

CNMC Goldmine Holdings Limited Sokor Project – updated Mineral Resource and Ore Reserve estimates as at 31 December 2015



#### J\_1944

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March 2016



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31 March 2016

The Board of Directors CNMC Goldmine Holdings Limited 745 Toa Payoh Lorong 5 #04-01 Singapore 319455

**Dear Sirs** 

#### SOKOR PROJECT – UPDATED MINERAL RESOURCE AND ORE RESERVE ESTIMATES AS AT 31 DECEMBER 2015

The Sokor Project (the Project) in Kelantan State in northern Peninsular Malaysia is currently 81% owned by CNMC Goldmine Holdings Limited (CNMC) through its subsidiary CMNM Mining Group Sdn. Bhd. (CMNM). CMNM holds the rights to mine and produce gold, silver and base metals from an area of approximately 10 km<sup>2</sup> in the Ulu Sokor area in Kelantan. CNMC has defined three gold deposits in the southern part of the project area (Manson's Lode, New Discovery and Ketubong) and a fourth gold deposit (Rixen) approximately 3 km to the north of Ketubong. Additional gold mineralisation has been intersected to the south of New Discovery and base metal and silver mineralisation is also present at Manson's Lode and at Sg Among, to the east of Rixen.

At CNMC's request, Optiro Pty Ltd (Optiro) has updated the Mineral Resource estimate for the Sokor Project and has incorporated data from 69 diamond holes drilled by CNMC during 2015 and since CNMC's 31 December 2014 Mineral Resource and Ore Reserve Statement. Mineral Resource and Ore Reserve estimates have been updated for Rixen, Manson's Lode and New Discovery. CNMC has extracted ore from Rixen during 2015 and the Mineral Resources have been depleted for mining to 31 December 2015. The Mineral Resources at Rixen, Manson's Lode, New Discovery and Ketubong and the Ore Reserves at Rixen, Manson's Lode and New Discovery have been reported in accordance with Singapore Exchange (SGX) mineral, oil and gas guidelines, having been classified and reported using the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, December 2012 (the JORC Code, 2012).

Optiro has prepared this document in support of CNMC's Annual Report for the year 2015. Optiro is an independent consulting and advisory organisation which provides a range of services related to the minerals industry including, in this case, independent geological Mineral Resource and Ore Reserve estimation services, but also corporate advisory, mining engineering, mine design, scheduling, audit, due diligence and risk assessment assistance. The principal office of Optiro is at 16 Ord Street, West Perth, Western Australia, and Optiro's staff work on a variety of projects in a range of commodities worldwide.

The report has been provided to the Directors of CNMC in relation to reporting of the Mineral Resource and Ore Reserves estimates for the Sokor Project as at 31 December 2015 for incorporation into CNMC's Annual Report for the Year 2015; as such, it should not be used or relied upon for any other purpose.



Neither the whole nor any part of this report or any reference thereto may be included in, or with, or attached to any document or used for any purpose without Optiro's written consent as to the form and context in which it appears.

The Mineral Resource estimate has been prepared by Mrs Christine Standing and reviewed by Mr Ian Glacken. Mr Glacken, Director of Optiro and Fellow of the Australasian Institute of Mining and Metallurgy, and Mrs Standing, Principal of Optiro and Member of the Australasian Institute of Mining and Metallurgy, fulfil the requirements of competent persons as defined in the JORC Code (2012) and accept responsibility for the qualified persons' report and the JORC Code (2012) categorisation of the Mineral Resource estimate as tabulated in the form and context in which it appears in this report.

The Ore Reserve Estimate has been compiled by Mr Michael Leak, Senior Consultant at Optiro and Member of the Australasian Institute of Mining and Metallurgy, under the direction of Mr Andrew Law, Director of Optiro and Fellow of the Australasian Institute of Mining and Metallurgy. Mr Andrew Law fulfils the requirement of a competent person as defined in the JORC Code (2012) and accepts responsibility for the qualified persons' report and the JORC Code (2012) categorisations of the Ore Reserve estimate as tabulated in the form and context in which they appear in this report.

Optiro has relied on the data, reports and information provided by CNMC; Optiro has nevertheless made such enquiries and exercised its judgement as it deems necessary and has found no reason to doubt the reliability of the data, reports and information which have been provided by CNMC.

Yours faithfully **OPTIRO** 

Andrew Law FAusIMM(CP), MAICD Director - Mining



Ian Glacken *FAusIMM(CP), FAIG, CEng* Director of Geology and Principal Consultant

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# **1. EXECUTIVE SUMMARY**

## 1.1. INTRODUCTION

The Sokor Project (the Project), located in Kelantan State in northern Peninsular Malaysia, is currently owned 81% by CNMC Goldmine Holdings Limited (CNMC) through its subsidiary CMNM Mining Group Sdn. Bhd. (CMNM). CMNM holds the rights to mine and produce gold, silver and base metals from an area of approximately 10 km<sup>2</sup> in the Ulu Sokor area in Kelantan. CNMC has defined three deposits in the southern part of the project area (Manson's Lode, New Discovery and Ketubong) and a fourth deposit (Rixen), approximately 3 km to the north of Ketubong. Additional gold mineralisation has been intersected at New Found, to the south of New Discovery. Base metal and silver mineralisation is also present at Manson's Lode and at Sg Among, to the east of Rixen.

Optiro Pty Ltd (Optiro) undertook site visits to the Sokor Project during December 2011 and June 2015 to review data for the Mineral Resource estimate and during October 2012 and June 2015 to review the mining operations for the Ore Reserve estimate. CNMC provided Optiro with the drillhole logging, assay and survey data, interpreted geological cross-sections and topographical data.

Optiro has been assisting CNMC with collation of the drillhole data, Mineral Resource and Ore Reserve estimates since 2012. During 2012, Optiro generated a validated drillhole database, three dimensional interpretations of the mineralisation and prepared updated Mineral Resource estimates for Manson's Lode, New Discovery, Rixen and Ketubong (Optiro, 2012 and 2013a). During 2013, CNMC drilled additional holes at Rixen and in 2014 Optiro updated the Mineral Resource estimates for Manson's Lode, Ketubong and Rixen deposits (Optiro, 2014a). Additional drilling was undertaken by CNMC during 2014 and updated estimates were prepared by Optiro for Rixen, Manson's Lode and New Discovery as at 31 December 2014 (Optiro, 2015a and 2015b). During 2015, CNMC drilled 69 diamond core holes at Rixen, Manson's Lode, New Discovery and New Found (to the south of New Discovery). Optiro has updated the Mineral Resource and Ore Reserves estimates for Rixen, Manson's Lode and New Discovery as at 31 December 2014 the Mineral Resource and Ore Reserves estimates for Rixen, Manson's Lode, New Discovery and New Found (to the south of New Discovery). Optiro has updated the Mineral Resource and Ore Reserves estimates for Rixen, Manson's Lode and New Discovery as at 31 December 2015.

Ore has been extracted by CNMC at Rixen since 2012 and at Manson's Lode and New Discovery during 2012. The Mineral Resource and Ore Reserve estimates have been depleted for all mining to 31 December 2015.

The Mineral Resource and Ore Reserve estimates for the Sokor Project have been prepared and classified in accordance with the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, December 2012 (the JORC Code 2012).

## **1.2.** MINERAL RESOURCE ESTIMATE

The gold mineralisation within the Sokor Project is lithologically and structurally controlled and is generally hosted in acid to intermediate volcanic rocks and in carbonate-rich rocks. The depth to the base of oxidation varies between deposits, from a shallow depth of less than 3 m at Ketubong to up to 60 m at Rixen. Previous mining of near surface, high grade ore has occurred at Manson's Lode and New Discovery and the pits have been backfilled with mineralised material of lower grades from these pits.

At Manson's Lode there are economic grade silver, lead and zinc assays in addition to gold that have been incorporated into the Mineral Resource model. At New Discovery, Ketubong and Rixen the silver and base metal concentrations are typically low. Exploration by CNMC has focussed on the definition of gold Mineral Resources and Ore Reserves at the Sokor Project; however, results from the drilling at Manson's Lode also include high zinc and lead grades.



Optiro interpreted the gold mineralisation at all deposits above a nominal 0.3 g/t gold cut-off grade. At Manson's Lode and New Discovery mineralisation was defined within backfilled material from previous mining and at New Discovery, Rixen and Ketubong a zone of mineralisation was interpreted within the alluvial/eluvial material overlying the bedrock. At Manson's Lode base metal mineralisation, external and additional to the gold mineralisation, was interpreted above a nominal 3% lead plus zinc (Pb+Zn) cut-off grade.

At New Discovery and Ketubong two types of mineralisation were interpreted within the bedrock: narrow zones of structurally controlled mineralisation within the north-south trending Ketubong-Rixen fault zone, and lithologically controlled mineralisation to the west of the fault zone which overlies the structurally controlled mineralisation. At Manson's Lode and Rixen the bedrock mineralisation has been interpreted to be lithologically controlled within one relatively flat zone at Manson's Lode and several east dipping zones at Rixen.

Block grades were estimated using an ordinary kriging technique with appropriate assay top-cuts applied for each deposit and style of mineralisation. The mineralisation has been classified as Measured, Indicated and Inferred in accordance with the guidelines of the JORC Code (2012). Bulk density values for each deposit and material type were calculated using measurements from 179 sections of diamond drill core and measurements of alluvial and backfilled material from 41 test pits.

Mining at Rixen during 2015 extracted 2,236 kt of ore for the production of 29,600 ounces of gold via heap leach extraction, which was ongoing as at 31 December 2015.

The New Discovery deposit is considered an inactive mining area at this time, with only small-scale trial mining undertaken on an ad hoc basis as part of an ongoing exploration and metallurgical testwork process. This activity was considered immaterial in terms of its impact on the New Discovery Ore Reserve. There was no mining at the Manson's Lode or Ketubong deposits during 2015.

## 1.3. MINERAL RESOURCE AND ORE RESERVE TABULATION

The Mineral Resource estimate, as at 31 December 2015, for the Sokor Project is reported in Table 1.1 below. This has been classified and reported in accordance with the guidelines of the JORC Code (2012) and has been depleted for mining at Manson's Lode (as at 2012), New Discovery (as at 2012) and Rixen to 31 December 2015. The Mineral Resources are reported above a 0.5 g/t gold cut-off grade at Manson's Lode and Ketubong, above a 0.4 g/t gold cut-off grade at New Discovery and above a 0.3 g/t gold cut-off grade at Rixen to reflect current commodity prices, operating costs and processing options. As at 31 December 2015, the total Measured, Indicated and Inferred gold Mineral Resource for the Sokor Project (above a 0.3 g/t gold cut-off grade at Rixen, a 0.4 g/t gold cut-off grade at New Discovery and a 0.5 g/t gold cut-off grade at Manson's Lode and Ketubong) is 13,830 kt at 1.4 g/t gold with 618,000 ounces of contained gold.

Gold mineralisation at Manson's Lode has associated silver and base metal mineralisation. Silver, lead and zinc Mineral Resources have been reported for Manson's Lode, both within the gold mineralisation, above a 0.5 g/t gold cut-off grade, and also external to the gold mineralisation, above a cut-off of 3% lead and zinc (Table 1.1).

The total Measured, Indicated and Inferred gold resources for the Sokor Project, previously reported in December 2014, were 10,810 kt at 1.5 g/t gold, with contained gold of 506,000 ounces; this represents an increase of 22% in contained gold in the December 2015 Mineral Resource. The Manson's Lode Mineral Resource also contains silver, lead and zinc; namely 1,210 kt with an average grade of 44 g/t silver, 1.7% lead and 1.6% zinc. This represents increases of 15%, 67% and 51% in contained silver, lead and zinc respectively over the December 2014 totals. The Mineral Resource figures discussed above include material which has subsequently been modified to produce Ore Reserves.

		Gross attributable to licence			Gross attributable to CNMC			
Category	Mineral type	Tonnes (millions)	Grade (Au g/t, Ag g/t, Pb%, Zn%)	Contained metal (Au koz, Ag koz, Pb t, Zn t)	Tonnes (millions)	Grade (Au g/t, Ag g/t, Pb%, Zn%)	Contained metal (Au koz, Ag koz, Pb t, Zn t)	Change from previous update (%)
Measured	Gold	0.56	3.1	56	0.46	3.1	45	-2%
Indicated	Gold	7.14	1.3	297	5.78	1.3	241	+4%
Inferred	Gold	6.13	1.4	265	4.95	1.4	215	+63%
Total	Gold	13.83	1.4	618	11.18	1.4	501	+22%
Measured	Silver	0.33	63	674	0.27	63	546	+2%
Indicated	Silver	0.17	73	398	0.14	73	322	+10%
Inferred	Silver	0.71	28	645	0.57	28	522	+36%
Total	Silver	1.21	44	1,717	0.98	44	1,391	+15%
Measured	Lead	0.33	1.7	5,632	0.27	1.7	4,562	+1%
Indicated	Lead	0.17	1.7	2,925	0.14	1.7	2,370	+11%
Inferred	Lead	0.71	1.7	12,245	0.57	1.7	9,918	+188%
Total	Lead	1.21	1.7	20,802	0.98	1.7	16,850	+67%
Measured	Zinc	0.33	1.7	5,535	0.27	1.7	4,483	+1%
Indicated	Zinc	0.17	2.0	3,299	0.14	2.0	2,672	+8%
Inferred	Zinc	0.71	1.5	10,781	0.57	1.5	8,733	+142%
Total	Zinc	1.21	1.6	19,615	0.98	1.6	15,888	+51%

Table 1.1	Sokor Project – Mineral Resource statement as at 31 December 2015 (inclusive of Ore Reserves)
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Note: Inconsistencies in totals are due to rounding

The additional drilling during 2015 at Rixen, Manson's Lode and New Discovery extended the Indicated and Inferred Mineral Resources at the three deposits. Silver, lead and zinc Mineral Resources have been defined at Manson's Lode, and the additional 2015 drilling has increased these Mineral Resources down-dip to the south-east. Confidence in the Rixen resource has improved, but discrepancies in the drillhole collar elevations need to be resolved before Measured Mineral Resources can be defined.

In reporting the 2015 Ore Reserves in Table 1.2, it should be noted that the tabulated Mineral Resource has been reported '*exclusive*' of and additional to Ore Reserves, as at 31 December 2015. This means that there will be material tabulated in Table 1.1 which is neither reported as Mineral Resource nor Ore Reserve in Table 1.2; for instance, material which falls within the final pit, but which is below the reserve cut-off grade. Thus it is not possible to add the Ore Reserves and Mineral Resources in Table 1.2 together to produce the total Mineral Resources in Table 1.1. Moreover, the Ore Reserves include factors for ore loss and dilution which, by convention, have not been applied to the Mineral Resources.

All Ore Reserves have been reported in accordance with the JORC Code (2012). Previously, Ore Reserves at Manson's Lode and New Discovery had been stated in accordance with the 2004 JORC Code. The reason for the split in reporting Ore Reserves between the 2004 and 2012 JORC Code versions previously was that only Rixen has been actively mined and no material changes had occurred to the resource or mine design for New Discovery or Manson's Lode. Whilst no mining took place on these deposits during 2015, the cost inputs are now better understood and a revised pit optimisation and design has been undertaken. This update needed to be reported in accordance with the 2012 JORC Code.



Table 1.2

Combined Sokor Project Ore Reserves (Manson's Lode, New Discovery and Rixen) and Mineral Resources (at Ketubong and in addition to Ore Reserves at Manson's Lode, New Discovery and Rixen) as at 31 December 2015

		Gross attributable to licence			Gross attributable to CNMC			
Category	Mineral type	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Change from previous update (%)
			C	Ore Reserves				
Proved	Gold	327	3.68	39	262	3.68	31	+73
Probable	Gold	4,781	1.14	183	3,864	1.14	148	+12
Total	Gold	5,107	1.07	222	4,127	1.07	179	+19
			Additiona	al Mineral Reso	ources			
Measured	Gold	210	2.8	29	170	2.8	23	-30%
Indicated	Gold	2,346	1.5	144	1,900	1.5	117	+25%
Inferred	Gold	6,166	1.4	279	4,994	1.4	226	+126%
Total	Gold	8,722	1.2	311	7,065	1.2	252	+11%

## 2. INTRODUCTION

CNMC Goldmine Holdings Limited, through its subsidiary CMNM Mining Group Sdn. Bhd., holds an 81% interest in the Sokor Project (Figure 2.1). CMNM holds the rights to mine and produce gold, silver and base metals from an area of approximately 10 km<sup>2</sup> in the Ulu Sokor area in Kelantan, Malaysia. CNMC listed on the Catalist Board of the Singapore Exchange (SGX-ST) by way of an Initial Public Offering on 28 October 2011.

Optiro has prepared this report to document the update to the Mineral Resource estimates and Ore Reserves in support of the planned 2015 Annual Report, and to provide a market update on Mineral Resources and Ore Reserves as at 31 December 2015, as required under the mineral, oil and gas guidelines of the SGX-ST.

CNMC has defined three deposits in the southern part of the Sokor Project area (Manson's Lode, New Discovery and Ketubong) and a fourth deposit (Rixen), approximately 3 km to the north of Ketubong (Figure 2.1). Additional gold mineralisation is present at New Found, to the south of New Discovery, and additional base metal mineralisation is present at Sg Among, to the east of Rixen: at present there is insufficient data to define Mineral Resources within these areas.

During 2015, CNMC drilled an additional 69 holes for 7,700.6 m at Rixen, Manson's Lode, New Discovery and New Found. The Mineral Resource estimates have been updated for Rixen, Manson's Lode and New Discovery. The Ketubong Mineral Resource estimate was not updated.

Exploration by CNMC has focussed on the definition of gold Mineral Resources and Ore Reserves at the Sokor Project. Results from the drilling at Manson's Lode included high zinc and lead grades and the Mineral Resources defined for silver, lead and zinc at this deposit have been included in the formal reporting of the Mineral Resources for the Sokor Project.

Ore was extracted at Rixen during 2015 and the Mineral Resource and Ore Reserve estimates have been depleted for mining to 31 December 2015. All of the Mineral Resources and Ore Reserves have been classified and reported in accordance with the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, December 2012 (the JORC Code, 2012).

During 2015, no mining activities took place at Manson's Lode or at New Discovery. A change to cost inputs has warranted a revised pit optimisation and design to be undertaken, and this update and reporting of the revised pit optimisations and designs is in accordance with the 2012 JORC Code.







#### 2.1. COMPETENT PERSONS

Behre Dolbear Australia Pty Ltd (BDA) has assisted CNMC with reviews of exploration procedures and Mineral Resource and Ore Reserve estimation (BDA, 2011a and 2011b). The property description, history of the property, exploration data and procedures, mining and processing, infrastructure, environmental and community issues, life of mine production schedule and capital and operating costs have previously been documented by BDA in August and November 2011 (BDA, 2011a and 2011b).

# Ôptiro

Mrs Christine Standing of Optiro undertook a site visit to the Sokor Project on 7 and 8 December 2011 to review data for the Mineral Resource estimate; Mr George Brech of BDA assisted Optiro during the site visit. Mr Andrew Law of Optiro undertook a site visit to the Sokor Project between 16 and 18 May 2012 to review the mining operations for the Ore Reserve estimate. Mrs Christine Standing visited the Sokor Project again during 1 to 5 June 2015 to inspect the Sokor mine site, drilling procedures, drillhole core and the sampling and logging procedures and Mr Andrew Law undertook a site visit on 4 and 5 June 2015 to review the mining operations.

The Mineral Resource estimate has been prepared by Mrs Christine Standing and reviewed by Mr Ian Glacken. Mr Glacken, Director of Optiro and Fellow of the Australian Institute of Mining and Metallurgy, and Mrs Standing, Principal of Optiro and Member of the Australasian Institute of Mining and Metallurgy, fulfil the requirements of competent persons as defined in the JORC Code (2012) and accept responsibility for the qualified persons' report and the JORC Code categorisation of the Mineral Resource estimate as tabulated in the form and context in which it appears in this report. Optiro has relied on the data, reports and information provided by CNMC; Optiro has nevertheless made such enquiries and has exercised its judgement as it deems necessary and has found no reason to doubt the reliability of the data, reports and information which have been provided by CNMC.

Mrs Christine Standing [BSc (Hons) Geology, MSc (Min Econs), MAusIMM, MAIG] is a geologist with over 30 years' worldwide experience in the mining industry. She has six years' experience as an exploration geologist in Western Australia and over 20 years' experience as a consultant specialising in resource estimation, reconciliation, project management and statutory and competent persons' reporting on worldwide projects for a range of commodities. She has acted as a Qualified Person and Competent Person for gold, silver, copper, mineral sands, nickel, chromium, kaolin and PGEs.

Mr Ian Glacken [BSc (Hons) Geology, MSc (Mining Geology), MSc (Geostatistics), Grad. Dip (Comp), FAUSIMM (CP), FAIG, CEng, MIMMM, DIC] has 33 years worldwide experience in the mining industry. Ian is a geologist with postgraduate qualifications in geostatistics, mining geology and computing. Mr Glacken has over 16 years' experience in consulting, including a decade as Group General Manager of a major consulting organisation. He has worked on mineral projects and given over 200 training courses to thousands of attendees on every continent apart from Antarctica. Mr Glacken's skills are in resource evaluation and due diligence reviews, public reporting, training and mentoring, quantitative risk assessment, strategic advice, geostatistics, reconciliation, project management, statutory and competent persons' reporting and mining geology studies. Ian was a founding Director of Optiro.

The Ore Reserve Estimate has been compiled by Mr Michael Leak, Senior Consultant at Optiro and Member of the Australasian Institute of Mining and Metallurgy, under the direction of Mr Andrew Law, Director of Optiro and Fellow of the Australian Institute of Mining and Metallurgy. Mr Leak and Mr Law fulfil the requirements of competent persons as defined in the JORC Code and accept responsibility for the qualified persons' report and the JORC Code categorisation of the Ore Reserve estimate as tabulated in the form and context in which it appears in this report.

Mr Andrew Law [HND MMIN, MBA, FAusIMM (CP), FIQA] is a mining engineer with over 30 years' experience in the mining industry in Australia, Africa and South America. His extensive technical and management experience ranges from deep level underground mining environments (bulk and narrow vein) to large open pit environments (across multiple commodities) and to large mineral sands dredging environments. His specialist skills are in corporate strategic business planning and due diligence, management of feasibility studies, operational optimization, Ore Reserve compliance and auditing (ASX, TSX, SEC, SGX, JSE), corporate management, mentoring and performance improvement reviews.



Mr Michael Leak [BEng Mining (Hons), MAusIMM (CP)] is a mining engineer with over 15 years' experience in both open pit and underground operations in Australia, Africa and Europe. He has experience in a range of commodities, including gold, copper, nickel, tin and lead-zinc and his skills are in operational management, due diligence, Ore Reserves, feasibility studies, mine planning and financial analysis.

#### 2.2. STATEMENT OF INDEPENDENCE

Optiro is an independent consulting and advisory organisation which provides a range of services related to the minerals industry including, in this case, independent geological Mineral Resource and Ore Reserve estimation services, but also corporate advisory, mining engineering, mine design, scheduling, audit, due diligence and risk assessment assistance. The principal office of Optiro is at 16 Ord Street, West Perth, Western Australia and Optiro's staff work on a variety of projects in a range of commodities worldwide.

This report has been prepared independently and to meet the requirements of the SGX minerals, oil and gas guidelines and in accordance with the VALMIN and JORC Codes. The authors do not hold any interest in CNMC, its associated parties, or in any of the mineral properties which are the subject of this report. Fees for the preparation of this report are being charged at Optiro's standard rates, whilst expenses are reimbursed at cost. Payment of fees and expenses is in no way contingent upon the conclusions drawn in this report.

# **3. PROPERTY DESCRIPTION**

#### 3.1. PROJECT LOCATION

The Sokor Project is located approximately 80 km southwest of Kota Bharu, the capital of Kelantan State in northern Peninsular Malaysia (Figure 3.1). The project is accessed by a sealed road from Kota Bhara to Kampong Bukit, which is approximately 18 km from site, and then by gravel track from Kampong Bukit to site. Kota Bharu is connected to Kuala Lumpur by a 55 minute flight. The nearest town, Tanah Merah, is located approximately half way between the project site and Kota Bharu.

The Sokor Project is situated in the upper catchment of the Sungai Sokor River, where topography consists of moderately steep hill ridges and narrow valleys, with elevations ranging from 200 m to 900 m above sea level. The project area experiences a hot, tropical monsoonal climate with dense tropical rainforest vegetation cover. Annual rainfall in Kelantan State averages between 2,000 mm and 2,500 mm, with November to January being the wettest months.

#### 3.2. PROJECT OWNERSHIP AND STATUS

The Sokor Project consists of a Mining Licence (ML 2/2008) covering approximately 10 km<sup>2</sup> (known as the "Sokor Block") and an Exploration Licence (EL 2/2006) approximately 62.8 km<sup>2</sup> (known as the "Sokor Gold Field Project"). CNMC was granted mining rights on 8 April 2008 for a period of 10 years to the Sokor Block and the granting of the first right of refusal for a 21 year mining rights renewal extension.

The Corporate income tax rate in Malaysia is 25%. A gold royalty of 5% of gross revenue is payable to the Kelantan State Government (KSG) and an additional tribute payment of 3% of gross revenue is payable to the Kelantan State Economic Development Corporation (KSEDC). Mining approval was obtained from KSG in January 2010 and allows for initial mine production of up to 300,000 tpa of ore.

Environmental approval was obtained from KSG in April 2010. Environmental approvals for the project included the submission of an Environmental Impact Assessment (EIA) in January 2008 and a supplementary EIA report in March 2009 with approval received in June 2009. An Environmental Management Plan (EMP) was submitted in February 2010 and an EMP Additional Information report

submitted in March 2010, with approval received in April 2010. The EIA and EMP include approval for both heap leach and pond (vat) leach processing of gold ore at the Sokor mine site. Where possible CNMC will progressively rehabilitate disturbed areas and some areas, such as the process plant, will be rehabilitated when the mine is closed and the plant is decommissioned.



#### Figure 3.1 Sokor project area and location of Mining Licence and Exploration Licence (BDA, 2011a).

CNMC, through its subsidiary CMNM Mining Group Sdn. Bhd., holds an 81% interest in ML 2/2008. The KSG holds a 10% share and other investors in Kelantan State hold the remaining 9% (Table 3.1). The 19% interest not held by CNMC is a non-contributory share during exploration and mine development and production stages. Exploration Licence EL 2/2006 has expired and is in the process of being renewed by CNMC through its subsidiary MCS Mining Group Sdn. Bhd. The location and exact area of EL 2/2006 will be dependent on availability of and access to land surrounding the Sokor Block.

Tenement ID	CNMC Interest	Status	Expiry date	Area km <sup>2</sup>	Type of mineral deposit	Remarks
ML 2/2008	81%	Development	7/4/2018	10.0	Gold	Mining rights
EL 2/2006	80%	Exploration	Application for renewal submitted	62.8	Gold	Exploration rights

## 4. HISTORY OF THE PROPERTY

The earliest recorded exploration in the Ulu Sokor area was undertaken by Duff Development Company Limited in the early 1900s and included trenching and the development of numerous shafts and adits.

Between 1966 and 1970 Eastern Mining and Metals Company (EMM) undertook a drilling programme at Ulu Sokor, consisting of 104 holes totalling 2,963 m. EMM reported primary base metal mineralisation of 227,000 t, with gold grades ranging from 1.94 g/t to 3.33 g/t gold and oxide mineralisation of 156,000 t, with gold grades ranging from 2.85 g/t to 5.34 g/t gold.

Between 1989 and 1991 Asia Mining Sdn Bhd (Asia Mining) conducted mapping, soil sampling, rockchip sampling and completed a drilling programme consisting of 55 holes totalling 2,705 m. From 1995 to 1996 Asia Mining operated a heap leach facility that processed around 40,000 t of nearsurface gossan ore from the Manson's Lode area and produced approximately 3,200 oz of gold. Asia Mining delineated a gold resource in the Rixen area totalling 4.1 Mt at 1.2 g/t gold above a cut-off grade of 0.5 g/t gold.

During 1997 and 1998 TRA Mining (Malaysia) Sdn Bhd (TRA) conducted geological mapping, rock chip and stream sediment sampling and completed a reverse circulation (RC) drilling programme consisting of 33 holes totalling 2,630 m. The TRA drilling was undertaken within the Manson's Lode and New Discovery areas.

CNMC commenced exploration in 2007, focusing on the known areas of mineralisation at Manson's Lode, New Discovery, Ketubong and Rixen. CNMC has conducted geological mapping, soil sampling, Induced Polarisation geophysical surveys and diamond drilling programmes, and has excavated 27 trenches. Diamond drilling has been undertaken at Manson's Lode, New Discovery, Ketubong and Rixen and has tested areas to the east of Rixen, at Sg Among, and to the south of New Discovery at New Found.

In July 2010, CNMC commenced commissioning of a 60,000 tpa vat leach facility and gold recovery plant. Initial ore production was sourced from the Manson's Lode deposit and in 2012, CNMC expanded production with the commissioning of the 70,000 tonne heap leach facility to treat ore from the Rixen deposit.

#### 4.1. **PRODUCTION STATISTICS**

Since CNMC commenced operations, there have been no comprehensive production records or reconciliation data collected. CNMC has advised Optiro of the production that has occurred between 2012 and 2015, which is summarised in Table 4.1.



Commodity	Production statistics	2012	2013	2014	2015
	Rixen				
Mined	Ore tonnes mined (claimed)	90,000	323,000	1,362,138	2,236,674
	Ore tonnes processed	90,000	386,000	1,362,138	2,236,674
	Ore stockpiled (not processed as at 31 December)	63,000	63,200	-	-
Gold	Calculated grade (g/t)	0.3	1.07	0.94	0.61
	Recovered gold (oz)	861	11,800	27,685	29,645
	New Discover	v			
Mined	Ore tonnes mined (claimed)	-	31,000	-	-
	Ore tonnes processed	-	31,000	-	-
Gold	Calculated grade (g/t)	-	1.14	-	-
	Recovered gold (oz)	-	1,100	-	-
Silver	Calculated grade (g/t)	-	N/A	-	-
	Recovered silver (oz)	-	690	-	-
	Manson's Lod	e			
Mined	Ore tonnes mined (claimed)	50,000	-	-	-
	Ore tonnes processed	46,791	-	-	-
Gold	Calculated grade (g/t)	0.65	-	-	-
	Recovered gold (oz)	984	-	-	-
Silver	Calculated grade (g/t)	75.00	-	-	-
	Recovered silver (oz)	112,451	-	-	-
Lead	Calculated grade (%)	0.003	-	-	-
	Recovered lead (kg)	1,397	-	-	-
Zinc	Calculated grade (%)	0.004	-	-	-
	Recovered zinc (kg)	1,752	-	-	-
	Total				
Mined	Ore tonnes mined (claimed)	140,000	354,000	1,362,138	2,236,674
	Ore tonnes processed	136,791	417,000	1,362,138	2,236,674
Gold	Calculated grade (g/t)	0.42	0.96	0.94	0.61
	Recovered gold (oz)	1,845	12,900	27,685	29,645
Silver	Calculated grade (g/t)	75.00	N/A	N/A	N/A
	Recovered silver (oz)	112,451	690	20,886	22,057
Lead	Calculated grade (%)	0.003	-	-	-
	Recovered lead (kg)	1,397	-	-	
Zinc	Calculated grade (%)	0.004	-	-	-
	Recovered zinc (kg)	1,752	-	-	-

#### Table 4.1Sokor production statistics for 2012 to 2015

# **5. GEOLOGICAL SETTING**

#### 5.1. REGIONAL GEOLOGY

The Sokor Project is located in the Central Belt of Peninsular Malaysia. Peninsular Malaysia is divided structurally into three north-south to northwest-southeast trending belts, the Eastern, Central and Western Belts. The Eastern and Western Belts are dominated by tin-bearing granites and associated tin and wolfram mineralisation.

The Central Belt consists of Permian to Triassic age metasediments including phyllite, slate, sandstone and limestone and felsic to intermediate volcanic rocks intruded by Late Triassic to Tertiary, acid to intermediate stocks and dykes. The Central Belt contains base metal mineralisation including copper, lead, zinc, antimony and manganese, and gold mineralisation.

The eastern (Lebir Fault) and western (Bentong-Raub Fault) boundaries of the Central Belt are major fault zones featuring dextral rotation and strike slippage of 5 km to 10 km. Known gold deposits in the Central Belt include Raub, Selinsing and Penjom, all located south of Ulu Sokor. The Sokor gold mineralisation is located towards the middle of the Central Belt and is associated with the

intersection of two major north-south trending structures with northeast to northwest trending secondary structures.

#### 5.2. LOCAL GEOLOGY

The gold mineralisation within the Sokor Project is lithologically and structurally controlled and is generally hosted in acid to intermediate volcanic rocks and carbonate-rich rocks. The depth to the base of oxidation varies between deposits from a shallow depth of less than 3 m at Ketubong to up to 60 m at Rixen. Previous mining (during the 1990s) of near surface, high grade ore has occurred at Manson's Lode and New Discovery and the pits have been backfilled with lower grade material from these deposits.

#### 5.2.1. RIXEN DEPOSIT

Gold mineralisation at the Rixen deposit is contained within acid volcanic rocks to the west of the Ketubong-Rixen fault. The deposit was defined initially by soil sampling and an Induced Polarisation survey which delineated an anomalous zone trending north-south with a strike length of approximately 800 m.

Drilling has outlined a zone of pervasively silicified tuffs and mineralisation extends over a strike of approximately 2,000 m. The Rixen deposit has been tested by 210 diamond drillholes totalling 23,014 m.

#### 5.2.2. MANSON'S LODE

The Manson's Lode deposit is located 3.5 km south of Rixen. Manson's Lode consists of a surface gossan after sulphides, partially replacing a silicified limestone unit which is intercalated with phyllitic sediments. The gold mineralised zone extends over a strike length of approximately 750 m, trending 060°, and is marked by old surface workings and a number of shallow shafts that have been excavated to depths of up to 30 m. The Manson's Lode deposit has been tested by 165 diamond drillholes totalling 9,977 m.

The average width of mineralisation exposed in trenches is 15 m, varying from a few metres to up to 34 m. The thickness of mineralisation is variable, ranging from 5 m to 20 m, and the dip of the mineralisation is shallow (10 to 15°) to the southeast. Trench mapping by CNMC suggests that the mineralisation is associated with a breccia zone. A quartz porphyry dyke which is exposed to the southeast of Manson's Lode may be a causative intrusion for the base metal-gold mineralisation. The dyke contains pyrite mineralisation as disseminations and veinlets, with rock chips returning grades of 0.5 g/t to 0.7 g/t gold. The base metal mineralisation has the same strike and dip as the gold mineralisation and extends along strike to the north-east and down-dip to the south-east, external to the gold mineralisation. Much of the surface area has been disturbed by previous mining activity and hence the relationship between the different rock types is not clear.

#### 5.2.3. NEW DISCOVERY DEPOSIT

The New Discovery deposit is located approximately 500 m west-northwest of Manson's Lode. Gold mineralisation is associated with the Ketubong-Rixen fault that runs through the central part of the concession area. The mineralisation has been defined by surface trenching over a strike length of 200 m. Trench exposures indicate mineralised widths of 7 m to 35 m, trending 010° with a dip of approximately 30° to the east. In the north, the mineralised zone appears to be displaced to the west by a northwest trending fault.

The deposit has been drilled down-dip to a depth of 200 m from surface and generally remains open at depth. The New Discovery deposit has been tested by 83 diamond drillholes totalling 6,664 m.

Based on trench mapping, mineralisation consists of gold in association with weak stockwork and disseminated pyrite hosted in sheared and brecciated phyllite and in an adjacent limestone unit. The phyllite is generally strongly altered close to the fault zone, with pervasive sericite-chlorite-epidote alteration, silicification and carbonate veining.

#### 5.2.4. KETUBONG DEPOSIT

The Ketubong deposit is located approximately 600 m to the northwest of Manson's Lode and immediately north of New Discovery. Ketubong represents the northwards continuation of the north-south trending and easterly dipping mineralisation present in New Discovery. Mineralisation dips to the east at around 20° to 30°.

The deposit has been delineated by trenching and drilling over a strike length of 680 m and by goldin-soil and Induced Polarisation anomalies which are open to the north. Mineralisation is contained within highly folded phyllite and intercalated limestone over widths of 2 m to 40 m, based upon trench exposures. Interpretation of trench mapping indicates the gold is associated with disseminated-stockwork quartz-sulphide mineralisation and more massive sulphide, consisting predominantly of pyrite with minor, sporadic galena, chalcopyrite and sphalerite. Drilling data indicates the mineralisation is closely associated with a limestone unit within phyllite.

CNMC has tested the Ketubong deposit with 47 diamond drillholes totalling 7,967 m. Drilling was not undertaken at Ketubong during 2015, and the mineralisation interpretation and Mineral Resource estimate has not been updated.

# 6. EXPLORATION DATA USED FOR MINERAL RESOURCE ESTIMATION

BDA previously documented outcomes from its review of CNMC's exploration and data collection procedures on site, inspection of surface trenches, drill sites and drill core and review of drillhole logging, survey, bulk density testing, sampling and data quality procedures (BDA, 2011a and 2011b). From BDA's documentation and Optiro's site visit observations and review and validation of the drilling data used for the Mineral Resource estimate, Optiro considers that the drilling, logging, sampling and assaying procedures, as discussed below, are appropriate and in accordance with industry standards. In Optiro's overall opinion, the geological database forms an appropriate and reasonable basis for resource estimation.

#### 6.1. DRILLING

The four Sokor deposits (Manson's Lode, New Discovery, Ketubong and Rixen) have been evaluated by both surface trenches and diamond core drilling. Diamond drilling was completed on all four deposits using a combination of inclined and vertical drillholes on drill sections oriented normal to the strike of the mineralisation. Only the data from the CNMC diamond drillholes has been used for resource estimation. A total of 529 diamond drillholes for 50,819 m have been drilled at the Sokor Project for Mineral Resource definition.

CNMC provided the geological logs, assay data and survey data to Optiro as a series of Excel spreadsheets. Optiro consolidated this data and generated a drillhole database using Datamine mining software. CNMC provided the assay certificates for 162 of the drillholes for the 2011 Mineral Resource, for all 16 drillholes used for the 2012 update to the Rixen Mineral Resource estimate, for 69 of the 76 drillholes provided for the 2013 Mineral Resource update and for 96 of the holes drilled during 2014. During 2015, CNMC purchased Datamine software and updated the database with the data from the 2015 drilling programme. Optiro validated the 2015 data captured by CNMC against the drillhole logs and data from the laboratory; minor inconsistencies were remedied following discussion with CNMC.

## 6.2. SURVEY DATA

CNMC has completed a topographic survey over a 7 km<sup>2</sup> area covering the four deposits; this local detailed survey has been tied into the Malaysian National Grid (MNG) using a number of MNG survey control points. This survey work was carried out using electronic distance measurement (EDM) and from this data a digital terrain model (DTM) was produced.

Drillhole collars have been surveyed using EDM equipment. Comparison of the 2015 drillhole collars with the DTM revealed that many of the drillhole collar elevations were significantly different from the DTM. At Rixen there are differences of up to 20 m between the drillhole collar elevation and the DTM, with over 45% of the drillhole collar elevations having a difference of greater than 3 m from the DTM. At Manson's Lode four of the nine holes drilled during 2015 have differences of more than 3 m, and a maximum difference of 12 m, between the between the drillhole collar elevation and the DTM. At New Discovery 50% of the of the holes drilled during 2015 have differences of more than 3 m, and a maximum difference of 12.6 m, between the between the drillhole collar elevation and the DTM.

These elevation differences were discussed with CNMC, who advised which drillholes were located in areas where material was moved subsequent to the topographical survey. Optiro adjusted the drillhole collar elevations of drillholes outside these areas to the DTM and took account of this data mismatch in the classification of the Mineral Resource.

The 2015 drillholes were surveyed using industry standard downhole survey equipment at approximately 50 m intervals. For the drillholes used for Mineral Resource definition, dip deviations average less than 0.2° with a maximum of 5°, and azimuth deviations average 1° with a maximum deviation of 20°.

Mining at Rixen was undertaken during 2015, and a pit survey was conducted in early 2016.

#### 6.3. LOGGING, SAMPLING AND SAMPLE PREPARATION

Drillhole cores are logged for lithology, weathering, alteration, structure, mineralisation and geotechnical data, including core recovery, RQD (rock quality designation) and fracture frequency measurements.

All drill core is photographed using a digital camera and potentially mineralised core is marked up for sampling. Sample intervals selected for analysis from the 2015 drillholes are between 0.18 m and 3.42 m, with an average sample interval of 1.29 m.

Systematic logging of oxidation boundaries (base of oxide and base of transitional) was introduced by CNMC for the 2011 exploration programme and oxidation was recorded as a separate field in the 2012 core logging. This practice was not continued during 2013 but was reinstated during 2014: the geological logs for all 2014 and 2015 drillholes recorded oxidised, transition and fresh material.

Half core samples were selected for analysis, with quarter core samples used for quality assurance/quality control (QA/QC) analysis. Prior to 2012, sample preparation was undertaken at the ALS Group Laboratory in Perth, Australia and the samples collected from 2012 to 2015 were prepared by SGS (Malaysia) Sdn. Bhd. laboratory, Malaysia. Sample weights range from 1 kg to 3 kg. Samples are dried, crushed to 6 mm and the whole sample is pulverised to 85% passing 75 microns. A pulp sample of 200 g is split for assay and the pulp reject bagged and retained.

#### 6.4. SAMPLE SECURITY

Exploration samples were selected, bagged and labelled by site geologists at Sokor and placed in sealed cartons for transport to the assay laboratory. The samples were stored at the Sokor exploration office in the sample storage area, prior to dispatch to the laboratory and the camp was patrolled day and night by security personnel.



During 2015, each batch of samples was transported to the SGS (Malaysia) Sdn. Bhd. laboratory, at Port Klang, Malaysia, by an employee of CNMC. The assay laboratory confirmed that all samples were received and that the cartons had not been damaged.

#### 6.5. ASSAYING

Gold analyses at all four deposits were by 30 g fire assay with atomic absorption spectrometry (AAS) finish, having a detection limit of 0.01 g/t gold. Prior to 2012, sample analysis was undertaken at the ALS Group Laboratory in Perth, Australia; samples from the 2012 to 2015 drilling programmes were analysed by SGS (Malaysia) Sdn. Bhd. Laboratory. Samples from 16 of the 2013 drillholes were assayed using a 50 g fire assay charge.

Samples from Manson's Lode are routinely analysed for Au, Ag, Cu, Pb and Zn. Prior to 2012, Ag, Cu, Pb and Zn were analysed at the ALS Group Laboratory in Perth, Australia by four acid digest and ICP Atomic Emission Spectrometry (ICPAES). The samples from the 2012 to 2015 drilling programmes were analysed by SGS (Malaysia) Sdn. Bhd. laboratory by four acid digest followed by AAS. At New Discovery, Ketubong and Rixen, silver and base metal concentrations are low and after initial analysis to establish this, samples were analysed for gold only.

#### 6.6. QUALITY ASSURANCE/QUALITY CONTROL

CNMC's QA/QC protocols for the 2015 drilling programme included the insertion of standard, duplicate and blank samples with the samples sent to SGS (Malaysia) Sdn. Bhd. laboratory and interlaboratory duplicate samples (of pulps) were submitted to ALS Group Laboratory in Perth, Australia.

For the 2015 drilling programme, a standard sample and a blank sample have been submitted with the samples from each drillhole and for drillholes with more than 40 samples, two standards have been included: this is above the industry standard rate, which is to be commended. A total of 70 standard samples have been analysed and over 90% of the results are within three standard deviations of the expected certified value. No sample bias is evident and results indicate good accuracy of the analysis.

A total of 67 blank samples were submitted with the 2015 drill samples: only two values are above 0.1 g/t gold. The results indicate good sample preparation with little sample contamination.

Over 200 duplicate samples (18% of the samples) have been analysed by SGS (Malaysia) Sdn. Bhd. laboratory and by the umpire laboratory, ALS Group Laboratory. This is considerably higher than the industry standard rate of 1 in 25 samples. The sets of original and duplicate results have a high correlation and indicate a good level of precision of the assay data.

#### 6.7. BULK DENSITY

Bulk density measurements are made on selected core samples of approximately 0.2 m in length using the water immersion method (weighing in air and water). Samples are dried before measurement. Bulk density values for each deposit and material type were calculated using measurements from 179 sections of diamond drill core (including 62 measurements obtained during 2015) and of alluvial/eluvial and backfill material from 41 test pits.

# 7. MINERAL PROCESSING AND METALLURGICAL TESTING

#### 7.1. PROCESSING

CNMC engaged Changchun Gold Research Institute (CGRI) to carry out process testwork in 2008 and to design a process for recovery of gold and silver from the Sokor ore. A vat leaching plant was constructed on site in early 2010 and operations commenced in July 2010. During 2013, vat leaching

operations continued on a minimal scale with ore from the New Discovery deposit being batch treated.

During 2012, the processing capability of the Sokor Project was increased with the construction and commissioning of a trial 70 kt heap leach facility to treat the ore from Rixen. The heap leach process was commissioned and declared operational during January 2013 and has continued to operate throughout 2013, 2014 and 2015, with ore being supplied solely from the Rixen deposit. Heap leach recoveries ranged from 66% to 69% during the year, with the average recovery being 67% for 2015.

#### 7.1.1. METALLURGICAL TESTWORK

During 2013, CNMC carried out further metallurgical testwork in the following areas:

- gravity gold recovery and heap leaching of Manson's Lode backfill ore
- mineralogical analysis on polymetallic Manson's Lode ore for selection of a process route
- mineralogical and leaching testwork on primary ore from New Discovery and Ketubong.

Metallurgical testwork is ongoing as part of the current operations, with the results being applied to the leaching processes as required to ensure that the operational parameters remain appropriate for the anticipated variations in ore characteristics across the various deposits.

#### 7.1.2. PLANT DESIGN

CNMC is currently using a combination of heap and vat leaching processes. The heap leach was the predominant processing method used during 2015.

The heap leaching process being used by CNMC features standard heap leaching practices, with fresh ore remaining on the leach pad for a residence time of between 30 and 45 days before it is regarded as being barren. Pregnant leach solution is subsequently stripped of leached gold via a standard elution and electrowinning process, with gold recoveries in the order of 67% being achieved during 2015. The barren heap leach material is then removed from the heap pad to a tailings storage area, which is then progressively rehabilitated during the year.

The vat leaching plant comprises the following equipment:

- a 50 t per hour crushing plant which includes a jaw crusher, a secondary impact crusher and a 10 mm vibrating screen to split the secondary crusher product into plus and minus 10 mm material
- three concrete leaching vats, each with a capacity of 1,500 t of ore
- pregnant, barren and raw water ponds
- eight activated carbon columns set up in two trains of four columns
- a gold room comprising an acid wash tank and an elution column, each with a capacity of 1 t of carbon
- a 1,000 kg carbon/day diesel-fired carbon regeneration furnace
- a pressurised electrowinning cell.

Crushed ore is trucked about 150 m to the leaching vats and loaded into the vats using excavators. Barren solution is pumped into the vat to saturate the ore and allow it to soak. The pregnant solution is then drained from the vat into the pregnant solution pond. Pregnant solution is pumped through the carbon columns, an estimated 97% of the contained gold is captured on the carbon and the solution discharging from the columns is recirculated to the barren pond, from where it is pumped back to the vat. The loaded carbon for both the heap leach and vat processes is transferred to the gold room for acid washing, elution and regeneration prior to recirculation to the adsorption columns. Eluate from the elution stage is circulated through an electrowinning process to produce a gold sludge which is dried and smelted to produce gold doré.



# 8. MINING

#### 8.1. MINING METHODS

The deposits at the Sokor Project are suited to conventional open pit mining methods, the primary reasons being:

- the deposits virtually outcrop with limited overburden
- the deposits dip at roughly 35° to 40°, which allows one wall of the pit to follow the footwall (minimal waste dilution)
- there are multiple parallel lenses that fall within the pit boundaries, resulting in low stripping ratios
- the width and dip of the ore zones and the dip would be problematic for underground extraction.

#### 8.2. PIT OPTIMISATION

#### 8.2.1. PROCESS

NPV Scheduler was used to determine the optimum pit limits. This program uses the input parameters of costs and revenues and applies these via an algorithm to create a series of "nested" pit shells, which are evaluated to find the shell with the highest NPV.

#### 8.2.2. COSTS

Site costs were provided by CNMC for the past two years of production. The total costs were back calculated into unit costs (\$/t) for use in the optimisations. It is understood that silver credits are used by CNMC to reduce the overall cost of gold production, and as such the revenue from silver was added to the CNMC provided costs. Additionally, it is understood that the CNMC costs reported to Optiro do not contain the final rehabilitation costs and these have been added back on based on known costs of similarly sized, geographically similarly located operations.

#### 8.2.3. DILUTION AND RECOVERY

The ore zones at Sokor have reasonable width and are in an orientation amenable to good recovery through open pit mining. As such, dilution and recovery of the ore zone were estimated at 5% and 95% respectively.

#### 8.2.4. GEOTECHNICAL

The geotechnical parameters on which the optimisation and subsequent design were undertaken were based on current operating practices for the Rixen pit. For Rixen, the slope angles used were:

- 40° for oxide material
- 42° for transitional material
- 45° for fresh rock.

At Manson's Lode and New Discovery an overall slope angle of 42° was used.

#### 8.2.5. OPTIMISATION INPUTS

#### Table 8.1 Optimisation input parameters

Item	Units	Amount	Comment
Overall slope angle - Rixen			
Oxide material	deg	40	Ovidation states have not been logged at
Transitional material	deg	42	New Discovery and Manson's Lode, hence
Fresh material	deg	45	one overall wall angle which roughly
			annrovimates the Riven average slone angle
Overall slope angle* – New Discovery	deg	42	was used
Overall slope angle* – Manson's Lode	deg	42	was useu
Production factors			
Dilution	%	5	
Mining recovery	%	95	
Ore processing limit	Mtpa	1.0	
Mining costs			
Mining cost - Rixen	US\$ /t	1.00	CNMC 2014 / 2015 data
Mining cost – New Discovery	US\$ /t	2.65	Optiro estimate
Mining cost – Manson's Lode	US\$ /t	3.38	Optiro estimate
Processing recovery			
Heap Leach	%	65%	CNMC 2014 / 2015 data
CIL	%	80%	Optiro estimate
Processing costs			
Heap Leach	US\$ /t ore	1.90	CNMC 2014 / 2015 data
CIL	US\$ /t ore	33.00	Optiro estimate
Administration and Royalty	US\$ /t ore	3.10	CNMC 2014 / 2015 data
Revenue			
Gold	US\$ / oz	1,100	

#### 8.3. MINE DESIGN

The mine design was undertaken using industry accepted parameters, in line with current site operating practices and based on a conventional, drill, blast, load and haul mining scenario.

#### 8.3.1. DESIGN PARAMETERS

#### Table 8.2 Mine design parameters

ltem	Units	Amount
Batter angles		
Oxide and Transitional	deg	60
Fresh rock	deg	75
Batter height	m	10
Berm width	m	5
Ramp width		
Dual lane	m	20
Single lane*	m	10
Minimum mining width	m	30

\* Single lane employed at bottom of pit and in small pits that do not warrant dual lane ramps



#### 8.3.2. PIT DESIGN

#### Figure 8.1 Final pit design - Rixen



Figure 8.2 Final pit design - New Discovery



Figure 8.3 Final pit design - Manson's Lode



#### 8.4. MINE SCHEDULE

The mine schedule was undertaken using NPV scheduler. The final pit design was imported into the optimisation package and merged with the surface topography to produce an ultimate mining surface. For Rixen, pushbacks were then created that:

- contained approximately 1 Mt of ore
- attempted to maintain similar stripping ratios.

Due to the small size of both the New Discovery and Manson's Lode pits, these were scheduled based on the final pit design, with no pushbacks.

#### 8.4.1. SCHEDULING STRATEGY

The mine schedule had three primary objectives:

- achieve approximately 30 koz recovered gold per annum
- smooth overall material movement as much as possible to keep stripping ratio constant
- prioritise Heap Leach sources (Rixen, then New Discovery) and leave the higher cost vat leach / Carbon in Leach processing (Manson's Lode pit) to the latter part of the schedule. This is consistent with the current site mining philosophy.

Note that no Inferred Mineral Resources have been included in the mine schedule; this is a conservative approach. Under the JORC Code (2012), Inferred Mineral Resources can be included as long as the financial viability of the operation does not depend upon their inclusion and mining.

#### 8.4.2. SCHEDULE OUTPUTS

The key outputs of the mining schedule are shown in Table 8.3.

Source	Unit	Total	Year 1	Year 2	Year 3	Year 4	Year 5			
			Rixen							
Waste	kt	15,083	2,927	2,807	3,546	5,803				
HL ore	kt	4,615	1,247	1,247	1,247	875				
HL ore grade	g/t	1.14	1.12	1.07	1.10	1.34				
Gold mined (HL)	koz	169.4	44.9	42.7	44.0	37.7				
	New Discovery									
Waste	kt	1,272				587	685			
HL ore	kt	349				115	234			
HL ore grade	g/t	3.31				3.10	3.42			
Gold mined (HL)	koz	37.2				11.4	25.7			
Manson's Lode										
Waste	kt	326					326			
CIL ore	kt	144					144			
CIL ore grade	g/t	3.40					3.40			
Gold mined (CIL)	koz	15.7					15.7			
		Soke	or Project - to	otal						
Waste	kt	16,681	2,927	2,807	3,546	6,390	1,011			
Total ore	kt	5,108	1,247	1,247	1,247	990	378			
HL ore	kt	4,964	1,247	1,247	1,247	990	234			
CIL ore	kt	144					144			
HL ore grade	g/t	1.3	1.12	1.07	1.10	1.54	3.42			
CIL ore grade	g/t	3.4					3.40			
Gold mined (HL)	koz	207	45	43	44	49	26			
Gold mined (CIL)	koz	16					16			
Gold mined	koz	222	45	43	44	49	41			

#### Table 8.3Mining schedule physicals

#### 8.5. MINING OPERATIONS

#### 8.5.1. MINING METHODS

The current mining method is conventional, drill and blast, load and haul in the open pit. The dip of the orebody (35° to 40°) aligns well with the conceptual overall pit slope. One wall of the pit has been designed to follow the footwall of the orebody.

#### 8.5.2. WORKFORCE

The current operating workforce comprises both CNMC employees and various contractors. Administration and technical services staff are employed directly by CNMC. CNMC endeavours to employ labour from the local communities as required.

#### 8.5.3. MINING FLEET

Due to the small volumes of material movement required, the pit is mined using a small fleet of machinery on a 24/7 operating basis. A number of back-hoe type excavators in the 60 to 120 tonne class are utilised in the mining of the ore and waste, as well as in the post-heap tails relocation and rehabilitation process. A mixed fleet of 10 wheel haul trucks and 30 tonne articulated haul trucks are used in the mining operations as required. Ancillary equipment for in pit work requirements, waste dump management and road maintenance is provided by a fleet of graders, dozers and front end loaders.

Drilling of blast holes is completed by a contractor and CNMC provides the blasting supervision.

# 9. RESOURCE AND RESERVE ESTIMATES AND EXPLORATION RESULTS

Only exploration data used for the Mineral Resource estimate has been reviewed by Optiro. Any additional exploration data obtained by CNMC, which is not within the Mineral Resource area at Manson's Lode, New Discovery, Ketubong or Rixen, has not been included in this report.

9.1. MINERAL RESOURCE

#### 9.1.1. INTERPRETATION

CNMC provided cross-sections of the mineralisation and geology interpreted from the geological logging and assay results from drillholes to the end of 2013. Optiro used the cross-sections to guide interpretation of the mineralisation at all deposits, using a nominal 0.3 g/t gold cut-off grade. At Manson's Lode base metal mineralisation, external and additional to the gold mineralisation, was interpreted using a nominal 3% lead and zinc (Pb+Zn) cut-off grade; this base metal interpretation encompasses the interpreted gold mineralisation. Interpretation of the 2014 and 2015 drillhole data by Optiro used the geological logs provided by CNMC and the assay data, and maintained a similar orientation to that interpreted by CNMC geologists prior to 2014. The mineralisation interpretations prepared by Optiro were reviewed by CNMC's geologist and adjustments were made to reflect field observations by CNMC.

At Rixen, the 2015 drilling extended the resource to the east and to the south. The Mineral Resource extends for 2,000 m along strike (north-south), 500 m across strike (east-west) and up to 200 m from surface. The resource interpretation for 2014 and the updated interpretation for 2015 are illustrated in Figure 9.1.



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At Manson's Lode the 2015 drilling extended the mineralisation interpretation for gold and base metals down-dip to the south-east. The Mineral Resource extends for 750 m along strike (northeast-southwest), 240 m across strike (southeast-northwest) and up to 120 m from surface. The resource interpretation for 2014 and the updated interpretation for 2015 are illustrated in Figure 9.2.

Figure 9.2 Manson's Lode – Mineral Resource interpretation as at 2014 (green) and 2015 (magenta) and drillholes (prior to 2015 green and 2015 red)



At New Discovery, the 2015 drilling extended the resource to the south and some additional mineralisation was intersected within the northern area. The Mineral Resource extends for 325 m along strike (north-south), 300 m across strike (east-west) and up to 180 m from surface. The resource interpretation for 2014 and the updated interpretation for 2015 are illustrated in Figure 9.3.

Figure 9.3 New Discovery – Mineral Resource interpretation as at 2014 (green) and 2015 (magenta) and drillholes (prior to 2015 green and 2015 red)



#### 9.1.2. DATA ANALYSIS

Data within the interpreted mineralisation was composited to 1.5 m downhole intervals and coded for material type (alluvial/eluvial, backfill, lithologically controlled or structurally controlled). Statistical analysis of the composited and coded gold values indicated that the data populations are positively skewed and top-cut values were therefore selected for each deposit and material type. Top-cuts were not applied to the eluvial mineralisation at Ketubong or the structurally controlled mineralisation at New Discovery. For the other material types top-cut values range between 9 g/t gold within the mineralisation at south Rixen and 25 g/t gold within the lithologically controlled mineralisation at New Discovery. These top-cuts affected the top 1% to 4% of the gold data.

At Manson's Lode, silver, lead and zinc grades were top-cut to 310 g/t Ag, 9% Pb and 2% Zn respectively within the backfill material and to 440 g/t Ag, 14% Pb and 17% Zn within the bedrock material. These top-cuts affected the top 1% to 4% of the data.

Mineralisation continuity was interpreted from variogram analyses to have an along strike range of 50 m to 115 m within the alluvial/eluvial and backfill material, and 75 m to 175 m within the bedrock mineralisation.

#### 9.1.3. GRADE ESTIMATION AND CLASSIFICATION

Block models were generated for each deposit using a block size of 10 mE by 10 mN on 2 m benches at Manson's Lode, New Discovery and Ketubong and 10 mE by 20 mN on 2 m benches at Rixen. Block grades were estimated using ordinary kriging techniques with appropriate top-cuts, as previously described, applied to each deposit and style of mineralisation.

The mineralisation has been classified as Measured, Indicated and Inferred in accordance with the guidelines of the Australian JORC Code (2012). Table 1 criteria of the JORC Code and supporting comments are listed in Appendix A. Areas with well-defined geological and grade continuity were classified as either Measured or Indicated and areas with close spaced drilling with higher estimation quality were classified as Measured. Areas with wide spaced drilling and/or poor grade continuity were classified as Inferred.



Average bulk density values for each deposit and material type were calculated using measurements from diamond drillholes and test pits. Bulk density values used for the 2015 Mineral Resource estimates were 1.85 t/m<sup>3</sup> for the backfill material at Manson's Lode, 2.2 t/m<sup>3</sup> for the eluvial and oxide material at New Discovery and Rixen, 2.89 t/m<sup>3</sup> for the transitional and fresh material at New Discovery, and 2.64 t/m<sup>3</sup> for the transitional and 2.66 t/m<sup>3</sup> for the fresh material at Rixen. At Manson's Lode there is a strong relationship between the sulphide mineralisation, in particular the silver, lead and zinc grades, and the bulk density. An ordinary multivariate least squares regression model between density and metal grade was developed and the following equation was used to determine the bulk density for the bedrock material at Manson's Lode:

The Ketubong Mineral Resource was not updated in 2015. Bulk density values used for the 2013 Mineral Resource estimate were 2.2 t/m<sup>3</sup> for the oxide material, 2.79 t/m<sup>3</sup> for the transitional and the fresh material at Ketubong.

#### 9.1.4. MINERAL RESOURCE TABULATION

The Mineral Resource estimate, as at 31 December 2015 for the Sokor Project is reported in Table 9.1. This has been classified and reported in accordance with the guidelines of the JORC Code (2012) and has been depleted for mining. The Mineral Resources are reported above a 0.5 g/t gold cut-off grade at Manson's Lode and Ketubong, above a 0.4 g/t gold cut-off grade at New Discovery and above a 0.3 g/t gold cut-off grade at Rixen to reflect current commodity prices, operating costs and processing options. The Mineral Resources in Table 9.1 have been reported <u>inclusive</u> of the material used to generate Ore Reserves.

The cut-off grades used for reporting reflect the current and anticipated processing operations. The economic cut-off grades determined from Optiro's mining study of 0.3 g/t and 0.4 g/t gold were used to report the Mineral Resources at Rixen and New Discovery respectively. A slightly higher cut-off grade of 0.5 g/t gold was used to report Mineral Resources at Manson's Lode and Ketubong. This cut-off grade is lower than the current economic mining cut-off grade of 1.4 g/t gold determined for Manson's Lode and reflects potential future economic extraction.

	Meas	sured	Indic	ated	Infe	rred	Total		
Deposit	Tonnes (millions)	Grade (Au g/t)	Tonnes (millions	Grade (Au g/t)	Tonnes (millions	Grade (Au g/t)	Tonnes (millions	Grade (Au g/t)	
Manson's Lode	0.33	2.6	0.17	2.4	0.42	1.0	0.92	1.8	
New Discovery	0.23	3.8	0.22	2.7	0.52	1.4	0.97	2.3	
Ketubong	-	-	0.11	3.9	0.73	2.4	0.84	2.6	
Rixen	-	-	6.64	1.2	4.47	1.2	11.11	1.2	
Total	0.56	3.1	7.14	1.3	6.13	1.4	13.83	1.4	

Table 9.1	Sokor Project - Gold Mineral Resource statement as at 31 December 2015 (inclusive of material modified
	to generate Ore Reserves)

Note: Inconsistencies in totals are due to rounding

At Manson's Lode, elevated silver and base metal concentrations are associated with the gold mineralisation and are reported in Table 9.2 above a cut-off grade of 0.5 g/t gold. Additional base metal mineralisation is present, which is external and additional to the interpreted gold mineralisation, and this has been reported above a 3% lead and zinc (Pb+Zn) cut-off grade in Table 9.2.



			Ũ			•										
Cut off	Measured			Indicated			Inferred			Total						
grado	Tonnes	Ag	Pb	Zn	Tonnes	Ag	Pb	Zn	Tonnes	Ag	Pb	Zn	Tonnes	Ag	Pb	Zn
grade	(millions)	g/t	%	%	(millions)	g/t	%	%	(millions)	g/t	%	%	(millions)	g/t	%	%
0.5 g/t Au	0.33	63	1.7	1.7	0.17	73	1.7	1.9	0.42	44	1.2	1.1	0.92	56	1.5	1.5
3% Zn+Pb	0.001	144	5.6	1.2	0.001	63	1.4	3.1	0.29	5	2.4	2.1	0.29	6	2.4	2.1
Total	0.33	63	1.7	1.7	0.17	73	1.7	2.0	0.71	28	1.7	1.5	1.21	44	1.7	1.6

# Table 9.2Silver and base metal Mineral Resources at Manson's Lode as at 31 December 2015 (inclusive of material<br/>modified to generate Ore Reserves)

Note: Inconsistencies in totals are due to rounding

The total Mineral Resource, <u>inclusive</u> of material used to generate Ore Reserves, is presented in Table 9.3. This has then been depleted for material used to generate Ore Reserves and the corresponding tabulation, <u>exclusive</u> of and <u>additional to</u> the material used to generate Ore Reserves, is presented in Table 9.4.

Table 9.3	Sokor Project, Malaysia – Mineral Resources as at 31 December 2015 (inclusive of Ore Reserves
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		Gros	ss attributable	to licence	Gross attributable to CNMC				
Category	Mineral type	Tonnes (millions)	Grade (Au g/t, Ag g/t, Pb%, Zn%)	Contained metal (Au koz, Ag koz, Pb t, Zn t)	Tonnes (millions)	Grade (Au g/t, Ag g/t, Pb%, Zn%)	Contained metal (Au koz, Ag koz, Pb t, Zn t)	Change from previous update (%)	
Measured	Gold	0.56	3.1	56	0.46	3.1	45	-2%	
Indicated	Gold	7.14	1.3	297	5.78	1.3	241	+4%	
Inferred	Gold	6.13	1.4	265	4.95	1.4	215	+63%	
Total	Gold	13.83	1.4	618	11.18	1.4	501	+22%	
Measured	Silver	0.33	63	674	0.27	63	546	+2%	
Indicated	Silver	0.17	73	398	0.14	73	322	+10%	
Inferred	Silver	0.71	28	645	0.57	28	522	+36%	
Total	Silver	1.21	44	1,717	0.98	44	1,391	+15%	
Measured	Lead	0.33	1.7	5,632	0.27	1.7	4,562	+1%	
Indicated	Lead	0.17	1.7	2,925	0.14	1.7	2,370	+11%	
Inferred	Lead	0.71	1.7	12,245	0.57	1.7	9,918	+188%	
Total	Lead	1.21	1.7	20,802	0.98	1.7	16,850	+67%	
Measured	Zinc	0.33	1.7	5,535	0.27	1.7	4,483	+1%	
Indicated	Zinc	0.17	2.0	3,299	0.14	2.0	2,672	+8%	
Inferred	Zinc	0.71	1.5	10,781	0.57	1.5	8,733	+142%	
Total	Zinc	1.21	1.6	19,615	0.98	1.6	15,888	+51%	

Note: Inconsistencies in totals are due to rounding

 Table 9.4
 Sokor Project, Malaysia – Mineral Resources at 31 December 2015 (exclusive of material used to generate Ore Reserves)

	Mineral type	Gross a	attributable to	licence	Gross attributable to CNMC				
Category		Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Change from previous update (%)	
Measured	Gold	210	2.8	29	170	2.8	23	-30%	
Indicated	Gold	2,346	1.5	144	1,900	1.5	117	+25%	
Inferred	Gold	6,166	1.4	279	4,994	1.4	226	+126%	
Total	Gold	8,722	1.2	311	7,065	1.2	252	+11%	

#### 9.1.5. COMPARISON WITH DECEMBER 2014 MINERAL RESOURCE

As at 31 December 2014, the total Measured, Indicated and Inferred gold resources for the Sokor Project above a 0.3 g/t gold cut-off grade at Rixen and a 0.5 g/t gold cut-off grade at Manson's Lode, New Discovery and Ketubong (exclusive of stockpiles and inclusive of material used to generate Ore Reserves) was 10,810 kt at 1.5 g/t gold, with contained gold of 506,000 ounces. The Manson's Lode Mineral Resources contain silver, lead and zinc and, as at 31 December 2014, this comprised 940 kt with an average grade of 50 g/t silver, 1.3% lead and 1.4% zinc. The 2014 Mineral Resources have

been subdivided by resource category below in Table 9.5, and this table can be compared directly with Table 9.3.

		Gros	ss attributable	to licence	Gross attributable to CNMC				
Category	Mineral type	Tonnes (millions)	Grade (Au g/t, Ag g/t, Pb%, Zn%)	Contained metal (Au koz, Ag koz, Pb t, Zn t)	Tonnes (millions)	Grade (Au g/t, Ag g/t, Pb%, Zn%)	Contained metal (Au koz, Ag koz, Pb t, Zn t)	Change from previous update (%)	
Measured	Gold	0.55	3.2	57	0.45	3.2	46	+1	
Indicated	Gold	6.75	1.3	287	5.47	1.3	232	+34	
Inferred	Gold	3.51	1.4	163	2.84	1.4	132	-17	
Total	Gold	10.81	1.5	506	8.76	1.5	410	+8	
Measured	Silver	0.33	62	659	0.27	62	534	-3	
Indicated	Silver	0.16	72	360	0.13	72	291	+52	
Inferred	Silver	0.45	33	473	0.37	33	383	+49	
Total	Silver	0.94	50	1,492	0.76	53	1,208	+21	
Measured	Lead	0.33	1.7	5,569	0.27	1.7	4,511	0	
Indicated	Lead	0.16	1.7	2,628	0.13	1.7	2,129	+66	
Inferred	Lead	0.45	0.9	4,252	0.37	0.9	3,444	+67	
Total	Lead	0.94	1.3	12,449	0.76	1.3	10,084	+28	
Measured	Zinc	0.33	1.7	5,487	0.27	1.7	4,444	-2	
Indicated	Zinc	0.16	2.0	3,062	0.13	2.0	2,480	+112	
Inferred	Zinc	0.45	1.0	4,459	0.37	1.0	3,612	+58	
Total	Zinc	0.94	1.4	13,007	0.76	1.4	10,536	+32	

Table 9.5	Sokor Project, Malaysia – Mineral Resource as at 31 December 2014 (inclusive of Ore Reserves)
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Note: Inconsistencies in totals are due to rounding

Since the Mineral Resource was reported as at 31 December 2015, drilling data from 68 holes drilled at the Sokor Project were used to update the Mineral Resource estimates for Rixen, Manson's Lode and New Discovery.

At Rixen, this drilling extended the resource to the south and to the east. After depletion for mining at Rixen during 2015, the additional drilling has increased the Indicated Mineral Resource tonnage by 6% and decreased the average grade by 1%, with an overall increase of 4% in contained gold, increasing the Inferred Mineral Resource tonnage by 108% and increased the average grade by 3%, with an overall increase of 144% in contained gold. The total Mineral Resource tonnage at Rixen has increased by 32% and the average grade is the same, with a corresponding overall increase of 32% in contained gold.

At Manson's Lode, the 2015 drilling has extended the Mineral Resource down dip to the south-east. This drilling increased the total gold Mineral Resource tonnage of Manson's Lode by 9% and the average grade decreased by 3%, with an overall increase of 5% in contained gold. There was a small increase in the tonnage of the Measured Mineral Resource of 2%, a reduction in grade of 3% and an overall reduction in contained gold of 0.2%. For the Indicated Mineral Resource the tonnage, grade and contained gold all increased, by 12%, 2% and 14% respectively. The Inferred Mineral Resource tonnage increased by 14% and the average grade decreased by 3% for an overall increase of 10% in contained gold. The silver and base metal resources all increased significantly with an increase of 21% in contained silver, 28% in contained lead and 32% in contained zinc.

At New Discovery, the 2015 drilling has extended the Mineral Resource to the south and some additional mineralisation was intersected in the northern area of the deposit. Evaluation of the economic cut-off grade by Optiro, as a consequence of reduced mining costs, indicated that the cut-off grade could be reduced from 0.5 g/t (as used in 2014) to 0.4 g/t gold. The extensions to the interpreted mineralisation and reduced cut-off grade have resulted in an increase in the total Mineral Resource tonnage of 40%, a decrease in the average grade of 20%, and an overall increase of 11% in contained gold. The majority of the increase is from the Inferred Mineral Resource, with

an increase in tonnage of 100%, a decrease in the average grade of 14% and a subsequent overall increase of 71% in contained gold. There were small reductions to the Measured Resource, with a decrease of 3% in average grade for an overall decrease of 4% in contained gold, and the Indicated Resource tonnage increased by 7% and the grade decreased by 13% for an overall reduction of 7% in contained gold.

As at 31 December 2015, the total Measured, Indicated and Inferred gold resources for the Sokor Project (above a 0.3 g/t gold cut-off grade at Rixen, a 0.4 g/t gold cut-off grade at New Discovery and a 0.5 g/t gold cut-off grade at Manson's Lode and Ketubong) are 13,830 kt at 1.4 g/t gold with contained gold of 618,000 ounces (inclusive of material used to define Ore Reserves). Manson's Lode Mineral Resources contain additional silver, lead and zinc Mineral Resources of 1,210 kt with an average grade of 44 g/t silver, 1.7% lead and 1.6% zinc. The share of the Mineral Resource attributable to CNMC is 81% and the figures are summarised in Table 9.3.

Compared to the 31 December 2014 Mineral Resource estimate, there has been an increase in gold Mineral Resources of 3,022 kt at 1.2 g/t gold. This represents an increase of 22% in contained gold in the Mineral Resource. The increased tonnage at Manson's Lode, of 274 kt, has an average grade of 26 g/t Ag, 3.1% Pb and 2.4% Zn with contained metal of 225,000 ounces of silver, 8,253 t of lead and 6,608 t of zinc.

#### 9.2. ORE RESERVE ESTIMATION

The Ore Reserve estimates as stated in this document have been reported in accordance with the guidelines of the JORC Code, 2012 edition. Any inconsistencies within the tables may be attributed to the JORC requirement to report to an appropriate number of significant figures, and as such will be due to rounding.

Previously Ore Reserves at Manson's Lode and New Discovery had been stated in accordance with the 2004 version of the JORC Code. The reason for the split in reporting Ore Reserves between 2004 and 2012 versions previously was that only Rixen has been actively mined previously and no material changes had occurred to the resource or mine design for New Discovery or Manson's Lode. Whilst no mining took place at these lodes during 2015, the cost inputs are now better understood and a revised pit optimisation and design has been undertaken; consequently this update was required to be classified and reported in accordance with JORC 2012.

The reporting of the Ore Reserve estimates below is laid out such that each deposit is reported and discussed individually in its own section, with a combined estimate reported at the end of Section 9.3.

Where changes in ounces as a percentage are quoted, this refers to the change in ounces attributable to CNMC, not the original gross value, and are based upon the rounded figures instead of the detailed base data.

#### 9.2.1. RIXEN PIT ORE RESERVE

Between the period of 1 January 2014 and 31 December 2015, mining activities occurred at Rixen. CNMC reported to Optiro that for the period approximately 2,236 kt of ore was removed from the Rixen Pit; however, accurate reporting as to the precise ore tonnes, grade and amount of waste removal was not available, and hence this information has been considered in conjunction with surveyed data and the 2015 depleted block model.

With the information available to Optiro, a detailed reconciliation of actual mined against the depleted model could not be completed, therefore this Ore Reserve estimate has been compiled solely on the basis of the depleted Mineral Resource block model against the pit design and working face surveys as of the 31 December 2015.

The Rixen Pit Ore Reserve estimate is reported above a 0.3 g/t gold cut-off grade, incorporating 95% mining recovery and 5% dilution at zero grade, and using a gold price of US\$1,100 per ounce. The 2015 Ore Reserve estimate is quoted in Table 9.6. It is important to note that there is material included in the inclusive Mineral Resources (Table 9.1) which is not included in either the Ore Reserves or the additional Mineral Resources; for instance Inferred material which sits inside the pit.

	Mineral type	Gross a	ttributable t	o licence	Gross attributable to CNMC					
Category		Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Change from previous update (%)		
Ore Reserves										
Proved	Gold	0	0	0	0	0	0	0		
Probable	Gold	4,615	1.1	169	3,729	1.1	137	+8		
Total	Gold	4,615	1.1	169	3,729	1.1	137	+8		
			Additi	onal Mineral F	Resources					
Measured	Gold	0	0	0	0	0	0	0		
Indicated	Gold	2,013	1.1	71	1,631	1.1	57	-17%		
Inferred	Gold	4,516	1.2	173	3,658	1.2	140	259%		
Total	Gold	6,529	1.2	243	5,288	1.2	197	83%		

Table 9.6	Rixen Pit Ore Reserve and Mineral Resource (additional to Ore Reserves) as at 31 December 2015
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Notes:

• Ore Reserves reported as per the JORC Code 2012 edition

• Calculations have been stated to two significant figures, and may display rounding inconsistencies

• Cut-off grade for Rixen Mineral Resources and Ore Reserves is 0.3 g/t gold

Gold price used for cut-off calculation is US\$1,100 /oz

• No Inferred material is included in the Ore Reserve

• Dilution of 5% and ore loss of 5% have been applied, with zero grade attributed to dilution.

#### COMPARISON WITH 2014 ORE RESERVES ESTIMATE - RIXEN

The variance between the 2014 and 2015 Ore Reserve estimates is due to increased Mineral Resources, depletion by mining activities, a reduced cut-off grade due to lower actual operating costs and an updated pit design. No other modifying factors have been changed in the Rixen Pit Ore Reserve between 2014 and 2015. The previous Ore Reserve was also reported as per the JORC Code, 2012 edition.

The operating cost base used for the 2015 Ore Reserves was based on the actual (weighted) cost base as reported to Optiro over the 2014 and 2015 production years. It should be noted that there has been a significant ramp up in production at Rixen during 2015, and this is now reflected in the lower actual cost base.

Pit surveys were taken for the end-of-reporting period of 31 December 2015, and these formed the basis of the depletion model. CNMC has reported to Optiro that for the period up to 31 December 2015, 2,236 kt of material has been extracted.

The variation between the claimed mined tonnes and the surveyed depletion of the Mineral Resource/Ore Reserve is attributable to dilution occurring during the mining phase, combined with the addition of material to the ore mined claimed through operational grade control work and ore loss through operational issues.

Optiro has taken a prudent and conservative approach to account for the lack of accurate and timely production data provided, and has assumed that the Ore Reserve portion was depleted prior to 31 December 2015.

As no detailed reconciliation data was provided to Optiro with respect to mine production, this Ore Reserve estimate (Table 9.6) has been calculated solely on the evaluation results from the pit design using the updated and depleted block model created as part of this Ore Reserve report.



Figure 9.4 and Figure 9.5 show, respectively, the differences in tonnes and metal between the 2014 and 2015 Ore Reserve figures.





Figure 9.5 Waterfall chart showing variance in 2014 and 2015 Ore Reserve estimate for Rixen (gold ounces)



#### 9.2.2. MANSON'S LODE PIT ORE RESERVE

Between the period of 1 January 2015 and 31 December 2015, no mining activity occurred at Manson's Lode.

Metals other than gold have not been included within this Ore Reserve estimate, nor has the impact on either credits or penalties for the presence of other metals and contaminants been included within the cost model or cut-off grade calculations. Metallurgical testwork was commenced to determine lead and zinc recoveries from previously stockpiled material from Manson's Lode. Further testwork and study work will be progressed during 2015, to assist with the upgrade and reclassification of the Manson's Lode to meet the JORC 2012 Ore Reserve reporting criteria and this will now include the zinc and lead minerals in addition to the gold and silver.

The Manson's Lode pit Ore Reserve is reported above a 1.4 g/t gold cut-off grade, using a 95% mining recovery and 5% dilution at zero grade and a gold price of US\$1,100 per ounce. The 2015 Ore Reserve is quoted in Table 9.7 with the 2015 Mineral Resource (additional to the Ore Reserve) presented below. As with the Rixen tabulation (Table 9.6) the total of the Ore Reserve and additional Mineral Resources will not equal the inclusive Mineral Resource, due mainly to the difference in cut-off grade between resource and reserve and the exclusion of Inferred Resources inside the pit designs.

# Table 9.7 Manson's Lode Pit Ore Reserve and Mineral Resource (additional to Ore Reserves) as at 31 December 2015

	Mineral type	Gross a	ttributable t	o licence	Gross attributable to CNMC					
Category		Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Change from previous update (%)		
Ore Reserves										
Proved	Gold	126	3.5	14	97	3.5	11	+21		
Probable	Gold	18	2.8	2	13	2.8	1	+20		
Total	Gold	144	3.4	16	111	3.4	12	+21		
			Additio	onal Mineral F	Resources					
Measured	Gold	183	2.1	12	148	2.1	10	-47		
Indicated	Gold	149	2.4	11	120	2.4	9	+556		
Inferred	Gold	407	1.0	13	330	1.0	11	+85		
Total	Gold	739	1.6	37	598	1.6	30	+14		

Notes:

• Ore Reserves reported as per the JORC Code 2012 edition

• Calculations have been stated to two significant figures, and may display rounding inconsistencies

- Cut-off grade for Manson's Lode Ore Reserves is 1.4 g/t gold
- Gold price used for cut-off calculation is US\$1,100 /oz
- No Inferred material is included in the Ore Reserve
- Dilution of 5% and ore loss of 5% have been applied, with zero grade attributed to dilution

• Cut-off grade for Manson's Lode Mineral Resources is 0.5 g/t gold outside pit design and 1.4 g/t gold for Inferred Resources within pit design.

#### COMPARISON WITH 2014 ORE RESERVES ESTIMATE – MANSON'S LODE

The variance between the 2014 and 2015 Ore Reserve shows a marginal increase due to minor resource and cut-off grade changes. No other modifying factors have been applied to the Manson's Lode pit Ore Reserve between 2014 and 2015. The previous Ore Reserve was reported as per the JORC Code 2004 edition. Figure 9.6 and Figure 9.7 show, respectively, the differences in tonnes and metal between the 2014 and 2015 Ore Reserve figures.



Figure 9.6 Waterfall chart showing variance in 2013 and 2014 Ore Reserve estimate for Manson's Lode (ore tonnes)

# Figure 9.7 Waterfall chart showing variance in 2013 and 2014 Ore Reserve estimate for Manson's Lode (gold ounces)



#### 9.2.3. NEW DISCOVERY PIT ORE RESERVE

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During the reporting period there were no material mining activities at New Discovery. The New Discovery deposit is considered to be an inactive mining area at this time, with small scale trialmining undertaken on an ad hoc basis as part of an ongoing exploration and metallurgical testwork process.

The New Discovery Pit Ore Reserve estimate has been reported above a 0.4 g/t gold cut-off grade, 95% mining recovery and 5% dilution at zero grade and a gold price of US\$1,100 per ounce. The resultant Ore Reserve for the New Discovery pit is reported below in Table 9.8 and is applicable for 2015. As with the previous tabulations the total of the reserve and additional resource does not equal the inclusive resource tabulation due mainly to the exclusion of Inferred Resources within the final pit.

		Gross a	ttributable t	o licence		Gross attri	outable to CNI	ИС
Category	Mineral type	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Change from previous update (%)
Ore Reserves								
Proved	Gold	201	3.8	25	165	3.8	20	+124
Probable	Gold	148	2.7	13	122	2.7	10	+108
Total	Gold	349	3.3	37	287	3.3	31	+118
			Additio	onal Mineral F	lesources			
Measured	Gold	27	2.7	2	22	2.7	2	-87%
Indicated	Gold	70	2.5	6	57	2.5	5	-62%
Inferred	Gold	515	1.4	23	417	1.4	19	+93%
Total	Gold	612	1.6	31	496	1.6	25	-31%

Table 9.8	New Discovery Pit Ore Reserve and Mineral Resource (additional to Ore Reserves) as at 31 December
	2015

Notes:

Ore Reserves reported as per the JORC Code 2012 edition

Calculations have been stated to two significant figures, and may display rounding inconsistencies

Cut-off grade for New Discovery Mineral Resources and Ore Reserves is 0.4 g/t gold

• Gold price used for cut-off calculation is US\$1,100 /oz

• No Inferred material is included in the Ore Reserve

• Dilution of 5% and ore loss of 5% have been applied, with zero grade attributed to dilution.

#### COMPARISON WITH 2014 ORE RESERVE ESTIMATE - NEW DISCOVERY

The variance between the 2014 and 2015 Ore Reserve estimation is due almost entirely to a lower cut-off grade as a result of lower costs (the operating cost of the heap leach is significantly less than previously estimated). There was also a small change to the overall resource tonnes and grade in the pit area that had a very minor impact. No other modifying factors have been changed on the New Discovery pit Ore Reserve between 2014 and 2015.

Figure 9.8 and Figure 9.9 show, respectively, the differences in tonnes and metal between the 2014 and 2015 Ore Reserve figures.









#### 9.2.4. KETUBONG

No Ore Reserve estimate was calculated or reported for the Ketubong deposit as there was no activity related to that deposit during 2014.

#### 9.3. STATEMENT OF SOKOR MINERAL RESOURCES AND ORE RESERVES

The combined Ore Reserve estimate for Rixen, Manson's Lode and New Discovery deposits has been calculated and is shown in Table 9.9, accompanied by the Mineral Resource tabulation for Rixen, Manson's Lode and New Discovery deposits (reported exclusive of and additional to Ore Reserves) and for Ketubong (where Ore Reserves have not been defined).



Table 9.9

Combined Sokor Project Ore Reserves (Manson's Lode, New Discovery and Rixen) and Mineral Resources (at Ketubong and in addition to Ore Reserves at Manson's Lode, New Discovery and Rixen) as at 31 December 2015

		Gross a	ttributable t	o licence		Gross attri	butable to CNN	ЛС
Category	Mineral type	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Tonnes (kt)	Grade (Au g/t)	Contained Au (koz)	Change from previous update (%)
				Ore Reserve	s			
Proved	Gold	327	3.68	39	262	3.68	31	+73
Probable	Gold	4,781	1.14	183	3,864	1.14	148	+12
Total	Gold	5,107	1.07	222	4,127	1.07	179	+19
			Additi	onal Mineral F	Resources			
Measured	Gold	210	2.8	29	170	2.8	23	-30%
Indicated	Gold	2,346	1.5	144	1,900	1.5	117	+25%
Inferred	Gold	6,166	1.4	279	4,994	1.4	226	+126%
Total	Gold	8,722	1.2	311	7,065	1.2	252	+11%

Notes:

- Mineral Resources and Ore Reserves reported as per the JORC Code 2012 edition
- Calculations have been stated to two significant figures, and totals may display rounding inconsistencies
- Cut-off grade for Rixen Mineral Resources and Ores Reserve is 0.3 g/t gold
- Cut-off grade for New Discovery Mineral Resources and Ore Reserves is 0.4 g/t gold
- Cut-off grade for Manson's Lode Ore Reserves (and Inferred Resources within the pit design) is 1.4 g/t gold and cut-off grade for Mineral Resources outside the pit design is 0.5 g/t gold.
- Cut -off grade for Ketubong Mineral Resources is 0.5 g/t gold
- Gold price used for cut-off calculation is US\$1,100 /oz for all lodes
- No Inferred material is included in the Ore Reserve
- Dilution of 5% and ore loss of 5% have been applied, with zero grade attributed to dilution.

# 10. INFRASTRUCTURE, FACILITIES, ENVIRONMENTAL AND COMMUNITY ISSUES

#### **10.1. INFRASTRUCTURE**

#### 10.1.1. POWER AND WATER SUPPLY

Power to the operation has previously been provided by three on-site diesel generators. Two generators of 400 kW and 240 kW capacity provide the bulk of the power requirements, with a 160 kW unit available as a stand-by. Small portable generators provide power to living quarters. In 2013, an additional six diesel generators were added to provide additional power generation for the expanded heap leach operations.

The project site is in an area of high, consistent rainfall. Water is sourced from local streams for use in mining and processing. Potable water is trucked to the site.

#### **10.2.** MINE SITE FACILITIES

CNMC has constructed offices, accommodation camp, assay laboratory and a permanent equipment maintenance facility on the site. Communications are provided via a satellite phone system. Telephone, fax and data transmission facilities are provided.

#### **10.3.** ENVIRONMENTAL AND COMMUNITY ISSUES

Optiro understands that BDA reviewed the project's Environmental Impact Assessment in 2008, 2009 and Environmental Management Plan in 2010. The review focussed on environmental aspects and social/community issues which are considered a material part of the project and which may have implications for project feasibility, costs and timing. Optiro understands that these aspects and

issues have not changed since BDA's review in 2011 and the summary below is from the BDA report (BDA, 2011a)

#### 10.3.1. ENVIRONMENTAL IMPACT ASSESSMENT

Environmental approvals for the project include submission of an Environmental Impact Assessment in January 2008 and a supplementary EIA report in March 2009, with approval received in June 2009. An Environmental Management Plan was submitted in February 2010 and an EMP – Additional Information report was submitted in March 2010, with approval received in April 2010. The EIA and EMP cover both heap leach and pond (vat) leach processing of gold ore at the Sokor mine site.

The project mining and environmental approvals are granted by the Kelantan State Department of Environment (DOE). The EIA approval was received in June 2009 with approval conditions stipulated, whilst the EMP approval was received in April 2010. The Mining Scheme approval was obtained in January 2010 and is subject to initial mine production not exceeding 300 ktpa of mined ore. This condition will be relaxed on submission to government of a full feasibility study and mine plan directed at expanding the project to include treatment of the primary gold sulphide mineralisation using a carbon in pulp process.

As part of the environmental investigations undertaken to date, potential project impacts to physical and biological resources have been assessed to identify key environmental risks that may arise from the construction, operation and eventual mine closure of the Sokor Project. Formal assessment, documentation and communication of potential project-related impacts, including the anticipated scope, magnitude, extent and duration, have been completed in conformance with the Kelantan State permitting process, including the DOE requirements and requirements under the Environmental Quality Act 1974. The information supplied under the Supplementary EIA was in response to further information requests from the DOE and the Kelantan State Minerals and Geoscience Department.

The EIA reports were prepared by Puncak Moriah Engineering Sdn. Bhd., whilst the EMP document was prepared by EQM Ventures Sdn. Bhd. The Sokor Mining Schemes Report was prepared by CMNM Mining Consultant Engineer, KF Lee Mining Consultant & Surveyor.

#### **10.3.2.** ENVIRONMENTAL PROTECTION AND MITIGATION MEASURES

CNMC has identified the key potential environmental impacts arising from the project's operations and their associated mitigation measures, which have been implemented. These potential impacts and CNMC mitigation measures include:

- Site clearing impacting on downstream water quality mitigation measures include the use of silt traps and runoff barriers, retention of vegetation, vegetation removal to follow natural contours to maximise effects of silt traps.
- Soil erosion and dust emissions resulting from earthmoving activities mitigation measures include revegetation to control runoff and soil loss, water spraying of mine roads and trafficked areas to suppress dust emissions and provision of personal protection equipment to provide protection from dust and noise.
- Biomass waste and other waste disposal causing air pollution, fire hazard, unhealthy environment mitigation measures include no burning of biomass waste allowed on site, spoils and waste materials to be buried on-site in a designated 'fill' area, properly designed spoil piles surrounded by soil containment berms and biodegradable waste to be left in-situ to decompose naturally.
- Waste water generation and disposal impacting on water quality mitigation measures include provision of suitable sanitation facilities and potable water supply, solid waste to be recycled and composted of disposed in secure areas designed in accordance with Department of Environment of Malaysia guidelines.

- Chemicals and hazardous material use impacting on water quality mitigation measures include prevention of leakage from tailings vats by installing water proofing materials to inhibit seepage, conducting regular maintenance of vats, engagement of Kualiti Alam (a Federal Government licensed toxic waste collector) to handle all acids and hazard chemicals resulting from the operations and provision of proper safe and secure storage facilities located away from incompatible substances that may generate heat, fire, gas or explosion.
- Traffic associated with the project impacting on air quality, noise and road safety mitigation measures include provision of sufficient width to access roads, limiting speed of vehicles, restricting entry to active mining areas to project vehicles only.
- Mine closure impacting on water quality, employment opportunities, development opportunities, loss of environmental values – mitigation measures include developing an appropriate Mine Closure and Rehabilitation Plan which includes appropriate systems for handling site storm water runoff, compacting and sealing potentially acid-generating waste rock, closure and covering tailings dams, site re-vegetation, employee training and multiskilled experience which is transferable to other mining operations or other sectors of employment.
- CNMC advised Optiro, in June 2015, that there had been no reported breaches of the environmental conditions and that all monitoring requirements were being carried out as per the licence requirements.

#### 10.3.3. AIR QUALITY AND NOISE

Background air quality and noise were measured in and around the Sokor Project area in 2007 as part of baseline monitoring for environmental assessment purposes. In general, ambient air quality and noise levels in areas sampled in the project area are within Government of Malaysian ambient standards.

#### **10.3.4.** SURFACE HYDROLOGY

Based on topographical information, there are numerous streams which pass through the Sokor mine site area from east to west, flowing through Sg Tapis, Sg Amang, Sg Sejana, Sg Liang and Sg Ketubong, which eventually discharge into the Sg Pergau.

Surface water baseline evaluations have previously been conducted in the Sokor Project area as part of the environmental assessment process.

Baseline water quality analysis showed that the water quality in the project area is generally good and the parameter levels comply with the limits of Class III of the Interim National River Water Quality Standard for Malaysia and Standard B of the Malaysian Environmental Quality (Sewage & Industrial Effluents) Regulations, 1979.

#### **10.3.5.** WATER MANAGEMENT

Given the project area's high rainfall, water management is a significant issue for the project so as to minimise any potential downstream impacts.

The mine and processing plant are operated as a closed-loop circuit where no water from the site operations discharges to nearby surface waters. All process water from the plant area is channelled to the tailings storage facility while any excess water from the tailings storage facility (TSF) is recycled to the plant's processing circuits.

The TSF is designed to operate with a minimum freeboard of 1.5 m and is surrounded by berms. The design capacity is at least twice the actual design capacity of all water from the mineral processing circuit and has also been designed to accommodate the recorded maximum rainfall event.



The berms are designed to prevent overflow from discharging from the TSF and will also preclude rainfall runoff from entering the TSF. Any stormwater and water collected from the mine pits is channelled to a sedimentation pond (i.e. environmental control pond), which is designed to provide a retention time of 48 hours.

Discharge from the sedimentation control pond is via a spillway. The mine has been developed with minimum disturbance to streams and creeks in the area. Where this is unavoidable, silt traps and sediment control practices are to be used to prevent any inflow of sediment to surface water. Surface runoff from the workshop area and other vehicle service areas is channelled to an oil/water separator device prior to the water being discharged.

Discharge of waste water from the sewerage system, domestic waste water and rainwater runoff from on-site facilities such as workshops is controlled so as not to impact on surrounding surface waters.

#### 10.3.6. TAILINGS MANAGEMENT

Originally it was proposed that the project would commence using alluvial and vat leach methods to develop the mine; however, since 2013 the ore is mainly processed via the heap leach circuit.

Optiro has been supplied with any details of the design of these plants, any expansion details on proposed plant process ponds, or any site water balance data. Optiro notes that it is prudent that any heap leach system (besides provisioning for process ponds – barren and pregnant solution ponds) provides a stormwater (safety) pond with sufficient capacity to accommodate the local maximum rainfall event. Such a pond will need to accommodate runoff from the entire process plant area, including the process ponds and heap leach area. A cyanide detoxification system will likely be necessary to handle increased rainfall on the heap leach area during the monsoon period and to provide for decommissioning of the heap leach structures and to make safe the process solutions once the heap leach system is closed. The EMP contains limited details on three possible cyanide detoxification methods; however, the information provided is considered preliminary, as no particular detoxification method has yet been selected.

The EIA Supplementary report contains design details and environmental protection measures to minimise the potential for water pollution. It is proposed that no solutions are to be discharged from the stormwater (safety) pond and that the cyanide content of water in the pond will be constantly monitored to ensure it remains below 0.1 mg/L.

All ponds, channels and impounding bunds are planned to be constructed with the required minimum freeboard and be HDPE-lined for protection against erosion and potential groundwater contamination.

#### 10.3.7. ENVIRONMENTAL MONITORING

The approved Environmental Management Plan contains details concerning the environmental monitoring requirements stipulated under the Government approval. They include requirements for the monitoring and reporting of air quality, noise and water quality.

An Environmental Audit process is set out in the Environmental Management Plan. CNMC has advised Optiro that all monitoring is being undertaken in accordance with the requirements of the licence conditions. There have been no reported breaches during the past 12 months.

#### 10.3.8. REHABILITATION

It is proposed that where possible, any disturbed areas will be progressively rehabilitated; however, there are some areas such as the process plant areas which cannot be rehabilitated until such time as the mine is closed and the plant is decommissioned.

An Erosion and Sediment Control Plan is set out in the Environmental Management Plan, together with other specific pollution control and occupational health and safety plans.

#### 10.3.9. SOCIAL ISSUES

There is a possibility that the Sokor Project may encroach into fishing areas, which may impact on revenue and livelihoods for the members of the local communities who use the area. Consequently, local dissatisfaction with the project may arise if access to fish resources is restricted.

It is expected that the Sokor Project will create employment opportunities for residents of the area. In the communities surveyed, the residents expressed the desire to seek work at the site for both skilled and unskilled work opportunities.

CNMC has made substantial efforts to integrate its project activities with the local communities and is assisting them in social and economic development programmes. It is providing the local community with new employment opportunities, training and skills development for those staff employed in CNMC's mining activities and has broadened the economic and commercial base for local businesses, contributing to economic growth in the region. In addition it provides opportunities for business investors to invest in Kelantan.

The main negative social impact that can occur at mine closure is the loss of jobs resulting from the cessation of mining. CNMC's proposed mitigation measure is to ensure that the workforce that has been employed will be fully trained with multi-skilled experience that is easily transferable at the time of mine closure, thus enabling potential further employment in other sectors.

## **11. FINANCIAL ANALYSIS**

The current production schedule was updated by Optiro to reflect the depletion due to mining at Rixen. The schedule mines the deposits in an order as determined by current site operating philosophy (Rixen, then New Discovery and finally Manson's Lode) at rates to enable gold production of approximately 30 koz per annum. Whilst this mining schedule is adequate for an Ore Reserve estimate, Optiro recommends that CNMC completes a detailed life of mine schedule combining all ore sources, for accurate reporting of tonnes and grade. This mining schedule has been authorised for use by CNMC. The mining schedule is presented in Section 8.4.2, Table 8.3 of this report.

#### 11.1. CAPITAL AND OPERATING COSTS

Capital and operating costs have been estimated by CNMC. Optiro understands that there has been no change to the previous year's estimated costs and that CNMC plans to review the costs as part of further study work to be under taken during 2015.

#### 11.2. OPERATING COSTS

The operating costs used to determine the economic viability of this Ore Reserve estimate have been provided to Optiro by CNMC. Whilst some actual production and processing costs have been recorded, and are lower than the study applied costs, Optiro has opted to use a combination of the current costs and the original cost projections for reasons of conservatism and consistency over variable recorded costs. The mining costs used are considered in line with current operational expectations and actuals. A revised forecast gold price of US\$1,100 per ounce has been applied at the request of CNMC. The unit operating costs and cut-off grade calculations used are tabulated below in Table 11.1.

	Units	Rixen	Manson's Lode	New Discovery
	Mining a	and Processing cos	ts	
Mining cost		1	3.38	2.65
Processing cost	US\$ /t	5	36.1	10.02
Cost	US\$ /t ore	9.26	43.05	17.3
	Revenu	e and Selling costs	5	
Rehabilitation cost	US\$/ t ore	-	-	-
Selling cost	US\$ /g	0.05	0.59	0.59
Develty	%		8%	8%
ROyalty	US\$ /g	2.95	2.83	2.83
Total sale cost	US\$ /g	3.00	3.42	3.42
Coldensian	US\$ /oz	1,100	1,100	1,100
Gold price	US\$ /g	35.37	35.37	35.37
Final sale price	US\$ /g	32.37	31.95	31.95
Mining recovery	%	95%	95%	95%
Process recovery	%	65.0%	85.0%	86.8%
Recovered revenue	\$/g	20.05	25.80	26.34
Marginal cut-off	g/t	0.3	1.4	0.4

#### Table 11.1 Mining unit costs and cut-off grade

#### 11.3. ECONOMIC EVALUATION

Economic evaluation of the Ore Reserves for the Sokor Project shows that the net cashflow from the operation is estimated to be \$93.1 M, with a Net Present Value of \$70M (based on a 10% discount rate).

Based on the economic evaluation undertaken by Optiro, Optiro is able to demonstrate and is satisfied that there is a positive financial outcome for the Manson's Lode, Rixen and New Discovery deposits. No financial analysis has been completed for the Ketubong deposit and thus no Ore Reserves have been stated.

#### **12. INTERPRETATION AND COMMENTS**

The geology and mineralisation controls at Sokor are reasonably well understood, with mineralisation being both structurally and lithologically controlled. The Rixen, Manson's Lode and New Discovery deposits are well defined by drilling. The 2015 drilling has extended the mineralisation at Rixen to the east and to the north and has extended the gold and base metal mineralisation at Manson's lode down-dip to the south-east. At New Discovery, the 2015 drilling has extended the resource to the south and intersected mineralisation at New Found, to the south of New Discovery. Additional drilling is required at New Found to determine if a Mineral Resource can be defined within this area.

Both New Discovery and Ketubong remain open at depth and warrant additional drill testing. Drilling to the north of Ketubong intersected mineralisation at surface and at around 140 m depth; this area also warrants further testing.

To date, CNMC has focussed its exploration on the known prospects within the Sokor Block. There is considerable potential remaining in the Sokor Block mining licence to locate additional gold and base metal mineralisation. CNMC plans to expand its exploration programme in the future to assess these areas and also in the surrounding exploration licence area.

From an operational perspective, Optiro recommends that CNMC continues to improve the rigour that has been applied to the recording and reconciliation of operating activities during 2015. Accurate reporting of mining locations and material movements on to and off of stockpiles and leach pads will provide CNMC with greatly improved production tracking and enable meaningful reconciliation of actual against planned mine performance in terms of both tonnes and grades.

The above recording should continue to be supported by accurate face and stockpile surveys on a monthly basis to provide a spatial basis of reconciliation against the reported physicals. The implementation of these processes would eliminate unaccounted for material movements and significantly streamline end of period reporting requirements. Optiro notes that there has been good improvement in this aspect of operations on site during 2015.

On a similar note, the movement of material from stockpiles to leach pads was recorded during 2014 and 2015. Optiro recommends additional details are recorded going forward to ensure that CNMC has a more detailed basis for measuring the performance of the heap leach circuits. Without recording this additional information from the leach circuits, the basis for determining how the leaching process has performed during the month is sub-optimal. Optiro commends CNMC on the work initiated during 2015 in this regard.

The above operational processes are considered to be essentials for a single-source mining and processing operation. With the potential for multiple ore sources to be mined concurrently at Sokor, the requirement for accurate and rigorous reporting processes is multiplied to ensure that operational performance is recorded on an appropriate basis.

In summary, Optiro notes the improved progress in recording of the operational performance of the Sokor Project. Optiro supports CNMC's desire and actions to continue implementing a more formalised and structured production recording and reporting process, as commenced during 2014.

# **13. CONCLUSIONS AND RECOMMENDATIONS**

CNMC purchased Datamine software in 2015 and CNMC's technical team has maintained the drillhole database and incorporated the additional information from the 2015 drilling programme. CNMC intends to undertake regular updates to the resource models. In addition, the following improvements have been implemented:

- A set of standardised codes for the geological logging are being used by CNMC to record oxidation, lithology and alteration.
- QAQC procedures include analysis of standard, blank and duplicate samples and analysis of duplicate samples at an umpire laboratory. The insertion rate is above industry standard, which is commended.
- Geological interpretation by CNMC includes 3D modelling of the faults zones at Rixen.

Optiro has the following recommendations with respect to the data used for the Mineral Resource estimate at the Sokor Project:

- Significant differences between the topographical surface data and the drillhole collars surveys remain and need to be resolved. The surveyed drillhole collars should be compared to the topographical survey data and, where there are inconsistencies, the drillhole collars should be re-surveyed.
- Infill drilling at Rixen is required where additional Inferred Mineral Resources were defined by the 2015 drilling, in order to upgrade these to Indicated Mineral Resources.
- Ongoing updates to the mineralisation interpretation should be undertaken during the drilling programme. This will assist with optimisation of the drilling programme and planning any additional drillholes.
- Depths to the base of oxidation and the base of transitional material should be logged from the existing drill core from Manson's Lode, New Discovery and Ketubong.
- A 3D interpretation of the lithology should be developed; this will improve the mineralisation interpretation and Mineral Resource definition.
- Pit survey pickups should be completed on a regular basis (at least at the end of each quarter, but ideally at the end of each month) and the Mineral Resource models should be reconciled against production at least on a quarterly basis.

Optiro has the following recommendations with respect to the data used for the Ore Reserve estimate at the Sokor Project. These are considered "best practice" recommendations:

- A detailed life-of-mine schedule should be updated with the depleted Rixen Ore Reserve and accounting for mining activities that have occurred.
- Detailed 3D topographic surfaces for each deposit should be developed to produce an accurate "as-mined" point of reference for each deposit. The current depletion surfaces are lacking in detail and spatial alignment accuracy.
- As more accurate actual costs are now established, the cut-off grade should be recalculated and used in the life-of-mine schedule and for future mine planning and forecasting.
- Ongoing recording of monthly operational production figures is occurring to a reasonably good standard, but needs to be supported by appropriately detailed daily tracking of mining and processing activities that include more detailed records of the material source and destination locations; this reporting standard has improved during 2015.
- Surveys of mining face positions and stockpile profiles should continue to occur on a monthly basis to facilitate effective reconciliation between all stages of the operation from the resource block model through to gold produced.
- Training of production staff should be implemented to ensure that continuity of production tracking and reporting is maintained whilst staff are absent from site on rosters.

#### **14. REFERENCES**

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- Optiro, 2012. Sokor Gold Project Updated Mineral Resource, Detailed Technical Report. Unpublished report prepared for CNMC Goldmine Holdings Limited, dated May 2012.
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- Optiro, 2013c. Sokor Gold Project Ore Reserves Estimate as at 31 December 2012 Rixen Mine. Unpublished report prepared for CNMC Goldmine Holdings Limited, dated April 2013.
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- Optiro, 2015a. Sokor Gold Project Updated Mineral Resource and Ore Reserve Estimates as at 31 December 2014. Unpublished report prepared for CNMC Goldmine Holdings Limited, dated April 2015.
- Optiro, 2015b. Sokor Gold Project Updated Mineral Resource 2014, Technical Report. Unpublished report prepared for CNMC Goldmine Holdings Limited, dated July 2015.

# 15. GLOSSARY

Term	Explanation
Alteration	A change in mineralogical composition of a rock through reactions with hydrothermal fluids, temperature or pressure changes.
Base metals	Non-ferrous (other than iron and alloys) metals excluding precious metals. These include copper, lead, nickel and zinc.
Bedrock	The solid rock lying beneath superficial material such as gravel or soil.
Bulk density	The mass of many particles of the material divided by the volume they occupy. The volume includes the
	space between particles as well as the space inside the pores of individual particles.
Cut-off grade	The grade that differentiates between mineralised material that is economic to mine and material that is not.
Diamond drilling	Drilling method which produces a cylindrical core of rock by drilling with a diamond tipped bit.
Fault	A fracture in rock along which displacement has occurred.
Indicated Mineral Resource	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
Inferred Mineral Resource	An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes which may be limited or of uncertain quality and reliability.
JORC Code	The JORC Code provides minimum standards for public reporting to ensure that investors and their advisers have all the information they would reasonably require for forming a reliable opinion on the results and estimates being reported. The current version is dated 2012.
Metallurgy	Study of the physical properties of metals as affected by composition, mechanical working and heat treatment.
Measured	A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape,
Mineral Resource	based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are spaced closely enough to confirm geological and grade continuity.
Mineral Resource	A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic
	extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
Mineralisation	The process by which a mineral or minerals are introduced into a rock, resulting in a valuable deposit.
Ordinary kriging	A geostatistical estimation method relying upon a model of spatial continuity as defined in a variogram.
Ore	Mineralised material which is economically mineable at the time of extraction and processing.
Ore Reserve	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. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.
Oxidation	The addition of oxygen to the metal ion, generally as a result of weathering.
Recovery	Metallurgical: The percentage of metal that can be recovered given the limitations of the processing equipment.
Stripping	Open pit mining term relating to the removal of uneconomic waste material to expose ore. Metallurgical term relating to the removal of copper from the organic phase in the solvent extraction process.
Top cut	A process that reduces the effect of isolated (and possible unrepresentative) outlier assay values on the estimation.
Transitional	The partially oxidised zone between oxidized and fresh material.
Volcanics	Sequence of strata formed from an erupting volcano.

# Appendix A

# JORC Code, 2012 Edition – Table 1 reporting

#### SECTION 1 SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Drill cores were photographed and logged by geologists. Core identified as having potential for mineralisation was marked up for sampling.</li> <li>Half core samples were selected for analysis and quarter core samples were used for quality assurance and quality control analysis.</li> <li>The 2015 sample intervals range from 0.18 m to 3.42 m with an average interval of 1.29 m.</li> <li>Samples were packed by experienced site personnel and sent to SGS (Malaysia) Sdn. Bhd. laboratory in Kuala Lumpur, Malaysia.</li> <li>All sample preparation and analyses were undertaken by (Malaysia) Sdn. Bhd. laboratory in Kuala Lumpur, Malaysia.</li> <li>Gold analyses of the 2015 samples were by fire assay with atomic absorption spectrometry (AAS) finish of a 30 g sample, with a detection limit of 0.01 g/t gold (method FAA303).</li> <li>Ag, Cu, Pb and Zn were analysed by a four acid digest using SGS method AAS43B.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Triple tube diamond core drilling - fully drilled with diamond bit without RC pre-collar.</li> <li>Core diameter varies from 122 mm, 96 mm to 76 mm with depth.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Core sample recovery recorded in logging sheet and recovery results assessed by geologists.</li> <li>Statistical analysis indicates there is no relationship between recovery and grade.</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drillholes were logged by geologists.</li> <li>Logging data recorded includes interval from and to, colour, major mineral composition, texture and structure, mineralisation and lithology types.</li> <li>Cores were photographed.</li> <li>All samples that were identified as having potential mineralisation were assayed.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Core samples were logged and intervals for analysis were marked-up by CNMC geologists.</li> <li>Core samples were cut into half and collected by experienced CNMC personnel.</li> <li>2015 sample intervals range between 0.18 m and 3.42 m with an average interval of 1.29 m.</li> <li>Quarter core samples were used for quality assurance and quality control analysis.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>All samples were dispatched to independent laboratory SGS (Malaysia) Sdn. Bhd. laboratory, Malaysia.</li> <li>CNMC's procedures for 2015 included the submission of blanks, blind duplicate samples and standards with samples and submission of duplicate sample to an umpire laboratory (ALS Minerals laboratory in Perth, Australia). Sample submission rates are in excess of industry practise and are to be commended.</li> <li>Four standard samples (G910-7, G307-8, G910- 3 and G308-4) from Geostats Pty Ltd were used.</li> <li>Analysis of the QAQC data indicates high levels of precision and with no bias.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>A twin hole was drilled at New Discovery during 2013. This confirmed the mineralised intersection within the upper part of the orebody.</li> <li>Signed copies of the assay certificates were used by Optiro to verify the assay data for 20% of the 2015 database.</li> <li>Data validation included checking for out of range assay data and overlapping or missing intervals.</li> <li>Below detection values were set to half the detection limit.</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drillhole collar locations (easting, northing and elevation) are surveyed by geologists after hole completion using SOUTH Polaris 9600 Static GPS accurate to within +/-10 cm, or GARMIN GPSmap 60CSx accurate to within +/-7 m.</li> <li>Grid system used is Malaysian National Grid (MNG).</li> <li>A detailed topographical surface has been defined over a 7 km<sup>2</sup> area that covers the four deposits. Contour intervals are at 5 m intervals and points along the contour lines are generally at intervals of around 10 m. This data was used to generate a DTM for the resource estimate.</li> <li>Drillhole collars were pressed to the DTM. Differences of up to 24 m were noted between the drillhole collar elevation and the topography.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>During 2015, data from 69 additional vertical and inclined drillholes for a total of 7,700.6 m were incorporated into the database.</li> <li>Drillhole spacing and drill section spacing averaged 50 m depending on location, access and ground conditions.</li> <li>Data obtained is sufficient to establish the degree of geological and grade continuity.</li> <li>Samples are not composited for analysis. Downhole compositing is applied for Mineral Resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Drill sections are oriented perpendicular to the strike of the deposit.</li> <li>Vertical and inclined holes have been drilled, depending on the orientation of the lithology and mineralisation.</li> <li>The orientation of drilling is considered adequate for an unbiased assessment of the deposit with respect to interpreted structures and controls on mineralisation.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>The 2015 drill core samples were packed on site by CNMC personnel and dispatched by road freight to SGS (Malaysia) Sdn. Bhd. laboratory, Malaysia.</li> <li>All sample preparation and assaying was completed under the supervision of SGS laboratory.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>Optiro visited the Sokor project during December 2011 and June 2015. Review of the sampling techniques did not reveal any material issues.</li> </ul>

# SECTION 2 REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Ulu Sokor area is covered by numerous exploration, mining and general purpose tenements which support the ongoing gold ore mining operation.</li> <li>Mining Lease ML 2/2008 Lot 2014 is held by CMNM Mining Group Sdn Bhd; a subsidiary of CNMC Goldmine Holdings Ltd.</li> <li>Exploration licence EL 2/2006 has expired and is in the process of being renewed by CNMC Goldmine Holdings Ltd through its subsidiary MCS Mining Group Sdn. Bhd.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Ulu Sokor area has a long history of gold prospecting and small scale alluvial and hard rock mining since 1900s, by Duff Development Company Ltd, Eastern Mining and Metals Company, Asia Mining Sdn Bhd, and TRA Mining (Malaysia) Sdn Bhd.</li> <li>BDA (Behre Dolbear Australia Pty Ltd) had provided an independent assessment of technical aspects on this project.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Ulu Sokor is located in the Central Belt of Peninsular Malaysia. Gold mineralisation is located towards the middle of Central Belt and is associated with the intersection of two major north-south trending structures with northeast to northwest trending secondary structures.</li> <li>Gold mineralisation at Ulu Sokor is both lithologically and structurally controlled. It is generally hosted in acid to intermediate tuffaceous rocks and in carbonate-rich rocks. High grade gold mineralisation is typically associated with intense shearing and brecciation, veining and pervasive alteration.</li> <li>Three deposits have been defined within the southern area (Manson's Lode, New Discovery Lode and Ketubong) and a fourth deposit (Rixen) is located within the northern area of the tenement.</li> <li>Gold at Manson's Lode is strongly associated with pyrite, chalcopyrite, galena and sphalerite.</li> <li>Manson's Lode extends along strike for 750 m, across strike for 240 m and up to 120 m from surface.</li> <li>New Discovery has a strike length of 325 m, an across strike extend of 300 m and extends up to 180 m at depth.</li> <li>Rixen is located 3 km north of Ketubong and extends along strike for 2,000 m, 500 m across strike and up to 200 m from surface.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drillhole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul> <li>Not applicable – drilling was designed for resource definition.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Not applicable – drilling was designed for resource definition.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Not applicable – drilling was designed for resource definition.</li> <li>Not applicable – drilling was designed for</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	• Not applicable – drilling was designed for resource definition.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Not applicable – drilling was designed for resource definition.</li> </ul>



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> </li> </ul>	<ul> <li>Not applicable – drilling was designed for resource definition.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Future resource definition drilling is planned to further extend known mineralised zones at Rixen, New Discovery and Manson's Lode, and to explore for additional mineralised zones within the Sokor project area.</li> </ul>

# SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data entry by site geologist, checked by geological supervisor and additional checking and validation by resource geologist.</li> <li>Data validation included checking for out of range assay data and overlapping or missing intervals</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Site visit undertaken during December 2011 and June 2015 by Optiro (Competent Person for the Mineral Resource estimate).</li> <li>During site visit geological logging, sampling techniques and procedures were reviewed.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The level of confidence in the interpretations of the mineralised horizons is reflected by the Mineral Resource classification.</li> <li>In general infill drilling has confirmed the mineralisation interpretations.</li> <li>Previous mining of near surface, high grade ore has occurred at Manson's Lode and the pit has been backfilled with mineralised material of lower grades from Manson's Lode.</li> <li>Geological interpretation has been defined by diamond drilling. Mineralisation interpretation was based on a nominal 0.3 g/t gold cut-off grade and was completed along drill sections, typically at spacings of 20 m and 50 m. The interpretations were triangulated to form 3D solids (mineralisation domains).</li> <li>Additional base metal mineralisation was interpreted at Manson's Lode based on a nominal 3% Pb+Zn cut-off grade.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>All available geological data has been used to interpret the mineralisation and to differentiate between mineralisation within eluvial/alluvial, backfill and bedrock.</li> <li>Mineralised domains were interpreted for the backfill material (at Manson's Lode), alluvial and eluvial mineralisation, and bedrock mineralisation that occurs sub-parallel to the lithology and is structurally controlled in the vicinity of the Ketubong-Rixen fault zone.</li> <li>Where possible, a base of oxidation surface has been interpreted.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>At Manson's Lode the mineralisation strikes northeast-southwest and has a relatively flat orientation. It is 750 m along strike and 240 m across strike and extends from surface to a depth of 120 m.</li> <li>At New Discovery the mineralisation strikes north-south and dips approximately 25° to the east. It is 325 m along strike by 300 m across strike. Mineralisation extends from surface to a depth of approximately up to 180 m.</li> <li>At Ketubong the mineralisation strikes north-south and dips approximately 50° to the east. It is 520 m along strike by 200 m down dip. Mineralisation extends from surface to a depth of approximately 200 m.</li> <li>At Rixen the mineralisation strikes north-south and dips approximately 20° to the east. It is 2,000 m along strike by 300 m across strike. Mineralisation extends from surface to a depth of approximately 20° to the east. It is 2,000 m along strike by 300 m across strike. Mineralisation extends from surface to a depth of approximately 20° to the east. It is 2,000 m along strike by 300 m across strike. Mineralisation extends from surface to a depth of approximately 20° to the east. It is 2,000 m along strike by 300 m across strike. Mineralisation extends from surface to a depth of approximately 20° to the east. It is 2,000 m along strike by 300 m across strike.</li> </ul>
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search</li> </ul>	<ul> <li>Drillhole sample data was flagged using domain codes generated from three dimensional mineralisation domains and oxidation surfaces.</li> <li>Sample data was composited to a 1.5 m downhole length.</li> <li>The influence of extreme sample distribution outliers was reduced by top-cutting. The top-cut levels were determined using a combination of top-cut analysis tools (grade histograms, log probability plots and CVs).</li> <li>Directional variograms were modelled using a normal score transformation. Mineralisation continuity was interpreted from variogram analyses to have an along strike range of 50 m to 115 m within the alluvial/eluvial and backfill material, and 75 m to 175 m within the bedrock mineralisation.</li> <li>Parameters from Kriging neighbourhood analysis, undertaken in 2012 (Manson's Lode and New Discovery) and 2015 (Rixen) to optimise the block size, search distances and sample numbers, were used.</li> <li>Grade estimation was into parent blocks of 10 m by 10 m at Manson's Lode, New Discovery</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>and Ketubong, and 10 m by 20 m at Rixen, on 2 m benches.</li> <li>Block grade estimation was carried out using ordinary kriging at the parent block scale. Three estimation passes were used for all domains; the first search was based upon the variogram ranges for each domain in the three principal directions; the second search was typically two times the first search in all directions, and the third search was four or five times the initial search, with reduced sample numbers required for estimation.</li> <li>Over 70% of blocks at Manson's Lode and Rixen and over 60% of the blocks at New Discovery were estimated in the first pass.</li> <li>The estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the declustered drillhole data and by easting, northing and elevation slices.</li> </ul>
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>The tonnages are estimated on a dry basis.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>The Mineral Resources are reported above a 0.5 g/t gold cut-off grade at Manson's Lode, and Ketubong, 0.4 g/t cut-off grade at New Discovery and above a 0.3 g/t gold cut-off grade at Rixen, to reflect current commodity prices, operating costs and processing options</li> <li>Base metal Mineral Resources at Manson's Lode, in addition to the gold Mineral Resources, are reported above a 3% Pb+Zn cut-off grade.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	Planned extraction is by open pit mining. Mining factors such as dilution and ore loss have not been applied.
Metallurgical factors or assumptions	<ul> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the</li> </ul>	<ul> <li>No metallurgical assumptions have been built into the Mineral Resource models.</li> </ul>



Criteria	JORC Code explanation	Commentary
	assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmen- tal factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>CNMC has identified the key potential environmental impacts arising from the project's operations and their associated mitigation measures are being implemented.</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Representative sections of core of 0.2 m were selected and weighted in water and air.</li> <li>Average bulk density values for oxide and fresh material at Rixen deposits were calculated using measurements from 80 sections of diamond core.</li> <li>Average bulk density values for New Discovery and Ketubong were calculated using measurements from 68 sections of diamond core from for New Discovery, Ketubong and New Found (adjacent to New Discovery).</li> <li>Density measurements were obtained from 30 sections of core from Manson's Lode. An ordinary least squares model was developed that was used to determine the density from the silver, lead and zinc contents.</li> <li>Average bulk density values for the eluvial/alluvial and back fill material was determined from measurements of material from 41 test pits.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> </ul>	<ul> <li>Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (kriging efficiency).</li> <li>Measured Mineral Resources have been defined at Manson's Lode and New Discovery generally in areas of 20 m by 20 m drill spacing.</li> <li>Indicated Mineral Resources have been defined generally in areas of 40 m by 40 m drill spacing.</li> </ul>

Criteria	JORC Code explanation	Commentary
Audits or	Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>Inferred Mineral Resources have been defined generally in areas of 80 m by 80 m drill spacing, at depths of over 60 m below the topographical surface and where the confidence in the block estimate (as measured by the kriging efficiency) is low.</li> </ul>
reviews	• The results of any aualts of reviews of Mineral Resource estimates.	<ul> <li>The estimation parameters and Mineral Resource models were peer reviewed by Optiro staff.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate and the procedures used.</li> </ul>	<ul> <li>The assigned classification of Measured, Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> <li>The confidence levels are believed to be appropriate for quarterly production volumes.</li> </ul>

#### SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The Mineral Resource estimate used for the Rixen, Manson's Lode and New Discovery deposits are classified as a JORC 2012 Mineral Resource Statement, and were completed by Mrs Christine Standing of Optiro on behalf of CNMC.</li> <li>The Mineral Resources are reported exclusive of (additional to) the Ore Reserves as stated in this report.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>A site visit was previously undertaken in May 2012 and June 2015 by Mr Andrew Law (the Competent Person for the Ore Reserve estimate).</li> </ul>

Criteria	JORC Code explanation	Commentary
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>Mineral Resources have been converted to Ore Reserves on the basis of the existing operational status of the deposits and historical records.</li> <li>As the mine is currently operating, no additional studies have been completed to support this Ore Reserve estimate. The mine has current, optimised mine plans in place, and material modifying factors have been derived on the basis of the current operational data.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>Cut-off grades have been calculated based on forecast mined gold grades, recovery and dilution parameters, mining and processing costs and forecast commodity pricing.</li> </ul>
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and preproduction drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul> <li>The methods and assumptions used in converting Mineral Resources to Ore Reserves are based on operating parameters from the mines. The mines have appropriate current designs developed from the recently re-done optimisation processes.</li> <li>The open pit mining methods selected for the CNMC mines have been selected to best address the operational requirements of the deposit characteristics, and have been in effect since the commencement of mining operations in 2010.</li> <li>Assumptions made regarding geotechnical constraints have been developed based on operating knowledge of the existing mines.</li> <li>The assumptions made for pit optimisation have been based on known operating conditions from the exiting mines.</li> <li>Mining dilution of 5% has been used.</li> <li>Mo minimum mining widths have been applied</li> <li>Inferred Mineral Resources have not been included in any Ore Reserve figures reported.</li> <li>As an operating mine, all infrastructure requirements are already in place for the applied mining methods.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> </ul>	<ul> <li>Heap leaching and vat leaching are currently being used at the Sokor Project. These methods have been selected based on the prevailing ore characteristics.</li> <li>The two leaching methods are well-tested and do not represent an untried processing strategy.</li> <li>Metallurgical testwork has been carried out on samples from across the project area to confirm the appropriateness of the leaching processing methodologies. No metallurgical</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul> <li>domaining has been applied within specific mine areas. Recovery factors have been applied on a mine by mine basis.</li> <li>No assumptions or allowances have been made for deleterious elements.</li> <li>A pilot scale test of the heap leach process was undertaken during 2012 to confirm the suitability of that process for the Rixen ore. The size (approx. 90 kt) of the trial was considered representative of the Rixen deposit.</li> <li>There are no specifications applied to the mine production.</li> </ul>
Environmen-	The status of studies of potential     environmental impacts of the mining and	CNMC has identified the key potential     environmental impacts arising from the
assumptions	processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	project's operations and their associated mitigation measures are being implemented.
Infrastructure	<ul> <li>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li> </ul>	<ul> <li>The Sokor Project is currently in operation and all required infrastructure is in place.</li> </ul>
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>There are no projected major capital costs forecast for the project as all construction is complete and the operating fleet is a mix of owner and contracted equipment.</li> <li>Operating cost data has been provided by CNMC.</li> <li>No allowances have been made for deleterious elements.</li> <li>Metal pricing has been provided by CNMC based on current market forecasts and existing sales agreements.</li> <li>All costs have been provided in US dollars with no conversions used.</li> <li>Transport charges have been provided by CNMC.</li> <li>Treatment and refining charges have been based on site data provided by CNMC.</li> <li>A gold royalty of 5% of gross revenue is payable to the Kelantan State Government (KSG) and an additional tribute payment of 3% of gross revenue is payable to the Kelantan State Economic Development Corporation (KSEDC). CNMC holds an 81% share in the production from the project.</li> </ul>



Criteria	JORC Code explanation	Commentary
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul> <li>As an operating project, all revenue factors have been derived from operating data.</li> <li>Commodity pricing assumptions have been provided by CNMC based on gold price forecasts and existing sales arrangements.</li> </ul>
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<ul> <li>Bullion produced is currently sold on the spot market to local buyers. There are currently no prevailing supply or demand constraints in the local gold industry. No constraints are anticipated over the production period for the project.</li> <li>The local gold market is not considered to present any competitor risk given the relatively low volume of bullion to be produced by the project.</li> <li>The forecast gold price used in preparation of this statement is considered to be an appropriate sales baseline for the production period applied.</li> </ul>
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul> <li>No detailed economic analysis has been completed by Optiro as the project is already in operation and demonstrates an economically viable project.</li> <li>No assumptions or inputs have been applied in an NPV analysis.</li> </ul>
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	• There are no existing impediments to the licence to operate for the project.
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<ul> <li>No identifiable naturally occurring risks have been identified to impact the Ore Reserves.</li> <li>There are no material legal agreements or marketing arrangements in place for the project at this time.</li> <li>Government agreements include: Mining right ML 2/2008 Exploration right EL 2/2006.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul> <li>Mineral Resources were converted to Ore Reserves as per JORC 2012 guidelines, i.e. Measured to Proven, Indicated to Probable. No downgrading in category has occurred for this project.</li> <li>The result reflects the Competent Person's view of the deposit.</li> <li>No Measured Mineral Resources have been converted to Probable Ore Reserves.</li> </ul>
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	<ul> <li>The Ore Reserve has been calculated by Independent consultants Optiro and an internal peer review undertaken.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate study be compared with production data, where available.</li> </ul>	<ul> <li>Relative accuracy and confidence calculations have not been conducted for the Ore Reserve.</li> <li>Current and past production and reconciliation data has been used throughout the Ore Reserve estimations.</li> </ul>