dwt	dead-weight ton	min	minute
٥F	degree Fahrenheit	μm	micrometre
ft	foot	mm	millimetre
ft ²	square foot	mph	miles per hour
ft ³	cubic foot	MVA	megavolt-amperes
ft/s	foot per second	MW	megawatt
g	gram	MWh	megawatt-hour
Ğ	giga (billion)	oz	Troy ounce (31.1035g)
Gal	Imperial gallon	oz/st, opt	ounce per short ton
g/L	gram per litre	ppb	part per billion
Gpm	Imperial gallons per minute	ppm	part per million
g/t	gram per tonne	psia	pound per square inch absolute
gr/ft ³	grain per cubic foot	psig	pound per square inch gauge
gr/m³	grain per cubic metre	RL	relative elevation
ha	hectare	S	second
hp	horsepower	st	short ton
hr	hour	st/a	short ton per year
Hz	hertz	st/d	short ton per day
in.	inch	t	metric tonne
in ²	square inch	t/a	metric tonne per year
J	joule	t/d	metric tonne per day
k	kilo (thousand)	US\$	United States dollar
kcal	kilocalorie	USg	United States gallon
kg	kilogram	USgpm	US gallon per minute
km	kilometre	V	volt
km ²	square kilometre	W	watt
km/h	kilometre per hour	wmt	wet metric tonne
kPa	kilopascal	wt%	weight percent
KVA	kilovolt-amperes	yd ³	cubic yard
KVV	kilowatt	yr	year

7.APPENDIX 2

7.1. RPA QUALIFICATIONS AND COMPETENT PERSONS



7.1.1. RPA QUALIFICATIONS

RPA is a group of technical professionals who have provided advice to the mining industry for 30 years. During this time, RPA has grown into a highly respected organization regarded as *the specialty firm of choice for resource and reserve work*. RPA provides services to the mining industry at all stages of project development from exploration and resource evaluation through scoping, prefeasibility and feasibility studies, financing, permitting, construction, operation, closure and rehabilitation. Our portfolio of customers includes clients in banking (both debt and equity), institutional investors, government, major mining companies, exploration and development firms, law firms, individual investors, and private equity ventures.

RPA offices are located in Canada, the United States, and the United Kingdom. Our professionals work globally, visiting mines and projects on six continents. Our home office is located in Toronto, Ontario, and the company is 100% owned by its employees.

Our mission is to apply our broad and deep experience to provide objective, independent advice. Our vision is to enable mining industry operators and investors to make the right decisions for business success. Clients return to RPA repeatedly because of the accurate, credible technical reports and advice we deliver, reports that are accepted and relied on time and time again, among financial institutions and major regulatory bodies worldwide.

RPA capabilities include:

- Mineral Resource and Mineral Reserve estimates and audits, compliant with all worldwide reporting codes
- Mine design and optimization
- Metallurgical assessment and process review
- Estimation of project capital and operating costs
- Preliminary Economic Assessments, scoping, prefeasibility, and feasibility studies
- Valuation of mineral properties
- M&A due diligence reviews of mining and exploration projects
- Lender advisory services
- Project financial modeling and analysis
- Expert witness services
- Design and management of exploration programs
- Reporting for public disclosure, including NI43-101 Technical Reports, Competent Persons Reports, and Mineral Expert Reports
- QA/QC audits and reporting
- Operations benchmarking, optimization programs and troubleshooting
- Strategic planning and advice for boards and senior management



7.1.2. COMPETENT PERSONS

7.1.2.1. GRAHAM G. CLOW

Graham Clow, Chairman and Principal Engineer of RPA, is a senior mining executive with 40 years' experience in all aspects of acquisitions, exploration, feasibility, finance, development, construction, operations, and closure. In addition to providing strategy and direction for RPA, he leads RPA's due diligence and M&A practice, bringing together experienced teams to assess and advise on projects worldwide.

Mr. Clow's experience ranges from the high arctic to the tropics, in base and precious metals and industrial minerals. He has been responsible for mergers and acquisitions for public companies.

Prior to joining RPA, Mr. Clow spent more than 20 years in senior executive and operating positions with publicly listed mining companies. This experience included financing, development, and management of open pit and underground mines, start-ups, feasibility studies, due diligence, and M&A.

He is Past Chairman of the Metal Mining Division of the Canadian Institute of Mining, Metallurgy, and Petroleum (CIM), and was a Member of the Committee on Ore Reserve Definitions. Mr. Clow is a Fellow of CIM and has been awarded the Metal Mining Award for contributions to the industry. For several years, Mr. Clow was an Adjunct Professor at the Lassonde Institute for Mineral Engineering at the University of Toronto, lecturing on mineral reserve estimation.

7.1.2.2. JASON J. COX

Jason Cox is a Principal Mining Engineer specializing in project management, mine design, cost estimation, and cash flow forecasting. Mr. Cox has over 18 years of experience in all stages of mine development; resource and reserve estimation, engineering studies, construction, operation, and closure.

As Director of Mine Engineering, Mr. Cox leads project teams in engineering studies, with responsibility for the final product, reviews metal price guidance for the company, and conducts peer review of mining work.

Prior to his work as a consultant, Mr. Cox held progressively senior positions with a major Canadian mining company. He was in charge of the engineering department at a remote lead/zinc mine located in the high Arctic. He also took part in the construction of a



lead/zinc mine in the U.S., which was put into production on schedule and under budget. Mr. Cox's responsibilities included contractor management for excavation and equipment installation, mine planning, water treatment process testwork, and recruitment.

Mr. Cox is registered as a professional engineer in the province of Ontario. His experience as a consultant includes base metal, gold, nickel, PGM, rare earths, uranium, and other commodities in a variety of environments across Canada, as well as the USA, Latin America, Africa, Australia, Europe, and Asia.

7.1.2.3. IAN T. BLAKLEY

Ian Blakley is Vice President and General Manager, RPA UK Ltd., and is based in London, U.K. He is a Principal Geologist with 30 years' experience in exploration and mining geology. Mr. Blakley has proven successful experience from grassroots through to mines exploration, production operations, and strategic senior management backgrounds. He understands the geological inputs/outputs and qualities required for a successful mining operation, with a track record of technology and structure driven business improvements instrumental in change and continuous improvement.

Mr. Blakley has extensive mineral resource and reserve experience including geological modelling and mineral resource estimation using Gemcom software, long-term strategic resource accounting and mine planning, and has been involved in Life of Mine Plan analysis, property evaluations, and related cash flow projections. He has worked in various worldwide geological environments and regions, including the High Arctic. Mr. Blakley's commodities experience includes gold, silver, nickel, copper, zinc, platinum group elements (PGEs), and iron projects.

Prior to joining RPA, Mr. Blakley held the position of Vice President – Exploration for Altynalmas Gold Ltd., a private company (50% owned by Ivanhoe Mines) exploring and developing world-class gold assets in north-eastern Kazakhstan. Mr. Blakley also had a successful two decade career with Inco Ltd., progressing from Beat Geologist to Chief Geologist, Manitoba Operations. As Chief Geologist, he was responsible for geological activities at three operating mines, long-term mineral resource and mineral reserve planning, management of drilling programs, staff hiring, training, and supervision.

Mr. Blakley is registered as a professional geologist in the province of Ontario, Canada.



7.1.2.4. HOLGER KRUTZELMANN

Holger Krutzelmann, Principal Metallurgist of RPA, has over 40 years of operating and metallurgical experience in the mining industry, including gold, base metal, and potash operations, and has spent more than 15 years working in major engineering firms on the design and implementation of new projects.

Mr. Krutzelmann's previous operating positions range from operator to surface superintendent in gold, potash, and base metal plants, as well as chief metallurgist in gold plants utilizing pressure oxidation. Mr. Krutzelmann participated in the design, engineering, and construction of Echo Bay's Kettle River gold facility, and was responsible for the crewing-up, start-up, and operation of the mill.

Mr. Krutzelmann has extensive managerial experience on multi-sized projects and studies. His project experience includes work in several countries in Africa, in Australia, Canada, Chile, Cuba, Greece, Indonesia, Papua New Guinea, New Caledonia, and the USA.



8.APPENDIX 3

8.1. GLOSSARY



Alteration - Any physical or chemical change in a rock or mineral subsequent to its formation. Milder and more localized than metamorphism.

- **ANFO** Acronym for ammonium nitrate and fuel oil, a mixture used as a blasting agent in many mines.
- **Assay** A chemical test performed on a sample of ores or minerals to determine the amount of valuable metals contained.

Back - The ceiling or roof of an underground opening.

Backfill - Waste material used to fill the void created by mining an orebody.

- **Ball Mill** A steel cylinder filled with steel balls into which crushed ore is fed. The ball mill is rotated, causing the balls to cascade and grind the ore.
- **Basement Rocks** The underlying or older rock mass. Often refers to rocks of Precambrian age which may be covered by younger rocks.
- **Beneficiate** To concentrate or enrich; often applied to the preparation of iron ore for smelting.
- **Block Model** a three dimensional mathematical representation of a volume of mineralization used to estimate tonnage and grade of a deposit.
- **Breccia** A rock in which angular fragments are surrounded by a mass of fine-grained minerals.
- **Bulk Mining** Any large-scale, mechanized method of mining involving many thousands of tonnes of ore being brought to surface per day.
- **Bulk Sample** A large sample of mineralized rock, frequently hundreds of tonnes, selected in such a manner as to be representative of the potential orebody being sampled. Used to determine metallurgical characteristics.
- **Chip Sample** A method of sampling a rock exposure whereby a regular series of small chips of rock is broken off along a line across the face.
- **Concentrate** A fine, powdery product of the milling process containing a high percentage of valuable metal.
- **Contact** A geological term used to describe the line or plane along which two different rock formations meet.
- **Core** The long cylindrical piece of rock, about an inch in diameter, brought to surface by diamond drilling.
- **Crosscut** A horizontal opening driven from a shaft and (or near) right angles to the strike of a vein or other orebody.
- **Cyanidation** A method of extracting exposed gold or silver grains from crushed or ground ore by dissolving it in a weak cyanide solution. May be carried out in tanks inside a mill or in heaps of ore out of doors.
- **Cyanide** A chemical species containing carbon and nitrogen used to dissolve gold and silver from ore.
- **Decline** A sloping underground opening for machine access from level to level or from surface; also called a ramp.
- **Development** Underground work carried out for the purpose of opening up a mineral deposit. Includes shaft sinking, cross-cutting, drifting and raising.

Development Drilling - drilling to establish accurate estimates of mineral reserves.

- **Diamond Drill** A rotary type of rock drill that cuts a core of rock that is recovered in long cylindrical sections, two cm or more in diameter.
- **Dilution (mining)** Rock that is, by necessity, removed along with the ore in the mining process, subsequently lowering the grade of the ore.
- **Dip** The angle at which a vein, structure or rock bed is inclined from the horizontal as measured at right angles to the strike.
- **Drift** A horizontal underground opening that follows along the length of a vein or rock formation as opposed to a cross-cut which crosses the rock formation.



Exploration - Prospecting, sampling, mapping, diamond drilling and other work involved in searching for ore.

- Exploration Target An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralization for which there has been insufficient exploration to estimate a Mineral Resource.
- **Feasibility Study (FS)** A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.
- Flotation A milling process in which valuable mineral particles are induced to become attached to bubbles and float as others sink.
- **Footwall** The rock on the underside of a vein or ore structure.

Gangue - The worthless minerals in an ore deposit.

Geochemistry - The study of the chemical properties of rocks.

Geophysical Survey - A scientific method of prospecting that measures the physical properties of rock formations. Common properties investigated include magnetism, specific gravity, electrical conductivity and radioactivity.

Hangingwall - The rock on the upper side of a vein or ore deposit.

Head Grade - The average grade of ore fed into a mill.

- **Heap Leaching** A process whereby valuable metals, usually gold and silver, are leached from a heap, or pad, of crushed ore by leaching solutions percolating down through the heap and collected from a sloping, impermeable liner below the pad.
- Hoist The machine used for raising and lowering the cage or other conveyance in a shaft.

Host Rock - The rock surrounding an ore deposit.

Hydrothermal - Relating to hot fluids circulating in the earth's crust.

Igneous Rocks - Rocks formed by the solidification of molten material from far below the earth's surface.

- **Indicated Mineral Resource (JORC Definition)** An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
- **Inferred Mineral Resource (JORC Definition)** –An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
- **Leaching** A chemical process for the extraction of valuable minerals from ore; also, a natural process by which ground waters dissolve minerals, thus leaving the rock with a smaller proportion of some of the minerals than it contained originally.



- **Lens** Generally used to describe a body of ore that is thick in the middle and tapers towards the ends.
- Lenticular A deposit having roughly the form of a double convex lens.
- Level The horizontal openings on a working horizon in a mine; it is customary to work mines from a shaft, establishing levels at regular intervals, generally about 50 metres or more apart.
- **Magnetic Susceptibility** A measure of the degree to which a rock is attracted to a magnet.

Metallurgical coal - Coal used to make steel.

Metallurgy - The study of extracting metals from their ores.

- **Mill** A plant in which ore is treated and metals are recovered or prepared for smelting; also a revolving drum used for the grinding of ores in preparation for treatment.
- Milling ore Ore that contains sufficient valuable mineral to be treated by milling process.
- **Mineral** A naturally occurring homogeneous substance having definite physical properties and chemical composition and, if formed under favourable conditions, a definite crystal form.
- **Mineral Resource (JORC Definition)** A Mineral Resource is a concentration or occurrence of a solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

Measured Mineral Resource (JORC Definition) – A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

A Measured Mineral Resource has a higher level of confidence that that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.





Mineral Resource / Reserve Relationship (CIM Definition)

Muck - Ore or rock that has been broken by blasting.

- **Open Pit** A mine that is entirely on surface. Also referred to as open-cut or open-cast mine.
- **Ore** A mixture of ore minerals and gangue from which at least one of the metals can be extracted at a profit.
- **Ore Pass** Vertical or inclined passage for the downward transfer of ore connecting a level with the hoisting shaft or a lower level.
- **Ore Reserves** An Ore Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

- **Orebody** A natural concentration of valuable material that can be extracted and sold at a profit.
- **Oxidation** A chemical reaction caused by exposure to oxygen that results in a change in the chemical composition of a mineral.
- **Preliminary Feasibility Study (Pre-Feasibility Study)** A Preliminary Feasibility Study (Pre-Feasibility Study) is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a state where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Competent Person, acting reasonably, to determine if all or part of the Mineral Resources may be converted to an Ore Reserve at the time of reporting. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.



- **Probable Ore Reserve (JORC Definition)** –A Probable Ore Reserve is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resources. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.
- **Proved Ore Reserve (JORC Definition)** A Proved Ore Reserve is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.
- **Pillar** A block of solid ore or other rock left in place to structurally support the shaft, walls or roof of a mine.
- **Plant** A building or group of buildings in which a process or function is carried out; at a mine site it will include warehouses, hoisting equipment, compressors, maintenance shops, offices and the mill or concentrator.
- **Porphyry** Any igneous rock in which relatively large crystals, called phenocrysts, are set in a fine-grained groundmass.
- **Portal** The surface entrance to a tunnel or adit.
- **Prospect** A mining property, the value of which has not been determined by exploration.
- **Pulp** Pulverized or ground ore in solution.
- **Raise** A vertical or inclined underground working that has been excavated from the bottom upward.
- **Reclamation** The restoration of a site after mining or exploration activity is completed.
- **Recovery** The percentage of valuable metal in the ore that is recovered by metallurgical treatment.
- **Refractory Ore** Ore that resists the action of chemical reagents in the normal treatment processes and which may require pressure leaching or other means to effect the full recovery of the valuable minerals.
- **Rock Mechanics** The study of the mechanical properties of rocks, which includes stress conditions around mine openings and the ability of rocks and underground structures to withstand these stresses.
- **Sample** A small portion of rock or a mineral deposit taken so that the metal content can be determined by assaying.
- Sampling Selecting a fractional but representative part of a mineral deposit for analysis.
- **Semi-Autogenous Grinding (SAG)** A method of grinding rock into fine powder whereby the grinding media consist of larger chunks of rocks and steel balls.
- **Shaft** A vertical or inclined excavation in rock for the purpose of providing access to an orebody. Usually equipped with a hoist at the top, which lowers and raises a conveyance for handling workers and materials.
- **Shear or Shearing** The deformation of rocks by lateral movement along innumerable parallel planes, generally resulting from pressure and producing such metamorphic structures as cleavage and schistosity.

Shear Zone - A zone in which shearing has occurred on a large scale.

- Short ton 2,000 lbs. avoirdupois.
- **Sodium Cyanide** A chemical used in the milling of gold ores to dissolve gold and silver.
- **Solvent Extraction-Electrowinning (SX-EW)** A metallurgical technique, so far applied only to copper ores, in which metal is dissolved from the rock by organic solvents and recovered from solution by electrolysis.
- Stockpile Broken ore heaped on surface, pending treatment or shipment.
- Stope An excavation in a mine from which ore is, or has been, extracted.
- **Strike** The direction, or bearing from true north, of a vein or rock formation measure on a horizontal surface.
- **Strip** To remove the overburden or waste rock overlying an orebody in preparation for mining by open pit methods.



Sulphide - A compound of sulphur and some other element.

- **Sustainable Development** Industrial development that does not detract from the potential of the natural environment to provide benefits to future generations.
- **Tailings** Material rejected from a mill after most of the recoverable valuable minerals have been extracted.
- **Tailings Pond** A low-lying depression used to confine tailings, the prime function of which is to allow enough time for heavy metals to settle out or for cyanide to be destroyed before water is discharged into the local watershed.
- **Thickener** A large, round tank used in milling operations to separate solids from liquids; clear fluid overflows from the tank and rock particles sink to the bottom.
- **Trench** A long, narrow excavation dug through overburden, or blasted out of rock, to expose a vein or ore structure.
- **Trend** The direction, in the horizontal plane, of a linear geological feature, such as an ore zone, measured from true north.
- **Tunnel** A horizontal underground opening, open to the atmosphere at both ends.
- **Umpire Sample or Assay** An assay made by a third party to provide a basis for settling disputes between buyers and sellers of ore.
- **Vein** A fissure, fault or crack in a rock filled by minerals that have travelled upwards from some deep source.
- Waste Unmineralized, or sometimes mineralized, rock that is not minable at a profit.

PART 7

ADDITIONAL INFORMATION

1. Responsibility

The Company and the Directors, whose names appear on page 1 of this Document, accept responsibility for the information contained in this Document. To the best of the knowledge and belief of the Company and the Directors (who have taken all reasonable care to ensure that such is the case), the information contained in this Document is in accordance with the facts and does not omit anything likely to affect the import of such information.

Roscoe Postle Associates Inc. accepts responsibility for the Competent Person's Report set out in Part 6 (*Competent Person's Report for Altynalmas*) of this Document. To the best of the knowledge and belief of Roscoe Postle Associates Inc. (which has taken all reasonable care to ensure that such is the case) the information contained therein is in accordance with the facts and does not omit anything likely to affect the import of such information.

2. Working Capital

The Company is of the opinion that, taking account of existing cash resources and other existing facilities available to the Enlarged Group, the Enlarged Group has sufficient working capital for its present requirements, that is, for at least the 12 months following the date of the publication of this Document.

3. No significant change

Save for the Acquisition as set out in paragraphs 1 and 2 of Part 1 (*Chairman's Letter*) and Part 3 (*Principal Terms of the Acquisition*) of this Document, there has been no significant change in the financial or trading position of the Group since 31 December 2013, being the date to which the latest audited financial information of the Company has been prepared.

There has been no significant change in the financial or trading position of the Altynalmas Group since 31 December 2013, being the date to which the latest audited financial information of the Altynalmas Group has been prepared.

4. Directors

The Directors of the Company are:

(Chairman)
(Chief Executive Officer)
(Non-Executive Director)
(Independent Non-Executive Director)
(Independent Non-Executive Director)
(Non-Executive Director)
(Non-Executive Director)
(Independent Non-Executive Director)
(Independent Non-Executive Director)

The business address of each of the Directors is Polymetal International plc, Ogier House, The Esplanade, St. Helier Jersey JE4 9WG Channel Islands.

5. Directors' interests in the Company

5.1 Director's interests in Ordinary Shares

As at 11 July 2014 (being the last practicable date prior to publication of this Document), the interests of the Directors in the share capital of the Company (all of which are beneficial unless otherwise stated) which have been notified to the Company pursuant to the Disclosure and Transparency Rules are set out below.

Name	Interests in Ordinary Shares	Deferred share awards	Awards under Performance Share Plan	Total interests in Polymetal shares
Bobby Godsell	2,000			2,000
Vitaly Nesis	3,100,000	30,081	74,165	3,204,246
Jean-Pascal Duvieusart				
Jonathan Best				
Leonard Homeniuk	64,000			64,000
Konstantin Yanakov				
Marina Grönberg	11,000			11,000
Russell Skirrow	—			
Christine Coignard				

5.2 Director's interests in Altynalmas Shares

None of the Directors have any interests in any shares in Altynalmas.

6. Significant shareholdings

6.1 As of 11 July 2014 (being the latest practicable date prior to publication of this Document), interests notified to the Company in accordance with Chapter 5 of the Disclosure and Transparency Rules comprised:

Shareholder	Beneficial owner	Number of shares	Percentage of issued share capital (%)	Nature of holding
Fodina B.V.	Mr Petr Kellner	79,840,437	20.50	Indirect
Powerboom Investments Limited	Mr Alexander Nesis	71,997,758	18.49	Indirect
Vitalbond Limited, A&NN Capital Management Fund Limited	Mr Alexander Mamut	38,740,784	9.95	Indirect
MBC Development Limited	Mr Alexander Mosionzhik	17,000,000	4.36	Indirect
Staroak Limited	Mr Oleg Shuliakovskii	16,335,275	4.19	Indirect

6.2 Save as disclosed in this paragraph 6, the Company is not aware of any person who as at 11 July 2014 (the latest practicable date prior to the publication of this Document) was interested directly or indirectly (within the meaning of Rule 5 of the Disclosure and Transparency Rules) which will represent 3 per cent. or more of the total voting rights in the Company. The Company is not aware of any person who, directly or indirectly owns or controls the Company.

7. Directors' remuneration

Details of the Company's directors' remuneration policy can be found in the Governance Remuneration Report in the Section "*Directors' remuneration policy*" on pages 90-95 of Polymetal's 2013 Annual Report and Accounts. Specific details on current directors' service contracts, including that of the CEO, can be found in Section "*Current Directors' service contracts*" on pages 96-101 of Polymetal's 2013 Annual Report and Accounts, which is incorporated by reference herein.

8. Related party transactions

Details of related party transactions (which for these purposes are those set out in the standards adopted according to Regulations (EC) No 1606/2002), the Company has entered into:

- (a) during the financial year ended 31 December 2011, are disclosed in accordance with the respective standard adopted according to Regulation (EC) No 1606/2002 in Note 33 on pages 135 and 136 of Polymetal's 2011 Annual Report and Accounts;
- (b) during the financial year ended 31 December 2012, are disclosed in accordance with the respective standard adopted according to Regulation (EC) No 1606/2002 in Note 33 on pages 157 and 158 of Polymetal's 2012 Annual Report and Accounts; and
- (c) during the financial year ended 31 December 2013, are disclosed in accordance with the respective standard adopted according to Regulation (EC) No 1606/2002 in Note 34 on page 149 of Polymetal's 2013 Annual Report and Accounts,

all of which are incorporated by reference herein.

9. Material contracts

Please refer to Part 3 (*Principal terms of the Acquisition*) for summaries of the SPA, the Bidding Agreement and the Deed of Assignment.

10. Litigation

Polymetal

There are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Company is aware) during the 12 months preceding the date of this Document, which may have, or have had in the recent past, a significant effect on the Company and/or the Group's financial position or profitability.

Altynalmas

There are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Company is aware) during the 12 months preceding the date of this Document, which may have, or have had in the recent past, a significant effect on Altynalmas and/or the Altynalmas Group's financial position or profitability.

11. Sources of information

Certain information has been obtained from external publications and is sourced in this Document where the information is included. Where information has been sourced from a third party, the Company confirms that this information has been accurately reproduced and that as far as the Company is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. Unless otherwise stated, such information has not been audited.

12. Incorporation by Reference

Information from the following documents has been incorporated into this Document by reference:

Documents containing information incorporated by reference	Paragraph of this Document which refers to the document containing information incorporated by reference	Page number in reference document	Where the information can be accessed to Shareholders
Polymetal's 2011 Annual Report and Accounts	_		http://www.polymetalinternational.com/investors- and-media/annual-reports.aspx?sc_lang=en
Related Party Transactions the Company has entered into	8	Pages 135 and 136	
Polymetal's 2012 Annual Report and Accounts			http://www.polymetalinternational.com/investors- and-media/annual-reports.aspx?sc_lang=en
Related Party Transactions the Company has entered into	8	Pages 157 and 158	
Polymetal's 2013 Annual Report and Accounts			http://www.polymetalinternational.com/investors- and-media/annual-reports.aspx?sc_lang=en
Related Party Transactions the Company has entered into Company's directors' remuneration	8	Page 149	http://www.polymetalinternational.com/investors- and-media/annual-reports.aspx?sc_lang=en http://www.polymetalinternational.com/investors-
policy	7	Pages 90 to 101	and-media/annual-reports.aspx?sc_lang=en

A copy of each of the documents listed above is available for inspection in accordance with paragraph 14 (*Documents available for inspection*) below.

13. Authorisations and Consents

Roscoe Postle Associates Inc., whose address is 501-55 University Avenue, Toronto, Ontario M5J 2HJ, Canada, has given and has not withdrawn its written consent to the inclusion in this Document of its report in Part 6 (*Competent Person's Report for Altynalmas*) of this Document in the form and context in which they appear and has authorised the contents of that report for the purposes of Prospectus Rule 5.5.3R(2)(f).

Morgan Stanley, whose address is 25 Cabot Square, Canary Wharf, London E14 4QA, United Kingdom, has given and has not withdrawn its written consent to the inclusion in this Document of references to its name in the form and context in which it appears.

Deloitte, whose address is 2 New Street Square, London EC4A 3BZ, United Kingdom,, has given and has not withdrawn its written consent to the inclusion in this Document of its reports set out in Parts 4 (*Financial Information on Altynalmas*) and 5 (*Unaudited Pro Forma Statement of Net Assets*) of this Document in the form and context in which they appear and has authorised the contents of such reports for the purposes of Prospectus Rule 5.5.3R(2)(f).

14. Documents available for inspection

Copies of the following documents and the written consents referred to in paragraph 13 above will be available for inspection at the registered office of the Company during normal business hours on each Business Day from the date of this Document up to and including the date of the General Meeting:

- (a) the articles of incorporation of the Company;
- (b) the Share Purchase Agreement, Deed of Assignment and Bidding Agreement;
- (c) the consent letters referred to in paragraph 13 above;
- (d) the Competent Person's Report;
- (e) this Circular and the Form of Proxy; and
- (f) Polymetal's Annual Reports and Accounts for 2011, 2012 and 2013.

These documents will also be available for inspection at the offices of White & Case LLP, 5 Old Broad Street, London EC2N 1DW, from at least 15 minutes prior to the General Meeting until the conclusion of that meeting.

Dated: 14 July 2014.

PART 8

DEFINITIONS AND GLOSSARY

Definitions

The following definitions apply throughout this Document, unless the context otherwise requires: "2013 Annual Report" the annual report and financial statements of Polymetal for the year ended 31 December 3013 "Acquisition" the acquisition of Altynalmas by Polymetal, pursuant to the terms of and subject to the conditions in the Sale and Purchase Agreement, the Deed of Assignment and the Bidding Agreement "Altynalmas" Altynalmas Gold Ltd "Altynalmas Articles" the articles of association of Altynalmas "Altynalmas Group" Altynalmas, CAML, BMV and IGC and all other subsidiaries of Altynalmas and "Altynalmas Group Company" means any of them "Altynalmas KASE Shares" 120,205,480 Altynalmas Shares owned by Sumeru as at the date of the Bidding Agreement "Altynalmas Shares" the entire issued share capital of Altynalmas "Altynalmas SPA Shares" 120,205,480 Altynalmas Shares to be sold by Sumeru Gold to PMTL pursuant to the terms of the SPA "Agreements" the Bidding Agreement, the Deed of Assignment and the SPA "Bidding Agreement" the agreement dated 21 May 2014 between Sumeru, PMTL and Polymetal setting out the terms and conditions on and subject to which Sumeru has agreed to (i) offer the KASE Shares for sale on KASE, and if PMTL's bid is successful, to sell and (ii) PMTL has agreed to bid for, and if its bid is successful, to acquire the KASE Shares, in each case on KASE by way of Open Trade "Board" the board of directors of Polymetal from time to time including a duly constituted committee thereof "Bakyrchik Contract" the Contract for Exploration and Production of Gold and Associated Minerals in East Kazakhstan Oblast (Subsoil Use Contract No. 120) concluded on July 2, 1997 on the basis of Licence No. 27 (the Bakyrchik Exploration Licence) and Licence No. 737 (the Bakyrchik Production Licence) between Bakyrchik Mining Venture LLP and the Ministry of Energy and Natural Resources of Kazakhstan, including all and any addenda and annexures thereto "Bolshevik Contract" the Contract for Exploration and Production of Gold and Associated Minerals in East Kazakhstan Oblast (Subsoil Use Contract No. 47) concluded on 24 June 1996 within the Bolshevik Deposit in Zharminsk Region of Semipalatinsk Oblast of Kazakhstan including all and any addenda and annexes thereto (as amended) Bakyrchik Mining Venture LLP "BMV" "CAML" Central Asian Mining Limited "Circular" this Document "Company" or "Polymetal" Polymetal International plc "Companies Law" the Companies (Jersey) Law 1991, as amended "Completion" completion of the Acquisition "Contracts" the Bakyrchik Contract and the Bolshevik Contract the relevant system (as defined in the Uncertified Securities "CREST" Regulations 2001 (SI 2001 No. 3755) operated by CRESTCo Limited

"Deed of Assignment"	the deed of assignment to be entered into on the date of Completion between Sumeru Gold, Sumeru, Altynalmas and PTML BV pursuant to which Sumeru Gold has agreed to assign all of its rights, title and interest in the Sumeru Shareholder Loans to PTML BV
"Deloitte"	Deloitte LLP
"Directors"	the directors of Polymetal, whose names are set out on page 1
"Effective Date"	the date of which the Acquisition becomes effective, which is expected to be in the fourth quarter of 2014
"Enlarged Group"	the Group following completion of the Acquisition
"FCA"	the UK Financial Conduct Authority
"FSMA"	the Financial Services and Markets Act 2000, as amended
"GBP" or "£"	pound sterling
"General Meeting"	the shareholder general meeting convened on 14 August 2014 to approve the Acquisition to which this Circular relates
"Group"	Polymetal and its subsidiary undertakings from time to time
"IFRS"	International Financial Reporting Standards as adopted by the European Union
"IGC"	Inter Gold Capital LLP
"Listing Rules"	the rules and regulations of the FCA pursuant to Part VI FSMA, as amended from time to time
"London Stock Exchange"	London Stock Exchange plc
"KASE"	Kazakhstan Stock Exchange
"KASE Completion"	completion of the sale and purchase of the Altynalmas KASE Shares on the terms of the Bidding Agreement
"KZT"	Kazakh Tenge, being the lawful currency of the Republic of Kazakhstan
"Morgan Stanley"	Morgan Stanley & Co International plc
"New Polymetal Shares"	new ordinary shares to be issued in the capital of Polymetal
"Offer Price"	means the amount of KZT which results from the USD Offer Price by the broker in accordance with the terms of the Bidding Agreement on the date of KASE Completion less (i) any commissions, costs and expenses to be deducted from such amount by the broker and (ii) other reasonable and documented costs incurred by the Share Buyer associated with opening a broker account and conversion of the USD Offer Price
"Offer Price per Share"	means the Offer Price divided by the number of Altynalmas KASE Shares and rounded down to the nearest whole number
"Official List"	the official list maintained by the FCA under section 74(1) of FSMA for the purposes of Part VI of the FSMA
"Open Trade"	an open auction at the KASE executed by one of the trading methods specified in the KASE Regulations of Trades and Confirmation System Operation
"p"	Pence
"PMTL" or "Share Buyer"	PMTL Mining Limited
"PMTL BV" or "Debt Buyer"	PMTL Netherlands B.V.
"Polymetal Shares"	the existing issued ordinary shares in the capital of Polymetal
"Polymetal Shareholder"	a holder of Polymetal Shares
"Resolutions"	the resolutions to be proposed at the General Meeting (as set out in the Notice of general meeting contained in this Document) to, among other things, approve the Acquisition
----------------------------	---
"Sellers"	Sumeru Gold and Sumeru LLP, and each a "Seller"
"SPA"	the agreement dated 21 May 2014 for the sale and purchase of the issued shares of and loans relating to Altynalmas entered into between Sumeru Gold, PMTL, PMTL BV and Polymetal
"subsidiary"	a subsidiary undertaking (as defined by section 1162 UK Companies Act 2006) or a subsidiary (as defined by section 1159 UK Companies Act 2006) and in interpreting those sections for the purposes of this Document, a company is to be treated as shareholder or a member of a subsidiary or a subsidiary undertaking (as the case may be) even if its shares or interests are registered in the name of (i) a nominee, or (ii) any party holding security over those shares or interests, or (iii) that secured party's nominee
"Subsoil Law"	Kazakh Law on Subsoil and Subsoil Use dated 24 June 2010
"Sumeru"	Sumeru LLP
"Sumeru Gold"	Sumeru Gold B.V.
"Sumeru Group"	Sumeru, Sumeru Gold and each of their respective affiliates
"Sumeru Shareholder Loans"	the various shareholder loans made by Sumeru Gold to Altynalmas, with an aggregate principal amount and accrued interest of approximately US\$70.1 million as at 21 May 2014
"UK"	the United Kingdom of Great Britain and Northern Ireland
"United States" or "US"	United States of America
"US\$", "\$" or "USD"	US dollars
"USD Offer Price"	means US\$318.5 million

Glossary

The following additional definitions apply throughout this Document, unless the context otherwise requires:

Alteration – Any physical or chemical change in a rock or mineral subsequent to its formation. Milder and more localized than metamorphism.

ANFO – Acronym for ammonium nitrate and fuel oil, a mixture used as a blasting agent in many mines.

Assay – A chemical test performed on a sample of ores or minerals to determine the amount of valuable metals contained.

Back – The ceiling or roof of an underground opening.

Backfill - Waste material used to fill the void created by mining an orebody.

Ball Mill – A steel cylinder filled with steel balls into which crushed ore is fed. The ball mill is rotated, causing the balls to cascade and grind the ore.

Basement Rocks – The underlying or older rock mass. Often refers to rocks of Precambrian age which may be covered by younger rocks.

Beneficiate – To concentrate or enrich; often applied to the preparation of iron ore for smelting.

Block Model – a three dimensional mathematical representation of a volume of mineralization used to estimate tonnage and grade of a deposit.

Breccia – A rock in which angular fragments are surrounded by a mass of fine-grained minerals.

Bulk Mining – Any large-scale, mechanized method of mining involving many thousands of tonnes of ore being brought to surface per day.

Bulk Sample – A large sample of mineralized rock, frequently hundreds of tonnes, selected in such a manner as to be representative of the potential orebody being sampled. Used to determine metallurgical characteristics.

Chip Sample – A method of sampling a rock exposure whereby a regular series of small chips of rock is broken off along a line across the face.

Concentrate – A fine, powdery product of the milling process containing a high percentage of valuable metal.

Contact – A geological term used to describe the line or plane along which two different rock formations meet.

Core – The long cylindrical piece of rock, about an inch in diameter, brought to surface by diamond drilling.

Crosscut – A horizontal opening driven from a shaft and (or near) right angles to the strike of a vein or other orebody.

Cyanidation - A method of extracting exposed gold or silver grains from crushed or ground ore by dissolving it in a weak cyanide solution. May be carried out in tanks inside a mill or in heaps of ore out of doors.

Cyanide – A chemical species containing carbon and nitrogen used to dissolve gold and silver from ore.

Decline – A sloping underground opening for machine access from level to level or from surface; also called a ramp.

Development – Underground work carried out for the purpose of opening up a mineral deposit. Includes shaft sinking, cross-cutting, drifting and raising.

Development Drilling – drilling to establish accurate estimates of mineral reserves.

Diamond Drill - A rotary type of rock drill that cuts a core of rock that is recovered in long cylindrical sections, two cm or more in diameter.

Dilution (mining) – Rock that is , by necessity, removed along with the ore in the mining process, subsequently lowering the grade of the ore.

Dip – The angle at which a vein, structure or rock bed is inclined from the horizontal as measured at right angles to the strike.

Drift – A horizontal underground opening that follows along the length of a vein or rock formation as opposed to a cross-cut which crosses the rock formation.

Exploration – Prospecting, sampling, mapping, diamond drilling and other work involved in searching for ore.

Exploration Target – An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralization for which there has been insufficient exploration to estimate a Mineral Resource.

Feasibility Study (FS) – A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.

Flotation – A milling process in which valuable mineral particles are induced to become attached to bubbles and float as others sink.

Footwall – The rock on the underside of a vein or ore structure.

Gangue - The worthless minerals in an ore deposit.

Geochemistry – The study of the chemical properties of rocks.

Geophysical Survey – A scientific method of prospecting that measures the physical properties of rock formations. Common properties investigated include magnetism, specific gravity, electrical conductivity and radioactivity.

Hangingwall – The rock on the upper side of a vein or ore deposit.

Head Grade – The average grade of ore fed into a mill.

Heap Leaching – A process whereby valuable metals, usually gold and silver, are leached from a heap, or pad, of crushed ore by leaching solutions percolating down through the heap and collected from a sloping, impermeable liner below the pad.

Hoist – The machine used for raising and lowering the cage or other conveyance in a shaft.

Host Rock – The rock surrounding an ore deposit.

Hydrothermal – Relating to hot fluids circulating in the earth's crust.

Igneous Rocks – Rocks formed by the solidification of molten material from far below the earth's surface.

Indicated Mineral Resource (JORC Definition) – An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Inferred Mineral Resource (JORC Definition) -An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Leaching - A chemical process for the extraction of valuable minerals from ore; also, a natural process by which ground waters dissolve minerals, thus leaving the rock with a smaller proportion of some of the minerals than it contained originally.

Lens – Generally used to describe a body of ore that is thick in the middle and tapers towards the ends.

Level – The horizontal openings on a working horizon in a mine; it is customary to work mines from a shaft, establishing levels at regular intervals, generally about 50 metres or more apart.

Magnetic Susceptibility – A measure of the degree to which a rock is attracted to a magnet.

Metallurgical coal – Coal used to make steel.

Metallurgy - The study of extracting metals from their ores.

Mill – A plant in which ore is treated and metals are recovered or prepared for smelting; also a revolving drum used for the grinding of ores in preparation for treatment.

Milling ore – Ore that contains sufficient valuable mineral to be treated by milling process.

Mineral – A naturally occurring homogeneous substance having definite physical properties and chemical composition and, if formed under favourable conditions, a definite crystal form.

Mineral Resource (JORC Definition) – A Mineral Resource is a concentration or occurrence of a solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

Measured Mineral Resource (JORC Definition) – A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered. A Measured Mineral Resource has a higher level of confidence that that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

Muck – Ore or rock that has been broken by blasting.

Open Pit - A mine that is entirely on surface. Also referred to as open-cut or open-cast mine.

Ore – A mixture of ore minerals and gangue from which at least one of the metals can be extracted at a profit.

Ore Pass – Vertical or inclined passage for the downward transfer of ore connecting a level with the hoisting shaft or a lower level.

Ore Reserves – An Ore Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

Orebody – A natural concentration of valuable material that can be extracted and sold at a profit.

Oxidation – A chemical reaction caused by exposure to oxygen that results in a change in the chemical composition of a mineral.

Preliminary Feasibility Study (Pre-Feasibility Study) – A Preliminary Feasibility Study (Pre-Feasibility Study) is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a state where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Competent Person, acting reasonably, to determine if all or part of the Mineral Resources may be converted to an Ore Reserve at the time of reporting. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.

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

Proved Ore Reserve (JORC Definition) – A Proved Ore Reserve is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

Pillar – A block of solid ore or other rock left in place to structurally support the shaft, walls or roof of a mine.

Plant – A building or group of buildings in which a process or function is carried out; at a mine site it will include warehouses, hoisting equipment, compressors, maintenance shops, offices and the mill or concentrator.

Porphyry – Any igneous rock in which relatively large crystals, called phenocrysts, are set in a finegrained groundmass.

Portal – The surface entrance to a tunnel or adit.

Prospect – A mining property, the value of which has not been determined by exploration.

Pulp – Pulverized or ground ore in solution.

Raise – A vertical or inclined underground working that has been excavated from the bottom upward.

Reclamation – The restoration of a site after mining or exploration activity is completed.

Recovery – The percentage of valuable metal in the ore that is recovered by metallurgical treatment.

Refractory Ore – Ore that resists the action of chemical reagents in the normal treatment processes and which may require pressure leaching or other means to effect the full recovery of the valuable minerals.

Rock Mechanics – The study of the mechanical properties of rocks, which includes stress conditions around mine openings and the ability of rocks and underground structures to withstand these stresses.

Sample – A small portion of rock or a mineral deposit taken so that the metal content can be determined by assaying.

Sampling – Selecting a fractional but representative part of a mineral deposit for analysis.

Semi-Autogenous Grinding (SAG) – A method of grinding rock into fine powder whereby the grinding media consist of larger chunks of rocks and steel balls.

Shaft – A vertical or inclined excavation in rock for the purpose of providing access to an orebody. Usually equipped with a hoist at the top, which lowers and raises a conveyance for handling workers and materials.

Shear or Shearing – The deformation of rocks by lateral movement along innumerable parallel planes, generally resulting from pressure and producing such metamorphic structures as cleavage and schistosity.

Shear Zone – A zone in which shearing has occurred on a large scale.

Short ton – 2,000 lbs. avoirdupois.

Sodium Cyanide - A chemical used in the milling of gold ores to dissolve gold and silver.

Solvent Extraction-Electrowinning (SX-EW) – A metallurgical technique, so far applied only to copper ores, in which metal is dissolved from the rock by organic solvents and recovered from solution by electrolysis.

Stockpile – Broken ore heaped on surface, pending treatment or shipment.

Stope – An excavation in a mine from which ore is, or has been, extracted.

Strike – The direction, or bearing from true north, of a vein or rock formation measure on a horizontal surface.

Strip – To remove the overburden or waste rock overlying an orebody in preparation for mining by open pit methods.

Sulphide – A compound of sulphur and some other element.

Sustainable Development – Industrial development that does not detract from the potential of the natural environment to provide benefits to future generations.

Tailings – Material rejected from a mill after most of the recoverable valuable minerals have been extracted.

Tailings Pond -A low-lying depression used to confine tailings, the prime function of which is to allow enough time for heavy metals to settle out or for cyanide to be destroyed before water is discharged into the local watershed.

Thickener – A large, round tank used in milling operations to separate solids from liquids; clear fluid overflows from the tank and rock particles sink to the bottom.

Trench – A long, narrow excavation dug through overburden, or blasted out of rock, to expose a vein or ore structure.

 \mathbf{Trend} – The direction, in the horizontal plane, of a linear geological feature, such as an ore zone, measured from true north.

Tunnel – A horizontal underground opening, open to the atmosphere at both ends.

Umpire Sample or Assay – An assay made by a third party to provide a basis for settling disputes between buyers and sellers of ore.

Vein – A fissure, fault or crack in a rock filled by minerals that have travelled upwards from some deep source.

Waste - Unmineralized, or sometimes mineralized, rock that is not minable at a profit.

PART 9

NOTICE OF GENERAL MEETING



POLYMETAL INTERNATIONAL PLC

(a public no par value limited liability company incorporated under the laws of Jersey with registered number 106196)

Notice of General Meeting

NOTICE IS HEREBY GIVEN that a General Meeting of the Company will be held at 11.00 a.m. on 14 August 2014 at the offices of White & Case LLP, 5 Old Broad Street, London EC2N 1DW ("**Notice**") for the purposes of considering and, if thought fit, passing the following Resolutions, with resolution 1 being proposed as an ordinary resolution and resolution 2 as a special resolution:

ORDINARY RESOLUTION

1. THAT

the proposed acquisition of the entire issued share capital and certain loans ("Acquisition") of Altynalmas Gold Ltd, substantially on the terms and subject to the conditions summarised in Part I of the circular to shareholders of the Company dated 14 July 2014 ("Circular") outlining the Acquisition (a copy of which is produced to the meeting and signed for identification purposes by the chairman of the meeting), be approved and the Directors (or any duly constituted committee thereof) ("Board") be authorised (1) to take all such steps as the Board considers to be necessary or desirable in connection with, and to implement, the Acquisition; and (2) to agree such modifications, variations, revisions, waivers, extensions or amendments to any of the terms and conditions of the Acquisition, and/or to any documents relating thereto, as they may in their absolute discretion think fit.

SPECIAL RESOLUTION

2. THAT

the Company be and is hereby generally and unconditionally authorised pursuant to Article 57 of the Companies (Jersey) Law 1991 to purchase Ordinary Shares in the capital of the Company in connection with any exercise of the Put Option (as defined in the Circular), provided that:

- (a) the maximum number of Ordinary Shares that may be purchased is equal to the number of Consideration Shares (as defined in the Circular);
- (b) the minimum price that may be paid for an Ordinary Share shall be not less than the nominal value of such share;
- (c) the maximum price to be paid for each Ordinary Share shall be equal to the Initial Share Price (as defined in the Circular);
- (d) this authority shall expire at the end of the 13 month period following Completion, unless such authority is previously renewed, varied or revoked by the Company in a general meeting; and
- (e) the Company may enter into a contract to purchase its Ordinary Shares under this authority prior to its expiry, which will or may be executed wholly or partly after such expiry.

Dated 14 July 2014

Registered office: Ogier House The Esplanade St Helier Jersey JE4 9WG Channel Islands By Order of the Board Tania Tchedaeva Company Secretary

EXPLANATORY NOTES

Notes

1. Entitlement to attend and vote

- **1.1** All Resolutions at the Meeting will be decided by a poll. The Company believes that this is a more transparent and equitable method of voting, as shareholder votes are counted according to the number of shares held, ensuring an exact and definitive result.
- 1.2 The Company, pursuant to the Companies (Uncertificated Securities) (Jersey) Order 1999, specifies that only those persons entered on the register of members of the Company as at 11.00 am (BST) on 12 August 2014 (the 'Specified Time') (or, if the Meeting is adjourned, 48 hours prior to the time fixed for the adjourned Meeting) shall be entitled to attend or vote at the Meeting in respect of the number of Shares registered in their name at that time. Subsequent changes to entries on the register of members after the Specified Time shall be disregarded in determining the rights of any person to attend or vote at the Meeting.

2. Appointment of proxies

- 2.1 Shareholders entitled to attend and vote at the Meeting convened by this Notice are entitled to appoint a proxy or proxies to exercise all or any of their rights to attend, speak and vote in their place at the meeting. A shareholder may appoint more than one proxy in relation to the Meeting provided that each proxy is appointed to exercise the rights attached to a different share or shares held by that shareholder. A proxy need not be a shareholder of the Company. A Form of Proxy which may be used to make such appointment and give proxy instructions accompanies this Notice and instructions for its use are shown on the Form. The appointment of a proxy does not preclude members from attending the Meeting and voting if they so wish, however, if they do attend the Meeting any proxy appointment will be treated as revoked. A shareholder may only appoint a proxy or proxies by:
 - (a) completing and returning the Form of Proxy accompanying this Notice in accordance with the instructions contained therein; or
 - (b) using the CREST system (including CREST Personal Members), having an appropriate CREST message transmitted (see Note 3 below).
- **2.2** The appointment of a proxy, and the original or duly certified copy of the power of attorney or other authority (if any) under which it is signed or authenticated, should be deposited with the Company's Registrar, Computershare Investor Services (Jersey) Limited, c/o The Pavilions, Bridgewater Road, Bristol BS99 6ZY, UK or received via www.investorcentre.co.uk/eproxy or lodged via the CREST proxy service (in each case) not later than 11.00 am (BST) on 12 August 2014, or 48 hours before the time appointed for holding any adjourned meeting or (in the case of a poll not taken on the same day as the Meeting or adjourned meeting) for the taking of the poll at which it is to be used. If more than one proxy appointment is returned in respect of the same holding of shares, either by paper or by electronic communication (save as described in Note 2.1 above), that proxy received last by the Registrar before the latest time for the receipt of proxies will take precedence.
- **2.3** To appoint more than one proxy, you may either photocopy the Form of Proxy accompanying this Document or contact the Company's Registrars, Computershare Investor Services (Jersey) Limited (contact details for which are set out under the heading 'Enquiries' below), to request additional personalised forms.
- **2.4** Further instructions for appointing a proxy or proxies are contained in the explanatory notes to the Form of Proxy accompanying this Notice.

3. Electronic proxy appointment through CREST

CREST members who wish to appoint a proxy or proxies or to give or amend an instruction to a previously appointed proxy through the CREST electronic proxy appointment service may do so by using the procedures described in the CREST Manual or as set out on the Euroclear website (www.euroclear.com/CREST). CREST personal members or other CREST sponsored members and those CREST members who have appointed a voting service provider, should refer to their CREST sponsor or voting service provider who will be able to take the appropriate action on their behalf. In order for a proxy appointment or instruction made using the CREST service to be valid, the appropriate CREST message (a 'CREST Proxy Instruction') must be properly authenticated in accordance with Euroclear's specifications and must contain the information required for such instructions, as described in the CREST Manual. The message, regardless of whether it constitutes the appointment of a proxy or an amendment to the instruction given to a previously appointed proxy, must, in order to be valid, be transmitted so as to be received by the issuer's agent (ID 3RA50) by no later than 11.00 am (BST) on 12 August 2014. For this purpose, the time of receipt will be taken to be the time (as determined by the time stamp applied to the message by the CREST Applications Host) from which the issuer's agent is able to retrieve the message. No such message received through the CREST network after this time will be accepted and any change of instructions to a proxy appointed through CREST should be communicated to the proxy by other means.

CREST members and, where applicable, their CREST sponsors or voting service providers should note that Euroclear does not make available procedures in CREST for any particular messages. Normal system timings and limitations will therefore apply in relation to the input of CREST Proxy Instructions. It is the responsibility of the CREST member concerned to take (or, if the CREST member is a CREST personal member or sponsored member or has appointed a voting service provider to procure that his CREST sponsor or voting service provider to take) such action as shall be necessary to ensure that a message is transmitted by means of the CREST system by any particular time. In this connection, CREST members and, where applicable, their CREST sponsors or voting service providers are referred, in particular, to those sections of the CREST Manual concerning practical limitation of the CREST system and timings and to the relevant website at Euroclear.com/CREST.

The Company may treat a CREST Proxy Instruction as invalid in the circumstances set out in Article 34 of the Companies (Uncertificated Securities) (Jersey) Order 1999.

4. Corporate representatives

Under the Companies (Jersey) Law 1991, a body corporate may only appoint one corporate representative to attend and vote on its behalf. A share owner which is a body corporate that wishes to allocate its votes to more than one person should use the proxy arrangements.

5. Nominated persons

Any person to whom this Notice is sent who is not a shareholder but is a person nominated by a shareholder under Article 73 of the Company's Articles of Association to enjoy information rights (a 'nominated person'), may, under an agreement between him/her and the shareholder by whom he/she was nominated, have a right to be appointed (or to have someone else appointed) as a proxy for the Meeting. If a nominated person has no such proxy appointment right or does not wish to exercise it, he/she may, under any such agreement, have a right to give instructions to the shareholder as to the exercise of voting rights. The statement of the rights of shareholders in relation to the appointment of proxies in Note 2 above does not apply to nominated persons. The right described in these paragraphs can only be exercised by shareholders of the Company.

6. Voting rights

As at 11 July 2014, being the last practicable date prior to the printing of this Notice, the Company's issued shares consisted of 389,472,865 ordinary shares; with each ordinary share carrying one vote. The Company does not hold any shares in treasury.

7. Inspection of documents

The following documents will be available for inspection during normal business hours at both the registered office of the Company (Ogier House, The Esplanade, St Helier, Jersey, JE4 9WG, Channel Islands), from the date of this Notice until the time of the Meeting, and at the offices of White & Case LLP, 5 Old Broad Street, London EC2N 1DW from 15 minutes before the Meeting starts until it ends:

- (a) a copy of the Executive Director's service contracts;
- (b) copies of letters of appointment of the Non-Executive Directors;
- (c) letters of indemnity for each of the Directors; and

8. Shareholders' statement

Shareholders should note that it is possible that, pursuant to requests made by shareholders of the Company under the Articles, the Company may be required to publish on a website a statement setting out:

- (a) any matter relating to the audit of the Company's accounts (including the auditor's report and the conduct of the audit) that are to be laid before the Meeting; or
- (b) any circumstance connected with an auditor of the Company ceasing to hold office since the previous meeting of the Company at which annual accounts and reports were laid.

The Company may not require the shareholders requesting any such website publication to pay its expenses in complying with such publication requirements. Where the Company is required to place a statement on a website under the Articles, it must forward the statement to the Company's auditor not later than the time when it makes the statement available on the website. The business which may be dealt with at the Meeting includes any statement that the Company has been required under the Articles to publish on a website.

9. Addresses

Addresses, including electronic addresses provided in this Notice, are provided solely for the purposes so specified. You may not use any electronic address provided in this Notice to communicate with the Company for any purpose other than those expressly stated herein.

10. Website

A copy of this Notice, the total number of shares in issue and the total voting rights in the Company can be found at <u>www.polymetalinternational.com</u>.

Time of the meeting

The Meeting will start promptly at 11.00 am (BST) on 14 August 2014 and will take place at the offices of White & Case LLP, 5 Old Broad Street, London EC2N 1DW.

Attending the meeting

If you are attending the Meeting, please bring your attendance card with you. It authenticates your right to attend, speak and vote at the Meeting and will speed your admission. You may also find it useful to bring this Notice in order that you may refer to them at the Meeting. All joint shareholders may attend and speak at the Meeting. However, only the first shareholder listed on the Register of Members is entitled to vote.

Questions

All shareholders and their proxies have the right to ask questions at the Meeting. The Company must cause to be answered any such question relating to the business being dealt with at the meeting, but no such answer need be given if: (a) to do so would interfere unduly with the preparation of the meeting or involve the disclosure of confidential information; (b) the answer has already been given on a website in the form of an answer to a question; or (c) it is undesirable in the interests of the Company or the good order of the meeting that the question be answered. The Chairman may also nominate a Company representative to answer a specific question after the Meeting.

Enquiries

Computershare Investor Services (Jersey) Limited maintain the Company's share register. If you have any enquiries about the Meeting or about your Polymetal International plc shareholding, you may contact Computershare:

by telephone to the Shareholder helpline:

(from the UK) 0870 707 4040*

(from outside the UK) +44 870 707 4040

or in writing to:

Computershare Investor Services Ltd The Pavilions, Bridgewater Road Bristol BS99 6ZY

* Calls to this number are charged at 8 pence per minute from a BT landline.

Other telephone providers' costs may vary. Lines are open from 8:30 am to 5:30 pm (BST), Monday to Friday.

E-mail enquiries: info@computershare.co.je

You may also contact Polymetal International plc at the following corporate address:

Ogier House, The Esplanade, St Helier, Jersey, JE4 9WG, Channel Islands Tel.: +44 1534 504000

or

London representative office at: Polymetal London Limited, 1 Berkeley St, London, W1J 8DJ Tel.: +44 2070169503

Data Protection Statement

Your personal data includes all data provided by you, or on your behalf, which relates to you as a shareholder, including your name and contact details, the votes you cast and your Reference Number (attributed to you by the Company). The Company determines the purposes for which and the manner in which your personal data are to be processed. The Company and any third party to which it discloses the data (including the Company's Registrars) may process your personal data for the purposes of compiling and updating the Company's records, fulfilling its legal obligations and processing the shareholder rights you exercise.