THIS CIRCULAR IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

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

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

中广核矿业有限公司*
CGN Mining Company Limited

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 01164)

(1) VERY SUBSTANTIAL ACQUISITION AND CONNECTED TRANSACTION IN RELATION TO THE ACQUISITION OF 49% INTEREST IN MINING COMPANY "ORTALYK" LLP; (2) VERY SUBSTANTIAL DISPOSAL AND CONNECTED TRANSACTION IN RELATION TO THE GRANT OF CALL OPTION AND BUY-BACK RIGHT; (3) CONTINUING CONNECTED TRANSACTION IN RELATION TO THE OFF-TAKE ARRANGEMENT; AND (4) NOTICE OF EXTRAORDINARY GENERAL MEETING

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

Gram Capital Limited
嘉林資本有限公司

A notice convening the EGM to be held at Conference Room 1402, 14th Floor, North Building, CGN Tower, 2002 Shennan Boulevard, Futian District, Shenzhen, Guangdong Province, PRC on 10 June 2021 (Thursday) at 11:00 a.m. is set out on pages EGM-1 to EGM-4 of this circular. A form of proxy for use at the EGM is enclosed with this circular. Such form of proxy is also published on the websites of the Stock Exchange at www.hkexnews.hk and the Company at www.cgnmc.com.

Whether or not you are able to attend the EGM in person, you are requested to complete and return the accompanying form of proxy enclosed with this circular in accordance with the instructions printed thereon and deposit the same to the Company's branch share registrar and transfer office in Hong Kong, Union Registrars Limited, at Suites 3301-04, 33/F, Two Chinachem Exchange Square, 338 King's Road, North Point, Hong Kong as soon as possible but in any event not less than 48 hours before the time appointed for the holding of the EGM or any adjournment thereof. Completion and return of the form of proxy will not preclude you from attending and voting in person at the EGM or any adjournment thereof should you so wish.

ALTERNATE ARRANGEMENT AND PRECAUTIONARY MEASURES FOR THE EGM

To facilitate Shareholders attending the EGM, electronic facilities will be set up at Room 1903, 19/F, China Resources Building, 26 Harbour Road, Wanchai, Hong Kong (the "**Hong Kong Venue**") where Shareholders or his/her/its proxies may participate in the EGM and cast their votes in person. For details, please refer to note 1 to the notice of EGM.

In view of the ongoing coronavirus disease (COVID-19) pandemic, the Company will implement the following precautionary measures at the EGM and the Hong Kong Venue to protect attending Shareholders, staff and stakeholders from the risk of infection including, without limitation:

(1) Compulsory temperature check
(2) Compulsory wearing of surgical face mask
(3) No refreshment will be served
(4) Provision of Communication Big Data Itinerary Card (通信大數據行程卡) and Health Code (健康碼) as required by the property management (in respect of the EGM venue only)

Any person who does not wear a surgical face mask, not accept temperature check, with a body temperature above 37.2 degree Celsius or subject to any Hong Kong government prescribed quarantine (in the case of attending the Hong Kong Venue) may be denied entry into the EGM venue and the Hong Kong Venue. The Company strongly encourages Shareholders **NOT to attend the EGM in person**, and advises Shareholders to appoint the chairman of the EGM as their proxy to vote according to their indicated voting instructions as an alternative to attending the EGM in person. In any event, should Shareholders intend to attend the EGM in person, Shareholders and/or their proxies are advised to arrive the venue early to allow sufficient time to go through the precautionary procedures. Subject to the development of COVID-19, the Company may implement further changes and precautionary measures and may issue further announcement on such measures as appropriate.

* *for identification purpose only*

25 May 2021

CONTENTS

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

"Acquisition"	the acquisition of the Target Interest under the Sale and Purchase Agreement
"associate(s)"	has the meaning ascribed to it under the Listing Rules
"Beijing Sino-Kazakh"	Beijing Sino-Kazakh Uranium Resources Investment Company Limited* (北京中哈鈾資源投資有限公司), a limited liability company incorporated in the PRC and a wholly-owned subsidiary of the Company
"Board"	the board of Directors
"Buy-back Event(s)"	the event(s) set out in the row "Buy-back of the Target Interest" under the section headed "The Further Cooperation Agreement – Major terms" in the letter from the Board in the circular
"Buy-back Right"	the right of Kazatomprom to request CGNM UK to sell the Target Interest to Kazatomprom set out in the row "Buy-back of the Target Interest" under the section headed "The Further Cooperation Agreement – Major terms" in the letter from the Board in the circular
"Call Option"	the option granted to Kazatomprom, its affiliate and UMP for the acquisition of all the interest of CGNPC-URC in the Fuel Partnership and all the interest of CGNM UK in Ortalyk set out in the Cooperation Agreement as further described in the section headed "Background of the Acquisition – The Cooperation Agreement – The Call Option" in the letter from the Board in the circular
"Call Option Triggering Event(s)"	the event(s) that would trigger the Call Option set out under the section headed "Background of the Acquisition – The Cooperation Agreement – The Call Option" in the letter from the Board in the circular
"Central Mynkuduk Subsoil Use Agreement"	the contract for exploration and extraction of uranium on Central Mynkuduk Deposit between the Ministry of Energy and Mineral Resources and Kazatomprom dated 8 July 2005, as amended, which has subsequently been transferred to Ortalyk

"Central Mynkuduk Deposit"	the central plot of Mynkuduk deposit in South-Kazakhstan region Kazakhstan operated by Ortalyk
"CGN Group"	CGNPC and its subsidiaries
"CGNM UK"	CGNM UK Limited, a company incorporated in the United Kingdom, with limited liability and a wholly-owned subsidiary of the Company
"CGNPC"	China General Nuclear Power Corporation*（中國廣核集團有限公司）, a company incorporated in the PRC with limited liability and the sole shareholder of CGNPC-URC
"CGNPC Mining Participant"	the Company or an affiliate of the Company as nominated by the Company or an affiliate of CGNPC as nominated by CGNPC for participation in the Mining Project under the Cooperation Agreement, later identified as CGNM UK
"CGNPC-URC"	CGNPC Uranium Resources Co., Ltd*（中廣核鈾業發展有限公司）, a company established in the PRC with limited liability and the sole shareholder of China Uranium Development
"China Uranium Development"	China Uranium Development Company Limited, a company incorporated in Hong Kong and a controlling shareholder of the Company, holding approximately 64.82% of the issued Shares as at the Latest Practicable Date
"Company"	CGN Mining Company Limited, a company incorporated in the Cayman Islands with limited liability, the shares of which are listed on the Main Board of the Stock Exchange
"Competent Person"	RPMGlobal Asia Limited
"Competent Person Report"	the *Competent Person Report* prepared by the Competent Person, RPM Global Asia Limited, which is set out in appendix IV to this circular
"Completion"	the completion of the Acquisition in accordance with the Sale and Purchase Agreement
"Completion Date"	the date of completion of the Acquisition in accordance with the Sale and Purchase Agreement

"Condition(s)"	the condition(s) precedent of the Acquisition as set out in the row "Conditions precedent" under the section headed "The Sale and Purchase Agreement – Major terms" in the letter from the Board in the circular
"connected person"	has the meaning ascribed to it under the Listing Rules
"Consideration"	the consideration for the acquisition of the Target Interest under the Sale and Purchase Agreement
"Constitutional Document"	the charter of Ortalyk to be approved by the general meetings of Ortalyk, being the constitutional document of Ortalyk
"controlling shareholder"	has the meaning ascribed to it under the Listing Rules
"Cooperation Agreement"	the *Agreement on Commercial Terms in relation to the Design and Construction of a Fuel Assembly Fabrication Plant in Kazakhstan and the Joint Development of Kazakhstan Uranium Deposits* dated 14 December 2015 entered into among the Company, CGNPC, CGNPC-URC, Kazatomprom and UMP, as announced in the announcement of the Company dated 14 December 2015
"COVID-19"	coronavirus disease 2019
"Director(s)"	the director(s) of the Company
"EGM"	the extraordinary general meeting of the Company to be convened for, among other matters, for the Independent Shareholders to consider and approve, if thought fit, the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of the Buy-back Right and the Call Option and the Off-take Arrangement)
"Expired Zhalpak Subsoil Use Agreement"	contract for exploration of uranium on the Zhalpak Deposit between Ministry of Industry and New Technologies of the Kazakhstan and Kazatomprom dated 31 May 2010, as amended, which has subsequently been transferred to Ortalyk

"Fission"	Fission Uranium Corp., a Canadian-based resource company whose ordinary shares are listed on the Toronto Stock Exchange under the symbol "FCU", the OTCQX market place in the U.S. under the symbol "FCUUF" and on the Frankfurt Stock Exchange under the symbol "2FU", and is owned as to approximately 15.01% by the Company as at the Latest Practicable Date
"Fuel Assembly Purchase Obligation"	the obligation to purchase an agreed quantity of fuel assemblies over a period of 20 years from the Fuel Partnership by CGNPC-URC or one of its affiliates as described under the paragraph headed "Background of the Acquisition – The Fuel Assembly Purchase Obligation" in the letter from the Board in the circular
"Fuel Partnership"	the legal entity for carrying out the Fuel Project, being Ulba-FA
"Fuel Pellets Manufacturing Services Purchase Obligation"	the obligation for CGNPC-URC to engage UMP to provide fuel pellets manufacturing services under the Further Cooperation Agreement as further described in the row "Fuel Pellets Manufacturing Services Purchase Obligation" under the section headed "The Further Cooperation Agreement – Major terms" in the letter from the Board in the circular
"Fuel Project"	the project to construct and manage a facility for the fabrication of fuel assemblies to be supplied to customers, which shall include fuel fabrication services, contemplated under the Cooperation Agreement
"Further Cooperation Agreement"	the *Agreement for Further Expanding and Deepening Mutually Beneficial Cooperation in Nuclear Energy Field* dated 22 April 2021 entered into between, among other parties, Kazatomprom, the Company and CGNM UK as further described in the section headed "Further Cooperation Agreement" in the letter from the Board in the circular
"Group"	the Company and its subsidiaries

"Guaranteed Entitlement"	the guaranteed entitlement to procure 20,000 tonnes of uranium by the Company or its affiliate during the life of the Fuel Partnership stipulated in the Mining Principles Agreement as described in point (iv) under the section headed "Background of the Acquisition – The Mining Principles Agreement" in the letter from the Board in the circular
"HK$"	Hong Kong dollars, the lawful currency of Hong Kong
"Hong Kong"	Hong Kong Special Administrative Region of the PRC
"Independent Board Committee"	the independent committee of the Board, consisting of all the independent non-executive Directors, established to advise the Independent Shareholders on the Sale and Purchase Agreement and the transactions contemplated thereunder
"Independent Financial Adviser" or "Gram Capital"	Gram Capital Limited, a corporation licensed to carry on Type 6 (advising on corporate finance) regulated activity under the SFO and the independent financial adviser appointed to advise the Independent Board Committee and the Independent Shareholders on the Sale and Purchase Agreement and the transactions contemplated thereunder
"Independent Shareholders"	Shareholders other than the CGN Group
"Independent Third Party(ies)"	party(ies) which is independent of and not connected with the Company and its connected persons and not otherwise a connected person of the Company
"Initial FA Purchase Obligation Due Date"	28 February 2020, being the date stipulated in the Cooperation Agreement that either Kazatomprom and UMP (acting together) or CGNPC and CGNPC-URC (acting together) may issue a liquidation notice for the liquidation of the Fuel Partnership if the first shipment under the initial Long Term Fuel Assembly Contract has not been despatched by such date
"Irkol Mine"	the Irkol mine located in the Kyzylorzhinsk area, 20 kilometres from the town of Chiili, Kazakhstan, which is owned and operated by Semizbay-U.
"JORC Code"	the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
"Kazakhstan"	the Republic of Kazakhstan

"Kazatomprom"	Joint Stock Company "National Atomic Company "Kazatomprom", a joint stock company established according to the laws of Kazakhstan
"Kazatomprom Mining Participant"	Kazatomprom or its affiliate for participation in the Mining Project under the Cooperation Agreement
"Latest Practicable Date"	18 May 2021, being the latest practicable date prior to the printing of this circular for ascertaining certain information contained in this circular
"Listing Rules"	the Rules Governing the Listing of Securities on the Stock Exchange
"Long Stop Date"	the long stop date in relation to the Completion as set out in the row "Long Stop Date" under the section headed "Sale and Purchase Agreement – Major terms" in the letter from the Board in the circular
"Long Term Fuel Assembly Contract(s)"	the back-to-back off-take agreement(s), each with a term between three to five years, to purchase the product of the Fuel Partnership (i.e. fuel assemblies) under the Fuel Assembly Purchase Obligation
"Mineral Resource"	as defined in the JORC Code, means a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) that there are reasonable prospects of eventual economic extraction
"Mining Partnership"	the legal entity for carrying out the Mining Project, which is later identified as Ortalyk
"Mining Principles Agreement"	the *Mining Principles Agreement on the joint development of Kazakhstan Uranium Deposit* dated 4 October 2016 entered into between the Company and Kazatomprom, as announced in the announcement of the Company dated 4 October 2016
"Mining Project"	the project of development of one or more uranium deposits in Kazakhstan contemplated under the Cooperation Agreement
"natural uranium"	uranium concentrates in the form of U3O8

"New Exercise Price"	the exercise price of the Buy-back Right, the Sell-back Right, the Call Option and the Put Option determined by the mechanism stipulated in the Further Cooperation Agreement as set out in the row "Exercise price of the Buy-back Right" under the section headed "The Further Cooperation Agreement – Major terms" in the letter from the Board in the circular
"New Zhalpak Subsoil Use Agreement"	the new subsoil use agreement for the Zhalpak Deposit
"Off-take Agreement"	the *Agreement on the basic principles of marketing (sale) policy with respect to the products of Mining Company "ORTALYK" LLP* expected to be entered into between Kazatomprom, the Company and CGNM UK as further described in the section headed "The Sale and Purchase Agreement – Off-take Arrangement" in the letter from the Board in the circular
"Off-take Arrangement"	the arrangement for off-take of the product of Ortalyk as initially described in the section headed "Off-take arrangement of products of the Mining Partnership" and further particularised in the Off-take Agreement
"Old Exercise Price"	the exercise price of the Call Option and the Put Option determined by the mechanism stipulated in the Cooperation Agreement as set out in the section headed "Background of the Acquisition – The Cooperation Agreement – Exercise price of the Call Option and Put Option" in the letter from the Board in this circular, which has subsequently been superseded by the New Exercise Price
"Ore Reserves"	as defined in the JORC Code, means the economically mineable part of a measured and/or indicated Mineral Resource
"Ortalyk"	Mining Company "ORTALYK" LLP, a legal entity established in the form of a limited liability partnership in Kazakhstan and is wholly owned by Kazatomprom as of the date of this circular
"percentage ratios"	has the same meaning ascribed to it under the Listing Rules

"PRC"	the People's Republic of China, and for the purpose of this circular only, excluding Hong Kong, Macau Special Administrative Region of the People's Republic of China and Taiwan
"Proposed Annual Cap(s)"	the proposed annual maximum amount of natural uranium to be off-taken by the Group under the Off-take Arrangement to be approved by the Independent Shareholders
"Put Option"	the option granted to CGNPC, CGNPC-URC, CGNPC Mining Participant for the disposal of all the interest of CGNPC-URC in the Fuel Partnership to UMP and all the interest of CGNM UK in Ortalyk to Kazatomprom Mining Participant under the Cooperation Agreement as further described under the paragraph headed "Background of the Acquisition – The Cooperation Agreement – The Put Option" in the letter from the Board in the circular
"Put Option Triggering Event(s)"	the event(s) that would trigger the Put Option set out under the paragraph headed "Background of the Acquisition – The Cooperation Agreement – The Put Option" in the letter from the Board in the circular
"RMB"	Renminbi, the lawful currency of the PRC
"Sale and Purchase Agreement"	the *Sale and Purchase Agreement in relation to the Participatory Interest in the charter capital of Mining Company "ORTALYK" LLP* dated 22 April 2021 entered into between Kazatomprom and CGNM UK as further described in the section headed "The Sale and Purchase Agreement" in the letter from the Board in the circular
"Sell-back Right"	the right to require Kazatomprom to buy-back the Target Interest if Ortalyk fails to obtain the New Zhalpak Subsoil Use Agreement set out in the row "Zhalpak subsoil use right" under the section headed "The Sale and Purchase Agreement – Major terms" in the letter from the Board in the circular
"Semizbay Mine"	the Semizbay mine located in the Valihanov District of Akmoltnsk Oblast, Kazakhstan which is owned and operated by Semizbay-U.

"Semizbay-U"	Semizbay-U Limited Liability Partnership, a limited liability partnership established in Kazakhstan with the Company holding 49% of its equity interest through its wholly-owned subsidiary
"SFO"	Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)
"Share(s)"	ordinary share(s) in the Company with nominal value of HK$0.01 each
"Shareholder(s)"	holder(s) of the Share(s)
"Shareholders' Agreement"	*The Foundation Agreement of Mining Company "Ortalyk" Limited Liability Partnership* to be entered between Kazatomprom and CGNM UK, specifying mutual rights and obligations in relation to the participation in the charter capital of Ortalyk and management thereof
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"subsidiaries"	has the meaning ascribed to it under the Listing Rules
"Subsoil Code"	Code of the Republic of Kazakhstan "On Subsoil and Subsoil Use" dated 27 December 2017 No. 125-VI, as amended
"Subsoil Law"	Law of the Republic of Kazakhstan "On Subsoil and Subsoil Use" dated 24 June 2010 No. 291-IV, as amended, which has been superseded by the Subsoil Code
"Target Interest"	49% interest in Ortalyk
"Target Mines"	the Central Mynkuduk Deposit and the Zhalpak Deposit
"TradeTech"	TradeTech of Denver Tech Centre, 7887 E. Belleview Avenue, Suite 888, Englewood, CO 80111, USA, one of the leading providers of uranium prices and an independent third party
"Tenge"	Kazakhstan Tenge, the lawful currency of Kazakhstan
"Track Record Period"	the three years ended 31 December 2020
"tU"	tonnes of uranium

"Ulba-FA"	"Ulba-FA" Limited Liability Partnership, a limited liability partnership established in in Kazakhstan and owned as to 51% and 49% by UMP and CGNPC-URC, respectively
"UMP"	Joint Stock Company "Ulba Metallurgical Plant", a joint stock company established according to the laws of Kazakhstan and a subsidiary of Kazatomprom
"United Kingdom"	The United Kingdom of Great Britain and Northern Ireland
"US$" or "USD"	United States dollars, the lawful currency of the United States of America
"UxC"	UxC, LLC, one of the leading providers of uranium prices and an independent third party
"Valuation Date"	the valuation date of the Target Interest for the purpose of determination of the Consideration, being 30 June 2020
"Valuation Report"	the report on valuation of 49% equity interest in Ortalyk prepared by the Valuer as set forth in Appendix V to this circular
"Valuer"	China Enterprise Appraisals Company Limited
"Zhalpak Deposit"	the uranium deposit located in Sozak district, Kazakhstan operated by Ortalyk
"%"	per cent

* *for identification purpose only*

中广核矿业有限公司*
CGN Mining Company Limited

(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 01164)

Executive Directors:
Mr. An Junjing *(chief executive officer)*
Mr. Chen Deshao

Non-executive Directors:
Mr. Yu Zhiping *(chairman)*
Mr. Sun Xu
Mr. Yin Xiong

Independent Non-executive Directors:
Mr. Qiu Xianhong
Mr. Gao Pei Ji
Mr. Lee Kwok Tung Louis

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

Head office and principal place of business in Hong Kong:
Room 1903, 19/F.
China Resources Building
26 Harbour Road
Wanchai, Hong Kong

25 May 2021

To the Shareholders

Dear Sir or Madam,

(1) Very substantial acquisition and connected transaction in relation to the acquisition of 49% interest in Mining Company "ORTALYK" LLP
(2) Very substantial disposal and connected transaction in relation to the grant of Call Option and Buy-back Right
(3) Continuing connected transaction in relation to the Off-take Arrangement

INTRODUCTION

Reference is made to the announcement of the Company dated 22 April 2021, whereby it was announced that the Group entered into the Sale and Purchase Agreement on 22 April 2021 pursuant to which, among other matters, CGNM UK (a wholly-owned subsidiary of the Company) agreed to acquire the Target Interest which constitutes a very substantial acquisition and connected transaction of the Company under the Listing Rules. The Sale and Purchase Agreement also gave effect to the grant of the Buy-back Right and the Call Option by the Group which constitute very substantial disposal and connected transaction of the Company.

* *for identification purpose only*

In connection with the Acquisition, it is expected that the Company, CGNM UK and Kazatomprom will enter into the Off-take Agreement prior to the Completion of the Acquisition for the off-take of the natural uranium concentrates produced by Ortalyk in proportion to their respective equity interest in Ortalyk.

The purpose of this circular is to provide you with, among other things, (i) a letter from the Board containing further details of the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of the Buy-back Right and the Call Option and the Off-take Arrangement); (ii) a letter from the Independent Board Committee containing the view of the Independent Board Committee on the Sale and Purchase Agreement and the transactions contemplated thereunder; (iii) a letter from Gram Capital advising the Independent Board Committee and the Independent Shareholders; and (iv) the notice of the EGM.

BACKGROUND OF THE ACQUISITION

The Cooperation Agreement

Reference is made to the announcement of the Company dated 14 December 2015 whereas it was announced that the Company entered into the Cooperation Agreement with CGNPC, CGNPC-URC, Kazatomprom and UMP to record their respective rights and obligations with respect to the incorporation and operation of (i) the Fuel Partnership, namely Ulba-FA, by CGNPC-URC and UMP to undertake the Fuel Project to build and operate a fuel assemblies fabrication plant in Kazakhstan; and (ii) a Mining Partnership to undertake the Mining Project by CGNPC Mining Participant and Kazatomprom Mining Participant to develop and operate one or more mining deposits in Kazakhstan. CGNPC Mining Participant has later been identified to be CGNM UK, a wholly-owned subsidiary of the Company, and the legal entity for carrying out the Mining Project has later been identified as Ortalyk.

The Fuel Assembly Purchase Obligation

The Cooperation Agreement provided that, CGNPC-URC or one of its affiliates shall enter into Long Term Fuel Assembly Contracts, being back-to-back off-take agreements, each with a term between three to five years, to purchase a total of 4,000 tU of product of the Fuel Partnership (i.e. fuel assemblies) over a period of 20 years.

The first Long Term Fuel Assembly Contract has been entered into between CGNPC-URC and Ulba-FA on 21 December 2020 covering up to 31 December 2025.

Off-take arrangement of products of the Mining Partnership

The Cooperation Agreement also provided that Kazatomprom Mining Participant and CGNPC Mining Participant shall procure that the Mining Partnership enters into an off-take agreement with CGNPC Mining Participant to supply a total amount of 20,000 tonnes of uranium during the commitment period of the Fuel Assembly Purchase Obligation.

The Call Option

Pursuant to the Cooperation Agreement, Kazatomprom, Kazatomprom Mining Participant and UMP shall have the right exercisable any time during the 60 business days following the occurrence of any of following events to require both (but not one of) (i) CGNPC-URC to sell 100% of its participatory interest (if any) in the Fuel Partnership to UMP (or its nominee); and (ii) CGNPC Mining Participant to sell 100% (in whole and not in part) of its participatory interest in the Mining Partnership (if any) to Kazatomprom Mining Participant at the Old Exercise Price:

(i) all procedures and steps as stipulated in the constitutional documents of the Fuel Partnership or the Mining Partnership, as applicable, to solve a deadlock having been exhausted but failed and UMP (in the case of the Fuel Partnership) or the Kazatomprom Mining Participant (in the case of the Mining Partnership) reasonably believes that the deadlock will have a materially detrimental effect on the operation or profitability of the Fuel Partnership or the Mining Partnership, as applicable;

(ii) CGNPC-URC ceasing to hold a participatory interest in the Fuel Partnership;

(iii) a material breach to the Cooperation Agreement is committed by either of CGNPC, CGNPC-URC, CGNPC Mining Participant or their affiliates (other than the government of the PRC) which is not remedied within 60 business days;

(iv) CGNPC and CGNPC-URC (acting together) issue a liquidation notice as a result of the first shipment under the first Long Term Fuel Assembly Contract has not been despatched on or before the Initial FA Purchase Obligation Due Date, being 28 February 2020, or CGNPC Mining Participant issues a liquidation notice pursuant to the constitutional documents of the Mining Partnership, or CGNPC-URC issues a liquidation notice pursuant to the constitutional documents of the Fuel Partnership;

(v) subject to certain exceptions, any step for the Fuel Project and/or the Mining Project is not completed on or before the due date stipulated in the Cooperation Agreement provided such delay is not attributable to, or due to, Kazatomprom, UMP or Kazatomprom Mining Participant's default in performing its obligations, and such delay has not been remedied within 60 business days after the applicable due date; and

(vi) on the date falling 24 months from the date when the first order is received by the Fuel Partnership under the first Long Term Fuel Assembly Contract, the Fuel Partnership has not delivered any shipment of its products under the Long Term Fuel Assembly Contract with respect to that order.

The Put Option

It was also stipulated in the Cooperation Agreement that, CGNPC, CGNPC-URC and CGNPC Mining Participant shall have the right exercisable any time during the 60 business days following the occurrence of any of the following events to require (i) UMP to acquire from CGNPC-URC 100% of its participatory interest in the Fuel Partnership (in whole and not in part) and (ii) Kazatomprom Mining Participant to acquire from CGNPC Mining Participant 100% of its participatory interest in the Mining Partnership (in whole and not in part) at the Old Exercise Price:

(i) all procedures and steps as stipulated in the constitutional documents of the Fuel Partnership or the Mining Partnership, as applicable, to solve a deadlock having been exhausted and failed and CGNPC-URC (in the case of the Fuel Partnership) or CGNPC Mining Participant (in the case of the Mining Partnership) reasonably believes that the deadlock will have a materially detrimental effect on the operation or profitability of the Fuel Partnership or the Mining Partnership, as applicable;

(ii) CGNPC Mining Participant ceasing to hold any participatory interest in the Mining Partnership;

(iii) a material breach to the Cooperation Agreement is committed by Kazatomprom or UMP or their affiliates (other than the government of Kazakhstan) which is not remedied within 60 business days;

(iv) Kazatomprom and UMP (acting together) issue a liquidation notice pursuant to the Cooperation Agreement as a result of the first shipment under the first Long Term Fuel Assembly Contract has not been despatched on or before the Initial FA Purchase Obligation Due Date, being 28 February 2020, or Kazatomprom Mining Participant issues a liquidation notice pursuant to the constitutional documents of the Mining Partnership, or UMP issues a liquidation notice pursuant to the constitutional documents of the Fuel Partnership;

(v) subject to certain exceptions, any step for the Fuel Project and/or the Mining Project is not completed on or before the due date as stipulated in the Cooperation Agreement provided such delay is not attributable to, or due to, CGNPC, CGNPC-URC or CGNPC Mining Participant's default in performing its obligations, and such delay has not been remedied within 60 business days after the applicable due date;

(vi) on the date falling 12 months from the date of execution of the mining purchase agreement, CGNPC Mining Participant's participatory interest in the Mining Partnership has not been vested to, and legally owned by, the CGNPC Mining Participant through state registration; and

(vii) occurrence of any Call Option Triggering Event provided that such event is not caused by the default of CGNPC, CGNPC-URC or CGNPC Mining Participant in performing their obligations.

Exercise price of the Call Option and Put Option

Pursuant to the Cooperation Agreement, the exercise price of the Call Option and the Put Option shall be the Old Exercise Price, being the market value of the relevant interest as at the date of the exercise notice as agreed by Kazatomprom and CGNPC, or in the absence of agreement, determined by a chartered accountant or valuer appropriately licensed pursuant to the laws of Kazakhstan from any of the big four accounting firms.

The Old Exercise Price has been superseded by the New Exercise Price in accordance with the Further Cooperation Agreement. For details, please refer to the rows "Exercise Price of the Buy-back Right" and "Adjustment to the exercise price of the Put Option and the Call Option" under the section headed "The Further Cooperation Agreement – Major terms" below.

Latest status of the Fuel Project

Ulba-FA, the Fuel Partnership, has been established between UMP and CGNPC-URC in December 2015 whereas a fuel assemblies fabrication plant is currently under construction in Kazakhstan and production is expected to commence in late 2021 with the first delivery of fuel assemblies to take place in 2022.

The Mining Principles Agreement

In relation to the Mining Project, reference is made to the announcement of the Company dated 4 October 2016 whereas the Company and Kazatomprom entered into the Mining Principles Agreement pursuant to which, among other matters:

(i) the Company confirmed its selection of the mining deposits, subject to result of due diligence;

(ii) Kazatomprom shall procure that its rights and obligations under the relevant subsoil use contracts and any other contracts identified by Kazatomprom as expressly relating to the mining deposits identified together with the relevant assets owned by Kazatomprom be transferred into the Mining Partnership;

(iii) Kazatomprom will sell and CGNPC Mining Participant will buy 49% interests in the Mining Partnership by entering into a mining purchase agreement; and

(iv) the parties shall off-take the share in the total uranium product of the Mining Partnership in proportion to their interests, provided that if the off-take is not sufficient to ensure the procurement of 20,000 tonnes of uranium by the Company or its affiliate during the life of the Fuel Partnership, Kazatomprom shall ensure that such further off-take is made available to the Company or its affiliate from its entitlement of the off-take from the Mining Partnership and the Company or its affiliate shall be required to accept such further uranium off-take unless CGNPC and CGNPC Mining Participant irrevocably waive in writing their right to claim non-compliance with the relevant clause of the Cooperation Agreement.

The amendment agreement to the Mining Principles Agreement

As disclosed in the announcement of the Company dated 6 December 2016, the Company and Kazatomprom entered into the amendment agreement to the Mining Principles Agreement to adjust the participatory interest of CGNPC Mining Participant to a percentage which will allow it to share on balance reserves of 19,600 tonnes of uranium.

Latest status of the Mining Project

The Company continued to negotiate with Kazatomprom and conduct due diligence on the Mining Partnership, the Target Interest and the Target Mines and entered into the Sale and Purchase Agreement on 22 April 2021 to materialize the Mining Project by acquiring the Target Interest. In addition, the Further Cooperation Agreement has also been entered to change and update provisions of cooperation of the parties under, among others, the Cooperation Agreement and the Mining Principles Agreement.

Relationship between the Mining Project and the Fuel Project

The Mining Project and the Fuel Project relates to different stages of nuclear fuel production. As it is the national policy of Kazakhstan that state-owned natural resources shall be developed together with the technological development of the nation, the parties agree to proceed with both projects rather than only the Mining Project or only the Fuel Project as part of the cooperation among the parties to the Cooperation Agreement in the nuclear energy industry. Accordingly, the Mining Project and the Fuel Project are inter-conditional.

The chart below illustrates the value chain for the nuclear energy industry:

Key:
U denotes element uranium
O denotes element oxygen
F denotes element fluorin

THE SALE AND PURCHASE AGREEMENT

Major terms

The major terms of the Sale and Purchase Agreement are as follows:

Date	22 April 2021
Parties	• Kazatomprom • CGNM UK
Subject matter	Kazatomprom agreed to sell and CGNM UK agreed to acquire the Target Interest, being 49% interest in Ortalyk, at the Consideration of USD 435,071,181
Conditions precedent	The Completion of the Acquisition shall be subject to the occurrence of: (a) the execution and entering into force of the Further Cooperation Agreement (b) the execution and entering into force of the Long Term Fuel Assembly Contract under the Fuel Assembly Purchase Obligation (c) the execution and entering into force of the contract in relation to the Fuel Pellets Manufacturing Services Purchase Obligation (d) the receipt by Kazatomprom of a record number assigned to the Sale and Purchase Agreement by the National Bank of Kazakhstan as required by the relevant currency control law of Kazakhstan

(e) the receipt by Kazatomprom of decision of its board of directors in relation to the disposal of the Target Interest and approval of the draft Shareholders' Agreement, the draft Constitutional Document and the draft Off-Take Agreement

(f) the receipt by Kazatomprom of the resolution of permission from the government of Kazakhstan regarding the transfer of the Target Interest

(g) the receipt by CGNM UK of the approval of the Acquisition by its board of directors and the Company (as its sole shareholder)

(h) the receipt by CGNM UK of the approval for entering into force of the Shareholders' Agreement and the Constitutional Document by its board of directors

(i) the receipt by CGNM UK of the approval by the Independent Shareholders in accordance with the Listing Rules and such other competent authorities as required from time to time pursuant to the legislation of the United Kingdom, the PRC and Hong Kong

(j) Kazatomprom having procured Ortalyk continue to conduct its business and to operate the Target Mines in the ordinary course and not to carry out other activities which will have a material adverse effect on the operations or assets of Ortalyk from the Valuation Date to the Completion Date

(k) there having no encumbrances existing over any of the material properties or assets of Ortalyk which have material adverse effect on the operations or assets of Ortalyk

CGNM UK shall use all reasonable endeavors to satisfy Conditions (a) to (c) and (g) to (i) and use all reasonable endeavors to assist Kazatomprom in satisfying Conditions (d) to (f).

Kazatomprom shall use all reasonable endeavors to satisfy Conditions (a) to (f), (j) and (k) and use all reasonable endeavors to assist CGNM UK in satisfying Conditions (g) to (i).

The Conditions may only be waived by the written agreement of CGNM UK and Kazatomprom to the extent that such waiver will not result in breach of any applicable law.

Long Stop Date

CGNM UK and Kazatomprom shall use all reasonable endeavors to procure that the Conditions are satisfied as soon as possible, but in any event not later than the Long Stop Date of 30 June 2021.

If all of the Conditions are not satisfied or waived on or before the Long Stop Date, all the provisions of the Sale and Purchase Agreement shall lapse and cease to have effect except for the surviving provisions which mainly relate to termination, confidentiality, qualification of warranties, third party rights, governing law and other administrative matters.

Pre-completion obligation

Kazatomprom shall procure Ortalyk continue to conduct its business and to operate the Target Mines in the ordinary course and not to carry out other activities which will have a material adverse effect on the operations or assets of Ortalyk from the Valuation Date to the Completion Date.

Kazatomprom shall not announce or distribute any dividends from Ortalyk from the Valuation Date to the date of transfer of the Target Interest to CGNM UK; and if any dividends have been made during such period, the corresponding amount shall be deducted from the Consideration.

Completion

Completion shall take place within thirty calendar days from the date on which the last of the Conditions is satisfied or waived or such other date as CGNM UK and Kazatomprom may agree, but not later than the Long Stop Date, where the parties shall sign a completion certificate in an agreed form to confirm (i) fulfillment and/or waiver of all Conditions and (ii) effective from the date of re-registration, CGNM UK will be a participant of Ortalyk holding 49% participatory interest.

Within one day after the Completion, CGNM UK and Kazatomprom shall hold a general meeting of Ortalyk to approve and sign the Shareholders'Agreement and the Constitutional Document. Kazatomprom shall thereafter procure that Ortalyk shall file for re-registration of Ortalyk with the authorised state body in connection with change in the composition of the participants of Ortalyk and such re-registration shall be completed no later than the Long Stop Date.

If the re-registration fails to be completed on or before the Long Stop Date for any reason, Kazatomprom and CGNM UK should settle the matter through friendly negotiation. In case the agreement cannot be reached, CGNM UK shall have the right to request Kazatomprom to refund the Consideration paid, and Kazatomprom shall refund such amount within three days thereafter.

Payment

The Consideration shall be credited to an account of Kazatomprom not later than three business days before the Completion.

Zhalpak subsoil use right and Sell-back Right

Kazatomprom shall use best endeavors to obtain the New Zhalpak Subsoil Use Agreement[1] no later than 31 December 2021 and to transfer all rights and obligations under the New Zhalpak Subsoil Use Agreement to Ortalyk subject to reimbursement of actually incurred costs of Kazatomprom by Ortalyk of not more than US$200,000.

If Ortalyk fails to obtain the New Zhalpak Subsoil Use Agreement by 31 December 2021, CGNM UK has the right to require Kazatomprom to buy-back the Target Interest in the same mechanism as the exercise of the Buy-back Right under the Further Cooperation Agreement.

Call Option, Put Option and Buy-back Right

The parties acknowledge and confirm that, subject to fulfillment or waiver of the Conditions, each of the Call Option, the Put Option and the Buy-back Right shall be granted and take effect upon Completion.

Warranties by Kazatomprom

If the liability of Ortalyk in respect of any accumulated amount of outstanding taxes and penalties, which were arising from any act or omission of Ortalyk before CGNM UK became the participant of Ortalyk, exceeds US$2,000,000 and Kazatomprom shall become liable for 49% of the excess amount, Kazatomprom should reimburse to CGNM UK 49% of such excess amount within 30 business days after the tax authorities make a final decision on the tax liabilities and such a reimbursement amount should be considered as a reduction of the Consideration.

In addition, Kazatomprom represents and warrants to CGNM UK that the warranties set out in the Sale and Purchase Agreement are true, accurate and not misleading in all respects, including, among other warranties, that:

(a) Ortalyk has no outstanding obligations under any loan or other financial arrangement, except those that are disclosed in financial statement.

(b) Ortalyk has not received any notice or other communication indicating that its business has been conducted in violation of applicable laws, regulations and other requirements of the government entities having jurisdiction over Ortalyk and the Target Interest except for those that were disclosed to CGNM UK within the due diligence of Ortalyk.

(c) Ortalyk has formed the liquidation fund required under the Central Mynkuduk Subsoil Use Agreement and the Expired Zhalpak Subsoil Use Agreement.

(d) Ortalyk is not a party to any contract that will have a material adverse effect on its operations or assets, which is other than on an arm's length basis or in the ordinary course.

Limitation on liabilities of Kazatomprom

Kazatomprom shall not be liable for in respect of any individual claim pursuant to or in relation to the warranties of Kazatomprom where the liability in respect of any such claim does not exceed US$200,000. Where the liability agreed or determined in respect of any such claim and related claims exceeds US$200,000, Kazatomprom shall be liable for the full amount of the claim and not just the excess.

Kazatomprom shall not be liable in respect of any claim pursuant to or in relation to the warranties of Kazatomprom unless the aggregate amount of all such claims exceeds US$400,000. Where the liability agreed or determined in respect of all such claims exceeds US$400,000, Kazatomprom shall be liable for the full amount of the claim or series of claims as agreed or determined and not just the excess.

Termination

The Sale and Purchase Agreement shall terminate:

(a) in the event of the termination of the Further Cooperation Agreement

(b) upon mutual written agreement of Kazatomprom and CGNM UK

(c) at any time prior to Completion, unilateral termination by Kazatomprom where any warranties given by CGNM UK are inaccurate or untrue, or have been breached, provided that written notification being served by Kazatomprom to CGNM UK and a cure period of thirty calendar days from the date of such notice has been given

(d) at any time prior to Completion, unilateral termination by CGNM UK where any warranties given by Kazatomprom are inaccurate or untrue, or have been breached, provided that written notification being served by CGNM UK to Kazatomprom and a cure period of thirty calendar days from the date of such notice has been given

	(e) at any time prior to Completion, notice by CGNM UK upon supplemental disclosure being made by Kazatomprom against warranties given by Kazatomprom which in CGNM UK's reasonable opinion is material in the context of the Acquisition, provided that written notification being served by CGNM UK to Kazatomprom and a cure period of thirty calendar days from the date of such notice has been given
Tax gross-up	If CGNM UK is required by law (other than any taxes or fees which shall be borne by Kazatomprom according to the laws of Kazakhstan) to make a deduction or withholding in respect of any sum payable under the Sale and Purchase Agreement, CGNM UK shall make a payment of such additional amount as shall be required to ensure that the net amount received by Kazatomprom will equal to the full amount which would have been received by it had no such deduction or withholding been required to be made.

Note:

1. For background and details of the New Zhalpak Subsoil Use Agreement, please refer to the sub-section headed "The New Zhalpak Subsoil Use Agreement" below.

The New Zhalpak Subsoil Use Agreement

As the Expired Zhalpak Subsoil Use Agreement only provides the right for exploration on the Zhalpak Deposit and has expired, Ortalyk is required to obtain the subsoil extraction right for the Zhalpak Deposit by obtaining the New Zhalpak Subsoil Use Agreement in order to extract and sell the natural uranium content therein. It is expected that the New Zhalpak Subsoil Use Agreement will be in the usual format of subsoil use agreement adopted by the government of Kazakhstan in relation to grant of extraction right, which will stipulate that the agreement owner shall have the right to extract and export materials produced and set out the territory of the Zhalpak Deposit and other requirements and obligations of the agreement owner, such as technological parameters, ecological and radiation safety parameters, capital commitment, obligation to employ local labours, develop and maintain the social infrastructure in the region and provision of professional trainings to Kazakhstan specialists.

In accordance with the requirements of the Subsoil Code, subsoil extraction rights are only granted in the form of a subsoil use agreement to a national company in the field of uranium, i.e. Kazatomprom. Accordingly, the parties agreed that Kazatomprom shall first obtain the extraction right of the Zhalpak Deposit by entering into the New Zhalpak Subsoil Use Agreement with the relevant authority of the Kazakhstan government and transfer the New Zhaplak Subsoil Use Agreement to Ortalyk on or before 31 December 2021.

The State Commission on Mineral Reserves of Kazakhstan approved a feasibility study of the industrial conditions of the Zhalpak Deposit on 4 February 2020. Subsequently, application to the competent authority has been made by Kazatomprom on 21 September 2020 for participation in direct negotiations for the New Zhalpak Subsoil Use Agreement and the uranium reserves report as of 2 January 2020 for Zhalpak Deposit was considered and approved by the State Commission on Mineral Reserves of Kazakhstan on 30 September 2020. As at the Latest Practicable Date, Kazatomprom is waiting for response in its application for direct negotiation from the relevant authorities for entering into the New Zhalpak Subsoil Use Agreement and, to the best knowledge of the Directors after making reasonable enquiries, there is no outstanding condition or requirement required to be fulfilled pursuant to the relevant laws and regulations prior to obtaining the New Zhalpak Subsoil Use Agreement or any legal impediment for Kazatomprom to obtain the New Zhalpak Subsoil Use Agreement.

To the best knowledge of the Directors after making reasonable enquires, no external approval is required or legal impediment exists for Kazatomprom to transfer the New Zhalpak Subsoil Use Agreement to Ortalyk and Kazatomprom may transfer the New Zhalpak Subsoil Use Agreement to Ortalyk by entering into a contract addenum. To protect the interest of the Group, should Ortalyk fails to obtain the New Zhalpak Subsoil Use Agreement by 31 December 2021, CGNM UK has the right to exercise the Sell-back Right to require Kazatomprom to buy-back the Target Interest.

Off-take Arrangement

In addition, to give effect to the off-take arrangement of products of Ortalyk stipulated under the Cooperation Agreement and allow the parties to share the output of the Target Mines in proportion to their interests, it is expected that Kazatomprom, the Company and CGNM UK will enter into the Off-take Agreement prior to the Completion pursuant to which, the parties will agree that they shall have the obligation to acquire the natural uranium concentrates produced by Ortalyk in proportion to their respective participation interests, as follows:

(i) Kazatomprom shall acquire 51% of Ortalyk's total annual production; and

(ii) the Company or CGNM UK shall acquire 49% of Ortalyk's total annual production,

subject to the Guaranteed Entitlement[1] of 20,000 tonnes of uranium[2] in stipulated under the Mining Principles Agreement.

Notes:

1. CGNPC will undertake that, should CGNM UK agree to waive the Guaranteed Entitlement, CGNPC shall execute all such necessary documents to give effect to the waiver in an undertaking to be given prior to the EGM.

2. Notwithstanding the Company and Kazatomprom entered into the amendment agreement to the Mining Principles Agreement to adjust the interest of the Company or its affiliate in the mining partnership to a percentage which will allow it to share on balance reserves of 19,600 tonnes of

uranium as disclosed in the section headed "Background of the Acquisition" above, the parties agreed that the guaranteed entitlement of the Company and CGNM UK shall remain to be 20,000 tonnes of uranium after negotiation.

Term

The Off-take Agreement shall come into force from the date CGNM UK becomes a participant of Ortalyk until the earlier of (i) the date CGNM UK exits from participation in Ortalyk or (ii) the end of the commitment period of the Fuel Assembly Purchase Obligation under the Cooperation Agreement (according to the Cooperation Agreement, the commitment period of the Fuel Assembly Purchase Obligation shall be purchasing fuel assemblies for a continuous period of twenty years, and the first delivery is currently expected to take place in 2022), provided that, if by the end of the commitment period, Ortalyk continues to operate, the Company or CGNM UK shall continue to acquire the product of Ortalyk in proportion to its participation interests but the total off-take volume of the Company and/or CGNM UK shall not exceed 20,000 tonnes of uranium.

It is expected that Ortalyk will carry out liquidation procedure upon depletion of both of the Target Mines and CGNM UK will exit from participation in Ortalyk upon completion of such procedure, and, accordingly, the Off-take Agreement will then cease to have effect pursuant to the terms of the Off-take Agreement.

Given the purpose of the Off-take Arrangement is to allow the holders of the equity interest of Ortalyk to share the product of Ortalyk, the Directors believe that it is necessary that the terms of the Off-take Agreement exceed three years to ensure that the Group will be able to share the output of Ortalyk and to protect the interest of the Company in Ortalyk. Gram Capital has confirmed in its letter to the Independent Board Committee and the Independent Shareholders in this circular that it is normal business practice for agreements of this type to be of such duration in accordance with Rule 14A.52 of the Listing Rules.

Pricing mechanism

The price of the natural uranium concentrates under the Off-take Arrangement shall be the average arithmetic value of spot price of natural uranium published and effective as of the date of delivery published by TradeTech and UxC (being leading providers of uranium prices and independent third parties), respectively, minus a 2% discount, and in the case of Kazatomprom only, less the transportation cost undertaken by Kazatomprom. Ortalyk engages Kazatomprom to deliver its products to its customers (such as the Group) and is required to pay the relevant delivery fees and, in respect of the sales to Kazatomprom, such delivery fees shall be deducted from the price of the purchase as transportation cost. The price of natural uranium concentrates to be paid by the Group and Kazatomprom, respectively, can be illustrated by the following formulas:

$$\text{Price per pound of natural uranium to be paid by the Group} = \text{Spot price} \times 0.98$$

$$\text{Price per pound of natural uranium to be paid by Kazatomprom} = \text{Spot price} \times 0.98 - \text{Transportation cost}$$

Key:

Spot price	means	the average arithmetic value of natural uranium spot price indicators published by TradeTech and UxC, which are published and effective as of the date of delivery
Transportation cost	means	transportation cost undertaken by Kazatomprom

Proposed Annual Caps

The Company proposes the following annual caps in relation to the Off-take Arrangement between 2021 and 2040:

Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Annual cap *(tonnes of natural uranium)*	466	941	1,206	1,324	1,471	1,644	1,588	1,531
Year	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
Annual cap *(tonnes of natural uranium)*	1,469	2,111	2,298	1,908	849	579	487	79
Year	**2037**	**2038**	**2039**	**2040**	**Total**			
Annual cap *(tonnes of natural uranium)*	100	100	100	100	**20,351**			

The Proposed Annual Caps between 2021 and 2036 are determined based on the mining schedule of the Target Mines contained in the Competent Person Report multiplied by the 49% proportionate share of the Group under the Off-take Arrangement, plus a 20% buffer to cater for any potential production fluctuation or year-end cut off adjustment, and adjusted as follows:

(a) in respect of 2021, further multiplied by 0.5 to reflect the fact that the Completion of the Acquisition is expected to take place in or around June 2021;

(b) in respect of 2030, addition of 700 tonnes to cover for potential additional off-take upon exercise of the Guaranteed Entitlement; and

(c) in respect of 2031 to 2036, addition of such amount resulting the entire scheduled output of the Target Mines being off-taken by the Group to reflect the potential additional off-take upon exercise of the Guaranteed Entitlement.

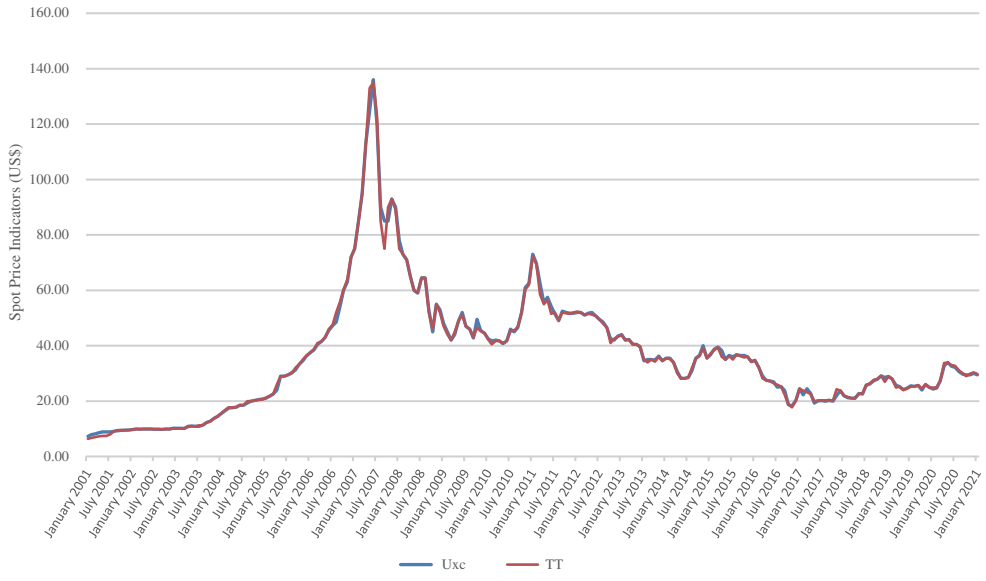
It is expected that the Guaranteed Entitlement, if exercised, will only be exercised in later years since the parties will then have a more certain estimate on the remaining output of the Target Mines.

The Proposed Annual Caps between 2037 and 2040 are determined to be 100 tonnes per year with reference to the estimated production of the final years based on the mining schedule of the Target Mines to cater for any additional production of the Target Mines or adjustment of or delay in production schedule of the Target Mines.

Pursuant to Rule 14A.53(1) of the Listing Rules, an annual cap must be set in respect of the a continuing connected transaction and such annual cap must be expressed in monetary terms. However, (i) as the price of natural uranium under the Off-take Arrangement will be based on the natural uranium price indicators published by TradeTech and UxC published and effective as of the date of delivery, such price may varies from month to month and is out of control of the Group and Kazatomprom; and (ii) since the term of the Off-take Agreement is expected to be more than 15 years save for occurrence of any unforeseen event, it would be more difficult to estimate future natural uranium prices for such a long period.

As illustrated in the chart below, the natural uranium spot price has reached a price of over US$130 per pound in 2007 from below US$10 per pound in 2001 and subsequently decreased to a price of below US$20 per pound in 2016 and 2017, representing a difference of over ten times between the lowest and highest price during the past twenty years:

Natural Uranium Spot Prices



Accordingly, the Company has applied and the Stock Exchange has granted a waiver from strict compliance with Rule 14A.53(1) of the Listing Rules such that annual caps expressed in monetary terms for the Off-take Arrangement is not required, on the conditions that:

(i) an annual cap expressed in fixed quantum will be proposed in the announcement of the Company in relation to the Off-take Arrangement and this circular for the Independent Shareholders' approval;

(ii) this circular will disclose a sensitivity analysis illustrating how changes in the natural uranium prices affect the value of the Off-take Arrangement;

(iii) the Company will, during the term of the Off-take Agreement, disclose in its annual report the transaction amount under the Off-take Agreement during the relevant financial year and comply with the annual review by independent non-executive Directors and auditor requirement (including disclosing the confirmations from the independent non-executive Directors and the auditors in relation to the transactions conducted under the Off-take Agreement during the relevant financial year in its annual report) as required under Chapter 14A of the Listing Rules; and

(iv) Gram Capital will explain and confirm in this circular that it is normal business practice for contracts of this type to be of such duration.

The Company will monitor the actual production of the Target Mines through its involvement in the management of Ortalyk as described in the section headed "Information on Ortalyk and the Target Mines - Management of Ortalyk" below to ensure compliance with the Proposed Annual Cap and, in case the Proposed Annual Cap is expected to be exceeded, the Company will comply with the relevant requirements of the Listing Rules, include obtaining Independent Shareholders' approval if applicable.

Sensitivity analysis

To illustrate how different natural uranium spot prices affect the monetary values under the Off-take Arrangement, the table below sets forth the estimated annual transaction amount between 2021 and 2040, assuming a volume equals to the Proposed Annual Caps has been off-taken in each year, under the following scenarios: (i) the spot price has remained at US$135.5, being the highest average natural uranium spot price indicators published by TradeTech and UxC during the past twenty years, throughout the year; (ii) the spot price has remained at US$28.9, being the most recent natural uranium spot price indicators published by TradeTech and UxC, throughout the year; and (iii) the spot price has remained at US$18.0, being the lowest average natural uranium spot price indicators published by TradeTech and UxC since its historic high of US$135.5 in 2007, throughout the year.

Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Annual cap *(tonnes of natural uranium)*	466	941	1,206	1,324	1,471	1,644	1,588	1,531
Annual transaction amount (US$ million)								
at US$135.5 per pound of natural uranium	164.2	331.5	424.9	466.4	518.2	579.2	559.5	539.4
at US$28.9 per pound of natural uranium	35.0	70.7	90.6	99.5	110.5	123.5	119.3	115.0
at US$18.0 per pound of natural uranium	21.8	44.0	56.4	62.0	68.8	76.9	74.3	71.7

Year	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
Annual cap *(tonnes of natural uranium)*	1,469	2,111	2,298	1,908	849	579	487	79
Annual transaction amount (US$ million)								
at US$135.5 per pound of natural uranium	517.5	743.7	809.6	672.2	299.1	204.0	171.6	27.8
at US$28.9 per pound of natural uranium	110.4	158.6	172.7	143.4	63.8	43.5	36.6	5.9
at US$18.0 per pound of natural uranium	68.7	98.8	107.5	89.3	39.7	27.1	22.8	3.7

Year	**2037**	**2038**	**2039**	**2040**	**Total**
Annual cap *(tonnes of natural uranium)*	100	100	100	100	**20,351**
Annual transaction amount (US$ million)					
at US$135.5 per pound of natural uranium	35.2	35.2	35.2	35.2	**7,169.7**
at US$28.9 per pound of natural uranium	7.5	7.5	7.5	7.5	**1,529.2**
at US$18.0 per pound of natural uranium	4.7	4.7	4.7	4.7	**952.4**

Implementation

To give effect to the Off-take Arrangement and to set out details of the Off-take Arrangement for each particular year, Kazatomprom and the Company or CGNM UK will sign contracts with Ortalyk annually for off-take of its products, setting out details of the off-take, such as quantity, product specification, delivery arrangement and schedule of delivery.

Legal effect

Although the consequences of breach of the Off-take Agreement will not be stipulated in the Off-take Agreement, in the event that the Group or Kazatomprom does not perform their respective off-take obligation, the other party shall have the legal right to commence legal action and seek for damages or specific performance on the Off-take Agreement. Furthermore, as the board of directors of Ortalyk will be controlled by Kazatomprom, being holder of its 51% participatory interests, should Ortalyk unreasonably refuses to sign the annual contract for implementing the Off-take Arrangement and Kazatomprom fails to procure Ortalyk to sign such contract, the Group may commence legal action against Kazatomprom to enforce the Off-take Agreement and/or have the right to exercise the Put Option by virtue of Kazatomprom not performing the Off-take Arrangement stipulated in the Cooperation Agreement.

The Shareholders' Agreement

To specify the rights and obligations of CGNM UK and Kazatomprom in relation to Ortalyk and its management, CGNM UK and Kazatomprom will enter into the Shareholders' Agreement within one day after the Completion pursuant to the Sale and Purchase Agreement. The major terms of the Shareholders' Agreement are as follows:

Legal status	Ortalyk is a separate legal entity and is not liable for the obligations of its participants and the participants (i.e. CGNM UK and Kazatomprom) are not liable for the obligations of Ortalyk.
Objectives	• Make profits in the interest of its participants • Development of mutually beneficial trade, economic, scientific and technical cooperation in the field of exploration, production, processing and sale of uranium products • Development and operation of one or more deposits to meet the demand of the Fuel Partnership provided that the terms and conditions are agreed between the participants • Other objectives that do not contradict the legislation of Kazakhstan, its Constitutional Document and the Shareholders' Agreement
Capital	The capital of Ortalyk is 27,164,074,000 Tenge and the ratio of participatory interests of the Kazatomprom and CGNM UK are as follows: • Kazatomprom – 51% • CGNM UK – 49%

Rights of participants

The participants of Ortalyk shall have the follow rights, subject to the legislation of Kazakhstan:

- Participate in the management of the Ortalyk's activities
- Receive information about Ortalyk's activities and get acquainted with its accounting and other documentation
- Receive income from Ortalyk's activities
- Receive part of Ortalyk's property corresponding to its participatory interests in case of liquidation of Ortalyk
- Terminate participation in the Partnership by alienating its participatory interests
- Challenge decisions of Ortalyk in court
- Appoint external auditors to conduct the audit of Ortalyk at own expenses and upon prior notification of Ortalyk
- Purchase, on a priority basis, products, works and services that are produced by Ortalyk in accordance with the Off-take Agreement
- Exercise other rights provided for by the legislation of Kazakhstan, the Constitutional Document, the Cooperation Agreement and the Further Cooperation Agreement

Obligations of participants

The participants of Ortalyk shall have the following obligations:

- Comply with the requirements of the Constitutional Document
- Make contributions to Ortalyk's capital in a manner, amount and time provided for by the Constitutional Document
- Not to disclose confidential information of Ortalyk or infringe the intellectual property rights of Ortalyk
- Notify the general director of Ortalyk changes in their particulars (such as name and address) and legal status (such as initiation of liquidation procedures)
- Properly fulfill their obligations to Ortalyk
- Assist and help Ortalyk in running its business
- Refrain from any and all actions that may cause damage or harm to Ortalyk or another participant
- Perform other duties stipulated by the legislation of Kazakhstan and the Constitutional Document

Management

Management of Ortalyk shall be conducted by the following governing bodies:

(i) The general meeting, being the highest management body of Ortalyk

(ii) The supervisory board, which aims at protection of participants' interests, exercise control over the financial and economic activities of Ortalyk and the activities of the general director

(iii) The general director, the executive body of Ortalyk that manages its current activities

The participants have the right to create a monitoring body, i.e. an audit committee or an auditor.

Constituent of the supervisory board

The supervisory board of Ortalyk shall consist of five members for the term of office not exceeding five years, out of which three members shall be nominated by Kazatomprom and two members shall be nominated by CGNM UK

Right of CGNM UK to recommend employees

The general director of Ortalyk should nominate eight employees expatriated by CGNM UK according to CGNM UK's recommendation for the following positions:

- One deputy general director who holds the position of chief financial officer concurrently
- Seven deputy heads of structural divisions responsible for production, finance, procurement and planning, etc., among which:
  - one employee shall concurrently assume the position of joint corporate secretary of Ortalyk who shall have the right of getting access to the reports and documents and attend the supervisory board meeting
  - one employee shall assume the position of deputy director for Central Mynkuduk Deposit
  - one employee shall assume the position of deputy director for Zhalpak Deposit

Deadlock

Upon occurrence of a deadlock situation and service of a deadlock notice, each participant shall procure its representative to meeting with a representative of the other participant to negotiate in good faith with a view to resolving the deadlock. The parties acknowledge and agree that the maximum deadline for resolving a deadlock situation is one year from the date of the first deadlock notice of such deadlock incident.

Distribution of income

Net income received by Ortalyk shall be distributed between the participants only based on the results of its business activities for a year in accordance with the participants' participatory interest in accordance with the dividend policy approved by the general meeting of Ortalyk.

The Buy-back Right

The Buy-back Right has been repeated in the Shareholders' Agreement.

Restrictions on transfers and pledges of the participatory interests

Each participant agrees that it shall not sell, assign, transfer, convey or otherwise dispose of, pledge or otherwise encumber its participatory interest except with the written consent of the other participant, provided that the new transferee must:

- assume all obligations of the transferring participant and duly execute the terms of all the relevant agreements as if it were a party to them and have the financial capability to satisfy all of such obligations;
- acquire all the participatory interests held by the transferring participant; and
- receive all approvals from state authorities of Kazakhstan necessary for it to become a participant of Ortalyk.

Basis of determination of the Consideration

The Consideration was determined based on the valuation of the market value as at the Valuation Date of the Target Interest of US$435,071,181 by an independent third party valuer engaged by Kazatomprom.

The Company expects to settle the Consideration in one lump sum three days before the Completion. The Directors consider that interest of the Company can be safeguarded notwithstanding payment is made in one lump sum three days prior to Completion as Kazatomprom is a company listed on, among others, the London Stock Exchange and is obliged to return the payment if Completion does not take place.

The Directors consider that the Consideration is fair and reasonable after taking into consideration of (i) the valuation of the Target Interest of US$367 million to US$504 million as of 31 December 2020 by the Valuer, an independent third party valuer engaged by the Company, where the Consideration falls approximately on the mid-point of the valuation and the valuation utilised the discounted cashflow method based on the forecasted natural uranium price published by UxC and TradeTech, which are widely adopted by uranium industry players, and are referenced in many fuel contracts and financial projections and (ii) the prevailing and forecasted natural uranium prices as the uranium price is in the historical low range since 2007 and it is foretasted by UxC and TradeTech that the future natural uranium prices is in an upward trend.

The Valuer derived the valuation utilising the discounted cash flows method and the comparable transactions method and based on the following key assumptions:

- There would be no material change in the existing political, legal, fiscal, foreign trade and economic conditions in Kazakhstan.

- There would be no significant deviation in the industry trends and market conditions from the current market expectation.

- There would be no material change in interest rates or foreign currency exchange rates from those currently prevailing.

- There would be no major change in the current taxation law in Kazakhstan and in the origin of the comparable companies.

- All relevant legal approvals, business certificates or licenses for the normal course of operation are formally obtained, in good standing and that no additional costs or fees were needed to procure such during the application.

- Future revenue growth for the mineral asset would conform to those forecasted based on production schedule and uranium price projections.

- The amount of capital expenditure would conform to those forecasted by the Competent Person.

- The amount of operating costs would conform to those forecasted by the Competent Person.

- The production schedule and reserve movement over the projection period would conform to those forecasted by the Competent Person.

- Ortalyk would retain competent management, key personnel, and technical staff to support the ongoing business operations.

- As per Chapter 18 Listing Rules 18.33 (6), the valuation of the mineral asset must be limited to measured and indicated resources only; therefore, the valuation will not include any inferred resources.

- Exploration licenses can be renewed when expired without any legal or operational barriers at an immaterial, minimal cost.

- No material legal risks related to sub-soil use license for Zhalpak Deposit.

- Subsoil use agreements can be renewed under similar terms and conditions in time.

- As exports are not subject to VAT, the valuation is on an ex-VAT basis. Uranium price forecast is not subject to VAT and capital expenditure estimation are on pre-VAT basis.

- While the competent person report covers the economic benefits of the entire mineral assets, the valuation also attempts to establish the value of the 49% equity interest of the Target Company that the Company intended to acquire.

- No material changes of the operations since last site inspection in November 2019.

In addition, when determining the valuation range using the discounted cash flows method, the Valuer derived the market value based on (i) the production schedule, capital expenditures and operating expenditures prepared by the Competent Person as reported in the Competent Person Report in Appendix IV to this circular; (ii) forecasted natural uranium price based on (a) forecast made by TradeTech and UxC and (b) spot price quoted by TradeTech and UxC as at the valuation date with an inflation adjustment based on the average inflation rate of the world of 3.18% published by Statista; and (iii) discount rate of 10.6% for Central Mynkuduk Deposit and 11.3% for Zhalpak Deposit.

According to the Valuation Report, the comparable transaction method under the market approach was utilised because sufficient amount of comparable transactions with adequate information can be found and such method adequately reflects the market opinion of the mineral assets. The discounted cash flows method of the income approach was utilised because (a) the market value of the mineral asset is determined by the ability to generate a stream of benefits in future; (b) economic benefit streams of the mineral asset could be identified based on historical and projected cash flows prepared by the management of the Company; (c) important parameters for the discounted cashflow analysis can be reasonably estimated or relied on with acceptable accuracy; and (d) income approach is suitable for valuing producing projects according to the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets.

To the best knowledge of the Board after making reasonable enquiries, each of the Competent Person and the Valuer is an Independent Third Party and the Board considers them competent to issue the Competent Person Report and the Valuation Report, as the case may be, as (i) the Competent Person consists of members with education background in geology and mining related disciplines, extensive experience of up to 39 years in the area and satisfies the definition of a competent person under Chapter 18 of the Listing Rules; and (ii) the Valuer consists of members with education background in mining and engineering science and over 10 years of experience in the valuation of uranium mineral assets and satisfies the definition of competent evaluator under Chapter 18 of the Listing Rules.

The Directors consider that the valuation methods, key assumptions and parameters adopted by the Valuer are fair and reasonable based on their collective experience, judgements and due diligence on the legal matters, financial information and operation of Ortalyk and the reserve and mining schedule of the Target Mines as well as taking into consideration of the Off-take Arrangement. In particular, the Directors consider that the parameters used in the discounted cash flows method are fair and reasonable in that:

(a) the forecasted production, capital expenditures and operating expenditures are reported by the Competent Person in the Competent Person Report and the team members of the Competent Person have extensive experience in mining industry and competent in preparing the Competent Person Report under Chapter 18 of the Listing Rules as discussed above;

(b) the forecasted production in respect of Central Mynkuduk is in line with its historic production capacity;

(c) the capital expenditures and operating expenditures forecasted by the Competent Person is consistent with the experience of the Company in its investment in other natural uranium deposits;

(d) Ortalyk will be able to generate a stable stream of revenue by selling its production under the Off-take Arrangement;

(e) all the products of Ortalyk is expected to be exported and thus will not attract any value-added tax under the prevailing laws of Kazakhstan;

(f) the discount rate of 10.6% and 11.3% for Central Mynkuduk Deposit and Zhalpak Deposit, respectively, are reasonable taking into account of the risks and uncertainty involved in natural uranium mining industry and

  a. the selection of long term Kazakhstan government bond yield as risk free return for equity is reasonable given the Target Mines are located in Kazakhstan and expected to operate for a long term;

  b. the equity risk premium and size premium were determined with reference to the publications of reputable academics;

  c. the systematic risk beta has made reference to public companies which are comparable to Ortalyk;

  d. no specific risk premium requirement has been identified in the due diligence process of Ortalyk by the Company; and

  e. the selection of Kazakhstan bank lending rate is reasonable given the Target Mines are located in Kazakhstan;

(g) the baseline scenario provides a more prudent estimate of future natural uranium prices which only took into account of potential inflation without taking into account potential increase in natural uranium prices as a result of depletion of uranium deposits with lower production costs as explained in the section headed "5. INDUSTRY OVERVIEW OF THE URANIUM MARKET - Uranium demand and supply" under "Further Information on Ortalyk" in this circular; and

(h) the consensus scenario has been derived by the forecasted uranium prices published by TradeTech and UxC which are leading market research companies widely adopted by uranium industry players and are referenced in many fuel contracts.

On the other hand, based on their experience in the natural uranium mining industry, the Directors consider that the selection of comparable transactions by the Valuer for the valuation under comparable transactions method is fair and reasonable in that the Valuer has

considered 30 transactions in the past 10 years and eliminated transactions that have material differences such as differences in size and development stage and has taken into account the differences in natural uranium prices on different date of transaction. In addition, it is reasonable to exclude inferred resources of the Target Mines from the Valuation given the unique nature of inferred resources and the requirements of Rule 18.30(3) of the Listing Rules.

The Directors have also considered the other assumptions assumed by the Valuer and consider that such assumptions are fair and reasonable as (a) there is no reason for the Directors to believe that there will be material change to the natural uranium market or the operational environment of Kazakhstan; (b) the Directors have conducted due diligence on legal compliances of Ortalyk with satisfactory results; and (c) Kazatomprom has undertaken to obtain the New Zhalpak Subsoil Use Agreement, failing which the Group will have the right to exercise the Sell-back Right.

Fulfillment status of Conditions

As at the Latest Practicable Date, none of the Conditions have been waived and, to the best knowledge of the Directors, none of the Conditions have been fulfilled other than Conditions (a) and (e).

Pursuant to the Sale and Purchase Agreement, the Conditions may only be waived to the extent that such waiver will not result in breach of any applicable law. As such, Conditions (d), (e), (f), (g) and (i) may not be waived by the parties. In addition, the Group has no current intention to waive any of the other Conditions.

Reasons for and benefits of entering into of the Sale and Purchase Agreement and the Off-take Agreement

The Directors consider that the terms of the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of Buy-back Right and the Call Option and the Off-take Arrangement) are on normal commercial term or better to the Group, fair and reasonable and in the interests of the Shareholders as a whole, after taking into consideration of the factors set out below.

Enlarging the scale of high-quality uranium assets held by the Group at favourable price

The Acquisition is one of the key steps in implementing the Company's strategy of exploring and acquiring high-quality resources as disclosed in the periodic reports of the Company. Based on the mining schedule of the Target Mines and the 49% entitlement of the Group under the Off-take Arrangement, the estimated attributable resources of the Group after Completion will increase by 85% from approximately 23ktU to 43ktU. In addition, the per unit production cost of Ortalyk is lower than Semizbay-U, another legal entity held by the Company as to 49% which operates the Semizbay Mine and Irkol Mine in Kazakhstan, based on their respective financial information.

The uranium price is in the historical low range since 2007. With low-cost uranium resources gradually depleted in the next five to ten years and projected demand exceeding the current level of supply, the Directors believe that marginal uranium production cost would increase over time and the international natural uranium price will raise in the foreseeable future.

Accordingly, the Directors consider that the Acquisition is a good opportunity for the Group to acquire interest in natural uranium deposits based on a valuation determined with reference to the prevailing natural uranium price.

Secure stable supply of uranium and improving the financial performance of the Group

As a result of the Acquisition together with the Off-take Arrangement, the Group will not only acquire a 49% interest in Ortalyk but also secure the products of the Target Mine in proportion to its interest subject to the Guaranteed Entitlement of 20,000 tonnes of uranium. Based on the mining schedule of the Target Mines, it is estimated that the Group will be able to purchase over 1,000 tonnes of natural uranium per annum from Ortalyk between 2023 and 2031. Such reliable source of natural uranium from Ortalyk at two percent discount over the international natural uranium spot price will be able to provide a reliable source of revenue and profit to the natural uranium trading business of the Group.

Based on such "participation interest plus off-take" model and given Kazatomprom is also obliged to purchase natural uranium from Ortalyk at comparable price in proportion to its interest, the Group can further benefit from any increase in international natural uranium spot prices as the Group is able to share the profit of Ortalyk, being accounted for as an associate using the equity method, in proportion to its interest.

As a result, the Group will be able to continue expand its natural uranium trading business through the off-take arrangement and enjoy positive cash flow from the share of profit of Ortalyk with a view to create long-term value for the Shareholders.

Deepening the Cooperation with Kazatomprom

According to World Nuclear Association, Kazatomprom is the world's largest uranium producer in 2019, with production representing 22% of world's total uranium production. The competitive edge of Kazatomprom lies with uranium mining technology, underpinned by use of the in-situ recovery mining method, which offers structural cost advantage and production flexibility. According to UxC, Kazatomprom average production costs are consistently in the first tier of the global uranium production cost curve which benefited from unique advantage of geological conditions, experienced management team, characteristic mining method and depreciation of Tenge.

In addition, Kazatomprom is the national operator for import and export of uranium of Kazakhstan, and Kazakhstan, being the largest producer of uranium in the world in 2019, has a geological advantage over Canada and Australia, being the second and third largest uranium producers in the world in 2019, as it locates between Asia and Europe which are the continents that the Company's subsidiaries locate.

The Directors believe that the Acquisition and the Off-take Arrangement would deepen the cooperation between Kazatomprom and the Company, which can create opportunities for further cooperation with Kazatomprom.

Expertise in investing in natural uranium deposits

The Cooperation Agreement serves as the framework agreement for the overall strategic cooperation in nuclear energy field between CGNPC and Kazatomprom on a long term and mutually beneficial basis, which includes the development of the Fuel Project and the Mining Project, being different stages of production of nuclear fuel for use in nuclear power plant for electricity generation. With its experience in investing in different natural uranium resources and managing its investment, such as the 49% interest in Semizbay-U which operates the Semizbay Mine and Irkol Mine and the approximately 15.01% interest in Fission, a Canadian-based resource company, the Group has the expertise to participate in the Mining Project and to evaluate and assess the Target Mines and to manage the investment in Ortalyk.

Financial effect of the Acquisition

Approximately 30% of the Consideration will be settled by internal resources of the Group and the remaining 70% of the Consideration will be settled by borrowings, which may include utilisation of the unutilised facilities of approximately US$784 million as of 31 March 2021 and potential acquisition financing or other loans to be obtained by the Group. Such unutilised facilities mainly include (i) an unutilised facility of US$300 million, which is unsecured and not guaranteed, with interest rate of LIBOR plus 1.5% to be repaid in or before May 2023; (ii) an unutilised facility of US$300 million, which is unsecured and not guaranteed, with interest rate of LIBOR plus 2.5% to be repaid within three years from the first withdrawal; and (iii) an unutilised facility of US$84 million, which is unsecured but guaranteed by the Company, with interest rate of LIBOR plus a margin between 0.6% and 1.5% to be repaid within one year from drawdown.

Upon Completion, Ortalyk will not become a subsidiary of the Company and shall be accounted for as an associate using the equity method in the consolidated financial statements of the Group. As a result, Ortalyk will initially be recognized in the statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of Ortalyk.

Assuming the Acquisition had been completed on 31 December 2020, (i) the total assets of the Group as at 31 December 2020 would have increased from approximately HK$4,187.8 million to HK$6,630.6 million; (ii) the total liabilities of the Group as at 31 December 2020 would have increased from approximately HK$2,160.7 million to HK$4,610.5 million; and (iii) the net assets of the Group as at 31 December 2020 would have decreased from HK$2,027.1 million to HK$2,020.1 million.

In addition, assuming the Acquisition had been completed on 1 January 2020, the profit of the Group for the year ended 31 December 2020 would have decreased from HK$155.2 million to HK$109.6 million. However, assuming the Off-take Arrangement has also come into effect on 1 January 2020, the adjusted pro form profit of the Group for the year ended

31 December 2020 shall be HK$159.8 million, representing an increase of HK$4.6 million from the audited profit of the Group of HK$155.2 million, taking into account of the HK$50.3 million profit generated from the sales of such volume off-taken by the Group. The profit generated from the sales of the off-take volume is calculated based on (i) the sales volume of 1,288tU by Ortalyk in 2020 and the 49% off-take volume by our Group; (ii) the 2% discount from the spot price under the Off-take Arrangement; (iii) profits tax of 16.5%; and (iv) the average long term price in 2020. As the sales of such off-take volume is not directly attributable to Acquisition, the inclusion of such profit is not a measure in accordance with Chapter 4 of the Listing Rules and the adjusted pro form profit of the Group is provided in addition to the pro forma profit of the Group for the information of the Shareholders and potential investors.

Furthermore, the profitability of Ortalyk would have been improved, which in turn improves the pro forma share of results of Ortalyk by our Group if there had been no production reduction as a result of COVID-19 which reduced the sales volume for the year ended 31 December 2020 to 1,288tU as compare to its annual production capacity of 2,000tU.

For details, please refer to the unaudited pro forma financial information in Appendix III to this circular.

There is no financial or capital commitment by the Group on Ortalyk.

INFORMATION ON ORTALYK AND THE TARGET MINES

Information on Ortalyk

Ortalyk is a legal entity wholly owned by Kazatomprom immediately prior to the Acquisition, established in the form of a limited liability partnership in Kazakhstan and is principally engaged in the exploration of the Target Mines, mining and processing of uranium-containing ores and production of natural uranium. As of the Latest Practicable Date, Ortalyk held the Central Mynkuduk Subsoil Use Agreement and was in the course of obtaining the New Zhalpak Subsoil Use Agreement through Kazatomprom.

Management of Ortalyk

Ortalyk is managed by its general director, who is assisted by deputy general directors and supervised by its supervisory board.

Pursuant to the Shareholders' Agreement, the CGNM UK shall have the right to nominate two out of the five members of the supervisory board while Kazatomprom shall have the right to nominate the remaining three members of the supervisory board. In addition, CGNM UK shall have the right to nominate one deputy general director who holds the position of chief financial officer concurrently, and seven deputy heads of structural divisions responsible for production, finance, procurement and planning, etc., among which (i) one employee shall concurrently assume the position of joint corporate secretary of Ortalyk who shall have the right of getting access to the reports and documents and attend

the supervisory board meeting; (ii) one employee shall assume the position of deputy director for Central Mynkuduk Deposit; and (iii) one employee shall assume the position of deputy director for Zhalpak Deposit.

In addition, to safeguard the interest of the Group in Ortalyk, certain matters require unanimous consent or super-majority approval in the general meeting of Ortalyk pursuant to the Constitutional Document, including (i) amendment of the Constitutional Document, (ii) approval of dividend policy, (iii) reorganisation or liquidation of Ortalyk, (iv) decision to make additional contribution to Ortalyk, (v) decision to pledge all the assets of Ortalyk, (v) approval of one or a series of transactions which relates to 51% or more of the total book value of the assets of Ortalyk other than sales of uranium and (v) a decision relating to the Off-take Agreement.

Ortalyk shall mainly be operated by Kazatomprom, its major shareholder, and the Group will involve in the operational management of Ortalyk and to ensure the completion of its annual production plan and fulfillment of the off-take amount under the Off-take Arrangement through the team of personnel appointed and dispatched by the Group who will act as the deputy general director of Ortalyk, the deputy directors of the two Target Mines and deputy heads of key departments of Ortalyk. The Group will also strive to maximize the return of the shareholders of Ortalyk as a whole through the team dispatched by exerting influences on mining production and in the areas of financial, operation, procurement, planning and distribution of profits as well as corporate governance.

In the unlikely event that Kazatomprom operates Ortalyk in a way detrimental to CGNM UK or fails to operate Ortalyk at all, the Group may invoke the relevant provisions of the Shareholders' Agreement, including that each of Kazatomprom and CGNM UK, being participants of Ortalyk, are required to assist and help Ortalyk in running its business and that CGNM UK shall have the right to participate in the management of Ortalyk's activities and challenge decisions of Ortalyk in court, and, in extreme case, may exercise the Put Option to require Kazatomprom to acquire the Target Interest from CGNM UK at the then prevailing market price of the Target Interest to be determined by a professional valuer. For the associated risk factor, please refer to "6. RISK FACTORS – Acquisition of a non-controlling interest" under "Further Information on Ortalyk" in this circular.

Information on the Target Mines

The Target Mines are located in the Shu-Saryshu Uranium Province in southern Kazakhstan. Set out below is the statement of mineral resources of the Target Mines as at 31 December 2020:

Area	Class	Quantity *Mt*	Uranium grade *%*	Contained Uranium metal *'000t*
Central Mynkuduk	Measured	21.3	0.025	5.3
	Indicated	81.8	0.027	22.1
	Inferred	1.5	0.036	0.5
	Total	**104.6**	**0.027**	**28.0**
Zhalpak	Measured	–	–	–
	Indicated	31.0	0.032	9.8
	Inferred	15.7	0.029	4.5
	Total	**46.7**	**0.035**	**14.3**
Total	Measured	21.3	0.025	5.5
	Indicated	112.8	0.028	31.9
	Inferred	17.3	0.029	5.0
	Total	**151.4**	**0.028**	**42.3**

Financial information of Ortalyk

The table below sets forth certain key financial information of Ortalyk for the years ended 31 December 2019 and 2020:

	As at/For the year ended 31 December	
	2019	**2020**
	(US$'000)	*(US$'000)*
Revenue	96,277	94,904
Profit before income tax	39,700	48,414
Profit after income tax	31,137	38,542
Total assets	123,794	120,250
Total liabilities	21,380	16,275
Net assets	102,415	103,975

Valuation of the Target Interest

According to the valuation on the Target Interest by the Valuer as set out in Appendix V to this circular, the valuation range of the Target Interest as at 31 December 2020 is US$367-504 million. For details, please refer to the Valuation Report in Appendix V to this circular.

Additional Information

For further information on Ortalyk, the Target Mines and the related industry overview and risk factors, please refer to the section headed "Further Information on Ortalyk" in this circular.

THE FURTHER COOPERATION AGREEMENT

Major terms

The major terms of the Further Cooperation Agreement are as follows:

Date	22 April 2021
Parties	• Kazatomprom • UMP • CGNPC • CGNPC-URC • the Company • Ulba-FA • CGNM UK • Beijing Sino-Kazakh
Purpose	Change and update provisions of cooperation of the parties under, among others, the Cooperation Agreement and the Mining Principles Agreement
The Mining Project	The Parties agreed that CGNM UK shall be a participant of Ortalyk and has obligations with respect to Ortalyk, as further detailed in the Sale and Purchase Agreement and the Further Cooperation Agreement, and take obligations to perform all obligations as a participant of Ortalyk. CGNM UK agreed and took obligations to perform the obligation as a participant of Ortalyk as provided for in each of the Cooperation Agreement, Mining Principles Agreement and other relevant agreements.
Implementation schedule of the Mining Project	Kazatomprom and the Company agreed to update the implementation schedule for the Mining Project, including, among others: (i) use reasonable endeavors to sign the Sale and Purchase Agreement before 1 April 2021 (ii) use reasonable endeavors to agree on the draft of the Shareholders' Agreement, the Constitutional Document and the Off-take Agreement in principle before 1 April 2021

(iii) use reasonable endeavors to send the Sale and Purchase Agreement and any other documents contemplated thereunder to all involved competent authorities of Kazakhstan and PRC for approval before 1 April 2021

(iv) use reasonable endeavors to obtain resolution of the government of Kazakhstan permitting the transfer of the Target Interest no later than three months after obtaining the necessary corporate decisions for entering into the Sale and Purchase Agreement and the Acquisition

(v) complete the transfer of the Target Interest to CGNM UK within one month after fulfillment of all conditions below:

a. execution and entry into force of the Further Cooperation Agreement

b. execution and entry into force of the Long Term Fuel Assembly Contract

c. execution and entry into force of contracts for the Fuel Pellets Manufacturing Services Purchase Obligation

d. obtaining the necessary decisions of the board of directors of Kazatomprom

e. obtaining resolution of the government of Kazakhstan on permission to the transfer of the Target Interest

(vi) Kazatomprom shall use best endeavours to obtain the New Zhalpak Subsoil Use Agreement by 30 June 2021 and under no circumstance later than 31 December 2021

Implementation schedule of the Fuel Project

The parties shall use reasonable endeavours to sign the first Long Term Fuel Assembly Contract before 31 December 2020 and make it effective within three months and agree on the timeline for delivery of the fuel assemblies thereunder.

The parties agreed that the Initial FA Purchase Obligation Due Date as referred in the Put Option Triggering Events and the Call Option Triggering Events shall be changed to 31 December 2022.

The parties further agreed to ensure the economic efficiency of the Fuel Project as detailed in the Further Cooperation Agreement.

Certification for the Fuel Partnership

CGNPC-URC shall use best endeavors to obtain and maintain in full force all permits require for the smooth transfer of fuel assemblies and their acceptance and transportation of the fuel assemblies across the PRC territory and shall provide or procured to be provided to the Fuel Partnership sufficient containers licensed in PRC required for timely delivery of fuel assemblies to the PRC.

CGNPC-URC guaranteed to recognize Ulba-FA as the certified supplier of fuel assemblies, after completion of its qualification process on the precondition that Ulba-FA meets the certification requirements of CGNPC-URC, based on design estimates and plant design approved by participants of Ulba-FA prior to the start of construction of the fuel assemblies fabrication plant. CGNPC-URC and Ulba-FA are obliged to agree on certification requirements in the form of a program for the recognition of Ulba-FA as a certified supplier no later than 31 May 2021.

Early termination of the Fuel Project

In the event that the Fuel Project is terminated before CGNPC-URC finishes the Fuel Assembly Purchase Obligation, CGNPC-URC shall be obliged, until the termination of the activities of Semizbay-U or the resumption of the Fuel Project or otherwise agreed by the parties, to order pellets manufacturing services from UMP for the amount corresponding to the Off-take of Semizbay-U's natural uranium based on participatory interest in Semizbay-U of Beijing Sino-Kazakh.

Uranium purchase obligation

CGNPC-URC or one of its affiliates shall purchase a total of 2,000 tonnes of natural uranium from Kazatomprom based on a prescribed schedule between 2021 to 2023 at the price of the arithmetical average of the month-end spot price indicators published by UxC and TradeTech for the three consecutive months prior to a reference point of time minus a 2.5% discount.

If Kazatomprom fails to complete the Acquisition on or before the Long Stop Date, Kazatomprom shall, upon CGNPC-URC or one of its affiliate's request, have the obligation to buy back the natural uranium purchased at the same price and cancel the delivery of the remaining natural uranium.

Fuel Pellets Manufacturing Services Purchase Obligation

CGNPC-URC shall engage UMP to provide fuel pellets manufacturing services of 608.5 tonnes of uranium based on a prescribed schedule from 2021 to 2030.

Buy-back of the Target Interest

Upon occurrence of any of the following events, CGNM UK shall, at the request at Kazatomprom, sell the Target Interest to Kazatomprom no later than six months from the date of such request at the New Exercise Price:

(a) delivery of the first batch of fuel assemblies under the first Long Term Fuel Assembly Contract has not taken place by 31 December 2022

(b) production and/or dispatch and/or delivery of fuel assemblies to PRC, under any Long Term Fuel Assembly Contract has not been performed within any twelve consecutive months

(c) any Long Term Fuel Assembly Contract being terminated or not executed before the expiry date of the previous Long Term Fuel Assembly Contract, or there is a dispute regarding the termination of Long Term Fuel Assembly Contract

(d) the Fuel Project is terminated before CGNPC-URC finishes the Fuel Assembly Purchase Obligation

(e) failure by CGNPC-URC to perform the Fuel Pellets Manufacturing Services Purchase Obligation save for cases when such failure is occurred due to fault of UMP

(f) upon CGNM UK or any of its affiliates that perform one or more obligations under the Further Cooperation Agreement conduct a merger event and the resulting legal entity unable, fail or refuse to assume the obligations of the Company, CGNM UK or its affiliates in relation to the Buy-back Right

(g) when CGNM UK is no longer an affiliate of CGNPC or CGNPC losing control over CGNM UK

Exercise price of the Buy-back Right

The exercise price of the Buy-back Right shall be the fair market value of the Target Interest as of the last day of the month of the exercise notice as determined by a valuer appropriately licenced pursuant to the laws of Kazakhstan from any of the big four accounting firms with expertise in valuing assets of the nature concerned and agreed by Kazatomprom and CGNPC, less any dividend received by CGNM UK from Ortalyk between the valuation date to the date of transfer of the Target Interest.

Adjustment to the exercise price of the Put Option and the Call Option	The parties agreed that the exercise price of the Put Option and the Call Option shall be the same as the exercise price of the Buy-back Right, being the New Exercise Price and the timing for the transfer of the interest in Ortalyk shall be same as the Buy-back Right
New cooperation opportunities	The parties agreed to work jointly to study the possibility of cooperation on uranium resources exploration, mining, radioactive waste disposal and other potential areas.
Termination	The Further Cooperation Agreement shall remain effective until the earliest of: (a) the parties unanimously agree in writing to terminate the Further Cooperation Agreement (b) the Fuel Partnership or the Mining Partnership has been liquidated (c) all rights and obligations in the Further Cooperation Agreement have been fully exercised and performed (d) transfer of the Target Interest has not been completed on or before 30 June 2021 unless CGNPC-URC agrees to extend such date
Guarantee	Each of CGNPC and Kazatomprom guarantees the due and punctual performance of their respective relevant subsidiaries of the relevant present and future obligations under the Further Cooperation Agreement, the Sale and Purchase Agreement and other relevant agreements.

Undertakings by CGNPC and CGNPC-URC

To protect the interest of the Company and its Shareholders as a whole, CGNPC and CGNPC-URC will undertake prior to the EGM that:

(i) so long as the Company or its subsidiaries is holding an interest in Ortalyk, the Put Option may not be exercise by CGNPC and/or CGNPC-URC without the consent of the Company;

(ii) so long as the Company or its subsidiaries is holding an interest in Ortalyk, CGNPC will not agree on the selection of valuer for determining the New Exercise Price without the consent of the Company;

(iii) CGNPC-URC will not agree on extension of the completion deadline of the Acquisition in relation to the termination of the Further Cooperation Agreement without the consent of the Company; and

(iv) should the Company agree to extend the completion deadline in relation to the termination of the Further Cooperation Agreement, CGNPC-URC will do all such acts to give effect to the extension of the completion deadline.

The Call Option, the Put Option and the Buy-back Right

The Directors consider that the Call Option, the Put Option and the Buy-back Right serve as exit arrangement for the parties in relation to the cooperation of the Fuel Project and the Mining Project as they can only be exercised upon occurrence of certain triggering events, such as occurrence of deadlock event, failure or delay of the Fuel Project or breach of the Further Cooperation Agreement.

In addition, in the event that Kazatomprom decides to exercise the Call Option or the Buy-back Right upon the occurrence of any Call Option Triggering Event or Buy-back Event, the New Exercise Price in respect of the Target Interest shall be the then market price of the Target Interest determined by an independent valuer and, accordingly, the interest of the Group can be protected and CGNM UK shall be able to benefit from any increase in value of the Target Interest.

INFORMATION OF THE PARTIES

The Group

The Group is principally engaged in investment and development of natural uranium resources and trading of natural uranium products with the Company principally engaged in trading of natural uranium products.

CGNM UK is a wholly-owned subsidiary of the Company incorporated in the United Kingdom and is principally engaged in uranium trading and investment in uranium resources.

Beijing Sino-Kazakh is a wholly-owned subsidiary of the Company incorporated in the PRC and is principally engaged in property investment and is also holding 49% interest in Semizbay-U, which in turn is interested in two natural uranium mines in Kazakhstan.

CGNPC and CGNPC-URC

CGNPC-URC is a company established in the PRC with limited liability and the sole shareholder of China Uranium Development, the controlling shareholder of the Company, holding approximately 64.82% of the issued Shares as at the Latest Practicable Date.

To the best of the knowledge, information and belief of the Directors having made all reasonable enquiries, CGNPC-URC is one of the few enterprises in the PRC which is authorised to manage nuclear fuels and deal with the import and export of natural uranium. The core businesses of CGNPC-URC are to: (i) manage the supply of nuclear fuels for CGNPC; and (ii) deal with the import and export trade of the PRC and overseas natural uranium and related products.

Founded on 29 September 1994, CGNPC is a large clean energy enterprise under the supervision of the State-owned Assets Supervision and Administration Commission of the State Council of the PRC. CGNPC together with its subsidiaries are principally engaged in the generation and sale of electricity, construction, operation and management of nuclear power projects and non-nuclear clean energy projects.

Kazatomprom

Kazatomprom is the largest global producer of natural uranium with priority access to one of the world's largest high-quality resource bases in the industry. Kazatomprom produced approximately 22% of the world's total uranium production in 2019 according to World Nuclear Association. Kazatomprom is the national operator of Kazakhstan for import and export of uranium and its compounds, rare metals, nuclear fuel for nuclear power plants, special purpose equipment and technologies.

The securities of Kazatomprom are listed on the London Stock Exchange and Astana International Exchange and is owned as to 75% by sovereign wealth fund of Kazakhstan. As the national atomic company in Kazakhstan, its primary customers are operators of nuclear generation capacity, and principal export markets for its products are China, South and Eastern Asia, Europe and North America.

UMP

UMP is a wholly owned subsidiary of Kazatomprom. It is one of the world leaders in terms of production of beryllium, tantalum, and niobium, as well as uranium-based fuel bricks for nuclear power stations.

Ulba-FA

Ulba-FA is owned as to 51% by UMP and 49% by CGNPC-URC, which mainly engages in fabrication of fuel assemblies and their components.

GENERAL

Save for exploration of opportunities to acquire competitive overseas uranium resource projects with low cost as part of the Group's development strategy as disclosed in the periodic reports of the Company, the Board has no current plan to conduct acquisition of new business or disposal of existing business in the next 12 months and the Company has not entered into any agreement, arrangement, understanding or negotiation, whether formal or informal, express or implied, to acquire new businesses or dispose of any of its existing businesses.

LISTING RULES IMPLICATIONS

Chapter 14 of the Listing Rules

As one or more of the applicable percentage ratio(s) of the Acquisition is more than 100%, the Acquisition constitutes a very substantial acquisition of the Company and is subject to the notification, announcement, circular and Shareholders' approval requirements under Chapter 14 of the Listing Rules.

Furthermore, each of the Sell-back Right, the Buy-back Right, the Call Option and the Put Option constitutes an option under Rule 14.72 of the Listing Rules.

As the exercise of the Buy-back Right and the Call Option are not at the discretion of the Group, and the exercise price, which is to be determined by an independent valuer, cannot be ascertained at this stage, the Company, after having taken into consideration of the transaction classification of the Acquisition, voluntarily classified each of the grant of the Buy-back Right and the Call Option as a very substantial disposal of the Company and is subject to the notification, announcement, circular and Shareholders' approval requirements under Chapter 14 of the Listing Rules.

Notwithstanding being stipulated in the Cooperation Agreement and the Further Cooperation Agreement, respectively, instead of being stipulated in the Sale and Purchase Agreement, each of the grant of the Buy-back Right and the Call Option would be subject to the Shareholders' approval as (i) the Sale and Purchase Agreement, which is subject to Shareholders' approval, stipulated that, among other matters, each of the Buy-back Right and the Call Option shall be granted and take effect upon Completion of the Acquisition; and (ii) the Buy-back Right and the Call Option would not have any effect without the transfer of the Target Interest under the Sale and Purchase Agreement.

In relation to the acceptance of the Sell-back Right and the Put Option, as the exercise of which is at the discretion of the Group and no premium has been paid by the Group in relation to obtaining the Sell-back Right and the Put Option, the acceptance of the Sell-back Right and the Put Option do not constitute notifiable transactions of the Company under Chapter 14 of the Listing Rule.

Chapter 14A of the Listing Rules

As at the Latest Practicable Date, CGNPC, the controlling shareholder of the Company is indirectly holding 67.17% of the issued Shares, among which 64.82% of the issued Shares is held by China Uranium Development, its wholly-owned indirect subsidiary. CGNPC-URC is the intermediate holding company, being a subsidiary of CGNPC and the sole shareholder of China Uranium Development. Accordingly, each of CGNPC and CGNPC-URC is a connected person of the Company.

Notwithstanding the Sale and Purchase Agreement was only entered into between CGNM UK (being a wholly-owned subsidiary of the Company) and Kazatomprom and the Off-take Agreement will only be entered into between the Company, CGNM UK and Kazatomprom, as the Acquisition is inter-conditional with the Fuel Project, Kazatomprom

shall be deemed as a connected person of the Company and, accordingly, (i) the entering into of the Sale and Purchase Agreement constitutes a connected transaction of the Company under Chapter 14A of the Listing Rules and is subject to the reporting, announcement, circular (including the independent financial adviser) and Independent Shareholders' approval requirements; and (ii) the entering into of the Off-take Agreement constitutes a continuing connected transaction of the Company under Chapter 14A of the Listing Rules and is subject to the reporting, announcement, circular (including the independent financial adviser), Independent Shareholders' approval, annual reporting and annual review requirements. In addition, as the term of the Off-take Agreement exceeds three years, the Company has appointed Gram Capital to explain, in the "Letter from Gram Capital" in this circular, why the agreement requires a longer period and to confirm that it is normal business practice for agreements of this type to be of such duration.

In addition, as the Buy-back Right and the Call Option are to be granted to Kazatomprom by the Group and the Sell-back Right and the Put Option are to be granted by Kazatomprom to the Group, each of the grant of Buy-back Right, Call Option and acceptance of the Sell-back Right and the Put Option constitutes a connected transaction of the Company under Chapter 14A of the Listing Rules. Accordingly, the grant of the Buy-back Right and the Call Option are subject to the reporting, announcement, circular (including the independent financial adviser) and Independent Shareholders' approval requirements.

Notwithstanding being stipulated in the Cooperation Agreement and the Further Cooperation Agreement, respectively, instead of being stipulated in the Sale and Purchase Agreement, each of the grant of the Buy-back Right and the Call Option would be subject to the Independent Shareholders' approval as (i) the Sale and Purchase Agreement, which is subject to Independent Shareholders' approval, stipulated that, among other matters, each of the Buy-back Right and the Call Option shall be granted and take effect upon Completion of the Acquisition; and (ii) the Buy-back Right and the Call Option would not have any effect without the transfer of the Target Interest under the Sale and Purchase Agreement.

On the other hand, each of the acceptance of the Sell-back Right and the Put Option constitutes fully-exempted connected transaction of the Company pursuant to Rule 14.76 of the Listing Rules as (i) the exercise of each of the Sell-back Right and the Put Option is at the discretion of the Group and (ii) no premium has been paid by the Group in relation to obtaining the Sell-back Right and the Put Option, and is exempted from the reporting, announcement, circular (including the independent financial adviser) and Independent Shareholders' approval requirements.

The Company will comply with the relevant requirements of the Listing Rules as and when appropriate in relation to the exercise (or non-exercise) of the Sell-back Right and the Put Option, including Independent Shareholders' approval if applicable.

ABSTAIN FROM VOTING

Mr. Yu Zhiping, Mr. An Junjing, Mr. Chen Deshao, Mr. Yin Xiong and Mr. Sun Xu have abstained from voting on the relevant board resolutions approving the Sale and Purchase Agreement and the transactions contemplated thereunder as each of Mr. Yu, Mr. An, Mr. Chen, Mr. Yin and Mr. Sun is considered to have a material interest in the resolutions by virtue of their directorial and/or managerial positions in CGNPC-URC.

INDEPENDENT BOARD COMMITTEE

The Independent Board Committee consisting Mr. Qiu Xianhong, Mr. Gao Pei Ji and Mr. Lee Kwok Tung Louis, being independent non-executive Directors, has been established to advise the Independent Shareholders in respect of the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of Call Option and Buy-back Right and the Off-take Arrangement).

INDEPENDENT FINANCIAL ADVISER

Gram Capital has been appointed to advise the Independent Board Committee and the Independent Shareholders in respect of the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of Call Option and Buy-back Right and the Off-take Arrangement) and to explain why the Off-take Arrangement requires a period longer than three years and to confirm that it is normal business practice for agreements of this type to be of such duration in accordance with Rule 14A.52 of the Listing Rules.

EGM

A notice of the EGM which will be held at Conference Room 1402, 14th Floor, North Building, CGN Tower, 2002 Shennan Boulevard, Futian District, Shenzhen, Guangdong Province, PRC on 10 June 2021 (Thursday) at 11:00 a.m. is set out on pages EGM-1 to EGM-4 of this circular. Ordinary resolutions will be proposed at the EGM to seek Independent Shareholders' approval for the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of the Buy-back Right and the Call Option and the Off-take Arrangement).

A form of proxy for use at the EGM is enclosed with this circular. Whether or not you are able to attend the EGM, please complete and return the enclosed form of proxy in accordance with the instructions printed thereon and return it to the branch share registrar and transfer office of the Company, Union Registrars Limited at Suites 3301-04, 33/F, Two Chinachem Exchange Square, 338 King's Road, North Point, Hong Kong, as soon as possible and in any event, not less than 48 hours before the time appointed for holding the EGM or any adjournment thereof (as the case maybe). Completion and return of the form of proxy will not preclude you from attending and voting in person at the EGM or any adjournment thereof (as the case maybe) should you so wish and in such event, the proxy shall be deemed revoked.

Due to its interest in the Sale and Purchase Agreement, CGNPC and its subsidiaries will abstain from voting on the resolution approving the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of the Buy-back Right and the Call Option and the Off-take Arrangement) at the EGM.

Save as disclosed above, to the best of the Directors' knowledge, information and belief having made all reasonable enquiries, no Shareholder is required to abstain from voting on the resolutions to be proposed at the EGM.

The Board confirms that to the best of their knowledge, information and belief having made all reasonable enquiries, as at the Latest Practicable Date, there was no voting trust or other agreement or other arrangement or understanding (other than an outright sale) entered into by or binding upon any Shareholder and there was no obligation or entitlement of any Shareholder whereby he has or may have temporarily or permanently passed control over the exercise of the voting right in respect of his Shares to a third party, either generally or on a case-by-case basis.

RECOMMENDATION

As the Directors consider that the terms of the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of the Buy-back Right and the Call Option and the Off-take Arrangement) are on normal commercial term or better to the Group, fair and reasonable and in the interests of the Shareholders as a whole, the Directors recommend the Independent Shareholders to vote in favour of the ordinary resolution to be proposed at the EGM.

ADDITIONAL INFORMATION

Your attention is drawn to the other information set out in the Section headed "Further Information on Ortalyk" and Appendices to this circular.

Yours faithfully,
By Order of the Board of
CGN Mining Company Limited
Mr. An Junjing
Chief Executive Officer

中广核矿业有限公司*
CGN Mining Company Limited

(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 01164)

25 May 2021

To the Independent Shareholders,

Dear Sir or Madam,

(1) Very substantial acquisition and connected transaction in relation to the acquisition of 49% interest in Mining Company "ORTALYK" LLP
(2) Very substantial disposal and connected transaction in relation to the grant of Call Option and Buy-back Right
(3) Continuing connected transaction in relation to the Off-take Arrangement

We refer to the circular dated 25 May 2021 of the Company (the "**Circular**") of which this letter forms part. Terms defined in the Circular shall have the same meanings herein unless the context otherwise requires.

We have been appointed to form the Independent Board Committee to consider and to advise the Independent Shareholders as to whether, in our opinion, the terms of the Sale and Purchase Agreement (including grant of the Buy-back Right and the Call Option and the Off-take Arrangement) are on normal commercial terms, fair and reasonable and whether the respective transactions contemplated thereunder are in the ordinary and usual course of business the Group and in the interests of the Company and the Shareholders as a whole.

Gram Capital has been appointed as the Independent Financial Adviser to advise the Independent Board Committee and the Independent Shareholders.

We wish to draw your attention to (i) "Letter from the Board" on pages 11 to 54 of the Circular which contains information of the Sale and Purchase Agreement and the transactions contemplated thereunder; (ii) "Letter from Gram Capital" on pages 57 to 79 of the Circular which contains the advice of Gram Capital in respect of the Sale and Purchase Agreement and the transactions contemplated thereunder; and (iii) "Further Information on Ortalyk" on pages 80 to 118 of the Circular which contains further information on Ortalyk.

Having taken into account the advice of Gram Capital, we consider that (i) the terms of the Sale and Purchase Agreement (including grant of the Buy-back Right and the Call Option and the Off-take Arrangement) are on normal commercial terms and fair and reasonable; (ii) the Acquisition and the Off-take Arrangement are in the ordinary and usual course of business the Group; (iii) the Sale and Purchase Agreement and the transactions

* *For identification purpose only*

contemplated thereunder (including the grant of the Buy-back Right and the Call Option and the Off-take Arrangement) are in the interests of the Company and the Shareholders as a whole; and (iii) the Consideration is fair and reasonable.

Accordingly, we recommend the Independent Shareholders to vote in favour of the ordinary resolution to be proposed at the EGM in respect of the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of the Buy-back Right and the Call Option and the Off-take Arrangement).

Yours faithfully,
For and on behalf of
the Independent Board Committee
CGN Mining Company Limited

Mr. Qiu Xianhong **Mr. Gao Pei Ji** **Mr. Lee Kwok Tung Louis**
Independent non-executive Directors

Set out below is the text of a letter received from Gram Capital, the Independent Financial Adviser to the Independent Board Committee and Independent Shareholders in respect of the Transactions, dated 25 May 2021 for the purpose of inclusion in this circular.

Gram Capital Limited
嘉林資本有限公司

Room 1209, 12/F.
Nan Fung Tower
88 Connaught Road Central/
173 Des Voeux Road Central
Hong Kong

25 May 2021

To: The Independent Board Committee and the Independent Shareholders of CGN Mining Company Limited

Dear Sir/ Madam,

(1) VERY SUBSTANTIAL ACQUISITION AND CONNECTED TRANSACTION IN RELATION TO THE ACQUISITION OF 49% INTEREST IN MINING COMPANY "ORTALYK" LLP;
(2) VERY SUBSTANTIAL DISPOSAL AND CONNECTED TRANSACTION IN RELATION TO THE GRANT OF CALL OPTION AND BUY-BACK RIGHT; AND
(3) CONTINUING CONNECTED TRANSACTION IN RELATION TO THE OFF-TAKE ARRANGEMENT

INTRODUCTION

We refer to our appointment as the Independent Financial Adviser to advise the Independent Board Committee and the Independent Shareholders in respect of the Sale and Purchase Agreement and the transactions contemplated thereunder (including the grant of the Call Option and, the Buy-back Right, the acceptance of the Put Option and the Sell-back Right and the Off-take Arrangement) (the "**Transactions**"), details of which are set out in the letter from the Board (the "**Board Letter**") contained in the circular dated 25 May 2021 issued by the Company to the Shareholders (the "**Circular**"), of which this letter forms part. Terms used in this letter shall have the same meanings as defined in the Circular unless the context requires otherwise.

With reference to the Board Letter, the Company entered into the Cooperation Agreement dated 14 December 2015 with CGNPC, CGNPC-URC, Kazatomprom and UMP to record their respective rights and obligations with respect to the incorporation and operation of (i) the Fuel Partnership (i.e. Ulba-FA) by CGNPC-URC and UMP to undertake the Fuel Project to build and operate a fuel assemblies fabrication plant in Kazakhstan; and (ii) a Mining Partnership to undertake the Mining Project by CGNPC Mining Participant and Kazatomprom Mining Participant to develop and operate one or more mining deposits in Kazakhstan. CGNPC Mining Participant has later been identified to be CGNM UK, a wholly-owned subsidiary of the Company, and the legal entity for carrying out the Mining Project has later been identified as Ortalyk.

The Fuel Partnership (i.e. Ulba-FA) has been established between UMP and CGNPC-URC in December 2015 whereas a fuel assemblies fabrication plant is currently under construction in Kazakhstan and production is expected to commence in late 2021 with the first delivery of fuel assemblies to take place in 2022.

In relation to the Mining Project, the Company and Kazatomprom entered into the Mining Principles Agreement dated 4 October 2016 and an amendment agreement dated 6 December 2016 to the Mining Principles Agreement.

The Company then continued to negotiate with Kazatomprom and conduct due diligence on the Mining Partnership, the Target Interest and the Target Mines and, on 22 April 2021, entered into (i) the Sale and Purchase Agreement to materialize the Mining Project by acquiring the Target Interest; and (ii) the Further Cooperation Agreement to change and update provisions of cooperation of the parties under, among others, the Cooperation Agreement and the Mining Principles Agreement.

With reference to the Board Letter, the Acquisition constitutes a very substantial acquisition and connected transaction of the Company under Chapter 14 and Chapter 14A of the Listing Rules and is subject to the notification, announcement, circular and Independent Shareholders' approval requirements under the Listing Rules. Please also refer to the section headed "LISTING RULES IMPLICATIONS" of the Board Letter for further implications on the Buy-back Right, the Call Option, the Sell-back Right and the Put Option.

The Independent Board Committee comprising Mr. Qiu Xianhong, Mr. Gao Pei Ji and Mr. Lee Kwok Tung Louis, being all of the independent non-executive Directors, has been formed to advise the Independent Shareholders on (i) whether the terms of the Transactions are on normal commercial terms and are fair and reasonable; (ii) whether the Transactions are in the interests of the Company and the Shareholders as a whole and are conducted in the ordinary and usual course of the business of the Group; and (iii) how the Independent Shareholders should vote in respect of the resolutions to approve the Transactions at the EGM. We, Gram Capital Limited, have been appointed as the Independent Financial Adviser to advise the Independent Board Committee and the Independent Shareholders in this respect.

INDEPENDENCE

During the past two years immediately preceding the Latest Practicable Date, Gram Capital was engaged as an independent financial adviser in respect of the major and continuing connected transactions of the Company as set out in the Company's circular dated 9 September 2019. Notwithstanding the aforesaid past engagement, as at the Latest Practicable Date, we were not aware of any relationships or interests between Gram Capital and the Company, or any other parties that could be reasonably regarded as a hindrance to Gram Capital's independence to act as the Independent Financial Adviser to the Independent Board Committee and the Independent Shareholders.

BASIS OF OUR OPINION

In formulating our opinion to the Independent Board Committee and the Independent Shareholders, we have relied on the statements, information, opinions and representations contained or referred to in the Circular and the information and representations as provided to us by the Company's management (the "**Management**"). We have assumed that all information and representations that have been provided by the Management, for which they are solely and wholly responsible, are true and accurate at the time when they were made and continue to be so as at the Latest Practicable Date. We have also assumed that all statements of belief, opinion, expectation and intention made by the Directors in the Circular were reasonably made after due enquiry and careful consideration. We have no reason to suspect that any material facts or information have been withheld or to doubt the truth, accuracy and completeness of the information and facts contained in the Circular, or the reasonableness of the opinions expressed by the Company, its advisers and/or the Management, which have been provided to us. Our opinion is based on the Management's representation and confirmation that there is no undisclosed private agreement/arrangement or implied understanding with anyone concerning the Transactions. We consider that we have taken sufficient and necessary steps (including review of the Group's financial information for the three years ended 31 December 2020, Ortalyk's financial information for the three years ended 31 December 2020, the Sale and Purchase Agreement, the Further Cooperation Agreement, the Competent Person Report, the Valuation Report, the Proposed Annual Caps, discussion with the Management, the Competent Person and the Valuer, and independent work performed on the Valuation Report) on which to form a reasonable basis and an informed view for our opinion in compliance with Rule 13.80 of the Listing Rules.

We have not made any independent evaluation or appraisal of the assets and liabilities of Ortalyk, and we have not been furnished with any such evaluation or appraisal, save as and except for the Valuation Report on the Target Interest as prepared by the Valuer and set out in Appendix V to the Circular. Since we are not experts in the valuation of company and mining assets, we have relied upon the Valuation Report for the value of the Target Interest (the "**Valuation**") after performing our independent work on the Valuation Report as set out under the sub-section headed "The Valuation Report" of this letter.

The Circular, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Listing Rules for the purpose of giving information with regard to the Company. The Directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in the Circular is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or the Circular misleading. We, as the Independent Financial Adviser, take no responsibility for the contents of any part of the Circular, save and except for this letter of advice.

We consider that we have been provided with sufficient information to reach an informed view and to provide a reasonable basis for our opinion. We have not, however, conducted any independent in-depth investigation into the business and affairs of the Group, CGNPC, Kazatomprom, Ortalyk or their respective subsidiaries or associates (if applicable), nor have we considered the taxation implication on the Group or the Shareholders as a result

of the Transactions. Our opinion is necessarily based on the financial, economic, market and other conditions in effect and the information made available to us as at the Latest Practicable Date. Shareholders should note that subsequent developments (including any material change in market and economic conditions) may affect and/or change our opinion and we have no obligation to update this opinion to take into account events occurring after the Latest Practicable Date or to update, revise or reaffirm our opinion. In addition, nothing contained in this letter should be construed as a recommendation to hold, sell or buy any Shares or any other securities of the Company.

Lastly, where information in this letter has been extracted from published or otherwise publicly available sources, it is the responsibility of Gram Capital to ensure that such information has been correctly extracted from the relevant sources while we are not obligated to conduct any independent in-depth investigation into the accuracy and completeness of those information.

PRINCIPAL FACTORS AND REASONS CONSIDERED

In arriving at our opinion in respect of the Transactions, we have taken into consideration the following principal factors and reasons:

Information on the Group

With reference to the Board Letter, the Group is principally engaged in investment and development of natural uranium resources and trading of natural uranium products with the Company principally engaged in trading of natural uranium products.

Set out below are the audited consolidated financial information of the Group for the three years ended 31 December 2020 as extracted from the Company's annual report for the year ended 31 December 2019 (the "**2019 Annual Report**") and annual report for the year ended 31 December 2020 (the "**2020 Annual Report**"):

	For the year ended 31 December 2020	**For the year ended 31 December 2019**	**For the year ended 31 December 2018**
	HK$'000	*HK$'000*	*HK$'000*
Revenue	2,862,226	2,076,688	1,625,974
Natural uranium trading	*2,859,214*	*2,073,449*	*1,623,859*
Property investment	*3,012*	*3,239*	*2,115*
Gross profit	202,766	143,905	131,824
Profit attributable to owners of the Company	155,217	160,009	122,066

As illustrated by the above table, the Group's revenue and gross profit for the year ended 31 December 2019 ("**FY2019**") increased by approximately 27.72% and 9.16% respectively, as compared to those for the year ended 31 December 2018 ("**FY2018**") and further increased by approximately 37.83% and 40.90% respectively, for the year ended 31

December 2020 ("**FY2020**") as compared to those for FY2019. With reference to the 2019 Annual Report and 2020 Annual Report, the aforesaid increase in revenue and gross profit was mainly due to the fact that CGN Global Uranium Limited (a wholly-owned subsidiary of the Company) ("**CGN Global**") aggressively expanded the global market and achieved significant increase in sales volume and trading revenue of natural uranium.

Along with the increase in the Group's revenue and gross profit, the profit attributable to owners of the Company for FY2019 increased by approximately 31.08% as compared to that for FY2018. With reference to the 2019 Annual Report, such increase was mainly due to increase in the Group's gross profit, significant growth in share of results of joint venture and significant decrease in operating expenditures as compared with those of FY2018. The Group's profit attributable to owners of the Company for FY2020 decreased by approximately 2.99% as compared to that for FY2019. With reference to the 2020 Annual Report, the slight decrease in profit attributable to owners of the Company was mainly due to (i) decrease in interest income; (ii) recognition of share of loss of an associate; (iii) increase in finance costs; and (iv) increase in income tax expenses, offset by the increase in gross profit.

With reference to the 2020 Annual Report, as the COVID-19 epidemic rebounded at the end of 2020 in Canada and Kazakhstan, major producers of uranium in the world and certain natural uranium mines stopped production. Since the industry has been starved of capital investment for years, and there were no new uranium projects receiving sufficient capital for development in the market, it will be difficult for new projects to form new production capacity rapidly even if natural uranium prices rise in the short term. Therefore, although the global supply of natural uranium is expected to recover in 2021, it is unlikely to recover to the level before the outbreak of the epidemic, and the market demand will continue to exceed production and the inventory of the natural uranium will be further consumed. The Company will strengthen its business dealings with end customers, such as global nuclear power plants owners, actively participate in international market bidding, deepen its analysis of market conditions and counterparties' behaviours, seize market opportunities, develop new business models and actively explore new trading opportunities to ensure the achievement of annual trade targets. The Company will also strive to implement the relevant completion work on "New Kazakhstan Uranium Projects" (which is now being materialised by conducting the Transactions) and will seek for potential uranium resource investment opportunities in major uranium-producing regions such as Central Asia and Africa. Furthermore, the Company will seek for establishing strategic cooperative relationships with internationally renowned uranium producers and traders to study the feasibility of joint development of uranium projects in various modes.

Information on Ortalyk and the Target Mines

With reference to the Board Letter, Ortalyk is a legal entity wholly owned by Kazatomprom immediately prior to the Acquisition, established in the form of a limited liability partnership in Kazakhstan and is principally engaged in the exploration of the Target Mines (i.e. the Central Mynkuduk Deposit and the Zhalpak Deposit), mining and processing of uranium-containing ores and production of natural uranium. As of the Latest Practicable Date, Ortalyk held the Central Mynkuduk Subsoil Use Agreement and was in the course of obtaining the New Zhalpak Subsoil Use Agreement through Kazatomprom.

With reference to the Circular, the Target Mines are located in the Shu-Sarysu basin in South Kazakhstan Province of Kazakhstan.

The Central Mynkuduk Deposit commenced production in 2007 and produced approximately 19,800 tonnes of uranium as of 31 December 2020. The annual production capacity of the Central Mynkuduk Deposit is 2,000 tonnes of uranium while production for FY2019 has been limited to 1,600 tonnes of uranium due to falling uranium prices. Based on the current production schedule, the operation of the Central Mynkuduk Deposit is scheduled to run until 2033.

The Zhalpak Deposit conducted test production between 2017 and April 2020 and produced approximately 200 tonnes of uranium. The Zhalpak Deposit completed trial mining operations and is in the course of applying the New Zhalpak Subsoil Use Agreement for extraction. Based on the current production schedule, the operation of the Zhalpak Deposit is scheduled to run until 2036 on the basis of commencing well field establishment in 2022 and ramp up to full production from 2023 to 2025.

Further details of the Target Mines are set out in the section headed "FURTHER INFORMATION ON ORTALYK" of the Circular.

Set out below is the financial information of Ortalyk for the three years ended 31 December 2020, as extracted from the accountant's report of Ortalyk as contained in Appendix II to the Circular:

	For the year ended 31 December 2018 *(US$'000)*	**For the year ended 31 December 2019** *(US$'000)*	**For the year ended 31 December 2020** *(US$'000)*
Revenue	101,017	96,277	94,904
Net profit before taxation	38,252	39,700	48,414
Net profit after taxation	30,514	31,137	38,542

As illustrated by the above table, Ortalyk's revenue decreased by approximately 4.69% from approximately US$101 million for FY2018 to approximately US$96 million for FY2019 and further decreased by approximately 1.43% to approximately US$95 million for FY2020 when presented in US$. With reference to the Circular, when presented in Tenge, Ortalyk recognised an increase in revenue of approximately 5.83% from approximately Tenge 34,830 million for FY2018 to approximately Tenge 36,861 million for FY2019 and a further increase of approximately 6.42% to approximately Tenge 39,229 million for FY2020. Such change was mainly attributable to the mixed effect of change in sales volume, depreciation of Tenge against USD and increase in international uranium price. Ortalyk's net profit after taxation increased slightly from FY2018 to FY2019 and further increased by approximately 23.78% to approximately US$39 million for FY2020. With reference to the Circular, the increase in Ortalyk's net profit after taxation for FY2020 was mainly attributable to decrease in cost of sales due to decrease in production, resulting in an

increase in gross profit margin from approximately 44.75% for FY2019 to approximately 54.88% for FY2020, and partially offset by the increase in income tax expenses due to increase in net profit before taxation.

Information on parties to the Transactions

CGNPC and CGNPC-URC

With reference to the Board Letter, CGNPC is the sole shareholder of CGNPC-URC. Founded on 29 September 1994, CGNPC is a large clean energy enterprise under the supervision of the State-owned Assets Supervision and Administration Commission of the State Council of the PRC.

With reference to the Board Letter, CGNPC-URC is a company established in the PRC with limited liability and the sole shareholder of China Uranium Development, the controlling shareholder of the Company.

Both of CGNPC and CGNPC-URC are connected persons of the Company.

Kazatomprom

With reference to the Board Letter, Kazatomprom is the largest global producer of natural uranium with priority access to one of the world's largest high-quality resource bases in the industry. Kazatomprom produced approximately 22% of the world's total uranium production in 2019 according to World Nuclear Association. Kazatomprom is the national operator of the Kazakhstan for import and export of uranium and its compounds, rare metals, nuclear fuel for nuclear power plants, special purpose equipment and technologies.

The securities of Kazatomprom are listed on the London Stock Exchange and Astana International Exchange and Kazatomprom is owned as to 75% by sovereign wealth fund of Kazakhstan. As the national atomic company in the Republic of Kazakhstan, its primary customers are operators of nuclear generation capacity, and principal export markets for its products are China, South and Eastern Asia, Europe and North America.

UMP

With reference to the Board Letter, UMP is a wholly owned subsidiary of Kazatomprom. It is one of the world leaders in terms of production of beryllium, tantalum, and niobium, as well as uranium-based fuel bricks for nuclear power stations.

Ulba-FA

With reference to the Board Letter, Ulba-FA is owned as to 51% by UMP and 49% by CGNPC-URC, which is mainly engaged in fabrication of fuel assemblies and their components.

Reasons for and benefits of the Transactions

The reasons for and benefits of the Transactions are set out under the section headed "Reasons for and benefits of entering into of the Sale and Purchase Agreement and the Off-take Agreement" of the Board Letter. With reference to the Board Letter:

(i) the Acquisition is a good opportunity for the Group to acquire interest in natural uranium deposits based on a valuation determined with reference to the prevailing natural uranium price;

(ii) the Group will be able to continue expand its natural uranium trading business through the Off-take Arrangement and enjoy positive cash flow from the share of profit of Ortalyk with a view to create long-term value for the Shareholders;

(iii) the Acquisition and the Off-take Arrangement would deepen the cooperation between Kazatomprom and the Company, which can create opportunity for further cooperation with Kazatomprom;

(iv) the Cooperation Agreement serves as the framework agreement for the overall strategic cooperation in nuclear energy field between CGNPC and Kazatomprom on a long term and mutually beneficial basis, which includes the development of the Fuel Project and the Mining Project, being different stages of production of nuclear fuel for use in nuclear power plant for electricity generation. The Group has the expertise to participate in the Mining Project and to evaluate and assess the Target Mines and to manage the investment in Ortalyk; and

(v) the Call Option, the Put Option and the Buy-back Right serve as exit arrangement for the parties in relation to the cooperation of the Fuel Project and the Mining Project as they can only be exercised upon occurrence of certain triggering events, such as occurrence of deadlock event, failure or delay of the Fuel Project or breach of the Further Cooperation Agreement.

Industrial outlook

Uranium from mining is used almost entirely as fuel for nuclear power plants. Uranium is a heavy metal which has been used as an abundant source of concentrated energy.

With reference to the World Nuclear Association's fuel report published by World Nuclear Association on its website (world-nuclear.org) in 2019, the uranium market has been characterized by oversupply in recent years, which has led to a sizable reduction in uranium production levels at existing mines and a sharp decrease in investment in the development of new and existing mines. The capacity of all presently-known mining projects (current and idled mines, projects under development, planned or prospective) should be at least doubled by 2039, and the need for new primary uranium supply becomes even more pressing as a number of older mines are projected to be depleted. There are more than adequate uranium resources to meet future needs; however, oversupply and associated low uranium prices are preventing the investment needed to convert these resources into production. Rapid growth in uranium demand will lead to a need for additional mined uranium in the period to 2040.

According to the information contained in World Nuclear Association's website (world-nuclear.org), Kazakhstan has 12% of the world's uranium resources and in 2019 produced about 22,800 tU. In 2009 it became the world's leading uranium producer, with almost 28% of world production. In 2019, Kazakhstan produced 43% of the world's uranium. Kazakhstan has been an important source of uranium for more than 50 years. Over 2001 to 2013 production rose from 2,022 tU to about 22,550 tU per year, making Kazakhstan the world's leading uranium producer.

In addition, we found statistics on uranium price published by UxC as set out below:

Uranium average spot price per pound (US$)

	2019	**2020**
January	28.90	24.63
February	28.00	24.80
March	25.33	27.35
April	25.20	33.25
May	24.05	33.93
June	24.60	32.80
July	25.38	32.45
August	25.30	30.85
September	25.68	29.93
October	24.25	29.70
November	26.05	29.68
December	24.93	30.20

Source: UxC. According to UxC's website (www.uxc.com), UxC is one of the nuclear industry's leading consulting companies. UxC offers a wide range of services spanning the full fuel cycle with special focus on market-related issues. UxC was founded in March 1994 as an affiliate of The Uranium Exchange Company, in order to extend and provide greater focus to The Uranium Exchange Company's consulting and information services capabilities.

As depicted from the above table, the uranium average spot price decreased in the beginning of 2019 and stayed steady at around US$24 to US$26 from March 2019 to February 2020. Thereafter, the uranium average spot price recovered to US$27.35 in March 2020 and there was an increasing trend in the uranium average spot price from March 2020 to July 2020. Subsequently, the uranium average spot price slightly decreased and reached US$30.20 in December 2020, being a level higher than that of 2019.

Having considered (i) the aforesaid reasons and benefits of the Transactions; (ii) the Transactions are in-line with the Group's overall development strategy; and (iii) the industrial outlook as set out above, we concur with the Directors that, the Transactions are conducted in the ordinary and usual course of business of the Group and are in the interests of the Company and its Shareholders as a whole.

Principal terms of the Sale and Purchase Agreement

Summarised below are the principal terms for the Sale and Purchase Agreement, details of which are set out under the section headed "THE SALE AND PURCHASE AGREEMENT" of the Board Letter.

Date:

22 April 2021

Parties:

Kazatomprom and CGNM UK (a wholly-owned subsidiary of the Company)

Subject matter

Pursuant to the Sale and Purchase Agreement, Kazatomprom agreed to sell and CGNM UK agreed to acquire the Target Interest, being 49% interest in Ortalyk, at the Consideration of US$435,071,181.

Consideration

The Consideration shall be credited to an account of Kazatomprom not later than three business days before the Completion. With reference to the Board Letter, the Consideration was determined based on the Valuation conducted by the Valuer.

The Valuation Report

Accordingly, to assess the fairness and reasonableness of the Consideration, we obtained the Valuation Report prepared by the Valuer and noted that the Valuation as at 31 December 2020 was US$367 to US$504 million, with a preferred value of US$435 million (approximately US$435.67 million before rounding down to integer) (the "**Preferred Value**"), being the midpoint of the valuation range. Details of the Valuation Report are set out in Appendix V to the Circular.

For our due diligence purpose, we reviewed and enquired into (i) the terms of engagement of the Valuer with the Company; (ii) the Valuer's qualification in relation to the preparation of the Valuation Report; and (iii) the Valuer's track records in valuation of mining companies; and (iv) the steps and due diligence measures taken by the Valuer for conducting the Valuation. From the mandate letter and other relevant information provided by the Valuer and based on our interview with them, we were satisfied with the terms of engagement and scope of work of the Valuer as well as their qualification and competence for preparation of the Valuation Report. The Valuer also confirmed that they are independent to the Group, the parties to the Transactions and Ortalyk.

We further reviewed and enquired into the Valuer on the methodologies adopted and the basis and assumptions adopted in the Valuation Report in order for us to understand the Valuation Report.

The Valuation Report was prepared by the Valuer in accordance with the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (i.e. the "**VALMIN Code**"). The Valuer derived the Valuation utilising the discounted cash flows ("**DCF**") method under income approach and comparable transaction method under market approach as the primary valuation methodologies.

With reference to the Valuation Report:

(i) The Valuer considered but rejected the cost approach because the Central Mynkuduk Deposit is in production while the Zhalpak Deposit has completed trial production with a large-scale expansion been planned, the market value of the Target Mines was determined by the ability to generate a stream of benefits in future, rather than the sunk cost or cost of replacement. According to the VALMIN Code, cost approach is not permitted to value the mineral asset at this stage;

(ii) the Valuer considered and accepted the market approach (comparable transaction method). The comparable transaction method under the market approach was selected as the primary valuation methodology because sufficient amount of comparable transactions with adequate information can be found and such method adequately reflects the market opinion of the mineral assets. Market approach is suitable for valuing mineral assets at this stage according to the VALMIN Code; and

(iii) the Valuer considered the income approach and applied the DCF method of the income approach as the primary valuation methodology because (a) the market value of mineral asset is determined by the ability to generate a stream of benefits in future; (b) economic benefit streams of mineral asset could be identified based on historical and projected cash flows according to the Competent Person's Report; (c) important parameters for the DCF analysis can be reasonable estimated or relied on with acceptable accuracy; and (d) income approach is suitable for valuing producing projects according to the VALMIN Code.

Having considered the above, in particular, cost approach is not permitted to value the Target Mines at this stage according to the VALMIN Code, and both market approach and income approach are applicable and suitable in conducting the Valuation, we consider the adoption of both market approach and income approach for the Valuation is fair and reasonable.

Under market approach, the Valuer adopted the comparable transactions method in conducting the Valuation. We noted that the Valuer selected transactions that involve the acquisition of uranium projects similar to Ortalyk in terms of size, development stage and mining method, that completed within the last 10 years from the Valuation Date on a worldwide basis. Having considered the selection criteria of the comparable transactions adopted by the Valuer and the particulars of the comparable transactions as contained in the Valuation Report, we do not doubt the fairness and the reasonableness of the comparable transactions.

The Valuer analysed the reserves of the comparable transactions in order to arrive at the average price per pound of uranium of the comparable transactions (being the consideration of the comparable transactions divided by the uranium resources of the uranium project acquired under each of the respective comparable transactions). Having arrived at the average price per pound of uranium based on the comparable transactions, the Valuer then made reference to the uranium resources statements included in the Competent Person Report, which set out the uranium resources of the Target Mines, to conclude the value of Ortalyk.

Under income approach, the Valuer adopted the DCF method in conducting the Valuation. We noticed the financial projection of the Target Mines are based on the mining schedules, operating expenditure and capital expenditure as set out in the Competent Person Report. With reference to the Competent Person Report, the Competent Person estimated the mineral resources and ore reserves in compliance with the JORC Code and the Competent Person Report has been compiled in accordance to Chapter 18 of the Listing Rules. The team members of the Competent Person involved in compiling the Competent Person Report have extensive experience in mining industry and the person signing off the Competent Person Report meets the requirements of a competent person as defined by Chapter 18 of the Listing Rules.

Having discussed with the Competent Person, we understood the followings from the Competent Person ("**Our Understanding from Competent Person**"):

- the mining schedules were formulated based on (i) the ore reserves of the Target Mines; (ii) the current production capacity of the Central Mynkuduk Deposit and the expected production capacity of the Zhalpak Deposit having obtained the New Zhalpak Subsoil Use Agreement; (iii) the regulatory requirement to extract 90% over the life of each production block; and (iv) the average time required to deplete each production block;

- the capital expenditures forecasted by the Competent Person is consistent with the extraction schedule in terms of the quantity of wells required for each block per annum and the historical cost of well construction; and

- the operating expenditures forecasted by the Competent Person with reference to the historical operating expenditure per unit of uranium and the expected production over the life of the Target Mines.

Having considered the above and after discussion with the Competent Person regarding the mining extraction schedules, operating expenditure and capital expenditure as set out in the Competent Person Report, we have no doubt on the aforesaid basis of the financial projection.

Two scenarios (i.e. baseline scenario and consensus scenario) of financial projection of the Target Mines were established. Under baseline scenario, uranium selling prices were based on current industry and economic conditions, using the spot uranium price with an annual growth rate of 3.18%, representing the world's average inflation rate as published by Statista as at the Valuation Date (Statista is specialized in market and consumer data, its

platform consolidates statistical data on over 80,000 topics from more than 22,500 sources on 170 industries). Under consensus scenario, to reflect the potential changes in uranium price as a result of changes in economic conditions, supply and demand, uranium selling prices were based on the forecasted uranium prices between 2020 and 2035 published by the TradeTech and UxC, two independent nuclear industry leading market research and analysis companies.

In determining the discount rate, the Valuer made reference to comparable public companies worldwide that engaged in uranium exploration and production, assessed other parameters such as risk-free return, equity risk premium, size premium to be adopted in the Valuation, and specific risk associated with each of the Target Mines.

In respect of risk-free return, we noted that the Valuer made reference to the Kazakhstan long-term government bond yield as at the Valuation Date. Having considered (i) the Target Mines operate in Kazakhstan; (ii) the Target Mines are scheduled to operate for over 5 years; and (iii) the government bond is often regarded as risk-free investment in Kazakhstan as it is fully backed by the government, we are of the view that the use of Kazakhstan long-term government bond yield as the risk-free return is fair and reasonable.

In respect of equity risk premium, we noted that the Valuer made reference to the "Country Default Spreads and Risk Premium" research published by Prof. Aswath Damodaran of New York University (Prof. Aswath Damodaran is a professor of finance at the Stern School of Business at New York University specialised in corporate finance and valuation. His papers have been published in the "Journal of Financial and Quantitative Analysis", the "Journal of Finance", the "Journal of Financial Economics" and the "Review of Financial Studies".).

In respect of size premium, we noted that the Valuer made reference to the "Cost of Capital Navigator 2019" research published by Duff & Phelps in December 2019 and adopted the small cap companies size premium of 1.59% (Duff & Phelps was founded in 1932 and provides merger and acquisition advisory services, valuation, investment banking, transaction advisory, dispute, legal management, and tax consulting services. Duff & Phelps serves customers worldwide.). We also noticed the adoption of Duff & Phelps published information on size premium in certain valuation reports contained in Hong Kong listed companies' circular.

During our discussion with the Valuer, we did not identify any major factor which caused us to doubt the fairness and reasonableness of the methodologies, principal bases, assumptions and parameters adopted for the Valuation Report.

Having considered our independent work performed on the Valuation Report and that the Consideration of US$435,071,181 is slightly lower than the Preferred Value of approximately US$435.67 million before rounding down to integer, we are of the view that the Consideration is fair and reasonable.

Sell-back Right

Kazatomprom shall use best endeavors to obtain the New Zhalpak Subsoil Use Agreement no later than 31 December 2021 and to transfer all rights and obligations under the New Zhalpak Subsoil Use Agreement to Ortalyk subject to reimbursement of actually incurred costs of Kazatomprom by Ortalyk of not more than US$200,000.

If Ortalyk fails to obtain the New Zhalpak Subsoil Use Agreement by 31 December 2021, CGNM UK has the right to require Kazatomprom to buy-back the Target Interest in the same mechanism as the exercise of the Buy-back Right under the Further Cooperation Agreement.

Call Option, Put Option and Buy-back Right

The parties to the Sale and Purchase Agreement acknowledge and confirm that, subject to fulfilment or wavier of the Conditions, each of the Call Option, the Put Option and the Buy-back Right shall be granted and take effect upon Completion.

Off-take Arrangement

To give effect to the Off-take Arrangement of products of Ortalyk stipulated under the Cooperation Agreement and allow the parties to share the output of the Target Mines in proportion to their interests, it is expected that Kazatomprom, the Company and CGNM UK will enter into the Off-take Agreement prior to the Completion pursuant to which, the parties will agree that they shall have the obligation to acquire the natural uranium concentrates produced by Ortalyk in proportion to their respective participation interests, as follows:

(i) Kazatomprom shall acquire 51% of Ortalyk's total annual production; and

(ii) the Company or CGNM UK shall acquire 49% of Ortalyk's total annual production,

subject to the Guaranteed Entitlement of 20,000 tonnes of uranium in aggregate stipulated under the Mining Principles Agreement.

Term

The Off-take Agreement shall come into force from the date CGNM UK becomes a participant of Ortalyk until the earlier of (i) the date CGNM UK exits from participation in Ortalyk; or (ii) the end of the commitment period of the Fuel Assembly Purchase Obligation under the Cooperation Agreement (according to the Cooperation Agreement, the commitment period of the Fuel Assembly Purchase Obligation shall be purchasing fuel assemblies for a continuous period of twenty years, and the first delivery is currently expected to take place in 2022), provided that, if by the end of the commitment period, Ortalyk continues to operate, the Company or CGNM UK shall continue to acquire the product of Ortalyk in proportion to its participation interests but the total off-take volume of the Company and/or CGNM UK shall not exceed 20,000 tonnes of uranium.

It is expected that Ortalyk will carry out liquidation procedure upon depletion of both of the Target Mines and CGNM UK will exit from participation in Ortalyk upon completion of such procedure, and, accordingly, the Off-take Agreement will then cease to have effect pursuant to the terms of the Off-take Agreement.

Given the purpose of the Off-take Arrangement is to allow the holders of the equity interest of Ortalyk to share the product of Ortalyk, the Directors believe that it is necessary that the terms of the Off-take Agreement exceed three years to ensure that the Group will be able to share the output of Ortalyk and to protect the interest of the Company in Ortalyk.

In assessing the reasons for the term of the Off-take Agreement ("**Off-take Term**") to be longer than three years, we have considered the following factors:

(i) Mining life

With reference to the Board Letter, the purpose of the Off-take Arrangement is to allow the holders of the equity interest of Ortalyk to share the product of Ortalyk, the Directors believe that it is necessary for the Off-take Term to exceed three years for ensuring that the Group will be able to share the output of Ortalyk and to protect the interest of the Company in Ortalyk.

We noticed from the Circular that based on the current production schedule, (i) the operation of the Central Mynkuduk Deposit is scheduled to run until 2033; and (ii) the operation of the Zhalpak Deposit is scheduled to run until 2036 on the basis of commencing well field establishment in 2022 and ramp up to full production from 2023 to 2025.

It is reasonable for the Off-take Term to be longer than three years to cover the mining life of the Target Mines.

(ii) Mineable quantity

With reference to the Board Letter, the Proposed Annual Caps between 2021 and 2036 are determined based on the mining schedules of the Target Mines contained in the Competent Person Report multiplied by the 49% proportionate share of the Group under the Off-take Arrangement, plus a 20% buffer to cater for any potential production fluctuation or year-end cut off adjustment, and additional quantity per annum between 2030 to 2036 to cater the potential additional off-take upon exercise of the Guaranteed Entitlement. The Proposed Annual Caps between 2037 and 2040 are determined to be 100 tonnes per year with reference to the estimated production of the final years based on the mining schedules of the Target Mines to cater for any additional production of the Target Mines or adjustment of or delay in production schedule of the Target Mines.

It is reasonable for the Off-take Term to be longer than three years to allow sufficient time for off-taking all the production under the mining schedule of the Target Mines (i.e. up to 2033 for the Central Mynkuduk Deposit and up to 2036 for the Zhalpak Deposit) and cater for any additional production of the Target Mines or adjustment of or delay in production schedule of the Target Mines.

In considering whether it is normal business practice for agreements of similar nature to the Off-take Agreement with duration of more than three years, we, on best effort basis, identified five uranium off-take agreements ("**Off-take Comparables**") entered into by listed companies worldwide during the past 10 years prior to 22 April 2021, being the date of the Sale and Purchase Agreement. Set out below is the exhaustive list of Off-take Comparables that we found based on our selection criteria:

Seller	Buyer	Date of announcement	Subject	Term	Contract price
GoviEx Uranium Inc.	Toshiba Corporation (Stock code: TYO:6502)	23 April 2012	600,000 pounds of uranium per annum (8,400,000 pounds in total)	14 years	Undisclosed
Paladin Energy Ltd (Stock code: ASX:PDN)	Undisclosed	15 August 2012	13,730,000 pounds of uranium	Six years commencing from 2019	Uranium will be sold at market prices prevailing at the time of delivery bounded by escalating floor and ceiling prices (no premium/discount)
Texas Rare Earth Resources Corp. (Stock code: OTCQX:TRER)	A subsidiary of AREVA S.A.	6 April 2015	1,500,000 pounds of uranium	Five years commencing in 2018 or as soon as thereafter	Based upon a pricing formula indexed to uranium spot prices at the times of delivery (undetermined premium/discount)
Berkeley Energia Limited (Stock code: ASX/ AIM:BKY)	Curzon Resources Limited (formerly known as Interalloys Trading Limited)	28 November 2016	2,000,000 pounds of uranium with optional volume of 1,000,000 pounds of uranium	Over a five-year period	Average fixed price of US$43.78 per pound of uranium with the then spot price of around US$18 per pound (premium of approximately 143.2%)
Aura Energy Limited (Stock code: ASX:AEE & AIM:AURA)	Curzon Uranium Trading Limited	29 January 2019	800,000 pounds of uranium production with a further 1.8 million pounds of uranium production as option volumes	A seven-year period starting from the commencement of production and extendable thereafter by mutual consent	Average price of above US$44 per pound of uranium compared with the then spot price of around US$29 per pound (premium of approximately 51.7%)

As depicted from the above table, all of the terms of the Off-take Comparables are more than three years.

In addition, we noticed from the Company's announcement dated 11 January 2016 that at the time when the Company subscribe certain equity interest in Fission (the "**Fission Subscription**"), the Company and Fission also entered into an off-take agreement ("**Fission Off-take Agreement**") pursuant to which the Company is entitled to acquire an agreed quantity of uranium concentrates from Fission under the terms and conditions in the Fission Off-take Agreement, contingent on the Company maintaining a certain significant share ownership in Fission. Fission and its ultimate beneficial owners are independent third parties to the Group as at the date of the aforesaid announcement. As advised by the Management, there is no specific term under the Fission Off-take Agreement. The Fission Off-take Agreement will remain effective as long as the Company maintaining a certain significant share ownership in Fission. In fact, the Fission Off-take Agreement has been effective since completion of the Fission Subscription in 2016.

Furthermore, we noticed from the Company's announcement dated 16 May 2014 in relation to the acquisition of the entire equity interest in Beijing Sino-Kazakh, which indirectly interested in Irkol Mine and Semizbay Mine through its 49% equity interest in Semizbay-U, CGNPC-URC and Kazatomprom entered into an off-take agreement ("**Semizbay-U Off-take Agreement**") pursuant to which CGNPC-URC and Kazatomprom are entitled to and shall acquire 49% and 51% of Semizbay-U's total annual production output respectively, which represent their respective equity interest in Semizbay-U, over the period of Semizbay-U's duration and under the terms and conditions of the Semizbay-U Off-take Agreement. Subsequently, CGNPC-URC irrevocably and exclusively designated the Group, from the completion date of the aforesaid acquisition, to purchase the off-take quantity from Semizbay-U for the entire term of the Semizbay-U Off-take Agreement. With reference to the Semizbay-U Off-take Agreement and as advised by the Management, the Semizbay-U Off-take Agreement is effective from 1 January 2013 and shall remain in force until the date (i) both CGNPC-URC and Kazatomprom reach a written agreement on the termination of the Semizbay-U Off-take Agreement; or (ii) Beijing Sino-Kazakh ceases to be the participant of Semizbay-U. Theoretically, the term of the Semizbay-U Off-take Agreement can be indefinite. In fact, the Semizbay-U Off-take Agreement has been effective since 1 January 2013.

Having considered the above, we confirm that the Off-take Term which is longer than three years, is required and it is normal business practice for the Off-take Agreement to be of such duration.

Pricing mechanism

The price of the natural uranium concentrates under the Off-take Arrangement shall be the average arithmetic value of spot price of natural uranium published and effective as of the date of delivery published by TradeTech and UxC (being leading providers of uranium prices and independent third parties), respectively, minus a 2% discount, and in the case of Kazatomprom only, less the transportation cost undertaken by Kazatomprom.

Ortalyk engages Kazatomprom to deliver its products to its customers (such as the Group) and is required to pay the relevant delivery fees and, in respect of the sales to Kazatomprom, such delivery fees shall be deducted from the price of the purchase as transportation cost. The price of natural uranium concentrates to be paid by the Group and Kazatomprom, respectively, can be illustrated by the following formulas:

Price per pound of natural uranium to be paid by the Group = Spot price x 0.98

Price per pound of natural uranium to be paid by Kazatomprom = Spot price x 0.98 – Transportation cost

Notes:

1. Spot price means the average arithmetic value of natural uranium spot price indicators published by TradeTech and UxC, which are published and effective as of the date of delivery

2. Transportation cost means transportation cost undertaken by Kazatomprom

As depicted from the Off-take Comparables table above, two of the Off-take Comparables selling prices represented premium over the then spot prices and one of the Off-take Comparables selling prices represented no premium over/discount to the then spot prices. In addition, we noticed that pricing under the Fission Off-take Agreement and the Semizbay-U Off-take Agreement are at 5% discount and 2% discount respectively on the average of TradeTech and UxC spot price indexes at the time of delivery.

Accordingly, we considered the pricing mechanism of the Off-take Arrangement to be fair and reasonable as the Group can secure natural uranium supply at a discounted price under the Off-take Arrangement.

Proposed Annual Caps

The Company proposes the following annual caps in relation to the Off-take Arrangement between 2021 and 2040:

Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Annual cap *(tonnes of natural uranium)*	466	941	1,206	1,324	1,471	1,644	1,588	1,531
Year	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
Annual cap *(tonnes of natural uranium)*	1,469	2,111	2,298	1,908	849	579	487	79
Year	**2037**	**2038**	**2039**	**2040**	**Total**			
Annual cap *(tonnes of natural uranium)*	100	100	100	100	**20,351**			

With reference to the Board Letter, the Proposed Annual Caps between 2021 and 2036 are determined based on the mining schedule of the Target Mines contained in the Competent Person Report multiplied by the 49% proportionate share of the Group under the Off-take Arrangement, plus a 20% buffer (the "**Buffer**") to cater for any potential production fluctuation or year-end cut off adjustment, and adjusted as follows:

(a) in respect of 2021, further multiplied by 0.5 to reflect the fact that the Completion of the Acquisition is expected to take place in or around June 2021;

(b) in respect of 2030, addition of 700 tonnes to cover for potential additional off-take upon exercise of the Guaranteed Entitlement; and

(c) in respect of 2031 to 2036, addition of such amount resulting the entire scheduled output of the Target Mines being off-taken by the Group to reflect the potential additional off-take upon exercise of the Guaranteed Entitlement.

It is expected that the Guaranteed Entitlement, if exercised, will only be exercised in later years since the parties will then have a more certain estimate on the remaining output of the Target Mines.

The Proposed Annual Caps between 2037 and 2040 are determined to be 100 tonnes per year with reference to the estimated production of the final years based on the mining schedule of the Target Mines to cater for any additional production of the Target Mines or adjustment of or delay in production schedule of the Target Mines.

As advised by the Management, the mining schedules are formulated with reference to (i) current available information regarding the operational structure of Ortalyk and the Target Mines; (ii) the ore reserves estimated by the Competent Person; and (iii) the currently known technology in relation to uranium mining. Given the long time span of the Off-take Agreement, which covers a period of around 20 years, the development of technology, mining techniques and logistics may affect future production and distribution of uranium, as such, the Management is of the view that the annual output as set out in the mining schedules may affect the actual output. Also, having considered the mining schedules concern the annual output of uranium from the Target Mines and the timing for distribution of uranium may differs from such schedules due to processing and delivery status, we are of the view that the Buffer of 20% is fair and reasonable.

For our due diligence purpose, we obtained the calculation of the Proposed Annual Caps from the Company. We noticed the calculation of the Proposed Annual Caps is consistent and in-line with the aforesaid basis of the Proposed Annual Caps and the mining schedules of the Target Mines as set out under the Competent Person Report contained in Appendix IV to the Circular. With reference to the Competent Person Report, the Competent Person estimated the mineral resources and ore reserves in compliance with the JORC Code and the Competent Person Report has been compiled in accordance to Chapter 18 of the Listing Rules. The team members of the Competent Person involved in compiling the Competent Person Report have extensive experience in mining industry and the person signing off the Competent Person Report meets the requirements of a competent person as defined by Chapter 18 of the Listing Rules. Having considered the above and Our

Understanding from Competent Person after our discussion with the Competent Person regarding the mining extraction schedules as set out in the Competent Person Report, we have no doubt on the application of such mining schedules in formulating the Proposed Annual Caps.

Given the above, we consider that the Proposed Annual Caps to be fair and reasonable.

The Group's measures for monitoring the Off-take Arrangement

With reference to the Board Letter, Ortalyk shall mainly be operated by Kazatomprom, its major shareholder, and the Group will involve in the operational management of Ortalyk and to ensure the completion of its annual production plan and fulfillment of the off-take amount under the Off-take Arrangement through the team of personnel appointed and despatched by the Group who will act as the deputy general director of Ortalyk, the deputy directors of the two Target Mines and deputy heads of key departments of Ortalyk. The personnel assigned by the Group shall exert their influence on mining production and in the areas of financial, operation, procurement, planning and distribution of profit as well as corporate governance. The Company will monitor the actual production of the Target Mines through its involvement in the management of Ortalyk to ensure compliance with the Proposed Annual Cap and, in case the Proposed Annual Cap is expected to be exceeded, the Company will comply with the relevant requirements of the Listing Rules, include obtaining Independent Shareholders' approval if applicable.

With reference to the Board Letter, in the event that Kazatomprom does not perform its off-take obligation, the Group shall have the legal right to commence legal action and seek for damage or specific performance on the Off-take Agreement. Furthermore, as the board of directors of Ortalyk will be controlled by Kazatomprom, should Ortalyk unreasonably refuses to sign the annual contract for implementing the Off-take Arrangement and Kazatomprom fails to procure Ortalyk to sign such contract, the Group may commence legal action against Kazatomprom to enforce the Off-take Agreement and/or have the right to exercise the Put Option by virtue of Kazatomprom not performing the Off-take Arrangement.

We consider the effective implementation of the above measures are sufficient for the Group to monitor the Off-take Arrangement (including its terms and the Proposed Annual Caps).

Other terms

Other terms of the Sale and Purchase Agreement are set out in the section headed "THE SALE AND PURCHASE AGREEMENT" of the Board Letter.

Principal terms of the Further Cooperation Agreement

Summarised below are the principal terms for the Further Cooperation Agreement, details of which are set out under the section headed "THE FURTHER COOPERATION AGREEMENT" of the Board Letter.

Date:

22 April 2021

Parties:

Kazatomprom, UMP, CGNPC, CGNPC-URC, the Company, Ulba-FA, CGNM UK (a wholly-owned subsidiary of the Company) and Beijing Sino-Kazakh (a wholly-owned subsidiary of the Company)

Purpose

The purpose of the Further Cooperation Agreement is to change and update provisions of cooperation of the parties under, among others, the Cooperation Agreement and the Mining Principles Agreement. The Further Cooperation Agreement set out, amongst others, implementation schedule of mining project, uranium purchase and fuel pellets manufacturing services purchase obligations of relevant parties, the Buy-back Right provision, the Call Option and the Put Option provisions.

The mining project

The parties to the Further Cooperation Agreement (the "**Parties**") agreed that CGNM UK shall be a participant of Ortalyk and has obligations with respect to Ortalyk, as further detailed in the Sale and Purchase Agreement and the Further Cooperation Agreement, and take obligations to perform all obligations as a participant of Ortalyk.

Buy-back of the Target Interest

Upon occurrence of any Buy-back Event, CGNM UK shall, at the request at Kazatomprom, sell the Target Interest to Kazatomprom no later than six months from the date of such request at the New Exercise Price.

The Buy-back Events are principally relating to the cooperation among the Parties (details of which is set out under the section headed "THE FURTHER COOPERATION AGREEMENT" of the Board Letter). The Management advised us that, as the Acquisition forms part of the cooperation among the Parties, they commercially agreed to the provision of the Buy-back Right.

The New Exercise Price shall be the fair market value of the Target Interest as of the last day of the month of the exercise notice determined by a valuer appropriately licenced pursuant to the laws of Kazakhstan from any of the big four accounting firms with expertise in valuing assets of the nature concerned and agreed by Kazatomprom and CGNPC, less any dividend received by CGNM UK from Ortalyk between the valuation date to the date of transfer of the Target Interest.

Call Option and Put Option

Pursuant to the Cooperation Agreement, Kazatomprom, Kazatomprom Mining Participant and UMP shall have the right exercisable any time during the 60 business days following the occurrence of any of Call Option Triggering Events to require both (but not one of) (i) CGNPC-URC to sell 100% of its participatory interest (if any) in the Fuel Partnership to UMP (or its nominee); and (ii) CGNPC Mining Participant (i.e. CGNM UK) to sell 100% (in whole and not in part) of its participatory interest in the Mining Partnership (i.e. Ortalyk) (if any) to Kazatomprom Mining Participant at the Old Exercise Price.

Pursuant to the Cooperation Agreement, CGNPC, CGNPC-URC and CGNPC Mining Participant (i.e. CGNM UK) shall have the right exercisable any time during the 60 business day following the occurrence of any of Put Option Triggering Events to require (i) UMP to acquire from CGNPC-URC 100% of its participatory interest in the Fuel Partnership (in whole and not in part); and (ii) Kazatomprom Mining Participant to acquire from CGNPC Mining Participant (i.e. CGNM UK) 100% of its participatory interest in the Mining Partnership (i.e. Ortalyk) (in whole and not in part) at the Old Exercise Price.

The Call Option Triggering Events and Put Option Triggering Events are principally relating to the cooperation among the Parties under the Fuel Partnership and the Mining Partnership (details of which is set out under the Board Letter). The Management advised us that, as the Fuel Partnership and the Acquisition (for the purpose of materialising the Mining Partnership) form part of the cooperation among the Parties, they commercially agreed to the provisions of the Call Option and the Put Option.

Pursuant to the Further Cooperation Agreement, the parties agreed that the exercise price of the Put Option and the Call Option shall be the same as the exercise price of the Buy-back Right, being the New Exercise Price.

Given that:

(i) the New Exercise Price shall be the fair market value of the Target Interest as of the last day of the month of the exercise notice, less any dividend received by CGNM UK from Ortalyk between the valuation date to the date of transfer of the Target Interest; and

(ii) the valuer determining the aforesaid fair market value will be (a) appropriately licenced pursuant to the laws of Kazakhstan; (b) from any of the big four accounting firms with expertise in valuing assets of the nature concerned; and (c) agreed by both of Kazatomprom and CGNPC,

we consider the mechanism of determining the New Exercise Price to be fair and reasonable.

Other terms

Other terms of the Further Cooperation Agreement are set out in the section headed "THE FURTHER COOPERATION AGREEMENT" of the Board Letter.

Taking into account the principal terms of the Transactions as set out above, we consider that the terms of the Transactions are fair and reasonable so far as the Independent Shareholders are concerned.

Financial effects in relation to the Acquisition

With reference to the Board Letter, upon Completion, Ortalyk will not become a subsidiary of the Company and shall be accounted for as an associate using the equity method in the consolidated financial statements of the Group. As a result, Ortalyk will initially be recognized in the statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of Ortalyk.

The unaudited pro forma financial information of the Enlarged Group (the "**Pro Forma Information**") is included in Appendix III to the Circular.

As extracted from the 2020 Annual Report, the audited consolidated total assets and total liabilities of the Group were approximately HK$4.19 billion and HK$2.16 billion as at 31 December 2020 respectively. According to the Pro Forma Information, the unaudited consolidated total assets and total liabilities of the Enlarged Group would be approximately HK$6.63 billion and HK$4.61 billion respectively as if the Acquisition had been completed on 31 December 2020.

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

RECOMMENDATION

Having taken into consideration the factors and reasons as stated above, we are of the opinion that (i) the terms of the Transactions are on normal commercial terms and are fair and reasonable; and (ii) the Transactions are conducted in the ordinary and usual course of the business of the Group and are in the interests of the Company and the Shareholders as a whole. Accordingly, we recommend the Independent Board Committee to advise the Independent Shareholders to vote in favour of the resolutions to be proposed at the EGM to approve the Transactions and we recommend the Independent Shareholders to vote in favour of the resolutions in this regard.

Yours faithfully,
For and on behalf of
Gram Capital Limited
Graham Lam
Managing Director

Note: Mr. Graham Lam is a licensed person registered with the Securities and Futures Commission and a responsible officer of Gram Capital Limited to carry out Type 6 (advising on corporate finance) regulated activity under the SFO. He has over 25 years of experience in investment banking industry.

1. OVERVIEW OF THE TARGET MINES

The Target Mines are located within the South Kazakhstan Province of Kazakhstan in Shu-Sarysu basin which is one of the biggest source of natural uranium globally. The Central Mynkuduk Deposit and the Zhalpak Deposit are approximately 80km away from each other.

The Central Mynkuduk Deposit

Location: The Central Mynkuduk Deposit is located in South Kazakhstan Province of Kazakhstan in the Shu-Sarysu basin 520km north of the city of Shymkent.

Products: Natural uranium oxide

Historic production: The Central Mynkuduk Deposit commenced production in 2007 and produced approximately 19,800 tonnes of uranium as of 31 December 2020.

The table below sets forth the production on the Central Mynkuduk Deposit between 2015 and 2020:

	Year					
	2015	**2016**	**2017**	**2018**	**2019**	**2020**
Mining production *(tonnes of uranium)*	1,808	2,010	1,802	1,600[1]	1,617[1]	1,305[2]

Notes:

1. Production has been limited to 1,600 tonnes of uranium due to falling uranium prices.

2. Production has been reduced due to COVID-19.

Current production capacity: The annual production capacity of the Central Mynkuduk Deposit is 2,000 tonnes of natural uranium while production for the year ended 31 December 2019 has been limited to 1,600 tonnes of natural uranium due to falling uranium prices.

Mining life: Based on the current production schedule, the operation of the Central Mynkuduk Deposit is scheduled to run until 2033.

Mining permit: The Central Mynkuduk Deposit is contained within a single mining permit (i.e. the Central Mynkuduk Subsoil Use Agreement) with an expiration period to 8 July 2033 and the current mining allotment is 46.976 sq. km with maximal depth 370m.

Mineral Resources: The table below sets forth Mineral Resource at geological cut off grade of 0.01% uranium as at 31 December 2020:

Class	**Quantity** *M t*	**Uranium grade** *%*	**Contained uranium** *'000 t*
Measured	21.3	0.025	5.3
Indicated	81.8	0.027	22.1
Inferred	1.5	0.036	0.5
Total	**104.6**	**0.027**	**28.0**

Ore Reserves: The table below sets forth the Ore Reserves as of 31 December 2020 (which are included and not additional to the Mineral Resources stated above):

Class	**Quantity** *M t*	**Uranium grade** *%*	**Contained uranium** *'000 t*
Proven	–	–	–
Probable	92.3	0.026	23.6
Total	**92.3**	**0.026**	**23.6**

Notes:

1. Undiluted for effective thickness
2. Metal content is post leach recovery (90%) extracted into pregnant leaching solution.
3. Ore Reserves do not account for in pipe or within the plant uranium content.

According to the Competent Person Report, the Central Mynkuduk Deposit has all key mining tenements, which are currently valid, for the continued operation of the assets to support the planned production rates and possesses all of the mineral rights (concessions) and surface rights necessary to exploit the project.

The Zhalpak Deposit

Location: The Zhalpak Deposit is located in South Kazakhstan Province of Kazakhstan in the Shu-Sarysu basin 500km north of the city of Shymkent.

Product: Natural uranium oxide

Historic production: The Zhalpak Deposit conducted test production between 2017 and April 2020 and produced approximately 200 tonnes of uranium. The table below sets forth the production on the Zhalpak Deposit between 2017 and 2020:

	Year			
	2017	**2018**	**2019**	**2020**
Mining production *(tonnes of uranium)*	6	110	77	17[1]

Current production: The Zhalpak Deposit completed trial mining operations and is in the course of applying the New Zhalpak Subsoil Use Agreement for extraction.

Mining permit: The exploration permit of the Zhalpak Deposit (i.e. the Expired Zhalpak Subsoil Use Agreement) expired on 31 May 2018, with an allotment of 145.8 sq. km. Ortalyk is in the course of obtaining the New Zhalpak Subsoil Use Agreement via Kazatomprom.

Mineral Resources: The table below sets forth Mineral Resources at geological cut off grade of 0.01% uranium as at 31 December 2020:

Class	**Quantity** *M t*	**Uranium grade** *%*	**Contained uranium** *'000 t*
Measured	–	–	–
Indicated	31.0	0.032	9.8
Inferred	15.7	0.009	4.5
Total	**46.7**	**0.031**	**14.3**

Mineable quantity estimate:

Further studies are necessary to reach sufficient confidence in modifying factors from which Ore Reserves can be calculated.

Based on estimate, which is not an Ore Reserve as per the definition of the JORC Code as it is supported only by scoping study level of confidence technical inputs, the table below sets forth the mineable quantity estimate for the indicated portion of the Mineral Resource of the Zhalpak Deposit as at 31 December 2020:

Quantity *M t*	**Uranium grade** *%*	**Contained uranium** *'000 t*
30.4	0.032	9.7

Notes:

1. Undiluted for effective thickness

Mineral Resources that are not Ore Reserves do not have demonstrated economic viability, and as such there is no certainty that the scoping study and economics will be realised at the Zhalpak Deposit as the studies progress. Nevertheless, a high-level economic assessment completed shows that based on the currently assumed modifying factors and long term consensus forecast of US$30 per pound of natural uranium, the Zhalpak Deposit scoping study presents positive cashflow, as such the production schedule is considered to be suitable for presentation.

Mining life:

Based on the current production schedule, the operation of the Zhalpak Deposit is scheduled to run until 2036 on the basis of commencing well field establishment in 2022 and ramp up to full production from 2023 to 2025.

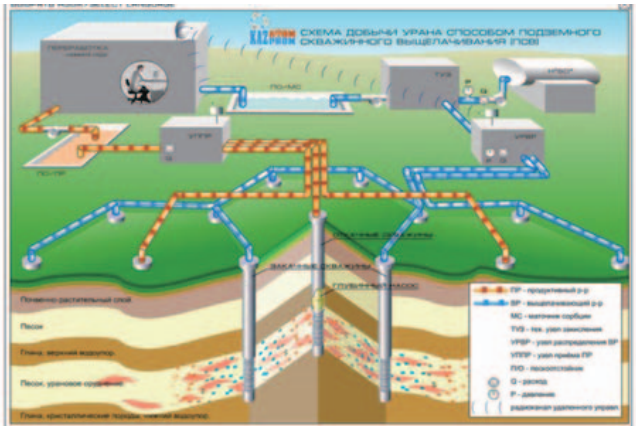
2. BUSINESS MODEL AND MANAGEMENT OF ORTALYK

Ortalyk is principally engaged in the exploration of the Target Mines, mining and processing of uranium-containing ores and production of natural uranium. The flow chart below sets forth the business model of Ortalyk:

Extraction

Natural uranium is extracted via in-situ leaching in both of the Target Mines. In-situ leaching is a mining process used to recover minerals such as uranium through boreholes drilled into a deposit. The process involves pumping of lixiviant into the ore body via a set of boreholes, which circulates through the porous rock dissolving the ore and isextracted via another set of boreholes. The solution bearing the dissolved ore content is then pumped to the surface and processed with the end product being pregnant solution of uranium. This process allows the extraction of uranium from an ore body without the need for conventional mining involving drill-and-blast, open-cut or underground mining.

The figure below shows the cross-section of in-situ leaching operation:



The advantages of in-situ leaching uranium are:

- Reduced hazards for the employees from accidents, dust, and radiation
- Less pollution to the surface environment
- Low capital expenditure, low cost, short period of mine construction
- No need for large uranium mill tailings deposits
- Making full use of low grade resources

On-site processing

In Central Mynkuduk Deposit, the pregnant solution is then processed by the on-site processing plant into yellow cake (a type of uranium concentrate powder) through adsorption, desorption, sedimentation and squeezing. In Zhalpak Deposit during its trial exploration, pregnant solution was first processed via on-site sorption plant into uranium-enriched resin which was subsequently transported to the processing plant in Central Mynkuduk Deposit for processing into yellow cake.

Metallurgical

The yellow cake is subsequently transported to a third party off-site metallurgical plant for solvent extraction and calcination and the product of such processes is natural uranium in the form of triuranium octoxide (U_3O_8).

Sales and delivery

The natural uranium is then delivered to such location as requested by its customer. During the Track Record Period, over 99% of the produced uranium of Ortalyk were sold to Kazatomprom, the then sole owner of Ortalyk. Upon completion of the Acquisition, it is expected that products of Ortalyk will be sold in accordance with the Off-take Arrangement set out in the section headed "Sale and Purchase Agreement – Off-take Arrangement" in the letter from the Board in this circular.

3. MANAGEMENT DISCUSSION AND ANALYSIS ON FINANCIAL PERFORMANCE

OPERATING RESULTS

The table below sets forth the statements of profit or loss of Ortalyk for the years ended 31 December 2018, 2019 and 2020.

	Year ended 31 December		
	2018	**2019**	**2020**
	US$	*US$*	*US$*
Revenue	101,016,519	96,277,498	94,903,510
Cost of sales	(58,954,211)	(53,192,030)	(42,824,347)
Gross profit	**42,062,308**	**43,085,468**	**52,079,163**
Distribution costs	(58,684)	(99,584)	(90,979)
General and administrative expenses	(2,803,710)	(2,619,235)	(3,299,744)
Other losses – net	(39,748)	(231,654)	(97,772)
Operating profit	**39,160,166**	**40,134,995**	**48,590,668**
Finance income	114,992	257,258	528,711
Finance costs	(1,022,873)	(692,705)	(705,545)
Finance costs – net	(907,881)	(435,447)	(176,834)
Profit before income tax	**38,252,285**	**39,699,548**	**48,413,834**
Income tax expenses	(7,738,010)	(8,562,175)	(9,872,307)
Profit for the year	**30,514,275**	**31,137,373**	**38,541,527**

Revenue

Ortalyk principally engages in mining and uranium extraction and processing, sale of uranium products. Sales of uranium products contributed over 99% of the revenue of Ortalyk during the Track Record Period, among which over 99% of the produced uranium of Ortalyk were sold to Kazatomprom, then the sole owner of Ortalyk at a price calculated as the weighted average natural uranium spot prices quoted by UxC and TradeTech with a discount and transfer pricing differential in accordance with Kazakhstan laws. The sales volume for the years ended 31 December 2018, 2019 and 2020 were 1,712, 1,694 and 1,288 tonnes of natural uranium, respectively.

The revenue of Ortalyk decreased by approximately 4.7% from approximately US$101.0 million for the year ended 31 December 2018 to US$96.3 million for the year ended 31 December 2019 and further decreased by 1.4% to US$94.9 million for the year ended 31 December 2020 when presented in USD. When presented in Tenge, the revenue of Ortalyk, recognised an increase of approximately 5.8% from approximately Tenge 34,830 million for the year ended 31 December 2018 to approximately Tenge 36,861 million for the year ended 31 December 2019 and a further increase of approximately 6.4% to approximately Tenge 39,229 million for the year ended 31 December 2020. Such change was mainly attributable to the mixed effect of change in sales volume, depreciation of Tenge against USD and increase in international uranium price.

Cost of Sales

Cost of sales of Ortalyk mainly relates to the direct cost for extraction and processing of uranium from the Target Mines and were mainly incurred in Tenge.

The cost of sales of Ortalyk decreased by approximately 9.8% from approximately US$59.0 million for the year ended 31 December 2018 to US$53.2 million for the year ended 31 December 2019 and further decreased by approximately 19.5% to US$42.8 million for the year ended 31 December 2020 when presented in USD. When presented in Tenge, the cost of sales of Ortalyk remained relatively stable at approximately Tenge 20,920 million and approximately Tenge 20,336 million for the years ended 31 December 2018 and 2019, respectively. The cost of sales of Ortalyk decreased by approximately 12.5% from approximately Tenge 20,336 million for the year ended 31 December 2019 to approximately Tenge 17,790 million for the year ended 31 December 2020 which is mainly attributable to the decrease in production for the year ended 31 December 2020.

Gross Profit

As a result of the forgoing, the gross profit of Ortalyk increased by approximately US$1.0 million or 2.4% from approximately US$42.1 million for the year ended 31 December 2018 to approximately US$43.1 million for the year ended 31 December 2019 and increased by approximately US$9.0 million or 20.9% to approximately US$52.1 million for the year ended December 2020.

The gross profit margin increased from approximately 41.6% for the year ended 31 December 2018 to approximately 44.8% for the year ended 31 December 2019 and increased to approximately 54.9% for the year ended 31 December 2020.

General and administrative expenses

General and administrative expenses which were mainly incurred in Tenge decreased by approximately US$0.2 million or 6.6% from approximately US$2.8 million for the year ended 31 December 2018 to approximately US$2.6 million for the year ended 31 December 2019 mainly due to depreciation of Tenge against USD.

General and administrative expenses subsequently increased by approximately US$0.7 million or 26.0% to approximately US$3.3 million for the year ended 31 December 2020 mainly due to recognition of expenses incurred in relation to the Zhalpak Deposit upon its cessation of trial production whereas such expenses were previously recognised as exploration and evaluation assets during its trial production.

Finance cost

Ortalyk does not have any borrowings and its finance cost mainly consisted of the provisions for the unwinding of discount from asset restoration obligations in relation to the Target Mines.

Finance cost decreased by approximately US$0.3 million or 32.3% from approximately US$1.0 million for the year ended 31 December 2018 to approximately US$0.7 million for the year ended 31 December 2019 mainly due to foreign exchange losses of approximately US$0.3 million incurred in the year ended 31 December 2018. Finance cost remained relatively stable at US$0.7 million for the year ended 31 December 2020 as compare to the year ended 31 December 2019.

Income tax expenses

Income tax expenses of Ortalyk increased by approximately US$0.8 million or 10.7% from approximately US$7.7 million for the year ended 31 December 2018 to approximately US$8.6 million for the year ended 31 December 2019 due to the combined effect of (i) increase in profit before tax as a result of the foregoing; and (ii) recognition of tax expense due to under provision for the prior year of approximately US$0.7 million.

Income tax expenses of Ortalyk further increased by US$1.3 million or 15.3% to approximately US$9.9 million mainly as a result of increase in profit before tax as a result of the foregoing.

Profit for the year

As a result of the foregoing, profit of Ortalyk increased by approximately US$0.6 million or 2.0% from approximately US$30.5 million for the year ended 31 December 2018 to approximately US$31.1 million for the year ended 31 December 2019 and further increased by approximately US$7.4 million or 23.8% to approximately US$38.5 million for the year ended 31 December 2020.

FINANCIAL POSITION

The table below sets forth the total assets and total liabilities of Ortalyk as at 31 December 2018, 2019 and 2020.

	As at 31 December		
	2018	**2019**	**2020**
	US$	*US$*	*US$*
Assets			
Non-current assets			
Property, plant and equipment	68,118,814	64,407,921	58,379,582
Intangible assets	1,212,611	1,147,817	2,319,427
Exploration and evaluation assets	4,511,020	4,536,030	4,447,867
Other non-current assets	3,372,663	4,156,674	3,375,401
	77,215,108	74,248,442	68,522,277
Current assets			
Inventories	5,701,307	5,036,405	5,726,360
Prepaid income tax	2,030,471	1,635,671	925,892
Trade and other receivables and prepayments	28,975,786	35,122,244	40,355,107
Cash and cash equivalents	9,482,738	7,751,529	4,720,354
	46,190,302	49,545,849	51,727,713
Total assets	**123,405,410**	**123,794,291**	**120,249,990**

	As at 31 December		
	2018	2019	2020
	US$	*US$*	*US$*
Liabilities			
Non-current liabilities			
Deferred income tax liabilities	1,013,457	1,027,520	1,191,852
Provision for asset restoration obligations	7,949,414	9,381,161	6,667,075
Long-term payables	1,500,666	1,016,947	509,686
Provision for employee benefits obligations	68,071	58,243	184,678
Other non-current liabilities	–	–	91,096
	10,531,608	11,483,871	8,644,387
Current liabilities			
Trade and other payables	12,350,836	9,344,596	7,081,294
Current portion of long-term payables	549,120	551,152	549,381
	12,899,956	9,895,748	7,630,675
Total liabilities	23,431,564	21,379,619	16,275,062

Inventories

Inventories of Ortalyk, which mainly consisted of natural uranium, remained relatively stable at approximately US$5.7 million, US$5.0 million and US$5.7 million as at 31 December 2018, 2019 and 2020.

Trade and other receivables and prepayments

Trade and other receivables and prepayments of Ortalyk, which mainly consisted of trade receivables from contracts with customers increased by approximately US$6.1 million or 21.2% from approximately US$29.0 million as at 31 December 2018 to approximately US$35.1 million as at 31 December 2019 and further increased by US$5.2 million or 14.9% to US$40.4 million as at 31 December 2020 mainly due to the payment schedule of its customer.

Cash and cash equivalents

Cash and cash equivalents of Ortalyk decreased by approximately US$1.7 million or 18.3% from approximately US$9.5 million as at 31 December 2018 to approximately US$7.8 million as at 31 December 2019 mainly due to cash generated from operating

activities of approximately US$34.5 million, net-off by purchases of property, plant and equipment and exploration and evaluation assets of approximately US$6.9 million and dividends of approximately US$29.6 million during the year ended 31 December 2019.

Cash and cash equivalents of Ortalyk further decreased by approximately US$3.0 million or 39.1% to approximately US$4.7 million as at 31 December 2020 mainly due to cash generated from operating activities of approximately US$34.0 million, net-off by purchases of property, plant and equipment and exploration and evaluation assets of approximately US$7.3 million and dividends of approximately US$28.4 million during the year ended 31 December 2019.

Over 99% of the cash and cash equivalents of Ortalyk as at 31 December 2018, 2019 and 2020 were held in Tenge.

Property, plant and equipment

Property, plant and equipment of Ortalyk decreased by approximately US$3.7 million or 5.4% from approximately US$68.1 million as at 31 December 2018 to US$64.4 million as at 31 December 2019 which is mainly due to depreciation charge of approximately US$9.4 million, partially set off by additions of approximately US$5.2 million during the year ended 31 December 2019.

Property, plant and equipment of Ortalyk further decreased by approximately US$6.0 million or 9.4% to approximately US$58.4 million as at 31 December 2020 which is mainly due to (i) depreciation charge of approximately US$7.3 million, (ii) currency translation differences of approximately US$6.6 million; and (iii) assets retirement obligation adjustment of approximately US$2.2 million, partially set off by additions of approximately US$10.3 million, during the year ended 31 December 2020.

LIQUIDITY AND FINANCIAL RESOURCES

Ortalyk has no borrowings as at 31 December 2018, 2019 and 2020. The table below sets for the gearing ratio of Ortalyk as at 31 December 2018, 2019 and 2020:

	As at 31 December		
	2018	**2019**	**2020**
Gearing ratio			
(Total liabilities / total assets)	19.0%	17.3%	13.5%

FUNDING AND TREASURY POLICY

Ortalyk generally utilises the cash generated from its business operation, which mainly relates to the sales of natural uranium extracted from the Target Mines, for its operational and capital expenditure and holds any surplus in deposit accounts. Based on its current dividend policy, Ortalyk shall distribute at least 80% of its profits, after adjusted for non-recurring items, for each financial year and has distributed 100% of its adjusted profits during the past three financial years.

SIGNIFICANT INVESTMENTS HELD, ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES, ASSOCIATES AND JOINT VENTURE

Save for the subsoil use rights in relation to the Target Mines, these was no any significant investments held by Ortalyk during the Track Record Period and there was no acquisition or disposal of subsidiaries, associates and joint venture.

CAPITAL COMMITMENTS AND SUBSURFACE USE CONTRACT COMMITMENTS

As at 31 December 2018, 2019 and 2020, Ortalyk has capital expenditure contracted for but not yet incurred of approximately US$156,000, US$1.9 million and US$38,000, respectively, which mainly relates to on-going construction contracts.

In addition, under the Central Mynkuduk Subsoil Use Agreement, Ortalyk has the obligation to make commitments in relation to various field development costs including training of Kazakhstan staff, investments in development of social sphere and accumulation of liquidation fund for site restoration.

EXPOSURE TO FLUCTUATIONS IN EXCHANGE RATES AND HEDGING POLICY

As Ortalyk derived most of its income from sales of natural uranium which is determined with reference to the international uranium price quoted in USD (notwithstanding settled in Tenge) and settled most of its expenses in Tenge, local currency of Kazakhstan, Ortalyk is exposed to the foreign exchange risk between USD and Tenge.

During the Track Record Period, Ortalyk is subject to the foreign exchange risk of the exchange rate between Tenge and USD. For the years ended 31 December 2018, 2019 and 2020, should the USD strengthened by 10% with all other variables held constant, the profit of Ortalyk would have decreased by approximately US$164,000, US$125,000 and US$84,000, respectively.

To the best knowledge of the Directors after making reasonable enquiries, Ortalyk did not adopt any hedging policy.

CONTINGENT LIABILITY AND CHARGE ON ASSET

To the best knowledge of the Directors after making reasonable enquiries, Ortalyk did not have any contingent liability nor there exists any charge on the assets of Ortalyk as of 31 December 2018, 2019 and 2020.

EMPLOYEES AND REMUNERATION POLICIES

As at 31 December 2018, 2019 and 2020, Ortalyk had approximately 490, 480 and 465 employees. The labour costs amounted to US$7.4 million, US$7.5 million and US$8.2 million for the years ended 31 December 2018, 2019 and 2020.

Employees may be given (i) bonuses according to their performance, (ii) bonuses for national holidays, (iii) bonuses for initiatives for improving production efficiency and (iv) bonuses from savings of the payroll funds as a result of planned labour expenditure for the period exceeding the actual expenses. In addition, Ortalyk offers vacation allowance when employees take annual leave and contributes to one-time social payment and pension, social insurance and medical insurance in accordance with the applicable laws.

Ortalyk also makes contribution to the labour union which utilises such fund to organise culture and sporting events, seminars and training and presents for underage children of employees.

To the best knowledge of the Directors after making reasonable enquiries, the aggregate of the remuneration payable to and benefits in kind receivable by the directors of Ortalyk will not be varied in consequence of the Acquisition.

BUSINESS PROSPECTS AND FUTURE PLANS

It is expected that upon entering into the Off-take Agreement and Completion of the Acquisition, the products of Ortalyk will be fully purchased by Kazatomprom and the Group in accordance with the mechanism of the Off-take Arrangement set out in the section headed "Sale and Purchase Agreement – Off-take Arrangement" in the letter from the Board in this circular.

For future development plans of the Target Mines, please refer to the Competent Person Report in Appendix IV to this circular.

4. REGULATORY AND ENVIRONMENTAL MATTERS

Subsoil use agreements

The principal statute governing mining activities in the Subsoil Code, which came into force on 29 June 2018 and superseded the Subsoil Law, save for certain provisions that remain effective for entities whose subsoil use contracts were concluded before 29 June 2018.

Under Article 20.1 of the Subsoil Code, subsoil use rights arise on the basis of a subsoil use licence or a contract.

Central Mynkuduk Deposit

Title to the subsoil use right for the Central Mynkuduk Deposit is contained within a single subsoil use agreement, being the Central Mynkuduk Subsoil Use Agreement, with the following terms:

Date of contract:	8 July 2005
Term:	28 years (i.e. until 8 July 2033), consisting of 3 consecutive years of exploration and 25 consecutive years of extraction
Current owner:	Ortalyk
Size of allotment:	46.979 square kilometres
Depth:	370 meters
Scope:	Exploration and extraction

Zhalpak Deposit

Title to the subsoil use right for the Zhalpak Deposit is contained within a single subsoil use agreement, being the Expired Zhalpak Subsoil Use Agreement, with the following terms:

Date of contract:	31 May 2010
Term:	4 years initially and further extended to 31 May 2018 subsequently
Current owner:	Ortalyk
Size of allotment:	145.8 square kilometres
Scope:	Exploration

In its letter to the competent authority dated 20 February 2018, the Ortalyk requested the competent authority to extend the period of exploration on Zhalpak Deposit until 31 December 2022. According to the letter, such extension would allow reaching 50% metal extraction by 2019, which is required to prepare a report with calculations of uranium deposits in 2020, and ultimately enter into a contract for uranium extraction with the competent authority in 2022.

The competent authority, in its letter dated 14 May 2018, responded to the request of Ortalyk, permitting the extension of the period of exploration. However, from the letter of Ortalyk to the competent authority dated 6 January 2020, Ortalyk and the competent authority are still in the process of negotiating a draft of mine assessment works.

In accordance with the requirements of the Subsoil Code of Kazakhstan, subsoil extraction rights are granted to a national company in the field of uranium, i.e. Kazatomprom. Accordingly, Kazatomprom shall first obtain the extraction right of the Zhalpak Deposit by entering into the New Zhalpak Subsoil Use Agreement with the relevant authority of the Kazakhstan government and transfer the New Zhaplak Subsoil Use Agreement to Ortalyk on or before 31 December 2021 pursuant to the Sale and Purchase Agreement.

As Ortalyk has continued the subsoil use on Zhalpak Deposit in the absence of the subsoil use contract or a licence, Ortalyk may be subjected to the following consequences:

- under article 463.1 of the Code "On Administrative Offences" of the Kazakhstan ("**Administrative Code**"), conducting activities without a licence, when such licence is required by law, entails a fine of up to 150 monthly calculated index in accordance with Kazakhstan law ("**MCI**") which currently equals to approximately US$980, with confiscation of income (dividends), funds and securities obtained as a result of the offence, if such activities do not have elements of a criminal offence;

- under article 214.1 of the Criminal Code of Kazakhstan, officers or employees of Ortalyk may be liable for conducting subsoil use activities without a licence, if such activities have caused large-scale damage to a citizen, organization or the state or involve income in a large amount or production, storage, transportation or sale of excise goods in substantial amount. The offence is punishable by a fine of up to 2,000 MCI, which currently equals to approximately US$13,073, correctional work in the same amount, community service of up to 600 hours, or restriction of liberty or imprisonment of up to 2 years with or without confiscation of property;

- under article 73 of the Code on Criminal Procedures of Kazakhstan, subsoil use operation under the Expired Zhalpak Subsoil Use Agreement also entails a risk of the Kazakhstan bringing a civil claim within the criminal case against the employees of Ortalyk on compensation of damages; and

- article 356.4 Administrative Code states that conducting exploration, assessment works, as well as extraction works in the absence of approved project documents entails a fine of up to 2,000 MCI, which currently equals to approximately US$13,073.

Compliance with work program under subsoil use agreements

Pursuant to Kazakhstan law, each subsoil user is obliged to conduct its subsoil use operations pursuant to the work program under the subsoil use agreements. In order to demonstrate fulfilment of the contractual obligations and obligations under the annual work program, the subsoil user is required to submit reports on fulfilment of contractual obligations and obligations under the annual work program ("**LKU reports**"). LKU reports are submitted in accordance with the established form on both a quarterly and an annual basis. The competent authority, after receipt of the annual LKU report, considers its fulfilment.

According to the LKU reports for 2018 and 2019 of Central Mynkuduk Subsoil Use Agreement, Ortalyk has failed to fulfilled certain of the expenses envisaged by the work program. According to Ortalyk, the reason behind its non-fulfilment of the work program obligations was its 20% decrease of volume of uranium extraction and that it was entitled to decrease the volume of uranium extraction under the Subsoil Code.

Article 66.8 of the Subsoil Law and Article 182.7 of the Subsoil Code permit certain subsoil users to deviate from project documents by less than 20% without amending the project documents. However, a recent amendment to Article 278.22 of the Subsoil Code, which came into force on 6 January 2020 and has retrospective effect on contracts executed before the Subsoil Code's effective date, excludes uranium from the list of minerals whose volume of extraction may be altered without the need to amend project documents approved under the previously existing subsoil use laws.

Due to the novelty of the amendment, it is unclear whether the competent authority would be of the position that (i) since adoption of the Subsoil Code any deviation required amendments to the project documents approved under the previously existing subsoil use laws or (ii) only since such amendments uranium subsoil users are required to amend the old project documents in case of deviation in production.

In case the competent authority argue that even Ortalyk had the project documents approved under the laws effective prior to the Subsoil Code, Ortalyk has no right to deviate from the production provided in such project documents, and in such case, the competent authority may unilaterally repudiate the Central Mynkuduk Subsoil Use Agreement pursuant to Article 72 of the Subsoil Law.

In addition, according to the LKU report for 2018 of Zhalpak Subsoil Use Agreement, Ortalyk fulfilled most of its obligations for 2018 with the exception of expenses on geological exploration and indirect expenses. Despite the expiry of Expired Zhalpak Subsoil Use Agreement, it provided that Ortalyk is still under an

obligation to remedy the underperformance of obligations under the work program. The work program of the Expired Zhalpak Subsoil Use Agreement does not envisage subsoil use operations after 2018.

Liquidation fund payments and insurance obligations

According to the subsoil use agreements, Ortalyk is required to form and contribute to a liquidation fund for financing liquidation of consequences of subsoil operations and obtain certain insurance policies, such as employer's liability insurance, environmental pollution insurance and insurance for civil liability for damage caused to third parties.

Other licenses and permits

Kazakhstan law requires that licenses, permits be obtained or notifications submitted prior to commencement of certain types of activities. In addition to the licences, permits and certificates relating to environmental matters set forth in the paragraph headed "Environmental matters" in this section below, Ortalyk obtained the following licences in relation to its activities:

Nature of licence / permit	Issuing authority	Licence / permit number	Issue date	Expiry date
License for activities related to circulation of precursors	Committee on the Fight Against Drug Trafficking and Drug Control and the Ministry of Internal Affairs of the Republic of Kazakhstan	17005428	March 31, 2017	March 31, 2022
License for handling of radioactive materials, devices and equipment containing radioactive materials	State Institution "Committee for Atomic and Energy Supervision and Control"	20006845	May 15, 2020	May 15, 2025
License for radioactive waste management	State Institution "Committee for Atomic and Energy Supervision and Control" and the Ministry of Energy of the Republic of Kazakhstan	15019372	2 November 2015	2 November 2020 [1]

Note:

1. Ortalyk applied for renewal on 3 October 2020, but the license has not been issued yet.

Environmental matters

Environmental permits

The Environmental Code of the Republic of Kazakhstan dated 9 January 2007 No. 212-III, as amended (the "**Environmental Code**") provides that an entity making emissions or discharges to the environment must obtain an environmental permit for such emissions or discharges and that if production facilities are located within different regions of Kazakhstan, a separate environment permit should be obtained for each facility.

The Environmental Code and the Sanitary Rules "*Sanitary epidemiological requirements for determination of sanitary protection zones of production facilities*" approved by the order of Minister of National Economy of Kazakhstan, facilities which require environmental permit for operation are divided into four categories depending on the level of hazard.

Environmental permits establish certain limits for emissions and impose certain obligations on its holder. The Administrative Code provides that the permit may be suspended or revoked if non-compliance to the obligations has led to major damage and threat to health and life of the population. The key conditions to be complied with under the permits include: (a) compliance with the established norms of the emissions of pollutants; (b) implementation of the measures set out in the respective plan of environmental protection measures; (c) reporting to the authorities on a quarterly basis on observance of points (a) and (b) and on maintenance of industrial environmental control.

Emission exceeding the limits stated in the permit may lead to administrative or criminal liabilities. Person responsible for such excess of the limits would be liable to compensate in full the damage caused. As of December 2020, Ortalyk obtained eight environmental permits for its facilities of different categories.

Environment Impact Assessment

Under the Environmental Code, environment impact assessment (the "**EIA**") is mandatory for any types of business and other activity which may directly or indirectly affect the environment and human health. The EIA is a procedure within which possible consequences of business and other activities for the environment and human health are assessed and measures for prevention of unfavourable consequences are developed. The EIA is subject to state environmental examination. According to the Environmental Code, development and implementation of projects are prohibited in the absence of the relevant EIA when required. The Administrative Code stipulates that absence of state environmental examination or non-fulfilment of the requirements specified in the conclusion of state environmental examination may lead to administrative liability in the form of an administrative fine up to 350 MCI, which is approximately US$2,288.

Industrial Environmental Control

According to the Environmental Code, entities which use natural resources and/or cause emissions into the environment are required to perform industrial environmental control on the basis of the special program that each natural resource user develops for itself. Such program must include, inter alia, a list of the parameters that the industrial environmental control process tracks, criteria for determining the frequency of industrial environmental control operations, the duration and frequency of measurements, and the instruments or methods of calculation used. The natural resource user is also required to perform internal record-keeping and prepares and submits periodic reports on the results of industrial environmental control in accordance with the requirements set by the state authority competent in the area of environmental protection. Based on the Ortalyk's environmental permits, such reports should be submitted to the competent authority on a quarterly basis.

Ortalyk's industrial environmental control program was approved by its General Director on 11 December 2015 and has duly submitted the reports on industrial environmental control for 2019 and the first three quarters of 2020.

Ecological insurance

Under Kazakhstan law, enterprises conducting environmentally hazardous activities must obtain a mandatory environmental insurance policy. Ortalyk conducts a number of activities such as subsoil use, hazardous waste disposal and water use, which are included into the list of environmentally hazardous activities by the Minister of Energy.

Ortalyk obtained the agreement for mandatory environmental insurance which is effective until 13 May 2021.

Hazardous waste disposal

Under the Environmental Code, for the activities, which result in hazardous waste, individuals and legal entities, who conduct such activities, must develop and approve hazardous waste certificates listing, among other things, sources of waste, chemical composition, recommended measures for handling and transporting the waste and preventative measures against accidents. Such waste certificates must be submitted to the competent authority within three months from the moment waste is produced.

As of December 2020, Ortalyk was holding 21 registered hazardous waste certificates for various types of waste, such as mercury residues, old pneumatic tires, spent oils and old protective clothes.

In addition, waste owners are also required to maintain calculations of waste and submit an annual report on their waste disposal activities to the competent authority for their inclusion into state waste inventory.

Special water use

Pursuant to the Water Code of Kazakhstan (the "**Water Code**"), special water use includes direct use of surface and underground water resources for the purpose of providing for the population's need for drinking water and other domestic use, agricultural use, industry, energy production, fish farming, transportation, as well as for the disposal of industrial, domestic, drainage, and other waste water through the use of facilities constructed and operated in compliance with Kazakhstan law, regardless of whether the water is extracted from its source. Under the Water Code, special water use is conducted on the basis of a permit that applies only to water use for those purposes specified in that permit and must not violate the rights and legal interests of other persons and entities or cause damage to the environment. Water users are required to fully comply with the water use terms set out in the permit as well as with the requirements of controlling authorities within the prescribed time limits.

As of December 2020, Ortalyk was holding three valid special water use permits.

Inspection by the Ecology Department of Turkestan Region

The Ecology Department of Turkestan Region inspected Ortalyk on June 10-21, 2019 for compliance with the environmental protection requirements of Kazakhstan law covering the period from 1 January 2017 until 27 June 2019. The inspection discovered six violations of various nature, including spillage of sulfuric acid, land pollution due to spillage of technological solutions, ineffective sewage treatment, excess smoke from a number of automobiles, provision of inaccurate information on conducting of industrial environmental control. The competent authority prescribed certain instructions on rectification of the revealed violations to the Ortalyk, including deadlines for rectification of each individual violation. Failure to fulfil prescriptions of state authorities may entail administrative liability. To the best knowledge of the Directors, such violations have been rectified.

During the inspection it was also revealed that the Ortalyk exceeded the permitted norms of emissions of pollutants to the atmosphere which resulted in the obligation to compensate the damage caused to the environment and a compensation of 87,401.51 Tenge (approximately US$206) has been paid by Ortalyk. Nevertheless, payment of the damage caused to the environment does not exclude administrative or criminal liability. Therefore, emissions into the environment in excess of the limits established in the environmental permit may result in an administrative fine equal to ten times of the regular payments for the emissions.

5. INDUSTRY OVERVIEW OF THE URANIUM MARKET

This section contains certain information which has been derived from official, market and other public sources including the World Nuclear Association and UxC. Such information has not been independently verified by the Company, the Directors or any of their affiliates or advisers or any other parties involved in the Acquisition or the preparing of this circular and no representation is given as to its accuracy. Such information may not be consistent with information from other sources.

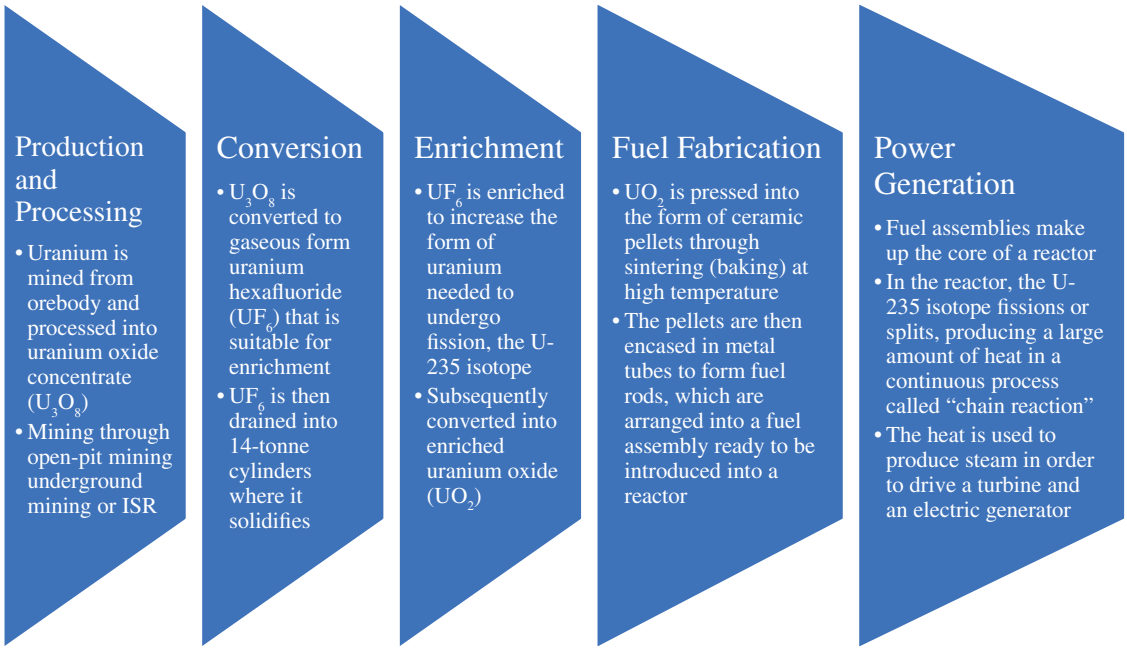
References to "reserves" or "resources" in this section are not references to reserves or resources as defined under the JORC Code.

Introduction

Uranium occurs naturally in the Earth's crust and is mildly radioactive. Uranium is predominantly used as the basic fuel in nuclear power reactors, mostly for electricity generation. The uranium ore mined and processed from the uranium mines is called natural uranium which contains only 0.71% of fissile isotope 235U with mild radiation and most of current power reactors require enriched uranium, so this natural uranium must be enriched. The level of enrichment required depends on specific reactor design. Typically, to produce 1 kg of enriched uranium with 5% of 235U, about 10 kg of natural uranium is required.

Nuclear Fuel Production

The production of nuclear energy involves a series of activities from extraction of uranium to generation of electricity at a nuclear power plant. Natural uranium concentrates (U_3O_8) produced after mining cannot be used as fuel for nuclear reactors without undergoing further processing. The diagram below illustrates the processes from mining to electricity generation at nuclear power plant:



Mining of uranium

Uranium ore is mined through one of three extraction methods: open-pit mining, underground mining or in-situ recovery depending on geology of the deposit and safety and economic considerations. The end product of the mining stage natural uranium concentrate (U_3O_8), which contains about 85% uranium. This is the form in which uranium is sold.

Both open-pit and underground mining require the ore to be removed from the ground in order to extract the uranium. Open-pit mining is generally used for deposits which are close to the surface. It requires an excavation area larger than the size of the deposit and as a result it is necessary to remove a large amount of material in order to access the ore body. Underground mining is used for deep deposits and have relatively small surface disturbance and considerably less quantity of material moved than in open pit mining. In both methods, the ore is crushed and ground up and then treated with acid or alkaline to dissolve the uranium.

The in-situ recovery method is a method of ore deposit extraction that does not bring the ore itself to the surface but dissolves the uranium in a groundwater sulphuric acid solution. It can be used at deposits that consist of uranium oxides and which are permeable. In in-situ recovery method, uranium is mined by dissolving it from the ore body in-situ by mixing with a low-sulphuric acid solution pumped through the injection well into the ore body and, as a result of acidification, the uranium is dissolved into the solution known as "pregnant solution". The pregnant solution is then pumped back to the surface through extraction well and into intermediate holding ponds where it is later transferred for processing to recover the uranium. Once the uranium is recovered, the remaining solution is re-fortified and injected back into the ground.

There are several advantages of using the in-situ recovery method over the open-pit or underground mining methods. In-situ recovery method requires considerably lower capital costs to construct the mines, lower operating expenses and less manpower. Environmental impacts of in-situ recovery extraction are mitigated since in-situ recovery does not create waste by-products by extracting the ore to the surface. The in-situ recovery process mobilises less than 5% of the radioactive elements, the balance of which remains in the ground as compared to 100% mobilisation when conventional open-pit or underground mining methods are used. This significantly reduces the need for construction of re-cultivation ponds which are necessary to store radioactive waste from conventional mining methods.

Mining methods of uranium have evolved over time. In 1990, over half of world production came from underground mines, but this shrunk dramatically to approximately 33% in 1999 and global use of in-situ recovery mining method has been growing steadily. According to World Nuclear Association, approximately 57% of uranium produced globally in 2019 utilised in-situ recovery method and substantially all production from the Kazakhstan is using in-situ recovery method.

Uranium Demand

Uranium is principally used as fuel for nuclear power plants. Reactor-related demand for uranium is fundamentally driven by installed nuclear power generation capacity, which is ultimately driven by the demand for electricity. According to World Nuclear Association, approximately 10.1% of the world's electricity is generated from nuclear power plants in 2019.

Because of the cost structure of nuclear power generation, being high capital and low fuel costs, demand for uranium fuel is much more predictable than with probably any other mineral commodity. Once reactor is built, it is cost-effective to keep them running at high capacity and to adjust electricity generation by cutting back on fossil fuel use according to electricity load trend. Demand forecasts for uranium thus depend largely on installed and operable capacity, regardless of economic fluctuations.

As of January 2021, there were approximately 440 operable nuclear reactors worldwide with combined capacity of approximately 393 GW which required approximate 68,000 tonnes of uranium annually according to World Nuclear Association.

Uranium Consumption by Region

According to World Nuclear Association, the United States of America generated the largest amount of nuclear electricity in 2019, with approximately 809.4 TWh generated, accounted for approximately 30.5% of worldwide nuclear electricity generation; and France has the largest dependency on nuclear electricity with 382.4 TWh generated in 2019, representing approximately 70.6% of its total electricity generation in 2019.

Table below sets forth certain nuclear electricity generation related data of the top 10 countries with largest nuclear electricity generation in 2019:

Top 10 countries with largest nuclear electricity generation in 2019

			As of January 2021								
Country	**Nuclear electricity generation in 2019**		**Reactors operable**		**Reactors under construction**		**Reactors planned**		**Reactors proposed**		**Uranium required in 2021**
	TWh	*% e*	*No.*	*MW net*	*No.*	*MW gross*	*No.*	*MW gross*	*No.*	*MW gross*	*Tonnes*
United State of America	809.4	19.7	94	96,553	2	2,500	3	2,550	18	8,000	18,295
France	382.4	70.6	56	61,370	1	1,650	0	0	0	0	8,701
PRC	330.1	4.9	49	47,498	16	17,253	39	43,085	168	196,910	10,814
Russia	195.5	19.7	38	28,578	2	2,510	21	21,380	23	22,500	6,227
South Korea	138.8	26.2	24	23,172	4	5,600	0	0	2	2,800	5,121
Canada	94.9	14.9	19	13,554	0	0	0	0	2	1,500	1,409
Ukraine	78.1	53.9	15	13,107	2	1,900	0	0	2	2,400	1,879
Germany	71.9	12.4	6	8,113	0	0	0	0	0	0	587
Japan	65.7	7.5	33	31,679	2	2,756	1	1,385	8	11,562	2,344
Sweden	64.4	34.0	6	6,859	0	0	0	0	0	0	985
Rest of the world	425.8	N/A	102	62,581	24	25,587	34	34,107	103	109,990	11,907
World total	**2,657**	**10.1**	**442**	**393,064**	**53**	**59,756**	**98**	**102,507**	**326**	**355,662**	**68,269**

Source: World Nuclear Association

Forecasted demand

According to the 19th edition of the *Nuclear Fuel Report* released by World Nuclear Association in 2019, the compound annual growth rate (CAGR) of global nuclear reactor capacity is expected to be 2.0% between 2019 and 2030 and the CAGR of global uranium demand is expected to be 2.1% during the same period.

According to World Nuclear Association, as of January 2021, there were 53 reactors under construction with combined capacity of approximately 60 GW and 98 planned reactors with combined capacity of approximately 103 GW. In addition, there were also 326 reactors proposed with total combined capacity of 356 GW.

Uranium Supply

Uranium resources

Total world resources of uranium, as is the case for other metals and minerals, are not known exactly. The only meaningful measure of long-term security of supply is the known reserves in the ground capable of being mined.

According to the 2020 edition of *Uranium – Resources, Production and Demand*, also known as the "Red Book", the world's conventional identified uranium resources amounted to 8,070,400 tonnes of uranium metal (tU) as of 1 January 2019 with Australia, Kazakhstan and Canada ranking the first three in uranium resources, accounting for around 50% of the world total. However, only 25% of the identified resources is estimated to be recovered at the cost below USD 80/kgU (USD30.8/lb), being having economic viability in the current

uranium market. Kazakhstan has the largest low-cost uranium resources in the world with identified resources below USD 80/kgU and USD 40/kgU accounting for 49% and 36% respectively of the world total.

Uranium production

In 2019, total worldwide uranium production from mines was approximately 54,752 tonnes of uranium according to World Nuclear Association. Uranium from direct mines output supplied about 85% of the fuel requirement of reactors which is supplemented by secondary sources such as commercial stockpiles, nuclear weapons stockpiles and recycled plutonium and uranium from reprocessing used fuel.

Over two-thirds of the world's production of uranium from mines is from Kazakhstan, Canada and Australia, with Kazakhstan, being the largest producer, produced 42% of the world supply in 2019. The table below sets forth the top 10 countries with the largest uranium production in 2019:

Ranking	Country	Tonnes of uranium produced in 2019	% of World Total
1	Kazakhstan	22,808	41.7%
2	Canada	6,938	12.7%
3	Australia	6,613	12.1%
4	Namibia	5,476	10.0%
5	Uzbekistan (est.)	3,500	6.4%
6	Niger	2,983	5.4%
7	Russia	2,911	5.3%
8	China (est.)	1,885	3.4%
9	Ukraine	801	1.5%
10	South Africa	346	0.6%
	Rest of the world	491	1.0%
	World total	**54,752**	**100.0%**

Source: World Nuclear Association

The uranium production industry is relatively small, with few companies accounting for majority of uranium produced. Kazatomprom is the largest producer of uranium in 2019, with 12,229 tonnes of uranium produced in 2019, represented approximately 22% of global production. The table below sets forth the top 10 companies with the largest uranium production in 2019:

Ranking	Company	Tonnes of uranium produced in 2019	% of world total
1	Kazatomprom	12,229	22.3%
2	Orano	5,809	10.6%
3	Cameco	4,754	8.7%
4	Uranium One	4,624	8.4%
5	CNNC	3,961	7.2%
6	CGN	3,871	7.1%
7	Navoi Mining	3,500	6.4%
8	BHP	3,364	6.1%
9	ARMZ	2,904	5.3%
10	Energy Asia	2,122	3.9%
	Others	7,614	13.9%
	Total	**54,752**	**100%**

Source: World Nuclear Association

There is also a high concentration of production with the ten largest uranium mines accounting for approximately 55% of total global uranium production in 2019, according to World Nuclear Association. The following tables sets forth largest-producing uranium mines in 2019:

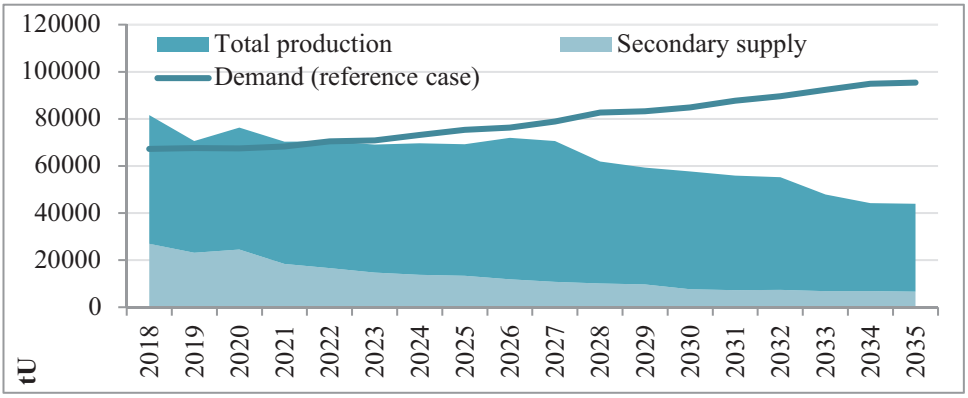
Rank	Mine	Country	Main owner	Tonnes of uranium produced in 2019	% of world
1	Cigar Lake	Canada	Cameco/Orano	6,924	13
2	Husab	Namibia	Swakop Uranium (CGN)	3,400	6
3	Olympic Dam	Australia	BHP Billiton	3,364	6
4	Moinjum & Tortkuduk	Kazakhstan	Orano/ Kazatomprom	3,252	6
5	Inkai, sites 1-3	Kazakhstan	Kazaktomprom/ Cameco	3,209	6
6	Budenovskoye 2	Kazakhstan	Uranium One/ Kazatomprom	2,600	5
7	Rössing	Namibia	Rio Tinto	2,076	4
8	SOMAIR	Niger	Orano	1,912	4
9	Central Mynkuduk	Kazakhstan	Kazatomprom	1,964	3
10	South Inkai (Block 4)	Kazakhstan	Uranium One/ Kazatomprom	1,601	3
	Top 10 total			**30,032**	**55%**

Source: World Nuclear Association

Uranium demand and supply

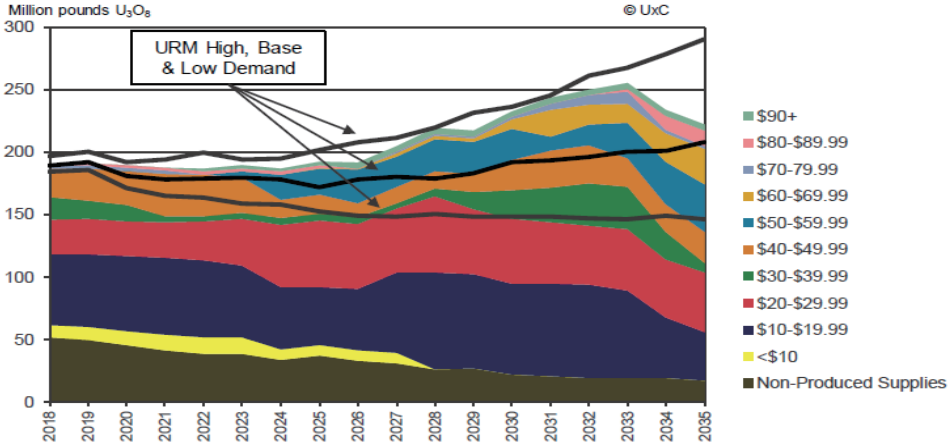
As shown in the figure forecasted by World Nuclear Association, the world's total uranium production from existing uranium mines plus secondary supply cannot meet the uranium demand from nuclear power plants from mid-2020s to 2035

World uranium demand and supply forecast



Source: World Nuclear Association (in respect of demand)
UxC (in respect of (in respect of total production and secondary supply)

With the declining secondary supply, the supply deficit is expected to be made up from idled mines and planned or potential uranium mines. Most of the idled mines and planned mines are estimated to have higher per unit cost than operating mines and, according to UxC as illustrated in the chart below, to meet the base demand in 2025, the marginal cost of the mines would be in the USD 50-59.99/lb category:



Source: UxC

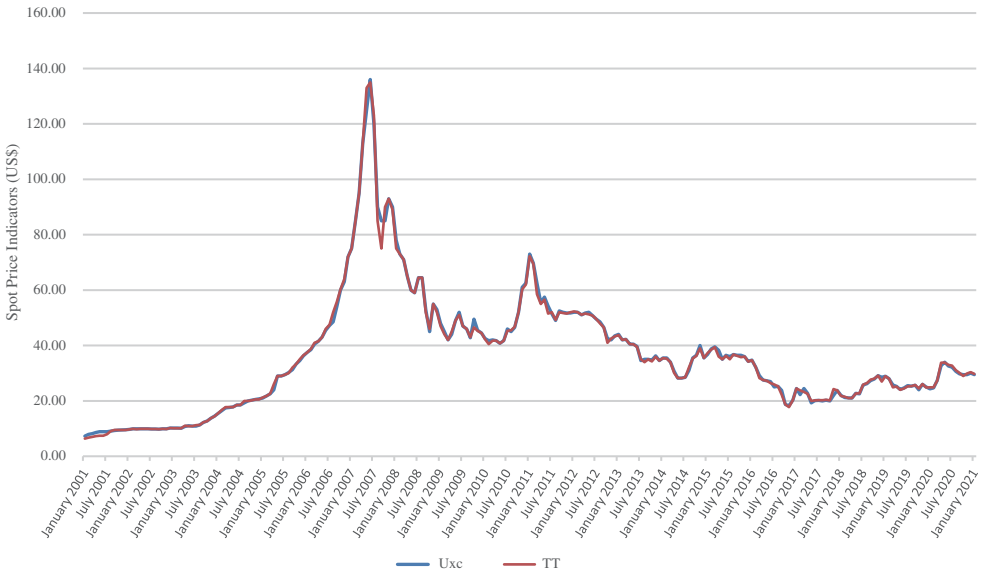
Accordingly, the increment in uranium production cost would be a major driver for the uranium price going forward.

Uranium price

Worldwide uranium purchases can generally fall into two categories, namely spot contracts and long-term contracts. Spot contracts are contracts with a one-time uranium delivery (usually) for the entire contract, and the delivery typically occurs within one year of contract execution (signed date). Long-term contracts are contracts with one or more uranium deliveries to occur at least a year following the contract execution (signed date) and as such may reflect some agreements of short and medium terms as well as longer term. According to U.S. Energy Information Administration, 22% of the uranium delivered was purchased under spot contracts and the remaining 78% was purchased under long-term contracts in 2019.

There is no uranium commodity exchange or common trading platform where international market prices for uranium can be determined. Monthly and weekly price indicators for uranium products are generally used in spot transaction pricing. The UxC LLC, TradeTech and the Euratom Supply Agency all track uranium prices. The chart below sets forth the spot uranium prices since 2001:

Natural Uranium Spot Prices



Source: UxC

As of month end of January 2021, uranium spot price was US$29.5 and US$29.75 per pound of natural uranium, as quoted by UxC and TradeTech, respectively.

The uranium price hit the bottom in the year 2016 and remained low until the beginning of 2018 prior to gaining an upward momentum in mid-2018 . In the end of 2020, the spot price remained stable at USD 30 per pound of natural uranium, representing an increase of approximately 10 USD per pound of natural uranium or 50% compared with the lowest price in 2016.

Uranium market outlook

The year 2020 has seen a dramatic change in uranium dynamics. The impact of COVID-19 on global primary uranium supply has already been seen in most mining jurisdictions. Driven by the need to keep employees safe and follow local health regulations, the temporary suspensions and production reductions announced by major uranium producers in Kazakhstan, Canada, Namibia and other locales in March and April has significance on the market sentiments with the uranium spot price soared up to $34/lb in April, the highest price since the year 2016.

According to UxC, compared to volumes announced before COVID-19 pandemic, there is a reduction of about 20 million pounds of natural uranium production in 2020, representing more than 10% of world's production, pushing the supply-demand balance into a supply deficit and reducing inventories. Notably, according to UxC, production suspensions related to COVID-19 have prompted additional purchases and uranium spot trading reached a new record of 29,000 tU in 2020 in terms of volume and number of deals since 1987, with the spot price quoted by UxC reached 30 USD per pound of natural uranium by the end of 2020, representing an increase of 5 USD per pound of natural uranium as compared to the price of 25 USD per pound of natural uranium by the end of 2019.

In the medium- to long-term, the under investment in uranium resources and concentration of production suggests continued constraints in supply. According to UxC, uranium spot and long-term prices is estimated to continue to increase with the spot price reaching around 40 USD per pound and long-term price around 50 USD per pound in 2025 and above 60 USD per pound in 2030.

Despite the constrained supply, uranium demand is projected to increase steadily. While the disruption caused by COVID-19 has impacted every country, nuclear power's important role in the global energy supply is expected to remain intact as a means of generating reliable baseload energy at a low operating cost. As a low-carbon energy source, nuclear is likely to form an integral part of future energy plans as countries seek to meet their carbon emission reduction commitments and limit global warming.

New reactors currently under construction and those planned represent approximately 41.3% increase in the global reactor fleet from the current position according to World Nuclear Association.

6. RISK FACTORS

Risks relating to the operation of Ortalyk

Uncertainty in obtaining the New Zhalpak Subsoil Use Agreement

The Expired Zhalpak Subsoil Use Agreement held by Ortalyk expired on May 31, 2018 and as of the Latest Practicable Date, a renewed or extended right has not been granted. There is no assurance that Ortalyk can eventually obtain the New Zhalpak Subsoil Use Agreement and if Ortalyk fails to obtain the New Zhalpak Subsoil Use Agreement, Ortalyk will not be able to benefit from the uranium inventory located therein and in turn its financial position and operating results may be adversely affected.

Uncertainty on compliance with work program under subsoil use agreements

Pursuant to Kazakhstan law, each subsoil user is obliged to conduct its subsoil use operations pursuant to the work program under the subsoil use agreements. According to the annual work program reports for the Target Mines, Ortalyk has failed to fulfilled certain of the expenses envisaged by the work program as further described under the paragraph headed "4. Regulatory and environmental matters – Compliance with work program under subsoil use agreements" under "Further information on Ortalyk".

Article 66.8 of the Subsoil Law and Article 182.7 of the Subsoil Code permit certain subsoil users to deviate from project documents by less than 20% without amending the project documents. However, a recent amendment to Article 278.22 of the Subsoil Code, which came into force on 6 January 2020 and has retrospective effect on contracts executed before the Subsoil Code's effective date, excludes uranium from the list of minerals whose volume of extraction may be altered without the need to amend project documents approved under the previously existing subsoil use laws.

Due to the novelty of the amendment, it is unclear whether the competent authority would be of the position that (i) since adoption of the Subsoil Code any deviation required amendments to the project documents approved under the previously existing subsoil use laws or (ii) only since such amendments uranium subsoil users are required to amend the old project documents in case of deviation in production.

In case the competent authority argue that even Ortalyk had the project documents approved under the laws effective prior to the Subsoil Code, Ortalyk has no right to deviate from the production provided in such project documents, and in such case, the competent authority may unilaterally repudiate the relevant subsoil use agreements. And in such case, Ortalyk may no longer has the right to extract from the Target Mines and the financial position and operating results of Ortalyk may be materially and adversely affected.

Potential accidents in the mining process

Similar to other mining companies, there is no assurance that there will not occur accident in the mining process. The occurrence of accident may result in substantial disruptions of the uranium mining operations and financial losses, damage to Ortalyk's reputation, increase in lawsuits and other compensatory claims and payouts, fines, penalties and mandatory suspension of production. Liabilities might arise in the future as a result of accidents, fatalities or other workforce-related misfortunes, some of which may be beyond the Ortalyk's control. The occurrence of accidents could delay production, increase production costs and result in significant liability not covered by insurance and adverse publicity which may in turn adversely affect reputation, business operation, results of operation and financial position of Ortalyk.

Failure to maintain various permits or licenses or satisfy administrative requirements

Numerous permits, licenses and approvals are required for the exploration, extraction and production activities of Ortalyk. Certain permits, licenses and approvals are subject to renewal, modification and revocation from time to time. If the Ortalyk fails to obtain or renew or to procure to obtain or renew such permits, licenses and approvals on a timely basis, Ortalyk may be subject to fines or be prohibited from continuing operations, which could in turn exert an adverse impact on the result of operations of Ortalyk.

Operational risks, hazards and unexpected disruptions

The continuous operations of Ortalyk are subject to a number of operational risks and hazards, for instance unexpected maintenance or technical problems, periodic interruptions due to inclement or hazardous weather conditions, fires, natural disasters, industrial accidents, power or fuel supply interruptions, critical equipment failure, malfunction and breakdowns of information management systems, depreciation and breakdowns of critical facilities and equipment, usual or unexpected variations in mineralization, geological or mining conditions, loss of well control, and volatility in transportation costs. These risks and hazards may result in personal injury, environmental damage, damage in business reputation and corporate image, destruction of properties or production facilities, business interruption, delay in product delivery and may subject Ortalyk and its directors and/or officers to extensive legal liability. In the event of any of the above issues happens, the results of operations and financial condition of Ortalyk could be seriously affected.

Uncertainties of reserves estimations and production projections

The methodology of estimating ore reserve may be updated over time and the estimates on the mineral resource and ore reserves of Ortalyk in the Competent Person Report is reliant to certain assumptions and judgement on principal factors and variables such as knowledge, experience and industry practice, which may found to deviate from the actual conditions of Ortalyk. There exists a small bias between the chemical and gamma U assays with the gamma data returning the lowest value. Estimates of the resources and reserves may change significantly when new information

becomes available or new factors arise. As a result, the actual amounts of uranium resources and reserves extracted by Ortalyk may deviate materially from the amount and schedule estimated. As a result, the business, results of operation and financial position of Ortalyk may not be as optimum as expected.

Risks associated to additional capital investment requirement

Operation in the mining industry requires substantial and continuous capital investment. Natural resources production projects may not be completed as planned or scheduled, may exceed the original budget, or may not achieve the intended economic results or commercial viability. Therefore, additional capital may be required for the development of the Target Mines and in such case, the financial position and results of operation of Ortalyk may be adversely affected.

Inclement weather and natural disaster

Inclement weather and natural disasters may cause evacuation of personnel, curtailment of operations, damage to mineral properties, transportation routes and loading facilities. This could in turn result in temporary suspension of operations and a general reduction in productivity. There is no assurance that inclement weather and natural disasters will not cause significant losses to Ortalyk in the future. Any damage to Ortalyk's projects or delays to its operations by prolonged periods of inclement weather could materially affect its business and results of its operations.

Fluctuation in the price of uranium

Uranium price can be affected by a wide range of factors, including but not limited to capacity of nuclear power plants, supply of uranium around the globe, electricity demand, stability of the international and domestic economic situation and the fluctuation of the global political and social condition, which are beyond Ortalyk's control. In particular, there is no assurance that there will not be large scale nuclear crises such as that in Fukushima city of Japan 2011 or the Chernobyl disaster in 1986 causing a sharp reduction in uranium demand.

There is also no assurance that demand for uranium will grow, or that the demand for uranium will not experience excess supply. In the absence of any offsetting factors, a significant and sustained adverse movement in the market prices of or demands for uranium may have a material adverse impact on the financial performance of Ortalyk, and in extreme circumstances, the cost of extraction of uranium may exceed uranium price, resulting the operation of Ortalyk non-profitable.

Risks associated with litigation

As with any company, Ortalyk maybe exposed to risk associated with litigation. There might be potential litigation but the impact of the potential litigation is unknown to the Group which may or may not be material. The potential litigation may have an adverse impact on the results of operation, financial condition and prospects of Ortalyk.

Adequacy of insurance coverage

Ortalyk may maintain certain insurance coverage from time to time. However, there is no guarantee that insurance coverage will always be available to Ortalyk at economically viable premiums (if at all) or that, in the event of a claim, the level of insurance carried by Ortalyk will be adequate to cover the entire claim/liability. Any liabilities arise that are not insured or where insurance coverage is inadequate to cover such liabilities may materially or adversely affect the actual or prospective profitability and the business and operation results. Ortalyk's business could also be materially and adversely affected by claims for which it is not adequately insured.

Environmental risks and issues arising from compliance with environmental regulations and permitting requirements

The operations of the Target Mines are subject to the extensive environmental risks inherent in the mining industry, such as risks of leakages, contamination of groundwater, contamination by chemical and radioactive substances, excess emission of air pollutants or other unforeseen circumstances, which could subject Ortalyk to considerable liability. Violation of health, safety or environmental laws, or failure to comply with the instructions of the relevant health, safety or environmental authorities, could lead to, amongst other things, a temporary shut down of all or a portion of the mine or relevant facility; the imposition of costly compliance procedures and fines; order to remedy the pollution caused which can be costly; or serious reputation damage to Ortalyk. In extreme circumstances, the relevant subsoil use right agreements may be rescinded by the relevant authority and Ortalyk may loss its right to the Target Mines. Should any of the above happens, business operation, results of operation and financial position of Ortalyk may be adversely affected.

Foreign currency exchange rate fluctuations

Ortalyk recognizes most of its revenue from sales of natural uranium which is determined with reference to the international uranium price quoted in US dollar and operating costs in Kazakhstan currency Tenge. Hence, its cost competitiveness, profitability and financial position is affected by the exchange rate between Tenge and US dollar. The effect of currency exchange fluctuations is impossible to predict with any degree of certainty and this may materially and adversely affect Ortalyk's operations and financial performance should there be any appreciation in exchange rate of Tenge against US dollar.

Reliance on Ortalyk's ability to attract, retain and train senior management or key technical staff

The future performance of Ortalyk depends, to a certain extent, upon its ability to continue to attract, retain and motivate key qualified personnel, key senior management and other employees with various skills and experience, including in relation to the development and operation of mineral projects. There is no assurance that these key qualified personnel will continue to provide services to Ortalyk or will honour the agreed terms and conditions of their employment or service contracts. Any loss of key

qualified personnel or failure to recruit and retain personnel may have a material adverse effect on business and operation of Ortalyk which may in turn adversely affect the results of operation of Ortalyk.

Risks relating to mining contractors

Third parties contractors are engaged to provide certain services in the operation of the Target Mines. Such third party contractors may be unable to perform their obligation due to different reasons, such as financial difficulties, contractual disputes and natural disasters, and there is no guarantee that Ortalyk will be able to source an alternate service provider in a timely manner or at all. In such case, this may adversely affect the operation of Ortalyk and in turn, the financial performance of Ortalyk.

Risks relating to the Acquisition

Acquisition of a non-controlling interest

Upon completion of the Acquisition, the Group will hold a 49% participation interest in Ortalyk and Kazatomprom will hold a 51% interest in Ortalyk. Notwithstanding certain covenant to protect the Group's interest in Ortalyk exist under the Shareholders' Agreement, Kazatomprom will be able to exert substantial control over Ortalyk and there is no guarantee that Kazatomprom will operate Ortalyk in such a way in the interest of all of its participant as a whole. Should Kazatomprom operate Ortalyk in a way to the detrimental of the Group, the Group's interest may be adversely affected.

Completion of the Acquisition may not take place or the Acquisition may be reversed in accordance with the Sale and Purchase Agreement

The completion of the Acquisition is subject to various Conditions which have not been fully fulfilled as of the date of this circular. Accordingly, the Acquisition may or may not proceed.

In addition, the Group has the right to request Kazatomprom to buy-back the Target Interest should Ortalyk fails to obtain the New Zhalpak Subsoil Use Agreement. Accordingly, the Target Interest may be returned to Kazatomprom notwithstanding Completion has taken place.

Uncertainty on the New Exercise Price

The Company may be required to sell the Target Interest upon the exercise of the Buy-back Right or the Call Option which is not at its discretion, or may, on its own motive, sell the Target Interest upon the exercise of the Sell-back Right or the Put Option, and in each case, based on the New Exercise Price, being the fair market value of the Target Interest as of the last day of the month of the exercise notice as determined by an independent valuer.

There is no assurance that the New Exercise Price will be at least equal to or higher than the Consideration. Should the New Exercise Price be determined to be lower than the Consideration upon exercise of the Buy-back Right, the Sell-back Right, the Call Option and the Put Option, the Group may incur a loss in its investment in Ortalyk, and, in extreme circumstance, may loss all of its investment in Ortalyk.

Risks relating to operation in Kazakhstan

General risks associated with operation in Kazakhstan as an emerging market

Kazakhstan, as an emerging market, in which Ortalyk operates and does business is generally subject to greater risks, including legal, regulatory, economic and political risks, than more developed markets.

An emerging economy, such as Kazakhstan, is generally subject to rapid change, and the information set out in this circular may quickly become outdated. Accordingly, Shareholders should exercise particular care in evaluating the risks involved and should consider whether, in light of these risks, should vote in favour of the resolution relating to the Sale and Purchase Agreement. Shareholders are encouraged to consult with their own legal and financial advisers on the risks involved.

Enhanced risks and uncertainties upon any change in government or any change in the political climate in Kazakhstan

Ortalyk could face enhanced risks and uncertainties upon any change in government or any change in the political climate in Kazakhstan. For example, a new government may seek to re-nationalise the Target Mines, terminate Ortalyk's subsoil use agreements and challenge the tax, legal or other arrangements affecting Ortalyk's operations, which could have a material adverse effect on Ortalyk's business, financial condition, results of operations and prospects.

Risks associated with regional instability

Since the break-up of the Soviet Union, a number of former Soviet republics have experienced periods of political instability, civil unrest, military action or incidents of violence. Kazakhstan has not experienced any such unrest and, to date, such regional instability has not affected Kazakhstan or Ortalyk's operations in the Kazakhstan. That being said, there is a risk that future political instability, civil unrest, continued violence in the region or the challenge or revocation of the subsoil use licence could potentially have an adverse effect on Ortalyk's business, financial condition, results of operations or prospects.

Developing and uncertain laws and regulations of Kazakhstan, changes of which could require Ortalyk to incur substantial expenditures or subject Ortalyk to material liabilities or other sanctions

The laws and regulations of the Kazakhstan are still developing and are uncertain. Any change in the laws of Kazakhstan could result in increased compliance costs. Moreover, many such laws provide regulators and officials with substantial discretion in their application, interpretation and enforcement of the laws.

The Subsoil Code which came into force in 2018 is relatively new, there are few precedents that would make the application of the Subsoil Code more predictable. For example, whether the Subsoil Code has retrospected effect of non-fulfillment of work program.

Subsoil use laws and regulations in Kazakhstan impose a very broad range of continuing obligations and restrictions on Ortalyk and require Ortalyk to incur significant capital expenditures and compliance costs. These significant expenditures and costs are incurred on an ongoing basis and Ortalyk will be obliged to incur them in the future as well.

Ortalyk is required to obtain, on an ongoing basis, all permits as are required by the laws of Kazakhstan. Failure to obtain any such permits could have a material adverse effect on Ortalyk's business, financial condition, results of operations and prospects. Given Kazakhstan's legislative, judicial and administrative history, it is not possible to predict the effect of current and future legislation on Ortalyk's business. The ongoing rights of Ortalyk under its subsoil use contracts and licences and other agreements may be susceptible to revision or cancellation, and legal redress in relation to such revocation or cancellation may be uncertain. Any changes to the rights of Ortalyk under its subsoil use contracts and licences (and any other relevant legislative changes) or increased compliance costs could have a material adverse effect on Ortalyk's business, financial condition, results of operations and prospects.

The regulatory authorities in Kazakhstan may exercise considerable discretion in the interpretation and enforcement of local laws and regulations. Authorities may use this discretion to enforce rights in a manner that is inconsistent with the previous practice and the relevant legislation and regulatory authorities may impose more onerous requirements and obligations than those currently in effect. Ortalyk is unable to predict the costs of compliance with such request or instruction and the costs could be substantial and could materially and adversely affect its business, financial condition, results of operations and prospects.

The taxation system in Kazakhstan and the interpretation and application of tax laws and regulations are evolving, which significantly increases the risks with respect to Ortalyk's operations and investment in the Republic of Kazakhstan.

As tax legislation in the Republic of Kazakhstan has been in effect for a relatively short time, tax risks in Kazakhstan are substantially higher than the tax risks in countries with more developed tax systems. In addition, the tax laws continue to

evolve. The uncertain application and evolution of tax laws create the risk of additional and substantial tax payments by Ortalyk, which could have a material adverse effect on Ortalyk's business, financial condition, results of operations and prospects. Such uncertainties may, in particular, relate to the valuation of the taxable base for excess profits tax purposes and the application of transfer pricing policies. The Off-take Arrangement could fall within these transfer pricing rules and prices may still be subject to adjustment if they deviate from market prices, and an adjustment of prices undertaken by tax authorities may result in an increase in the amount of tax and other mandatory payments and penalty that become payable. Due to the ambiguities in the legislation and the uncertainties in its interpretation, the relevant tax and customs authorities may challenge Ortalyk's prices and propose adjustments.

Tax regulation and compliance is subject to review and investigation by authorities who may impose severe fines, penalties and interest charges. The tax authorities have a right to impose additional tax assessments.

Accordingly, the business of Ortalyk prior to the Acquisition remain open to further assessments, and should the tax authority decide to impose addition tax obligation on Ortalyk, its results of operation and financial position will be adversely affected.

7. No material adverse change

To the best knowledge of the Directors, no material adverse change have occurred from the effective date of the Competent Person Report of 31 December 2020 up to the Latest Practicable Date.

8. Legal claims and proceedings

To the best knowledge of the Directors after making reasonable enquiries, as at the Latest Practicable Date, no legal claims or proceedings that may have an material influence on Ortalyk or the mining and exploration rights of the Target Mines are known to the Directors to be present, on-going, pending or threatened by any third party against Ortalyk.

In addition, as at the Latest Practicable Date, there are no land claims of material importance known to the Directors that may exist over the land on which the Target Mines are located.

1. THREE-YEAR FINANCIAL INFORMATION

Financial information of the Group for each of the three years ended 31 December 2018, 2019 and 2020 are disclosed in the 2018 annual report of the Company (https://www1.hkexnews.hk/listedco/listconews/sehk/2019/0424/ltn20190424480.pdf) at pages 110-222, 2019 annual report of the Company (https://www1.hkexnews.hk/listedco/listconews/sehk/2020/0427/2020042700617.pdf) at pages 131-262 and 2020 annual report of the Company (https://www1.hkexnews.hk/listedco/listconews/sehk/2021/0428/2021042801425.pdf) at pages 137-278, respectively.

2. STATEMENT OF INDEBTEDNESS

At the close of business on 31 March 2021, being the latest practicable date for the purpose of determining this statement of indebtedness prior to printing of this circular, the Group has borrowings of US$66.0 million which were unsecured and guaranteed by the Company and borrowings of US$68.8 million which were unsecured and not guaranteed. In addition, the Group has unutilised borrowing facility of US$114.0 million which is unsecured and guaranteed by the Company and borrowing facility of US$670.0 million which is unsecured and not guaranteed.

The Group measures the lease liabilities at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rates. As at 31 March 2021, the Group had total lease liabilities of approximately US$182,000.

Save as aforesaid, and apart from intra-Group liabilities, the Group did not have any (a) debt securities issued and outstanding, or authorised or otherwise created but unissued term loans; (b) borrowings or indebtedness in the nature of borrowing including bank overdrafts and liabilities under acceptances (other than normal trade bills), acceptance credits or hire purchase commitments; (c) mortgages or charges; or (d) guarantees or other material contingent liabilities as at the close of business on 31 March 2021.

3. WORKING CAPITAL

The Directors are of the opinion that, taking into account the business prospects, the internal resources of the Group and the facility available to the Group, the Group has sufficient working capital for its present requirements, that is for at least the next twelve months from the date of this circular.

4. FINANCIAL AND TRADING PROSPECTS

As the COVID-19 epidemic rebounded at the end of 2020 in Canada and Kazakhstan, major producers of uranium in the world, certain natural uranium mines stopped production. Moreover, the industry has been starved of capital investment for years, and there were no new uranium projects receiving sufficient capital for development in the market, which means that it will be difficult for new projects to form new production capacity rapidly even if natural uranium prices rise in the short term. Therefore, although the global supply of natural uranium is expected to recover in 2021 as compared with 2020, it is unlikely to

recover to the level before the outbreak of the epidemic, and the market demand will continue to exceed production and the inventory of natural uranium will be further consumed.

Meanwhile, both newly constructed nuclear power plants in global emerging economies and the demand brought by the expiration and renewal of long-term trade contracts signed historically will bring more mid- to long-term procurement demands by nuclear power plants owners and enhance recovery impetus to the natural uranium market in 2021.

5. MANAGEMENT DISCUSSION AND ANALYSIS OF HISTORIC RESULTS OF THE GROUP

For the year ended 31 December 2018

The following management discussion and analysis of the Group were extracted from the 2018 annual report of the Company and the phase "Reporting Period" in this sub-section refers to the year ended 31 December 2018.

BUSINESS REVIEW

The Group is principally engaged in investment and trading of natural uranium resources. As at 31 December 2018, the Group held 49% equity interest and 49% off-take rights of products in Semizbay-U, as well as 19.90% equity interest, 20% off-take rights and additional 15% optional off-take rights of its future natural uranium products in Fission.

In 2018, the Company realised revenue of HK$362 million, and HK$101 million in profit attributable to owners of the Company.

ANALYSIS OF BUSINESS ENVIRONMENT

The nuclear power market and its industrial development

In 2018, the overall slowdown trend in the development of the international nuclear power continued. According to a report released by the World Nuclear Association (WNA) in 2017, the global installed capacity of nuclear power (mid case) is expected to reach 445GWe by 2030, with an annual growth rate of 1.6%, which is 0.8% lower than the expected annual growth rate in the 2015 report. However, the development of nuclear power in Japan and China shows obvious signs of recovery under the current environment.

The Japanese government issued the "Energy Basic Plan" in 2018, which expects the national nuclear power generation will account for 20-22% of the total power generation by 2030, meaning 30 reactors will be required to resume commercial power generation in full capacity given only 9 reactors resumed commercial operation as at 31 December 2018. In China, the third-generation nuclear reactors with AP1000 and EPR technology have successfully connected to the grid.

Natural uranium market and its industrial development

In 2018, the supply still exceeded demand in the international natural uranium market and the trade focused on stock clearing. However, due to the announcement of the indefinite suspension of the McArthur River uranium mine of Cameco and the initial public offering (IPO) of Kazatomprom, together with the production reduction plans announced by the three major international producers, namely Cameco, Kazatomprom and Orano, the market sentiment has gradually become bullish. In addition, the purchase of Cameco and investment companies, such as Yellow Cake Plc and Tribeca Investment Partners Pty. Ltd, etc. prompted the natural uranium spot price to start rising, and the trading volume in the spot market increased significantly.

During the year, the monthly price of natural uranium in the international spot market fell slightly from USD22.00/lb in the beginning of the year to USD21.00/lb in April. Since then, as the purchase volume increased, the spot price climbed and reached the highest point of USD29.1/lb in November, and it finally ended with a price of USD28.50/lb in 2018. The monthly average price in the spot market was USD24.63/lb, representing a year-on-year increase of 13.9%. The monthly average price in the long-term market is USD30.83/lb, which is basically the same as 2017*.

* The natural uranium price data in the paragraph are derived from the UxC. In 2018, the supply and demand of long-term market of natural uranium remained stable, and the rising momentum of spot price was not transmitted to the long-term market, therefore the long-term price was basically the same as in 2017.

BUSINESS PERFORMANCE AND ANALYSIS

Uranium under production-Production of Semizbay-U

Due to the production reduction policy of Kazatomprom, the production volume of the Semizbay Mine and Irkol Mine reduced in 2018, with a total annual production of 960 tons of uranium, of which Semizbay Mine and Irkol Mine produced 400 and 560 tons respectively, both have fully fulfilled production plans for 2018. After negotiations, the Company's off-take of natural uranium from Semizbay-U remained at 588 tons.

During the Reporting Period, Semizbay Mine opened up 6 new fault-blocks with 323 boreholes drilled and approximately 451 tons of uranium reserves expanded. Irkol Mine also opened up 6 new fault-blocks with 314 boreholes drilled and approximately 692 tons of uranium reserves expanded. The accumulated exploration expenses and the total mining production cost of the two mines were 2.89 billion tenge and 14.77 billion tenge respectively.

As at 31 December 2018, the uranium reserves and resources of Semizbay-U are as follows:

		Semizbay Mine	Irkol Mine
*Reserves	Average Grade	0.055%	0.0422%
	Tons of Uranium	10,950	16,347
Measured + Indicated Resources	Average Grade	0.055%	0.0422%
	Tons of Uranium	10,950	16,347

**Note:* Kazatomprom was listed in London on 16 November 2018 and published resources and reserve data of uranium projects under JORC standards. In order to maintain data consistency, the Company will shift from using Kazakh Classification System standards to JORC standard, in reporting the resources and reserve data of these two mines from the date of this report onwards. The JORC standard is a reporting specification of Australia on exploration results, mineral resources and ore reserves, jointly developed by the Australia Institute of Mining and Metallurgy and the Australia Geosciences and Minerals Council.

Uranium pending for development – exploration by Fission

Fission owns 100% of equity interest of the PLS Project. The PLS Project is located in the south west margin of Saskatchewan's Athabasca Basin, Canada, the world-renowned source of high-grade uranium ore, with a mineralized area of 600 meters, which is the longest continuous area with high-grade uranium ore in the basin. Currently, the main ore body already identified in the PLS Project is the 3R Uranium Deposit. During the Reporting Period, Fission steadily promoted the preliminary feasibility study of 3R Uranium Deposit and achieved the following results: (i) converted all of inferred resources in high-grade section of R780E area to the indicated category; (ii) expanded the scale of the uranium ore body in R1515W section and identified the uranium mine zone with good continuity; and (iii) initiated the preparation of the preliminary feasibility study report of 3R Uranium Deposit. During the Reporting Period, the expenditures on exploration by Fission amounted to approximately CAD 16 million.

As at 31 December 2018, resources of PLS Project under Fission were as follows:

		PLS Projects
Indicated Resources	Average Grade	1.54%
	Tons of Uranium	33,757
Inferred Resources	Average Grade	1.53%
	Tons of Uranium	20,329

Note: Resources are prepared according to the NI43-101 standard. NI43-101 standard is a national instrument for mining project report within Canada, which is formulated by the Standing Committee on Reserve Definitions of Canada. The above figures are derived from the public information of Fission.

Natural uranium trading business

During the Reporting Period, the natural uranium products sold by the Group were sourced from self-owned mines of Semizbay-U, and realized trading revenue of HK$360 million, representing a 3% decrease compared to 2017 (2017: HK$371 million). Pursuant to the New Natural Uranium Sales Framework Agreement, the natural uranium transactions between the Company and CGNPC-URC Group were conducted under a pricing mechanism that includes a floor price and a ceiling price with reference to the long-term price index of natural uranium published by a third-party index agency. The spot price of natural uranium rose during the Reporting Period, but the long-term price generally remained stable even with a slight decline. As such, despite a similar sales volume in 2017, the Group recorded a decrease in the amount of sales. In addition, since the natural uranium products supplied by the Group could not fully cater to the demand of CGN, all the natural uranium products were sold to CGNPC-URC Group during the Reporting Period. Based on the long-term and stable cooperation between the parties, the Company maintained good relationships with its controlling shareholders.

DEVELOPING NEW PROJECTS

Acquisition of CGN Global

In order to broaden the international marketing of natural uranium products, improve the profit structure and lower the proportion of connected transactions, the Company and China Uranium Development entered into a sales and purchases agreement in relation to the acquisition of 100% equity interest of CGN Global during the Reporting Period. The completion of such transaction took place on 17 January 2019.

CGN Global is a leading uranium trading entity in the industry, whose main business is the sale and purchase of natural uranium in the international market. It is also engaged in the sale and distribution of natural uranium products produced by Swakop.

During the Reporting Period, CGN Global entered into trading contracts with its main customers including European and American nuclear plants owners, international nuclear fuel manufacturers and trading entities with a total trading volume of 5,385 tons of uranium (purchases and sales included), of which 2,298 tons of uranium were delivered throughout the year.

Steady implementation of the New Kazakhstan Uranium Project

During the Reporting Period, the Company actively advanced the New Kazakhstan Uranium Project, the subject of the acquisition is no more than 49% equity interest in Altarec. Altarec has two in-situ leachable uranium mines with high competitive advantages in cost, namely the Central Mynkuduk Mine and the Zhalpak Mine. Both mines are located in the Tutkestan state, a southern region of Kazakhstan and adjoins to the Irkol Mine of Semizbay-U.

The Central Mynkuduk Mine is in operation, with a designed production capacity of 2,000 tons of uranium per year. Subject to the production reduction policy of its controlling shareholder, Kazatomprom, the production volume of the Central Mynkuduk Mine was around 1,600 tons of uranium in 2018. According to the cost report of global uranium mines in operation published by UxC in 2017, the production cost of Central Mynkuduk Mine is US$17.33/lb, which ranked in the top one third of world's uranium mines with the lowest production cost and is expected to operate until 2032. The Zhalpak Mine is still in the test mining phase, with a designed production capacity of 500 tons of uranium per year. The production volume of 2018 was approximately 110 tons of uranium.

During the Reporting Period, the Company organized a technical team to conduct an on-site inspection in the Target Deposits, the key technical data obtained shows that the Target Mines are in good operating condition.

POTENTIAL RISKS DURING OPERATION AND RISK MANAGEMENT

Risks of international natural uranium trade

Taking into account of the uncertainty of the price trend of natural uranium and the complexity of international trade, there are certain risks in the international natural uranium trade. For example, breach of contracts, bankruptcy of suppliers, force majeure events, receivables or prepayments that are not recoverable or misjudgements in investments may cause the Company to suffer loss.

In order to reduce such risks, the Company will improve its risk management on trading by monitoring the qualification and business capacity of the counterparties, adopting protective provisions in the contract, requiring parties with poor credit to provide guarantee or prepayments and implementing risk-based contingency plans on one hand; and trying to improve the ability to predict price of natural uranium, capturing opportunities with low procurement price, and ensuring that each natural uranium trade is strictly implemented in accordance with established authorization and completed approval processes on the other hand.

Capital guarantee risk

Considering it is hard for the current capital to meet the needs of the Company in terms of its medium to long-term acquisition and in line with the business plan of 2019 and the short to medium term strategic plan, the Company will make relevant capital and financing plans based on a fair assessment on the economic efficiency and feasibility of potential projects, and finance at an appropriate timing. In addition, the Company will take reasonable measures to improve the utilisation efficiency of capital by reducing various expenses.

BUSINESS PROSPECTS

BUSINESS ENVIRONMENT OUTLOOK

Forecast of the nuclear power market

As an important source of low-carbon power generation, nuclear power plays a key role in global decarbonization. For major nuclear power countries in the world, China's increasing emphasis on nuclear power development is widely recognized. Japan's demand for energy is expected to accelerate the recovery of nuclear power. Meanwhile, the progress of nuclear reduction and denuclearization in important nuclear power countries such as France and South Korea are no longer radical, but tend to be stable and rational. Emerging countries such as India, Saudi Arabia and Poland have adopted a more positive attitude towards nuclear power development. Despite the uneven development of the international nuclear power, it is undeniable that while nuclear power meets the global energy demand, its important position as a low-carbon base energy is irreplaceable. It is believed that the development of nuclear power and nuclear fuel industries will remain stable in the future.

Forecast of the natural uranium market

Combining analyses and forecasts of various major international institutions, the Company forecasts that the oversupply of natural uranium market will remain unchanged for years to come. Due to the significant production reduction by major natural uranium producers, the market entry of investment companies and the conclusion of a new batch of long-term sales and purchase contracts for natural uranium, the imbalance between supply and demand in the market will be improved in the next few years. The market pressure will gradually ease as the inventories are digested, and the natural uranium price will continue to rise steadily. However, due to a large idle capacity, the increase is expected to be suppressed.

BUSINESS DEVELOPMENT OUTLOOK

Strengthening stock asset management

The Company will continue to participate in the operation management of Semizbay-U in 2019 to ensure the completion of its annual production, cost control objectives and delivery of its committed off-take by the latter. Meanwhile, the Company will strengthen control on the expenses of Semizbay-U by participating in board meetings and decisions, to ensure that the annual expenditure budget is not exceeded. In addition, the Company will push Semizbay-U to devote more efforts in improving its resource reserves in 2019, thus to promote its sustainable development.

For Fission, the Company will participate in its decision-making and daily management through the board of directors and the assigned financial manager. We will mainly focus on and encourage Fission to formulate clear medium and long-term development plans for the PLS Project, based on which the Company will make its strategic decisions in relation to Fission in the future. At the same time, the Company

will support Fission in promoting the feasibility study of the 3R Uranium Deposit, combining the market situation of natural uranium and the results of its related pre-feasibility study report.

Expanding trade business

Leveraging on its own capital advantages, the Company will actively expand its international trade business, vigorously support CGN Global to explore the market outside CGNPC, and ensure that the trade volume and sales profit will be gradually improving under the circumstances that risks are controllable.

Promoting the acquisition of new projects

In order to complete the New Kazakhstan Uranium Project earlier, the Company will initiate the formal negotiation in 2019, and discuss with Kazatomprom the feasible plans and arrangements for accelerating the progress.

In the meantime, the Company will continue to systematically screen global high-quality uranium projects, track key potential projects and select the best for acquisitions in good time to gradually realize the goal of asset expansion. Furthermore, the Company will remain concerned with investment opportunities in related industries such as uranium associated mines and natural uranium processing, and treat them as potential opportunities.

Enhancing maintenance of the investor relationship

In 2019, the Company will continue to optimize information disclosure by continuously improving the quality of voluntary information, strengthening interaction with investors and analysts through various channels. In addition, the Company will continuously strengthen investor relations management by further improving the investor relations team and enhancing the capacities of team members.

Strengthening internal control and risk management

In 2019, the Company will continue to carry out a series of internal control and risk management work including comprehensive risk management, internal audit and internal control assessment. In addition, the Company plans to evaluate its risk management system by introducing external professional strength to further improve and enhance the level of risk management.

FINANCIAL PERFORMANCE AND ANALYSIS

Financial performance reflects the operation of the Company throughout the year. By paying attention to changes in financial indicators, business development of the Company can be fully understood.

OVERVIEW OF FINANCIAL RESULTS AND POSITION

Major Financial Indicators

	2018	2017
Profitability indicators		
Gross profit margin (%)[1]	17.61	31.93
EBITDA (HK$ million)[2]	119.82	69.60
EBITDA/Revenue (%)[3]	33.10	18.67
Net profit margin(%)[4]	28.01	13.97
Operation ability indicators		
Trade receivables cycle – average (Days)[5]	64.16	60.16
Investment return indicators		
Return on equity (%)[6]	5.63	2.89
Profit attributable to owners of the Company to revenue ratio[7]	28.01	13.97
Return on assets (%)[8]	5.38	2.74
Repayment ability indicators		
Bank balances and cash (HK$ million)	1,071.16	1,017.11
Net tangible assets (HK$ million)[9]	1,812.43	1,790.76
Gearing ratio (%)[10]	2.73	6.73

1. Difference between revenue and cost of sales divided by revenue multiplied by 100%.

2. The sum of profit before tax, finance costs, depreciation of property, plant and equipment.

3. The sum of profit before tax, finance costs, depreciation of property, plant and equipment, divided by revenue multiplied by 100%.

4. Net profit for the year divided by revenue multiplied by 100%.

5. Average trade receivables (i.e the arithmetic average of the beginning and the end of the Reporting Period) divided by average daily sales (revenue divided by 360 days).

6. Profit attributable to owners of the Company divided by total average equity (i.e the arithmetic average of the beginning and the end of the Reporting Period) multiplied by 100%.

7. Profit attributable to owners of the Company divided by the revenue multiplied by 100%.

8. Net profit for the year divided by total average assets (i.e the arithmetic average of the beginning and the end of the Reporting Period) multiplied by 100%.

9. Interests of the Shareholders less intangible assets, net.

10. Total debt divided by total equity multiplied by 100%.

FINANCIAL RESULTS

As at 31 December 2018, the Group realized revenue of HK$362 million, representing a decrease of 3% as compared to 2017. The profit and profit attributable to owners of the Company of 2018 were HK$101 million, representing an increase of 95% as compared to 2017.

	For the year ended 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2018	2017		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Natural uranium trading	359,916	370,720	(10,804)	(3)
Property investment	2,115	2,070	45	2
Total revenue	362,031	372,790	(10,759)	(3)

The revenue of the Group was HK$362 million, representing a decrease of 3% as compared to that of HK$373 million in 2017. It was mainly due to the slight decrease in the long-term price of international natural uranium as compared to 2017.

Cost of sales

	For the year ended 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2018	2017		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Natural uranium trading	298,278	253,774	44,504	18
Property investment	–	–	–	–
Total cost of sales	298,278	253,774	44,504	18

The cost of sales of the Group was HK$298 million, representing an increase of 18% as compared to that of HK$254 million in 2017. It was mainly due to the increase in the spot price of international natural uranium as compared to 2017.

Gross profit and gross profit margin of natural uranium trading

Influenced by the slight decline in the sales price and the increase in purchase price, the Group recorded a gross profit of natural uranium trading of HK$62 million, representing a decrease of 47% as compared to that of HK$117 million in 2017, and the gross profit margin decreased from 32% in 2017 to 17% in 2018.

Other operating income

The other operating income of the Group was HK$29 million, representing a 47% increase as compared to that of HK$20 million in 2017, mainly due to the increase of interest rate of deposit during the Reporting Period as compared to the corresponding period in 2017, causing a significant increase in interest income.

Administrative expenses

Administrative expenses of the Group were HK$40 million, representing an increase of 15% as compared to that of HK$34 million in 2017, mainly due to the agency fees incurred for the acquisition during the Reporting Period.

Share of results of a joint venture

The joint venture of the Company is Semizbay-U. The share of results of a joint venture was HK$52 million, recorded a substantial increase as compared to the loss of HK$21 million in 2017, mainly due to the increase of selling price of natural uranium, resulting in a substantial increase in its profits.

Share of results of an associate

The associate of the Company is Fission. The share of results of an associate was HK$13 million, which includes share of loss for the Reporting Period of HK$6 million and the reversal of long-term investment impairment of HK$19 million, representing a significant increase as compared to the loss of HK$16 million in 2017.

During the Reporting Period, part of the share options granted by Fission to its directors and employees were exercised and 363,604 ordinary shares were issued, as a result, the equity interests in Fission held by the Company decreased to 19.90% (31 December 2017: 19.92%).

Income tax expenses

Income tax expense of the Group was HK$17 million, representing an increase of 7% as compared to that of HK$16 million in 2017, mainly due to the increase of provision of income tax in relation to the substantial increase in share of result of a joint venture during the Reporting Period.

Profit for the year

The profit of the Group in 2018 was HK$101 million, representing an increase of 95% as compared to that of HK$52 million in 2017, mainly due to a substantial increase in share of results of the joint venture as compared to 2017.

ASSETS CONDITION AND ANALYSIS

Total assets

As at 31 December 2018, the Group's total assets amounted to HK$1,862 million, representing an decrease of 3% as compared to 2017, mainly due to the decrease of trade receivables.

Total liabilities

As at 31 December 2018, the Group's total liabilities amounted to HK$49 million, representing a decrease of 59% as compared to 2017, mainly due to the decrease of trade payables.

Net current assets

As at 31 December 2018, the Group's net current assets was HK$1,074 million, representing an increase of 3% as compared to 2017, mainly due to the significant decrease of current liabilities during the Reporting Period.

Current assets

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2018	**2017**	**(Decrease)**	**(Decrease)**
	HK$'000	*HK$'000*	*HK$'000*	*%*
Trade and other receivables	19,708	128,900	(109,192)	(85)
Amount due from an intermediate holding company	5,375	1,546	3,829	248
Bank balances and cash	1,071,159	1,017,111	54,048	5
Income tax recoverable	8,728	4,280	4,448	104
Total current assets	1,104,970	1,151,837	(46,867)	(4)

As at 31 December 2018, the Group's current assets was HK$1,105 million, representing a decrease of 4% as compared to 2017, which was mainly due to the receipt of all the down payment of natural uranium sales during the Reporting Period, resulting in the significant decrease in the trade and other receivables as compared to 2017.

As at 31 December 2018, the aggregate amount of bank balances and cash of the Group was approximately HK$1,071 million, representing an increase of HK$54 million year-on-year, among which approximately 24% (31 December 2017: 30%) was denominated in HK$, approximately 75% (31 December 2017: 68%) was denominated in USD, and approximately 1% (31 December 2017: 2%) was denominated in RMB. As at 31 December 2018, the Group did not have any bank deposits and cash pledged to any banks (31 December 2017: Nil).

As at 31 December 2018, the proportion of current assets of the Group over total assets was 59% (31 December 2017: 60%), and the proportion of bank balances and cash over total assets was 58% (31 December 2017: 53%).

Non-current assets

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2018	2017		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Property, plant and equipment	14,319	16,529	(2,210)	(13)
Investment properties	30,359	31,427	(1,068)	(3)
Interest in a joint venture	190,706	161,280	29,426	18
Interest in an associate	521,538	550,202	(28,664)	(5)
Total non-current assets	756,922	759,438	(2,516)	(0.3)

As at 31 December 2018, the non-current assets of the Group were HK$757 million, representing a decrease of 0.3% as compared to 2017.

Current liabilities

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2018	2017		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Trade and other payables	13,778	90,152	(76,374)	(85)
Amount due to an intermediate holding company	6,132	6,490	(358)	(6)
Amount due to a joint venture	5,513	5,513	–	–
Amounts due to fellow subsidiaries	1,668	1,212	456	38
Income tax payable	4,246	4,047	199	5
Total current liabilities	31,337	107,414	(76,077)	(71)

As at 31 December 2018, the Group's current liabilities were HK$31 million, representing a decrease of 71% as compared to 2017, mainly due to the payment of all the down payment for natural uranium purchases during the Reporting Period, resulting in the significant decrease in the trade and other payables as compared to 2017.

As at 31 December 2018, the Group had no bank borrowings (31 December 2017: Nil). Pursuant to the loan agreement entered into between the Company and CGNPC Huasheng on 18 December 2015, the Company can borrow from CGNPC Huasheng for short-term capital within the limit of total borrowing from time to time within 3 years after first withdrawal.

Non-current liability

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2018	2017		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Deferred tax liability	18,126	13,106	5,020	38
Total non-current liability	18,126	13,106	5,020	38

As at 31 December 2018, the non-current liability of the Group was HK$18 million, representing an increase of 38% as compared to 2017, primarily due to the increase of provision of income tax in relation to the substantial increase in share of result of a joint venture during the Reporting Period.

Total equity

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2018	2017		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Share capital	66,007	66,007	–	–
Reserves	1,746,422	1,724,748	21,674	1
Total equity	1,812,429	1,790,755	21,674	1

As at 31 December 2018, total equity of the Group amounted to HK$1,812 million, representing an increase of 1% as compared to 2017, mainly due to the increase of profit during the Reporting Period.

The Group's gearing ratio (total borrowings/equity attributable to owners of the Company) was 3% (2017: 7%).

Assets and investments

During the Reporting Period, the Company entered into a sale and purchase agreement with China Uranium Development for the acquisition of 100% equity interest in CGN Global, which was completed on 17 January 2019.

Other than the abovementioned transaction, the Group did not have any other significant equity investment, major acquisition or disposal.

Investment orientation

According to business positioning and development strategy of the Group, the main investment direction of the Group is to acquire overseas uranium resource projects with competitiveness and low cost. The Group will carry out relevant investment activities as and when appropriate to strengthen the assets of the Company.

FINANCIAL CAPITAL

The Company adopts prudent capital and treasury policy and goals. During the Reporting Period, the Company's operating fund was mainly from the cash generated from operating activities. The capital needs requirements of the Company mainly come from the possible acquisition expenses of acquiring natural uranium resources and funds for operation.

The financing capacity of the Company is affected by multiple external and internal factors. In order to obtain financing on more favourable terms, the Company has to understand the external financing environment and adopts a reasonable financing model and strategies based on its structure of assets and liabilities.

The Company constantly pays close attention to the trends in the financial market, considers how to respond to internal and external financial risks, formulates reasonable financing model and strategies to ensure the safety and economical efficiency of financing, and adopts strict management measures for debt risks to prevent related risks exposed to the Company, and to facilitate the financial health and the development of core business.

Financing model

Given the complex and ever-changing financial market environment, the Company has been exploring diverse financing approaches and been striving to establish a financing model with combination of short, medium and long-term capitals, merges direct financing and indirect financing and other various financing channels to ensure the protection of stable fund. In the process of debt financing, the Company has taken a balanced approach to both costs and safety. The Company is committed to the pursuit of a competitive financing cost rather than the lowest one to ensure the security of financing and the quality of service received.

For projects with large amount of capital expenditures and sound expected returns, the Company will prudently consider using equity financing to balance risks and enhance Shareholders' value.

Types of financing products

Diversified financing varieties would prevent the Company from relying on a single financing channel, so as to ensure that the Company has choices in meeting the different capital needs.

On 18 December 2015, the Company (as borrower) and CGNPC Huasheng (as lender) entered into a loan agreement, pursuant to which the Company can borrow short-term capital from CGNPC Huasheng for short-term capital within the limit of total borrowing from time to time within 3 years of first withdrawal. As at 31 December 2018, the Company did not have any borrowing from external banks.

Capital structure

As at 31 December 2018, the Company had 6,600,682,645 ordinary shares in issue totally (31 December 2017: 6,600,682,645 ordinary shares), the market value of the Company was approximately HK$1,580 million (31 December 2017: HK$4,160 million).

FINANCIAL RISK MANAGEMENT

The development of the Group comes with various financial risks, such as debt risk and exchange rate risks.

Risk management of debt

As at 31 December 2018, there were no banking borrowings, other borrowings or interest-bearing liabilities of the Company, reserving more space for the Company to acquire overseas uranium resource projects through debt financing.

In order to manage liquidity risk, the Company closely monitors the cash and cash equivalents and the unutilized credit, to ensure a sufficient liquidity for the operation of the Company and to lower the effect from the cash flow volatility. Management of the Company will also keep an eye on the external borrowing, to ensure the sufficiency of borrowing credit. As of 31 December 2018, the Company has undrawn borrowing credit of USD300,000,000.

Exchange rate risk

The functional currency of the Company is USD. During the Reporting Period, the Group's sale and purchase of main business were mainly settled in USD and RMB (2017: USD and RMB), while its cash was mainly denominated in USD and HKD (2017: USD and HKD).

Fluctuations in exchange rate of Tenge and CAD may have an impact on the Company's interest in Semizbay-U and Fission respectively.

For exchange rate risk management, the Company always targets to control cost rather than profitability. During the Reporting Period, the Group did not have any forward foreign exchange contracts, interests or currency swaps or other financial derivatives for hedging purposes, and the Group did not experience any significant difficulty or impact in its operation or liquidity due to the fluctuation in exchange rate.

CONTINGENCY EVENTS

External guarantees

During the Reporting Period, the Group did not have any external guarantee (2017: Nil). The Company did not provide any guarantee to its subsidiaries or other companies, nor allow subsidiaries to provide any form of guarantee to any entities or individuals without the approval of the Company.

Pledge of assets

During the Reporting Period, the Group did not have any pledge of assets (2017: Nil).

Contingent liability

As at 31 December 2018, the Group did not have any major contingent liability (31 December 2017: Nil).

Legal proceedings

The Company confirmed that there was no litigation, and it was not aware of any pending or threatened litigation against the Company which had or could have a material and adverse effect on the financial condition or results of operations of the Company during the Reporting Period.

For the year ended 31 December 2019

The following management discussion and analysis of the Group were extracted from the 2019 annual report of the Company and the phase "Reporting Period" in this sub-section refers to the year ended 31 December 2019.

BUSINESS REVIEW

The Group is principally engaged in natural uranium investment and trading. As of 31 December 2019, the Group held 49% equity interest and 49% off-take rights of products in Semizbay-U and 19.88% equity interest in Fission, as well as wholly-owned subsidiaries CGN Global, Beijing Sino-Kazakh and CGNM UK Ltd.

In 2019, the Company realised revenue of HK$2,077 million and HK$160 million in profits attributable to owners of the Company.

ANALYSIS OF BUSINESS ENVIRONMENT

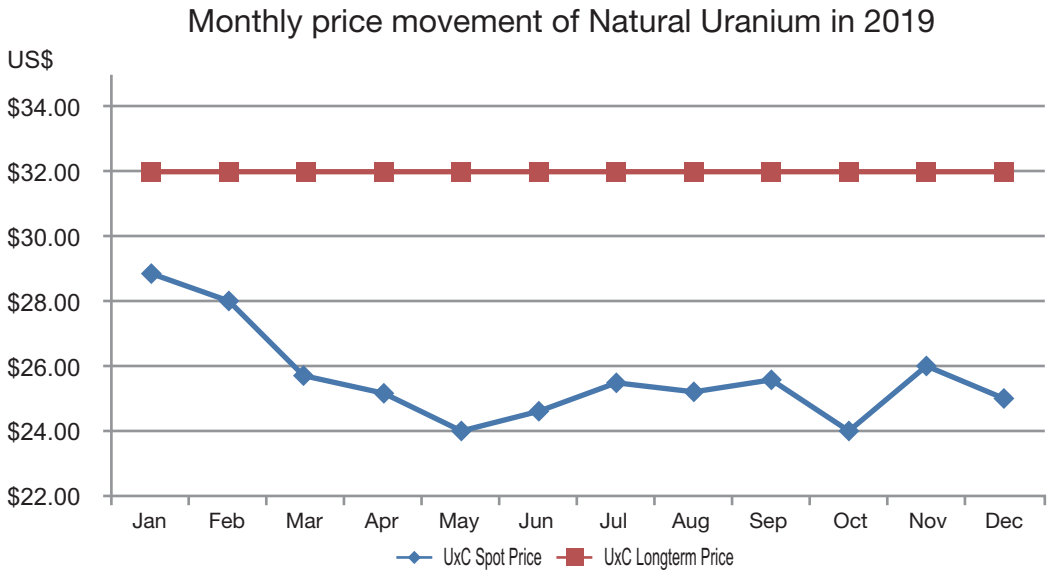
The nuclear power market and its industrial development

The year 2019 marks a new start in the development of nuclear power, with total global nuclear power generation now exceeding the level prior to the Fukushima accident. China – the globe's main engine for the growth in nuclear power – ended a three-year (2016-2018) period, in which no nuclear power projects were approved. Several units of the Shandong Rongcheng, Fujian Zhangzhou and Guangdong Huizhou Taipingling nuclear power projects were approved for construction, bringing new vigour to global nuclear power development. In the meanwhile, several US companies applied to its government to extend the life of nuclear power units in order to avoid their early retirements. Russia has entered a cooperative agreement with India which is expected lead to six additional nuclear power plants constructed in India. Uzbekistan, Saudi Arabia and other countries have begun preparations for the construction of their first nuclear power plants. In summary, the trend for nuclear power is steadily progressing. Furthermore, the 2019 WNA report upgraded the expected nuclear power installed capacity by 2040, in particular, significantly raised its forecast in respect of low growth scenario from an annual decrease of 0.4% in its previous report to an annual increase of 0.4%. We remain confident in the development of nuclear power and the growth of nuclear fuel demand.

The natural uranium market and its industrial development

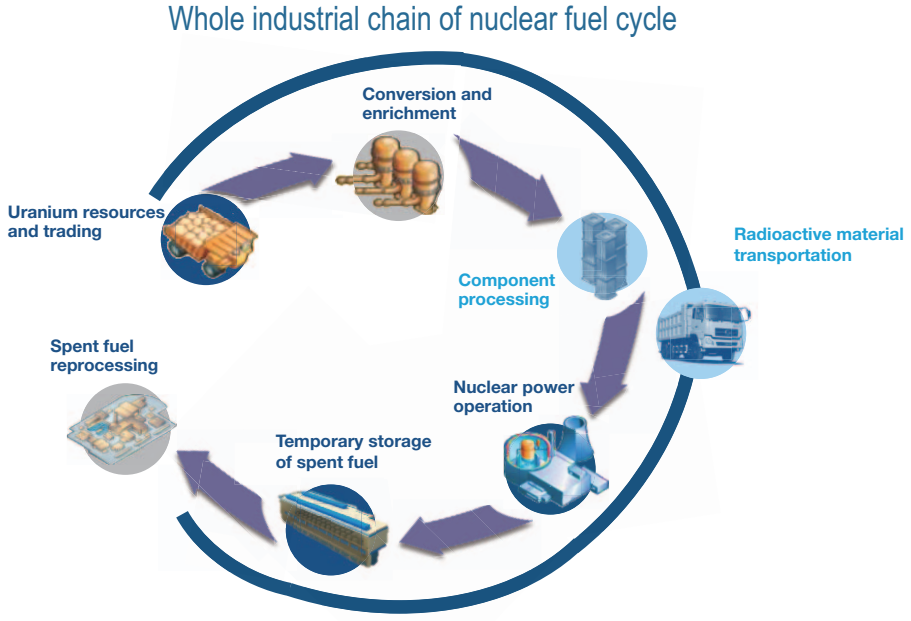
Throughout 2019, the spot price of natural uranium in the international market, as quoted by UxC, generally turned negative after a favourable start, fluctuated between US$24-29/lb and with an average price of US$25.72/lb, while the long-term price stablising at US$32/lb*. Since the fundamentals of oversupply in the international natural uranium market remained unchanged, the increase in uranium prices was restricted. Under the combined effect of uncertainties such as the pending results of the Section 232 Investigation of the US and the extension of sanctions exemption for Iran's nuclear facilities, most major market players (nuclear power companies, investment funds, etc.) have adopted a wait-and-see attitude, resulting in lower spot demand in 2019. As a consequence, the spot transaction volume has dropped by 40% compared to 2018. The long-term market transaction volume increased by 6.6% compared to 2018. Five non-US nuclear power companies purchased 64% of the long-term market during the year, and it is expected that nuclear power companies in emerging markets will be the main players in long-term market transactions in the future.

* Long term price quoted by TradeTech is US$33/lb.



Nuclear fuel cycle market and its industry development

The final product of natural uranium for civil use is mainly in the form of nuclear fuel assembly sold to nuclear power plants. Therefore, continual attention should be paid to the market of various parts in the nuclear fuel industry chain (including conversion and uranium enrichment).



The international conversion prices have been continuously depressed in the long run. However, due to the combined effect of the closure of the Metropolis conversion plant and the unsatisfactory slow growing production of the Orano's COMURHEX II conversion plant, a supply shortage began to appear in the conversion market in 2019, and spot prices continued to climb. By the end of December 2019, the purchases from intermediate traders had driven the spot prices and long-term prices to US$22.25/kgU and US$18/kgU, representing a year-on-year increase of US$8.75/kgU and US$2.5/kgU, respectively.

Meanwhile, the enrichment market was also showing signs of recovery in 2019. Nuclear power companies have locked low-cost of SWU through spot and mid-term purchases in the past two years, resulting in a significant reduction of the currently available SWU. Coupled with the purchases of other market participants, the price of SWU increased, and the spot price and long-term price of enriched uranium increased by US$6/SWU and US$6.5/SWU from the beginning of the year, to US$47/SWU and US$49/SWU respectively, at the end of the year.

It is noteworthy that although the prices of conversion and SWU are gradually picking up, as nuclear power companies in China, South Korea and Japan as well as certain traders and producers still hold a relatively large amount of stock, the increase in prices would be restricted.

BUSINESS PERFORMANCE AND ANALYSIS

Uranium mines under production – production of Semizbay-U

Due to the production reduction policy of Kazatomprom, the production volume of Semizbay Mine and Irkol Mine, owned by Semizbay-U, continued to be both reduced in 2019. The total annual production was 960tU, of which Semizbay Mine and Irkol Mine respectively produced 400tU and 560tU, fulfilling their 2019 production plans. The Company kept its off-take rights in natural uranium products from Semizbay-U at 588tU after negotiations.

During the Reporting Period, Semizbay Mine opened up three new faultblocks with 316 boreholes drilled and approximately 546tU reserves expanded; and Irkol Mine opened up seven new faultblocks with 333 boreholes drilled and approximately 573tU reserves expanded. The accumulated exploration expenses and total mining production cost of the two mines during the Reporting Period were 2.81 billion tenge (equivalent to approximately HK$57.7 million) and 15.25 billion tenge (equivalent to approximately HK$313.19 million), respectively.

As at 31 December 2019, the uranium reserves of Semizbay-U were as follows:

	Semizbay Mine	**Irkol Mine**
Average Grade	0.055%	0.0422%
tU	10,472	15,716

Uranium mine project pending for development – exploration by Fission

During the Reporting Period, Fission continued its winter exploration commenced in 2018, completing 32 drillholes with a total length of 3,872 meters. The exploration cost was approximately CA$8.40 million (equivalent to approximately HK$4,826 million). The exploration achievements during the year include: (a) part of the inferred resources in R780 area were transferred to indicated category, thereby increasing the mineable reserves of the mine and improving the project's economical feasibility; (b) further identified the geoengineering and exploitation conditions of the deposit development through a series of additional geological studies, and created a basis for the selection of mining methods and the reasonable design of a tailing storage facility in the PLS Project feasibility study. Fission released a pre-feasibility study report of open pit/underground hybrid operation of the PLS Project in May 2019, which indicated total project resources of approximately 62,034t U_3O_8 with an average grade of 1.64%, total reserves of 41,062t U_3O_8 with a hydrometallurgical recovery rate of 96.7%, and a total investment in mine construction of CA$1,498 million. Based on the "selling price at US$50 per pound of U_3O_8, exchange rate at CA$1/US$0.75, discount rate at 8%" model hypothesis, the production cost of PLS Project is US$6.77 per pound of U_3O_8, the internal rate of return is 21%, net present value is CA$132 million, and the project payback period is 2.3 years.

In order to further improve the economical feasibility of the project, reduce investment in mining construction and shorten the construction period, Fission commissioned a third-party technical adviser to conduct a pre-feasibility study on its underground-only mining method in July 2019. On 7 November 2019, Fission officially released the pre-feasibility study report on the underground-only mining method of the PLS Project. Compared with the pre-feasibility study results of open pit/underground hybrid mining released in May, 1) capital expenditure decreased from CA$1,498 million to CA$1,177 million and the mine construction period was reduced from four to three years; 2) geological reserves decreased from 41,062t U_3O_8 to 36,923t U_3O_8 and the mine life decreased from eight to seven years; 3) unit operating cost slightly increased from US$6.77 per pound of U_3O_8 to US$7.18 per pound of U_3O_8; 4) the internal rate of return was 34%, net present value was CA$133 million, and the project payback period was 2.2 years. The two pre-feasibility study reports indicated that the project mining methods can be flexible and the underground-only mining method has potential advantages, which provide a good foundation for future feasibility studies of the PLS Project.

The table below presents a comparison of main economic indicators in the pre-feasibility study reports on the PLS Project's open pit/underground hybrid mining and underground-only mining:

Economic indicators	Open pit/underground hybrid operation	Underground-only mining
Total reserves (tU_3O_8)	41,062	36,923
Annual production (tU_3O_8)	6,500 for the first six years and 1,600 for the following two years	5,900 for the first five years and 3,000 for the following two years
Hydrometallurgicall recovery rate (%)	96.7	96.8
Total investment in mining construction (CA$ billion)	14.98	11.77
Mine construction period (years)	4	3
Mine life (years)	8 (six years by open pit method and two years by underground method)	7
Unit operating cost (US$/pound)	6.77	7.18
Internal rate of return (%)	21	34
Net present value (CA$ billion, discount rate of 8%)	1.32	1.33

Note: Assuming natural uranium selling price at US$50 per pound and CA$1=US$0.75

During the Reporting Period, the Company reviewed and expressed its technical comments on the two pre-feasibility study reports released by Fission on the open pit/underground hybrid mining plan and underground-only mining plan for the PLS Project. Based on adequate communication with its directors, the Company also conducted special studies on Fission's subsequent operating strategies.

Natural uranium trading business

For the year ended 31 December 2019, the Group realised revenue of HK$2,073 million from natural uranium trading.

Trading revenue from sales of natural uranium products from mines owned by Semizbay-U was HK$377 million, representing an increase of 5% compared to 2018 (2018: HK$360 million). Pursuant to the Former Sales Framework Agreements, natural uranium transactions between the Company and CGNPC-URC Group were conducted under a pricing mechanism of referencing to the long-term price index of natural uranium published by third-party index agencies with a floor price and a ceiling price. During the Reporting Period, all the Company's off-take of natural uranium products

from Semizbay-U were sold to CGNPC-URC Group. Based on the stable long-term cooperation between the parties, the Company maintained a good relationship with this major customer.

During the Reporting Period, CGN Global delivered a total 8.08 million lbs of natural uranium and realised trading revenue of US$219 million, with cost of sales of US$211 million and realised profit of US$1.93 million. Despite the sluggish natural uranium market, CGN Global made an active effort to grasp the short window of opportunities and successfully realised significant increases in delivery volume and trading revenue as compared to 2018.

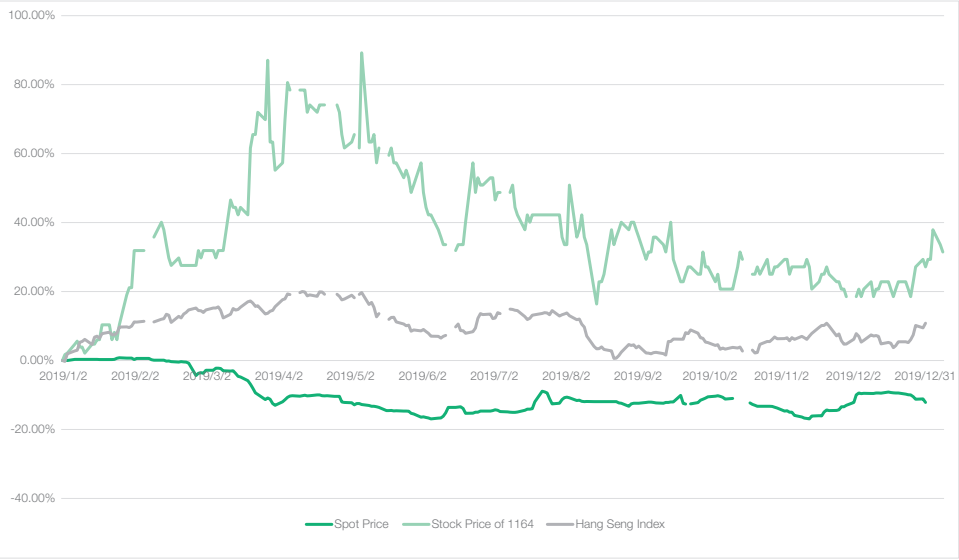
Developing New Projects

The New Kazakhstan Uranium Project has been the key work of the Company for these two years. During the Reporting Period, the Company continued to proceed with the project and launched multiple rounds of negotiations with its Kazakhstan partners. Due to the disagreement between two parties on some specific issues, progress of the New Kazakhstan Uranium Project was behind the original schedule. However, the Company and Kazatomprom have reached an agreement on an updated timetable and agreed to work together to push forward the project. Meanwhile, the Company also completed a comprehensive due diligence on the project during the Reporting Period, and reached a positive conclusion. The project is still under negotiations and hopefully to be launched in 2020.

Maintenance of Investor Relationship

To enhance its communications with Shareholders and the capital market, during the Reporting Period, the Company systematically optimised its investor relationship management, information disclosure, market promotion and industry research, and achieved satisfactory results. Notwithstanding a generally weak performance in the share prices of uranium mining companies around the globe and the decline of the natural uranium spot index by 13.08% over the same period, the Company's stock performance was acceptable, and the year-end closing price was 29.79% higher than that of the first business day of 2019.

Relative Performance of Share Price of CGN Mining (01164.HK), HSI and the Spot Price of Natural Uranium from 1 January 2019 to 31 December 2019



Source: Yahoo Finance and UxC

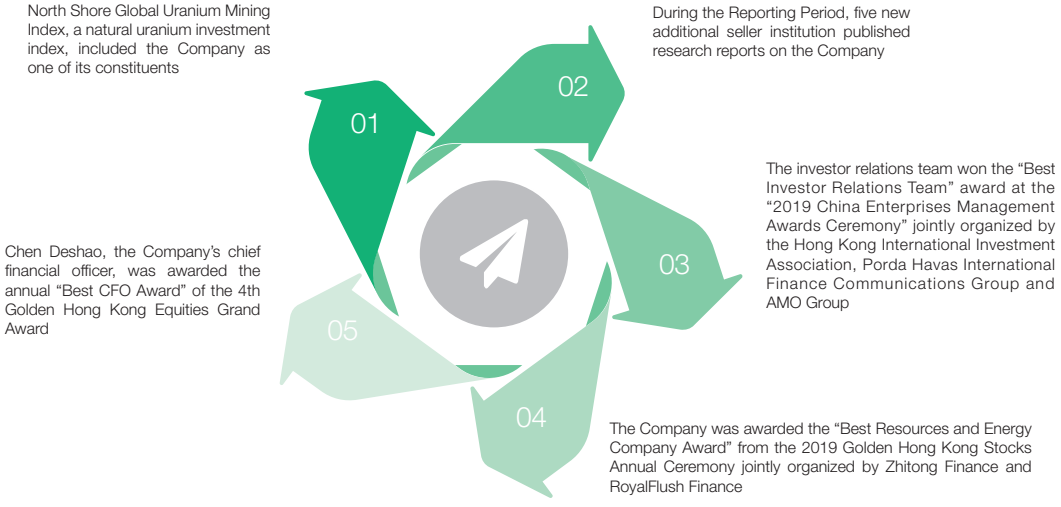
During the Reporting Period, the Company made several attempts to broaden its channels of direct communication and liaison with Shareholders. The key tasks during the year were as follows:

Channels	Key points
Annual general meeting	• Approved seven ordinary resolutions on 14 June
Extraordinary general meetings	• Approved the acquisition of 100% equity interest of CGN Global on 15 January • Approved the New Sales Framework Agreement, the New Financial Services Framework Agreement and the Sales and Purchase Agreement of Husab Uranium Concentrates on 27 September
Annual results presentation and interim results presentation The management and persons in charge of the Company's main business department were present	• Convened annual results presentation at Renaissance Harbour View Hotel on 27 March, with the attendance of 13 invited institutional investors and analysts

Channels	Key points
	• Convened interim results presentation at JW Marriott Hotel on 30 August, with the attendance of 38 invited institutional investors and analysts
Investor seminars Group discussion between potential investors and analysts	• Held investors' and analysts' breakfast meeting in the Company's conference room in May, with the attendance of 11 invited institutional investors and analysts • The investor relations team participated in the investor strategy meeting of Northeast Securities in July • The investor relations team participated in the investor strategy meetings of Haitong Securities in July, September and October • The investor relations team participated in the investor strategy meeting of Everbright Securities in September • The investor relations team participated in face-to-face communications about Hong Kong stock held by QuanJing in September
Industry summit The Company's CFO and investor relations team were present	• Attended "121 Mining" meeting and gave a keynote speech • Attended China Mining Congress and Expo and gave a keynote speech • Attended China Investment Summit and gave a keynote speech
Roadshow activities One-to-one communications between potential investors and analysts Regular reports and announcements	• Completed 184 one-to-one communications throughout the year

Channels	Key points
	• Released 21 announcements and two regular reports during the year • Two voluntary disclosure announcements
Company websites	• Company news and industry information • Policies and codes • Financial information and investors' contact • Briefing information for analysts
Official Company We Media channel Offical WeChat account, Futu, Tonghuashun and Snowball website accounts	• Successively created at the end of 2019
Official Company e-mail Receives investor enquiries and feedback	• By email: Ir.cgnmc@cgnpc.com.cn

Results achieved by the investor relations team in 2019:



BUSINESS PROSPECTS

BUSINESS ENVIRONMENT OUTLOOK

Nuclear power market forecast

For the first time since 2011, WNA has raised its expectations for future nuclear power and natural uranium demand – indicating the improving in global nuclear power development. China has broken the "zero approval of nuclear power project situation", with four to six new power units being expected to be approved annually in the future. Japan will continue to pursue its goal of "recovering nuclear power to 20% to 22% by 2030". France's target of 50% nuclear decommissioning has been delayed to 2030-2035. In the US, with increased subsidies for nuclear energy in the 2020 fiscal budget, extensions of lifetime for some nuclear power units are expected to be approved. Generally speaking, nuclear power development is expected to slow down in the European Union, remain stable in North America, and achieve faster growth in East Asia and related regions, marking a gradual shift of the centre of global nuclear power development to Asia.

Natural uranium market forecast

With references to the analyses and forecasts of major international institutions, the Company estimated that the fundamental oversupply situation in the natural uranium market in the next few years will stay unchanged. The market will slowly consume inventories, and the price will increase slightly in the long run. In such environment, the Company will take measures such as controlling production costs and strengthening risk control to ensure stable operation.

Nuclear fuel cycle market and industry analysis

As far as the conversion market is concerned, the price increase in the short term is largely determined by the urgency of conversion purchases by nuclear power companies. In the medium and long term, as the output of the COMURHEX II conversion plant increases and Metropolis conversion plant restarts its production, the conversion price will stabilise.

The uranium enrichment market faces larger uncertainties. The quota provision that Russia is allowed to export nuclear fuel of not more than 20% of the annual demand of the US under the US-Russia suspension agreement will expire in 2020. The current tension between the US and Russia makes it unclear whether the agreement will be extended, and if so, how the quota may be adjusted and what impact this, which will have significant impact on the enrichment price and remains to be seen.

BUSINESS DEVELOPMENT OUTLOOK

Operation of Semizbay-U, management and control of Fission

The Company will continue to participate in the operation management of Semizbay-U in 2020 to ensure the completion of its annual production, cost control target and the delivery of its committed offtake. Meanwhile, the Company will strengthen control on Semizbay-U's expenses through participation in board meetings and decision-making to ensure that the annual expenditure budget is not exceeded. Base on effective corporate governance and the management through expatriate team, the Company is able to exert its continuous influence on the finance, mining production and the operation of Semizbay-U to ensure its safe production and completion of the production plan. Additionally, in 2020, the Company will actively advocate the adoption of new mine production processes and technologies as well as mine digitalization as to strengthen automated management, and procure Semizbay-U to devote more effort in improving its resources/reserves in 2020 to support its sustainable development.

As to Fission, the Company will participate in and put impact on its decision-making of key issues through being its directors and will gradually strengthen the control over its technology and business management. In 2020, the Company will continue to urge Fission to complete the PLS Project feasibility study as planned and send personnel for technical exchanges with Fission, strengthen the review on the feasibility study report and formulate subsequent development plans for the PLS Project that fit market conditions.

Expanding trade business proactively

The Group will strengthen business contacts with end-customers such as nuclear power plant owners, participate in international market bidding proactively, strengthen its analyses of market conditions and counterparty behaviours, seize market opportunities, develop new business models and explore new trading business opportunities to ensure the achievement of annual trade targets.

Promoting the acquisition of new projects

While moving forward of the New Kazakhstan Uranium Project in 2020, the Company will also continue to identify and track other overseas high-quality and low-cost uranium resources projects, paying special attention to on low-cost projects such as in-situ leachable sandstone uranium mines in Central Asia, and approach potential targets at appropriate timing. At the same time, the Company will seek to establish strategic cooperation relationships with internationally renowned uranium producers and traders, and study the feasibility of jointly developing uranium mine projects in different modes.

Enhancing investor relationship

In 2020, the Company will continue to put efforts in optimising investor relationships, presenting good corporate image and improve investors' recognition of the Company, further enhancing investors on communications through various channels and interacting with more market participants, Additionally, it will reasonably strengthen voluntary disclosure, striving for more transparent disclosure of information.

Strengthening internal control

In 2020, the Company will continue to improve its internal control system, incorporate internal control requirements into the management procedure documents, and strengthen supervision of systems implementation to reduce internal control risks.

Improving incentive system

To establish a sound long-term incentive and restraint mechanism and support high quality development, the Company is examining the possibility of implementing a mid- and long-term incentive system based on its existing system, which aims to link the growth of employees with the development of the Company, encourage employees to contribute to the Company wholeheartedly, and stimulate overall corporate vitality.

RISK IDENTIFICATION AND MANAGEMENT

Upon systematic analysis, the Company is subject to the following three main risks in 2020:

International natural uranium trade risks

The uncertain price trend of natural uranium and the complexity of international trade lead to certain risks in the development of the international uranium trade. These include less-than-expected profit or even loss due to fluctuations in the price of natural uranium, breach of contract by the counter party and failure to recover receivables.

To reduce risks in natural uranium trading, the Company has taken measures to strengthen trade risk management and control. Firstly, establish a professional team to closely track and analyse global nuclear power development trends, the production movement of uranium mines and changes of the supply and demand in natural uranium, strengthen the ability on prediction of uranium price, and grasp market opportunities to purchase natural uranium at a lower cost. Secondly, cooperate with international credit rating institutions to comprehensively monitor the qualifications and performance capabilities of counterparties and require those counterparties with lower credit ratings to provide performance guarantees or prepayments to reduce trade risks. Thirdly, continue to strengthen internal management by improving trade exposure authorisation mechanism, a prevention and control system of counter party default risks and an information system to ensure that trade risks are controllable.

Financial security risks

Currently, the price of international natural uranium remains low. However, when taking into account the global nuclear power demand gap and inventory, it is expected that prices will reverse in the medium and long term, and rare opportunities occur for investments in uranium resources globally. Under these circumstances, the Company will continuously track high-quality and high-grade uranium mine projects and conduct mergers and acquisitions when appropriate. Considering that the self-owned capital can hardly meet the mid– and long-term merger and acquisition requirements, the Company will formulate a sound fund and financing plan based on a reasonable assessment of the economic and feasibility of potential projects, and introduce new strategic cooperation partners as appropriate to jointly develop and operate projects.

International operation risks

The business and projects of the Company are distributed in Kazakhstan, Canada, the UK and other countries. The uncertainties of the operating environment (political and economic situations, policies and regulations) in such countries and changes in the international situation such as Sino-US economic and trade frictions, may create higher risks for the Company's operations. Therefore, the Company has established a regular monitoring mechanism for the operating environments of overseas investment projects to track changes in the operating environments of Kazakhstan, Canada and the UK in a timely manner. An analysis report will be generated on major changes at the first instant and notify management and the Board in a timely manner so that an effective and scientific response measure can be taken.

FINANCIAL PERFORMANCE AND ANALYSIS

Financial performance reflects the operation performance of the Group throughout the year. By paying attention to changes in financial indicators, business development of the Group can be comprehensively understood.

OVERVIEW OF FINANCIAL RESULTS AND POSITION

Major Financial Indicators

	2019	2018 (Restated)
Profitability indicators		
Gross profit margin (%)[1]	6.93	8.11
EBITDA (HK$ million)[2]	199.14	174.41
EBITDA/Revenue (%)[3]	9.59	10.73
Net profit margin(%)[4]	7.71	7.51
Operation ability indicator		
Trade receivables cycle – average (Days)[5]	17	21
Inventory cycle – average (Days)[6]	200	181
Investment return indicators		
Return on equity (%)[7]	8.40	6.62
Profit attributable to owners of the Company to revenue ratio (%)[8]	7.71	7.51
Return on assets (%)[9]	5.55	4.40
Repayment ability indicators		
Bank balances and cash (HK$ million)	676.79	1,123.06
Net tangible assets (HK$ million)[10]	1,940.41	1,864.42
Gearing ratio (%)[11]	59.21	43.45

1. Difference between revenue and cost of sales divided by revenue multiplied by 100%.

2. The sum of profit before tax, finance costs, depreciation of right-of-use assets and depreciation of property, plant and equipment, if any.

3. The sum of profit before tax, finance costs, depreciation of right-of use assets and depreciation of property, plant and equipment, if any, divided by revenue multiplied by 100%.

4. Profit for the year divided by revenue multiplied by 100%.

5. Average receivables (i.e the arithmetic average of the beginning and the end of the Reporting Period) divided by average daily sales (revenue divided by 360 days).

6. Average inventories (i.e the arithmetic average of the beginning and the end of the Reporting Period) divided by average daily costs (costs divided by 360 days).

7. Profit attributable to owners of the Company divided by total average equity (i.e the arithmetic average of the beginning and the end of the Reporting Period) multiplied by 100%.

8. Profit attributable to owners of the Company divided by the revenue multiplied by 100%.

9. Profit attributable to owners of the Company divided by total average assets (i.e the arithmetic average of the beginning and the end of the Reporting Period) multiplied by 100%.

10. Interests of the Shareholders less intangible assets, net.

11. Total debt divided by total equity multiplied by 100%.

Financial results

The profit of the Company of 2019 were HK$160 million, representing an increase of 31% as compared to 2018.

REVENUE

	For the year ended 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2019	2018		
	HK$'000	*HK$'000* (Restated)	*HK$'000*	*%*
Natural uranium trading	2,073,449	1,623,859	449,590	28
Property investment	3,239	2,115	1,124	53
Total revenue	2,076,688	1,625,974	450,714	28

The revenue of the Group was HK$2,077 million, representing an increase of 28% as compared to that of HK$1,626 million in 2018, primarily because CGN Global aggressively expanded the global market and achieved a significant increase in sales volume and trading revenue of natural uranium as compared with the corresponding period in 2018.

Cost of sales

	For the year ended 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2019	2018		
	HK$'000	*HK$'000* (Restated)	*HK$'000*	*%*
Natural uranium trading cost	1,932,783	1,494,150	438,633	29
Property investment	–	–	–	–
Total cost of sales	1,932,783	1,494,150	438,633	29

The cost of sales of the Group was HK$1,933 million, representing an increase of 29% as compared to that of HK$1,494 million in 2018, primarily because CGN Global aggressively expanded the global market and achieved a significant increase in the sales volume and cost of sales of natural uranium as compared with the corresponding period in 2018.

Gross profit and gross profit margin of natural uranium trading

Due to the increase on the sales volume of CGN Global, the Group recorded a gross profit of natural uranium trading of HK$141 million, representing an increase of 8% as compared to that of HK$130 million in 2018, and the gross profit margin decreased from 8% in 2018 to 7% in 2019.

Other operating income

The other operating income of the Group was HK$20 million, representing a decrease of 31% as compared to that of HK$29 million in 2018, mainly due to the significant decrease in fund deposited in CGNPC Huahseng through optimising the internal utilisation of financial resources of the Group, resulting in decrease in the interest income dramatically.

Selling and distribution expenses

Selling and distribution expenses amounted to HK$8 million, representing a decrease of 20% as compared to that of HK$10 million in 2018, mainly due to the Group's increased effort on the expenditure control.

Administrative expenses

Administrative expenses of the Group were HK$37 million, representing a decrease of 14% as compared to that of HK$43 million in 2018, mainly due to stronger efforts were made on implementing "cost reduction and efficiency improvement" measures and tightening the expenditure control.

Share of results of a joint venture

The joint venture of the Company is Semizbay-U. The share of results of a joint venture was HK$65 million, representing an increase of 25% as compared to that of HK$52 million in 2018, mainly due to devaluation of Kazakhstan currency and the enhanced cost control of Semizbay-U.

Share of results of an associate

The associate of the Company is Fission. The share of results of an associate was HK$12 million, which includes share of loss for the Reporting Period of HK$6 million and the reversal of long-term investment impairment of HK$18 million.

During the Reporting Period, part of the share options granted by Fission to its directors and employees were exercised and 605,448 ordinary shares were issued. As a result, the equity interests in Fission held by the Company on 31 December 2019 decreased to 19.88% (31 December 2018: 19.90%).

Finance costs

The finance costs of the Group was HK$20 million, which was decreased by 37.5% as compared to the restated finance cost of HK$32 million in 2018, mainly due to the decrease in interest expenses through optimising the utilisation of financial resources of the Group.

Income tax expenses

Income tax expense of the Group was HK$16 million, representing a decrease of 11% as compared to that of HK$18 million in 2018.

Profit for the year

The profit of the Group in 2019 was HK$160 million, representing an increase of 31% as compared to the same period in 2018, mainly due to an increase of gross profits, the significant growth in share of results of the joint venture and the significant decrease in operating expenditures as compared to 2018.

ASSETS CONDITION AND ANALYSIS

Total Assets

As at 31 December 2019, the Group's total assets amounted to HK$3,095 million, representing an increase of HK$420 million as compared to HK$2,675 million as at 31 December 2018, mainly due to the significant increase in natural uranium inventories of the Group.

Total Liabilities

As at 31 December 2019, the Group's total liabilities amounted to HK$1,151 million, representing an increase of 42% as compared to 31 December 2018, mainly due to the increase of loan from a fellow subsidiary.

Net current Assets

As at 31 December 2019, the Group's net current assets was HK$1,766 million, representing an increase of 32% as compared to HK$1,341 million as at 31 December 2018, mainly due to the significant increase of inventory and trade receivables.

Current Assets

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2019	**2018**		
	HK$'000	*HK$'000* (Restated)	*HK$'000*	*%*
Inventories	1,441,980	703,300	738,680	105
Trade and other receivables	126,706	76,483	50,223	66
Amount due from an intermediate holding company	3,875	5,375	(1,500)	(28)
Income tax recoverable	1,737	8,728	(6,991)	(80)
Bank balances and cash	676,793	1,123,056	(446,263)	(40)
Total current assets	2,251,091	1,916,942	334,149	17

As at 31 December 2019, the Group's current assets was HK$2,251 million, representing an increase of HK$334 million as compared to 2018, which was mainly due to the significant increase in natural uranium inventories of the Group.

As at 31 December 2019, the aggregate amount of bank balances and cash of the Group was approximately HK$677 million representing a decrease of HK$446 million year-on-year, among which approximately 32% (31 December 2018: 30%) was denominated in HKD, 67% (31 December 2018: 68%) was denominated in USD, and 1% (31 December 2018: 2%) was denominated in RMB.

As at 31 December 2019, the Group did not have any bank deposits and cash pledged to any banks (31 December 2018: Nil).

As at 31 December 2019, the proportion of current assets of the Group over total assets was 73% (31 December 2018: 72%), and the proportion of bank balances and cash over total assets was 22% (31 December 2018: 42%).

Non-current Assets

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2019	**2018**		
	HK$'000	*HK$'000* (Restated)	*HK$'000*	*%*
Property, plant and equipment	160	14,466	(14,306)	(99)
Right-of-use assets	3,836	–	3,836	N/A
Investment properties	48,595	30,359	18,236	60
Interest in a joint venture	237,775	190,706	47,069	25
Interest in an associate	553,522	521,538	31,984	6
Deferred tax assets	–	496	(496)	(100)
Rental deposits	387	–	387	N/A
Total non-current assets	844,275	757,565	86,710	11

As at 31 December 2019, the non-current assets of the Group were HK$844 million, representing an increase of 11% year-on-year, due to the increase in interests in a joint venture and an associate.

Current Liabilities

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2019	**2018**		
	HK$'000	*HK$'000* (Restated)	*HK$'000*	*%*
Trade and other payables	36,382	30,476	5,906	19
Loans from a fellow subsidiary	422,559	527,560	(105,001)	(20)
Lease liabilities	1,703	–	1,703	N/A
Amount due to an intermediate holding company	8,373	6,132	2,241	37
Amount due to a joint venture	5,513	5,513	–	–
Amounts due to fellow subsidiaries	1,421	1,668	(247)	(15)
Income tax payable	9,555	4,246	5,309	125
Total current liabilities	485,506	575,595	(90,089)	(16)

As at 31 December 2019, the Group's current liabilities were HK$486 million, representing a decrease of 16% as compared to 2018, mainly due to the decrease in short-term external loans through optimising the utilisation of financial resources of the Group.

Non-current liabilities

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2019	2018		
	HK$'000	*HK$'000* (Restated)	*HK$'000*	*%*
Deferred tax liabilities	19,104	18,126	978	5
Loans from a fellow subsidiary	644,494	216,368	428,126	198
Lease liabilities	2,021	–	2,021	N/A
Total non-current liability	665,619	234,494	431,125	184

As at 31 December 2019, the non-current liabilities of the Group were HK$666 million, representing an increase of 184% as compared to 2018, primarily due to the increase in long term loans from a fellow subsidiary.

Total equity

	As at 31 December		Movements Increase/ (Decrease)	Percentage change Increase/ (Decrease)
	2019	2018		
	HK$'000	*HK$'000* (Restated)	*HK$'000*	*%*
Share capital	66,007	66,007	–	–
Reserves	1,878,234	1,798,411	79,823	4
Total equity	1,944,241	1,864,418	79,823	4

As at 31 December 2019, total equity of the Group amounted to HK$1,944 million, representing an increase of 4% year-on-year, mainly due to the increase of profit during the Reporting Period.

The Group's gearing ratio (total debt divided by total equity multiplied by 100%) was 59% (2018: 43%).

Assets and investments

Prior to the Reporting Period, the Company entered into a sale and purchase agreement with China Uranium Development for the acquisition of 100% equity interest in CGN Global, which was completed on 17 January 2019. The consideration of this acquisition was US$8.55 million in which CGN Global contributed profit of US$1.93 million in 2019. The Company received a favorable return for the acquisition.

Save for this transaction and the interests in Semizbay-U and Fission, the Group did not hold any other significant investment or have any other major investment, acquisition or disposal during the Reporting Period.

Investment direction

According to business positioning and development strategy of the Group, the main investment direction of the Group remains to be acquiring competitive overseas uranium resource projects with low cost. The Group will carry out relevant investment activities as and when appropriate, to laid the foundation of further development of the Company.

Financial capital

Capital structure

As at 31 December 2019, the Company had a total of 6,600,682,645 ordinary shares in issue (31 December 2018: 6,600,682,645), and the market value of the Company was approximately HK$2,013 million (31 December 2018: HK$1,580 million).

Liquidity risk and financial resources

The Company adheres to prudent capital and treasury policy and goals. During the Reporting Period, the Company's operating fund was mainly from the cash generated from operating activities and external borrowings. The capital requirements of the Group mainly come from the possible acquisition expenses of acquiring natural uranium resources and funds for operation.

The Group has sufficient financial resources for daily operation and business and does not have seasonal borrowing demands. If any suitable acquisition opportunity arises in the future, the Group will raise funds from diverse financing channels.

The Company's financing capacity is affected by multiple external and internal factors. To obtain financing on more favourable terms, the Company must understand the external financing environment and adopt a reasonable financing model and strategies based on its structure of assets and liabilities.

The Company pays close attention to financial market trends, considers its responses to internal and external financial risks, formulates reasonable models and strategies to ensure the safety and economical efficiency of financing, and takes strict management measures for debt risks to prevent exposure to related risks and to facilitate the financial health and development of the core business.

Financing model

Given the complex and ever-changing financial market, the Company has been exploring diverse financing methods and strives to establish a financing model with combination of short-, medium-and long-term capital, merged direct and indirect financing and multiple financing channels to ensure the protection of a stable fund. In the process of debt financing, the Company has taken a balanced approach to both cost and safety. The Company is committed to the pursuit of a competitive financing cost rather than the lowest one to ensure the security of financing and the quality of service received.

For projects with large capital expenditures and sound expected returns, the Company will prudently consider using equity financing to balance risks and enhance Shareholder value.

FINANCIAL RISK MANAGEMENT

The Group's development comes with various financial risks, such as debt risk and exchange rate risks.

Risk management of debt

As at 31 December 2019, the borrowings from a fellow subsidiary of the Company were HK$1,067 million. The loans were unsecured and interest bearing ranging from 3.2% to 4.6% per annum.

To manage liquidity risk, the Company closely monitors the cash, cash equivalents and unutilised credit to ensure sufficient liquidity for operation and to reduce the effects of cash flow volatility. The Company's management also keeps an eye on external borrowing to ensure a sufficiency of available borrowing credit. As at 31 December 2019, the Company has undrawn borrowing credit of US$522 million (2018: US$404 million), which can be utilised to provide sufficient cash for the Group's operation and to reduce the impact of cash flow volatility.

Exchange rate risk

The Company's functional currency is US$. During the Reporting Period, the Group's sale and purchase of products were mainly settled in US$ and RMB (2018: US$ and RMB), while its cash was mainly denominated in US$ and HK$ (2018: US$ and HK$). Daily expenses including administrative expenses, sales and distribution expenses, were mainly settled in US$, HK$ and RMB (corresponding period of 2018: US$, HK$ and RMB). Loans were all denominated in US$. The Group was not subject to any material exchange rate risk during the Reporting Period.

For exchange rate risk management, the Company aims to control cost rather than profitability. During the Reporting Period, the Group had no forward foreign exchange contracts, interests or currency swaps or other financial derivatives for hedging purposes, and experienced no significant difficulty or impact on its operation or liquidity due to exchange rate fluctuation.

CONTINGENCY EVENTS

External guarantees

During the Reporting Period, the Group did not have any external guarantee (2018: Nil). The Company did not provide any guarantee to its subsidiaries or other companies, nor allow subsidiaries to provide any form of guarantee to any entities or individuals without the approval of the Company.

Pledge of assets

During the Reporting Period, the Group did not have any pledge of assets (2018: Nil).

Contingent liabilities

As at 31 December 2019, the Group did not have any material contingent liabilities (31 December 2018: Nil).

Legal proceedings

The Company confirms that there was no litigation, and that it was nor aware of any pending or threatened litigation against it, which had or could have a material and adverse effect on its financial condition or operation during the Reporting Period.

CHANGES IN ACCOUNTING POLICIES

Details of changes in accounting policies as required under the applicable accounting standard are explained in notes 2 and 3 to the Consolidated Financial Statements.

For the year ended 31 December 2020

The following management discussion and analysis of the Group were extracted from the 2020 annual report of the Company and the phase "Reporting Period" in this sub-section refers to the year ended 31 December 2020.

BUSINESS REVIEW

The Group is principally engaged in natural uranium investment and trading. As of 31 December 2020, the Company held 49% equity interest and off-take rights of products in Semizbay-U, 16.74% equity interest in Fission, as well as wholly-owned subsidiaries Beijing Sino-Kazakh, CGN Global and CGNM UK Ltd..

In 2020, the Group achieved revenue of HK$2,862 million and profits attributable to owners of the Company of HK$155 million.

Analysis of business environment

The nuclear power market and its development

According to data released by International Atomic Energy Agency, there were 443 nuclear power units in operation worldwide by the end of 2020, with a total installed capacity of 393,080MWe, and nuclear power units in operation and under construction are scattered in 32 countries and regions. In 2020, there were five newly grid-connected units worldwide, with a total installed capacity of 5,521MWe; four units with a total installed capacity of 4,473MWe commenced construction; and six closed units with a total installed capacity of 5,165MWe. The world's total net installed capacity showed an increasing trend, and the focus of global nuclear power generation is shifting from traditional nuclear power countries to emerging economies.

Newly grid-connected units, units commenced construction, and closed units around the world in 2020

Newly Grid-connected Units				Units commenced construction			Closed Units		
No.	Name	Installed Capacity *(MWe)*	Country	No.	Name	Installed Capacity *(MWe)*	Country	No.	Name	Installed Capacity *(MWe)*	Country
1.	BARAKAH-1	1,345	United Arab Emirates	6.	AKKUYU-2	1,114	Turkey	10.	DUANE APNOLD-1	601	United States
2.	BELARUSIAN-1	1,110	Republic of Belarus	7.	SANAO-1	1,117	China	11.	FESSENHEIM-1	880	France
3.	FUQING-5	1,000	China	8.	TAIPINGLING-2	1,116	China	12.	FESSENHEIM-2	880	France
4.	LENINGRAD2-2	1,066	Russia	9.	ZHANGZHOU-2	1,126	China	13.	INDIAN POINT-2	998	United States
5.	TIANWAN-5	1,000	China					14.	LENINGGRAD-2	925	Russia
								15.	RINGHALS-1	881	Sweden

Note: 1. Data source: International Atomic Energy Agency

2. The "-number" in the name column represents the unit serial number of the nuclear power unit project.

The details of global nuclear power units in the short to medium term are as follows:

- Leningrad II-2 nuclear power unit 2 in Russia was connected to the grid for power generation in October 2020.

- The first nuclear power unit in Belarus was connected to the grid in November 2020, and the construction of its unit 2 is scheduled to be completed in the middle of 2022.

- In November 2020, Turkey announced that the unit 3 in Akkuyu nuclear power plant had obtained construction permit. Besides, unit 1 had obtained construction permit in 2018 and is expected to be put into operation in 2023.

- Ringhals-1 unit in Sweden was officially retired from service in December 2020, and the remaining unit 3 and unit 4 are expected to operate for more than 20 years.

- Affected by cheap natural gas and new energy, the nuclear power units in operation in the US were at a competitive disadvantage in the open power market, but the enterprises also applied to its government to extend the life cycle of nuclear power units in the states where the power market was regulated. The US will continue to invest in research and development of advanced nuclear energy technology to maintain the leading position in nuclear energy technology. The US Senate and the House of Representatives passed the Nuclear Energy Leadership Act (NELA) in July and September 2020, respectively, which required the Department of Energy to provide support for the development and construction of new and advanced reactors, provide nuclear fuel supply, cultivate nuclear energy talents, support the federal agencies to sign long-term power purchase agreements, and create the commercial environment for new reactors. Furthermore, two nuclear power plants in the US are expected to put into production in 2021 and 2022.

- Germany, being the most concrete country which announced its nuclear abandoning attitude among major nuclear power countries, still has six nuclear power units in operation and plans to close them all by the end of 2022.

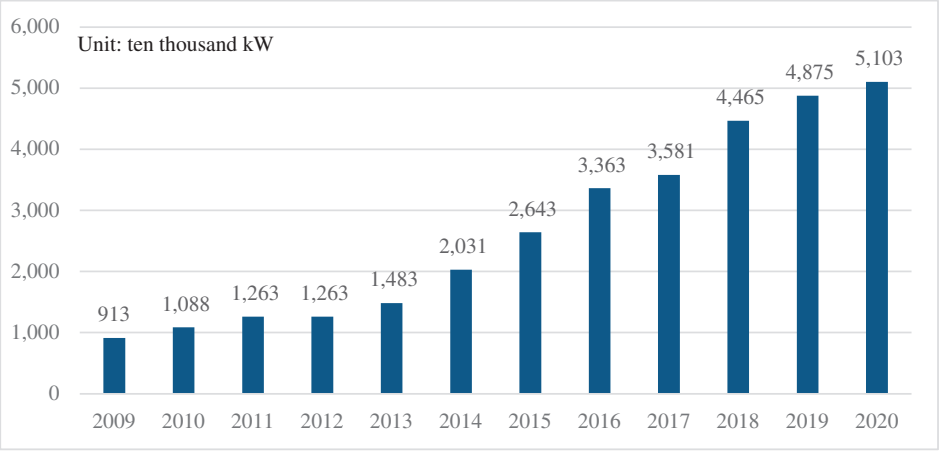
- France is still the country with the highest proportion of nuclear power in the world, with 56 nuclear power units currently in operation, providing approximately 70% of power supply of the country, and with an EPR unit under construction, which is expected to be loaded in 2022. According to its Energy Transition Law for Green Growth, enacted in 2015, it aims to reduce the proportion of nuclear power to 50% by 2035.

- By the end of 2020, 9 nuclear power units in Japan have been restarted, all of which are pressurized water reactors, and 18 nuclear power units were still under review for restarting operation. In October 2020, the Japanese government announced that it planned to achieve carbon neutrality by 2050. In view of 88% of its current energy supply coming from fossil fuels and almost all of them relying on imports, coupled with the electricity power shortage in the winter of 2020, the Ministry of Economy, Trade and Industry of Japan believes that the development of nuclear energy is crucial.

In China

According to data released by the China Nuclear Energy Association, there were 49 nuclear power units in operation in China (excluding Taiwan Region of the PRC) with a rated installed capacity of 51,027 MWe as of 31 December 2020. In 2020, the total power generation of the country was 7,417,040 million kWh, and the total power generation from nuclear power units was 366,243 million kWh, accounting for 4.94% of the total power generation of the country. Power generation by nuclear power units in 2020 represented a year-on-year increase of 5.02% compared with 2019 and the cumulative on-grid power generation was 342,854 million kWh, representing a year-on-year increase of 4.89% compared with 2019.

Growth of Installed Capacity of Nuclear Power in China from 2009 to 2020



Major events in China's nuclear power industry during the Reporting Period:

- On 10 August, Tianwan Unit 5 was successfully connected to the grid for power generation.
- On 2 September, the State Council approved the Hainan Changjiang Phase II project and the San'ao Nuclear Power Phase I project.
- On 4 September, the construction of Zhangzhou Unit 2 in Fujian Province commenced.
- On 15 October, the construction of Taipingling Unit 2 in Huizhou, Guangdong Province commenced.
- On 27 November, the world's first nuclear reactor of "Hualong One"-Unit 5 of Fuqing nuclear power plant was connected to the grid for the first time.
- On 28 November, the first overseas nuclear reactor of "Hualong One"-Unit 2 of Karachi nuclear power plant in Pakistan started loading.

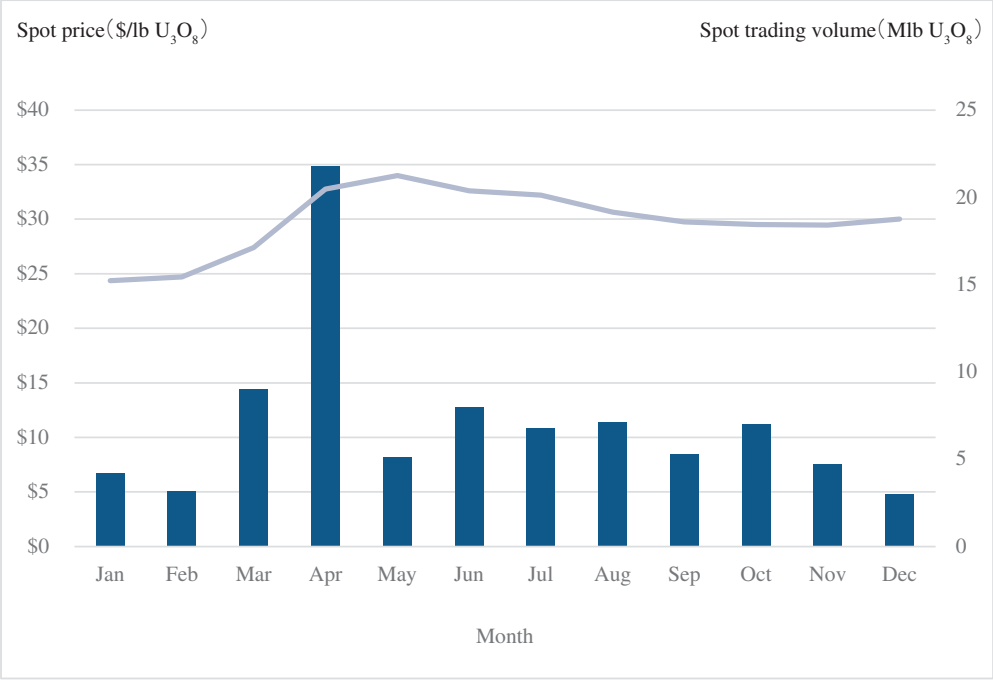
- On 31 December, Unit 1 of San'ao nuclear power plant in Zhejiang Province began pouring the first tank of concrete on the nuclear island and officially commenced the construction.

Global natural uranium market and industry development

Due to the impact of the COVID-19 epidemic, major natural uranium producers in the world announced to reduce or suspend production in 2020, such as, Cameco Corp. announced to suspend the production of Cigar Lake uranium mine in March (subsequently resumed in September and suspended again in December due to the intensification of the COVID-19 epidemic) and the uranium mines of Kazatomprom implemented a three-month production reduction; besides, the production of major uranium mines such as Husab and Rossing uranium mines in Namibia was also affected by different extents. The output of natural uranium was approximately 47,000tU in 2020, representing a decrease of 17% as compared with 2019, which is the lowest point since 2008, accounting for only 69% of the global natural uranium demand in the year.

Affected by the suspension of production of Cigar Lake uranium mine in March, the trading volume of natural uranium spot trading surged between late March and April, and the single-month trading volume in April broke the historical record. Spot prices increased from US$24/lb to US$26/lb at the beginning of the year to US$34/lb at the end of May, which is the highest point of the year. Spot prices declined gently to below US$30/lb after June, but recovered to US$30/lb by the end of the year. According to data released by UxC, the global spot trading volume of natural uranium was 35,503tU in 2020, representing an increase of 43% as compared with 2019, with average trading size decreased and the trading frequency increased. It was observed that natural uranium producers sought procurement opportunities in the spot market after they reduced their production capacity and the activities of natural uranium traders and financial investors increased dramatically, while the direct procurement demand from nuclear power plants owners remained pent-up and delayed.

In 2020, the long-term trading volume of natural uranium was approximately 21,560tU, representing a decrease of approximately 42% as compared with 2019. According to the data from UxC, the long-term price fluctuated between US$31/lb to US$33/lb in 2020, while according to the data from TradeTech Inc., the long-term price fluctuated between US$33/lb to US$39/lb in 2020.



BUSINESS PERFORMANCE AND ANALYSIS

Uranium mines under production – production of Semizbay-U

Due to the impact of the COVID-19 epidemic, Semizbay Mine and Irkol Mine reduced its production volume to 299tU and 434tU, both completed its annual production plan, but the total production was decreased by 24% as compared with 2019. However, based on the foundation of good cooperation between the two parties for years and active communication, the Company kept its natural uranium off-take amount of 588tU from Semizbay-U in 2020.

During the Reporting Period, Semizbay Mine developed four new blocks with 326 boreholes drilled and approximately 409tU developed reserves expanded; and Irkol Mine developed five new blocks with 333 boreholes drilled and approximately 435tU developed reserves expanded. The total exploration expenses of Semizbay Mine and Irkol Mine were 3 billion tenge (approximately HK$55.06 million).

As at 31 December 2020, the uranium reserves of Semizbay-U were as follows:

		Semizbay Mine	**Irkol Mine**
Reserves	Average Grade	0.055%	0.0422%
	tU	10,120	15,234

Uranium mine project pending for development – operation and project exploration by Fission

There were changes in Fission's management in 2020. The former chief operating officer Mr. Ross McElroy has been promoted as the chief executive officer, new management and technical team have been engaged and a new company development plan has been formulated to meet the need in promoting the PLS project to the development phase, which mainly comprises:

(1) Putting forward the development path of Fission, promoting the development of the PLS Project by strengthening operation team and obtaining financial resources, and continuously improve the image of the company.

(2) Evaluating potential financing pathway of Fission. To implement the new development plan, Fission conducted two rounds of financing in 2020 with proceeds of CA$24.07 million (approximately US$19.26 million), which secured the financial resources for commencement of infill drilling and other works.

(3) Formulating a new 6-year (2021 to 2026) development plan for the PLS Project, where the total expenditure is approximately US$56 million, including US$12.40 million for infill drilling, US$27.20 million for feasibility studies, and US$16.30 million for licenses and permits and social impacts. Approximately US$41.50 million are urgently needed in 2021 and 2022 for feasibility studies and environmental assessments.

During the Reporting Period, Fission had not carried out any exploration activity.

Natural uranium trading business

For the year ended 31 December 2020, the Group achieved revenue of HK$2,859 million from natural uranium trading, increased by 38% as compared to 2019. Trading revenue from sales of natural uranium products from mines owned by Semizbay-U was HK$425 million, representing an increase of 12.5% compared to 2019 (2019: HK$377 million).

During the Reporting Period, CGN Global sold a total 4,168tU and realised trading revenue of approximately HK$2,434 million, with realised profit of approximately HK$60 million. Although the price of natural uranium in 2020 was still at the low point in the historical cycle and face to face communication with customers was impracticable due to the epidemic in 2020, CGN Global made an active effort to grasp the opportunities and still realised significant improvement in operating performance compared to 2019.

As of 31 December 2020, the Group held 3,142tU of natural uranium (approximately 8.17 million pounds of U_3O_8), with a weighed average cost of US$27.90 per pound of U_3O_8, and had 5,096tU of natural uranium sales contracted but not delivered (approximately 13.25 million pounds of U_3O_8), with a weighed average selling price of US$32.28 per pound of U_3O_8.

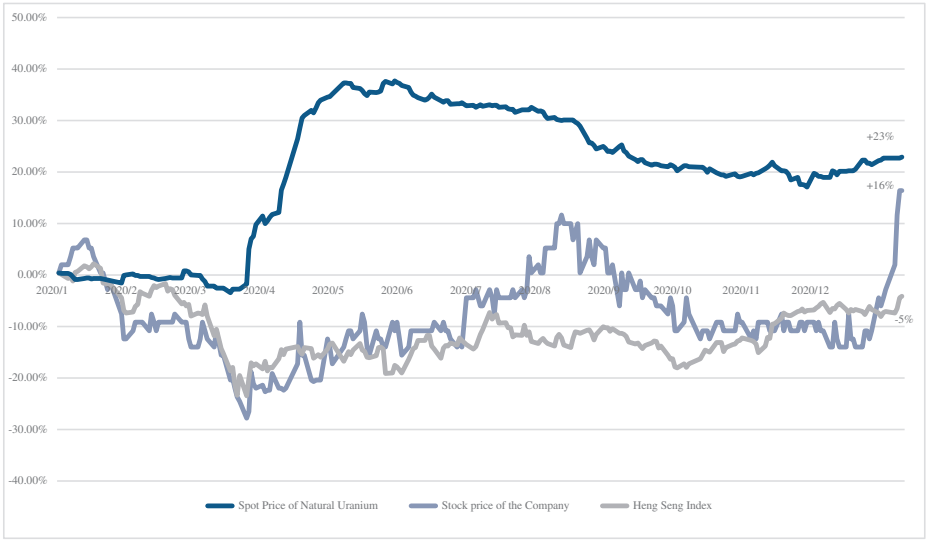
Acquisitions of New Uranium Projects

The New Kazakhstan Uranium Project has been the primary task of the Company in recent years. During the Reporting Period, the Company had completed a round of supplemental due diligence and launched multiple rounds of negotiations with its Kazakhstan partner. The Company has reached an intention with Kazatomprom in principle to complete the transaction by 30 June 2021.

Maintenance of Investor Relationship

Investor relationship management met new challenges in 2020. To enhance its communications with Shareholders and the capital market, during the Reporting Period, the Company improved its investor relationship management through online communication, systematically optimised its information disclosure, market promotion and industry research, and achieved satisfactory results.

Relative Performance of Share Price of CGN Mining (01164.HK), HSI and the Spot Price of Natural Uranium from 1 January 2020 to 31 December 2020



Source of spot price index of natural uranium: UxC

During the Reporting Period, the Company made several attempts to broaden its channels of direct communication and liaison with Shareholders. The key tasks during the year 2020 were as follows:

Channels	Key points
Annual general meeting	• Approved 8 ordinary resolutions on 18 June
Annual results presentation and interim results presentation	• On 27 March, the annual results conference was held via telephone under the chairmanship of BOCI • On 26 August, with the support of Essence Securities, the interim results conference was held through Tencent conference and Futu live broadcast
Investor seminars and roadshows communication	• 117 seminars and roadshows
Increase in natural uranium industry index fund holdings	• North Shore Global Uranium Mining ETF increased its holdings in the Company by 41.63 million shares. The Global X Uranium ETF re-incorporated the Company into its constituent stocks.
Company awards	• The Company received the best "Energy and Resources Listed Company" and "Best CEO" awards from Golden Hong Kong Stock.
Regular reports and announcements	• Released 13 announcements and 2 regular reports throughout the year • Including 3 voluntary disclosure announcemnets
Company websites (http://www.cgnmc.com/)	• Company news and industry information • Policies and codes • Financial information and investors' contact • Briefing information for analysts
Official Company We Media channel	• The official Wechat account, the corporate accounts on Futu, Flush and Xueqiu.com, and the investor relations WeChat applet have been created
Official Company e-mail Receives investor enquiries and feedback	• ir.cgnmc@cgnpc.com.cn

BUSINESS PROSPECTS

BUSINESS ENVIRONMENT OUTLOOK

Nuclear power market forecast

Low-carbon has never been more widely recognized in the world like it is today. On 22 September 2020, the Chinese President Xi Jinping announced at the 75th session of the United Nations General Assembly that "China will scale up its nationally determined contributions and adopt more vigorous policies and measures, strive to peak carbon dioxide emissions before 2030, and achieve carbon neutrality before 2060". Countries such as Japan, South Korea, and Canada successively announced in 2020 the plan for realization of carbon neutrality. In January 2021, the President of the US, Biden, announced the return to the Paris Agreement. The US and European Union jointly announced that they would achieve carbon neutrality by 2050 in March 2021. According to a research report issued by the International Energy Agency, nuclear power accounted for 18% of the total power generation among developed economies in 2018, which was the largest low-carbon energy sourcre, contributed nearly half of the low-carbon power in the past half century and was an important contributor to the global energy transition. However, emerging economies are expected to succeed the developed countries as the main players in vigorously developing nuclear power in the future.

On 5 March 2021, the Chinese Premier Li Keqiang proposed in government report: Promote clean and efficient use of coal, vigorously develop new energy, and actively and orderly develop nuclear power under the premise of ensuring safety. This is the first time in the past ten years that the word "actively" was used in mentioning the development to nuclear power in Chinese government's work report. According to the estimation of the China's Annual Development and Outlook of Nuclear Energy (2020) published by the China Nuclear Energy Industry Association, the future position of nuclear energy in China's energy structure will be clearer, and the pace of nuclear power construction is expected to be stabilized. China's nuclear power construction is expected to continue steadily at a rate of 6 to 8 units per year during the "14th Five-Year" and mid– to long-term periods and it is estimated that China's nuclear power installed capacity in operation will reach 70 million kW by 2025 with 30 million kW under construction. The total installed nuclear power capacity in operation and under construction will reach 200 million kW by 2035.

We believe that nuclear power, with its advantages of zero carbon emission, fearless of climate changes and its capability of being base load, will play an increasingly important role in the worldwide carbon neutrality movement.

Natural uranium market forecast

As the COVID-19 epidemic rebounded at the end of 2020 in Canada and Kazakhstan, major producers of uranium in the world, certain natural uranium mines stopped production. Moreover, the industry has been starved of capital investment for years, and there were no new uranium projects receiving sufficient capital for

development in the market, which means that it will be difficult for new projects to form new production capacity rapidly even if natural uranium prices rise in the short term. Therefore, although the global supply of natural uranium is expected to recover in 2021 as compared with 2020, it is unlikely to recover to the level before the outbreak of the epidemic, and the market demand will continue to exceed production and the inventory of natural uranium will be further consumed.

Meanwhile, both newly constructed nuclear power plants in global emerging economies and the demand brought by the expiration and renewal of long-term trade contracts signed historically will bring more mid– to long-term procurement demands by nuclear power plants owners and enhance recovery impetus to the natural uranium market in 2021.

BUSINESS DEVELOPMENT OUTLOOK

Operation Management of Semizbay-U

Faced with the situation that Semizbay-U was forced to reduce production under the impact of the COVID-19 epidemic, the Company will actively participate in its governance through its board of directors in 2021 to ensure the completion of its annual production plan and product sales tasks so as to achieve annual profit targets. The field team will strengthen the supervision of the implementation on the annual production, operation plan and the annual budget to ensure that the enterprise's business objectives are achieved under the premise of safe production. Moreover, in 2021, Semizbay-U will continue to promote innovation in mineral production and new technology, optimize the construction of digitalized mines and improve the standard of automated management. Meanwhile, in order to promote the sustainable development of Semizbay-U, the Company will continue to promote the enhancement of its resources/reserves in 2021.

Management and Control on Fission

In respect of Fission, the Company mainly relies on participation in its board of directors to involve in its major decision-making and exert influence, while continuously deepen the technical support for the PLS project and enhancing regular technical exchange. In 2021, the Company will support Fission in completing the winter and summer exploration programs as scheduled and finishing the upgrade of part of the R780E and R840W areas of the PLS project from inferred level to indicated level so as to extend the designed life of mines. The Company also plans to hire a local technical personnel to participate in the field work of Fission in Canada to increase technical management for the PLS project and enhance collaboration efficiency.

Active Expansion of Trading Business

The Group will strengthen its business dealings with end customers, such as global nuclear power plants owners, actively participate in international market bidding, deepen its analysis of market conditions and counterparties' behaviors, seize market opportunities, develop new business models and actively explore new trading opportunities to ensure the achievement of annual trade targets.

Acquisition of New Uranium Resources Projects

The Company is optimistic about the continuous growing trend of natural uranium demand brought by the long-term stable development of global nuclear power. Given the current price of natural uranium is still at the low point in the historical cycle, the Company will seize this historical opportunity and take the investment and acquisition of high-quality uranium resources as its lifeline of development. In 2021, the Company will strive to implement the relevant completion work on New Kazakhstan Uranium Project in the first half of the year on the one hand, and will seek for potential uranium resource investment opportunities in major uranium-producing regions such as Central Asia and Africa on the other hand, and start to build a sustainable development resources pipeline of "exploration+in-production". Furthermore, the Company will seek for establishing strategic cooperative relationships with internationally renowned uranium producers and traders to study the feasibility of joint development of uranium projects in various modes.

RISK IDENTIFICATION AND MANAGEMENT

The comprehensive risk management system of the Company functioned effectively in 2020 with all risks under monitor and no significant risk incident happened. The major work completed including:

a. Implementing of dynamic risk management mechanism. The middle and senior management of the Company were requested to rate the annual risk list to identify major risks scientifically. The major risks were tracked, monitored and were reported to the management and the Board regularly, utilising the dynamic monitoring of major risks. The risk list has been timely identified and updated based on business progress so as to determine the trend of risk as well as update and implement corresponding response measures.

b. Establishing risk management information system. The risk management efficiency has been improved by utilising the informatization and visualization of risk management tracking.

c. Managing major specific risks of the Company well and to optimise the risk management of subsidiaries and companies with shareholding interests. To deal with the major risks which may bring material impacts to the Company

such as changes in the international political environment and the spread of epidemic, the Company has established a specific research mechanism and implemented weekly tracking, realizing dynamic risk monitoring.

Upon systematic analysis, the Company is subject to the following two main risks in 2021:

International natural uranium trade risks

Affected by the COVID-19 epidemic, CGN Global still faces challenges in securing contracts with nuclear power plants owners for the sale of natural uranium and in identifying trade opportunities. To reduce the risk of natural uranium trade, the Company will sort out and optimize the authorization mechanism for exposure (i.e. purchase of natural uranium without the sales customers secured). Leveraging on the market opportunities, the Company will actively expand trade business in Europe and other regions, explore new business models such as the trade of UF6 (intermediate product in the production of nuclear fuel), and strive to achieve the annual target of the trade business. We will also vigorously develop the global natural uranium market, increase the proportion of sales to overseas customers, and try to win the bid of more sales to international nuclear power plants owners.

Production and operation risk of Semizbay-U

As the COVID-19 epidemic in Kazakhstan has not been effectively controlled and is not expected to end in the short term, Semizbay-U will face challenges in achieving its annual production and profit targets. To this end, the Company will assist Kazatomprom to carry out the epidemic prevention and production works on the mining site, continuously conduct nucleic acid test by all the staff before work, strictly prevent cluster infection, and strive to ensure that the mine production and operation will not be affected in the year. We will monitor the production progress of the two mines on a daily basis to ensure the timely completion of development tasks and ensure the progress of acidification and pipeline connection; and increase the number of drilling rigs as appropriate to improve the production efficiency of the two mines.

FINANCIAL PERFORMANCE AND ANALYSIS

Financial performance reflects the operation performance of the Group throughout the year. By paying attention to changes in financial indicators, business development of the Group can be comprehensively understood.

OVERVIEW OF FINANCIAL RESULTS AND POSITION

Major Financial Indicators

	2020	2019
Profitability indicators		
Gross profit margin (%)[1]	7.08	6.93
EBITDA (HK$ million)[2]	222.78	199.14
EBITDA/Revenue ratio (%)[3]	7.78	9.59
Net profit margin (%)[4]	5.42	7.71
Operation ability indicators		
Trade receivables cycle – average (Days)[5]	30	17
Inventory cycle – average (Days)[6]	218	200
Investment return indicators		
Return on equity (%)[7]	7.82	8.40
Profit attributable to owners of the Company to revenue ratio (%)[8]	5.42	7.71
Return on assets (%)[9]	4.26	5.55
Repayment ability indicators		
Bank balances and cash (HK$ million)	1,174.51	676.79
Net tangible assets (HK$ million)[10]	2,025.08	1,940.41
Gearing ratio (%)[11]	106.59	59.21

Notes:

1. Difference between revenue and cost of sales divided by revenue multiplied by 100%.

2. The sum of profit before tax, finance costs, depreciation of right-of-use assets and depreciation of property, plant and equipment, if any.

3. The sum of profit before tax, finance costs, depreciation of right-of use assets and depreciation of property, plant and equipment, if any, divided by revenue multiplied by 100%.

4. Profit for the year divided by revenue multiplied by 100%.

5. Average receivables (i.e the arithmetic average of the beginning and the end of the Reporting Period) divided by average daily sales (i.e revenue divided by 360 days).

6. Average inventories (i.e the arithmetic average of the beginning and the end of the Reporting Period) divided by average daily costs of sales (i.e costs of sales divided by 360 days).

7. Profit for the year attributable to owners of the Company divided by total average equity (i.e the arithmetic average of the beginning and the end of the Reporting Period) multiplied by 100%.

8. Profit for the year attributable to owners of the Company divided by the revenue multiplied by 100%.

9. Profit for the year attributable to owners of the Company divided by total average assets (i.e the arithmetic average of the beginning and the end of the Reporting Period) multiplied by 100%.

10. Total equity less intangible assets, net.

11. Total debt divided by total equity multiplied by 100%.

FINANCIAL RESULTS

The profit of the Group was HK$155 million in 2020, representing a year-on-year decrease of 3% as compared to that of HK$160 million in 2019.

REVENUE

	For the year ended 31 December		Movements Increase/ Decrease	Percentage Change Increase/ Decrease
	2020	2019		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Natural uranium trading	2,859,214	2,073,449	785,765	38
Property investment	3,012	3,239	(227)	(7)
Total revenue	2,862,226	2,076,688	785,538	38

The revenue of the Group was HK$2,862 million in 2020, representing an increase of 38% as compared to that of HK$2,077 million in 2019, primarily because CGN Global aggressively expanded the global market and achieved a significant increase in sales volume and trading revenue of natural uranium as compared with the corresponding period in 2019.

Cost of sales

	For the year ended 31 December		Movements Increase/ Decrease	Percentage Change Increase/ Decrease
	2020	2019		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Natural uranium trading cost	2,659,460	1,932,783	726,677	38
Property investment	–	–	–	–
Total cost of sales	2,659,460	1,932,783	726,677	38

The cost of sales of the Group was HK$2,659 million in 2020, representing an increase of 38% as compared to that of HK$1,933 million in 2019, which is in line with the increase percentage of revenue primarily due to CGN Global aggressively expanded the global market.

Gross profit and gross profit margin of natural uranium trading

Due to impact from the increase on the sales volume of CGN Global, the Group recorded a gross profit of natural uranium trading of HK$200 million in 2020, representing an increase of 42% as compared to that of HK$141 million in 2019, and the gross profit margin of natural uranium trading remained stable at 7%.

Other operating income

The other operating income of the Group was HK$9 million in 2020, representing a decrease of 54% as compared to that of HK$20 million in 2019, mainly due to the significant decrease in the amount of daily average fund deposited through optimising the internal utilisation of financial resources of the Company by lending to its subsidiary, CGN Global, and together with the decrease of market interest rate, resulting in the significant decrease in interest income.

Selling and distribution expenses

Selling and distribution expenses of the Group was HK$10 million in 2020, representing an increase of 38% as compared to that of HK$8 million in 2019, mainly due to the increase of storage expenses of natural uranium inventories.

Administrative expenses

Administrative expenses of the Group was HK$38 million in 2020, representing an increase of 1% as compared to that of HK$37 million in 2019. Although the Group expanded its business actively during the Reporting Period, benefited from the overall strengthened cost management, administrative expenses only increased slightly.

Share of results of a joint venture

The joint venture of the Company is Semizbay-U. The share of results of a joint venture was HK$71 million in 2020, representing an increase of 9% as compared to that of HK$65 million in 2019, mainly due to the increase of selling price of natural uranium during the Reporting Period.

Share of results of an associate

The associate of the Company is Fission. The share of loss of an associate was HK$15 million, which includes share of loss for the Reporting Period of HK$10 million, loss on deemed disposal of HK$64 million and the reversal of long-term investment impairment of HK$59 million.

During the Reporting Period, Fission issued 79,163,474 ordinary shares under subscription of new shares by investors, 1,684,231 ordinary shares in lieu of payment of interest, 10,000,000 ordinary shares upon exercise of warrants and 243,852 ordinary shares as director remuneration. As a result, the equity interests in Fission held by the Company as at 31 December 2020 decreased to 16.74% (31 December 2019: 19.88%).

Finance costs

The finance costs of the Group was HK$41 million in 2020, representing an increase of 100% as compared to that of HK$20 million in 2019, mainly due to the addition of external borrowings by CGN Global for business expansion.

Income tax expenses

Income tax expense of the Group was HK$25 million in 2020, representing an increase of 53% as compared to that of HK$16 million in 2019, mainly due to the increase in gross profit of natural uranium trade.

Profit for the year

The profit of the Group was HK$155 million in 2020, representing a slight decrease of 3% as compared to that of HK$160 million in 2019.

FINANCIAL POSITION AND ANALYSIS

Total assets

As at 31 December 2020, the Group's total assets were HK$4,188 million, representing an increase of 35% as compared to HK$3,095 million as at 31 December 2019, mainly due to the significant increase in natural uranium inventories, trade receivables and bank balances and cash as compared with the corresponding period in 2019.

Total liabilities

As at 31 December 2020, the Group's total liabilities were HK$2,161 million, representing an increase of 88% as compared to HK$1,151 million on 31 December 2019, mainly due to the external bank loan newly drawdown by CGN Global for business expansion during the Reporting Period.

Net current assets

As at 31 December 2020, the Group's net current assets were HK$2,100 million, representing an increase of 19% as compared to HK$1,766 million as at 31 December 2019, mainly due to the significant increase in natural uranium inventories, trade receivables and bank balances and cash as compared with the corresponding period in 2019.

	As at 31 December		Movements Increase/ (Decrease)	Percentage Change Increase/ (Decrease)
	2020	**2019**	**(Decrease)**	**(Decrease)**
	HK$'000	*HK$'000*	*HK$'000*	*%*
Inventories	1,767,335	1,441,980	325,355	23
Trade and other receivables	363,176	126,706	236,470	186
Amount due from an intermediate holding company	2,323	3,875	(1,552)	(40)
Amount due from a fellow subsidiary	19	–	19	N/A
Income tax recoverable	6,678	1,737	4,941	284
Bank balances and cash	1,174,508	676,793	497,715	74
Total current assets	3,314,039	2,251,091	1,062,948	47

As at 31 December 2020, the Group's total current assets were HK$3,314 million, representing an increase of 47% as compared to HK$2,251 million as at 31 December 2019, mainly due to the significant increase in natural uranium inventories, trade receivables and bank balances and cash as compared with the corresponding period in 2019.

As at 31 December 2020, the aggregate amount of bank balances and cash of the Group was HK$1,175 million (31 December 2019: HK$677 million), among which, approximately 9% (31 December 2019: 32%) was denominated in HKD, approximately 90% (31 December 2019: 67%) was denominated in USD, approximately 1% (31 December 2019: 1%) was denominated in RMB.

As at 31 December 2020, the Group did not have any bank deposits and cash pledged to any banks (31 December 2019: Nil). The proportion of current assets of the Group over total assets was 79% (31 December 2019: 73%), and the proportion of bank balances and cash over total assets was 28% (31 December 2019: 22%).

Non-current assets

	As at 31 December		Movements Increase/ (Decrease)	Percentage Change Increase/ (Decrease)
	2020	2019		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Property, plant and equipment	622	160	462	289
Right-of-use assets	1,977	3,836	(1,859)	(48)
Investment properties	52,623	48,595	4,028	8
Interest in a joint venture	264,956	237,775	27,181	11
Interest in an associate	553,570	553,522	48	–
Rental deposits	–	387	(387)	(100)
Total non-current assets	873,748	844,275	29,473	3

As at 31 December 2020, the total non-current assets of the Group were HK$874 million, representing an increase of 3% as compared to HK$844 million as at 31 December 2019, mainly due to the increase in interest in a joint venture.

Current liabilities

	As at 31 December		Movements Increase/ (Decrease)	Percentage Change Increase/ (Decrease)
	2020	2019		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Trade and other payables	158,289	36,382	121,907	335
Loans from a fellow subsidiary	370,693	422,559	(51,866)	(12)
Bank borrowings	666,704	–	666,704	N/A
Lease liabilities	704	1,703	(999)	(59)
Amount due to an intermediate holding company	874	8,373	(7,499)	(90)
Amount due to a joint venture	-	5,513	(5,513)	(100)
Amounts due to fellow subsidiaries	1,135	1,421	(286)	(20)
Income tax payable	15,848	9,555	6,293	66
Total current liabilities	1,214,247	485,506	728,741	150

As at 31 December 2020, the Group's total current liabilities were HK$1,214 million, representing an increase of 150% as compared to HK$486 million as at 31 December 2019, mainly due to the external bank loan drawdown by CGN Global for business expansion during the Reporting Period.

Non-current liabilities

	As at 31 December		Movements Increase/ Decrease	Percentage Change Increase/ Decrease
	2020	**2019**		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Deferred tax liabilities	23,968	19,104	4,864	25
Loans from a fellow subsidiary	533,596	644,494	(110,898)	(17)
Bank borrowings	387,754	–	387,754	N/A
Lease liabilities	1,162	2,021	(859)	(43)
Total non-current liabilities	946,480	665,619	280,861	42

As at 31 December 2020, the Group's total non-current liabilities were HK$946 million, representing an increase of 42% as compared to HK$666 million as at 31 December 2019, mainly due to the external bank loan drawdown by CGN Global for business expansion during the Reporting Period.

	As at 31 December		Movements Increase/ Decrease	Percentage Change Increase/ Decrease
	2020	**2019**		
	HK$'000	*HK$'000*	*HK$'000*	*%*
Share capital	66,007	66,007	–	–
Reserves	1,961,053	1,878,234	82,819	4
Total equity	2,027,060	1,944,241	82,819	4

Total equity

As at 31 December 2020, total equity of the Group amounted to HK$2,027 million, representing an increase of 4% as compared to HK$1,944 million as at 31 December 2019, mainly due to the increase of profit during the Reporting Period.

The Group's gearing ratio (total debt divided by total equity multiplied by 100%) was 107% (2019: 59%).

Assets and investments

The Group did not conduct any significant equity investment, major acquisition or disposal during the Reporting Period.

Investment direction

According to the business positioning and development strategy of the Group, the main investment direction of the Group remains to be acquiring competitive overseas uranium resource projects with low cost. The Group will carry out relevant investment activities as and when appropriate, to laid the foundation of further development of the Group.

FINANCIAL CAPITAL

Capital structure

As at 31 December 2020, the Company had a total of 6,600,682,645 ordinary shares in issue (31 December 2019: 6,600,682,645 ordinary shares) ordinary shares, and the market capitalization of the Company was approximately HK$2,376 million (31 December 2019: HK$2,013 million).

Liquidity risk and financial resources

The Company adheres to prudent capital and treasury policy and goals. During the Reporting Period, the Company's operating fund was mainly from the cash generated from operating activities and external borrowings. The capital requirements of the Company mainly come from the possible acquisition expenses of acquiring natural uranium resources and funds for operation.

The Group has sufficient financial resources for daily operation and business and does not have seasonal borrowing demands. If any suitable acquisition opportunity arises in the future, the Group will raise funds from diverse financing channels.

The Company's financing capacity is affected by multiple external and internal factors. To obtain financing on more favourable terms, the Company must understand the external financing environment and adopt a reasonable financing model and strategies based on its structure of assets and liabilities.

The Company pays close attention to financial market trends, actively considers its responses to internal and external financial risks, formulates reasonable models and strategies to ensure the safety and economic efficiency of financing, and takes strict management measures for debt risks to prevent exposure to related risks and to facilitate the financial health and development of the core business.

Financing model

Given the complex and ever-changing financial market, the Company has been exploring diverse financing methods and strives to establish a financing model with combination of short-, medium-and long-term capital, merged direct and indirect financing and multiple financing channels to ensure the protection of a stable fund. In the process of debt financing, the Company has taken a balanced approach to between cost and safety. The Company is committed to the pursuit of a competitive financing cost rather than the lowest one to ensure the security of financing and the quality of service received.

For projects with large capital expenditures and sound expected returns, the Company will prudently consider using equity financing to balance risks and enhance Shareholder value.

FINANCIAL RISK MANAGEMENT

The Group's development comes with various financial risks, such as debt risks and exchange rate risks.

Risk management of debt

As at 31 December 2020, the bank borrowings (drawdown during the year 2020) were US$136 million, denominated in USD with floating interest rate and were unsecured and interest bearing ranging from 0.78% to 1.47% per annum. Borrowings from a fellow subsidiary of the Company (drawdown during the year 2018 and 2019) were US$117 million, denominated in USD with fixed interest rate and were unsecured and interest bearing ranging from 3.2% to 4.6% per annum.

To manage liquidity risk, the Company closely monitors the cash, cash equivalents and unutilised credit to ensure sufficient liquidity for operation and to reduce the effects of cash flow volatility. The Company's management also keeps an eye on external borrowing to ensure a sufficiency of available borrowing credit. As at 31 December 2020, the Group has undrawn borrowing credit of US$857 million, which can be utilised to provide sufficient cash for the Group's operation and to reduce the impact of cash flow volatility.

Exchange rate risk

The Company's functional currency is US$. During the Reporting Period, the Group's sale and purchase of products were mainly settled in US$ and RMB (2019: US$ and RMB), while its cash was mainly denominated in US$ and HK$ (2019: US$ and HK$). Daily expenses including administrative expenses, sales and distribution expenses, were mainly settled in US$, HK$ and RMB (2019: US$, HK$ and RMB). The Group was not subject to any material exchange rate risk during the Reporting Period.

For exchange rate risk management, the Company aims to control cost rather than profitability. In 2020, the Group had no forward foreign exchange contracts, interests or currency swaps or other financial derivatives for hedging purposes, and experienced no significant difficulty or impact on its operation or liquidity due to exchange rate fluctuation.

CONTINGENCY EVENTS

External guarantees

During the Reporting Period, the Group did not have any external guarantee (2019: Nil). The guarantee provided by the Company to CGN Global was US$180 million (2019: Nil) and US$136 million (2019: Nil) was utilised. The Company did not allow subsidiaries to provide any form of guarantee to any entities or individuals without the approval of the Company.

Pledge of assets

During the Reporting Period, the Group did not pledge any of its assets (2019: Nil).

Contingent liabilities

As at 31 December 2020, the Group did not have any material contingent liabilities (31 December 2019: Nil).

Legal proceedings

The Company confirms that there was no significant litigation, and that it was nor aware of any pending or threatened litigation against it, which had or could have a material and adverse effect on its financial condition or operation during the Reporting Period.

CHANGES IN ACCOUNTING POLICIES

Details of changes in accounting policies as required under the applicable accounting standard are explained in note 2 and 4 to the Consolidated Financial Statements.

The following is the text of a report set out on pages II-1 to II-2 received from PricewaterhouseCoopers, Certified Public Accountants, Hong Kong, for the purpose of incorporation in this circular.

羅兵咸永道

ACCOUNTANT'S REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF CGN MINING COMPANY LIMITIED

Introduction

We report on the historical financial information of Mining Company "ORTALYK" LLP (the "Target") set out on pages II-3 to II-60, which comprises the statements of financial position of the Target as at 31 December 2018, 2019 and 2020, and the statements of profit or loss, the statements of comprehensive income, the statements of changes in equity and the statements of cash flows for each of the years ended 31 December 2018, 2019 and 2020 (the "Track Record Period") and a summary of significant accounting policies and other explanatory information (together, the "Historical Financial Information"). The Historical Financial Information set out on pages II-3 to II-60, forms an integral part of this report, which has been prepared for inclusion in the circular of CGN Mining Company Limited (the "Company") dated 25 May 2021 (the "Circular") in connection with the proposed acquisition of 49% interest in the Target by the Company.

Directors' responsibility for the Historical Financial Information

The directors of the Company are responsible for the preparation of Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in Note 2.1 to the Historical Financial Information.

The financial statements of the Target for the Track Record Period ("Underlying Financial Statements"), on which the Historical Financial Information is based, were prepared by the directors of the Target. The directors of the Target are responsible for the preparation and fair presentation of the Underlying Financial Statements in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board, and for such internal control as the directors determine is necessary to enable the preparation of Underlying Financial Statements that are free from material misstatement, whether due to fraud or error.

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Reporting accountant's responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200, *Accountants' Reports on Historical Financial Information in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountant's judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountant considers internal control relevant to the entity's preparation of Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in Note 2.1 to the Historical Financial Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the Historical Financial Information.

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

Opinion

In our opinion, the Historical Financial Information gives, for the purposes of the accountant's report, a true and fair view of the financial position of the Target as at 31 December 2018, 2019 and 2020 and of its financial performance and its cash flows for the Track Record Period in accordance with the basis of preparation set out in Note 2.1 to the Historical Financial Information.

Report on matters under the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited

Adjustments

In preparing the Historical Financial Information, no adjustments to the Underlying Financial Statements have been made.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 25 May 2021

HISTORICAL FINANCIAL INFORMATION OF THE TARGET

Preparation of Historical Financial Information

Set out below is the Historical Financial Information which forms an integral part of this accountant's report.

The Underlying Financial Statements, on which the Historical Financial Information is based, were audited by PricewaterhouseCoopers in accordance with International Standards on Auditing issued by the International Auditing and Assurance Standards Board.

The Historical Financial Information is presented in US dollars except when otherwise indicated.

STATEMENTS OF PROFIT OR LOSS

FOR THE YEARS ENDED 31 DECEMBER 2018, 2019 AND 2020

		Year ended 31 December		
	Note	**2020**	**2019**	**2018**
		US$	*US$*	*US$*
Revenue	*5*	94,903,510	96,277,498	101,016,519
Cost of sales	*6*	(42,824,347)	(53,192,030)	(58,954,211)
Gross profit		**52,079,163**	**43,085,468**	**42,062,308**
Distribution costs	*6*	(90,979)	(99,584)	(58,684)
General and administrative expenses	*6*	(3,299,744)	(2,619,235)	(2,803,710)
Other losses – net		(97,772)	(231,654)	(39,748)
Operating profit		**48,590,668**	**40,134,995**	**39,160,166**
Finance income	*8*	528,711	257,258	114,992
Finance costs	*8*	(705,545)	(692,705)	(1,022,873)
Finance costs – net	*8*	(176,834)	(435,447)	(907,881)
Profit before income tax		**48,413,834**	**39,699,548**	**38,252,285**
Income tax expenses	*9*	(9,872,307)	(8,562,175)	(7,738,010)
Profit for the year		**38,541,527**	**31,137,373**	**30,514,275**

STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED 31 DECEMBER 2018, 2019 AND 2020

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Profit for the year	**38,541,527**	**31,137,373**	**30,514,275**
Other comprehensive (losses)/income:			
Items that will not be reclassified to profit or loss			
Currency translation differences arising from the retranslation of the Target's financial statements to the presentation currency	(9,723,892)	977,470	(13,309,015)
Remeasurements of post-employment benefit obligations	(58,608)	13,759	4,347
Remeasurements of financial assets at fair value through other comprehensive income	–	(90,695)	(51,161)
Other comprehensive (losses)/income for the year, net of tax	**(9,782,500)**	**900,534**	**(13,355,829)**
Total comprehensive income for the year	**28,759,027**	**32,037,907**	**17,158,446**

STATEMENTS OF FINANCIAL POSITION
AS AT 31 DECEMBER 2018, 2019 AND 2020

	Note	As at 31 December 2020	2019	2018
		US$	*US$*	*US$*
Assets				
Non-current assets				
Property, plant and equipment	*10*	58,379,582	64,407,921	68,118,814
Intangible assets	*11*	2,319,427	1,147,817	1,212,611
Exploration and evaluation assets	*12*	4,447,867	4,536,030	4,511,020
Other non-current assets	*13*	3,375,401	4,156,674	3,372,663
		68,522,277	74,248,442	77,215,108
Current assets				
Inventories	*15*	5,726,360	5,036,405	5,701,307
Prepaid income tax		925,892	1,635,671	2,030,471
Trade and other receivables and prepayments	*14*	40,355,107	35,122,244	28,975,786
Cash and cash equivalents	*16*	4,720,354	7,751,529	9,482,738
		51,727,713	49,545,849	46,190,302
Total assets		**120,249,990**	**123,794,291**	**123,405,410**
Equity and liabilities				
Share capital	*17*	102,945,934	101,778,539	101,778,539
Reserves	*18*	(45,843,467)	(36,060,967)	(36,961,501)
Retained earnings		46,872,461	36,697,100	35,156,808
Total equity		**103,974,928**	**102,414,672**	**99,973,846**

	Note	As at 31 December 2020 US$	2019 US$	2018 US$
Liabilities				
Non-current liabilities				
Deferred income tax liabilities	*19*	1,191,852	1,027,520	1,013,457
Provision for asset restoration obligations	*20*	6,667,075	9,381,161	7,949,414
Long-term payables	*21*	509,686	1,016,947	1,500,666
Provision for employee benefits obligations	*22*	184,678	58,243	68,071
Other non-current liabilities		91,096	–	–
		8,644,387	11,483,871	10,531,608
Current liabilities				
Trade and other payables	*23*	7,081,294	9,344,596	12,350,836
Current portion of long-term payables	*21*	549,381	551,152	549,120
		7,630,675	9,895,748	12,899,956
Total liabilities		**16,275,062**	**21,379,619**	**23,431,564**
Total equity and liabilities		**120,249,990**	**123,794,291**	**123,405,410**
Net current assets		**44,097,038**	**39,650,101**	**33,290,346**
Total assets less current liabilities		**112,619,315**	**113,898,543**	**110,505,454**

STATEMENTS OF CHANGES IN EQUITY

FOR THE YEARS ENDED 31 DECEMBER 2018, 2019 AND 2020

	Share capital *US$*	Reserves *(Note 18)* *US$*	Retained earnings *US$*	Total equity *US$*
Balance at 1 January 2018, as previously stated	**91,277,112**	**(23,605,672)**	**9,576,317**	**77,247,757**
Adoption of IFRS 9:				
– remeasurement of expected credit losses	–	–	(661)	(661)
Balance at 1 January 2018, as restated	**91,277,112**	**(23,605,672)**	**9,575,656**	**77,247,096**
Profit for the year	–	–	30,514,275	30,514,275
Other comprehensive income/(losses)				
Remeasurements of post-employment benefit obligations	–	4,347	–	4,347
Remeasurements of financial assets at fair value through other comprehensive income	–	(51,161)	–	(51,161)
Currency translation differences	–	(13,309,015)	–	(13,309,015)
Total other comprehensive losses, net of tax	–	(13,355,829)	–	(13,355,829)
Total comprehensive (losses)/income for the year	**–**	**(13,355,829)**	**30,514,275**	**17,158,446**
Dividends paid	–	–	(4,933,123)	(4,933,123)
Contribution from the shareholder *(Note 17)*	10,501,427	–	–	10,501,427
Balance at 31 December 2018	**101,778,539**	**(36,961,501)**	**35,156,808**	**99,973,846**

	Share capital US$	Reserves (Note 18) US$	Retained earnings US$	Total equity US$
Balance at 1 January 2019	**101,778,539**	**(36,961,501)**	**35,156,808**	**99,973,846**
Profit for the year	–	–	31,137,373	31,137,373
Other comprehensive income/(losses)				
Remeasurements of post-employment benefit obligations	–	13,759	–	13,759
Remeasurements of financial assets at fair value through other comprehensive income	–	(90,695)	–	(90,695)
Currency translation differences	–	977,470	–	977,470
Total other comprehensive income, net of tax	–	900,534	–	900,534
Total comprehensive income for the year	**–**	**900,534**	**31,137,373**	**32,037,907**
Dividends paid	–	–	(29,597,081)	(29,597,081)
Balance at 31 December 2019	**101,778,539**	**(36,060,967)**	**36,697,100**	**102,414,672**
Balance at 1 January 2020	**101,778,539**	**(36,060,967)**	**36,697,100**	**102,414,672**
Profit for the year	–	–	38,541,527	38,541,527
Other comprehensive losses				
Remeasurements of post-employment benefit obligations	–	(58,608)	–	(58,608)
Currency translation differences	–	(9,723,892)	–	(9,723,892)
Total other comprehensive (losses)/ income, net of tax	–	(9,782,500)	–	(9,782,500)
Total comprehensive (losses)/income for the year	**–**	**(9,782,500)**	**38,541,527**	**28,759,027**
Dividends paid	–	–	(28,366,166)	(28,366,166)
Contribution from the shareholder *(Note 17)*	1,167,395	–	–	1,167,395
Balance at 31 December 2020	**102,945,934**	**(45,843,467)**	**46,872,461**	**103,974,928**

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED 31 DECEMBER 2018, 2019 AND 2020

	Note	Year ended 31 December 2020	2019	2018
		US$	*US$*	*US$*
Cash flows from operating activities				
Cash generated from operations	*24(a)*	42,735,318	42,377,977	32,291,786
Interest received		326,976	231,515	114,992
Income taxes paid		(9,040,812)	(8,147,089)	(8,144,647)
Net cash from operating activities		**34,021,482**	**34,462,403**	**24,262,131**
Cash flows from investing activities				
Purchases of property, plant and equipment		(6,815,382)	(5,972,418)	(20,893,887)
Purchases of intangible assets		(259,689)	–	(157,484)
Purchases of exploration and evaluation assets		(437,914)	(913,070)	(593,590)
Net increase in restricted use liquidation fund		(486,121)	(387,425)	(2,873,696)
Payments for financial assets at fair value through other comprehensive income		–	(90,695)	(51,161)
Net cash used in investing activities		**(7,999,106)**	**(7,363,608)**	**(24,569,818)**
Cash flows from financing activities				
Capital injection from the shareholder	*17*	–	–	10,049,930
Receipt of a restricted use liquidation fund deposit	*10(b)*	–	–	2,691,032
Dividends paid to the shareholder		(28,366,166)	(29,597,081)	(4,933,123)
Net cash (used in)/generated from financing activities		**(28,366,166)**	**(29,597,081)**	**7,807,839**

	Note	Year ended 31 December 2020 US$	2019 US$	2018 US$
Net (decrease)/increase in cash and cash equivalents		(2,343,790)	(2,498,286)	7,500,152
Cash and cash equivalents at the beginning of year		7,751,529	9,482,738	2,383,366
Exchange (losses)/gains arising from the retranslation of financial statement items to the presentation currency	*24(b)*	(687,385)	767,077	(400,780)
Cash and cash equivalents at end of year		**4,720,354**	**7,751,529**	**9,482,738**

NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEARS ENDED 31 DECEMBER 2018, 2019 AND 2020

1 GENERAL INFORMATION

Mining Company "ORTALYK" LLP (the "Target") is a limited liability partnership set up according to the legislation of the Republic of Kazakhstan. The sole shareholder of the Target is National Atomic Company Kazatomprom JSC ("NAC KAP" or the "sole shareholder"). As of 31 December 2020, 75% shares of NAC KAP belong to the government of the Republic Kazakhstan represented by Sovereign Wealth Fund Samruk Kazyna JSC and 25% belong to other shareholders (31 December 2019: 81.28% and 18.72%, respectively, 31 December 2018: 85.08% and 14.92%, respectively).

The Target's registered address is Building No. 28, Suzak 033 village, Suzak region, South Kazakhstan oblast, Republic of Kazakhstan.

These set of the Target's financial statements for the years ended 31 December 2018, 2019 and 2020 is included in the circular of CGN Mining Company Limited, a company listed on the Main Board of The Stock Exchange of Hong Kong Limited ("HKEx"), for its potential acquisition of 49% equity interest in the Target (the "Potential Acquisition") in accordance with the requirements as set out in the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The Potential Acquisition is subject to the approvals from the shareholders of CGN Mining Company Limited.

The functional currency of the Target is Kazakhstan Tenge ("KZT") while these financial statements are presented in United States Dollars ("US$"), unless otherwise stated.

These financial statements have been approved for issue by management of the Target ("management") on 25 May 2021.

Principal activities and status of the Target's major non-current operating assets

Prior to 19 October 2017, the Target's principal activities were the provision of uranium extraction and processing services to NAC KAP.

On 19 October 2017, the Target's share capital was increased by KZT12,126,529 thousand (equivalent to US$36,353,776) in the form of contribution of non-monetary assets from NAC KAP to the Target (the "2017 Capital Injection"). The non-monetary assets as injected by NAC KAP in the 2017 Capital Injection comprise of the subsurface use right (i.e. the mineral extraction right) for an uranium mine area with the approval for active uranium production or extraction activities (the "Central Mynkuduk field"), all the mine development assets and other property, plant and equipment as located in the Central Mynkuduk field, the exploration and evaluation assets as capitalised for the exploration of uranium resources in another mine area (the "Zhalpak field"). As of the respective balance sheet dates, the Target's exploration and evauation assets are all in connection with the Zhalpak field (Note 12).

Subequent to the 2017 Capital Injection, the Target is principally engaged in the mining and extraction of uranium, the processing and sales of uranium products and the exploration of uranium resources in the Zhalpak field. Due to the particularity of the uranium products and the customer relationships as established by NAC KAP for years, the ultimate customers of the uranium products as produced by the Target will purchase uranium products directly from NAC KAP. Therefore, the Target sells its uranium products to NAC KAP which will then sell the products to the ultimate customers. For the years ended 31 December 2020, 2019 and 2018, approximately 99.9% of the Target's revenues are attributable to sales transactions with the sole shareholder, NAC KAP.

The Central Mynkuduk field has a remaining licenced uranium extraction period of 12 years till 8 July 2032 as approved by the Ministry of Energy of the Republic of Kazakhstan.

The Target's approved right to explore uranium resources at the Zhalpak field was originally expired on 31 May 2018 and the Target had applied for an extension for the exploration period. By reference to a letter as issued by the Ministry of Energy of the Republic of Kazakhstan dated 14 May 2018, the Target's right to explore uranium resources at the Zhalpak field has been extended to 31 December 2022, subject,

inter alia, to the provision of a work program based on the approved project document. The Target has started to apply for the subsurface use right (i.e. the mineral extraction right) for the Zhalpak field since February 2018. However, the related government approval was delayed due to the ambiguity in relation to the authorised governmental body for approving the commencement of uranium mining activities and due to the lack of a clear regulation on the Central Commission (a subordinate governmental body as governed by the Ministry of Energy of the Republic of Kazakhstan) for the development of uranium resources/deposits in the Republic of Kazakhstan. Despite the Target has not yet obtained the subsurface use right (i.e. the mineral extraction right) for the Zhalpak field, the Target has continued its trial production at the Zhalpak field since June 2018.

On 6 May 2020, the related governmental body has formally rejected the Target's application for the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field on the grounds that it does not have capacity to approve the related application.

The Target has worked closely with NAC KAP about the remedial actions for obtaining the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field and the Target has already suspended its trial production at the Zhalpak field since 20 April 2020. Pursuant to a NAC KAP's Board Resolution dated 26 August 2020, NAC KAP will apply for the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field for the Target and then further transfer the subsurface use right in favour of the Target (at nil costs – other than those minimal administrative costs to be incurred by NAC KAP for obtaining the subsurface use right) in the manner as prescribed by the law applicable in the Republic of Kazakhstan.

On 21 September 2020, NAC KAP has already commenced the application processes with the relevant government authorities for obtaining the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field. As of the date of these financial statements, the application is still subject to the approval from the relevant government authority and management expects that NAC KAP will obtain the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field prior to 31 December 2021. NAC KAP has confirmed to the Target that it will transfer the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field to the Target (at nil cost) once it has obtained the aforesaid subsurface use right which is permitted under the prevailing laws and regulations in Republic of Kazakhstan (with more details as disclosed in Note 4(b)).

Impact of the outbreak of Novel Coronavirus (the "COVID-19 Outbreak")

In December 2019, news about the outbreak of a new virus first appeared. On 11 March 2020, the World Health Organisation declared the outbreak of a new type of coronavirus COVID-19 a pandemic. According to the Decree of the President of the Republic of Kazakhstan dated 15 March 2020 No. 285 "On the introduction of a state of emergency in the Republic of Kazakhstan", a state of emergency was introduced for the period from 16 March 2020 until 15 April 2020 and later extended until 11 May 2020.

Major cities of Kazakhstan fell under a quarantine regime; also, the activities of many enterprises were suspended from 30 March 2020 to 11 May 2020. On 5 July 2020, the State Commission for Ensuring State of Emergency under the President of Kazakhstan, in consideration of the complications of the epidemiological situation and the increase in the prevalence of coronavirus infection in Kazakhstan, introduced restrictive measures for 14 days, subsequently extended until 16 August 2020. The Target's activities in the Central Mynkuduk field during the period of quarantine were not suspended and, the works of all office employees were organised remotely.

The Target's uranium extraction and production activities at the Central Mynkuduk field were suspended from 12 April 2020 to 6 August 2020 due to the introduction of the aforesaid state of emergency and the reduction in the sales order from NAC KAP. In the first half of August 2020, the Target began activities to mobilise workers to production facilities, in compliance with strict health and safety protocols in order to minimise the risk of a potential outbreak in the field or among the population living in the regions of the Target's presence. Since August 2020, mine development activities have resumed, however, it is expected that mining operations, suspended for four months from the beginning of the second quarter of 2020, will have an impact on the Target's production.

In overall, the COVID-19 has reduced the Target's production and sales volume of uranium products by approximately 21% and 24% respectively (as compared to the year ended 31 December 2019) and the adverse impact has been substantially offset by the impact of the appreciation of the average uranium spot price (which acts as a base for the pricing of the Target's products) by approximately 23% on a yearly basis (as compared to the year ended 31 December 2019). As a result, the Target's revenue for the year ended 31 December 2020 has just slightly reduced by approximately 1.4% as compared to the year ended 31 December 2019.

Other than the reduced level of field operational and development activities for the period as mentioned above, management is not aware of any other significant noticeable impact on the Target's production volume, revenues, deliveries or supply chain activities due to the COVID-19 Outbreak. Management considers that the abovementioned disruption in the Target's operational and development activities is temporary and there should not be any continuous significant negative impact on the Target's business.

The COVID-19 situation is still developing and management will continue to monitor the market situation and development of the COVID-19 situation and will take all necessary measures to prevent and minimise the negative impact on the Target's business (if any).

Depreciation of the Target's functional currency, Kazakhstan Tenge ("KZT")

During the first 3 months ended 31 March 2020, KZT has been depreciated against the US$ by approximately 17%. During the period from April to June 2020, the exchange rates of KZT (against US$) have been partially recovered and then slightly depreciated during period from July to December 2020. As a result, the exchange rate of KZT (against US$) has been depreciated by approximately 10.37% on a yearly basis during the year ended 31 December 2020. As of 31 December 2020, the exchange rate was KZT420.71 per US$1.

During the years ended 31 December 2019 and 2018, the exchange rates of KZT (against US$) have been appreciated by 0.79% and depreciated by 15.6%, respectively.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The financial statements of the Target have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board (the "IASB"). The financial statements have been prepared under the historical cost convention, as modified by the revaluation of financial assets at fair value through other comprehensive income (Note 13(b)), which are carried at fair value.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Target's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 4.

2.1.1 Changes in accounting policy and disclosures

The accounting policies set out below have been applied consistently to all periods presented in the financial statements, except for IFRS 9 Financial Instruments ("IFRS 9") and IFRS 15 Revenue from Contracts with Customers ("IFRS 15") which have been initially applied on 1 January 2018 and IFRS 16 Leases ("IFRS 16") which has been initially applied on 1 January 2019 with no material impact on the financial statements of the Target. Details of the changes in accounting policies are discussed below.

(a) New and amended standards adopted by the Target

A number of new or amended standards became applicable for the reporting period beginning on 1 January 2018 and the Target had to change its accounting policies and make modified retrospective adjustments as a result of adopting the following standards:

- IFRS 9 Financial Instruments (effective from 1 January 2018),
- IFRS 15 Revenue from Contracts with Customers (effective from 1 January 2018), and
- IFRS 16 Leases (effective from 1 January 2019).

Certain new accounting standards and interpretations have been published during the three years ended 31 December 2020 but not listed above and they did not have any impact on the amounts recognised in prior periods and are not expected to significantly affect the current or future periods.

The below explains the impact of adoption of IFRS 9, IFRS 15 and IFRS 16 on the Target's financial statements.

(i) Adoption of IFRS 9

IFRS 9 replaces the provisions of IAS 39 that relate to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting.

The adoption of IFRS 9 from 1 January 2018 resulted in changes in accounting policies and adjustments to the amounts recognised in the financial statements. In accordance with the transitional provisions in IFRS 9, comparative figures have not been restated.

Classification and measurement of financial instruments

The financial assets held by the Target mainly represent debt instruments previously classified as loans and receivables and measured at amortised cost, meet the conditions for classification at amortised cost under IFRS 9. Accordingly, there is no impact on the Target's accounting for financial assets.

There is no impact on the Target's accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss and the Target does not have any such liabilities.

Impairment of financial assets

The following table reconciles the carrying amounts of financial assets, from their previous measurement categories in accordance with IAS 39 into their new measurement categories upon transition to IFRS 9 on 1 January 2018:

	Carrying value under IAS 39 31 December 2017	**Remeasurement of expected credit losses**	**Carrying value under IFRS 9 1 January 2018**
	US$	*US$*	*US$*
Cash and cash equivalents	2,383,366	(362)	2,383,004
Trade and other receivables	14,594,618	(299)	14,594,319

Line items that were not affected by the changes have not been included in the table above.

(ii) Adoption of IFRS 15

The Target applied simplified method of transition to IFRS 15, and elected to apply the practical expedient available for simplified transition method. The Target applies IFRS 15 retrospectively only to contracts that were not completed at the date of initial application (1 January 2018).

Based on an analysis of the Target's income, contracts with customers and on the basis of the facts and circumstances that exist at that date, management of the Target concluded that the adoption of IFRS 15 has no significant impact on the Target's financial statements.

(iii) Adoption of IFRS 16

From 1 January 2019, leases are recognised as right-of-use assets and corresponding liabilities at the date at which the leased assets are available for use by the Target. Each lease payment is allocated between the liability and finance cost.

The Target has adopted IFRS 16 from 1 January 2019, the adoption of the IFRS 16 did not have any material impact on the Target's financial statements since all of the Target's leases are short-term leases with the lease term of 12 months or less.

(b) Impact of standards and amendments issued but not yet adopted by the Target

The following amended standards became effective for the Target from 1 January 2021 or later:

- Sale or Contribution of Assets between an Investor and its Associate or Joint Venture – Amendments to IFRS 10 and IAS 28 (issued on 11 September 2014 and effective for annual periods beginning on or after a date to be determined by the IASB).

- Classification of Liabilities as Current or Non-current – Amendments to IAS 1 (issued on 23 January 2020 and effective for annual periods beginning on or after 1 January 2022).

- Classification of liabilities as current or non-current, deferral of effective date – Amendments to IAS 1 (issued on 15 July 2020 and effective for annual periods beginning on or after 1 January 2023).

- Proceeds before Intended Use, Onerous Contracts – Cost of Fulfilling a Contract, Reference to the Conceptual Framework – narrow scope amendments to IAS 16, IAS 37 and IFRS 3, and Annual Improvements to IFRSs 2018-2020 – amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41 (issued on 14 May 2020 and effective for annual periods beginning on or after 1 January 2022).

- Insurance Contracts – Amendments to IFRS 17 (issued on 18 May 2017 and effective for annual periods beginning on or after 1 January 2023) and an amendment to IFRS 4 (issued on 25 June 2020 and effective for annual periods beginning on or after 1 January 2023).

- Interest rate benchmark (IBOR) reform – phase 2 amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (issued on 27 August 2020 and effective for annual periods beginning on or after 1 January 2021).

The Target will adopt the above new or revised standards and amendments to existing standards as and when they become effective. Management has performed preliminary assessment and does not expect the new standards and interpretations have a material impact on the Target in the current or future reporting periods and on foreseeable future transactions, other than those as described below:

The amendment to IAS 16 prohibits an entity from deducting from the cost of an item of property, plant and equipment any proceeds received from selling items produced while the entity is preparing the asset for its intended use. The proceeds from selling such items, net with the costs of producing them, are now required to be recognised in profit or loss. The Target will adopt the amendment to IAS 16

prospectively from 1 January 2022. Management has conducted a preliminary assessment and concluded that the adoption of the aforesaid amendment to IAS 16 will have certain impact on the Target's financial statements because the net proceeds from the trial production at the Zhalpak filed which have been deducted from the cost of exploration and evaluation assets during the years ended 31 December 2019 and 2018 amounted to US$1,776,087 and US$727,519, respectively. During the year ended 31 December 2020, the Target did not sell uranium product extracted at Zhalpak field due to expiry of the subsurface use contract and and has recognised the production costs in connection with the Target's geological exploration activities at the Zhalpak field in the statement of profit or loss (Notes 1 and 4).

2.2 Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements of the Target are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The functional currency of the Target is Kazakhstan Tenge ("KZT"). For the convenience of users of these financial statements, the financial information of the Target for each of the three years ended 31 December 2018, 2019 and 2020 has been presented in United States Dollars ("US$"). Assets and liabilities for each statement of financial position presented have been translated at the closing rate at the date of that statement of financial position; income and expenses for each statement presenting profit or loss and other comprehensive income have been translated at an average rate for the period; and all resulting exchange differences recognised in other comprehensive income. Translation at year-end rates does not apply to non-monetary items that are measured at historical cost.

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognised in profit or loss.

Foreign exchange gains and losses that relate to cash and cash equivalents are presented in the statement of profit or loss, within finance income and costs. All other foreign exchange gains and losses are presented in the statement of profit or loss on a net basis within other gains/(losses).

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognised in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as fair value through other comprehensive income are recognised in other comprehensive income.

2.3 Property, plant and equipment

(i) Recognition and evaluation of property, plant and equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and provision for impairment, where required. Cost comprises purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates, and any costs directly attributable to bringing the asset to the location and condition necessary for its intended use. The cost of self-constructed assets includes the cost of materials, direct labour.

Mine development assets comprise the capitalised costs of pump-in and pump-out well drilling, main external tying of the well with surface piping, equipment, measuring instruments, ion-exchange resin, estimated site restoration and other development costs.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Target and the cost of the item can be measured reliably. Specialised spare parts and servicing equipment with a significant initial value and a useful life of more than one year are recognised as an item of property, plant and equipment. Other spare parts and auxiliary equipment are recognised as inventories and accounted for in profit and loss for the year as retired.

Costs of minor repairs and day-to-day maintenance are expensed when incurred. Cost of replacing major parts or components of property, plant and equipment items are capitalised and the replaced part is retired.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised in profit or loss for the year.

(ii) Depreciation of property, plant and equipment

Depreciation of items within buildings category that are used in extraction of uranium and its preliminary processing is charged on a unit-of-production (UoP) method in respect of items for which this basis best reflects the pattern of consumption.

Mine development assets are depreciated at the mine or block level using the unit-of-production method. Unit-of-production rates are based on proved reserves estimated to be recovered from mines (blocks) using existing facilities and operating methods. The estimate of proved reserves is based on reserve reports which are integral part of each subsurface use contract. These reserve reports are incorporated into feasibility models which are approved by the government and detail the total proven reserves and estimated scheduled extraction by year.

Depreciation on other items of property, plant and equipment is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives:

	Useful lives in years
Buildings used for residential	10 – 50
Plant, machinery and equipment	3 – 50
Others	3 – 20

Each item's estimated useful life depends on its own useful life limitations and/or term of a subsurface use contract and the present assessment of economically recoverable reserves of the mine property at which the item is located.

The residual value of an asset is the estimated amount that the Target would currently obtain from the disposal of the asset less the estimated costs of disposal, if the asset was already of the age and in the condition expected at the end of its useful life. The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.6).

2.4 Intangible assets

(i) Recognition and evaluation of intangible assets

The Target's intangible assets have definite useful lives and primarily include mineral rights, software and licenses. Acquired software and licenses are initially measured at costs incurred to acquire and bring them to use.

Mineral rights are stated at cost, less accumulated amortisation and provision for impairment, where required. The capitalised cost of acquisition of mineral rights comprises direct costs or payments for obtaining a mineral right for proved commercial reserves or newly explored reserves (as identified during the exploration), the cost of subsurface use rights and capitalised historical costs. The Target is obliged to

reimburse certain historical costs as incurred by the government in respect of licensing areas prior to licenses being issued (the "Historical Costs"). These Historical Costs are recognised as part of the acquisition costs with a corresponding liability equal to the present value of payments made during the license period. The aforesaid liabilities in connection with the Historical Costs payables have been presented in the statements of financial position as "Long-term payables" (Note 21).

(ii) Amortisation of intangible assets

Software, licenses are amortised using the straight-line method over their useful lives:

	Useful lives in years
Software	1 – 14
Licences	3 – 20
Others	2 – 15

Mineral rights are amortised using unit-of-production method based on proved reserves commencing when uranium first starts to be extracted. The estimate of proved reserves is based on reserve reports, which are integral part of each subsurface use contract. These reserve reports are incorporated into feasibility models, which are approved by the government and detail the total proven reserves and estimated scheduled extraction by year.

If impaired, the carrying amount of intangible assets is written down to the higher of value in use and fair value less costs of disposal.

2.5 Exploration and evaluation assets

Exploration and evaluation assets are measured at cost less provision for impairment, where required. The Target classifies exploration and evaluation assets as tangible or intangible according to the nature of the assets acquired. Exploration and evaluation assets comprise the capitalised costs incurred after the Target has obtained the legal rights to explore a specific area and prior to proving that viable production is possible and include geological and geophysical costs, the costs of exploratory wells and directly attributable overheads associated with exploration activities.

Income less expenses from uranium sales at trial production stage decrease the cost of exploration and evaluation assets.

Activities prior to the acquisition of the subsurface rights are pre-exploration. All pre-exploration costs are expensed as incurred and include such costs as design work on operations, technical and economical assessment of a project, and overheads associated with the pre-exploration. A decision on termination or extension of a subsurface use contract upon expiry of the exploration and evaluation period is subject to success of the exploration and evaluation of mineral resources and the Target's decision whether or not progress to the production (development) stage.

Tangible exploration and evaluation assets are transferred to mine development assets upon demonstration of commercial viability of uranium production and amortised using unit-of-production method based upon proved reserves. Once commercial reserves (proved or commercial reserves) are found, intangible exploration and evaluation assets are transferred to mineral rights. Accordingly, the Target does not amortise exploration and evaluation assets before commercial reserves (proved or commercial reserves) are found. If eventually no commercial reserves are found, exploration and evaluation assets are written off and charged to the statement of profit or loss.

Exploration and evaluation assets are tested by the Target for impairment whenever facts and circumstances indicate assets' impairment. An impairment loss is recognised for the amount by which exploration and evaluation assets' carrying amount exceeds their recoverable amount. The recoverable amount is higher of the exploration and evaluation assets' fair value less costs to sell and their value in use.

One or more of the following facts and circumstances indicate that the Target should test its exploration and evaluation assets for impairment (the list is not exhaustive):

- the period for which the Target has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on further exploration for and evaluation of mineral reserves in the specific area is neither budgeted nor planned;
- exploration for and evaluation of mineral reserves in the specific area have not led to the discovery of commercially viable quantities of mineral reserves and the Target has decided to discontinue such operations in the specific area;
- sufficient data exist to indicate that, although development works in the specific area are likely to proceed, the carrying amount of the exploration and evaluation assets is unlikely to be recovered in full resulting from efficient development or by sale.

2.6 Impairment of non-financial assets

The carrying amounts of the Target's non-financial assets, other than inventories and deferred income tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, management estimates the recoverable amount, which is determined as the higher of an asset's fair value less costs to sell (amount which could be obtained as a result of the sales of an asset or a cash generating unit in an arms-length transaction between knowledgeable, voluntary, independent parties, less cost of disposal) and its value in use (being the net present value of expected future cash flows of the relevant cash-generating unit). In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted.

If it is not possible to estimate the recoverable amount of the individual asset, the Target determines the recoverable amount of the cash-generating unit to which the asset belongs. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

The estimates used for impairment reviews are based on detailed life of mine plans and operating budgets, modified as appropriate to meet the requirements of IAS 36 "Impairment of Assets". Future cash flows are based on:

- estimates of the volumes of the reserves for which there is a high degree of confidence of economic extraction;
- future production levels and related services;
- future commodity prices (assuming the current market prices will revert to the Target's assessment of the long term average price, generally over a period of three to five years); and
- future costs of production, other operating and capital expenditures.

2.7 Investments and other financial assets

(a) Classification

The Target classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value through other comprehensive income (FVOCI), and
- those to be measured at amortised cost.

The classification depends on the Target's business model for managing the financial assets and the contractual terms of the cash flows.

(b) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the Target commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Target has transferred substantially all the risks and rewards of ownership.

(c) Measurement

At initial recognition, the Target measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial asset carried at fair value through profit or loss are expensed in profit or loss.

Debt instruments

Subsequent measurement of debt instruments depends on the Target's business model for managing the asset and the cash flow characteristics of the asset.

Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses), together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.

Equity instruments

The Target subsequently measures all equity investments at fair value. Where the Target's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the Target's right to receive payments is established.

(d) Impairment

From 1 January 2018, the Target assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade and other receivables, the Target applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

(e) Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Target or the counterparty.

2.8 Inventories

Inventories are recorded at the lower of cost and net realisable value. Upon the inventory issue or other disposal, its cost is determined on the weighted average basis. The cost of finished goods and work in progress comprises raw material, direct labor, other direct costs and related production overheads (based on the normal operating capacity) but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and selling expenses.

2.9 Trade and other receivables

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. Trade and other receivables are generally due for settlement within one year and therefore all classified as current.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost. The carrying amount of the assets is reduced through the use of a provision account, and the amount of the loss is recognised in the statement of profit or loss within "General and administrative expenses". When a trade and other receivable is uncollectible, it is written off against the allowance account for trade receivables and other receivables. Subsequent recoveries of amounts previously written off are credited to profit or loss statement within "General and administrative expenses" in the statement of profit or loss.

2.10 Cash and cash equivalents

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Cash and cash equivalents are carried at amortised cost because: (i) they are held for collection of contractual cash flows and those cash flows represent solely payments of principal and interest, and (ii) they are not designated at fair value through profit or loss. Restricted balances are excluded from cash and cash equivalents for the purposes of the statement of cash flows. Balances restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period are included in other non-current assets.

2.11 Share capital

Assets contributed by the sole shareholder are recognised at fair value when the contribution is made. Any excess of the fair value of the contributed assets over the nominal share capital contribution is credited directly to equity as share premium.

2.12 Trade and other payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost.

2.13 Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate adjusted by changes in deferred income tax assets and liabilities attributable to temporary differences and to unused tax losses.

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the country where the Target operates and generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

(b) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction that at the time of the transaction affects neither accounting nor taxable profit nor loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred income tax assets and liabilities are offset where there is a legally enforceable right to offset current tax assets and liabilities and where the deferred tax balances relate to the same taxation authority. Current income tax assets and liabilities are offset where the Target has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred income tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

2.14 Employee benefits

(a) Payroll expense and related contributions

Wages, salaries, social tax, contributions to social insurance funds, paid annual leave and sick leave, bonuses, and non-monetary benefits are accrued in the year in which the associated services are rendered by the employees of the Target. In accordance with the legal requirements of the Republic of Kazakhstan, the Target withholds pension contributions from employees' salary and transfers them to the Unified Accumulative Pension Fund. Upon retirement of employees, all pension payments are administered by the Unified Accumulative Pension Fund.

(b) Long-term employee benefit obligations

The Target provides certain long-term employee benefits to employees in accordance with the terms of the Collective Labor Agreement (a unified document made available to employees) (the "Agreement"). The Agreement provides for financial aid for employees' disability, retirement, funeral aid and other payments to the Target's employees. The entitlement to some benefits is usually conditional on the employee remaining employed until the retiremen age and the completion of a minimum service period.

The Target does not have any funded post-employment plans. Liability recognised at each reporting date represents the present value of the plan liabilities. Actuarial gains and losses arising in the year are recorded in the profit or loss for the year or other comprehensive income. The obligations are presented as

current liabilities in the statement of financial position if the Target does not have an unconditional right to defer settlement for at least twelve months after the reporting period, regardless of when the actual settlement is expected to occur.

For this purpose, actuarial gains and losses comprise both the effects of changes in actuarial assumptions and experience adjustments arising because of differences between the previous actuarial assumptions and what has actually occurred.

Actuarial gains and losses on post-employment obligations such as experience adjustments and the effects of changes in actuarial assumptions recognised in other comprehensive income in the period occurred. Other movements in the present value of the plan liabilities are also recognised in the profit or loss for the year, including current service cost.

The most significant assumptions used in accounting for defined benefit obligations are the discount rate, staff turnover and the mortality assumptions. The discount rate is used to determine the net present value of future liabilities and each year the unwinding of the discount on those liabilities is charged to profit or loss for the year. The mortality assumption is used to project the future stream of benefit payments, which is then discounted to arrive at a net present value of liabilities.

Employee benefits, including financial aid for employees' disability and funeral aid to the Target's employees and other payments, are considered as other long-term employee benefits. The expected cost of these benefits is accrued over the period of employment using the same accounting methodology as used for the defined benefit plan. These obligations are valued annually by independent qualified actuaries.

2.15 Provisions

Provisions for liabilities and charges are non-financial liabilities with indefinite maturity or amount. They are accrued when the Target has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. The Target's provisions include site restoration and other provisions recorded in the financial statements.

Provision for asset restoration obligations

Assets restoration obligations ("ARO") are recognised when it is probable that the costs would be incurred and those costs can be measured reliably. Asset restoration obligations include the costs of rehabilitation and costs of liquidation (demolition of buildings, constructions and infrastructure dismantling of machinery and equipment, transportation of the residual materials, environmental clean-up, monitoring of wastes and land restoration). An estimated cost of dismantling and removal of an item of property, plant and equipment is added to the cost of the item at the time of acquisition of this item of property, plant and equipment or when the item is used for the purposes not related to production during a period in which the liability arising from a respective fact of disturbance of lands during contamination of environment, based on the discounted value of estimated future costs.

Changes in the estimate of the existing asset restoration obligation as a result of changes in estimated maturity or amount of respective costs or as a result of change in the discount rate are recorded as an adjustment of the cost of a respective asset in the current period. These costs are subsequently amortised during useful lives of assets, to which they are related, using the amortisation method appropriate to these assets. Changes in the provisions for asset restoration obligations related to damage during the production and processing phase are recorded in profit or loss for the year.

Provisions for asset restoration obligations do not include any additional obligations which are expected to arise from future disturbances. Estimated amounts of the costs are calculated annually in the course of operations taking into account known changes, for example, updated estimated amounts and revised useful lives of assets or set terms of operating activities, with conduct of official reviews on a regular basis. Although the final cost to be incurred is uncertain, the Target estimates its costs based on feasibility and engineering studies using current restoration standards and techniques for conducting restoration works.

The amortisation or "unwinding" of the discount applied in establishing the net present value of provisions is charged to profit or loss in each accounting period, and disclosed as finance costs.

2.16 Revenue recognition

Revenue is income arising in the course of the Target's ordinary activities. Revenue is recognised in the amount of transaction price. Transaction price is the amount of consideration to which the Target expects to be entitled in exchange for transferring control over promised goods or services to a customer, excluding the amounts collected on behalf of third parties.

Sales are recognised when control of the good has transferred, being when the goods are delivered to the customer, the customer has full discretion over the goods, and there is no unfulfilled obligation that could affect the customer's acceptance of the goods. Delivery occurs when the goods have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the goods in accordance with the contract, the acceptance provisions have lapsed, or the Target has objective evidence that all criteria for acceptance have been satisfied.

The Target carries out the following types of activities:

(a) Sales of uranium in the form of natural uranium oxide

The Target is engaged in mining its own uranium at the contractual territory as a subsurface user. During the years ended 31 December 2018, 2019 and 2020 the Target conducted processing of uranium to natural uranium oxide at Ulba metallurgical plant (a NAC KAP subsidiary involved in processing of uranium to final uranium product) and sold finished goods to NAC KAP.

Sales are recognised when control of the good has transferred, being when the goods are delivered to the customer, the customer has full discretion over the goods, and there is no unfulfilled obligation that could affect the customer's acceptance of the goods. Delivery occurs when the goods have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the goods in accordance with the contract, the acceptance provisions have lapsed, or the Target has objective evidence that all criteria for acceptance have been satisfied. Delivery of uranium products is stipulated by the contract with customer, delivery date is considered to be the date of acceptance act signing. The date of acceptance act signing is determined based on the good consignment note, the date of physical delivery, or the date of special written notification specified by customer.

No element of financing is deemed present as the sales are made with an average credit term of 30-90 days, which is consistent with market practice.

A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

(b) Render of services

The Target may provide services under fixed-price and variable price contracts. Revenue from providing services is recognised in the accounting period in which the services are rendered. For fixed-price contracts, revenue is recognised based on the actual service provided to the end of the reporting period as a proportion of the total services to be provided because the customer receives and uses the benefits simultaneously. Revenue from rendering the services is recognised over the period of the contract by reference to the progress of work performed, which is established according to the value of efforts put in each task over total value of efforts of the implementation project with support by progress reports acknowledged by the customers. The corresponding implementation costs are recognised as incurred under cost of sales.

Where the contracts include multiple performance obligations, the transaction price is allocated to each separate performance obligation based on the stand-alone selling prices. Where these are not directly observable, they are estimated based on expected cost plus margin.

Estimates of revenues, costs or extent of progress toward completion are revised if circumstances change. Any resulting increases or decreases in estimated revenues or costs are reflected in profit or loss in the period in which the circumstances that give rise to the revision become known by management.

In case of fixed-price contracts, the customer pays the fixed amount based on a payment schedule. If the services rendered by the Target exceed the payment, a contract asset is recognised. If the payments exceed the services rendered, a contract liability is recognised.

If the contract includes variable consideration, revenue is recognised only to the extent that it is highly probable that there will be no significant reversal of such consideration.

Revenue is recognised net of value added taxes. Revenue is measured at the fair value of the consideration received or receivable.

2.17 Leases

The Target currently only have leases of various office and industrial premises under short-term leases which are with a lease term of less than 12 months. Lease terms are negotiated on an individual basis and contain various different terms and conditions. Payments associated with short-term leases are recognised on a straight-line basis as an expense.

Accounting policies applied until 31 December 2018

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessors are classified as operating leases. Payments made under operating leases, net of any incentives received from the lessors are charged to profit or loss on a straight-line basis over the period of the lease.

2.18 Dividend distribution

Dividends are recorded as a liability and deducted from equity in the period in which they are declared and approved. Any dividends declared after the reporting period and before the financial statements are authorised for issue are disclosed in the subsequent events note. Dividends are distributed on the basis of the statutory financial statements prepared under IFRS in the functional currency of the Target. Based on the applicable legislations of the Republic of Kazakhstan, the calculation and distribution of dividends should be made after the approval of financial statements.

2.19 Contingent liabilities

A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Target. It can also be a present obligation arising from past events that is not recognised because it is not probable that outflow of economic resources will be required or the amount of obligation cannot be measured reliably.

A contingent liability is not recognised but is disclosed in the notes to the financial statements. When a change in the probability of an outflow occurs so that outflow is probable, they will then be recognised as a provision.

3 FINANCIAL RISK MANAGEMENT

The risk management function within the Target is carried out in respect of financial risks, operational risks and legal risks. Financial risks comprise credit risk, liquidity risk and market risk (including currency risk, interest rate risk and price risk). The Target's risk management policy was developed to identify and analyse risks, to which the Target is exposed, establish manageable risk limits and respective controls, and monitor risks and observance of set limits. The risk management policy and systems are regularly analysed for the need to make changes due to changes in market conditions and the Target's operations. The Target establishes standards and procedures for training and management to create a regular and effective control system, in which all the staff understand their roles and responsibilities. The operational and legal risk management functions are intended to ensure proper functioning of internal policies and procedures to minimise these risks.

This note presents information on the Target's exposure to each of the said financial risks, on the Target's goals, its policy and procedures of risk evaluation and management and on the Target's approaches to management of capital. Additional quantitative information is disclosed throughout these financial statements.

The sole shareholder of the Target, NAC KAP, is in charge of setting the Target's objectives and approval of the risk management policy. Management is in charge of implementing the risk management policy and organising an efficient risk management system and is responsible for its implementation and regularly reports on its work to the sole shareholder.

3.1 Financial risk factors

(a) Market risk

The following is information on the Target's exposure to the impact of market risks, i.e. risks that a change in market prices will have an adverse impact on the Target's profit or on the cost of its financial instruments.

(i) Foreign exchange risk

In respect of foreign exchange risk, management sets limits on the level of exposure by currency and in total for both overnight and intra-day positions, which are monitored daily.

The table below summarises the Target's exposure to foreign currency exchange rate risk at the end of the reporting period:

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Monetary financial assets *(Note 16)*			
Russian Rubles	–	–	1,379
Monetary financial liabilities *(Note 21)*			
US Dollars	(1,059,067)	(1,568,099)	(2,049,786)

The following table presents sensitivities of profit or loss to reasonably possible changes in exchange rate of US dollar applied at the end of the reporting period relative to the Target's functional currency (i.e. Kazakhstan Tenge), with all other variables held constant:

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
US Dollar strengthening by 10%	(84,726)	(125,448)	(163,983)
US Dollar weakening by 10%	84,726	125,448	163,983

(ii) Cash flow and fair value interest rate risk

The Target's interest rate risk arises from interest bearing bank deposits. Bank deposits at variable rates expose the Target to cash flow interest-rate risk. The Target currently does not use any derivative contracts to hedge its exposure to interest rate risk. There are no significant interest bearing bank deposits for the years ended 31 December 2018, 2019 and 2020, the Target is therefore not exposed to significant cash flow interest rate risk.

(iii) Price risk

The Target is exposed to the effect of fluctuations in the price of uranium. The Target prepares an annual budget based on future uranium prices. Uranium prices historically fluctuate and are affected by numerous factors outside of the Target's control, including, but not limited to:

- demand for uranium used as fuel by nuclear power stations;
- depleting levels of secondary sources such as recycling and blended down highly enriched stocks available to close the gap of the excess demand over supply;
- impact of regulations by the International Agency on Nuclear Energy;
- other factors related specifically to uranium industry.

At the end of the reporting period there was no significant impact of commodity price risk on the Target's financial assets and financial liabilities.

(b) Credit risk

The Target takes on exposure to credit risk, which is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. Exposure to credit risk arises as a result of the Target's sales of products on credit terms and other transactions with counterparties giving rise to financial assets. Credit risk is related mainly to the Target's receivables from buyers and customers and cash and cash equivalents.

Credit risk related to cash and cash equivalents and long-term deposit wholly placed in the Republic of Kazakhstan, is limited since the counterparties are represented by banks with high available (In the Republic of Kazakhstan) credit ratings assigned by international rating agencies. Credit risk related to trade receivables is also limited as they are primarily due from NAC KAP (the largest state-owned nuclear energy operator in the Republic of Kazakhstan).

In US$	**Rating (Moody's)**	**31 December 2020**	**31 December 2019**	**31 December 2018**
Financial trade receivables *(Note 14)*	Not present	39,710,640	34,957,170	28,509,855
Liquidation fund *(Note 13)*				
ForteBank JSC	Ba3	3,432,333	–	2,873,696
Citibank Kazakhstan JSC	Aa3	–	3,261,121	–
Cash and cash equivalents *(Note 16)*				
ForteBank JSC	Ba3	40,313	5,247,267	32,345
National Bank of Kazakhstan JSC	Ba1	4,679,918	2,503,098	8,043,261
Citibank Kazakhstan JSC	Aa3	116	–	–
Kaspi Bank JSC	Ba2	–	–	1,385,741
Tengri Bank JSC	*Note (i)*	–	–	16,960
Other banks	B1	–	–	1,435
Total cash at current bank accounts and restricted deposits		**8,152,680**	**11,011,486**	**12,353,438**
Total maximum exposure to credit risk		**47,863,320**	**45,968,656**	**40,863,293**

Note (i): Tengri Bank JSC has not the established credit rating, since the license for banking operations was revoked from 18 September 2020.

The Target is exposed to concentrations of credit risk, since approximately 99.9% of the Target's revenue is attributable to sales transactions with one customer, sole shareholder of the Target, NAC KAP.

Expected credit loss (ECL) measurement

The Target has following financial assets that are subject to IFRS 9 new expected credit loss model:

- trade receivables;
- other receivables;
- other non-current assets (excluding the financial assets at FVOCI) as set out in Note 13.

While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

Assessment of expected credit losses is a significant estimate, for which the assessment methodology, models and initial data are used. The following components have significant impact on credit loss allowance: determination of default, a significant increase in credit risk, the probability of default, exposure to default risk and the amount of loss in the event of default, as well as models of macroeconomic scenarios. The Target regularly checks and confirms models and initial data for models in order to reduce discrepancies between estimated expected credit losses and actual credit loss allowance.

(i) Credit risk of trade receivables

The Target applies the simplified approach to provide for expected credit losses prescribed by IFRS 9, which permits the use of the lifetime expected loss provision for all accounts receivable. In view of the sound financial position and collection history of receivables due from these counterparties and insignificant risk of default, to measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due.

The expected loss rates are based on the payment profiles of revenue over 12 months and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

A default on trade receivables is when the counterparty fails to make contractual payments within 90 days of when they fall due. Trade receivables are written off, in whole or in part, when it has exhausted all practical recovery efforts and has concluded that there is no reasonable expectation of recovery.

Impairment losses on trade receivables are presented as net impairment losses within operating profit. Subsequent recoveries of amounts previously written off are credited against the same item.

(ii) Credit risk of other receivables and other non-current assets (excluding the financial assets at FVOCI)

Management considers the credit risk of other receivables and other non-current assets (excluding FVOCI) are insignificant when they have a low risk of default and a strong capacity to meet its contractual cash flow obligations in the near term, and the loss allowance recognised is therefore limited to 12 months expected losses. In view of insignificant risk of default and credit risk since initial recognition, management believes that the expected credit loss under the 12 months expected losses method is immaterial.

The Target incorporated supportable forward-looking information for assessment of expected credit losses, which was mainly based on the forecasted macro-economic model adopted by shareholder of the Target. The following easily interpreted assumptions were used for analysis:

growth rate of GDP and inflation rate. The final macro-economic function includes only the assumption of inflation. Information about prospects is included in the parameters of the probability of default during a lifetime after the reporting date.

On that basis, the loss allowance as at 31 December 2020, 2019 and 2018 was determined as follows for trade receivables, other receivables and other non-current assets (excluding the financial assets at FVOCI):

	Trade receivables *(Note 14)* **No past due** *US$*	**Other receivables** *(Note 14)* **No past due** *US$*	**Other non-current assets (excluding the financial assets at FVOCI)** *(Note 13)* **No past due** *US$*
As at 31 December 2018			
Expected loss rate	0.04%	–	0.04%
Gross carrying amount	28,509,855	25,851	3,374,102
Loss allowance provision	(11,994)	–	(1,439)
As at 31 December 2019			
Expected loss rate	0.04%	–	0.03%
Gross carrying amount	34,957,170	57,041	4,158,041
Loss allowance provision	(13,954)	–	(1,367)
As at 31 December 2020			
Expected loss rate	0.23%	–	1.77%
Gross carrying amount	39,710,640	37,526	3,436,379
Loss allowance provision	(91,956)	–	(60,978)

The loss allowances for trade receivables, other receivables and other non-current assets (excluding the financial assets at FVOCI) as at 31 December reconcile to the opening loss allowances as follows:

	Trade receivables *(Note 14)* US$	Other receivables *(Note 14)* US$	Other non-current assets (excluding the financial assets at FVOCI) *(Note 13)* US$
Opening loss allowance as at 1 January 2018 calculated under IFRS 9	299	–	–
Increase in loss allowance recognised in profit or loss during the year	11,695	–	1,439
As at 31 December 2018	**11,994**	**–**	**1,439**
Opening loss allowance as at 1 January 2019 calculated under IFRS 9	11,994	–	1,439
Increase/(decrease) in loss allowance recognised in profit or loss during the year	1,960	–	(72)
As at 31 December 2019	**13,954**	**–**	**1,367**
Opening loss allowance as at 1 January 2020 calculated under IFRS 9	13,954	–	1,367
Increase in loss allowance recognised in profit or loss during the year	78,002	–	59,611
As at 31 December 2020	**91,956**	**–**	**60,978**

Trade and other receivables and other non-current assets are written off where there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Target.

Impairment losses on trade and other receivables and other non-current assets are presented as net impairment losses within general and administrative expenses. Subsequent recoveries of amounts previously written off are credited against the same line item.

(c) Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Target is exposed to daily calls on its available cash resources. Management monitors monthly rolling forecasts of the Target's cash flows.

The Target seeks to maintain a stable funding base primarily consisting of trade and other payables. The Target's approach to liquidity risk management is to ensure the continuous and sufficient liquidity to meet the Target's liabilities as they fall due (both under standard and non-standard situations), preventing unacceptable losses or damage to the Target's reputation.

The Target usually ensures presence of cash available on first demand and further supplements this by timely recovery of expired trade receivables, in the amount sufficient to cover expected operating expenses. It does not consider potential impact of exceptional circumstances whose occurrence could not be justifiably foreseen, for example, natural hazards.

The table below shows financial liabilities by their remaining contractual maturity. When the amount payable is not fixed, the amount disclosed is determined by reference to the conditions existing at the end of the reporting period. Foreign currency payments are translated using the spot exchange rate by the reporting date.

	Less than 1 year	**Between 1 and 2 years**	**Between 2 and 5 years**	**Total**
	US$	*US$*	*US$*	*US$*
Trade and other payables				
At 31 December 2018	6,091,722	–	–	6,091,722
At 31 December 2019	5,085,027	–	–	5,085,027
At 31 December 2020	4,926,058	–	–	4,926,058
Long-term payables				
At 31 December 2018	549,120	549,120	1,098,240	2,196,480
At 31 December 2019	551,152	549,120	547,088	1,647,360
At 31 December 2020	549,381	548,859	–	1,098,240

3.2 Capital management

The Target pursues a policy of sustaining a stable capital basis to safeguard the Target's ability to continue as a going concern, keep confidence of shareholders, creditors and market, to provide an acceptable level of profit for the shareholder, to maintain an optimal capital structure to minimise the cost of capital, and to ensure future business development. Capital includes share capital, reserves and retained earnings of the Target. In order to maintain or adjust the capital structure, the Target may adjust the amount of dividends paid to the shareholder, and sell assets to reduce debt. The Target managed capital at 31 December 2020 was US$103,974,928 (2019: US$102,414,672, 2018: US$99,973,846). As at 31 December 2020, 2019 and 2018, the Target does not have any external borrowings.

During the year ended 31 December 2020, there were no changes in capital management goals, policies and processes.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS IN APPLYING ACCOUNTING POLICIES

The Target makes estimates and assumptions that affect the amounts recognised in the financial statements and the carrying amounts of assets and liabilities within the next financial year. Estimates and judgements are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgements, apart from those involving estimations, in the process of applying the accounting policies. Judgements that have the most significant effect on the amounts recognised in the financial statements and estimates that can cause a significant adjustment to the carrying amount of assets and liabilities within the next financial year include:

(a) Uranium reserves

Uranium reserves are a critical component of the Target's projected cash flow estimates that are used to assess the recoverable values of assets (when an impairment indicator exists) and to determine depreciation and amortisation expense.

The Target uses a method of reserve evaluation based on Australasian Code for reporting on geological exploration works, mineral resources and ore reserves dated December 2012 ("JORC Code"), which requires the use of justified assumptions, including:

- evaluation of the future production, which includes proved and forecast reserves, evaluations of reserves and obligation on expansion;
- assumed future commodity prices based on the effective market price, forward price and the Target's estimate of long-term average price; and
- future cash costs of production capital investments and restoration liabilities.

(b) Impairment of non-financial assets

At the end of each reporting period, the Target assesses non-financial assets for any indication of their possible impairment. If any such indications exist, the recoverable amount of the assets is calculated and compared with their carrying amount in accordance with the policies as set out in Note 2.6 to the financial statements. Any excess of the carrying amount over the recoverable amount will be recognised as impairment. To estimate impairment the assets are grouped on the lowest levels, for which there are separate identifiable cash flows significantly independent on cash flows from other assets or groups of assets (cash generating units). The Target determined each field (contract area) as a separate cash generating unit.

The identification of the existence of impairment indicator involves significant management's judgement. The Target's management has conducted an analysis and concluded that no indicators of impairment of non-financial assets exist as of the respective balance sheet dates.

The insignificant impairment charge on property, plant and equipment of US$510,530 (Notes 6 and 10) as recognsied in 2019 are all relating to certain individual obsolete assets which are not functioned properly and cannot be used further in the Target's production activities.

In reaching the abovementioned conclusion, management has already considered the situation that the Target's application for the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field was rejected on 6 May 2020 (see details in Note 1 to the financial statements).

Management still concluded that there were no indications of impairment of the exploration and evaluation assets related to the Zhalpak field (Note 12) due to the following factors or considerations:

- The Target and the sole shareholder have both committed to take all measures provided for by the prevailing legislations on subsoil and subsurface use to enable the Target can obtain the related subsurface use right (i.e. the mineral extraction right) for the uranium extraction and production at the Zhalpak field eventually.

- The Target has engaged Kinstellar LLP as its external legal consultant (the "Legal Consultant") and the Legal Consultant has opined that currently, the subsurface use right in the Republic of Kazakhstan is governed by the legislation named "The Code of the Republic of Kazakhstan "On subsoil and subsoil use" (the "Code"). The Legal Consultant has also opined that the subsurface use right for the uranium extraction in accordance with the Code can only be granted to a national company in the field of uranium (which is NAC KAP under the existing situation), which in turn may transfer the subsurface use right to a subsidiary with more than 50% share ownership. Hence, after NAC KAP has obtained the approved subsurface use right to conduct uranium extraction at the Zhalpak field, it has the right to transfer the subsurface use right to the Target because 100% of shares of the Target belong to NAC KAP and such transfer is permitted under the Code.

- As mentioned in Note 1, the Board of Directors of NAC KAP has already approved on 26 August 2020 that once the Zhalpak field subsurface use right (i.e. the mineral extraction right) has been obtained by NAC KAP, NAC KAP will then transfer the subsurface use right (at nil cost) in favour of the Target in the manner prescribed by the law. In addition, NAC KAP has already commenced the application processes with the relevant government authorities for obtaining the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field on 21 September 2020.

- On 2 January 2020, the uranium reserves report for the Zhalpak field (one of the application documents as filed by the Target) was considered and approved by the competent authority. The competent authority has also approved the "Feasibility Study of the industrial conditions of the Zhalpak uranium deposit" as filed by NAC KAP on 4 February 2020. All these approvals are considered as positive progresses or stages for NAC KAP to obtain the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field.

- The Target has submitted all reports on the implementation of the license and contract terms (hereinafter, "LKU") for 2018-2020, which were accepted by the competent authority. At the same time, no notifications of violations related to the LKU were sent to the Target.

- Enabling the Target to obtain the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field is a prerequisite for the transaction between NAC KAP and CGNPC Uranium Resources Co. Ltd. (a wholly-owned subsidiary of CGN Mining Company Limited) (hereafter collectively the "CGN Mining Group") in respect of the CGN Mining Group's potential acquisition of the 49% equity interest in the Target as mentioned in Note 1. NAC KAP is obliged and has committed to obtain the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field and transfer it to the Target by 31 December 2021. In case NAC KAP fails to do so, CGN Mining Group has the right to withdraw from that potential acquisition deal. More importantly, this will further lead to the threats of disruption of several other projects within the framework of Kazakhstan-China cooperation in the field of nuclear energy (the agreements of these other projects were all approved by the Government of the Republic of Kazakhstan and issues on the implementations of these projects are being discussed at the government level of the two countries (i.e. the Republic of Kazakhstan and the People's Republic of China). In view of these, management believes that the Government of the Republic of Kazakhstan will be supportive for granting the subsurface use right (i.e. the mineral extraction right) of the Zhalpak field to NAC KAP for the subsequent transfer to the Target so that the CGN Mining Group's potential acquisition of the 49% equity interest in the Target can be completed in due course.

In addition to exploration and evaluation assets relating to the Zhalpak field as disclosed in Note 12, the Target's property, plant and equipment also includes a road to the Zhalpak field with carrying amount of US$8,523,000 as at 31 December 2020. The road to the Zhalpak field was commissioned in 2020 and is the property of the Target. The Target continues to use the road to the Zhalpak field to maintain the uranium resources or reserves in a good condition for further exploration and production of uranium products. Management also considers that there were no indicators of impairment of the road in view of those factors and considerations as set out above for the assessment on the exploration and evaluation assets related to the Zhalpak field.

(c) Provision for asset restoration obligations

According to environmental regulations, the Target has a legal obligation to remediate damage caused to the environment from its operations, dismantling of equipment and soil remediation after completion of activities. The provisions are made based on the discounted value of costs of liquidation and remediation as soon as the obligations arise from past operating activities.

Provision for asset restoration obligations is estimated based on the Target's interpretation of the current environmental legislation in the Republic of Kazakhstan and related remedial action programs at contract areas and other operating activities, supported by a feasibility study and engineering research according with the applicable restoration and restoration standards and techniques.

The estimates of the costs of damage elimination are subject to potential changes in environmental requirements and interpretations of the legislation. Liquidation obligations are recognised in case of a probability of their occurrence and possibility of their reasonable estimate.

Significant judgements in such estimations include the estimate of the discount rate, cost of work and timing of future cash outflows. The discount rate is applied to the nominal value of work which management is assuming to conduct to liquidate and restore assets in the future. Accordingly, management's estimates made on current prices were increased using the assumed long-term inflation rate (2018: 5.30%, 2019: 5.30%, 2020: 5.17%) and subsequently discounted based on the discount rate. The discount rate reflects current market estimates of time value of money and risks on obligations which were not accounted for in the best estimates of costs. The discount rate applied by the Target to calculate the provision at 31 December 2018, 2019, 2020 are 7.45%, 7.13%, 9.87%, respectively.

Were the estimated inflation rate to differ by 10% from management's estimates, the impact on the carrying value of provision for asset restoration obligations as at 31 December 2020 would be to increase it by US$401,495 or decrease it by US$378,498 (2019: increase by US$645,611 or decrease by US$605,365, 2018: increase by US$692,833 or decrease by US$645,696). Were the estimated discount rate to differ by 10% from management's estimates, the impact on the carrying value of provision for asset restoration obligations as at 31 December 2020 would be to increase it by US$697,576 or decrease it by US$620,682 (2019: increase by US$800,764 or decrease by US$730,351, 2018: increase by US$906,226 or decrease by US$816,706).

(d) Useful lives of property, plant and equipment

The estimation of the useful lives of items of property, plant and equipment is a matter of judgement based on the experience with similar assets. The future economic benefits embodied in the assets are consumed principally through use. However, other factors such as technical or commercial obsolescence and wear and tear, often result in the diminution of the economic benefits embodied in the assets. Management assesses the remaining useful lives of property, plant and equipment based on the current technical conditions of the assets and estimated period during which the assets are expected to earn benefits. The following primary factors are considered: (a) the expected usage of the assets; (b) the expected physical wear and tear, which depends on operational factors and maintenance schedule; and (c) the technical or commercial obsolescence arising from changes in market conditions.

The Target's property, plant and equipment (except those used for uranium production and its pre-processing) are depreciated on a straight-line basis over their useful life. Management reviews compliance of useful lives of assets at least annually; any changes can impact perspective rates of depreciation and carrying amount of assets.

(e) Estimated useful lives of assets related to uranium production

Property, plant and equipment related to uranium production are depreciated using the unit-of-production method during the term of deposit mining based on the estimate of mineral reserves. In determining mineral reserves the assumptions which were valid during the evaluation can change upon arrival of new information. Any changes can affect the perspective rates of depreciation and carrying amount of an asset.

(f) Tax legislation

Tax conditions in the Republic of Kazakhstan are subject to changes and inconsistent application and interpretation. Discrepancies in interpretation of Kazakhstan laws and regulations by the Target and Kazakhstan authorities may lead to accrual of additional taxes, penalties and interest.

Kazakhstan tax legislation and practice is in a state of continuous development, and therefore is subject to varying interpretations and frequent changes, which may be retroactive. In certain cases to determine the taxable basis tax legislation refers to IFRS provisions, however the interpretation of IFRS provisions by Kazakhstan tax authorities may differ from accounting policies, judgements and estimates applied by management in preparation of these financial statements, which may lead to additional tax liabilities of the Target. Tax authorities can conduct a retroactive review for five years after the end of the tax year.

As mentioned in Note 1, the Target has continued its trial production at the Zhalpak field since June 2018 despite the fact that the Target has not yet obtained the extension of the subsurface use right (i.e. the mineral extraction right) for the Zhalpak field. The net profit from the trial production has been recognised as a reduction in the carrying amount of the exploration and evaluation assets of the Target (Note 12). The Target has already re-submitted the current income tax returns in October 2020 as if the net profit from the trial production in 2018 and 2019 are taxable (depite those amounts were capitalised as assets from accounting perspective) and the tax authority has accepted the Target's re-submission without any further queries. The additional provision as recognised is not significant and has been presented as "under provision for prior years" in Note 9 to these financial statements.

The Target's management believes that its interpretation of respective legislation is acceptable and the Target's tax position is justified. In the opinion of the Target's management, the Target will not incur significant losses on current and potential tax claims.

5 REVENUE AND SEGMENT INFORMATION

The chief operating decision-maker has been identified as the management of the Target. Management determines the operating segments based on the Target's internal reports, which are then submitted to the Board of Directors of the Target for performance assessment and resources allocation.

The Management assesses the performance of operating segment based on a measure of profit before income tax. The Target has identified only one operating segment – Production and sales of uranium product.Accordingly, segment disclosures are not presented. No geographical segment analysis is presented as all of the assets and liabilities and operations of the Target are located in the Republic of Kazakhstan.

During the years ended 31 December 2020, 2019 and 2018, the Target is principally engaged in uranium mining, extraction and processing and the sales of uranium product. Approximately 99.9% of the Target's revenue is attributable to sales transactions with the sole shareholder of the Target, NAC KAP.

The Target recognises revenue from the transfer of goods at a point in time and revenue from provision of services over time for the following streams:

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Revenue recognised at a point in time			
– Sales of uranium product	89,536,970	96,173,892	97,228,199
Revenue recognised over time			
– Transportation services	5,277,097	–	3,690,268
– Other services	89,443	103,606	98,052
Total revenue	**94,903,510**	**96,277,498**	**101,016,519**
Revenue generated from:			
– related parties	94,896,359	96,216,006	100,994,286
– third parties	7,151	61,492	22,233
	94,903,510	**96,277,498**	**101,016,519**

6 EXPENSE BY NATURE

Expenses included in cost of sales, distribution costs, general and administrative expenses are analysed as follows:

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Outsourcing processing costs	8,305,310	12,677,968	14,680,321
Employee benefit expenses *(Note 7)*	7,499,335	7,129,992	7,082,728
Depreciation and amortisation	6,915,362	8,938,209	10,178,264
Mineral and other taxes	6,785,519	8,590,285	9,052,998
Raw materials and consumables used	6,774,391	11,940,028	13,968,887
Transportation costs	3,885,918	179,541	3,007,375
Fuel and electricity	2,275,508	2,621,481	2,248,211
Repair and maintenance costs	1,047,673	1,211,126	603,327
Training expense	351,865	467,951	659,543
Auditor's remuneration	10,354	11,231	12,471
Provision for impairment of property, plant and equipment	–	510,530	–
Reversal of provision for impairment of inventories	(18,454)	(121,991)	(1,437,585)
Others	2,382,289	1,754,498	1,760,065
Total	**46,215,070**	**55,910,849**	**61,816,605**

7 EMPLOYEE BENEFITS

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Wages and salaries	7,220,595	6,685,182	6,594,622
Contributions to pension plans *(Note)*	722,059	668,518	659,462
Service cost of benefit plans *(Note 22)*	107,257	6,913	10,971
Welfare and other expenses	101,485	162,635	172,424
	8,151,396	7,523,248	7,437,479
Less: amounts capitalised in property, plant and equipment and exploration and evaluation assets	(652,061)	(393,256)	(354,751)
	7,499,335	7,129,992	7,082,728

Note: The Target's contributions to pension plans are made in accordance with the legal requirements of the Republic of Kazakhstan under which the Target is required to make monthly defined contributions to these plans at rates 10% of the employees' salaries. The Target withholds pension contributions from employees' salary and transfers them into the Unified Accumulative Pension Fund. Upon retirement of employees, all pension payments are administered by the Unified Accumulative Pension Fund and the Target has no further payment obligations once the aforesaid monthly defined contributions have been paid.

8 FINANCE COSTS – NET

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Finance costs			
Provisions: unwinding of discount from asset restoration obligations	596,127	621,614	614,157
Unwinding of discount from long-term payables	45,321	61,635	95,677
Provisions: unwinding of discount from employee benefits obligations	11,024	5,892	5,714
Foreign exchange losses	–	–	307,325
Others	53,073	3,564	–
Total finance costs	**705,545**	**692,705**	**1,022,873**
Finance income			
Interest income from bank deposits	(326,976)	(231,515)	(114,992)
Foreign exchange gains	(201,735)	(25,743)	–
Total finance income	**(528,711)**	**(257,258)**	**(114,992)**
Finance costs – net	**176,834**	**435,447**	**907,881**

9 INCOME TAX EXPENSES

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Current income tax:			
– Current tax on profits for the year	9,338,982	7,839,382	7,431,844
– Under provision for prior years	267,808	716,786	–
	9,606,790	8,556,168	7,431,844
Deferred income tax charge	265,517	6,007	306,166
	9,872,307	8,562,175	7,738,010

The provision for Kazakhstan current income tax is based on the statutory tax rate of 20% on the basis of the Target's profit for statutory financial reporting purpose, adjusted for income and expense items which are not assessable or deductible for current income tax purpose.

The taxation of the Target's profit before income tax differs from the theoretical amount that would arise using the rate prevailing in the jurisdiction in which the Target operates as follows:

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Profit before income tax	48,413,834	39,699,548	38,252,285
Tax calculated at applicable tax rate (20%)	9,682,767	7,939,910	7,650,457
Income not subject to tax	(79,338)	(102,364)	(107,662)
Expenses not deductible for tax purposes	1,070	7,843	195,215
Under provision for prior years	267,808	716,786	–
Income tax expense for the year	**9,872,307**	**8,562,175**	**7,738,010**

10 PROPERTY, PLANT AND EQUIPMENT

	Buildings *US$*	Plant machinery and equipment *US$*	Mine development assets and others *US$*	Construction in progress *US$*	Total *US$*
As at 1 January 2018					
Cost	27,545,335	12,012,191	45,138,615	756,177	85,452,318
Accumulated depreciation	(6,275,799)	(6,475,464)	(2,266,640)	–	(15,017,903)
Net book amount	**21,269,536**	**5,536,727**	**42,871,975**	**756,177**	**70,434,415**
Year ended 31 December 2018					
Opening net book amount	21,269,536	5,536,727	42,871,975	756,177	70,434,415
Capital injection from shareholder	–	–	–	379,372	379,372
Additions	–	551,607	6,283,528	13,337,285	20,172,420
Disposals	(371)	(1,972)	(3,248)	(6,851)	(12,442)
Transfers upon completion of construction	254,936	20,717	–	(275,653)	–
Transfers to intangible assets	–	–	–	(157,484)	(157,484)
ARO adjustment	(1,121,052)	–	–	–	(1,121,052)
Depreciation charge	(1,586,316)	(1,331,363)	(8,018,682)	–	(10,936,361)
Currency translation differences	(2,791,436)	(684,152)	(5,723,580)	(1,440,886)	(10,640,054)
Closing net book amount	**16,025,297**	**4,091,564**	**35,409,993**	**12,591,960**	**68,118,814**
As at 31 December 2018					
Cost	22,860,549	10,825,393	44,531,953	12,591,960	90,809,855
Accumulated depreciation	(6,835,252)	(6,733,829)	(9,121,960)	–	(22,691,041)
Net book amount	**16,025,297**	**4,091,564**	**35,409,993**	**12,591,960**	**68,118,814**
Year ended 31 December 2019					
Opening net book amount	16,025,297	4,091,564	35,409,993	12,591,960	68,118,814
Additions	–	123,626	4,511,239	527,293	5,162,158
Disposals	(9,810)	(9,471)	(1,726)	(65,297)	(86,304)
Transfers upon completion of construction	3,414,200	66,321	89,857	(3,570,378)	–
Reclassification	(304,113)	(202,946)	412,681	94,378	–
Transfers to intangible assets	–	–	–	(37,899)	(37,899)
ARO adjustment	91,641	–	560,717	–	652,358
Depreciation charge	(1,234,567)	(995,932)	(7,181,164)	–	(9,411,663)
Impairment loss	(397,182)	(111,444)	(1,904)	–	(510,530)
Currency translation differences	133,858	27,424	273,428	86,277	520,987
Closing net book amount	**17,719,324**	**2,989,142**	**34,073,121**	**9,626,334**	**64,407,921**
As at 31 December 2019					
Cost	25,744,436	10,620,054	52,905,542	9,626,334	98,896,366
Accumulated depreciation	(8,025,112)	(7,630,912)	(18,832,421)	–	(34,488,445)
Net book amount	**17,719,324**	**2,989,142**	**34,073,121**	**9,626,334**	**64,407,921**

	Buildings	Plant machinery and equipment	Mine development assets and others	Construction in progress	Total
	US$	*US$*	*US$*	*US$*	*US$*
Year ended 31 December 2020					
Opening net book amount	17,719,324	2,989,142	34,073,121	9,626,334	64,407,921
Additions	88,492	8,985	8,456,041	1,724,627	10,278,145
Disposals	–	(119,429)	(3,138)	–	(122,567)
Transfers upon completion of construction	9,482,033	397,820	127,378	(10,007,231)	–
ARO adjustment	–	–	(2,247,962)	–	(2,247,962)
Depreciation charge	(1,050,223)	(830,954)	(5,409,916)	–	(7,291,093)
Currency translation differences	(1,813,765)	(271,363)	(3,799,942)	(759,792)	(6,644,862)
Closing net book amount	**24,425,861**	**2,174,201**	**31,195,582**	**583,938**	**58,379,582**
As at 31 December 2020					
Cost	32,728,806	9,901,907	53,579,477	583,938	96,794,128
Accumulated depreciation	(8,302,945)	(7,727,706)	(22,383,895)	–	(38,414,546)
Net book amount	**24,425,861**	**2,174,201**	**31,195,582**	**583,938**	**58,379,582**

(a) Depreciation expenses are recognised in the financial statements as below:

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Charged to the statements of profit or loss as:			
Cost of sales	6,737,851	8,805,536	10,008,448
General and administrative expenses	24,272	20,701	55,044
	6,762,123	8,826,237	10,063,492
Amounts of depreciation capisalised as inventories	528,970	585,426	872,869
	7,291,093	**9,411,663**	**10,936,361**

(b) In preparing these financial statements, the Target's management has reconsidered the approach to recognise the receipt of a restricted use liquidation fund bank deposit of KZT 927,858 thousand (equivalent to US$2,691,032) as transferred from NAC KAP at free of charge in 2018 (which was previously recognised as an other gain in profit or loss in the Target's statutory financial statements for the year ended 31 December 2018).

Considering the liquidation fund has the sole restricted use as described in Note 13(a) to the financial statements and cannot be transferred separately to parties other than those which have the extraction or exploration rights in the respective mining fields, the free of charge transfer of the abovementioned liquidation fund bank deposit was recognised as a reduction in the Target's acquisition costs of certain mine development assets back in 2017 (the timing when the related assets were transferred to the Target) and the depreciation charge on the related assets for the years ended 31 December 2020, 2019 and 2018 have been reduced and reflected in these financial statements accordingly. Management has also reconsidered the approach on presentation of the receipt of the aforesaid liquidation fund deposit in the statement of cash flows for the year ended 31 December 2018 and presented the receipt as cash flows from financing activities instead of cash flows from

operating activities.Management has assessed and concluded that the abovementioned changes have no material impact on the Target's financial performance for the years ended 31 December 2018, 2019 and 2020.

(c) The insurance industry in the Republic of Kazakhstan is in a developing stage and many forms of insurance protection common in other parts of the world are not yet generally available in the Republic of Kazakhstan. The Target does not have full coverage for its plant facilities, losses caused by business interruptions or third party liabilities in respect of property or environmental damage arising from accidents or the Target's activities. Until the Target obtains adequate insurance coverage, there is a risk that the loss or destruction of certain assets could have a material adverse effect on the Target's operations and financial position.

11 INTANGIBLE ASSETS

	Mineral rights	**Licenses**	**Software**	**Others**	**Total**
	US$	*US$*	*US$*	*US$*	*US$*
As at 1 January 2018					
Cost	1,271,157	16,547	49,431	5,019	1,342,154
Accumulated amortisation	(7,558)	(12,638)	(36,491)	(4,271)	(60,958)
Net book amount	**1,263,599**	**3,909**	**12,940**	**748**	**1,281,196**
Year ended 31 December 2018					
Opening net book amount	1,263,599	3,909	12,940	748	1,281,196
Capital injection from the shareholder	–	–	72,125	–	72,125
Transfers from property, plant and equipment	–	–	–	157,484	157,484
Amortisation charges	(73,551)	(2,230)	(7,010)	(31,981)	(114,772)
Currency translation differences	(166,407)	(310)	(3,732)	(12,973)	(183,422)
Closing net book amount	**1,023,641**	**1,369**	**74,323**	**113,278**	**1,212,611**
As at 31 December 2018					
Cost	1,096,166	14,269	112,082	145,662	1,368,179
Accumulated amortisation	(72,525)	(12,900)	(37,759)	(32,384)	(155,568)
Net book amount	**1,023,641**	**1,369**	**74,323**	**113,278**	**1,212,611**
Year ended 31 December 2019					
Opening net book amount	1,023,641	1,369	74,323	113,278	1,212,611
Transfers from property, plant and equipment	–	–	37,899	–	37,899
Amortisation charges	(65,880)	(1,316)	(8,682)	(36,094)	(111,972)
Currency translation differences	7,820	5	718	736	9,279
Closing net book amount	**965,581**	**58**	**104,258**	**77,920**	**1,147,817**
As at 31 December 2019					
Cost	1,104,851	14,382	151,036	146,814	1,417,083
Accumulated amortisation	(139,270)	(14,324)	(46,778)	(68,894)	(269,266)
Net book amount	**965,581**	**58**	**104,258**	**77,920**	**1,147,817**

	Mineral rights	Licenses	Software	Others	Total
	US$	*US$*	*US$*	*US$*	*US$*
Year ended 31 December 2020					
Opening net book amount	965,581	58	104,258	77,920	1,147,817
Additions	–	–	56,700	–	56,700
Transfers from exploration and evaluation assets	–	105,184	28,312	–	133,496
Capital injection from the shareholder	–	–	1,167,395	–	1,167,395
Amortisation charges	(50,094)	(4,437)	(89,249)	(9,459)	(153,239)
Currency translation differences	(89,852)	(1,765)	66,030	(7,155)	(32,742)
Closing net book amount	**825,635**	**99,040**	**1,333,446**	**61,306**	**2,319,427**
As at 31 December 2020					
Cost	1,001,039	116,377	1,463,519	133,020	2,713,955
Accumulated amortisation	(175,404)	(17,337)	(130,073)	(71,714)	(394,528)
Net book amount	**825,635**	**99,040**	**1,333,446**	**61,306**	**2,319,427**

Amortisation expenses are charged to the statement of profit or loss as below:

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Cost of sales	68,257	101,840	105,050
General and administrative expenses	84,982	10,132	9,722
	153,239	**111,972**	**114,772**

12 EXPLORATION AND EVALUATION ASSETS

	Tangible assets	Intangible assets	Total
	US$	*US$*	*US$*
Year ended 31 December 2018			
Opening net book amount	2,938,233	2,801,060	5,739,293
Additions	239,257	–	239,257
ARO adjustment	10,927	–	10,927
Net proceeds from trial production	(727,519)	–	(727,519)
Currency translation differences	(365,336)	(385,602)	(750,938)
Closing net book amount	**2,095,562**	**2,415,458**	**4,511,020**
Year ended 31 December 2019			
Opening net book amount	2,095,562	2,415,458	4,511,020
Additions	945,830	–	945,830
ARO adjustment	92,046	–	92,046
Net proceeds from trial production	(1,048,559)	–	(1,048,559)
Currency translation differences	16,556	19,137	35,693
Closing net book amount	**2,101,435**	**2,434,595**	**4,536,030**
Year ended 31 December 2020			
Opening net book amount	2,101,435	2,434,595	4,536,030
Additions	690,931	–	690,931
ARO adjustment	(213,381)	–	(213,381)
Transfer to intangible assets	(14,992)	(118,504)	(133,496)
Currency translation differences	(205,532)	(226,685)	(432,217)
Closing net book amount	**2,358,461**	**2,089,406**	**4,447,867**

During the year ended 31 December 2020, the Target did not sell uranium extracted at the Zhalpak field and has recognised the production costs in connection with the Target's geological exploration activies in the statement of profit or loss within "general and administrative expenses" (Note 4).

13 OTHER NON-CURRENT ASSETS

	As at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Liquidation fund *(Note a)*	3,432,333	3,261,121	2,873,696
Prepayments for non-current assets	4,046	896,920	500,406
Less: provision for impairment	(60,978)	(1,367)	(1,439)
	3,375,401	4,156,674	3,372,663
Investments in financial asstes at fair value through other comprehensive income *(Note b)*	141,856	141,856	51,161
Less: remeasurements of fair value	(141,856)	(141,856)	(51,161)
	–	–	–
	3,375,401	**4,156,674**	**3,372,663**

Notes:

(a) Based on the subsurface use contracts, the Target is obliged to maintain liquidation fund, which is a long-term deposit account with the sole restricted use for the replenishment and restoration costs of the Central Mynkuduk and Zhalpak mining fields in future (Note 26 (b)).

(b) As of 31 December 2020, the investment represented the Target's investment in 6.0% equity interest in an unlisted entity, Uranenergo LLP (a subsidiary of NAC KAP), which is principally engaged in the provision of electricity generation services to mining subsidiaries of NAC KAP. The Target has designated the aforesaid investment in Uranenergo LLP as financial assets at FVOCI.

During the years ended 31 December 2019 and 2018, the increase in the Target's investment in Uranenergo LLP amounted to US$90,695 and US$51,161 respectively.

Considering Uranenergo LLP is continuously suffered from losses for years, management estimated that the fair value of the investment approximated to zero as of the respective balance sheet dates. Therefore, fair value losses of US$90,695 and US$51,161, have been recognised as other comprehensive losses for the years ended 31 December 2019 and 2018 respectively.

14 TRADE AND OTHER RECEIVABLES AND PREPAYMENTS

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Trade receivables from contracts with customers			
– related parties	39,679,428	34,949,882	28,508,980
– third parties	31,212	7,288	875
	39,710,640	34,957,170	28,509,855
Less: provision for impairment of trade receivables	(91,956)	(13,954)	(11,994)
Trade receivables – net	39,618,684	34,943,216	28,497,861
Prepaid taxes other than income tax	508,709	52,366	380,427
Advances for goods and services	190,188	69,621	139,797
Others	37,526	57,041	25,851
	736,423	179,028	546,075
Less: provision for impairment of other receivables	–	–	(68,150)
Other receivables – net	736,423	179,028	477,925
	40,355,107	**35,122,244**	**28,975,786**

(a) The Target's sales to related parties and third parties are with credit terms of 90 days. Aging analysis of trade receivables based on invoice dates were as follows:

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Up to 3 months	39,710,640	34,957,170	28,509,855

(b) Movement of provision for impairment of trade and other receivables is as follows:

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
At beginning of the year	(13,954)	(80,144)	–
(Provision)/reversal for the year (note)	(78,002)	(1,960)	(80,144)
Written-off during the year	–	68,150	–
At the end of the year	**(91,956)**	**(13,954)**	**(80,144)**

Note: These (provision)/reversal of provision for impairment has been (charged)/credited to "general and administrative expenses" in the statement of profit or loss.

(c) There are no collaterals for trade and other receivables.

(d) Trade and other receivables and prepayments were all denominated in KZT and their carrying amounts are considered to approximate their fair values.

15 INVENTORIES

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Work in progress	3,578,327	3,954,995	4,606,057
Finished goods	1,284,916	–	–
Raw materials	1,083,271	1,344,407	1,477,746
Impairment of inventories	(220,154)	(262,997)	(382,496)
Total inventories	**5,726,360**	**5,036,405**	**5,701,307**

(a) The cost of inventories recognised as expense and included in the statement of profit or loss is as follows:

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Cost of sales	6,729,185	11,896,883	13,910,284
General and administrative expenses	45,206	43,145	58,603
	6,774,391	**11,940,028**	**13,968,887**

(b) Movement of the provision for impairment of inventories is as follows:

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
At beginning of the year	262,997	382,496	1,939,661
Reversal of provision	(18,454)	(121,991)	(1,437,585)
Currency translation differences	(24,389)	2,492	(119,580)
At the end of the year	**220,154**	**262,997**	**382,496**

The Target write-downs previous inventory impairment in 2018, 2019 and 2020, as the Target sold the relevant goods to NAC KAP. The amount reversed has been included in cost of sales in the statements of profit or loss.

16 CASH AND CASH EQUIVALENTS

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Cash at bank	4,720,347	7,750,365	9,479,742
Cash on hand	7	1,164	2,996
	4,720,354	**7,751,529**	**9,482,738**

Cash at bank and on hand are denominated in the following currencies:

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
KZT	4,720,354	7,751,529	9,481,359
Russian Rouble	–	–	1,379
	4,720,354	7,751,529	9,482,738

The carrying amount of cash and cash equivalents approximates their fair value.

17 SHARE CAPITAL

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
At beginning of the year	101,778,539	101,778,539	91,277,112
Capital injection from the shareholder *(Note)*	1,167,395	–	10,501,427
At the end of the year	**102,945,934**	**101,778,539**	**101,778,539**

Note: The Target's share capital at 31 December 2020 was fully paid up and amounted to KZT27,164,074 thousand (equivalent to US$102,945,934). The sole shareholder of the Target is NAC KAP (Note 1).

During the year ended 31 December 2020, the Target's share capital was increased by KZT 523,005 thousand (equivalent to US$1,167,395) in the form of contribution of the ERP SAP Software from NAC KAP to the Target (Note 11).

During the year ended 31 December 2018, the Target's share capital was increased by KZT 3,885,318 thousand (equivalent to US$ 10,501,427) in the form of contribution of monetary and non-monetary assets from NAC KAP to the Target. The aforesaid assets as contributed by NAC KAP included property, plant and equipment of KZT 140,360 thousand (equivalent to US$379,372), intangible assets of KZT 26,684 thousand (equivalent to US$72,125), in the form of cash of KZT 3,718,274 thousand (equivalent to US$10,049,930).

18 RESERVES

	Foreign currency translation	Remeasurements of post-employment benefit obligations	Remeasurements of financial assets at FVOCI	Total
	US$	*US$*	*US$*	*US$*
Balance at 1 January 2018	(23,687,934)	82,262	–	(23,605,672)
Currency translation differences	(13,309,015)	–	–	(13,309,015)
Remeasurements of post-employment benefit obligations	–	4,347	–	4,347
Remeasurements of financial assets at FVOCI	–	–	(51,161)	(51,161)
Balance at 31 December 2018	**(36,996,949)**	**86,609**	**(51,161)**	**(36,961,501)**
Balance at 1 January 2019	(36,996,949)	86,609	(51,161)	(36,961,501)
Currency translation differences	977,470	–	–	977,470
Remeasurements of post-employment benefit obligations	–	13,759	–	13,759
Remeasurements of financial assets FVOCI	–	–	(90,695)	(90,695)
Balance at 31 December 2019	**(36,019,479)**	**100,368**	**(141,856)**	**(36,060,967)**
Balance at 1 January 2020	(36,019,479)	100,368	(141,856)	(36,060,967)
Currency translation differences	(9,723,892)	–	–	(9,723,892)
Remeasurements of post-employment benefit obligations	–	(58,608)	–	(58,608)
Balance at 31 December 2020	**(45,743,371)**	**41,760**	**(141,856)**	**(45,843,467)**

19 DEFERRED INCOME TAX

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Deferred income tax assets	1,265,152	1,995,422	2,146,067
Deferred income tax liabilities	(2,457,004)	(3,022,942)	(3,159,524)
Deferred income tax liabilities (net)	**(1,191,852)**	**(1,027,520)**	**(1,013,457)**

The analysis of deferred income tax assets and deferred income tax liabilities is as follows:

(i) Deferred income tax assets

The balance comprises temporary differences attributable to:

	As at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Provision for asset restoration obligations and long-term payables	830,962	1,537,628	1,425,099
Impairments of inventories	44,030	52,600	76,499
Other non-deductible temporary differences	296,033	332,672	562,881
Others	94,127	72,522	81,588
Total deferred income tax assets	1,265,152	1,995,422	2,146,067
Set-off of deferred income tax liabilities pursuant to set-off provisions	(1,265,152)	(1,995,422)	(2,146,067)
Net deferred income tax assets	**–**	**–**	**–**

(ii) Deferred income tax liabilities

The balance comprises temporary differences attributable to:

	As at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Property, plant and equipment	1,121,773	1,089,341	1,236,819
Exploration and evaluation assets	496,095	1,336,476	1,278,519
Others	839,136	597,125	644,186
Total deferred income tax liabilities	2,457,004	3,022,942	3,159,524
Set-off of deferred income tax liabilities pursuant to set-off provisions	(1,265,152)	(1,995,422)	(2,146,067)
Net deferred income tax liabilities	**1,191,852**	**1,027,520**	**1,013,457**

(iii) The movement in deferred income tax assets during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

	Provisions for asset restoration obligations and long-term payables *US$*	**Impairment of inventories** *US$*	**Other non-deductible temporary differences** *US$*	**Others** *US$*	**Total** *US$*
At 1 January 2018	2,588,470	387,933	93,939	73,315	3,143,657
(Charged)/credited to profit or loss	(899,264)	(287,518)	536,943	20,464	(629,375)
Currency translation differences	(264,107)	(23,916)	(68,001)	(12,191)	(368,215)
At 31 December 2018	**1,425,099**	**76,499**	**562,881**	**81,588**	**2,146,067**
At 1 January 2019	1,425,099	76,499	562,881	81,588	2,146,067
Credited/(charged) to profit or loss	100,793	(24,398)	(233,636)	(9,669)	(166,910)
Currency translation differences	11,736	499	3,427	603	16,265
At 31 December 2019	**1,537,628**	**52,600**	**332,672**	**72,522**	**1,995,422**
At 1 January 2020	1,537,628	52,600	332,672	72,522	1,995,422
(Charged)/credited to profit or loss	(572,186)	(3,692)	(5,477)	28,924	(552,431)
Currency translation differences	(134,480)	(4,878)	(31,162)	(7,319)	(177,839)
At 31 December 2020	**830,962**	**44,030**	**296,033**	**94,127**	**1,265,152**

(iv) The movement in deferred income tax liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

	Property, plant and equipment	Exploration and evaluation assets	Others	Total
	US$	*US$*	*US$*	*US$*
At 1 January 2018	1,813,078	1,571,190	616,004	4,000,272
(Credited)/charged to profit or loss	(363,997)	(85,105)	125,893	(323,209)
Currency translation differences	(212,262)	(207,566)	(97,711)	(517,539)
At 31 December 2018	**1,236,819**	**1,278,519**	**644,186**	**3,159,524**
At 1 January 2019	1,236,819	1,278,519	644,186	3,159,524
(Credited)/charged to profit or loss	(156,585)	47,617	(51,935)	(160,903)
Currency translation differences	9,107	10,340	4,874	24,321
At 31 December 2019	**1,089,341**	**1,336,476**	**597,125**	**3,022,942**
At 1 January 2020	1,089,341	1,336,476	597,125	3,022,942
Charged/(credited) to profit or loss	137,183	(727,516)	303,419	(286,914)
Currency translation differences	(104,751)	(112,865)	(61,408)	(279,024)
At 31 December 2020	**1,121,773**	**496,095**	**839,136**	**2,457,004**

20 PROVISION FOR ASSET RESTORATION OBLIGATIONS

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
At beginning of the year	9,381,161	7,949,414	9,866,638
(Decrease)/increase in provision	(2,461,343)	744,404	(1,110,125)
Interest charge on unwinding of discounts	596,127	621,614	614,157
Currency translation differences	(848,870)	65,729	(1,421,256)
At end of the year	**6,667,075**	**9,381,161**	**7,949,414**

The provision for asset restoration obligations is determined using current prices (prices at the reporting date) on expenses to be incurred and by applying a projected rate of inflation of 5.30% for the period until the settlement of obligations. The present value at 31 December 2020, 2019 and 2018 has been estimated using the discount rate of 9.87%, 7.13% and 7.45%, respectively.

In determining the provision, the Target's management used assumptions and estimates based on the experience of decommissioning and remediation activities of a similar nature. The estimated assumptions and estimates were presented by the Target's engineers and professional consultants based on the best interpretation of the effective environmental regulations.

21 LONG-TERM PAYABLES

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
At beginning of the year	1,568,099	2,049,786	3,075,708
Liabilities paid to government	(554,353)	(543,322)	(1,121,599)
Interest charge on unwinding of discounts	45,321	61,635	95,677
At end of the year	1,059,067	1,568,099	2,049,786
Less: current portion at end of the year	(549,381)	(551,152)	(549,120)
Non-current portion at end of the year	**509,686**	**1,016,947**	**1,500,666**

Long-term payables represent the amortised amounts of the remaining portion of the Target's obligations to reimburse the government of the Republic of Kazakhstan (the "Kazakhstan Government") for the historical costs (geological, geophysical and related information) as incurred prior to the transfer out of the mineral rights by the Kazakhstan Government. These long-term payables are denominated in US dollars and to be settled by instalments prior to 31 December 2022. At the initial recognition of the long-term payables, the expected total future payments were discounted at the rate of 3.30%.

22 PROVISION FOR EMPLOYEE BENEFITS OBLIGATIONS

	As at 31 December 2020		
	Current	Non-current	Total
	US$	*US$*	*US$*
Post-employment benefits	6,712	103,237	109,949
Other long-term employee benefits	9,986	81,441	91,427
	16,698	**184,678**	**201,376**

	As at 31 December 2019		
	Current	Non-current	Total
	US$	*US$*	*US$*
Post-employment benefits	10,168	53,933	64,101
Other long-term employee benefits	1,430	4,310	5,740
	11,598	**58,243**	**69,841**

	As at 31 December 2018		
	Current	Non-current	Total
	US$	*US$*	*US$*
Post-employment benefits	1,312	63,621	64,933
Other long-term employee benefits	1,515	4,450	5,965
	2,827	**68,071**	**70,898**

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Opening balance at 1 January	69,841	70,898	72,917
Current service cost	21,475	7,684	9,437
Modification of employee benefit obligations	85,782	(771)	1,534
Interest expense	11,024	5,892	5,714
Total amount recognised in profit or loss	**118,281**	**12,805**	**16,685**
Remeasurement of post-employment benefits	58,608	(13,759)	(4,347)
Total amount recognised in other comprehensive income	**58,608**	**(13,759)**	**(4,347)**
Currency translation differences	(9,018)	558	(11,304)
Benefit payments	(36,336)	(661)	(3,053)
Closing balance at 31 December	**201,376**	**69,841**	**70,898**

Notes:

(a) The significant actuarial assumptions were as follows:

	As at 31 December		
	2020	**2019**	**2018**
Discount rate	10.30%	8.31%	8.32%
Salary growth rate	4.20%	7.00%	7.00%
Average labour turnover rate – administrative staff	12.40%	19.96%	21.68%
Average labour turnover rate – operational staff	2.80%	7.26%	5.52%

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

	As at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Discount rate			
Increase by 20 percent	(172,753)	(64,859)	(65,841)
Decrease by 20 percent	240,006	76,825	77,985
Future salary growth rates			
Increase by 20 percent of average salary	218,238	77,522	78,696
Decrease by 20 percent of average salary	(186,204)	(63,206)	(64,162)
Average staff turnover rate			
Increase by 20 percent	(192,826)	(63,802)	(64,768)
Decrease by 20 percent	210,568	76,476	77,631

23 TRADE AND OTHER PAYABLES

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Trade payables			
– related parties	1,038,083	2,643,515	2,405,699
– third parties	396,439	1,021,349	1,901,202
	1,434,522	3,664,864	4,306,901
Other taxes payable *(Note b)*	1,635,557	3,619,474	5,575,698
Payable for purchases of non-current assets			
– related parties	3,041,501	584,590	250,920
– third parties	450,035	835,573	1,533,901
	3,491,536	1,420,163	1,784,821
Salaries and staff welfare payable	488,572	568,264	638,972
Contract liabilities *(Note c)*	9,365	17,548	9,433
Current portion of provision for employee benefits obligations *(Note 22)*	16,698	11,598	2,827
Others	5,044	42,685	32,184
	7,081,294	**9,344,596**	**12,350,836**

(a) Aging analysis of trade payables at each balance sheet date based on invoice dates were as follows:

	As at 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Up to 3 months	1,434,522	3,664,864	4,306,901

(b) Other taxes payable mainly include value added tax and mineral extraction tax accrued according to related tax code of the Republic of Kazakhstan.

(c) With effective from 1 January 2018, receipts in advance from customers have been classified as "contract liabilities" in accordance with IFRS 15.

24 CASH FLOW INFORMATION

(a) Cash generated from operations

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Profit before income tax	48,413,834	39,699,548	38,252,285
Adjustments for:			
– Depreciation of property, plant and equipment	6,762,123	8,826,237	10,063,492
– Amortisation	153,239	111,972	114,772
– Net losses on disposals of property, plant and equipment	9,503	86,302	12,442
– Provision for/(reversal of) impairment, net	119,159	390,427	(1,356,002)
– Finance costs	641,448	683,249	709,834
	56,099,306	49,797,735	47,796,823
Changes in working capital:			
– Inventories	(647,112)	784,401	3,045,698
– Trade and other receivables and prepayments	(5,310,865)	(6,080,268)	(17,152,343)
– Trade and other payables	(4,334,675)	(2,641,582)	4,118,484
– Provision for employee benefits obligations (non-current portion)	126,435	(9,828)	(1,239)
– Effects of exchange rate changes	(3,197,771)	527,519	(5,515,637)
Cash generated from operations	**42,735,318**	**42,377,977**	**32,291,786**

(b) The exchange (losses)/gains from the retranslation of financial statement items to the presentation currency comprise of the aggregated impact from the retranslation of the Target's cash flows items and cash and cash equivalents (both denoiminated in KZT) into the presentation currency (i.e. US dollars) by using the average exchange rates for the respective financial years and the closing exchange rates as of the respective balalance sheet dates, respectively.

(c) Non-cash investing and financing activities

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Non-current assets as contributed by the shareholder as its capital injection to the Target	1,167,395	–	451,498

25 CONTINGENCIES

(a) Legal proceedings

As of the respective balance sheet dates, the Target does not have any pending litigations for which the Target is a defendant and may expose the Target to any significant legal fines and penalties.

(b) Tax legislation

Please refer to Note 4 (f).

(c) Trial production at the Zhalpak field

As mentioned in Note 1, the Target has continued its trial production at the Zhalpak field since June 2018 despite the fact that the Target has not yet obtained the subsurface use right (i.e. the mineral extraction right) for the Zhalpak field. By reference to the legal opinion as issued by the Target's external legal consultant, Kinstellar LLP, management has concluded that the probability of the realisation of risks associated with bringing the Target to any liability, charging potential fines, risks of confiscation of revenue generated from the trial production at the Zhalpak field during the period from June 2018 to 31 December 2020, to be low. Accordingly, management considers that no provision for fines or liabilities or adjustments on the net profit from the trial production at the Zhalpak field are required to be recognised in these financial statements.

26 COMMITMENTS

(a) Capital expenditure commitments

Capital expenditure contracted for by the Target at the balance sheet date but not yet incurred is as follows:

	As at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Non-current assets	38,031	1,921,182	156,039

(b) Subsurface use contract commitments

Under the subsurface use contracts, field development costs comprise of expenses relating to training of the Republic of Kazakhstan staff, investments in development of social sphere and accumulation of liquidation fund for site restoration. In particular, the subsurface use contracts require the Target to accumulate cash on a special bank account (the liquidation fund as referred in Note 13 (a)) in the amount of not less than 1% of total annual operating expenses to meet the condition of future site restoration in relation to obligations of site restoration, safety disassembling of wells and estimated cost of liquidation of chemicals leakage consequences.

In accordance with the subsurface use contracts, the field development costs approved by the Ministry of Industry and New Technologies of the Republic of Kazakhstan and actual expenses respectively for the three years ended 31 December 2020, 2019 and 2018 are as follows:

	Year ended 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Central Mynkuduk field			
– field development costs approved by government	33,828,098	50,163,985	48,369,685
– actual expenses	36,316,623	35,574,666	33,351,686
Zhalpak field			
– field development costs approved by government	–	–	395,911
– actual expenses	1,263,785	2,696,212	2,367,197

The Target has to follow the terms provided by the subsurface use contract. Non-fulfilment of the terms can lead to negative implications, including termination of the contract. Subsurface use contracts stipulate that the deviation of contractual obligation within 20% is an allowable and acceptable deviation for each individual obligation. Management believes that the Target was in compliance with all contractual obligations as at 31 December 2019 and 2018 for the respective 12 months then ended.

The management of the Target communicated potential deviations with the Ministry of Industry and New Technologies of the Republic of Kazakhstan, such communications also contain justifications of deviations and have been accepted by authorities based on historical experience.

(c) Environmental commitments

The enforcement of environmental regulation in the Republic of Kazakhstan is evolving and the enforcement posture of government authorities of the Republic of Kazakhstan is continually being reconsidered. The Target periodically evaluates its environmental commitments. As obligations are determined, they are recognised immediately in the financial statements.

Potential obligations, which can arise as a result of changes to effective regulations, as a result of a civil action or per legislation, cannot be estimated but can be material. However, per the current interpretation of the current legislation, management believes that the Target does not have material obligations in addition to the amounts already accrued and recorded in these financial statements, which would have a material adverse effect on the operating results or the financial position of the Target.

27 RELATED PARTY TRANSACTIONS

Except for those as disclosed elsewhere in these financial statements, the following is a summary of the significant transactions as carried out between the Target and its related parties during the ordinary course of the Target's business.

(a) Transactions with NAC KAP and fellow subsidiaries

Sales of goods to the sole shareholder:

	Year ended at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Sales of uranium products	94,814,068	96,173,892	100,918,467

As detailed in Note 1, the ultimate customers of the uranium product as produced by the Target will purchase uranium products directly from NAC KAP. Therefore, the Target sells nearly all of its uranium product to NAC KAP which will then sell the products to the ultimate customers. The Target's sales to NAC KAP are conducted at prices as agreed among the mutual parties (which are generally determined by reference to the market price of uranium products, less a discount of approximately 7.5% after considering various factors such as the transportation costs and other selling costs to be incurred by NAC KAP for the sales to the ultimate customers and the profit margin to be maintained by NAC KAP from such sales to the ultimate customers).

Rendering of services or sales of goods to fellow subsidiaries:

	Year ended at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Sales of other materials and services	82,291	42,114	75,819

The provision of services and sales of goods to related parties are conducted at prices as mutually agreed among the Target and the respective related parties concerned.

Purchases of goods and services from fellow subsidiaries:

	Year ended at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Purchases of raw materials	13,602,844	12,843,553	11,576,110
Purchases of processing services	4,927,601	11,244,742	15,381,636
Purchases of construction services	3,877,975	2,334,337	5,718,273
Purchases of IT and consulting services	899,882	689,962	731,578
Others	302,678	620,267	890,917
	23,610,980	27,732,861	34,298,514

The purchases of goods and services from related parties are conducted at prices as mutually agreed among the Target and the respective related parties concerned.

(b) Year-end balances arising from sales/purchases of goods/services

	As at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Receivables from related parties			
Trade receivables			
– NAC KAP	39,679,162	34,949,735	28,508,980
– Fellow subsidiaries	266	147	–
	39,679,428	34,949,882	28,508,980
Less: provision for impairment of trade receivables	(91,956)	(13,954)	(11,994)
Trade receivables – net	**39,587,472**	**34,935,928**	**28,496,986**

	As at 31 December		
	2020	**2019**	**2018**
	US$	*US$*	*US$*
Trade payables			
– NAC KAP	1,450	4,796	5,656
– Fellow subsidiaries	1,036,633	2,638,719	2,400,043
	1,038,083	2,643,515	2,405,699
Other payables			
– Fellow subsidiaries	3,041,501	584,590	250,920
	4,079,584	**3,228,105**	**2,656,619**

(c) Key management compensation

During the years ended 31 December 2018, 2019 and 2020, key management compensation is equivalent to the director's remuneration as disclosed in Note 28(a).

28 BENEFITS AND INTERESTS OF DIRECTORS

(a) Directors' emoluments

	Year ended 31 December		
	2020	2019	2018
	US$	*US$*	*US$*
Salaries and other short-term employee benefits – Directors	183,995	251,344	281,248

(b) Directors' retirement benefits

Directors of the Target include the general director and four deputy directors for Finance, Economy, Business Development and Production. None of the directors received or will receive any retirement benefits during the years ended 31 December 2020, 2019 and 2018.

(c) Directors' termination benefits

None of the directors received or will receive any termination benefits during the years ended 31 December 2020, 2019 and 2018.

(d) Consideration provided to third parties for making available directors' services

During the year ended 31 December 2020, 2019 and 2018, the Target did not pay consideration to any third parties for making available directors' services.

(e) Information about loans, quasi-loans and other dealings in favour of directors, controlled bodies corporate by and connected entities with such directors

During the years ended 31 December 2020, 2019 and 2018, there are no loans, quasi-loans and other dealing arrangements in favour of directors, or controlled bodies and connected entities with such directors.

(f) Directors' material interests in transactions, arrangements or contracts

During the year ended 31 December 2020, 2019 and 2018, no significant transactions, arrangements and contracts in relation the Target's business to which the Target was a party and in which a director of the Target had a material interest, whether directly to indirectly, subsisted.

29 EVENTS OCCURRING AFTER THE REPORTING PERIOD

As mentioned in Note 1 to the financial statements, the COVID-19 has certain unfavourable impact on the Target's operational and development activities during the year ended 31 December 2020. Management considers that the abovementioned unfavourable disruption in the Target's operational and development activities is temporary and there should not be any continuous significant negative impact on the Target's business. As of the date of these financial statements, the COVID-19 situation is still developing and management will continue to monitor the market situation and development of the COVID-19 situation and will take all necessary measures to prevent and minimise the negative impact on the Target's business (if any).

30 SUBSEQUENT FINANCIAL STATEMENTS

No audited financial statements have been prepared by the Target in respect of any period subsequent to 31 December 2020.

INTRODUCTION

The following is an illustrative and unaudited pro forma financial information of the Group, which have been prepared on the basis of the notes set out below, for the purpose of illustrating the effect of the Acquisition.

The Unaudited Pro Forma Financial Information is prepared based on the consolidated statement of financial position of the Group as at 31 December 2020, the consolidated statement of profit or loss and other comprehensive income and the consolidated statement of cash flows of the Group for the year ended 31 December 2020, which has been published in the annual report of the Company for the year ended 31 December 2020, and adjusted on a pro forma basis to reflect the effect of the Acquisition.

The Unaudited Pro Forma Financial Information has been prepared in accordance with paragraph 29 of Chapter 4 of the Listing Rules for the purpose of illustrating the effect of the Acquisition as if the Acquisition had been completed on 31 December 2020 and 1 January 2020 respectively.

The Unaudited Pro Forma Financial Information is prepared by the Directors to provide information of the Group upon completion of the Acquisition (the "**Enlarged Group**"). It is prepared for illustrative purpose only and based on a number of assumptions, estimates and uncertainties. Because of its hypothetical nature, the Unaudited Pro Forma Financial Information may not give a true picture of the financial position of the Enlarged Group following the completion of the Acquisition or any future date.

The Unaudited Pro Forma Financial Information should be read in conjunction with the financial information of the Group as set out in Appendix I of the circular, the accountant's report of Ortalyk as set out in Appendix II of the circular and other financial information included elsewhere in the circular.

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF FINANCIAL POSITION OF THE ENLARGED GROUP

	The Group	Pro forma adjustments		The Enlarged Group
	HK$'000	*HK$'000*	*HK$'000*	*HK$'000*
	(Note 1)	*(Note 3)*	*(Note 4)*	
Non-current assets				
Property, plant and equipment	622	–	–	622
Right-of-use assets	1,977	–	–	1,977
Investment properties	52,623	–	–	52,623
Interest in a joint venture	264,956	–	–	264,956
Interest in associates	553,570	3,373,460	–	3,927,030
	873,748	3,373,460	–	4,247,208
Current assets				
Inventories	1,767,335	–	–	1,767,335
Trade and other receivables	363,176	–	–	363,176
Amount due from an intermediate holding company	2,323	–	–	2,323
Amount due from a fellow subsidiary	19	–	–	19
Income tax recoverable	6,678	–	–	6,678
Bank balances and cash	1,174,508	(930,610)	–	243,898
	3,314,039	(930,610)	–	2,383,429
Total assets	4,187,787	2,442,850	–	6,630,637
Current liabilities				
Trade and other payables	(158,289)	–	(6,930)	(165,219)
Loans from a fellow subsidiary	(370,693)	–	–	(370,693)
Loan from an intermediate holding company	–	(2,326,524)	–	(2,326,524)
Bank borrowings	(666,704)	(116,326)	–	(783,030)
Lease liabilities	(704)	–	–	(704)
Amount due to an intermediate holding company	(874)	–	–	(874)
Amount due to a joint venture	–	–	–	–
Amounts due to fellow subsidiaries	(1,135)	–	–	(1,135)
Dividend payable	–	–	–	–
Income tax payable	(15,848)	–	–	(15,848)
	(1,214,247)	(2,442,850)	(6,930)	(3,664,027)

	The Group	Pro forma adjustments		The Enlarged Group
	HK$'000 (Note 1)	*HK$'000* (Note 3)	*HK$'000* (Note 4)	*HK$'000*
Net current assets/(liabilities)	2,099,792	(3,373,460)	(6,930)	(1,280,598)
Total assets less current liabilities	2,973,540	–	(6,930)	2,966,610
Non-current liabilities				
Loans from a fellow subsidiary	(533,596)	–	–	(533,596)
Bank borrowings	(387,754)	–	–	(387,754)
Lease liabilities	(1,162)	–	–	(1,162)
Deferred tax liabilities	(23,968)	–	–	(23,968)
	(946,480)	–	–	(946,480)
Net assets	2,027,060	–	(6,930)	2,020,130
Capital and reserves				
Share capital	(66,007)	–	–	(66,007)
Reserves	(1,961,053)	–	6,930	(1,954,123)
Total equity	(2,027,060)	–	6,930	(2,020,130)

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME OF THE ENLARGED GROUP

	The Group	Pro forma adjustments			The Enlarged Group
	HK$'000 (Note 2)	*HK$'000 (Note 4)*	*HK$'000 (Note 5)*	*HK$'000 (Note 6)*	*HK$'000*
Revenue	2,862,226	–	–	–	2,862,226
Cost of sales	(2,659,460)	–	–	–	(2,659,460)
Gross profit	202,766				202,766
Other operating income	9,496	–	–	–	9,496
Selling and distribution expenses	(10,453)	–	–	–	(10,453)
Administrative expenses	(37,593)	(6,930)	–	(4,886)	(49,409)
Changes in fair value of investment properties	855	–	–	–	855
Share of results of a joint venture	70,844	–	–	–	70,844
Share of results of associates	(15,060)	–	15,020	–	(40)
Finance costs	(40,889)	–	–	(41,528)	(82,417)
Profit before taxation	179,966	(6,930)	15,020	(46,414)	141,642
Income tax expenses	(24,749)	–	(7,323)	–	(32,072)
Profit for the year	155,217	(6,930)	7,697	(46,414)	109,570
Other comprehensive expenses:					
Items that may be subsequently reclassified to profit or loss:					
Exchange differences on translation of financial statements of subsidiaries	5,430	–	–	–	5,430
Exchange differences on translation of financial statements of a joint venture	(26,929)	–	–	–	(26,929)
Exchange differences on translation of financial statements of associates	10,197	–	–	–	10,197
Other comprehensive expenses for the year	(11,302)	–	–	–	(11,302)
Total comprehensive income for the year	143,915	(6,930)	7,697	(46,414)	98,268

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF CASH FLOWS OF THE ENLARGED GROUP

	The Group	Pro forma adjustments				The Enlarged Group
	HK$'000 (Note 2)	*HK$'000 (Note 3)*	*HK$'000 (Note 4)*	*HK$'000 (Note 5)*	*HK$'000 (Note 6)*	*HK$'000*
OPERATING ACTIVITIES						
Profit before taxation	179,966	–	(6,930)	15,020	(46,414)	141,642
Adjustments for:						
Depreciation of property, plant and equipment	63	–	–	–	–	63
Depreciation of right-of-use assets	1,859	–	–	–	–	1,859
Reversal of impairment in respect of inventories	(1,768)	–	–	–	–	(1,768)
Changes in fair value of investment properties	(855)	–	–	–	–	(855)
Interest income	(9,106)	–	–	–	–	(9,106)
Interest expenses on loan from immediate holding company	107	–	–	–	39,551	39,658
Interest expense on loans from a fellow subsidiary	35,896	–	–	–	–	35,896
Interest expenses on bank borrowings	4,782	–	–	–	1,977	6,759
Interest expense on lease liabilities	104	–	–	–	–	104
Share of results from a joint venture	(70,844)	–	–	–	–	(70,844)
Share of results from associates	15,060	–	–	(15,020)	–	40
Operating cash flow before movements in working capital	155,264	–	(6,930)	–	(4,886)	143,448
Increase in inventories	(323,587)	–	–	–	–	(323,587)
Increase in trade and other receivables	(236,485)	–	–	–	–	(236,485)
Decrease in amount due from an intermediate holding company	1,552	–	–	–	–	1,552
Increase in amount due from a fellow subsidiary	(19)	–	–	–	–	(19)
Increase in trade and other payables	118,867	–	–	–	–	118,867
Decrease in amount due to an intermediate holding company	(7,499)	–	–	–	–	(7,499)
Decrease in amount due to a joint venture	(5,513)	–	–	–	–	(5,513)
Decrease in amounts due to fellow subsidiaries	(286)	–	–	–	–	(286)
Cash used in operations	(297,706)	–	(6,930)	–	(4,886)	(309,522)
Hong Kong profits tax paid	(10,628)	–	–	–	–	(10,628)
People's Republic of China Enterprise Income Tax paid	(760)	–	–	–	–	(760)
The United Kingdom Corporation Tax paid	(5,995)	–	–	–	–	(5,995)
NET CASH USED IN OPERATING ACTIVITIES	(315,089)	–	(6,930)	–	(4,886)	(326,905)

	The Group	Pro forma adjustments				The Enlarged Group
	HK$'000 (Note 2)	*HK$'000 (Note 3)*	*HK$'000 (Note 4)*	*HK$'000 (Note 5)*	*HK$'000 (Note 6)*	*HK$'000*
INVESTING ACTIVITIES						
Acquisition of an associate	–	(3,373,460)	–	–	–	(3,373,460)
Purchase of property, plant and equipment	(524)	–	–	–	–	(524)
Interest income received	9,508	–	–	–	–	9,508
Dividend received from a joint venture	16,734	–	–	–	–	16,734
NET CASH GENERATED FROM/ (USED IN) INVESTING ACTIVITIES	25,718	(3,373,460)	–	–	–	(3,347,742)
FINANCING ACTIVITIES						
Dividend paid	(66,007)	–	–	–	–	(66,007)
Interest paid on loans from immediate holding company	(107)	–	–	–	(39,551)	(39,658)
Interest paid on loans from a fellow subsidiary	(36,100)	–	–	–	–	(36,100)
Interest paid on bank borrowings	(1,538)	–	–	–	(1,977)	(3,515)
Advance of loans from an immediate holding company	349,686	2,326,524	–	–	–	2,676,210
Repayment of loans to immediate holding company	(349,686)	–	–	–	–	(349,686)
Advance of loans from a fellow subsidiary	259,795	–	–	–	–	259,795
Repayment of loans to a fellow subsidiary	(422,559)	–	–	–	–	(422,559)
Advance of bank borrowings	1,054,458	116,326	–	–	–	1,170,784
Repayment of lease liabilities	(1,962)	–	–	–	–	(1,962)
NET CASH GENERATED FROM FINANCING ACTIVITIES	785,980	2,442,850	–	–	(41,528)	3,187,302
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	496,609	(930,610)	(6,930)	–	(46,414)	(487,345)
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	676,793	–	–	–	–	676,793
Effect of foreign exchange rate changes	1,106	–	–	–	–	1,106
CASH AND CASH EQUIVALENTS AT END OF THE YEAR	1,174,508	(930,610)	(6,930)	–	(46,414)	190,554

NOTES

1) The amounts are extracted from the consolidated statement of financial position of the Group as at 31 December 2020, as set out in the published annual report of the Group for the year ended 31 December 2020.

2) The amounts are extracted from the consolidated statement of profit or loss and other comprehensive income and the consolidated statement of cash flows for the year ended 31 December 2020, as set out in the published annual report of the Group for the year ended 31 December 2020.

3) The adjustment represents the acquisition of Ortalyk as if the completion of the transaction, for pro forma purpose, took place on 31 December 2020 for the consolidated statement of financial position and 1 January 2020 for the consolidated statement of profit or loss and other comprehensive income and the consolidated statement of cash flows respectively.

   Except for certain unanimous decisions, at all meetings of the board of directors of Ortalyk shall be decided by a majority of the votes casted on the question. Upon the completion of the Acquisition, the Group will appoint 2 individuals into the board of directors which the size will increase from 3 to 5 directors. Also, following the completion of the Acquisition, the Group will hold 49% of the interest of Ortalyk, and become the second largest shareholder of Ortalyk. In accordance with the Hong Kong Accounting Standard 28 "Investments in Associates and Joint Ventures" ("HKAS 28") issued by the Hong Kong Institute of Certified Public Accountants, Ortalyk will be accounted for as an associate of the Group which exercises significant influence in Ortalyk.

   The consideration for the investment in Ortalyk will be satisfied partially by cash of US$120,000,000 (equivalent to approximately HK$930,610,000) and partially by borrowings of US$300,000,000 (equivalent to approximately HK$2,326,524,000) from China Uranium Development and US$15,000,000 (equivalent to approximately HK$116,326,000) from a bank. The total consideration become approximately US$435,000,000 (equivalent to approximately HK$3,373,460,000).

   The Directors of the Company have assessed whether there is indication that the interest in an associate may be impaired as at 31 December 2020 on a pro forma basis, in accordance with Hong Kong Accounting Standard 28 "Investments in Associates and Joint Ventures", and concluded that there is no impairment indication in respect of the interest in an associate as at 31 December 2020, because the value provided in the valuation of Ortalyk as set out in Appendix V "Valuation Report" (the "Valuation") is higher than the carrying amount of the interest in an associate. Upon completion of the Acquisition and in subsequent reporting periods, valuation of the interest in an associate will be performed for the purpose of determining the recoverable amount of

the interest in an associate. The valuation method to be applied will be consistent with the Valuation and the key assumptions will be similar to those disclosed in the Valuation and adjusted to reflect changes in market conditions.

The loan from China Uranium Development is unsecured, interest-bearing at 3/6 months LIBOR plus 1.5% and matured at end of May 2023. The loan from a bank is unsecured, interest-bearing at 3/6/12 months LIBOR plus 1.5% and matured at end of June 2022. The interest incurred is accounted for in Note 6.

4) The adjustment represents the estimated transaction costs of approximately HK$6,930,000, including the accountancy, valuation and other professional services related to the Acquisition. The expenses are charged to profit or loss directly. The adjustment has no continuing effect on the financial statements of the Enlarged Group in subsequent years.

5) The adjustments represent the share of results of Ortalyk under equity accounting method and the 5% dividend withholding tax, as if the Acquisition had been completed on 1 January 2020. The financial information of Ortalyk is extracted from the audited statement of financial position of Ortalyk as at 31 December 2020 and the audited statement of profit or loss as set out in the accountant's report of Ortalyk from PricewaterhouseCoopers as set out in Appendix II "Financial Information of Ortalyk" in this circular.

The share of results was calculated as follows:

	HK$'000
49% sharing of Ortalyk's profit for the year ended 31 December 2020, as set out in Appendix II "Financial Information of Ortalyk" (US$38,541,527 (equivalent to approximately HK$298,892,625) x 49%)	146,457
Less: utilisation of fair value adjustment on mineral assets arising from acquisition (US$34,588,805 (equivalent to approximately HK$268,238,950) x 49%)	(131,437)
	15,020

On the Acquisition, a fair value adjustment on mineral assets amounting to approximately US$783,780,000 was arisen from the difference between the fair value of Ortalyk amounting to approximately US$887,755,000, determined based on the valuation of 49% equity interest in Ortalyk as at 31 December 2020 (i.e. US$435,000,000 / 49%) and the net assets value of Ortalyk amounting to US$103,974,928 as at 31 December 2020, as set out in Appendix II "Financial Information of Ortalyk". According to the estimated total volume of production of uranium amounting to 29,186 tonnes (the sum of estimated total volume of production in the two mines of Central Mynkuduk and Zhalpak amounted to 20,888 tonnes and 8,298 tonnes respectively) as at 31 December 2020, the fair value adjustment on uranium of each tonne would be approximately US$26,855. Based on the sales volume

of uranium of 1,288 tonnes for the year ended 31 December 2020, the utilisation of fair value adjustment on uranium would be equal to approximately US$34,589,000 (i.e. US$26,855 x 1,288 tonnes).

It is assumed that the Company would be suffered from 5% dividend tax amounted to approximately HK$7,323,000 on 49% sharing of profit of Ortalyk.

6) The adjustment represents the interest expenses of approximatley HK$41,528,000 incurred in the external borrowings from China Uranium Development and the bank as stated in Note 3.

On the other hand, the Company will internally finance CGNM UK which acts as the acquirer for the completion of the transaction. The borrowing cost is calculated at 3/6 months LIBOR plus 0.8% per annum and it is assumed that the Company is liable to pay the witholding tax at 20% on the interest income in United Kingdom amounted to approximately HK$4,886,000.

7) In the opinion of the Directors, the Acquisition will not have significant impact on the other comprehensive income.

Conversion of US$ into HK$ is based on the exchange rate on US$1:00 = HK$ 7.75508 for the purpose of illustration only.

8) No adjustment has been made to reflect any trading results or other transactions of the Group and Ortalyk entered into subsequent to 31 December 2020.

ACCOUNTANT'S REPORT ON THE UNAUDITED PRO FORMA FINANCIAL INFORMATION

The following is the text of the independent reporting accountants' assurance report dated 25 May 2021 received from BDO Limited, Certified Public Accountants, Hong Kong, the reporting accountants of the Company, in respect of the Unaudited Pro Forma Financial Information prepared for the purpose of inclusion in this circular.

INDEPENDENT REPORTING ACCOUNTANTS' ASSURANCE REPORT ON THE COMPILATION OF UNAUDITED PRO FORMA FINANCIAL INFORMATION

To the directors of CGN Mining Company Limited

We have completed our assurance engagement to report on the compilation of unaudited pro forma financial information of CGN Mining Company Limited (the "Company") and its subsidiaries (hereinafter collectively referred to as the "Group") by the directors of the Company for illustrative purposes only. The unaudited pro forma financial information consists of the unaudited pro forma consolidated statement of financial position as at 31 December 2020, the unaudited pro forma consolidated statement of profit or loss and other comprehensive income for the year ended 31 December 2020, the unaudited pro forma consolidated statement of cash flows for the year ended 31 December 2020, and related notes as set out on pages III-1 to III-9 of Appendix III of the circular issued by the Company dated 25 May 2021 (the "Circular") in connection with the proposed acquisition of 49% equity interest of "ORTALYK" LLP (the "Proposed Acquisition"). The applicable criteria on the basis of which the directors of the Company have compiled the unaudited pro forma financial information are described on pages III-1 to III-9 of Appendix III of the Circular.

The unaudited pro forma financial information has been compiled by the directors of the Company to illustrate the impact of the Proposed Acquisition on the Group's consolidated financial position as at 31 December 2020 and the Group's financial performance and cash flows for the year ended 31 December 2020 as if the Proposed Acquisition had taken place at 31 December 2020 and 1 January 2020 respectively. As part of this process, information about the Group's financial position, financial performance and cash flows has been extracted by the directors of the Company from the Group's financial statements for the year ended 31 December 2020, on which an audit report has been published.

Directors' Responsibility for the Unaudited Pro Forma Financial Information

The directors of the Company are responsible for compiling the pro forma financial information in accordance with paragraph 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and with

reference to Accounting Guideline 7 "Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars" ("AG 7") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA").

Our Independence and Quality Control

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

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

Reporting Accountants' Responsibilities

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

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

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

The purpose of unaudited pro forma financial information included in an investment circular is solely to illustrate the impact of a significant event or transaction on unadjusted financial information of the entity as if the event had occurred or the transaction had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the Proposed Acquisition at 31 December 2020 or 1 January 2020 would have been as presented.

A reasonable assurance engagement to report on whether the unaudited pro forma financial information has been properly compiled on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by the directors of the Company in the compilation of the unaudited pro forma financial information provide a reasonable basis for presenting the significant effects directly attributable to the event or transaction, and to obtain sufficient appropriate evidence about whether:

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

The procedures selected depend on the reporting accountant's judgment, having regard to the reporting accountant's understanding of the nature of the entity, the event or transaction in respect of which the pro forma financial information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the unaudited pro forma financial information.

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

Opinion

In our opinion:

(a) the unaudited pro forma financial information has been properly compiled by the directors of the Company on the basis stated;

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

(c) the adjustments are appropriate for the purposes of the unaudited pro forma financial information as disclosed pursuant to paragraph 4.29(1) of the Listing Rules.

BDO Limited
Certified Public Accountants

Hong Kong, 25 May 2021

The following is the text of the competent person report received from RPMGlobal China Limited dated 25 May 2021 for the purpose of inclusion in this circular.

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Golden Eagle Project, Republic of Kazakhstan

Competent Person Report

CGN Mining Company Limited

Job Number: ADV-HK-00139
Date: 25 May 2021

DOCUMENT CONTROL SHEET

Client	
CGN Mining Company Limited	
Report Name	**Date**
Competent Person's Report – Project Eagle	May 25th 2021
Report No.	**Revision No.**
ADV-HK-00139	Final

Authorizations				
Name		**Position**	**Signature**	**Date**
Prepared By:	Robert Dennis Artur Zakis Kristen Simpson Oyunbat Bat Ochir Huang Song Dr Andrew Newell Igor Konichev Tony Cameron Murray Brooker Irina Gorkina Viktor Raykin	Executive Consultant Senior Geologist Senior Resource Geologist Senior Resource Geologist Senior Resource Geologist Executive Processing Engineer Principal Mechanical Engineer Principal Engineer Hydrogeologist Senior EHSS Consultant Principal EHSS Consultant		
Reviewed By:	Jeremy Clark	Manager Hong Kong		
Approved By:	Philippe Baudry	Executive General Manager		

Organization	**No. Of Hard Copies**	**No. Of Electronic Copies**	**Comment**
CGN Mining Company Limited		1	

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RPM has created this report using data and information provided by or on behalf of the Client [and Client's agents and contractors]. Unless specifically stated otherwise, RPM has not independently verified that data and information. RPM accepts no liability for the accuracy or completeness of that data and information, even if that data and information has been incorporated into or relied upon in creating this report (or parts of it).

The conclusions and opinions contained in this report apply as at the date of the report. Events (including changes to any of the data and information that RPM used in preparing the report) may have occurred since that date which may impact on those conclusions and opinions and make them unreliable. RPM is under no duty to update the report upon the occurrence of any such event, though it reserves the right to do so.

5. Mining Unknown Factors

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond RPM's control and that RPM cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

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EXECUTIVE SUMMARY

CGN Mining Company Limited
Room 1903, 19 F,
China Resources Building,
26 Harbour Road,
Wanchai, Hong Kong

25th May, 2021

RE: Competent Person Report

Dear Sirs,

RPM Global Asia Limited ("RPM") has been engaged by CGN Mining Pty. Ltd. on behalf of CGN Mining Company Limited (HK1164) referred to as ("CGN" or "the Clients") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") in relation to the Project Golden Eagle which includes the Central Mynkuduk and Zhalpak uranium projects (the "Projects"). The Projects are currently owned (100%) and operated by Kazatomprom; via the wholly owned subsidiary LLP "Mining company" (the "Company") and is an operating In-situ Leach operating Uranium ("U") Project located in Southern Kazakhstan (**Figure 1-1**). The Client has conditionally agreed to acquire 49% the Company's share of the Project through the acquisition of the issued share capital of an intermediate holding company of the Project.

The process and conclusions of the ITR are presented in the CPR which will be included in the Circular of the Client in relation to the transaction in accordance with Chapter 18 of the Listing Rules. The statements of Mineral Resources and Ore Reserves (as defined in ***Appendix C***) have been reported to be in accordance with the recommended guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves JORC Code (2012 Edition)

RPM's technical team ("the Team") consisted of International Competent Person's, International Senior Consultants, Executive Mining Engineers and Senior Geologists. RPM's Hong Kong Competent Person was responsible for compiling or supervising the compilation of the report and the JORC Statements of Mineral Resources and Ore Reserves, stated within. The Team's qualifications and experience is detailed in ***Appendix A*** for reference.

A site visit was conducted by the Team to the Project's mine site and surface operations to familiarise themselves with the Project characteristics. The site visit to the Project was undertaken from November 18th to the 23rd, 2019 by Mr. Jeremy Clark, Mr. Artur Zakis and Irina Gorkina. During the site visit the Team inspected the mine, the ore processing plants, the communities and conducted general inspections of the Project area. The visit was also used to gain a better understanding of the Projects' status. During the site visits, the Team had open discussions with the Company's personnel on technical aspects relating to the relevant issues. The Company's personnel were cooperative and open in facilitating RPM's work.

In addition to work undertaken to generate independent JORC Mineral Resources and Ore Reserves estimates, the CPR relies largely on information provided by the Company, either directly from the sites and other offices, or from reports by other organizations whose work is the property of the Company or its subsidiaries. The data relied upon for the JORC Mineral Resources and Ore Reserves estimates independently completed by RPM have been compiled primarily by the Client and the Company and subsequently reviewed and verified as well as reasonably possible by RPM. The CPR is based on information made available to RPM as at 31st December, 2020. The Client or the Company has not advised RPM of any material change, or event likely to cause material change, to the underlying data, designs or forecasts since the date of asset inspections.

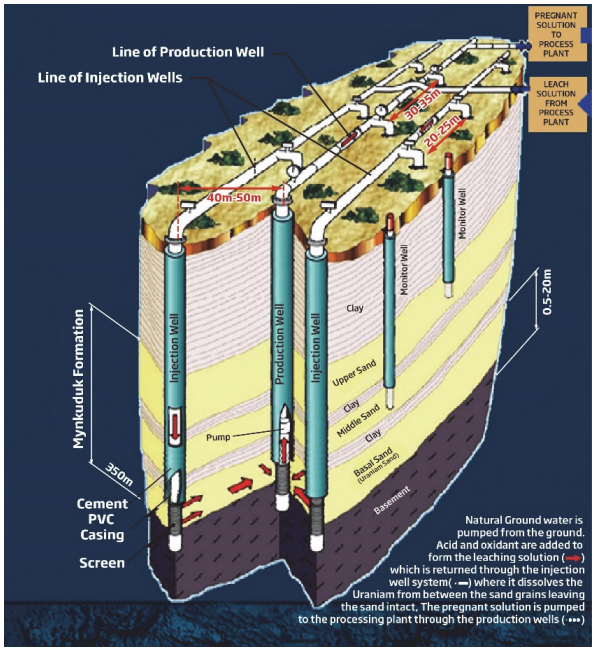
Project Summary

- The Projects are hosted within the world-renowned Southern Kazakhstan Shu-Saryshu Uranium Province which hosts approximately 60% of the total uranium ("U") reserves of Kazakhstan and is one of the biggest sources of U globally. The mineralisation is represented by typical hydrogenic uranium deposition related to ore-bearing formation oxidation zones ("FOZ") also known as Roll Front deposits that developed in

permeable terrigenous rocks. A number of world class U operations exist in the region which have been at various stages of development since the 1960's.

- The Projects comprise two deposits, namely Central Mynkuduk and Zhalpak. The depth of the mineralisation varies from 120m (Zhalpak) to 350m (Central Mynkuduk) below surface, having significant continuity within both deposits; up to 27km long and 50 to 800m width. The thickness of the mineralised channels varies from 0.5 to 20m with an average of 3.9m (Zhalpak) and 7.6m (Central Mynkuduk) which is typical of Roll Front style uranium deposits.
- Uranium recovery through the ISL method or solution mining is well established in Kazakhstan with over 60 years of expertise in this method. ISL is used at both projects and involves leaving the ore in situ and recovering the U through dissolution and pumping of the pregnant solution to the surface where U can be recovered through standard ion exchange methods to produce a final yellow cake (U_3O_8) product. For ISL to be effective the mineralised aquifers need to be permeable to the liquids used, and located so that they do not contaminate groundwater away from the orebody, with flow of liquids usually restricted by impermeable confining layers. Uranium is largely insoluble in the native groundwater, which is not potable due to naturally high concentrations of radionuclides and dissolved solids. Using a grid of injection and extraction wells, an oxidised mining solution, containing sulphuric acid, is circulated through the orebody to dissolve the uranium. The uranium-bearing solution (generally containing less than 0.1% uranium) is then pumped to a surface processing facility where the uranium is removed using an ion exchange resin/polymer. The water is re-oxidised and re-injected into the orebody with the process repeated until such time as 90% of the in-situ U content of the production block has been recovered, at which point the wells are shut down. **Figure 1** below shows a schematic of the ISL process for the Central Mynkuduk Operation.

Figure 1 ISL Schematic Central Mynkuduk Operation



- Supporting regional and local infrastructure for the Project is well established and has ample capacity for the continued support of the planned LOM operation. The Projects' are located 500 km to the north-west of the provincial capital of Shymkent (**Figure 1-1**) within the South Kazakhstan Province (Sozak district) in Shu-Sarysu basin (north of the Shu River). These cities provide suitable accommodation and supporting industries for the operations. RPM considers the infrastructure appropriate and in good condition.

Mineral Resource and Ore Reserves Estimates

- The review undertaken by RPM of the drilling and sampling procedures indicates that whilst practices employed have followed Russian/Kazakh standards these are generally in line with, or exceed international standard practices with no material issues being noted by RPM in the checks completed. The QAQC samples showed suitable levels of precision and accuracy to enable confidence in the assay data used to develop the Mineral Resources. RPM notes that the samples used for the resource estimation are derived from disequilibrium corrected gamma logging which was the most extensive dataset for the resource areas. There exists a small bias between the chemical and gamma U assays with the gamma data returning the lower value. RPM notes that the Company did not provide the QAQC information for the Zhalpak deposit however based on site discussions RPM understands that the same methods as utilised for Central Mynkuduk were used at Zhalpak. Additionally, the Zhalpak data and historical resource estimates have been reviewed by the independent expertise commission of Kazakhstan sub soil ministry and approved, increasing the confidence in the work completed.
- The Central Mynkuduk deposit is under operation and has all key mining tenements, which are currently valid, for the continued operation of the assets to support the planned production rates and possesses all of the mineral rights (concessions) and surface rights necessary to exploit the Project at the forecast presented in this report.
- RPM is aware the exploration permit on the Zhalpak deposit expired on the 31.05.2018. The Company's management stated that all necessary documents were sent for permit prolongation in 2020 but in May 2020 the Central Committee of Mining ("CCM") recommended that changes be made to the design plan for trial mining prior to approval being granted. At that stage the Company advised that they would stop all field work on the Project and rather than pursue an extention to the trial mining licence they would focus on the application for the entire fields mining licence. To that end the Company has progressed the design and development of the entire large scale Project and in February 2020 the Company received approval for the entire Projects feasibility study as well as recommended parameters for the updating of the entire Projects resource estimation from the government expertise committee ("GKZ"). As at September the Company advised that they have applied for the entire Project mining licence with the next stage of the approval process being a consultation period ahead of the mining design plan being lodged with the CCM for approval. As at the time of this Report the Company has not received a response from the government on the commencement of the consultation period and to save time have commenced to prepare the mining design plan. The Company was not able to provide further clarity on the timeline for consultation nor the review and approval of their mining design plan. **RPM is not in a position to provide further information on the legal claims of the Company for the continued rights over the project other than to opine that the application for the entire Project mining licence is being completed in line with Kazakhstan requirements.**
- The independent Statement of Mineral Resources is reported within the current mining and exploration licenses and as at 31st December, 2020 using no U cut-off grade. ISL mining is a non-selective mining method with all the targeted minerals within the channel, up to the time that solution flow is stopped, recovered during leaching. To that end other than a geological cut off employed in the development of the resource wireframes of 0.01% U no cut off is applied to the reporting of the Mineral Resource. Mineral resources were constrained within permeability zones with proven production history with impermeable layers excluded from the estimate. ***Section 7*** outlines additional information regarding the Mineral Resources and reporting of the quantities.
- The Statement of Mineral Resources for both Projects are summarised in **Table 1** and graphically in **Figure 2** and are reported inclusive of and not additional to the Ore Reserves reported in **Table 2** and due to the extraction method do not include ore loss however do include effective leach dilution and effective metal recovery into the Pregnant Leach Solution ("PLS") from the in-situ material. For clarity RPM has presented both the in-situ Ore Reserve and the effective leach diluted Ore Reserve.

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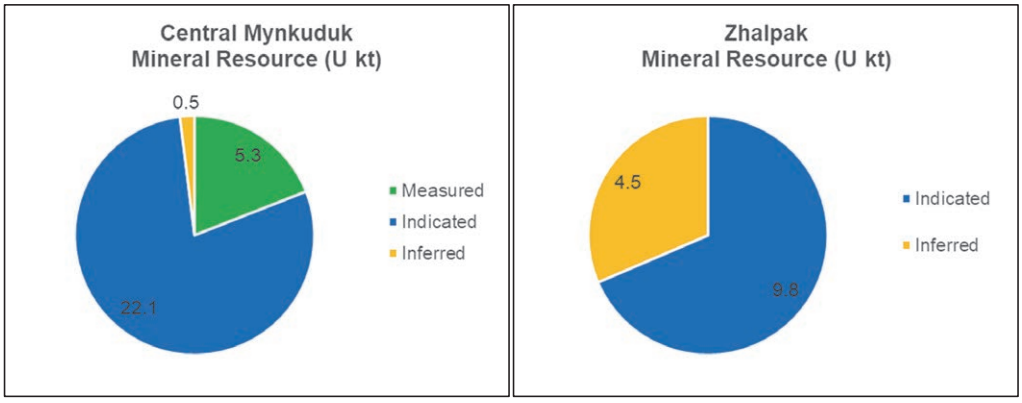
Table 1 Statement of JORC Mineral Resources as at 31st December, 2020

Area	Class	Quantity Mt	U %	U kt
Central Mynkuduk	Measured	21.3	0.025	5.3
	Indicated	81.8	0.027	22.1
	Inferred	1.5	0.036	0.5
	Total	**104.6**	**0.027**	**28.0**
Zhalpak	Measured	-	-	-
	Indicated	31.0	0.032	9.8
	Inferred	15.7	0.029	4.5
	Total	**46.7**	**0.031**	**14.3**
Total	Measured	21.3	0.025	5.3
	Indicated	112.8	0.028	31.9
	Inferred	17.3	0.029	5.0
	Total	**151.4**	**0.028**	**42.3**

Note:

1. ***The Company Exploration Licence over the Zhalpak Mineral Resource area expired on the 31.05.2018. The Company's management stated that rather than pursuing an extension to the trial mining licence they will instead apply for a mining licence across the whole field with this process commenced in 2020 and expected to be completed in 2021. The legality of the ownership of the licence by the Company cannot be verified by RPM. Further details are provided in Section 3.***
2. *RPM has reported the resources assuming the Company has a 100% equity stake in the both Projects and strongly advises the reader to consult a legal opinion.*
3. *The Mineral Resources have been compiled under the supervision of Mr. Bob Dennis who is a consultant to RPM and a member of the Australasian Institute of Geoscientists. Mr. Dennis has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
4. *All Mineral Resources figures reported in the table above represent estimates at 31st of December 2020. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
5. *Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).*

Figure 2 Graphical Representation of the Mineral Resource Quantities



- The Proved and Probable JORC Ore Reserves estimate for the Projects are summarized in **Table 2.** The JORC Ore Reserves estimates reported below are included in, and not additional to, the Measured and Indicated Mineral Resources quantities reported in ***Section 7***. RPM has estimated the total undiluted Ore

Reserves to be **92.3 Mt** at an average grade of **0.026 % U,** all of which is classified as Probable Ore Reserves due to the style of mineralisation and assumed accuracy of the modifying factors.

Table 2 Central Mynkuduk - Statement of JORC Ore Reserves Estimate as of 31st December, 2020

Area	Class	Quantity Mt	U %	U kt
Central Mynkuduk	Proved	-	-	-
	Probable	92.3	0.026	23.6
	Total	**92.3**	**0.026**	**23.6**

Notes:

1. *The Statement of JORC Ore Reserves has been compiled under the supervision of Mr. Murray Brooker who is a consultant to RPM. Mr. Brooker has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
2. *The JORC Ore Reserve are undiluted for effective thickness as discussed below and in Section 10.1.2 of this report.*
3. *Metal content is post leach recovery (90%) extracted into PLS.*
4. *Figures reported are rounded which may result in small tabulation errors. Ore Reserves have been estimated under the 2012 Edition of the JORC Code.*
5. *Tonnages are metric tonnes.*
6. *U content in the Reserves excludes Uranium in the wellfield pipes and plant.*

- The Independent Statement of Ore Reserves for the Project is estimated as at the 31st December, 2020 by RPM and reported in accordance with the JORC Code. RPM has determined suitable technical parameters to apply in the Ore Reserve estimation process following review of site data and technical information contained with studies of at least a pre-feasibility level of confidence. Further information taken into consideration included the proposed life of mine plans, mining method, forecast processing plant recoveries and capacities. The Ore Reserves were derived only from areas of the Project where Measured and Indicated Resources have been estimated.
- The tonnages outlined in Table 2 exclude "leach dilution" which is the effective volume of sediments leached through the ISL recovery method surrounding the targeted leach horizons. This is however incorporated into the LOM Schedule for the project to allow for the appropriate estimation of pumping volumes, PLS grade and OPEX. The LOM quantity after leach dilution is estimated at 129.9 Mt at an average grade of 0.018 % U. Refer to **Section 8** of this Report for more detail.

Exploration Potential

- Within Central Mynkuduk over 95% of the resource area has been extensively drilled and is included in high confidence Measured and Indicated Mineral Resources as summarized in ***Section 7.3***. A small area of broader spaced drilling occurs at the south end of the licence which shows potential to host similar mineralisation as defined to date across a strike length of 2km. RPM is of the opinion that this is unlikely to be a material addition to the already reported Mineral Resources and should be targeted as part of future exploration programs for completeness. There is a significant potential to upgrade the small amount of Inferred and most of the Indicated resources to Measured resources through the completion of infill drilling.
- The Zhalpak exploration potential is low with the majority of the deposit area tested. There is some potential to increase the Resource on a small scale in some of the more broadly drilled areas of the Project. RPM considers that there is good potential to expand the currently defined Indicated Resource with further infill drilling as 38% of the total resource is currently classified as Inferred Mineral Resource, which presents a good potential for increase in confidence with further drilling.
- RPM understands that for both Projects the Company has already completed a significant program of production drilling over the resources which may allow upgrading of the resource confidence to be completed already, however RPM was not provided with this information at the time of drafting of this Report.

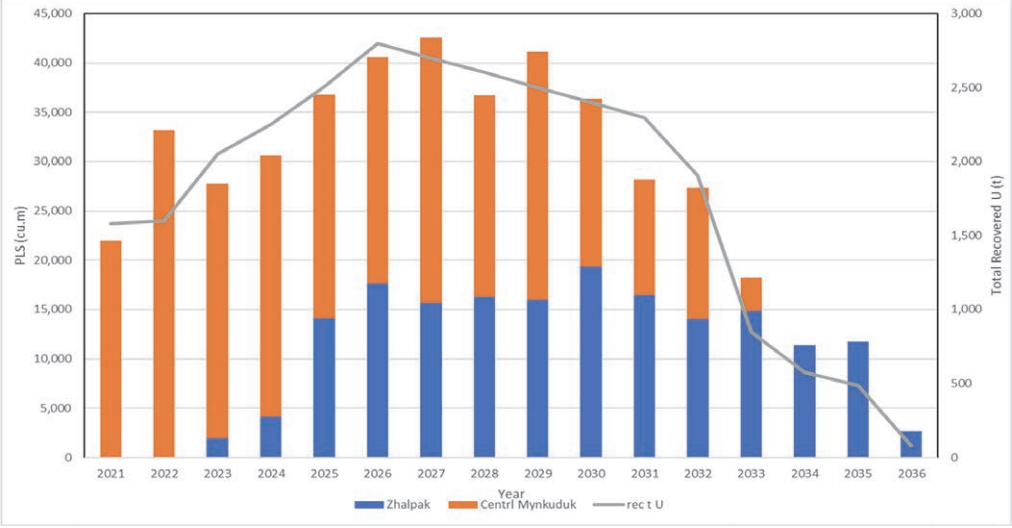
Mine and Production

- Mining operations at Central Mynkuduk via underground in-situ leaching ("ISL") commenced in 2007 and has been in continuous production since commissioning with 19,791 t of U extracted as at December 2020. Central Mynkuduk has a capacity of 2,000 t of U per annum in the form of yellow cake which is produced via an onsite processing plant (3,500 cu.m/hr). The yellowcake product is transported by truck to Tuankent (240km) and subsequently by railroad to Ust-Kamenogorsk for refining. Zhalpak underwent test production from 2017 to April 2020 with 3 blocks leached and 213 t of U extracted. There is currently no leaching

activity at Zhalpakwith trial production including extraction via ISL, the PLS was upgraded to a resin product at Zhalpak prior to being transported (80km) via truck to the Central Mynkuduk plant for processing to yellow cake ("U_3O_8").

- Based on the Ore Reserve estimates, the wellfield development sequence, the forecast total production schedule and costs, RPM has estimated the currently defined mine life for Central Mynkuduk to be approximately 13 years as of 31st December, 2020 until 2033 as shown in **Figure 3**.
- RPM completed a scoping level of accuracy (+/- 50%) assessment of the likely production schedule for the currently defined Indicated Mineral Resource at Zhalpak. Assuming circa 800 t U per annum production rate RPM has estimated the mine life for the Zhalpak Indicated Mineral Resource to be approximately 14 years. Establishment of the well field is planned to commence in 2022, with first production in 2023, ramping up to full production by 2026. RPM notes that test production ceased in April 2020 and an updated 'Kazak feasibility study was completed reflecting the results of the test production. With further testwork updated resources and reserves are planned to be developed. This potentially will significantly increase the amount of Indicated Resource which could be included in future Ore Reserve estimates. As such, the final mine life and production rate may vary from that presented in this report.

Figure 3 Graphical Representation of Life of Project Plan



- As part of its scoping study for Zhalpak, RPM has estimated the Mineable Quantities for the Indicated portion of the Mineral Resource only, following the application of modifying factors considered suitable based on the data available. Both the in situ and effective leach diluted quantities are as shown in **Table 3**. RPM notes that Mineable Quantities are not Ore Reserves as defined by the JORC Code as they are not supported by at least pre-feasibility study level operational parameters. Additionally; as at the time of this report the Company does not have the required approvals and licences to bring Zhalpak into production. Additionally, RPM does not have specific raw density measurements for Zhalpak.

Table 3 Zhalpak - Mineable Quantity Estimate as of 31st December, 2020

Area	Quantity Mt	U %	U kt
Zhalpak	30.4	0.032	9.7

Note: The Mineable Quantity Estimate are undiluted for effective thickness as discussed below and in Section 10.1.2 of this report

A high-level economic assessment completed by RPM shows that based on the currently assumed modifying factors and long-term consensus forecast of 30 USD / U lb, the Zhalpak scoping study presents positive cashflow, as such RPM considers the production schedule to be suitable for presentation in this

Report. A review of the key project drivers shows the NPV to be highly sensitive to U price, as such in future studies analysis to optimize the cost profile and the long-term sales price should be undertaken.

RPM notes that Mineral Resources that are not Ore Reserves, while having reasonable expectations of eventual economic extraction, do not have demonstrated economic viability, and as such there is no certainty that the scoping study and economics will be realized at Zhalpak as the studies progress.

The tonnages outlined in **Table 3** excludes "leach dilution" which is the effective volume of sediments leached through the ISL recovery method surrounding the targeted leach horizons. This is however incorporated into the LOM Schedule for the project to allow for the appropriate estimation of pumping volumes, PLS grade and OPEX. The LOM quantity after leach dilution is estimated at **69.4 Mt** at an average grade of **0.014 % U** Refer to **Section 10.1.2** of this Report for more detail.

Infrastructure

- Given the location of the Projects, transportation and power are critical logistical, infrastructure and operational items. The Project power is currently supplied from the national grid system as well as several solar panels located onsite. Operations require 7MW of power of which 1MW is sourced from solar power. Local roads and highway are in excellent conditions to facilitate transport of supplies to site and product to market. All roads are maintained by the government.
- Zhalpak while currently in care and maintenance, will require expansion of the plant to meet the forecast productions. This includes expansion of the current resin plant and construction of a yellow cake facility with smaller capacity than Central Mynkuduk.

Capital and Operating Cost Forecasts

- Operating costs for central Mynkuduk are relatively constant between USD 50 and 60 million per annum resulting in total operating cost of between 12 and 14 USD per pound of recovered U. Given the method of extraction and recovery the majority of the costs is associated with drilling of production holes as well as acid consumption, both within the 'mine' and the processing plant. These costs account for just less than 50% of the total costs, with resource tax and refining accounting for a further 30%. Details are provided in **Section 12**.
- As the project has had a long history of operation limited capital is required to support the forecast production. RPM notes that all production drilling is included in operating costs while only the installation and costs of the pipes and pumps is included in the capital costs for Central Mynkuduk.

Environmental Health and Safety

- A high-level review of the environmental, health and safety indicates that the Project has a typical risk profile which is associated with projects of similar styles and maturity in the region. All required Environmental Impact Studies have been completed resulting in the approved permits and licenses being gained for planned production in the near term. RPM notes that approvals are required for the future development into operation of the Zhalpak Project with trial production ceasing in April 2020. During the site visit RPM noted that appropriate procedures are in place to manage and mitigate the associated risks and that the Company is following the required regulations of the state.

The key opportunities identified for the Project during the review are outlined below:

While limited opportunities exist to increase the value of the Project given the established extraction method and very long mine life RPM for reference presents below what are considered to the key opportunities which could materially affect the mine life and/or the value of the Project.

- **Inferred material Zhalpak:** Within the current licence (expired in 2018) 4.5 kt of U has been defined within the Inferred Mineral Resource as at December, 2020. These Mineral Resource cannot be included in the Ore Reserves estimate as per the requirement of the JORC Code and the current Ore Reserve schedule, as presented in this Report. RPM considers there is high likelihood that geological confidence can be increased through additional exploration or production drilling some of which has likely already been completed by the Company with the data not provided to RPM. Incorporation of this drilling will result in large portions of this material being upgraded to Indicated and included as part of future Ore Reserve estimates.

The key Risks identified during the ITR include.

While various risks have been identified, given the very long mine life, RPM presents below what are considered to be the risks that could potentially affect the Company's ability to achieve the mine life and/or the value of the Project's current Ore Reserve schedule

- **Zhalpak Licence:** RPM is aware the exploration permit on Zhalpak deposit expired on the 31.05.2018. The Company's management stated that all necessary documents had already been sent for permit prolongation however the Company did not provide any document to support this statement. The legality of the ownership of the licence by the Company cannot be verified by RPM. Further details are provided in ***Section 3***.
- **Uranium Price:** Zhalpak is sensitive to uranium price, as such variation in U pricing presents a risk to the viability of the project.

Further lower category risks are presented in ***Section 15*** for reference.

RPM Qualifications and Experience

RPM's advisory division operates as independent technical consultants providing services across the entire mining life cycle including exploration and project feasibility, resource and reserve evaluation, mining engineering and mine valuation services to both the mining and financial services industries.

RPM is the market leader in the innovation of advisory and technology solutions that optimise the economic value of mining assets and operations. RPM has serviced the industry with a full suite of advisory services for over 45 years and is the largest publicly traded independent group of mining technical experts in the world having completed over 11,000 studies across all major commodities and mining methods, and worked in over 118 countries globally. This report was prepared on behalf of RPM by technical specialists, details of whose qualifications and experience are set out in **Appendix A**.

RPM has been paid, and has agreed to be paid, professional fees for its preparation of this report; however, none of RPM or its directors, staff or sub-consultants who contributed to this report has any interest or entitlement, direct or indirect in:

- the Company, securities of the Company or companies associated with the Company; or
- the right or options in the relevant Mine.
- The work undertaken is an ITR of the information provided by or on behalf of the Company, as well as information collected during site inspections completed by RPM as part of the ITR process. It specifically excludes all aspects of legal issues, marketing, commercial and financing matters, insurance, land titles and usage agreements, and any other agreements/contracts that Company may have entered into.

RPM does not warrant the completeness or accuracy of information provided by the Company which has been used in the preparation of this report.

The title of this report does not pass to the Client until all consideration has been paid in full.

Drafts of this report were provided to the Client, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in the report.

Generally, the data available was sufficient for RPM to complete the scope of work. The quality and quantity of data available, and the cooperative assistance, in RPM's view, clearly demonstrated the Company's assistance in the ITR process. All opinions, findings and conclusions expressed in the report are those of RPM and its specialist advisors.

Yours faithfully,

Robert Dennis

Executive Consultant (Competent Person – Chapter 18).

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1. INTRODUCTION

RPM Global Asia Limited ("RPM") has been engaged by CGN Mining Pty. Ltd. on behalf of CGN Mining Company Limited (HK1164) referred to as ("CGN" or "the Clients") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") in relation to the Project Golden Eagle which includes the Central Mynkuduk and Zhalpak uranium projects (the "Projects"). The Projects are currently owned (100%) and operated by Kazatomprom, via its wholly owned subsidiary Ortalyk LLP "Mining company" (the "Company") which operates two Uranium ("U") In-situ Leach ("ISL") projects in Southern Kazakhstan (**Figure 1-1**).

1.1 RPM Scope of Work

RPM's scope of work included:

- Gathering of relevant information on the Project including resources and reserves information, LOM production schedules, and operating and capital cost information;
- Reviewing of the Company's resources and reserves, including quantity and quality of drilling, reliability of data, and adequacy of resource and reserve estimation methods;
- Estimation of independent Mineral Resources and Ore Reserves (as defined in ***Appendix B***) reported in compliance with the recommended guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"), prepared by the Joint Ore Reserves Committee ("JORC");
- Reviewing and commenting on the exploration prospect of the Project;
- Reviewing and commenting on forecast operating and capital expenditures in the relevant technical studies;
- Reviewing the Project short term and long-term development plans;
- High level review of the environmental, health and safety risks and management plans for the Project; and
- Compilation of a CPR as defined under Chapter 18 of the Listing Rules.

1.2 Relevant Assets

The relevant assets for the study included the operating Mynkuduk Uranium Mine and the Zhalpak Uranium Project which recently completed trial production. The Projects are located in the southern central region of Kazakhstan **Figure 1-1** and are under production through the ISL extraction method. Solution from the mine's extraction wellfields is processed through two onsite plants; these include a resin plant located at Zhalpak and a conventional yellow cake plant located at Mynkuduk.

1.3 Review Methodology

RPM's ITR methodology was as follows:

- Review existing reports and data,
- Conduct a Competent Person's site visit,
- Discussions with Project personnel of the Company prior to and following the site visit,
- Independent Estimation and Reporting of Mineral Resources and Ore Reserves in accordance with the guidelines of the JORC Code, and
- Preparation of a CPR and provision of drafts of the CPR to Project personnel to ensure factual accuracy and reasonableness of assumptions.

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Figure 1-1 General Location Plan

1.4 Site Visits and Inspections

RPM completed a single site visit to the mines and processing facilities between the dates of November 18th to the 23rd, 2019 to review the geology, mining, processing and EHSS aspects of the project. RPM's site visit team consisted of

- Mr. Jeremy Clark, Manager – Principal Consultant,
- Mr. Artur Zakis, Senior Consultant Geologist, and
- Mrs Irina Gorkina, Environmental Health and Safety Consultant.

RPM notes that the Hong Kong Competent Person (Mr. Robert Dennis, as noted in ***Section 1.6***) was not part of the site visit team. As part of the Hong Kong Competent Person responsibilities Mr. Dennis has relied on the relevant experts who completed the site visit as part of his confirmation of the works completed.

1.5 Information Sources

Several geology studies, feasibility studies, and design reports were provided for the Project as well as recent operational data.

1.6 Competent Person and Responsibilities

The Statements of Mineral Resources and Ore Reserves have been reported in accordance with the recommended guidelines of the JORC Code and are suitable for inclusion in a CPR as defined by Chapter 18 of the Listing Rules.

1.6.1 Team Responsibility

As part of the Team, members who have worked to compile this report include the following:

- Mr. Artur Zakis – Artur was responsible for review the drill hole database and compilation of underlying resource estimation data as used in the Mineral Resources stated within this Report.
- Mrs Kristen Simpson and Mr Oyunbat Bat Ochir – Kristen was responsible for the estimation of the Mineral Resources stated in this report for Central Mynkuduk whilst Oyunbat was responsible for the Zhalpak project.
- Mr. Igor Konishchev – Igor was responsible for the infrastructure review.
- Dr Andrew Newell – Andrew was responsible for the processing and metallurgical flowsheet and parameter review as well as the review of historical and forecast operating and capital costs.
- Mr Tony Cameron – Tony was responsible for undertaking the ISL scheduling for both projects.
- Mr. Murray Brooker – Murray was responsible for review of the mining parameters, mine scheduling and estimation of the Ore Reserves stated within this Report.
- Irina Gorkina – Irina was responsible for the review of the environmental, safety and social aspects of the Projects.
- Mr Viktor Raykin – Viktor was responsible for the peer review and finalization of the environmental, safety and social aspects of the Report.
- Mr. Robert Dennis – Robert was responsible for the supervision of all Team members, their work and the compilation of the Report. Robert assumes responsibility of the Report as Competent Person and is also Competent Person under JORC for the Mineral Resources.
- Mr. Jeremy Clark – Jeremy was responsible for the internal peer review of the Report.

1.6.2 Mineral Resources

The information in this report that relates to Mineral Resources is based on information compiled by Mr Robert Dennis who is a full-time employee of RPM and a Registered Member of the AIG. Mr. Dennis has sufficient

experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

Reporting of the Mineral Resources estimate complies with the recommended guidelines of the JORC Code and is therefore suitable for public reporting.

……..

Robert Dennis - (Competent Person – Mineral Resources)

1.6.3 Ore Reserves

The information in this report that relates to Ore Reserves is based on information compiled by the Project Team and reviewed by Mr. Murray Brooker who is a Principal Hydrogeologist and is a Member of the Australian Institute of Geoscientists ("AIG") and the International Association of Hydrogeologists. Mr. Brooker has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.

……..

Murray Brooker - (Competent Person – Ore Reserves)

1.6.4 HKEx Competent Person

Mr. Robert Dennis meets the requirements of a Competent Person, as defined by Chapter 18 of the Listing Rules. These requirements include:

- Greater than five years' experience relevant to the type of deposit;
- Member of the Australian Institute of Geoscientists ("AIG"), which is a Recognized Professional Organizations as per the HKEx and JORC Code.
- Does not have economic or beneficial interest (present or contingent) in any of the reported Relevant Assets;
- Has not received a fee dependent on the findings outlined in the Competent Person's Report;
- Is not an officer, employee or proposed officer for the Client or any group, holding or associated company of the issuer, and
- Assumes overall responsibility for the Competent Person's Report.

1.7 Limitations and Exclusions

RPM's review was based on various reports, plans and tabulations provided by CGN or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the CGN or the Company. Neither CGN nor the Company have advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of asset inspections.

The work undertaken for this Report is that required for a technical review of the information, coupled with such inspections as the Team considered appropriate to prepare this Report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the Relevant Asset compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the Relevant Asset in the market, and the fundamentals of the uranium markets at large.

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1.7.1 Limited Liability

This Report has been prepared by RPM for the purposes of CGN for inclusion in its Circular in respect of the proposed acquisition of the Project in accordance with the Listing Rules and is not to be used or relied upon for any other purpose. RPM will not be liable for any loss or damage suffered by a third party relying on this report or any references or extracts therefrom contrary to the purpose (regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise) unless and to the extent that RPM has consented to such reliance or use.

1.7.2 Responsibility and Context of this Report

The contents of this Report have been based upon and created using data and information provided by or on behalf of CGN or the Company. RPM accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from CGN, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by RPM in good faith using information that was available to RPM as at the date stated on the cover page and is to be read in conjunction with the circular which has been prepared and forms part of the referenced transaction.

This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied to RPM is inaccurate or is materially changed. RPM is under no obligation to update the information contained in the report.

Notwithstanding the above, in RPM's opinion, the data and information provided by or on behalf of CGN or the Company was reasonable and nothing discovered during the preparation of this Report suggests that there was significant error or misrepresentation of such data or information.

1.7.3 Indemnification

CGN has indemnified and held harmless RPM and its subcontractors, consultants, agents, officers, directors, and employees from and against any and all claims, liabilities, damages, losses, and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- RPM's reliance on any information provided by CGN and the Company; or
- RPM's services or materials; or
- Any use of or reliance on these services or material,

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, willful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules), and regardless of any breach of contract or strict liability by RPM.

1.7.4 Mining Unknown Factors

The findings and opinions presented herein are not warranted in any manner, expressed or implied. The ability of the operator, or any other related business unit, to achieve forward looking production and economic targets is dependent upon numerous factors that are beyond RPM's control and which cannot be fully anticipated by RPM. These factors include site specific mining and geological conditions, the capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

1.7.5 Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

RPM has independently assessed the Relevant Assets of the Project by reviewing pertinent data, including resources, reserves, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this Report are those of RPM and its specialist advisors.

Drafts of this Report were provided to CGN, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Report.

RPM has been paid, and has agreed to be paid, professional fees based on a fixed fee estimate for its preparation of this Report. Its remuneration is not dependent upon the findings of this Report or on the outcome of the transaction.

None of RPM or its directors, staff or specialists who contributed to this Report have any economic or beneficial interest (present or contingent), in:

- The Project, securities of the companies associated with the Project or that of CGN; or
- The right or options in the Relevant Assets; or
- The outcome of the proposed transaction.

This CPR was compiled on behalf of RPM by the signatories to this CPR, details of whose qualifications and experience are set out in ***Annexure A*** of this CPR. The specialists who contributed to the findings within this CPR have each consented to the matters based on their information in the form and context in which it appears.

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2. PROJECT OVERVIEW

The Projects' comprise two deposits, namely Central Mynkuduk and Zhalpak, which are located in Southern Kazakhstan in the Shu-Saryshu Uranium Province. The province contains approximately 60% of the total uranium ("U") reported (GKZ reported) reserves in Kazakhstan and is one of the largest sources of U not only in Kazakhstan, but also in the world. The mineralisation is represented by typical hydrogenic uranium deposition related with ore-bearing formation oxidation zones (FOZ) that developed in permeable terrigenous rocks. The depth of the mineralisation varies from 120m (Zhalpak) to 350m (Central Mynkuduk) below surface and has significant continuity within both deposits up to 25km long and 50 to 800m width. The thickness of the layers varies from 0.5 to 20m with an average of 3.9m (Zhalpak) and 7.6m (Central Mynkuduk) which is typical of Roll Front style of uranium deposits.

Mining operations at Central Mynkuduk via underground in-situ leaching ("ISL") commenced in 2007 and has been in continuous production since commissioning. Central Mynkuduk has a capacity of 2,000 t of U per annum in the form of yellow cake which is produced via an onsite processing plant. The yellowcake product is transported by truck to Tuankent (240km) and subsequently by railroad to Ust-Kamenogorsk for refining. Zhalpak recently completed trial production, which commenced in 2017 within 3 blocks, with a subsequent Kazak Feasibility Study completed with pending approval of permits from the relevant authorities. Following extraction via ISL, the pregnant leaching solution ("PLS") was upgraded to a resin product at Zhalpak prior to being transported (80km) via truck to the Central Mynkuduk plant for processing to yellow cake. All infrastructure remains on site for recommencement and upgrade of production once internal and government final approvals are in place. The current feasibility study for Zhalpak envisages a standalone project with a 800 U tpa in the form of yellow cake. RPM notes this Kazak Feasibility Study is not considered a Feasilbity Study as defined by the JORC Code, however, is considered suitable to underpin the production schedule accuracy as presented in this report.

2.1 Project Location and Access

The Projects are located 500 km to the north-west of the provincial capital of Shymkent (**Figure 1-1**) within the South Kazakhstan Province (Sozak district) in Shu-Sarysu basin (north of Shu River). The Projects are hosted within the world renown Shu-Saryshu Uranium Province and accessed via a good quality paved national highway. Shymkent operates regular domestic flights to Almaty and Nur-Sultan which connect to major international hubs in Asia and Europe.

2.2 Current Operations

Central Mynkuduk was commissioned in 2007 and has been in continuous production since, producing 19,791 t of U as at the end of December 2020. In addition, the Zhalpak Project commenced test production in 2017 which ended in April 2020, having produced 213 t of U as at that date.

The current Life of Mine ("LOM") schedule (Ore Reserve Schedule) within Central Mynkuduk is planned to be sourced from three polygon shaped areas namely the western, central and eastern polygons which will be supplemented by the production Ore Reserves within the Zhalpak Project until 2020. Each polygon within the Central Mynkuduk Project operates independently with three dedicated pumping lines servicing each polygon. Production capacity of the plant is 3,500 cu.m/hr. of pregnant solution to produce 2,000 t U per annum. Approximately half of the currently defined deposit area is under production with 46 mining blocks producing 3,100 cu.m/hr. solution for further processing for a forecasted 2020 production of 1,600 t U. Pregnant solution is processed via the onsite sorption/desorption processing plant into yellow cake which is subsequently transported by truck to Taukent railroad station (250 km) with further transportation by railroad to Ust-Kamenogorsk metallurgical plant.

The Zhalpak project recently completed trial mining operations to obtain additional recovery data and technological parameters from which a kazak feasibility study was developed to support the decision to commence operations. Three polygons were under operations which fed the onsite sorption plant to produce a U-enriched resin that was processed to yellow cake at the Central Mynkuduk plant. All supporting infrastructure remains in place, with the recent completed Kazak Feasibility Study underpinning the production schedule presented in this Report.

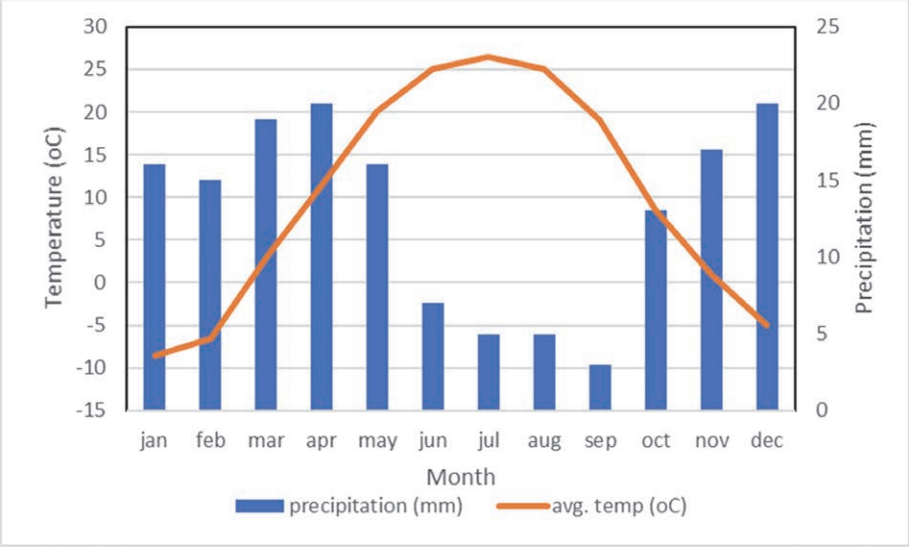
2.3 Geography and Climate

The Projects are located within the territory of the Betpakdala plateau, which is a large desert plain within Kazakhstan (**Figure 1-1**). The plateau is relatively flat with heights ranging from 220 to 330m with a slight southerly dip to the valley of the Shu River. The plain comprises significant amounts of salt-marsh and lacustrine basins, dry rivers, oxbow lakes and the eolian terrain of various configurations.

Sarysu and Shu Rivers are intermittent and are fed by snow and glacial melts from May through to June each year. The climate is considered extreme with significant variations of the air temperature; with a cold low-snow winter, hot and dry summers, short spring, dry air, with low rainfall and constant winds. Average annual air temperature is +9°C, with a maximum of +43°C in June-July and minimum -35°C in January as shown in **Figure 2-1**. Daily variation of air temperature reaches up to 14°C with an average annual precipitation of approximately 130-140 mm of which snow accounts for 22 to 40%.

The vegetation typically consists of haloxylon and saline-baluchova plants while the valleys of the rivers Sarysu and Shuhave have developed meadow vegetation, reeds and tamarisk. Animals include saigas, gazelles, wild boars, gophers, jerboa, gerbils, ground hares, wolf, fox and korsak.

Figure 2-1 Average Precipitation and Temperatures



2.4 Industry

The territory of the Project is sparsely populated with the nearest mountains and the valley of the Shu River the closest populated area. Settlers in the region are employed mainly in livestock and agriculture.

Development of the region started as a direct result of uranium mining which is extensive in the region. Due to development of the deposits Kanzhugan and Moinkum located 150 km south, Taukent city and the railroad connecting Zhanatas and Suzak were built. Further development included building paved roads connecting the uranium deposits with the railroad stations to supply the deposits with necessary materials, equipment, chemicals etc. Currently all the deposits in Syr-Darya Uranium Province including Central Mynkuduk and Zhalpak are connected by paved roads, which are available year-round. The closest railroad stations are located at Zheskazgan ~270 km north, Zhanatas ~370 km south and Taukent ~260 km south.

2.5 Regional and Local Infrastructure

Extensive regional infrastructure is in place which includes railroad, paved road, electric lines etc. Roads and railroads are widely used to supply necessary materials and transport products between the Company's facilities including the third-party Ust-Kamenogorsk metallurgical plant. Regional roads and railroads are government controlled and maintained. Electric power is provided through a regional electric company via transmission lines however onsite solar panel supply 16% of the required power for the operations at Central Mynkuduk.

Local infrastructure comprises both permanent paved and temporary unpaved roads. Local paved roads connect Central Mynkuduk with Zhalpak and Western and Eastern polygons within the Central Mynkuduk Project.

All infrastructure reviewed by RPM is considered to be of high quality allowing for large-scale industrial activity. Further information is provided in Section 11.

3. LICENSES AND PERMITS

RPM provides this information for reference only and recommends that land titles and ownership rights be reviewed by legal experts.

The Central Mynkuduk deposit is contained within a single mining permit. In 2005 JSC "NJSC "Kazatomprom" received the mineral rights (Contract on exploration and mining). The Contract is registered under the number 1796 and dated 08.07.2005 with an expiration period to 08.07.2033. Mining and operation permissions were transferred to LLP "Mining company "Ortalyk" according to amendment 3 on the 19.10.2017. Current mining allotment is 46.976 sq.km with a maximum depth 370 m as shown graphically in **Figure 3-1**.

The exploration permit for the Zhalpak deposit is held by the LLP "Mining company "Ortalyk" in accordance with the Contract 3610-TPI of 31.05.2010 (Add 4 of 19.10.2017), and has an expiration date of 31.05.2018. The Company stated that they have submitted necessary documents for license prolongation, however no information has been provided to RPM to confirm the status of the permits. The Geological allotment of the previous license is 145.8 sq.km.

LLP "Mining company Ortalyk" has the following permits relating to current activity on the uranium deposits:

- State license on designing and operation of mining, petrochemical, chemical, oil-and-gas-processing operations, operation of gas, oil and oil products storages, of gas pipelines, oil pipelines, oil-products pipelines;
- State license on mineral processing excluding processing of widespread minerals (Industrial Minerals);
- License on using radioactive materials, devices and equipment containing radioactive materials; and
- State license on activity related to acquisition, storage, use of and destruction of precursors.

3.1 Mineral Concessions and Surface Rights

The Central Mynkuduk deposit is under operation and has all key mining tenements, which are currently valid, for the continued operation of the assets to support the planned production rates and possesses all of the mineral rights (concessions) and surface rights necessary to exploit the Project at the forecast presented in this report. RPM is not aware of any legal claims or proceedings against the Company. In addition, the Company currently holds numerous environmental, construction, and operating permits. RPM has completed an overview of these permits and considers them in good standing to support the continued operation of the assets for the foreseeable future in line with the planned production rates for the mine life. RPM notes all major concessions are applicable for the life of mine subject to compliance with local regulations.

RPM is aware the exploration permit on the Zhalpak deposit expired on the 31.05.2018. The Company's management stated that all necessary documents were sent for permit prolongation in 2020 but in May 2020 the Central Committee of Mining ("CCM") recommended that changes be made to the design plan for trial mining prior to approval being granted. At that stage the Company advised that they would stop all field work on the Project and rather than pursue an extention to the trial mining licence they would focus on the application for the entire fields mining licence. To that end the Company has progressed the design and development of the entire large scale Project and in February 2020 the Company received approval for the entire Projects feasibility study as well as recommended parameters for the updating of the entire Projects resource estimation from the government expertise committee ("GKZ"). As at September the Company advised that they have applied for the entire Project mining licence with the next stage of the approval process being a consultation period ahead of the mining design plan being lodged with the CCM for approval. As at the time of this Report the Company has not received a response from the government on the commencement of the consultation period and to save time have commenced to prepare the mining design plan. The Company was not able to provide further clarity on the timeline for consultation nor the review and approval of their mining design plan. **RPM is not in a position to provide further information on the legal claims of the Company for the continued rights over the project other than to opine that the application for the entire Project mining licence is being completed in line with Kazakhstan requirements.**

3.2 Community and EHSS Permiting and Interactions

As further detailed in ***Section 14.1.4***, RPM understands that it has been and still is in compliance with the country law and regulations and all permitting, and tenement expenditures have been met.

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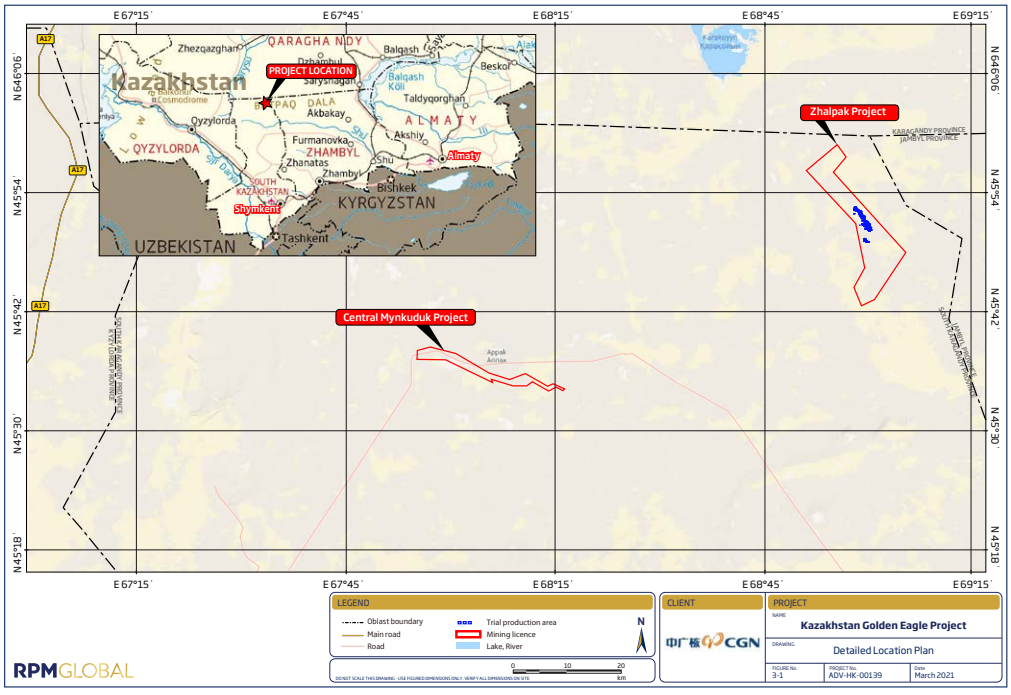
Figure 3-1 Detail Location Plan



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4. PROJECT HISTORY

4.1 Exploration History

The state geological survey commenced geological reconnaissance of the territory in 1958. These works included drilling, however due to low core recovery geological connection of the permeable rocks was difficult during this early exploration. Special uranium prospecting commenced in 1961 by the Volkov expedition. The Volkov expedition explored the Uvanas deposit in 1967; the Mynkuduk and Zhalpak deposits in 1970; the Kanzhugan and Moinkum in 1972; Inkai in 1976-78 and Budenovskoye in 1979. Thus, before 1980 two large uranium districts were discovered: Mynkuduk uranium district and Kanzhugan uranium district (located in the southwest part of the territory).

This report focused on two areas within these deposits, the Central Mynkuduk and Zhalpak deposits.

Central Mynkuduk

The Mynkuduk deposit, which includes the east, west and central deposits (note this is different to the east, west and central polygon areas within the Central Mynkuduk Project) was discovered in 1970 by party # 27 of the Volkov expedition (now JSC "Vovkovgeologiya") after the drilling on line 416. Preliminary exploration was undertaken in 1976 followed by detailed exploration, which commenced in 1977, the first stage of which was finished in 1981. The second stage of detailed exploration was completed from 1981 to 1989 which defined uranium resources of category C_1 (according to Soviet and later followed the Kazakhstan classification). The total number of exploration drill holes provided to RPM is shown in **Table 4-1**.

Table 4-1 Total Historical Exploration Drilling on the Central Mynkuduk (1970-1989)

Type	Unit	Total on deposit	Total inside the mineralisation	Including	
				Orebody 8	Orebody 10
Prospecting and exploration	m	471,295	279,776.1	43,553.3	236,222.8
	holes	1,313	772	131	641
Hydrogeological	m	7,035	5,655	662.6	4,992.4
	holes	19	15	2	13
Total	m	478,330	285,431.1	44,215.9	241,215.2
	holes	1,332	787	133	654

Source: Company Data

Zhalpak

The Zhalpak deposit was discovered in 1964 after the prospecting works of the Volkov expedition. Whilst initially found to be of low economic prospectivity, after further exploration testing of the strike extent over 4 section lines spaced 6.4–12.8 km apart it was decided to continue exploration. Earliest preliminary exploration was completed in 1973 through drilling holes on a spacing of 1,600-800 by 100-50 m with a 1km long area infilled to 200 by 50m. The next stage of exploration commenced in 1988 by Expedition Bureau # 27 with infill drilling completed to bring the spacing to 200 by 50 m within the highest-grade zones. This work was completed in 1991. Zhalpak test production commenced in 2017 and whilst incomplete was ceased in April 2020. A summary of the historical drilling information is provided in **Table 4-2**.

RPM is aware that several holes, as shown in **Table 4-2**, are not utilized in the resource estimate. Please refer to **Section 6** and **7** for further information.

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Table 4-2 Summary of Drilling at Zhalpak used in Mineral Resource

Year	Database Total						In Mineral Resource		
	No. of Holes	Metres	Gamma-logged Holes	Gamma-logged metres	Chemical assayed Holes	Chemical assayed metres	Gamma-logged Holes	Gamma-logged metres	Intersection Metres
1971	30	4,645	20	2,943	19	2,807	10	1,478	33
1972	137	20,036	91	13,179	116	16,897	28	4,010	107
1973	329	47,638	261	37,787	294	42,593	127	18,364	430
1974	1	138	1	138	1	138	-	-	-
1979	4	579	4	579	3	439	1	140	3
1981	9	1,922	5	1,081			2	421	7
1982	3	416	3	416	2	276	3	416	9
1984	1	178	-	-	-	-	-	-	-
1987	2	292	2	292	1	144	1	144	10
1988	778	110,008	659	93,401	302	42,409	376	53,215	1,465
1989	761	112,109	588	86,275	287	41,954	311	45,491	1,282
1990	210	31,440	165	24,861	89	13,281	84	12,676	379
1991	172	24,740	154	22,392	80	11,610	115	16,699	492
1993	1	87	-	-	-	-	-	-	-
2016	10	1,464	10	1,464	2	292	7	1,022	40
NA	67	9,629	49	7,255	25	3,606	28	3,967	91
Total	**2,515**	**365,323**	**2,012**	**292,063**	**1221**	**176,446**	**1,093**	**158,043**	**4,349**

Source: Provided by the Company

4.2 Mining History

4.2.1 Central Mynkuduk

In 2007 JSC "KenDala.KZ" started large-scale mining on the Central Mynkuduk deposit to produce yellow cake. Currently more than half of the total area of Central Mynkuduk is covered by active mining polygons (termed "blocks" capable of producing a maximum annual production of 2,000 t U. Current production is limited to 1,600 t U per annum, which RPM understands is due to demand reasons. **Table 4-3** summarises the recent production history of the Project's with 19,791t of U recovered since production commenced to end of December 2020. RPM notes that this is mining production, not production from processing.

Table 4-3 Recent Production History

Area	Unit	Year					
		2015	2016	2017	2018	2019	2020*
Central Mynkuduk	U tonnes	1,808	2,010	1,802	1,600	1,617	1,305
Zhalpak	U tonnes	0	0	6	110	77	17

Note: Provided by the Company.
** Zhalpak ceased production in April 2020.*

4.2.2 Zhalpak

Mining activity at Zhalpak commenced in 2017 via test production and ceased in April 2020. Only three mining Blocks were put into production during the tests, which were designed to obtain necessary mining parameters to complete a Kazak feasibility study and updated resource estimation to underpin full production which was recently completed and utilised in this report. An onsite sorption plant was built for production of uranium enriched resin that was transported to the Central Mynkuduk processing plant for further processing to yellow cake. RPM understands all onsite infrastructure is currently on care and maintenance.

5. GEOLOGY

RPM has reviewed the geology within the Projects, on both a regional and deposit scale and considers the geology is well understood and developed through the generation of geological maps, stratigraphic definitions (sedimentary sequence), geological cross-sectional interpretations, and two-dimensional models.

5.1 Geologic Environment and Mineralisation Style

5.1.1 Regional geology

The Upper Cretaceous sediments lie unconformably over the deeply eroded Palaeocene-Eocene contact and are represented by only continental deposited formations. The sediments contain un-eroded relics of reddish dense clays with inclusions of quartz pebbles and gravel, as well as siliceous rocks with intercalations of sand, clay, and sandstones of various grain sizes. The unit's thickness usually does not reach more than 10-15m, and is termed the Cenomanian Formation (K_2sm).

5.1.2 Stratigraphic column

Cretaceous

The Upper Cretaceous units are subdivided into three independent formations: Mynkuduk (early Turonian), Inkuduk (late Turonian-Coniacian-Santonian) and Zhalpak (Campanian-Maastricht) as shown in **Figure 5-2**. The thickness of the formations increases from northeast to southwest.

The Mynkuduk Formation (K_2t_1 mk) was defined in 1973 at the Mynkuduk deposit and comprises grey-coloured and variegated alluvial and lacustrine-alluvial sediments accumulated in the Turonian System, which generally extends from the south-east to the north-west (**Figure 5-1**). The stratigraphic column (**Figure 5-2**) identified clear changes in lithological-facies units frombottom to top, including:

- Rod-channel sands of various grain sizes with gravel and pebble;
- Floodplain deposits of medium-grained sands; and
- Medium and fine-grained sands with clay layers of floodplain-oxbow facies.

The thickness of the Mynkuduk Formation in the area ranges from 70m to 90m, and it is one of the main U-bearing formations at the Mynkuduk deposit and is the only formation at the Central Mynkuduk deposit.

The Inkuduk Formation (K_2t_2-s in) has a distinct erosion boundary and lies on the Turonian sediments. It has a coarse-grained composition and a low degree of material grading. Three sub-formations (units) were identified ranging from gravel-pebble sediments to fine and medium-grained sands with clay layers and lenses.

The thickness of the lower sub-formation varies from 30m to 35m, the middle sub-formation from 55m to 60m and of the upper sub-formation from 25m to 35m. Sediments of the lower sub-formation are represented by grey and green-grey gravel-pebble varieties that naturally change in the upper part of the section into more graded sands of medium and other grain sizes.

At the base of the middle sub-formation, green-grey sand of various grain sizes with gravel and pebble also predominates, changing into medium and fine-grained sands with clay layers.

Sediments of the upper sub-formation have a more regular lithological composition and are mainly composed of medium-grained sand with a small portion of equigranular sand and equigranular sand with gravel (up to 10% of the total thickness). Primary grey colours predominate in this sub-formation.

The Inkuduk Formation is also U-bearing at the Mynkuduk deposit however at the Central Mynkuduk deposit it is barren.

The Zhalpak Formation (K_2km-m gp) overlies the Inkuduk Formation with sporadic gaps and is separated into two sub-formations: the lower grey-coloured and the upper variegated sub-formations. There is a geochemical

boundary between the variegated and grey-coloured sub-formations, which corresponds to the paleo groundwater table level of the Danian to Early Paleocene period.

Grey medium-grained cross-bedded feldspar-quartz sand with pebble and gravels are developed in the grey-coloured sub-formation. Often containing carbonized detritus with iron di-sulphides this sub-formation is U bearing within the Zhalpak deposit.

Sediments of the variegated sub-formation are mainly represented by medium and fine-grained sands of green-yellow-brown-red hues. The upper portion of the sub-formation comprises red-brown carbonized clays that are the regional boundary separating saline Cretaceous waters from fresh Paleogene waters. The thickness of variegated sub-formation varies from 20m to 60m.

Paleogene

Paleogene sediments are represented by continental (Paleocene) and marine (Eocene) strata. The sediments are separated into four formations (from the bottom upwards): Uvanas, Uyuk, Ikan and Intymak.

The Uvanas Formation (P_1^2uv) was discovered in 1970. It is represented throughout the area of the Inkai deposit at depths from 170m to 300m and within the Suzak Trough at the Budenovskoye deposit at depths of approximately 450m. The thickness of this formation increases from a few meters to 80m and comprises different-grained sand, dark-grey, green and reddish clay.

Within the Mynkuduk deposit this formation is represented only in western portion with the thickness up to 15 m and on the eastern portion of the deposit, it is completely eroded. The Zhalpak deposit is only 10 m thick in southern portion of the deposit.

The Uyuk Formation (P_1^2-P_2^1uk) is ubiquitous and mainly represented by intermittent bedded grey and green-grey clays. Coastal-marine sandy-clay sediments were preserved only in the southern part of the region. Thickness of the Uyuk Formation ranges from a few meters to 60m. Within the Mynkuduk deposit this formation occurs only within the western portion with the thickness up to 20 m. The Zhalpak project does not contain this formation.

The Ikan Formation's (P_2^2ik) composition (grey-green clay) is very close to the underlying Uyuk Formation. As such, identifying this formation is difficult, however within the Central Mynkuduk and Zhalpak this formation is not represented.

The Intymak Formation ($P_2^{2-3}im$) is represented by deep marine green-grey to blue-green intermittent bedded or massive (more rarely) clay with thicknesses from 80 to 150 m. This formation is the upper regional aquifuge for the Eocene – Late Cretaceous aquifer system.

Late Oligocene – Quaternary unit (barren)

A late Oligocene – Quaternary unit, overlies the late Eocene formations with signs of erosion at an angular unconformity. The unit contains three subunits: a Late Oligocene – Early Miocene sub-orogenic subunit; a Late Oligocene – Quaternary orogenic sub-unit and a Quaternary platform sub-unit. The unit has complex formational composition and frequent non-deposition pauses, which played a significant role in development of mineralisation by control of infiltration processes in the Cretaceous-Palaeogene formations. The sub-orogenic subunit is represented by Betpakdala Suite and Togusken Series sediments as noted below.

The Betpakdala Suite (P_3^3-N_1^1bt) consists of two layers: the lower with red beds and the upper one which is variegated. The lower layer overlies Palaeogene and Cretaceous formations has signs of erosion degradation and is composed of brick-red and brown-red carbonate clays, silt, pink and brown sands. The upper layer differs from the lower layer in heterogeneous lithological composition (clays, sands and gravel), variegated dirty-yellow, brown and pale colours, poor rounding and grading of material. The overall thickness of the suite in the Suzak Trough reaches 200m, however it reduces towards the north and eventually pinches out entirely.

The Togusken Series (N_1^2 -N_2^1tg) is represented by ubiquitous yellow, rusty-brown inequigranular quartz sand with bands of gritstone, sandstone and clay. Its thickness across the Betpakdala Plateau generally does not exceed 12m and it is considered to have formed under fluvial conditions with sediment origins located in the Kazakh folded area.

The Late Pliocene – Quaternary orogenic subunit (N_2+Q) is composed of pebble-gravel deposits, gritstone and conglomerates of the alluvial plain of Karatau ridge and its thickness ranges from a few meters to 40m.

Quaternary unit

Quaternary sediments form shallow cover at the Betpakdala Plateau, infill valleys of Sarysu and Shu rivers, arid grasslands, takyr and salt basins and form the sand massifs of Muyunkum, Samen-Kum, etc. Most widespread are alluvial sand, sandy loam, loam, gravel rock, aeolian sand, silt and clay. The total Quaternary thickness varies from less than a meter to 20m.

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Figure 5-1 Regional Geological Map

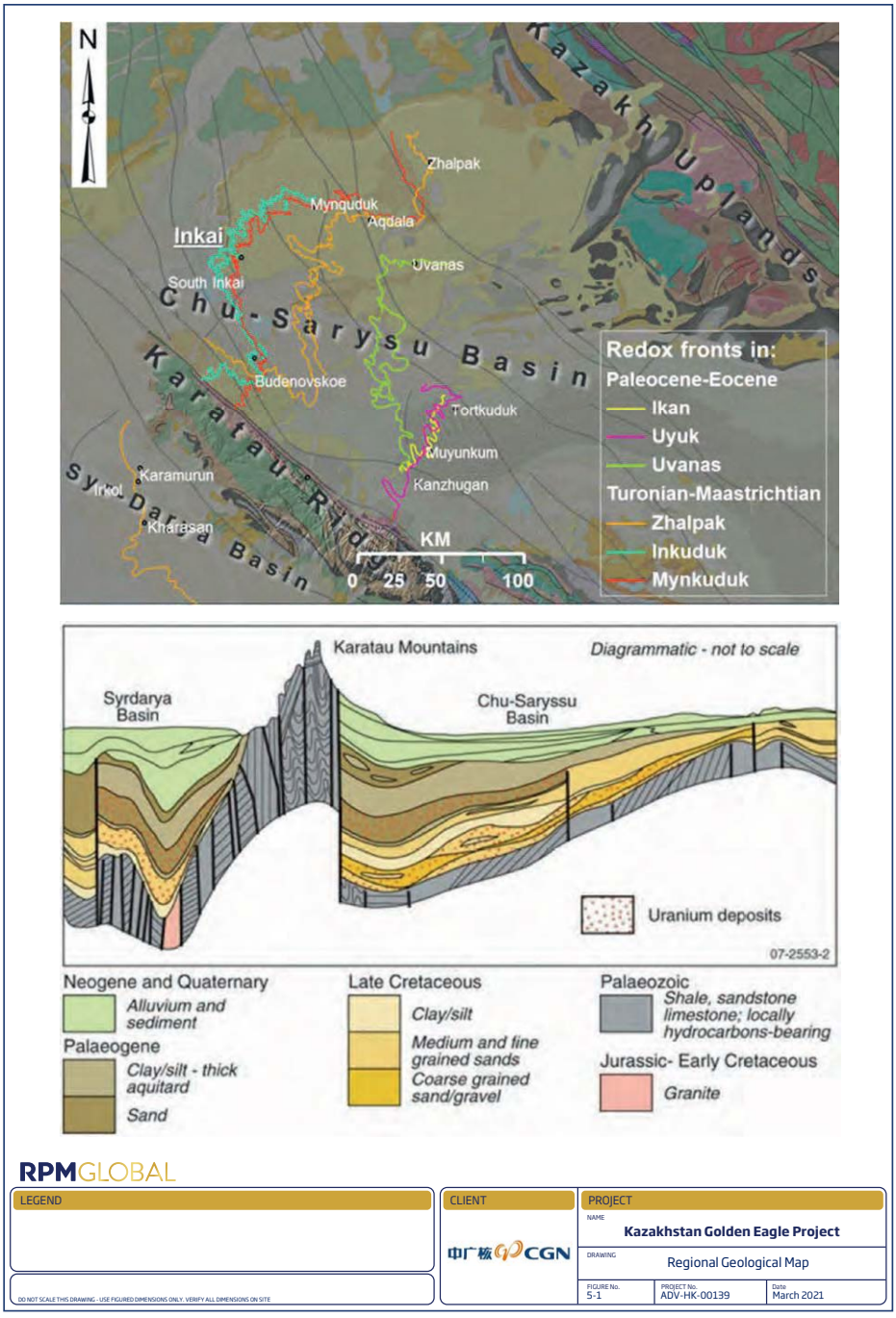

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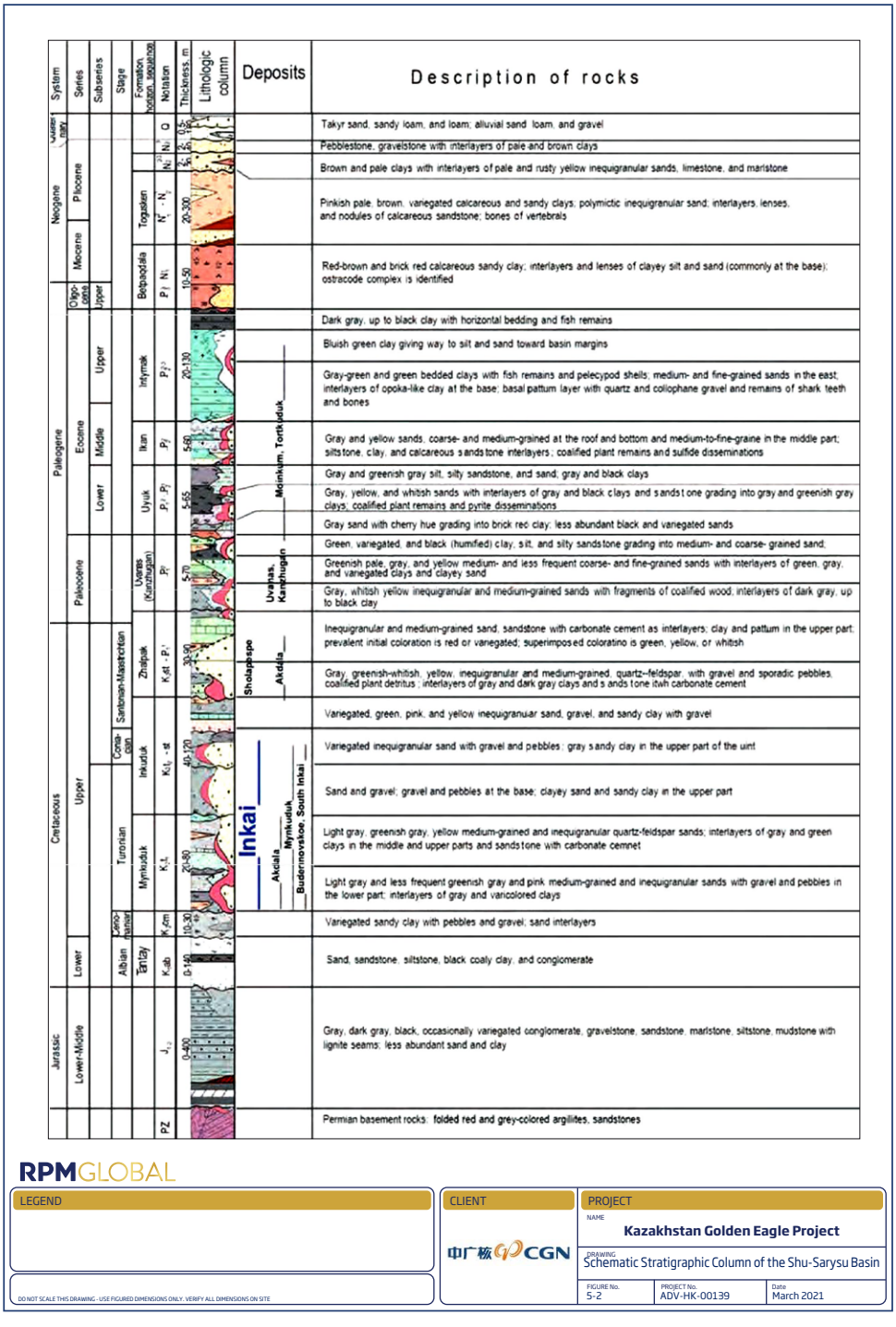
Figure 5-2 Schematic stratigraphic column of the Shu-Sarysu basin



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5.1.3 Regional Strutural Geology

The territory of the Shu-Sarysu Basin is a large epi-caledonian structural trough, characterised by a three-level structure. In vertical section, the following stratigraphic levels are: the lower level (folded Caledonian basement), the middle level (intermediate semi-platform or lithified sedimentary layer) and the upper level (Mesozoic-Cenozoic platform cover) (**Figure 5-1**).

The geological structure of the basement has been interpreted from geophysical works and rare drill holes. Basement mostly is at depths of 2-3 km, but rarely raised to 300-400 m. The oldest facies have Proterozoic age and are represented by bi-mica feldspar-quartz schists. Beside these rocks, the basement contains Cambrian and Lower-Middle Ordovician sandstone, conglomerate and aleurolite, which are intruded by Lower Paleozoic mafic and ultramafic intrusions.

The Middle level is represented by a complex of slightly folded sub-basement sedimentary formations. The base level consists of Famennian terrigenic-halogenic red coloured formations, which are covered by Lower Carboniferrous marine/terrigenic-carbonate formations. These are unconformably covered by continental red-coloured sediments of Middle-Upper Carboniferous and Lower Permian age. The contact with the upper level to the middle level is brown argillite and aleurolite.

The geological structure of the Mesozoic-Cenozoic cover is interpreted from a large number of drill holes made during prospecting and exploration works. The sediments in the project area are split into two units: the Cretaceous-Paleogene platform unit and the Neogene-Quaternary platform sub-orogenic unit.

The Cretaceous-Paleogene platform unit is represented by continental terrigenous strata of the Upper Cretaceous period, and continental / marine terrigenous strata of the Palaeocene and Eocene period.

The Upper Cretaceous sediments lie unconformably on the deeply eroded Palaeocene-Eocene contact and are represented by only continental formations. There are un-eroded relics of reddish dense clays with inclusions of quartz pebbles and gravels, and siliceous rocks with intercalations of sandy clay sandstones of various grain sizes indicative of the Palaeozoic basement. Thickness usually does not reach more than 10-15 m with the facies nominally assigned to the Cenomanian Formation (K_2sm).

5.1.4 Alteration and Mineralisation

Uranium mineralisation is confined to the boundaries of the 'formation oxidation zone' (FOZ). Epigenetic oxidation in section consists of two thick multilayer formation zones: lower and upper. The lower zone relates to Mynkuduk and Inkuduk Formations and the upper to the Zhalpak Formation.

5.2 Mineralisation Style

Central Mynkuduk and Zhalpak deposits are typical hydrogenic roll front uranium deposits related to U-bearing formation oxidation zones that developed in permeable terrigenous rocks.

All deposits of the Shu-Sarysu Basin are related to one regional front of oxidation that is developed inside the Cretaceous and Paleogene age formations. The main stage of ore-genesis occurred in the late Oligocene period and is related to the long-term gap between the deposition of later Eocene clays and early Miocene red colored formations.

Development of the U-bearing oxidation zone has several stages with initial rapid activation of infiltration processes followed by a slowdown until infiltration ceased. Introduction of uranium by deposition and removal by dissolution are constant simultaneous processes in the deposits. Mineralisation is in geochemical equilibrium with the host rocks when introduction equals removal. Due to these processes, mineralised bodies look like a strip in plan view and develop typical roll fronts in cross section view (**Figure 5-3**).

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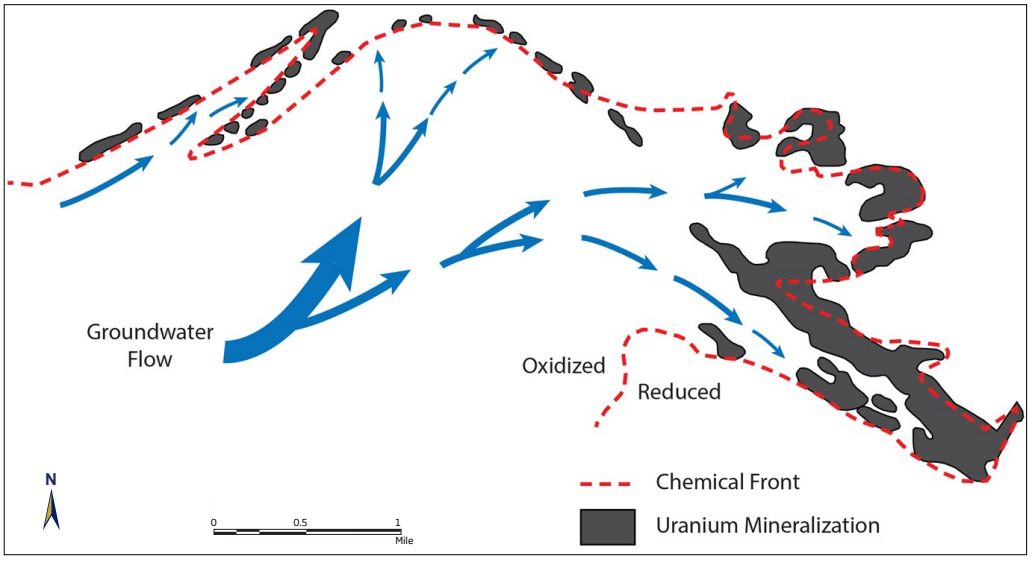
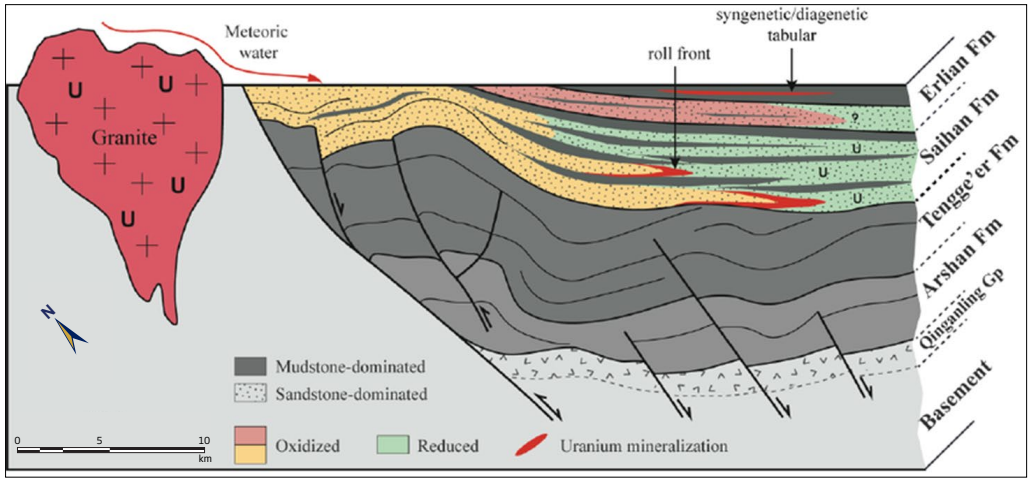
Figure 5-3 Type View of Roll Front Uranium Deposit



Source: Wyoming State Geological Survey

Type Cross Section View of Roll Front Uranium Deposit (Erlian Basin China)



Source: Bonnetti, Christophe & Cuney, Michel & Malartre, Fabrice & Michels, Raymond & Liu, Xd. (2015). The Uranium Metallogenic Cycle in the Intracontinental Erlian Basin, NE China: From Source to Deposit.

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LEGEND	CLIENT	PROJECT
Source: Wyoming State Geological Bonnetti, Christophe & Cuney, Michel & Malartre, Fabrice & Michels,Raymond & Liu, Xd. (2015). The Uranium Metallogenic Cycle in the Intracontinental Erlian Basin, NE China: From Source to Deposit.	中广核 CGN	NAME: Kazakhstan Golden Eagle Project DRAWING: Type View of Roll Front Uranium Deposit FIGURE No. 5-3 / PROJECT No. ADV-HK-00139 / Date March 2021

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

5.3 Project Geology

5.3.1 Lithology

Cretaceous-Palaeogenic formations host all major economic uranium deposits of the Shu-Sarysu Basin. All known deposits are the stratified-infiltration uranium type (roll front) resulting from widespread oxidative ore-control and zonality in permeable aquifer levels of the Upper Cretaceous formations.

Uranium mineralisation is confined to the boundaries of the FOZ. Epigenetic oxidation viewed in section consists of two thick multilayer formation zones: lower and upper. The lower zone relates to the Mynkuduk and Inkuduk Formations and the upper to the Zhalpak Formation.

5.3.2 Central Mynkuduk

The Mynkuduk deposit is confined to the lower portion of the ore-bearing fronts within the FOZ and has simple morphology. The thinning of the lower zone has a step nature depending on different composition and permeability of the hosting rocks.

Mineralisation of the Central Mynkuduk project is related to thicker parts of the Mynkuduk Formation. It is hosted within permeable sands and controlled by the boundary of the FOZ that form part of one large regional front of oxidation. Refer to **Figure 5-4**.

The Mynkuduk Formation is a complicated transgressive alluvial sequence consisting of variably classified sedimentary sub-units. There are 3-6 identifiable elementary units within the lower sub levels of the formation. They feature variable lithology, predominance of coarse-grained sand, poor classification of material, light-grey and grey colors with oblique texture. The Lower sub-level occasionally contains intercalated lenses of grey and variegated clays. The Upper sub-level contains 2-4 elementary units containing fine and mid—sized grained sands with occasional coarse grained grey-green formations.

Channels of coarse-grained sediments fringe local anticline uplifts. These contain primary red-colored formations of old floodplain facies. Marginal spit-channel formations occupy an intermediate position between them in plan view. This pattern of facies distribution significantly affects the configuration of the boundaries of the ore-controlling FOZ and the zone of uranium mineralisation. The Upper sub-level is more homogeneous with the differences between the permeability of rocks of the lower coarse-grained unit and the upper fine-middle-grained units leading to the development of the oxidation zone.

The Central Mynkuduk Formation contains thick lenses of grey clay throughout the stratigraphic sequence which are the reason for the heterogeneity of the Mynkuduk Formation. Average grain size of permeable rocks within the key sub levels are constant across the different parts of the deposit as shown in **Table 5-1 and Table 5-2**

Table 5-1 Average Grain Composition of Permeable Rocks by Sub-Level

Level, Sub-level	Number of samples	Grain size, mm						
		10-2	2-1	1-0,5	0,5-0,25	0,25-0,1	0,1-0,05	<0,05
Formation	1600	7,4	4,0	5,1	32,8	29,5	6,7	14,4
Lower sub-level	993	10,0	5,1	6,4	30,2	27,5	6,8	14,0
Upper sub-level	607	3,7	2,4	3,2	36,6	32,3	6,7	15,1

Note: Provided by the Company

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Table 5-2 Lithological Types

Lithological types	Number of samples	Proportion in level. %	Grain size. mm						
			10-2	2-1	1-0.5	0.5-0.25	0.25-0.1	0.1-0.05	<0.05
Permeable									
Sand-gravel rocks	502	9.6	43.9	16.6	9.4	13.3	5.6	3.2	8.0
Sand various-grained with gravel	821	15.7	17.2	11.6	16.6	30.2	8.6	4.1	11.7
Sand middle-grained	1223	23.3	1.1	0.9	3.0	60.6	15.7	5.3	13.4
Sand fine-middle and middle-fine-grained	1423	27.2	0.7	0.6	1.6	38.2	34.6	7.5	16.8
Sand fine-grained	577	11.0	0.1	0.1	0.6	10.7	62.2	9.5	16.8
Sand thin-fine-grained and thin-grained	199	3.8	0.1	0.1	0.3	6.6	39.4	28.5	24.9
Aquitard									
Sand <0.05 mm – 30-40%	163	3.1	0.5	0.3	1.4	5.3	35.2	24.1	33.2
Impermeable									
Rocks with <0.05 mm more 40%	330	6.3	0.1	0.1	0.4	1.8	4.9	11.3	81.4

Note: Provided by the Company

Localization of uranium mineralisation is dependent on the geochemical type of host rocks. The Mynkuduk Formation contains four geochemical types: diagenetically reduced grey-colored; diagenetically and epigenetically reduced green-grey and green-colored; non-reduced primary red-colored and variably; epigenetically oxidized formation.

- **First (I) geochemical type** is typical for the lower sub-level formed in the channel deposition. The upper sub-level is represented by lenses of grey clay of floodplain-oxbow formations. This geochemical type is the most favourable for uranium mineralisation.
- **Second (II) geochemical type** differ from the first only in colour (green-grey and green) and are developed in the upper sub-level. This type is not favourable for uranium mineralisation.
- **Third (III) geochemical type** is represented by clayey red-coloured and variably-coloured rocks. They have high iron content and low uranium content. These rocks are not favourable for uranium mineralisation.
- **Fourth (IV) geochemical type** is represented by oxidized permeable formations whose genesis is related to the formation of epigenetic oxidation that results in the ore-control front.

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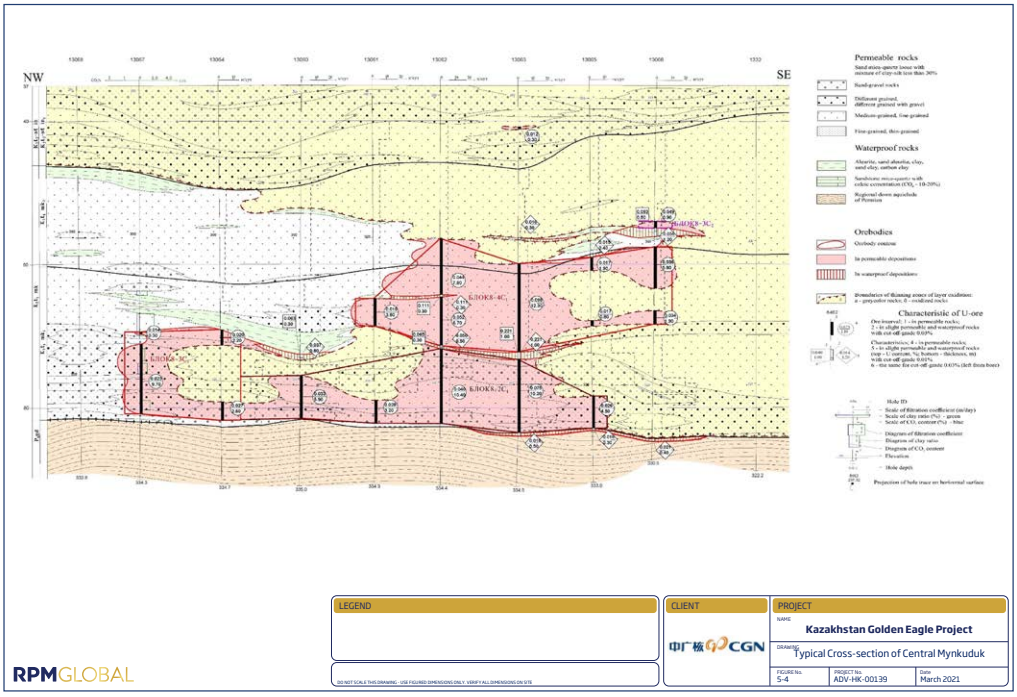
Figure 5-4 Typical Cross-Section of Central Mynkuduk Deposit



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5.3.3 Zhalpak

Zhalpak is located at the north-eastern portion of the Shu-Sarysu Basin. The mineralisation is confined to the sub-meridian oxidation front within the Zhalpak Formation. The deposit has a simple geometry and reasonable continuity within the main zone; however, this decreases in the margins of the deposit as shown graphically in **Figure 5-5**.

Both lower and upper formation zones are identified within the deposit. Uranium mineralisation is controlled by formation oxidation and primarily located at the bottom of upper (Zhalpak) level within the Zhalpak Formation. The FOZ is developed in both the upper and lower sub-levels of the Zhalpak Formation but unevenly due to differences of reducing properties.

Within the grey-coloured formations of lower sub-level the FOZ pinches out earlier than within rocks of the upper sub-level that were oxidized by surface processes, and later reduced.

The edge of the FOZ within the Zhalpak Formation rises from the lower aquiclude into rocks of the upper sub-level. High grade mineralisation is located at the bottom of FOZ close to the pinching out point while the upper portion of FOZ within the productive level is not mineralised. The host rock is a grey-coloured gravel-sandstone with rare grey-coloured clayey interlayering. Mineralised host rock has higher amounts of charred detritus (up to 0.5% of organic carbon) and a higher concentration of heavy minerals.

5.3.4 Mineralisation

The boundary between the zone of U-dispersion and the un-mineralised zone is defined only by the U content higher than or equal to 0.001%. Width of this zone usually reaches up to 0.5 km with the predominant form of U accumulation being through sorption, as such the low concentration of U does not allow crystals of U-minerals to form. Average Fe content is near 1% while the organic material is 0.03%.

U mineralisation domains are generally interpreted for zones which have a U content >0.01%. These zones are weakly increased in other elements, mainly chalcophile elements, due to the increased sulfide content associated with the primary reducing mineralisation events. Slightly increased Fe content is indicative of this zone, which has been sub-divided into the following zones:

- **Initial mineral forming sub-zone** is determined in the frontal portions of the FOZ. This sub-zone is represented by light-colored materials with low U content. The U bearing minerals occur as disseminated mineralisation that cannot be determined by optical and X-Ray methods due to small particle sizes (<0.1 micron) and occurrence within porous spaces. The average Fe content is approximately 1% while organic material is 0.04%.
- **Zone of U-accumulation** typically occurs in the central portions of the mineralised bodies and is distinguished by accumulative crystallization of disseminated U-minerals. U-minerals have grain sizes up to 0.15 micron which predominantly accumulated in parts of clay-siltsone cement containing pellets of grey clay, pyrite nodules and fragments of charred organic.
- ***Enrichment sub-zone*** contains the majority of the 'high grade' mineralisation and is located in the back portions of the roll front or "bags" of the bodies, wings and remnants. This zone is distinguished from other sub-zones by the presence of spots, nests, lenses of brown iron hydroxides with thickness near 10 cm and visual clusters of U-minerals, small nodules of sandstones with pyritic or Ra-barite cement. Thickness of the sub-zone varies from cm to 1-3 m and contains coffinite which is associated with epigenetic iron sulfides, goethite and hydrogoethite, native Se, sphalerite, galena and Ra-bearing minerals.

In addition to the sub zones for the U mineralisation the associated Formation Oxidation Zone is divided into two sub-zones.

- ***Iron accumulation sub-zone*** typically occurs in front of the roll front and FOZ. This zone has high Fe content (average 1.99%) and occurs as discontinuous bands having spotty or relatively uneven buffy-brown color. Its thickness varies from 5 cm to >3 m with boundaries altered by limonite and U mineralisation and is characterised by thin layers of redeposited organic material. The sub-zone consists of colloidal Fe hydroxides enveloping terrigenous grains and accumulated in cement. Rare grains of pyrite, native Se, siderite and chlorite occur.

- ***Iron depletion sub-zone*** occurs within light whitish permeable sand containing layers and nests of relatively less permeable yellow and spotty buffy-brown sand. The average Fe content is 0.73% with organic and CO_2 less than background value.

Uranium mineralisation is sub divided into three sub units which are dependent on the grain size classes:

- **Type (I)** consists of dark-grey coloured sands with high U content. It contains large amounts of organic material inside coarse-grained material fragments of lignitized wood. Large amounts of epigenetic pyrite occur, while within the fine-grained material clay-siltstone occurs with thin flakes of charred organics. U-minerals replace organic materials and form crusts on clastic material, rarely forming a basal cement of the sand. Coefficient of radioactive equilibrium is significantly shifted to excess of U.
- ***Type (II)*** consists of grey or light-grey coloured material with high content of U. The type is enriched by epigenetic pyrite however it does not contain charred organic material. U minerals occur as thin crusts on clastic grains and pyrite and scattered through the clay-siltstone cement as well as pseudomorphs replacing the leucoxene. This type of the U mineralisation is typical of the Mynkuduk deposit.
- **Type (III)** consists of light grey to white colour sands with significant concentrations of U and Ra bearing leucoxene within the heavy fraction. Due to the small grain size the U minerals they cannot be determined by optical and X-Ray methods. This type of ore is typical for the Akdala site of the Mynkuduk deposit.

Sandy units of the II and III types are weakly enriched with uranium, while I type contains up to 17% of uranium in coarse grained minerals due to accumulation of detrital fragments that are pseudomorphed by coffinite. Nodules of pyrite are covered by crusts of U minerals.

High U content occurs in the size fraction 0.5 - 0.25 mm (average 14.2%) for all ore types due to the increased volume of this grain size within the deposits. Type III proportion of the U increases in fine-grained classes (0.25 - 0.05) due to increased concentration of associated U-bearing leucoxene.

Central Mynkuduk Mineralisation

The Central Mynkuduk deposit comprises 2 main bodies and one minor. In horizontal view all of the bodies are presented by twisty narrow bands of different thickness and shape. The lenses extend along strike for between 8 km and 27 km, have widths between 50 m and 800 m, and thicknesses of between 0.9 m and 27 m. RPM notes that these bands extend both to the east and west of the existing mining license and are under production in the adjoining licenses.

Orebody number 8 is located in the eastern part of the ore-bearing zone (**Figure 5-1**) and has U content which varies from 0.015 to 0.177% U, thickness varies from 0.90 to 16.80 m. Orebody number 10 is the largest within the deposit with the U content from 0.014 to 0.240 % and thickness from 0.90 to 20.7 m. Minor orebody 18 located in the lower sub-level of the Mynkuduk Formation and represents only 1/3 of the defined resource of Central Mynkuduk. The remaining part of the 18 orebody is in the Osenniy block of the Mynkuduk deposit, as such it is not included in this report.

The average equilibrium coefficient is 0.81, while in central part of the roll front of the orebody 10 it is equal to 0.97. The uranium grade in the mineralisation varies from 0.038% U to 0.047% U, the average thickness varies from 5.6 m to 7.6 m and the average productivity varies from 5.2 kg/m^2 (C_1) to 2.9 kg/m^2 (C_2).

Table 5-3 Features of the Main Mineralised Bodies

Orebody	Exploration lines		Length, km	Width, m		Depth of the bottom, m
	From	To		From	To	
8	288	212	8.8	50	1,300	305-345
10	212	48/1	26.4	50	800	340-365
18	48/1	620	1.1	50	320	300-315
Total on Central Mynkuduk			36.3			

Note: Provided by the Company

Uranium mineralisation occurs in the I (diagenetically reduced grey-colored) and II (diagenetically and epigenetically reduced green-grey and green-colored) rock geochemical types. U hosting formations are

represented by loose or rarely slightly dense permeable sand and sand-gravel rocks. The Mynkuduk Formation contains primarily variably grained and middle-grained sands. Grain and chemical composition are provided in **Table 5-4 and Table 5-5**.

Table 5-4 Grain Composition of the Host Rock

Grain size, weight %									Sum
>5	5-2	2-1	1-0,5	0,5-0,25	0,25-0,1		0,1-0,05	<0,05	
					light fr.	heavy fr.			
3.97	6.17	6.53	10.66	30.76	17.24	0.05	7.30	17.32	100

Note: Provided by the Company

Table 5-5 Chemical Composition of the Mineralisation

MgO	Al_2O_3	SiO_2	P_2O_5	K_2O	CaO	TiO_2	MnO	Fe_2O_3	FeO	Na_2O	LOI
0.15	7.27	83.87	0.03	2.49	0.34	0.22	0.00	1.17	0.00	1.03	3.5

Note: Provided by the Company

The clastic material, in terms of composition and proportion, is similar within both the mineralisation and hosting sand. It is represented by quartz, feldspar and intraclasts of the siliceous rocks, rare flakes of muscovite and biotite. The sand contains small clasts of the sandstones with pyrite, rarely with siderite or barite cement. Quartz is the main mineral that forms 80% (from 70 to 86%) of the weight. The sand-gravel formation contains from 12 to 16% of siliceous rock clasts. Feldspar is present in typically microcline and felsic plagioclase and consist of up to 7 to 18%. Associated minerals include leucoxene, ilmenite, tourmaline, stavrolite, garnet, andalusite, kyanite, epidote, apatite and zircon, however rare grains of rutile and sphene occur. Clastic material is cemented by loose clay-siltstone material of up to 5 to 20% by weight and contains grains of quartz, flakes of mica, grains of associated minerals, pyrite, siderite and limonite. In the grains size of less than 0.05 mm there are typically clay materials within the cement. They are generally kaolinite, montmorillonite and thin-grained quartz. Mineral composition of the sand is provided in the **Table 5-6**.

Table 5-6 Mineral Composition of the Mineralisation (line 96 of the Central Mynkuduk)

Mineral	Content, %
Insoluble	
Quartz	68.14
Clasts of the siliceous rocks	13.69
Associated minerals	0.04
Total insoluble	81.87
Sparingly soluble	
Feldspar	9.87
Muscovite, biotite	1.42
Kaolinite	2.94
Montmorillonite	2.73
Limonite	0.31
Charred organic	0.05
Total sparingly soluble	17.32
Soluble	
Pitchblende	0.05
Coffinite	0.01
Calcite, siderite	0.50
Pyrite, marcasite	0.25
Total soluble	0.81
Total	**100**

Note: Provided by the Company

Regardless of lithological type and U content, the U grade distribution depends on a number of features. However the key feature is typically grain size as shown in **Table 5-7**.

Table 5-7 Distribution of U Compared to Grain Size

Mm		Class content, %	U content %	Proportion (%)
>2		10.14	0.0055	1.2
2-1		6.53	0.0078	1.1
1-0.5		10.66	0.0168	3.86
0.5-0.25		30.76	0.0178	11.8
0.25-0.1	**Light fr.**	17.24	0.0153	5.69
	Heavy fr.	0.05	0.024	0.03
0.1-0.05		7.3	0.0698	10.98
Clay-siltstone cement, water extraction (1L)		17.32	0.0942	35.16 30.18
Sum		100	0.0491	100

Note: Provided by the Company

The majority of uranium is in a disseminated form in the permeable porous cement of the sands. Uranium minerals together with the fine-crystalized pyrite forms thin layers on clastic grains and thicker layers and crusts on the pyrite grains. Small proportions of the U are concentrated in charred organic material as shown in **Table 5-8**. Mynkuduk U minerals include circa 15% coffinite and 85% pitchblende.

Table 5-8 Distribution of U minerals in U-bearing formations

	Pitchblende				coffinite			
	Number of samples	including			Number of samples	including		
		Charred organic	Loose clay-siltstone	Heavy fraction		Charred organic	Loose clay-siltstone	Heavy fraction
Number	108	19	64	25	19	6	12	1
Total %	**100**	**0.4**	**99.2**	**0.4**	**100**	**0.6**	**99.3**	**0.1**

Note: Provided by the Company

RPM notes that the ratio between coffinite and pitchblende varies within the U bearing formations and does not have a correlation. In core samples and microscopic analysis coffinite ($USiO_4$) and pitchblende (UO_2) are typically indistinguishable. This is due to presence of minerals with micro-intergrowths which are visible only with an electronic microscope. Macroscopically both minerals occur as black, soft, sooty minerals forming as disseminated minerals within loose permeable cement of sands, crusts on the surface of the terrigenous grains, in micro-fractures and pores of other grains. Rarely in relatively high-grade material coffinite and pitchblende form nests in the sands, fully replace organic fragments and develop on the leucoxene grains. In addition to the two main minerals, U is contained within leucoxene and ilmenite which have porous grains and are impregnated by U-minerals.

Leucoxene, hydrogoethite and Ra-barite are the Ra-bearing minerals. Independent minerals of Ra were not determined because of sorption of Ra by hydroxides of iron and leucoxene. High concentration of Re was determined within orebody 10 on some locations of the Mynkuduk Formation.

Rocks of I-III geochemical types represent zones of the epigenetically altered rocks. Uranium and associated elements in this zone can be considered under the determination of the Clarke concentrations of uranium in ionic crystals. Average U content in permeable rocks is 0.003%, iron 1% and organic material 0.02%. Sand formation has equal amount of kaolinite and montmorillonite.

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Zhalpak Mineralisation

Mineralisation of the Zhalpak deposit is similar to the regional mineralisation within the Central Mynkuduk Project. Mineralisation is hosted within clay-sand grey-colored formations of the lower Zhalpak sub-level that are covered by oxidized and secondary-reduced clay-sand formations of upper sub-level. The lower sub-level covers gravel-sand-clay formations of the lower confining layer (aquiclude formation).

U bearing rocks are represented by grey and dark-grey gravel-sand with rare lenses of grey clay. Various sizes of grains within the sand occur, however they are predominantly medium-grained (0.50-0.25 mm) in size. Sands are loose or slightly dense, with good permeability. Barren sands are not distinguishable visibly because of similar composition, while higher U grade occur as darker spots with higher proportion of heavy fraction and charred organic.

Clastic material forms 67 - 90% of the rock volume and occurs as quartz (average 85%), fragments of siliceous rocks, feldspar, rare flakes of the muscovite and biotite. Chemical assays indicate that the average content of organic material within the sands of the Zhalpak Formation is 0.06 - 0.12%, however up to 0.5% occurs associated with charred often pyritized organic material. Grain size varies from 0.01 to 50 mm.

Associated minerals form 0.2% of the weight accumulating in the heavy fraction of 0.25 - 0.10 mm and 0.10 - 0.05 mm. These minerals include pyrite, marcasite, siderite, goethite, hydrogoethite, leucoxene, ilmenite, staurolite, tourmaline, garnet, andalusite, zircon, epidote, kyanite, rutile, barite and apatite.

Porous cements consist of loose clay-siltstone material that forms 5 to 17 % of the sands' volume. The cement consists of loosely rolled grains of quartz, siliceous rocks, feldspar and charred organic material with grain sizes less than 0.05 mm. Pores between siltstone grains are filled by clay minerals of kaolinite and montmorillonite mixed with thin quartz (<0.00n mm).

Within the Zhalpak deposit the mineralised bodies do not have the distinct envelopes and mineralogical zonality as identified within Mynkuduk. This is interpreted to be due the dissolution of the mineralisation that led to migration of the material particularly to the dissolution of lower grade areas.

It should be noted that the central portion of the mineralisation, which contains the more continuous zones of U are in water-soluble form due to following factors:

- Coffinite and pitchblende are lyophobic colloids with micron size;
- Coffinite and pitchblende are disseminated in porous clay-siltstone cements in sands and in loose charred detritus; and
- the main portion of the U material forms thin powder layers on fragments of clastic rocks, crusts on pyritic nodules and occasionally coffinite is a basal cement.

Based on X-ray and mineralogical studies, Uranium occurs as coffinite, with only 7 occurrences of pitchblende being identified. Of the analysis completed 111 coffinite mineral occurrences occurred in charred detritus, 89 in loose clay-siltstone material with 18 grains in heavy fraction 0.25-0.10 mm.

Coffinite occurs as black, soft, sooty mineral disseminated within the loose permeable clay-siltstone cement of the sand, crusts on the surface and cement of the micro-fractures and pores of the clastic fragments and pyrite. Occasionally coffinite forms nodules of sandstones with basal coffinite cement, pseudomorphically replacing charred organics. When pitchblende was identified, it occurred as inclusions within the coffinite crystals. Other minor U-bearing minerals include leucoxene and ilmenite that are pseudomorphically replaced by coffinite. Ra bearing minerals are leucoxene, hydrogoethite and Ra-barite. Other associated minerals include minerals of Re, Se, Co, Ni, Zn and Mo that do not occur in significant concentrations within the deposit.

As described above the geochemical balance between mineralisation and hosting rocks is in disequilibrium. As such the envelope shapes of original deposition are changed and the mineralogical zonality does not typically occur, however some general rules are observed within the deposit:

- The highest U content correlates to the highest Fe content. Epigenetic pyrite accumulates simultaneously with U in the geochemical horizon.

- Charred organic material does not play a significant role in accumulation of the U.
- Average content of associated elements in all geochemical zones is low.
- All mineralisation ranges display a correlation between U and Re content.
- Uranium mineralisation related to the lower boundary of the FOZ are located in areas of pinching out mineralisation where the lower boundary rises from confining bed (aquiclude) which results in sharp reduction in thickness, however this is the most favourable location for localization of U mineralisation.
- Bodies in horizontal view occur as continuous snaky bands related to the FOZ and have been modelled using a 0.010%U cut-off.
- In section view, mineralisation occurs as blanket-like bodies along the lower border of the FOZ or sub-roll (pocket-like) bodies, or a combination of both.

5.4 Hydrogeology

The region contains two hydrogeological formations. The lower Paleozoic rocks comprising fracture hosted groundwater. The Upper hydrogeological formation comprises the Neogene-Quaternary unconsolidated formations and the Paleogene and Upper Cretaceous consolidated formations, both containing groundwater in pores within the sediments. Thick layers of impermeable clay of Eocene age, dividing the porous rocks and sediments into two parts: the upper with predominantly artesian groundwater; and the lower with high-pressure groundwater. The latter is the most important regarding uranium deposits of the region.

The upper formation is divided into two sub-levels: Neogene-Quaternary and the Cretaceous-Paleogene. The Neogene-Quaternary sub-level contains:

- Unsaturated permeable modern aeolian horizon - vQ_{IV};
- Partially saturated modern lake horizon - l,chQ_{IV};
- Water-bearing modern alluvial horizon – aQ_{IV};
- Water-bearing Upper-Quaternary modern fluvial-alluvial horizon – dpQ_{III-IV};
- Water-bearing Upper-Quaternary alluvial horizon – aQ_{III};
- Water-bearing Middle-Quaternary alluvial horizon – aQ_{II};
- Water-bearing and locally-water-bearing Middle-Miocene-Upper Pliocene terrigenous-carbonate horizon – N_1^2-N_2^2;
- Locally-water-bearing Upper-Oligocene-Lower-Miocene terrigenous-carbonate horizon of the Betpakdala suite –P_3^2-N_1^1;
- Water-bearing marine Middle-Upper Miocene horizon - P_2^{2-3}.

The Cretaceous - Paleogene sub-level comprising the Paleocene water-bearing horizon and Upper-Cretaceous water-bearing complex containing the following complexes:

- Campanian-Maastrichtian (Zhalpak) horizon – K_2km-m;
- Upper Turonian-Santonian (Inkuduk) horizon – K_2t_2-st;
- Lower Turonian (Mynkuduk) horizon - K_2t_1.

The above complexes commonly have similar formation, transition and discharge features, with only small differences occurring. Upper Cretaceous groundwater horizons do not have obvious impermeable levels between the complexes while the Neogene-Quaternary and Cretaceous-Paleogene complexes are separated by regional impermeable layers represented by marine Middle-Upper Eocene (Intymak) horizon - P_2^{2-3}, Middle Eocene (Ikan) and Lower Eocene (Uyuk) - P_2^1 horizons.

The U bearing Mynkuduk horizon is underlain by impermeable, dense, slightly-fractured and water-free siltstones of Permian age. Water-bearing horizons of the Upper Cretaceous do not contain continuous and thick, slightly permeable clay rocks. Lithological differences are not significant in vertical section and in plan, leading to similar groundwater characteristics in all three horizons. Flow rates in sand beds recorded during pumping

tests range from 0.1 to 27.7 L/sec with water drawdown of between 0.3 - 23.0 m in pumping test holes. Average flows vary from 2 to 7 L/sec with 8.1 - 15.0 m of drawdown typical in wells. Mineralisation in pumping test water samples varies from 0.9 to 10 g/L U, with average values of 1.8 - 6.2 g/L U. Chemical composition of the groundwater is constistently sulphate-chloride or chloride-sulphate, and only rarely is groundwater sulphate - hydrocarbonate orsodium chloride. These groundwaters are NOT utilised for livestock watering.

5.4.1 Central Mynkuduk

Hydrogeological works on the Central Mynkuduk area were completed in 1973-1989 and are summarised in **Table 5-9**.

Table 5-9 Total hydrogeological works

Type	Holes	Metrics
1. Hydrogeological drilling	87	33,060.1m
including core sampling in some intervals	72	5,760m
2. Multiple-well test pumping		4
3. Single-well test pumping		62
4. Test pumping		12
5. Water injection method	29	
6. Flowmeter logging	32	
7. Observation	23	84 months

Note: Provided by the Company

The Central Mynkuduk deposit comprises the following water bearing zones:

- Water-bearing and local-water-bearing Middle-Miocene-Upper Pliocene terrigenous-carbonate horizon – N_1^2-N_2^2;
- Local-water-bearing Upper-Oligocene-Lower-Miocene terrigenous-carbonate horizon of Betpakdala suite – P_3^2-N_1^1;
- Water-bearing marine Middle-Upper Miocene horizon - P_2^{2-3};
- Water-bearing Paleocene horizon – P_1;
- Water-bearing Upper Cretaceous complex – K_2;
- Slightly water-bearing zone of fractures if the Zhidelisay suite of Lower Permian age – P_1zd.

The regional hydraulic map for the Central Mynkuduk area is shown in **Figure 5-5**.

U-bearing horizons occur in the Upper Cretaceous water-bearing horizon including Zhalpak, Inkuduk and Mynkuduk horizons. The Zhalpak horizon occurs at a depth ranging from 110-150 m in the north and up to 160-180 m on south. The Inkuduk horizon occurs at a depth ranging from 150 up to 230-245 m while the Mynkuduk horizon occurs at a depth ranging from 265-380 m. Water-bearing rocks are represented by fine- to coase-grained sand, rarely sandstone, and gravel-pebble conglomerates with clay cement. The total thickness of the water-bearing horizon is 170-220 m and is underlain by Permian sandstones and siltstones. The water pressure increases with depth, with the highest water pressure column reaching up to 105 m. The groundwater level is typically at a depth of 70 m, with flow rates varying from 0.65 to 9.14 L/sec with drawdown ranging from 8 to 92 m.

Pumping tests were undertaken both in single and multiple wells, generally for a duration of 5 to 7 days, with water level recovery after 1 to 6 days. Pumping was undertaken with constant pumping capacity, accompanied by measurement of time, volume and water level. Common hydrogeological results of single-well and multiple-well pumping tests of the ore-bearing horizon on Central Mynkuduk are provided in **Table 5-10**.

In addition to the above information, a review of the information provided indicates that the groundwater has minimal impact of uranium concentration with very low average contents from 0.000022 to 0.0000001 g/l U.

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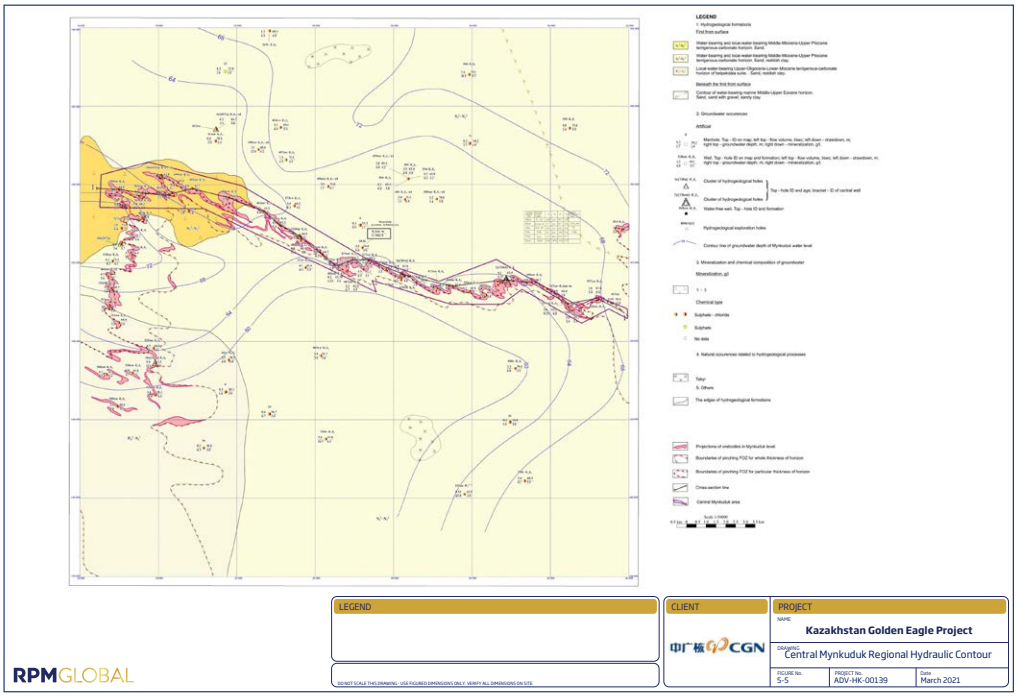
Table 5-10 Summary of Central Mynkuduk Pumping Tests

Hole ID	Flow rate Q.	Drawdown S.	Specific volume q^.	Coef. of conductivity (Km)*	Coef. of filtration (Kf)**	Coefficient of piezoconductivity	Radius of influence
	L/sec	m	L/sec	m^2/day	m/day	a*. m^2/day	m
Orebody 8							
324op	5.6	9.25	0.6	245	6.1	-	
397op	3.6	5.39	0.66	103	3.5	-	
398op	5.9	5.84	1.01	158	6.5	-	
336n	6.1	6.24	0.98	344	2.7	-	
335n		0.52		510	4	3.6×10^6	
334c		0.42		516	4.1	2.8×10^6	
326op		0.32		697	3.4	3.0×10^6	
Average				**441**	**3.5**	**2.0×10^6**	**4600**
Orebody 10							
361c	3.8	1.5	2.53	600	10.1	-	
362n		0.19		708	11.9	3.9×10^6	
363n		0.17		732	12.3	4.1×10^6	
364n		0.11		760	12.8	2.2×10^6	
365n		0.05		857	14.4	2.9×10^6	
Average				721	12.1	2.7×10^6	
487op	3.2	6.68	0.48	112	1.3	-	
475op	4.5	13.58	4.54	181	3.4	-	
401op	4.2	2.53	1.64	166	6.5	-	
485op	5	4.2	1.19	376	3.4	-	
488op	4.8	12.17	0.39	70	3.2	-	
330c	6	13.65	0.44	381	8.8	-	
331n		0.74		366	8.4	5.9×10^6	
332^{a}n		0.47		476	10.9	4.0×10^6	
333n		0.28		529	12.2	4.9×10^6	
Average				403	9.3	6.3×10^6	4600
489op	4.6	5.38	0.86	482	10.9	-	
402op	6.7	4.41	1.51	586	11.3	-	
406op	4.4	2.66	1.65	464	17.6	-	
403op	4.8	2.3	2.09	586	11.3	-	
499op	5	2.57	1.94	608	17.3	-	
500op	5.9	3.29	1.79	778	18.7	-	
501op	5	4.64	1.07	176	5.8	-	
502op	5	3.18	1.57	255	7.6	-	
503op	5	2.7	1.8	343	13	-	
452c	7.7	3.75	2.03	784	16.6	-	
453n		0.65		675	14.3	1.0×10^6	
454n		0.54		632	13.4	1.7×10^6	
456n		0.46		708	13.6	5.2×10^6	
Average				755	15.9	4.7×10^6	

** Believed to represent the aquifer transmissivity ** Believed to represent aquifer hydraulic conductivity*
^ Believed to represent the specific capacity of the well with non-standard units Source: Provided by the Company

Figure 5-5 Central Mynkuduk Regional Hydraulic Contour



Hydraulic characteristics were determined after the flowmeter logging of holes. Based on flow-meter data all lithological types were divided into several lithological-hydraulic types, as shown in **Table 5-11.** Kf is the coefficient of filtration (considered equivalent of Hydraulic Conductivity in common groundwater usage) reportedly obtained as a result of geophysical flow-meter logging of holes, not pumping tests. The coefficient of conductivity is Km (considered equivalent to Transmissivity in common usage of groundwater parameters), Kf=Km/M0, where M0 is thickness of a water-bearing formation zone. Geophysical flow-meter logging allows measurement of hydrogeological parameters for separated lithological intervals, not only for complete water-bearing horizons. As such this method allows for determination of parameters for different rocks such as sand, clay etc.

Table 5-11 Lithological-filtration types of rocks

Rock type	Number of tests	K_f, m/day	Lithological-filtration type	K_f for type, m/day	Particles <0.05 mm content, %
Gravel sandy	27	**26.9**	**I**	**26.9**	**8.1**
Various-grained sand	15	**18.6**	**II**	**18.6**	**14.1**
Coarse- middle-grained sand	21	**14.7**	**III**	**11.1**	**10.9**
Middle-grained sand	12	**8.8**	**III**		**10.9**
Fine- middle-grained sand	31	**7.8**	**III**	**8.7**	**14.9**
Fine-grained sand	23	**4.5**	**III**		**13.1**

Note: Provided by the Company

5.4.2 Zhalpak

Zhalpak is located in the northern portion of the Sarysu artesian basin. Two hydrogeological levels are typically interpreted within Zhalpak, namely the upper level consisting of the porous sedimentary rocks below the Mezo-Cenozoic cover and the lower level consisting of the units in the Paleozoic formations.

The upper hydrogeological level is divided into several units consisting of:

- aquifer horizon porous rocks of Neogene age,
- aquifer horizon porous rocks of Paleogene rocks, and
- aquifer horizon pressurised waters of late Cretaceous water-permeable rocks.

Stratigraphy of the upper level is subdivided as follows:

- **lower-middle Miocene N_1^{1-2} *bt***; Rocks of this horizon form discordant cover eroded from upper-Eocene clays, and covered by Quaternary sand, loam and sandy loam with thickness less than a few meters. Permeable rocks consist of variabl sorted quartz-feldspar sand with gravel. The bottom of the horizon is noted for the occurrence of thick red carbonated clays. Flow of wells is between 0.05 to 0.1 L/sec, with drawdown of 2.6-3.4 m and a filtration coefficient (hydraulic conductivity) of 0.27 to 0.68 m/day. Four wells, located out of ore-bearing areas, are characterized by high water capacity, with flow rates of 0.3 to 0.6 l/sec, drawdown of 0.5 m depth and a dynamic level of 7.8 to 18.3 m depth, with the depth of the lower aquiclude ranging from 13.7 to 19 m. The groundater chemical composition includes sulphate, sulphate-chloride and calcium-magnesium-sodium types.
- **middle-upper-Eocene Tasarenko-Chegansk suite P_2^{2-3}*(ts-čg)*.** This horizon is represented by grey-green clays with the middle and lower parts of the suite containing sand levels with thicknesses ranging from 5 to 15 m. Water-bearing rocks are fine-medium- and variably sorted quartz sand with minor gravel and layers of sandstone with gypsum cement. Aquifer horizons are characterized by low pressure, with an equivalent pressure of 1.2 to 12 meters. Water-abundance and flow in this horizon is low, with flow rates of 0.1 to 0.29 L/s, with a drawdown of 8 to 14 meters and specific capacityfrom 0.009-0.077 L/s/m. The Coefficient filtration (hydraulic conductivity), calculated according to pumping tests within the boundaries of the ore zone varies from 0.24 to 0.91 m/day. The chemical composition of this groundwater horizon is typically the sulphate-chloride type and rarely the sulphate type of groundwater. Mineralised water has a concentration of 5.6 g/l U with a carbonate hardness of 2.6 to 5.0 mg.equ/l.
- **upper-zhalpak, senon suite, K_2 *sn* (gp_2);** This horizon comprises medium-grained sand with layers of fine and irregularly grained sand with increased concentration of carbonates (up to 1%) and the silt-clay fraction (less than 0.05 mm). These factors decrease permeability and water abundance compared with the lower-

zhalpak level. The aquifer horizon is a confined aquifer with water pressure varying from 22 to 25 m of equivalent head. The depth of groundwater is approximately 60 to 61 m, with flow rates of 0.7 to 3.0 L/s, with drawdowns of 15 to 23 meters and with specific capacity of 0.03 to 0.2 L/sec/m. The chemical composition of this groundwater is sulphate-chloride to sodium, with a total hardness around 44 mg.equ/l and carbonate hardness of 1.7 to 2.2 mg.equ/l.

- **lower-zhalpak senon suite, *K_2 sn (gp_1)*;** This horizon is the main production aquifer for ISL uranium and contains alluvial with medium grained quartz-feldspar sand, with layers and lenses of fine-grained and irregularly-grained sand, rarely clay and conglomerate. With a total thickness of water-permeable rocks of 22 to 31 m, the horizon overlays the slightly permeable inkuduk clayey gravel-pebble rocks (12 to 20 m thick), which performs the role of a lower aquiclude for this horizon. The is a confined aquifer, with depth of the water level of 57 to 60.5 m, with an absolute level varying from 208.2 to 210.1 m. Water flow is from the Southeast to the Northwest with average gradient of 0.00015. The horizon has significant water abundance, with flow rates varying from 3 to 6 L/sec, with drawdowns of 3.8 to 15.2 m and specific capacity of 0.28 to 1.2 l/s/m. The permeability of these rocks is quite high with pumping test results and hydrogeological studies within the Central part of the Zhalpak deposit indicating a coefficient of infiltration (hydraulic conductivity) varying from 3.4 to 14.3 m/day (average 8,8 m/day). Pumping tests of the horizon indicate the following:
  - Permeability of ore-bearing rocks was determined by the water injection method with a rate 2.4 l/s. Results of injections show good permeability, near 5.6 cu.m/hour.
  - Groundwater of this ore-bearing horizon has a pH of 6.9 to 7.87 and carbonate hardness ranging from 1.5 to 2.2 mg.equ/l. Underground waters have sulphate aggressiveness in relation to non-sulphate-resistant cements, so for using the underground holes' leaching method special cement is required.
  - Groundwater depth to the top of the horizon 112 to118 m
  - Groundwater depth of occurrence to the base of the horizon 125 to 145 m
  - Groundwater depth to the top of the mineralisationzone 115 to 130 m
  -
  - Effective horizon thickness 2 to 8 m
  - Mmineralised zone (orebody) thickness 2 to 5 m
  - Filtration coefficient (hydraulic conductivity) of ores 8.8 m / day
  - Filtration coefficient (hydraulic conductivity) of horizon 7.8 m/day
  - Water capacity (transmissivity) of the horizon 193 m^2/day
  - Coefficient of piezoresistance $4.2x10^6$ m / day
  - Total mineralisation of groundwater water 7.4 g / l
  - Chemical composition - sulphate-chloride and sodium-based.
- **Inkuduk, senon suite, *K_2 sn (in)***; This horizon comprises mottled irregularly grained feldspar-quartz sand with layers of pebble, gravel and grey clay (0.5-2.0 m). Total thickness of water-permeable rocks is 23 to 40 m. The top of the complex contains abundant impermeable clayey conglomerate with thicknesses from 12 to 20 m, and clay fraction content of 30-50%. The filtration coefficient (hydraulic conductivity) for the horizon is low, varying from 1.7 to 10.3 m/day. Water occurred at depths of 140 to 151 m with a static groundwater level of 58.3 to 60.9 m, with water pressures on the top of the unit equivalent to 79 to 93 m. Well flow rates vary from 4.6 to 7 l/s, at drawdowns of 4 to 13 m and specific capacity of 0.35 to 1.1 L/sec/m. The chemical composition water is sulphate-chloride or sodium, with a hardness of 42 to 47 mg/l, and a carbonate hardness of 2.0 to 2.4 mg.equ/l.
- **Mynkuduk, turon suite, *K_2t (mk)***. This horizon lies below the loose Cretaceous Mezo-Cenozoic cover with the majority of the horizon presented by grey feldspar-quartz sand with layers of sand-pebble rocks, rarely dark-grey sandy clay. Groundwater occurs at a depth of 175 to 185 m, with a thickness of water-permeable rocks in the Central part of the deposit of 20 to 35 m, a static groundwater level of 58.3 to 60.7m and an equivalent water pressure of 118.7 to 122.3 m. Well flow rates vary from 3.1 to 3.9 L/s, with drawdown 8 to 22 m, specific capacity of 0.14 to 0.45 l/s/m. Filtration coefficient (hydraulic conductivity) of 1.6 to 2.8 m/day. Water is sulphate-chloride and sodium-based with a total hardness of 40 to 46 mg/l and a carbonate hardness of 2.2 to 2.4 mg.equ/l.

- **Tectonic zones' Perm age, kingir suite *$P_1(kn)$*.** This horizon contains sandstones, siltstones, mudstones with minor pyrite and calcite. As a result of hydrogeological tests on one hole a flow rates of 2.43 L/s was determined with a static level depth of 61 m, a specific capacity of 0.076 l/s/m, and a filtration coefficient (hydraulic conductivity) or 0.7 m/day. The groundwater has a sodium sulphate composition.

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6. DATA VERIFICATION

RPM conducted a review of the geological digital data supplied by the Client and Company to ensure that no material issues could be identified and that there was no reason to consider the data inaccurate and not representative of the underlying samples. RPM visited the Project in November, 2019 and concluded that the data was adequately acquired and validated by following suitable practices.

RPM conducted a review of the geological data, which was provided, this included the 2010 Exploration report for Central Mynkuduk, Mining Plan completed in 2016 for Zhalpak as well as the 2019 Zhalpak Mineral Resource and TEO report, in addition to the Official Opinion letters from the GKZ. Below is a summary of the information reviewed by RPM.

6.1 Drilling Types and Core Recoveries

6.1.1 Exploration drilling

Central Mynkuduk

Drilling has been undertaken via surface diamond and percussion methods, typically with the ZIF-1200MR Kazak drill rig. Drill spacing is generally 200m by 50m, however ranges from 800m by 50m to 100m by 25m during infill drilling. Diamond core drilling was undertaken to determine boundaries on lithological zones and the formation oxidation zone; assessment of uranium-bearing levels and technological tests of the hosting rock while percussion drilling was subsequently undertaken for infill on close spacing. The total drilling information provided to RPM is summarised in **Table 6-1**.

Table 6-1 Total Drilling on the Central Mynkuduk Area

Type	Unit	Total Deposit	Mineralised Total	Including	
				Orebody 8	Orebody 10
Prospecting and exploration	m	471,295	279,776,1	43,553.3	236,222.8
	holes	1,313	772	131	641
Hydrogeological	m	7,035	5,655	662,6	4,992.4
	holes	19	15	2	13
Total	m	478,330	285,431,1	44,215.9	241,215.2
	holes	1,332	787	133	654

Note: Provided by the Company

Core drilling was undertaken utilizing 89 mm hole diameter drill bits resulting in 70-75 mm core, while the percussion holes were drilled with 118-132 mm diameter drill bits. Drill hole recovery data is provided in **Table 6-2** below. RPM notes that >70% recovery is considered suitable for chemical analysis, however as noted below the resource estimate has been estimated based entirely on the downhole gamma log calculated U content with chemical analysis utilised to confirm the gamma logs and provide correction for disequilibrium. Because of this RPM does not consider the low recovery to be an issue.

Table 6-2 Exploration Holes Core recovery

Orebody	Holes	Including		Total holes recovery %		
		Non-core	Core	>70%	<70%	Total >70% in % total
8	133	92	41	33	8	80
10	654	321	333	275	58	83
Total	**787**	**413**	**374**	**308**	**66**	**82**

Note: Provided by the Company

All sampled core was geologically logged according to National Standards that includes describing colour, composition and size of clastic material, clay ratio, texture, associated mineralisation and measurements of radioactivity by portable radiometers through every 0.1 m.

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Zhalpak

The first stage drilling in 1971-1972 was undertaken by a sub-meridional line crossing orebody with the distance between lines of 6.4km by 3.2km. The distance between the holes was reduced over a period of time to 1600m by 800m then to 100m by 50m. Detailed exploration (1988-1991) was undertaken in the central area hosting the highest-grade mineralization. This infill drilling program reduced the spacing across this area to 200m by 50m with more complex zone infill drilled to 100m by 50m and 100m by 25m.

Total volumes of historical drilling made on Zhalpak deposit is provided in the **Table 6-3.**

Table 6-3 Total Historical Exploration Drilling on the Zhalpak

Type	Unit	Total on deposit	Including	
			1964-1973	1988-1991
Prospecting and exploration	m	348,733	73,290	275,443
	holes	2 399	503	1 896
Hydrogeological	m	9,948	1,665	8,283
	holes	74	15	59
Total	m	358,681	74,955	283,726
	holes	2,473	518	1,955

Source: Provided by the Company

Diamond core drilling has been undertaken by typical Soviet drilling rigs ZIF-1200MR with drilling diameter 89 mm and core diameter 70-75 mm. Blade drilling was also carried out in zones where sampling was not necessary with an open hole diameter of 118 to 132 mm. According to Soviet standards of 1986 necessary core recovery for inclusion in resource estimation for this mineralisation style should be greater than 70%. Summary core recovery through exploration stages is provided in the **Table 6-4** below.

Similarly, to Central Mynkuduk, RPM does not consider the core recovery limit of 70% to be an issue as the resource estimate has been estimated based entirely on the downhole gamma log calculated U content, with chemical analysis only utilised to confirm the gamma logs and provide correction for disequilibrium.

Table 6-4 Exploration Holes Core Recovery

Holes stage	Mineralised holes			Summary length of min. zones, m	Summary length of core from min. zones, m	Summary core recovery
	Total	Core recovery >70%	Core recovery <70%			
Prospecting	73	63	10	294.6	251.5	85.4
Preliminary exploration	189	158	31	752.2	638.6	84.9
Detail exploration	463	413	50	1893.7	1588.8	83.9
Total	**725**	**634**	**91**	**2940.5**	**2478.9**	**84.3**

Source: Provided by the Company

All sampled core was geologically logged according to National Standards that includes describing colour, composition and size of clastic material, clay ratio, texture, associated mineralisation etc.

6.1.2 Operational exploration and Mining drilling

Currently Central Mynkuduk and historically Zhalpak deposits are under mining operations via the ISL method of extraction. Mining is accompanied by drilling of several types of holes. These are injection, extraction and operational exploration holes.

Central Mynkuduk

Each mining block contains approximately 10 to 15 extraction holes to remove the uranium solution (termed "Pregnant Solution") and 30 to 40 injection holes for injection of leaching solution in uranium-bearing layers.

Subcontractor "Volkovgeology" undertakes drilling of the holes with depths ranging typically between 350-360 m. Special tubes, pumps and sump equipment are inserted into the holes after the drilling prior to mining. Holes are typically percussion holes however 5% are diamond core with subsequent chemical analysis for quality control of the geophysical logging. Core recovery data of these holes are not provided; however, RPM understands similar recoveries are observed as for the exploration holes in **Table 6-2**.

Approximately 2,850 injection, 1,135 extraction and 200 operational exploration holes have been drilled in the Central Mynkuduk area since 2007. Approximately 200 total holes are drilled per year including 20 operational exploration holes for geological definition prior to short term resource estimation.

Geophysical logging occurs following drilling. It includes downhole gamma and electric methods in addition to the geological logging. During the site visit RPM observed the drill hole passports for two operational holes, and noted the high-quality logging, gamma logs and cross correlation of the uranium content.

Zhalpak

Drilling procedures for Zhalpak deposit were completed for test mining on three polygons. The same subcontractor "Volkovgeology" undertook all the necessary works using the same approaches as outlined above.

Whilst the actual production holes drilled were not provided to RPM a total of 119 holes totaling 17,255 meters were designed for the deposit as part of the trial mining operation.

6.2 Topography and Collar Locations

Central Mynkuduk

Topography was prepared for Central Mynkuduk through the 1981-1988 exploration based on state geodetic points. Actual historical holes' location survey proceeds after the drilling using auxiliary and state geodetic points by theodolite traverses and levelling courses.

Geodetic survey of new holes, including the mining and the operational exploration holes, is undertaken by subcontractor "Volkovgeology".

All the works are made in local coordinates system. RPM considers the accuracy suitable for the classification applied.

Zhalpak

Topographic and geodetic works included on-site geodetic points preparation, holes coordinate determination and mapping on a scale of 1:10 000. Geodetic points were prepared from state geodetic points by theodolite traverses and leveling courses. Hole location is measured by intersection and resection methods, and by theodolite traverses between the state and on-site geodetic points.

A topography scheme of 1:10 000 was made using data obtained through the exploration stage.

All the works are made in a local coordinates system. RPM considers the accuracy suitable for the classification applied.

6.3 Down Hole Survey

Central Mynkuduk

Downhole surveys were undertaken for all exploration holes regardless of type or direction. The 20m down hole measurements were made by magnetic inclinometers type KIT-1. A summary of the results is shown in **Table 6-5** which indicate the good quality of the downhole survey measurements with minimal deviation as expected for vertical holes.

Table 6-5 Summary of Downhole Survey Results

Range of deviation from vertical	Measurements	Deviation					
		Dip angle			Azimuth		
		Root square mean deviation		Admissible	Root square mean deviation		Admissible
		Max	Average		Max	Average	
<2°	6764	30'	15'	30'	-	-	-
2° -5°	4341	30'	18'	30'	10°	3°	10°
5° -10°	1215	30'	12'	30'	10°	3°	5°

Note: Provided by the Company

Zhalpak

Downhole survey for all exploration holes on Zhalpak has been undertaken using the same approach and equipment as used on Central Mynkuduk. Graduation of equipment was made at least once per month. Control measurements were made for 20% of the holes. Obtained deviations do not exceed reasonable values, relevant data is provided in the **Table 6-6**.

Table 6-6 Summary of Downhole Survey Results on Zhalpak

Range of deviation from vertical	Measurements	Deviation			
		Dip angle		Azimuth	
		Average	Admissible	Average	Admissible
<2°	4104	10	30	-	-
2° -5°	114	12	30	3	5

Source: Provided by the Company

6.4 Geological, Geotechnical, and Geomechanical Logging

Exploration geological logging for both Central Mynkuduk and Zhalpak deposits was undertaken according to Soviet standards. Geological description of the lithological types included colour, material composition, grain size, clay-content and mineralisation. Geological logging was accompanied by measurements of radioactivity via gamma geophysical downhole surveys on 10cm intervals.

Similar methods were utilised for the operational holes with geological description performed for new core holes that are drilled which are subsequently compared to the geophysical-based interpretation of lithology.

No geotechnical logging is necessary due to the mining method.

6.5 Bulk Density and Bulk Moisture Determination

Central Mynkuduk

Bulk density and moisture determinations were undertaken during the exploration drilling of the diamond holes from each lithological rock type. A total of 914 determinations were undertaken across the deposit on spacing 800×100 m. Average moisture and density are shown in **Table 6-7** for Central Mynkuduk. Of interest the same average was determined for each stage of drilling highlighting the relative consistency of the rock type along the channels. The standard deviation of the density measurements was 0.12.

Table 6-7 Average Moisture and Density of Central Mynkuduk Rocks

Stage	Number of samples	Wet Density t/cu.m	Moisture %	Dry Density t/cu.m
I	494	1.98	14.54	1.7
II	310	1.99	14.91	1.7
Total/ average	914	1.99	14.71	1.7

Source: Provided by the Company

Zhalpak

Sampling for density and moisture was completed across the entire deposit area however the raw located data has not been supplied for evaluation of the coverage of the sampling. From high level reporting of the work 200 samples were tested, including 145 from the mineralised zones. The tests were carried out immediately after core recovery from the hole. Average density of rocks from the mineralised zones for Zhalpak is 1.95 t/m^3, dry density 1.64 t/m^3, moisture 16.57%. These determinations were also cross checked by Instantaneous Fission Neutron {"IFN") logging. RPM accepted 1.64 t/m^3 for the resource estimate.

6.6 Sampling, Sample Preparation and Assaying

Both diamond core sampling and geophysical logging was undertaken within the exploration stages of the Projects. All information was provided in the exploration report 2010 on Central Mynkuduk and RPM understands similar processes were utilised at Zhalpak.

Original exploration materials such as sampling sheets and assay certificates (protocols) were not provided for review due to security. RPM's review is based on approved exploration reports provided by special state authority such as State Committee of Resources of Republic of Kazakhstan (GKZ RK) as noted previously.

6.6.1 Core sampling, sample preparation and Assaying

Central Mynkuduk

Core samples were undertaken on all diamond core based on geology and collected for core intervals with the radioactivity higher than 40 μR/h and linear core recovery of at least 70%.

Samples were composited to the entire mineralised intervals and were collected on half core material following cutting along a central axis. The length of the samples varied from 0.15 to 1.2 m with the majority of samples having length between 0.3 and 0.6 m. Host rocks with the limited radioactivity were sampled on 0.2 to 0.3 m length.samples included the following analysis:

- U and Ra determination;
- Grain size and carbon content;
- Geochemical assay including Se, Re, Sc, Y, some REE determination were undertaken during the second stage of exploration only;
- Metallurgical tests for leaching;

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- Mineralogical research of the mineralisation and hosting rocks.

The total samples provided to RPM are shown in **Table 6-8**. RPM notes that while secondary elements were determined metallurgical tests did not confirm the possibility of extraction from mineralised rocks. According to Protocol GKZ RK non-balanced (non-economical) resources of Re, Sc and REE (including Y) are registered for Central Mynkuduk deposit, and GKZ recommends continued study of the possibility of extraction from mineralised rocks for these elements. Rhenium was not registered because of low concentrations. Beside the determination of uranium concentration additional analyzes on Fe^{2+}, Fe^{3+}, HCO_3^-, NO_3^-, SO_4^{2-}, CO_3^{2-}, Cl^-, pH, Eh and Ca, Mg, Al, SiO_2 sometimes Sc, Re, REE are being undertaken through the mining process.

Table 6-8 Total Volume of the Sampling in the Central Mynkuduk

Sampling type	Unit	Total samples	Including exploration stages	
			I	II
U and Ra	core meters	15,728	11,265*	4,463
	Sample	28,345	20,230*	8,115
Grain size:				
All	Sample	2,856	1,820	1,036
Mineralised	Sample	934	646	288
Carbonate content				
All	Sample	1,068	478	590
Mineralised	Sample	648	351	297
Associated elements				
Se	Sample	9,837	7,790	2,047
Re	Sample	1 ,271	130	1,141
Sc	Sample	640	-	640
REE (including Y)	Sample	87	-	87
Mineralogical researching	Sample	757	667	90
Metallurgical tests	Sample	42	32	10

Note: Provided by the Company
**denoted the ensure Myndukuk despoit which include east, central and western areas.*

In addition to the above information RPM notes the following:

- Analysis for secondary elements commenced during the second stage of exploration. Re and Sc determinations were undertaken within U bearing intervals from the core holes with core recovery at least 70% and U-content ≥0.01%. REE and Y were analysed within samples collected from mineralisation and barren rocks within unaltered and oxidized zones. RPM notes that the highest U and Ra samples were also analysed for selenium content.
- Thorium concentration was determined by the XRF method on 232 U bearing samples. Potassium concentrations were measured in 86 samples using a flame photometric method.
- Sampling for grain size determination and carbonate content was undertaken for analysis of the permeability and ability to leach via the in-situ methods. Samples were collected on a hole spacing of 400 by 50 to100 m and in most cases specific holes were drilled to collect these samples.
- The average weight of the samples reached up to 7.0 kg which was initially crushed to 1 mm and split to an average weight 0.2 kg.
- U-Ra samples were analysed in Central laboratory of Volkov according to Standards of Scientific Council of Analytical Methods (Soviet Standards). U-content was determined via XRF with minimum limit 0.0004% while Ra-content was undertaken by a complex gamma-ray-spectral method with the minimum limit 0.0006%.
- Associated elements were also analysed in the Central laboratory of Volkov expedition. Selenium was determined by X-Ray method. While rhenium was determined by chemical and spectrographic methods.
- CO_2 content was determined in the field-laboratory with previous dissolution of the sample in 10% HCl.

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Zhalpak

Core samples from the Zhalpak exploration holes underwent the following analysis:

- U and Ra for control parameters determined by gamma-logging;
- Grain size analysis and carbonate determination;
- Experimental metallurgical test works;
- Bulk density and moisture determination;
- Mineralogical and chemical composition of rocks and mineralisation;
- Secondary elements analysis.

The number of the key analyses is provided in **Table 6-9**.

Table 6-9 Total Number of Samples in the Zhalpak

Sampling type	Unit	Number of samples	Including stages		
			Prospecting	Preliminary exploration	Detail exploration
U and Ra	Core meters	7,764	1,582	2,622	3,560
	Sample	18,115	3,158	6,174	8,813
Grain size	Sample	2,600	355	815	1,430
Carbonate content	Sample	2,595	365	790	1,440
Density and moisture	Sample	200	-	20	180
- including mineralisation		145	-	10	135

Source: Provided by the Company

In addition to the above information RPM notes the following:

- U and Ra analyses was the main analysis type and was undertaken from the most representative intervals with the activity of more than 40 μR/h. At the stages of prospecting and preliminary exploration, when only common patterns of distribution for radioactive equilibrium were researched, whole core was sampled and assayed. During detail exploration sampling has been undertaken only from core with core recovery more than 70%. The samples were collected from the half core with length varying from 0.1 to 1.1 m with the most lengths 0.4 - 0.5 m. Sampling procedure quality was controlled by sampling the other half of the core. As well assay results were cross controlled by gamma and IFN logging. The control procedures are described in Section 6.7 of this Report.
- Sampling on grain size and carbonate content has been undertaken on 400 m section lines and between holes 100 m apart on section. Mineralised intervals, barren rock intervals inside the mineralised zones, and rocks over and under the mineralised zones were sampled by chip sampling taking into account geology. Sample length varied from 1 to 3 m with average 1.7 m. Weight for carbonate content samples is 100-300 g, for grain size samples at least 500 g.
- Secondary elements sampling commenced at the detailed exploration stage (1988-1991). Rhenium distribution was researched by qualitative spectral assays on 2,845 samples, quantitative analyses have been undertaken on 286 combined samples from U mineralisation intervals with >70% core recovery. Rhenium concentrations were determined by catalytic and spectrographic methods with a limit 0.1 g/t. Selenium was analysed by qualitative X-ray method for all mineralisation and contouring samples. 2,545 samples were analysed for the average concentration calculation. Scandium has been analysed by 2,765 samples from geochemical profiles within 266 combined samples from uranium mineralization. Scandium has been analysed by nuclear-physical method with the limit 0.2 g/t. Y and REE were analysed from 138 separate samples and 158 combined samples from non-altered sand of 6 exploration lines. The sample was analysed for Y by X-ray method with the limit 4 g/t. REE were analysed by spectrophotometric method.
- Three combined metallurgical samples were tested in laboratory p/ya A-1997. As well there are 5 combined and 50 small single metallurgical samples which were tested in the field laboratory GRE-7.
- Mineralogical and auxiliary analysis types and numbers provided in the **Table 6-10** below.

Table 6-10 Mineralogical and Auxiliary Analysis

Analyze type	Stages	
	1971-1973	1988-1991
Mineralogy and grain size analysis on sample		
- uranium mineralisation	123	283
- barren rocks	76	165
Thin section documentation	140	73
Polished sections documentation	80	155
Microradioghraphy	160	193
X-ray phase analyzes for U-minerals	93	315
- clay minerals	-	286
X-ray spectral analyzes on U	150	1,189
- Ra	-	719
- Se	-	974
- Y	-	165
Spectral analyze	123	1,456
Neutron activation analysis for Sc	-	1,356
Chemical assay for REE		165
- Re	-	1,532
- carbonate content	-	1,381
- organic	-	1,381
- Fe and S phases	96	1,381
- U in water	-	280
- Re in water	43	120
Full chemical analyze on oxides for combined samples	-	8
Electronic microscopy	7	36

Note: Provided by the Company

Sample preparation has been undertaken for samples on U, Ra, Re and other elements and included crushing to 1 mm and milling to 0.075 mm as is usual according to Soviet standards.

6.6.2 Geophysical sampling

Central Mynkuduk

Downhole geophysical surveys were undertaken on every hole aiming to complete the following:

- Detecting the radioactive gamma-anomalies in the holes;
- Determination of the depth, boundaries and thickness of intervals and U-content for resource estimation;
- Lithological description of section;
- Dividing U-bearing permeable and impermeable rocks and lithological-filtration;
- Core recovery evaluation;
- Classification of rocks depending on lithological-filtration types and calculation of filtration coefficient through section.

To achieve the required outcomes the following methods were applied for each hole:

- Apparent resistivity;

- Natural polarization;
- Downhole survey;
- Instantaneous fission neutron logging (IFN);
- Calliper logging;
- Thermometry;
- Flowmeter logging.

The first four methods were made for all holes through the two exploration stages and are also utilised in the operational holes during mining while the others variably as noted below. The total number of geophysical surveys undertaken during the exploration stages are provided in **Table 6-11**.

Table 6-11 Geophysical Surveys on Central Mynkuduk

Type, scale	total length (m)	Holes
Gamma logging:		
scale 1:1000	249,790	1,332
scale 1:200	228,540	1,332
scale 1:50	46,830	1,332
Electric logging		
scale 1:1000	244,710	1,332
scale 1:200	232,680	1,332
scale 1:50	49,110	1,332
Downhole survey	477,130	1,332
Caliper logging	32,460	157
Thermometry	2,960	11
Instantaneous fission neutron logging (IFN)		23

Note: Provided by the Company

All geophysical methods were completed using geophysical instrument type SK-1-74. Gamma logging was the main method for detecting radioactive anomalies and determination of thickness and average content of uranium. All analysis was undertaken in accordance with Soviet Standards. Crystals NaI (Tl) with the size of 30×70 mm were used for detectors of the gamma-quants.

Calibration of the radiometers was undertaken every 6 months using special field calibration equipment. Calibration was undertaken using standard sources Ra-226 series 10 # 218 (1.06 mg Ra), # 327 (1.00 mg Ra), series 2 # 1290(0.180 mg Ra) and series C41 # 814 (0.093 mg Ra).

A “work pattern” was used to control and cross check the primary reading before and after every hole measurement. This pattern was a cylindrical container made of iron walls with a thickness of 1.5 - 2.0 mm with an outer diameter of 100 mm. The container was filled with ore material mixed with cement and water and subsequently measured for gamma. While a 1% deviation between readings was considered material, no readings deviated more than 4%. Averages are shown in **Table 6-12.**

Another type of control included re-logging of select holes using alternative equipment such as IFN. Control procedure included comparison of gamma-anomalies areas and m*% for original and control results using Root mean square deviation as shown in **Table 6-12.** A review of the results indicates that gamma-logging results are relatively constant and are suitable for determination of U content. Further QAQC checks were completed as outlined in **Section 6.7.3**

Table 6-12 Cross Correlation of Gamma Measurements

Year	Number of holes	Control logging	Proportion controlled %	Root mean square deviation, %
1981	229	19	8.3	2.0
1982	185	9	4.9	2.2
1983	317	17	5.4	1.0
1984	83	22	26.5	1.0
1985	21	5	23.8	0.7
1988	37	14	37.8	1.4
Total	**872**	**86**	**9.9**	

Note: Provided by the Company

Following geophysical analysis, the U content was calculated as well as the boundary depths of the U bearing units. Gamma-logging data was prepared by digitizing of gamma-curves on a 1:50 scale in μR/h on each 10cm interval with all anomalies higher than 50 μR/h digitized. The following information was utilised in the digitizing of the data:

- Coefficient K0 taking into account the gamma-activity (μR/h) per 0.01% in U-equal units depending on type and size of detector in gamma-logging equipment;
- Coefficient Vk depending on mineralisation density, hole construction, geophysical equipment and contact orientation of the mineralisation.

In addition to the main parameters, the coefficients for determining the measured gamma-activity to normal conditions of ore layers and to air-dry conditions include:

- Correction for absorption of x-ray by drilling fluid (C_{df}) and by casing tubes (C_{ct}), and
- Correction on moisture (C_m)

Following the digitization, a second analysis was undertaken which included the determination of mineralisation boundaries, thickness and average U-content. This analysis requires using calculations taking into account radioactive equilibrium of U-Ra, correction on radioactive equilibrium U-Ra (C_{eq}) and calculations on radioactive equilibrium Ra-Rn (C_{Rn}).

A Summary of the coefficients is provided in the **Table 6-13**.

Table 6-13 Table Parameters for the Determination of U-content

Parameter, correction coefficient	Value
Effective atomic number Z_{eff} (calculated using geophysical standard)	12.342
Ratio to normal environment (calculated using geophysical standard), C_{norm}	1.017
Constant coefficient of re-calculation, K_0	115 μR/h
Correction on moisture, C_m	0.85
Density, ρ	1.99 g/ccu.m
Thorium concentration, Th	$5.3*10^{-4}$ %
Potassium concentration, K	1.8 %
Correction for deflection of the Rn, C_{Rn}	0.83
Correction on absorption by drilling fluids, C_{df}	0.84-0.90 depending on hole diameter
Equilibrium ratio: Central part and flanks: orebodies 8 and 10 (blocks 10-68C_1-10-85C_1), flank parts: orebody 10 (blocks 10-86C_1-10-96C_1), C_{eq}	0.80
Equilibrium ratio: Central part: orebody 10 (blocks 10-86C_1-10-95C_1) , C_{eq}	0.95
Average cut-off grade	0.010 %

Note: Provided by the Company

In addition to the above Geophysical determinations of U content, RPM notes the following:

- In addition to physical determination, geophysical determination of moisture and density were undertaken via IFN logging on 121 holes during stage 2 of exploration. The resultant data was used for evaluation of the accuracy of the gamma-logging. Geophysical instrument type AGA-101 “Impuls” was used for IFN logging. Coefficient of variations of original and control uranium content determinations varies from 4.67 to 7.15% as outlined in **Section 6.7**.
- Based on data of gamma logging and core assays on Ra, the Correction for deflection of the Rn was calculated and resulted in 0.83. For orebody number 8 results of IFN logging were used in place of the core sampling. Equilibrium ratios were calculated for every ore interval using parameters described previously and outlined in **Section 7**.
- Equilibrium ratios were measured based on 373 ore intervals in 276 holes with core recovery more than 70%. Exploration results of the first stage indicated the absence of correlation of the equilibrium ratio with different lithological types (sand, clay, gravel) which allowed using average equilibrium ratio for the whole ore interval.
- Apparent resistivity and natural polarization methods were used to determine the lithological boundaries and rock permeability as well as sub-dividing the lithological-filtration rock types. The logging was undertaken using a special half-meter gradient-sonde, type M045A0.1V. RPM notes that the records for apparent resistivity were 1.5-2.0 Ohm*m/cm for Cretaceous-Paleogene complex, 10 Ohm*m/cm for Neogene-Quaternary complex and a natural polarization of 2.0 mV/cm. Further subdivisions are shown in **Table 6-14 and Table 6-15**.

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Table 6-14 Geophysical Features of Lithologies within Central Mynkuduk

Age	Rock types	ρ_a, Ohm*m.		ΔU, mV	
		Variation	Average	Variation	Average
N_1-N_2^{1-2}	Sand dry	45-150	100	-5-10	-7
	Sand watered	10-70	40	-2-7	-5
	Clay calcareous	6-25	14	+3-+14	+8
P_2^3 P_1^2	Clay "chegan" – benchmark	2.2-4.3	3	0.0	0.0
	Sand middle grain	8.0-11.6	9.4	-5-3	-3.0
	Sand fine-grained	5.4-10.0	7.3	-5-2.5	-3.0
$K_2cpP_1^1(gp)$	Clay, siltstone	3.6-6.6	5.1	-2-1	-1.0
	Sand fine- middle-grained	4.8-12.4	7.4	-6-0	-5
	Sand various-grained	7.2-12.0	9.2	-3.5-11	-5
	Sand various-grained with gravel and gravel	8.0-15.2	10.0	-5-10	-6
	Sandstone	160-200	180	-1.5-4.0	-2.0
K_2in(cn-st)	Clay, siltstone	3.6-6.6	5.4	-2-+3	+2.0
	Sand fine- middle-grained	6.6-10.0	7.8	-3-1	-2.0
	Sand various-grained	8.2-12.0	10.0	-1-0.5	-0.5
	Gravel sandy	10.0-15.0	11.2	-0.5-0.8	-0.5
	Sandstone and gravelite with calcareous and siliceous cement	100-150	140	+2.5-3.0	+2.5
K_2t	Clay, siltstone, pattum	3.0-6.6	4.8	2.5-+4	3.5
	Sand fine- middle-grained	6.0-11.0	7.6	-1.0-2.5	-2.0
	Sand various-grained	7.0-14.0	8.9	-1.0-2.0	-1.5
	Sand various -grained with gravel and sandy gravel	8.0-15.0	10.5	-2.5-3.0	-2.8
	Sandstone and gravelite with calcareous and siliceous cement	140-190	180	+2.5-1.5	+1.8
P_1	Clay, siltstone	3.5-6.0	3.0	-1.0-12.0	+10.0

Note: Provided by the Company

Table 6-15 Geophysical Features of Ore-Bearing Units within Central Mynkuduk

Type	Rock type	Filtration type	Number of measures	Apparent res. ρ_a Ohm.m	
				Variation	Average
5	Clay	Impermeable	152	2.9-6.6	4.2
4	Fine-grained sand	Permeable	201	5.6-9.9	6.6
3	Middle-grained sand	Permeable	248	5.7-10.7	6.7
2	Various-grained sand	Permeable	194	7.0-14.0	8.3
1	Gravel	Permeable	218	8.0-15.0	10.4

Note: Provided by the Company

- A review of the data suggests that identification of rock types such as clay, siltstone clayey, clay siltstone, sand fine and middle-grained, gravel-sand and pebble-sand are considered reliable through the logging, while grain size is less reliable but suitable for the estimation. Importantly the permeable and impermeable rocks could be reliably separated by geophysical logging which is supported by the correlation between filtration coefficient and lithological types which were determined by hydrogeological pumping tests.
- Calliper logging procedures were undertaken to confirm the actual diameter of the holes. This data was used for calculation of the absorption by drilling fluids, and for cementation analysis of the hydrogeological holes. 11.5% of total volume of drilling underwent this determination using the KM-2 equipment on a 2cm scale.

- Thermometry was undertaken in hydrogeological holes to confirm the required cementation. Measures of the temperature were made 18-30 hours after cementation with ETS-2U equipment.
- Flowmeter logging was undertaken in hydrogeological holes by equipment type TSR-34 and RTES-2 with the interval 5-10 m in the casing tube, 0.5 m in the filter column.

Zhalpak

Most of the downhole geophysical work was undertaken between 1971-1991 with a minor amount completed during the trial leaching. The geophysical work is used extensively in the interpretation including:

- Detecting the radioactive gamma-anomalies in the holes;
- Determination of the depth, boundaries and thickness of intervals and U-content for resource estimation;
- Lithological description of section determination of hydrogeological parameters by electric logging;
- Dividing U-bearing permeable and impermeable rocks and lithological-filtration;
- Hole inclination;
- Control of the technical quality of the wells.

To achieve the required outcomes, the following methods were applied:

- Gamma-logging;
- Electric logging; including apparent resistivity (AR) and natural polarization (NP);
- Downhole survey;
- Instantaneous fission neutron logging (IFN);
- Calliper logging;
- Thermometry;
- Induced logging (IL);
- Flowmeter logging.

Gamma-logging, AR, NP and downhole survey have been undertaken in all holes regardless of their aims. IFN and calliper logging were also used as additional methods. Thermometry and flowmeter logging have been made for hydrogeological holes. Induced logging and thermometry were conducted for technological holes (injection and extraction) of trial leaching areas. The total number of geophysical surveys undertaken during the exploration stages are provided in **Table 6-16**. A number of surveys were conducted on the trial test leaching stage are provided in the **Table 6-17**.

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Table 6-16 Geophysical Surveys on the Exploration Stage on Zhalpak

Type	Unit	Total	Prospecting and preliminary exploration 1964-1973	Detail exploration 1988-1991
Gamma-logging	m	348,733.2	73,290.3	275,442.9
	holes	2,399.0	503.0	1,896.0
Electric logging AR	m	346,436.9	72,412.4	274,024.5
	holes	2,399.0	503.0	1,896.0
Electric logging NP	m	345,435.8	72,358.5	273,077.3
	holes	2,399.0	503.0	1,896.0
Downhole survey	m	348,733.2	73,290.3	275,442.9
	holes	2,399.0	503.0	1,896.0
Calliper logging	m	33,495.5	13,886.3	19,609.2
	holes	235.0	97.0	138.0
IFN	m	538.6	-	538.6
	holes	45.0	-	45.0
Hydrogeological holes				
Gamma-logging	m	9.947.6	1,665.0	8,282.6
	holes	74.0	15.0	59.0
Electric logging AR	m	9.863.6	1,636.7	8,226.9
	holes	74.0	15.0	59.0
Electric logging NP	m	9.828.8	1,633.6	8,195.2
	holes	74.0	15.0	59.0
Downhole survey	m	9.947.6	1,665.0	8,282.6
	holes	74.0	15.0	59.0
Calliper logging	m	5.142.5	117.1	,-
	holes	36.0	1.0	,-

Note: Provided by the Company

Table 6-17 Geophysical Surveys on the Trial Leaching Stage on Zhalpak

Type	Unit	Total	Technological holes 2012-2016	Control holes 2019
Gamma-logging, AR, NP, downhole survey	m	24,117.2	21,298.5	2,818.7
	holes	166.0	146.0	20.0
Calliper logging	m	23,682.0	20,863.3	2,818.7
	holes	163.0	143.0	20.0
Thermometry	m	16,016.7	16,016.7	-
	holes	112.0	112.0	-
IP	m	20,437.4	17,514.0	2,923.4
	holes	140.0	120.0	20.0
IFN	m	836.1	524.3	311.8
	holes	50.0	30.0	20.0

Note: Provided by the Company

Gamma-logging is the main methodology employed and is used to derive radioactivity determination and for resource estimation. The procedure for gamma-logging included equipment calibration at least once per 3 months, equipment preparation, measurements and interpretation. Interpretation includes determination of mineral interval thickness and U content inside the permeable and impermeable rocks.

As Gamma-logging is the main base for resource estimation, this type of work was being controlled using different approaches. The very first control included control of equipment stability. Stability between the calibrations had been controlled by measurement of a control radioactive source; a container with mixed ore material. The relative difference was calculated as a result of these measurements. During the period in which the analysis was carried out the variance never reached the upper limit of 7%. The inaccuracy of geophysical measures is controlled by comparison of control logging on production holes and control hole. Control logging is usually undertaken using different equipment. Control logging was undertaken on 4.7% of holes containing U mineralization. The average difference between the intervals' depths of main measure and repeats is 0.16m which is less than the upper limit of 0.2m. RPM opines that based on these controls the gamma-logging is of high quality. The numbers of controls are summarized in **Table 6-18**.

Table 6-18 Cross Correlation of Gamma Measurements for Zhalpak

Year	Number of holes	Control logging	Proportion controlled %	Difference of gamma-anomaly area, %
1972	133	17	12,7	3
1973	342	16	4,7	3,4
1988	803	62	7,7	2,4
1989	760	46	6,1	2,5
1990	212	17	8	1,6
1991	173	15	8,7	2,6
Total	**2,423**	**173**	**7,14**	

Note: Provided by the Company

A number of correction factors are applied to the uranium concentration derived from the gamma-logging ahead of the data being used in resource estimation, including:

- Correction for deflection of the Rn, C_{Rn} calculated as a result of comparison of gamma-logging and core sampling on Ra for 1,818 U intervals. Calculated value is 0.90 for permeable rocks and clay, 0.67 for impermeable rocks excluding clay;
- Correction on the radioactive equilibrium U - Ra, C_{eq} was based on core sampling on U and Ra including 1,411 U intervals in permeable rocks and 958 U intervals in impermeable rocks. Different from Central Mynkuduk, the Zhalpak area contains complicated mineralisation shape (roll fronts actually do not exist) that requires different values of correction for different rocks. Eventually, correction for permeable rocks has been chosen depending on Ra content according to data provided in the **Table 6-19**. Calculated correction for impermeable rocks is 1.0;
- Coefficient (K_0) gamma-activity (μR/h) per 0.01% in U-equal units depending on effective atomic number (Z_{eff}) and ratio to normal environment (C_{norm});
- Coefficient (V_k) depending on mineralisation density, hole construction, geophysical equipment and contact orientation of the mineralisation;
- Correction for absorption of x-ray by drilling fluid (C_{df}) and by casing tubes (C_{ct}); and
- Correction on moisture (C_m);

A Summary of the coefficients for interpretation gamma-logging on Zhalpak deposit is provided in the **Table 6-19**.

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Table 6-19 Parameters for Determination of U-content

Parameter, correction coefficient	Value
Effective atomic number Z_{eff} (calculated using geophysical standard)	11.813
Ratio to normal environment (calculated using geophysical standard), C_{norm}	1.012
Constant coefficient of re-calculation, K_0	115 μR/h
Moisture	16.6 %
Density of wet rocks	1.95 g/cm^3
Density of dry rock	1.64 g/cm^3
Thorium concentration, Th	7.0*10^{-4} %
Potassium concentration, K	1.50 %
Correction for deflection of the Rn (permeable rocks), C_{Rn}	0.90
Correction for deflection of the Rn (impermeable rocks), C_{Rn}	0.67
Correction on absorption by drilling fluids, C_{df}	Depending on hole diameter (there is no any numbers provided in the exploration report)
Equilibrium ratio for permeable rocks depending on average Ra content, C_{eq}	
0.009 Ra%	0.755
0.013 Ra%	0.980
0.018 Ra%	1.062
0.025 Ra%	1.088
0.038 Ra%	1.089
0.067 Ra%	1.083
0.151 Ra%	1.076
Equilibrium ratio for impermeable rocks, C_{eq}	1.0
Average cut-off grade for interpretation depending on C_{Ra} in U bearing interval	
boundary "grey-grey"	$y=0{,}032x^{0{,}282}$
boundary "grey-yellow"	$y=0{,}0909x^{0{,}493}$
impermeable rocks	0.010 %

Note: Provided by the Company

In addition to the above Geophysical determinations of U content, RPM notes the following:

- Apparent resistivity and natural polarization methods were used to determine the lithological boundaries and rock permeability as well as sub-dividing the lithological-filtration rock types. In most cases the logging was undertaken using a gradient-sonde type M045A0.1V, some portion of works have been undertaken by sonde M0.95A0.1V. RPM notes that the records for apparent resistivity were 1.5 - 2.0 Ohm*m/cm for the Cretaceous-Paleogene complex, 10 Ohm*m/cm for Neogene-Quaternary complex and a natural polarization of 2.0-5.0 mV/cm;
- IFN logging was used for control of core sample U analyses and gamma-logging interpreted U content. Average variation between IFN and core sampling based on 53 intervals is 13.39 rel.%. The variation between IFN and gamma-logging interpreted U content is 6.76 rel.%. Detailed data outlined in the QAQC section;
- In addition to physical determination, geophysical determination of moisture and density for confirmation of 145 core samples was undertaken via IFN logging on 50 measurements;
- Calliper logging procedures were undertaken to confirm the completed diameter of the holes. As well the data was used for calculation of the absorption by drilling fluids, and for cementation analysis of the hydrogeological holes. In total 10% of the volume of drilling was calliper logged;
- Thermometry has been undertaken for positioning cement ring for construction of hydrogeological and technological holes;
- Flowmeter logging has been made for hydrogeological holes for determination filtration parameters; and
- Induced logging has been used for clarification of lithological types for complex interpretation of geophysical data.

6.7 Quality Assurance and Quality Control

Central Mynkuduk

QA/QC for the Central Mynkuduk deposit focused on two main goals, these included:

- Chemical analysis confirmation of physical samples via field duplicates of the remaining half of the core samples, duplicate pulp samples (combined with the second half of the core) and internal laboratory repeats; and
- Confirmation of the geophysical procedures to estimate the U and Ra content with the rocks. This was completed by comparing the chemical analysis to the gamma logs, as well as IFN surveys which were completed on 5% of the holes.

All QAQC samples and procedures were undertaken according to USSR and RK standards, however only Stage 2 exploration data QAQC was provided to RPM. No data was provided for the earlier stages of exploration such as initial prospecting and the first stage of exploration, however similar systems are assumed to be in place as per Soviet procedures. RPM notes that stage 2 accounts for over 90% of the data used in the estimate as discussed in **Section 6.10**.

Zhalpak

QA/QC for the Zhalpak deposit focused on two main goals, these included:

- Chemical analysis confirmation of physical samples via field duplicates of the remaining half of the core samples, duplicate pulp samples (combined with the second half of the core) and internal laboratory repeats.
- Confirmation of the geophysical procedure to estimate the U and Ra content with the rocks. This was completed by comparing the chemical analysis to the gamma logs and IFN.

All QAQC samples and procedures were undertaken according to USSR and RK standards.

6.7.1 QAQC of core sampling methods

Central Mynkuduk

Field Duplicates

A total of 188 field duplicates were undertaken during Stage 2. These were via sampling the second half of the diamond core for select intervals. As per Soviet standards (USSR and RK) the root-mean-square deviation (RMSD) was calculated for each sample and compared to the original. As shown in **Table 6-20** all grade ranges for the field duplicates are within the acceptable limits as per the Soviet standard. The scatter plots support this interpretation by showing acceptable levels of accuracy as in **Figure 6-1.** RPM notes that upon review of this data, given the style of mineralisation, this is acceptable as per international standards.

Table 6-20 Root Mean Squared Deviation of Field Duplicates

Period	U grade (%)	Acceptable RMSD (%)	Actual RMSD (%)
1981-1989	0.010-0.019	9.0	8.1
	0.020-0.049	6.8	6.7
	0.050-0.099	5.7	5.6

Note: Provided by the Company

Pulp Duplicates

A total of 198 pulp duplicates were undertaken during Stage 2 of exploration by the following procedure:

- Selection of duplicate core intervals with subsequent crushing and pulverization to 74 um;
- Combination of the core pulp sample with the original sample; and
- Combined sample was submitted for analysis as per above chemical analysis.

Table 6-21 summaries the RMSD results which shows they are within the acceptable Soviet limits, while **Figure 6-1** graphically shows the comparison to the original sample in scatter plots. RPM considers that the data supports the sampling methods applied, in particular the field duplicate is well within international acceptable limits for the style of mineralisation.

Table 6-21 Root Mean Squared Deviation Pulp Duplicate Results

Period	U grade (%)	Acceptable RMSD (%)	Actual RMSD (%)
1981-1989	0.010-0.019	9.0	8.3
	0.020-0.049	6.8	6.6
	0.050-0.099	5.7	5.2

Note: Provided by the Company

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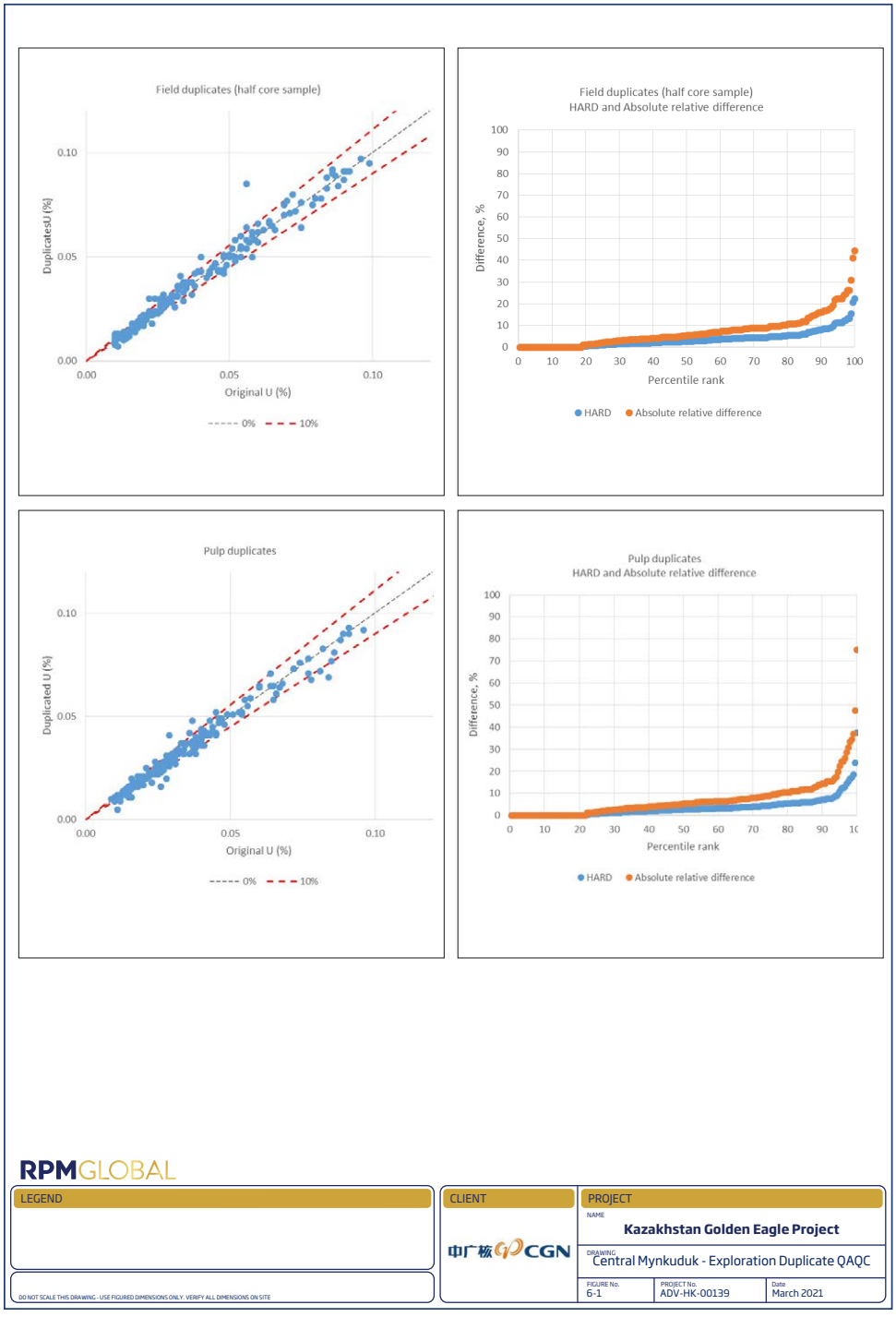
Figure 6-1 Central Mynkuduk - Exploration Duplicate QAQC



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Zhalpak

The same approach to sample preparation control as used for Central Mynkuduk has been undertaken for sampling control at Zhalpak.

Field Duplicates

A total of 252 field duplicates were undertaken during all exploration stages on Zhalpak. These were via sampling the second half of the diamond core for selected intervals. The estimation of sampling quality for Zhalpak was made by calculation of Students t-criterion. As shown in **Table 6-22** all grade ranges for the field duplicates are within the acceptable limits as per the Soviet standard. The scatter plot, Half Absolute Relative Difference (HARD) and Absolute relative difference plots support this interpretation and show acceptable levels of accuracy as shown in **Figure 6-2**. RPM notes that upon review of this data, given the style of mineralisation, this is acceptable as per international standards.

Table 6-22 Results of Field Duplicates on Zhalpak

Period	U grade (%)	Number of control samples	Acceptable t-criterion Student	Actual t-criterion Student
1971-1989	0.0010-0.0099	141	1.96	0.21
	0.010-0.049	131	1.96	0.91
	>0.050	34	2.04	0.10

Note: Provided by the Company

Pulp Duplicates

A total of 264 pulp duplicates were taken during exploration stages by the following procedure:

- Selection of duplicate core intervals with subsequent crushing and pulverization to um 74;
- Combination of the core pulp sample with the original sample; and
- Combined sample was submitted for analysis as per above chemical analysis.

Table 6-23 summarises the Student t-criterion which shows they are within the acceptable Soviet limits, while **Figure 6-2** graphically shows the comparison to the original sample in scatter plots, Half Absolute Relative Difference (HARD) and Absolute relative difference plots. RPM considers that the data supports the sampling methods applied, in particular the field duplicate is well within international acceptable limits for the style of mineralization.

Table 6-23 Pulp Duplicate Results

Period	U grade (%)	Number of control samples	Acceptable t-criterion Student	Actual t-criterion Student
1971-1989	0.0010-0.0099	131	1.96	0.25
	0.010-0.049	122	1.96	1.45
	>0.050	24	2.07	0.10

Note: Provided by the Company

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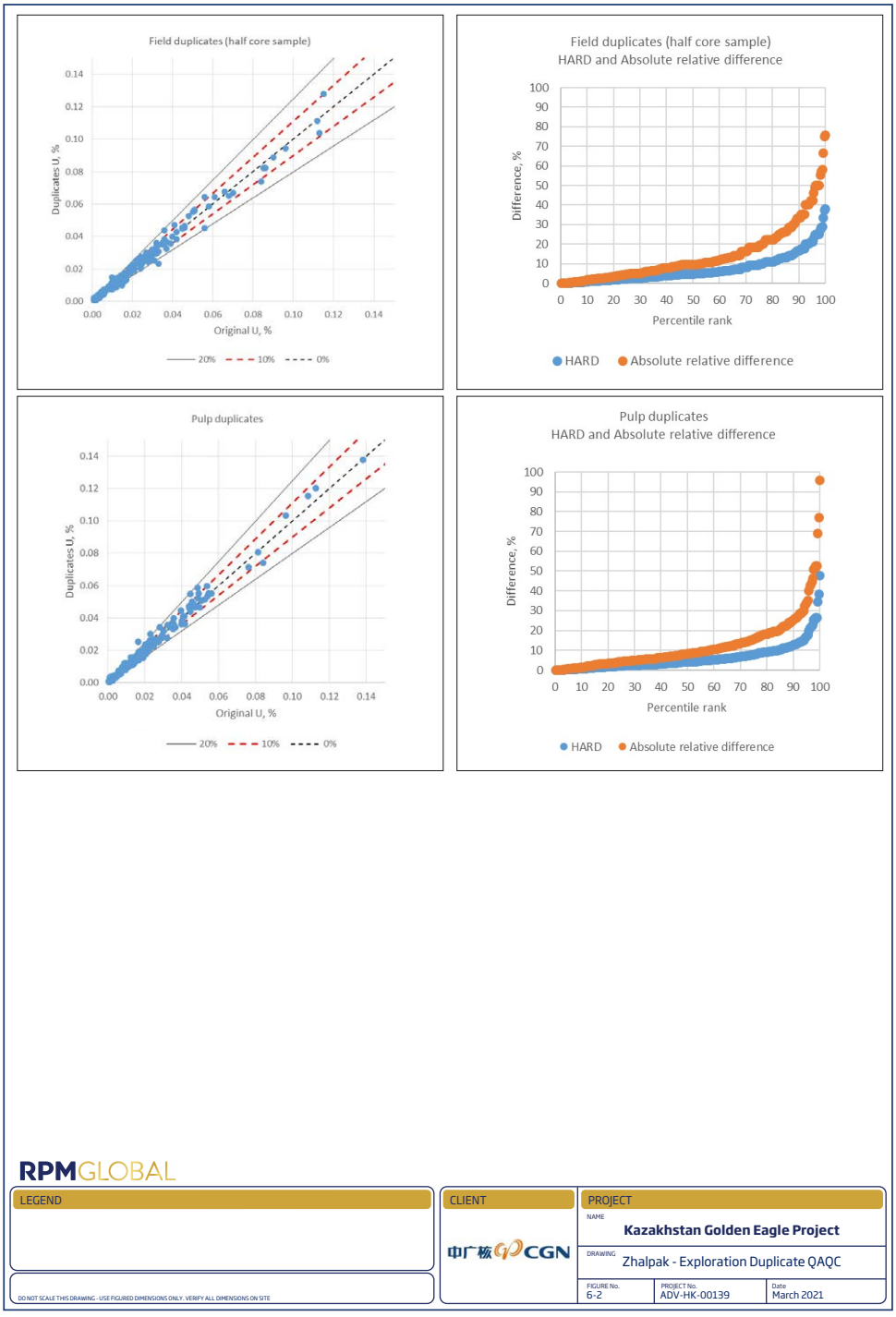
Figure 6-2 Zhalpak - Exploration Duplicate QAQC



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6.7.2 Laboratory QAQC

Central Mynkuduk

As per Soviet standards both internal and external repeat assaying was undertaken for the primary chemical sample. This included the following procedures:

- Internal repeat of the pulp sample by the same method within the laboratory;
- Internal duplicate pulp sample within the primary laboratory using an alternate chemical method for U and radio-chemical method for Ra; and
- External pulp duplicates via the Nevskiy PGO and All-Union Institute of Mineral Resources in Moscow (currently known as the All-Russian Institute of Mineral Resources).

As outlined in **Table 6-24** over 10% of the primary samples were repeated while over 5% were analysed via alternative methods as well as external duplicates. The results, as shown in **Figure 6-3**, all show excellent correlation with the primary sample particularly the alternate method and external pulp duplicates which had minimal observed variation. RPM considers the data supports the assay methods applied and the results.

Table 6-24 Internal and External Samples

Assay period		Number of primary samples	Volkov Laboratory		External Lab
			Internal	Alt Method	AUIMS
			U	U	
1981-1988	Total	8,115	996	634	489
	Number of control samples. %		12.3	7.8	6

Note: Provided by the Company

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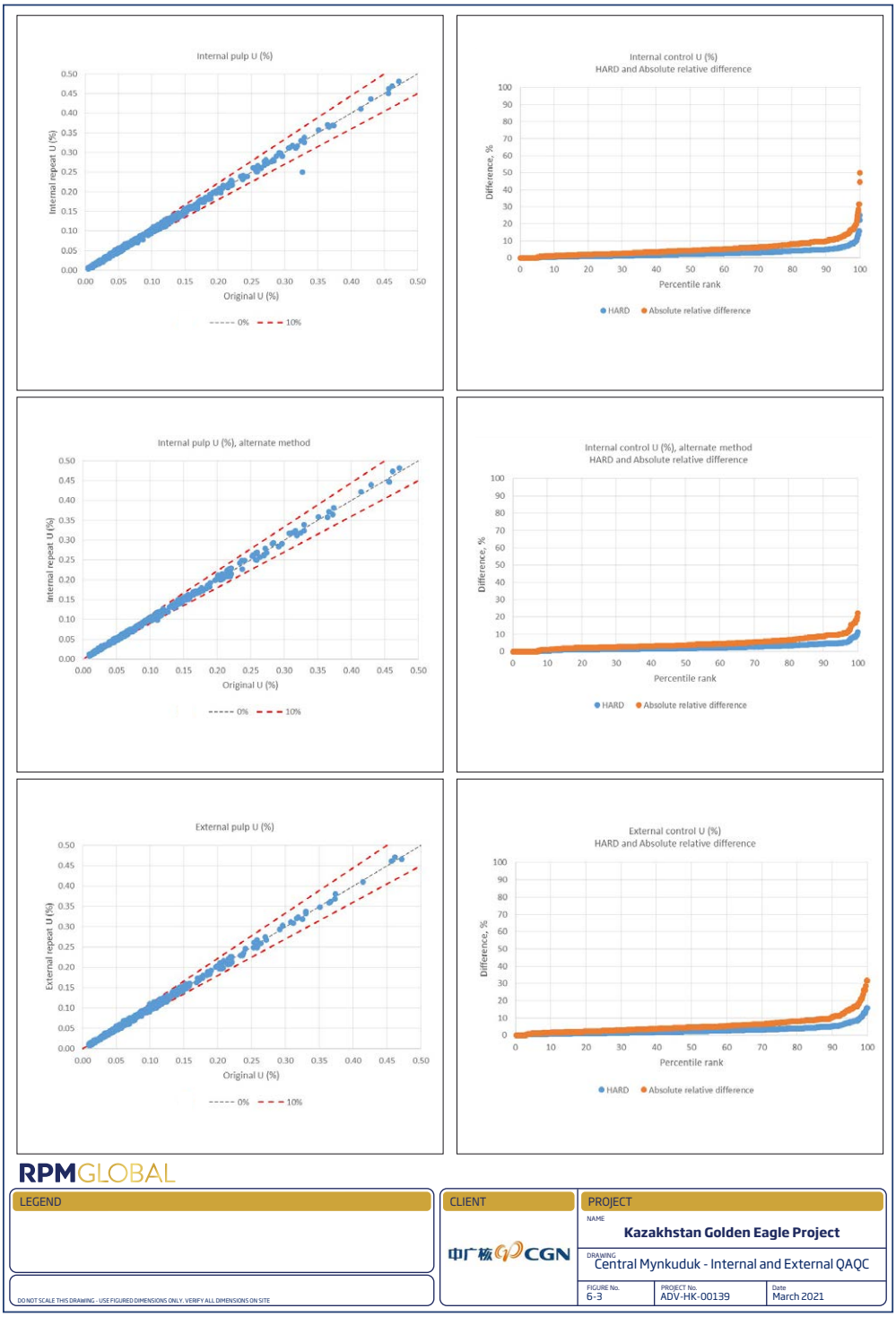
Figure 6-3 Central Mynkuduk - Internal and External QAQC



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Zhalpak

The same assays control approach as for Central Mynkuduk was undertaken for Zhalpak including the following procedures:

- Internal repeat of the pulp sample by the same method within the laboratory;
- Internal duplicate pulp sample within the primary laboratory using an alternate chemical method for U and radio-chemical method for Ra; and
- External pulp duplicates via the Nevskiy PGO and All-Union Institute of Mineral Resources in Moscow (currently known as the All-Russian Institute of Mineral Resources).

As outlined in **Table 6-25** 6.2% of primary samples were controlled by internal laboratory methods, 2.3% were controlled via an alternative method, 4.4% of samples were controlled by an external laboratory.

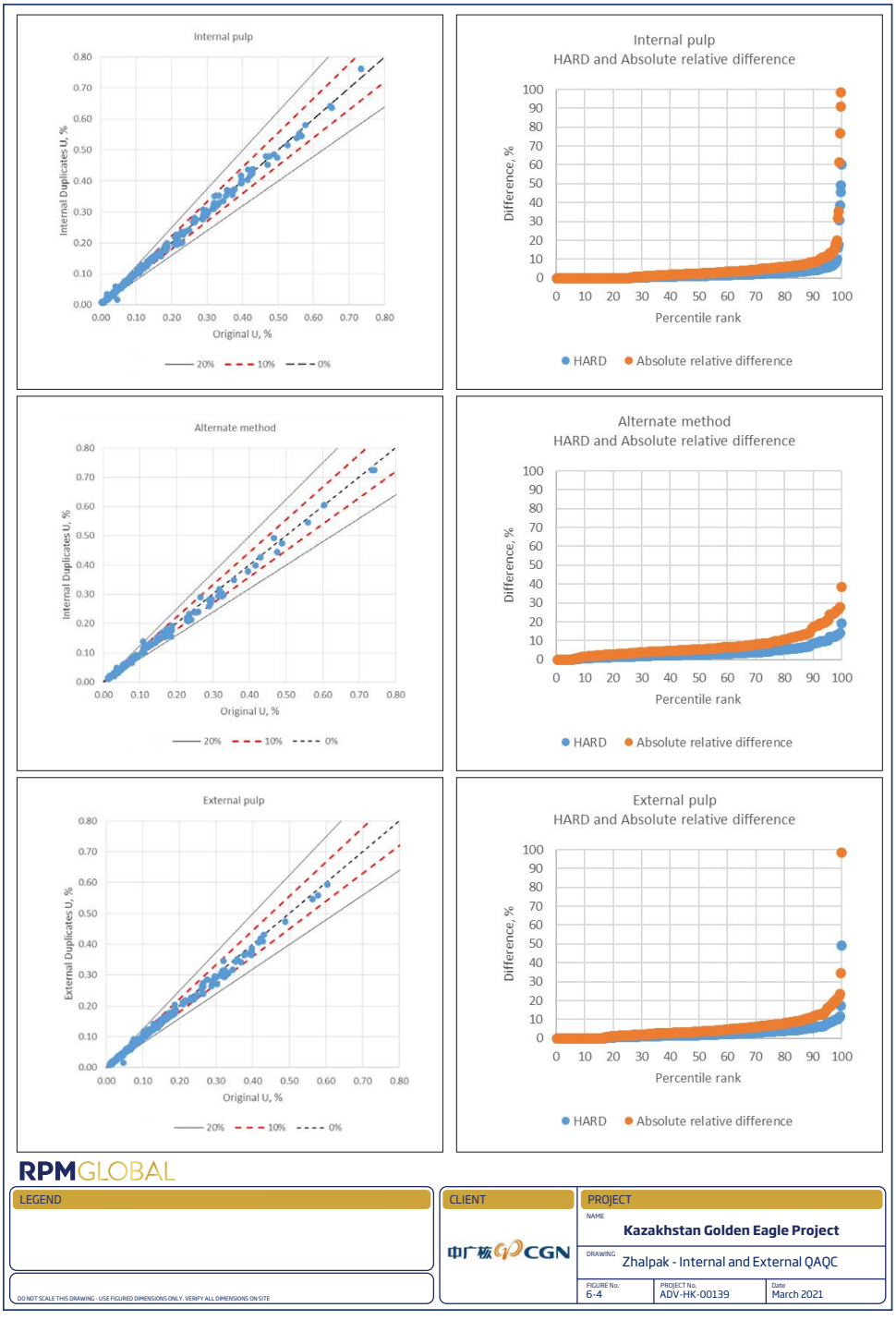
Table 6-25 Internal and External Samples

Assay period		Number of primary samples	Volkov Laboratory		External Lab
			Internal, U	Alt Method, U	AUIMS
1971-1988	Total	7,236	447	170	320
	Number of control samples. %		6.2	2.3	4.4

Note: Provided by the Company

The results, as shown in **Figure 6-4**, all show excellent correlation with the primary sample particularly the alternate method and external pulp duplicates showing minimal variation. Plots show that less than 20% of the repeats exceed 10% relative difference with no outliers. As such RPM considers the QAQC confirms the accuracy and precision of the assay method.

Figure 6-4 Zhalpak - Internal and External QAQC



6.7.3 QA/QC Geophysical Logging

Central Mynkuduk

As noted previously, three main geophysical methods were used for determination of quantity parameters such as uranium content, depth and thickness of mineralisation, these include: gamma logging, apparent resistivity and natural polarization.

To verify the primary gamma logging measurements and calculations undertaken a number of cross checks were completed. These include:

- Comparison to the Chemical Assays of the U content;
- Comparison of the physical geology logging to the interpreted interval thickness and depth; and
- Comparison to the INF U content and thickness.

A total of 264 Chemical U content assays, 224 interval thickness and 91 IFN Logging intervals were paired with the gamma logging and compared graphically. The results are shown in **Figure 6-5** and indicate the following:

- **Interval thickness**: the interval thickness comparisons are reasonable with a close association between the core samples and the gamma as well as the INF logging intervals.
- **U Content**: Some variation of the U content is observed with 50% of geophysical measurements (interpretations) having a deviation of more than 10% relatively to chemical data obtained. Of note the chemical analysis tends to be higher above 0.15% U than the gamma logging results however this trend is reversed below 0.15% U, albeit with only a very slight bias observed. RPM notes that the grade is relatively low, as such small variations will result in large percentage variations. Variation was also observed in the IFN-logging interpretation where at least 30% of interpretations have deviation from 10 to 35% to original core-sampling assays. However, the overall trend is reasonable.
- **Depth and geology**: The electric logging interpretations were a visual comparison with the geological logging from 36 holes with 40 ore-intervals. Importantly the gamma logging was very consistent in identifying the permeable and impermeable layers with deviation between thickness and depth of boundaries generally below 0.2 m with an average of 0.12 m for boundary depths and 0.075 m for thickness.

Reliability of filtration coefficient determinations from geophysical interpretation was undertaken through comparison with the results of original pumping tests. The average filtration coefficient through the pumping tests was 8.85, while the geophysical logging was 7.74. Relative deviation is 11.6% which is considered suitable.

The results of the geophysical QAQC indicate that the gamma logging shows suitable levels of accuracy in predicting the rock types and locations, and while some variations are observed in the U content the calculations are reasonable. Further details are provided in **Section 7**.

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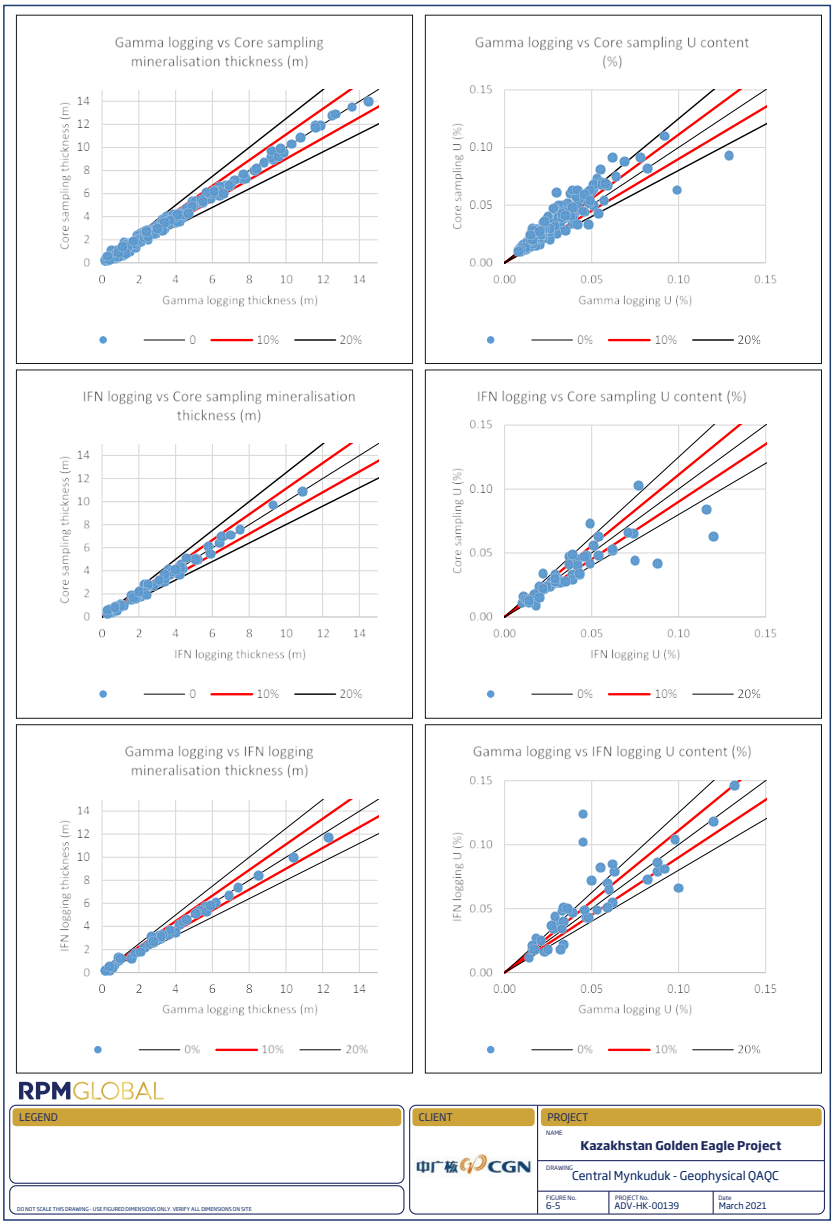
Figure 6-5 Central Mynkuduk - Geophysical QAQC



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Zhalpak

As for Central Mynkuduk, three main geophysical methods were used for determination of quantity parameters such as uranium content, depth and thickness of mineralisation, these include: gamma logging, apparent resistivity and natural polarization.

To verify the primary gamma logging measurements and calculations undertaken a number of cross checks were completed. These include:

- Comparison to the Chemical Assays of the U content;
- Comparison of the physical geology logging to the interpreted interval thickness and depth; and
- Comparison to the INF U content and thickness.

A total of 803 Chemical U content assays and interval thickness determinations, and 73 IFN Logging intervals were paired with the gamma logging and compared graphically. The results are shown in **Figure 6-6** and **Figure 6-7** and indicate the following:

- **Interval thickness**: the interval thickness comparisons are reasonable with a close association between the core samples and the gamma as well as the INF logging intervals.
- **U Content**: Significant variations between the gamma-logging and core sampling data are found after data processing. Totally around 40% of compared intervals have differences of more than 20% relative for U content (%). This can be observed on the **Figure 6-7**. A similar situation is found for cross-checking control IFN vs gamma-logging and IFN vs core sampling. Additionally, IFN vs core sampling shows slight bias and IFN logging gives a slightly higher result. RPM notes that the grade is relatively low, as such small variations will result in large percentage variations. As well despite the differences described, in summary the overall trends for all plots are considered reasonable.

Reliability of filtration coefficient determination from geophysical interpretation was undertaken through comparison with the results of original pumping tests. A total of 21 measurements were compared. The average filtration coefficient from the pumping tests was 2.88, while the geophysical logging was 2.79. Relative deviation is 2.3% which is considered suitable.

The results of the geophysical QAQC indicate that the gamma logging shows a suitable level of accuracy in predicting of the rock types and locations, and while some variations are observed in the U content the calculations are reasonable.

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Figure 6-6 Zhalpak - Geophysical QAQC for mineralisationthickness

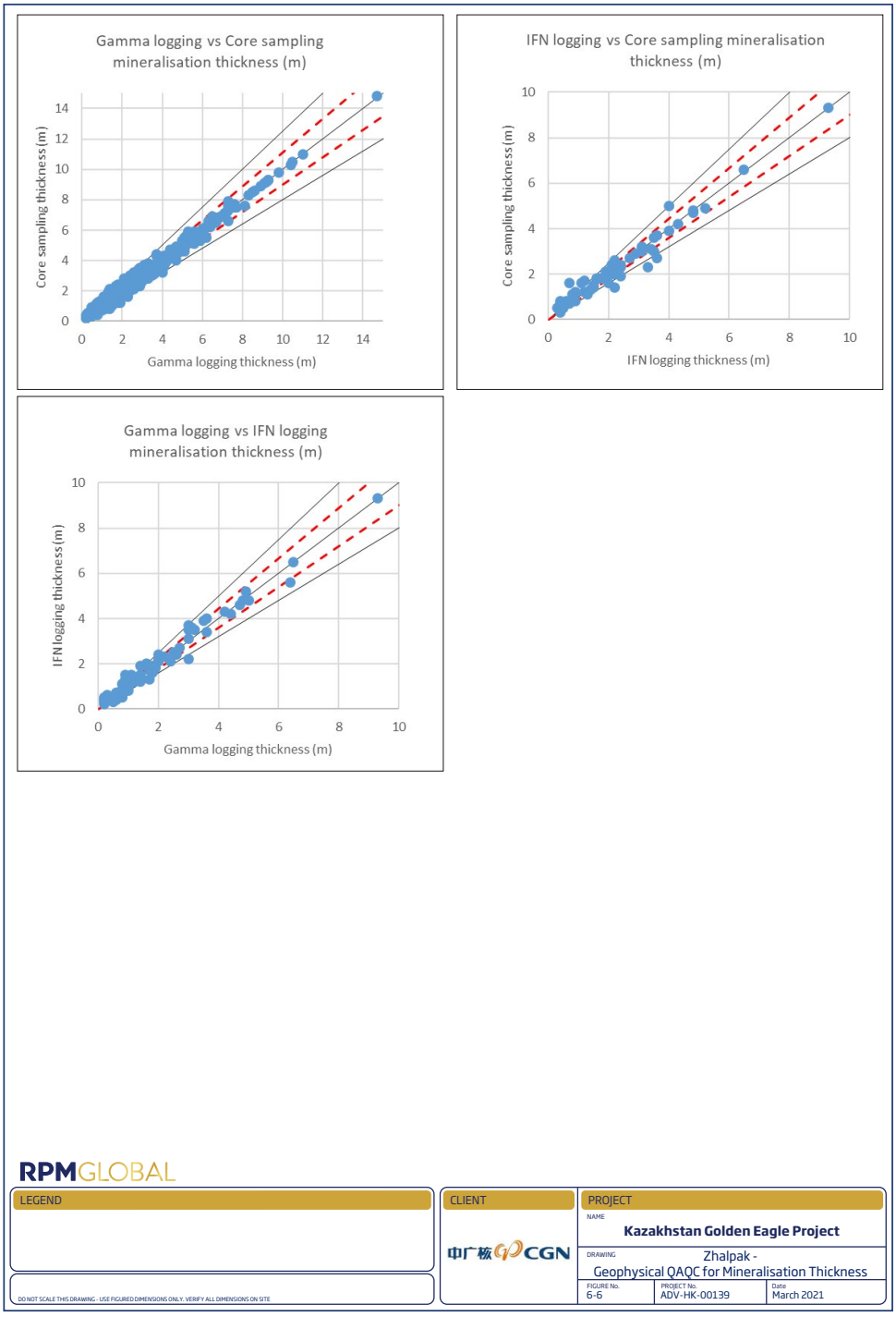

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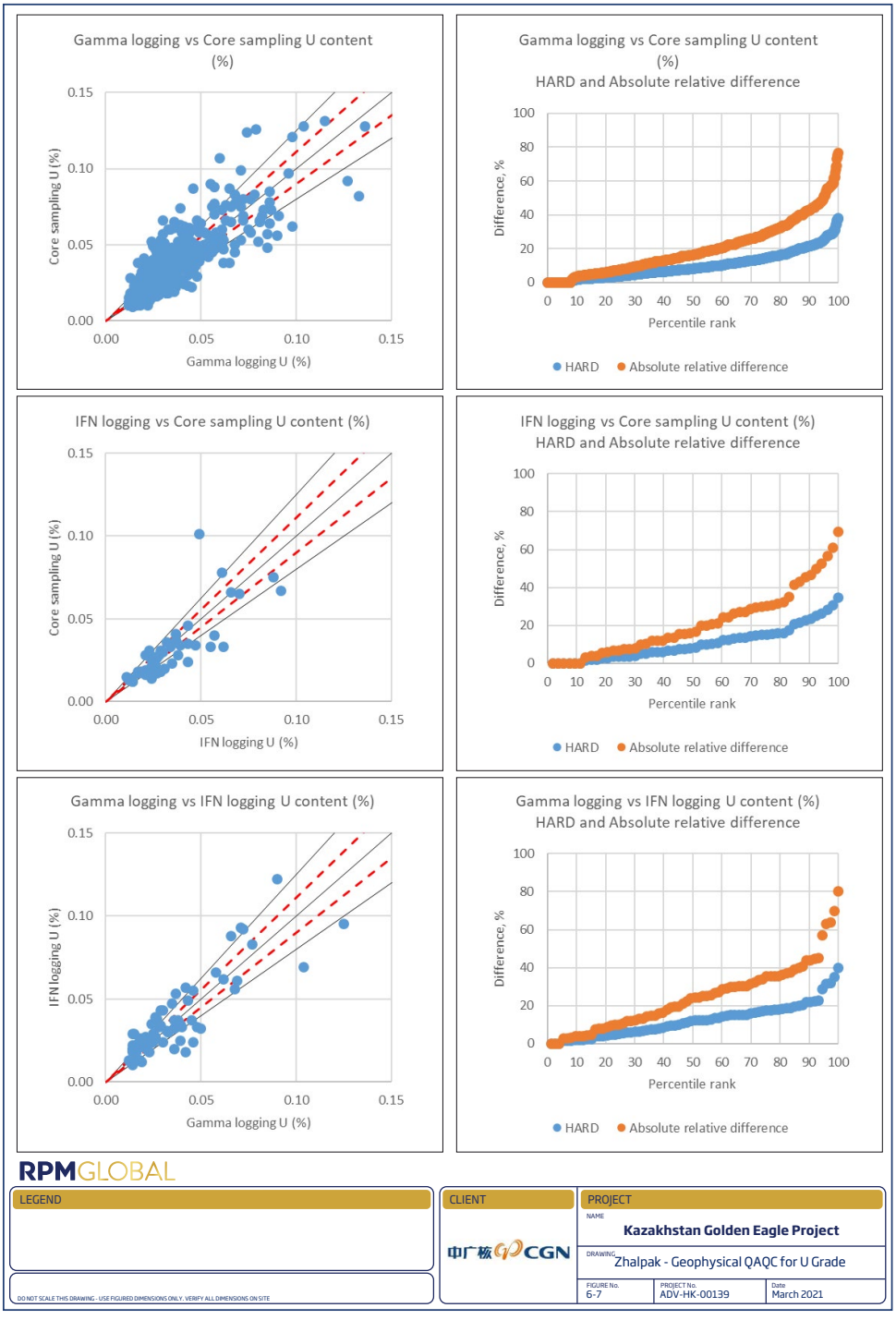
Figure 6-7 Zhalpak - Geophysical QAQC for U grade



6.8 Data Quality Review

Central Mynkuduk

The review of the drilling and sampling procedures for the 1981 to 1989, while not observed by RPM, indicates that suitable practices were utilised with no material issues being noted by RPM. The QA/QC samples from 1981 to 1989 all showed suitable levels of precision and accuracy to ensure confidence in the sample and logging methods employed by the Company on the whole of interval basis. While there was some variation in the geophysical QAQC data the gamma U content this difference is not material. Therefore, RPM considers the data which supports the resource estimation to have no sample or logging bias and is representative of the samples taken.

In addition, RPM considers that there is sufficient geological logging and bulk density determinations to enable estimation of the geological and grade continuity of the deposit to an accuracy suitable for the classification applied (see ***Section 7-4***).

Zhalpak

RPM notes that drilling and sampling procedures for Zhalpak as they were made by the same contractor as Central Mynkuduk, could be considered as reasonable with no material issues. Summary QA/QC procedures and results show the level of precision and accuracy is sufficient for the data to be used for confident resource estimation. The differences obtained between the gamma logging vs IFN logging vs core sampling results summary show an overall reasonable trend with no significant biases. Therefore, RPM considers the data which supports the resource estimation to have no sample or logging bias and is representative of the samples taken.

RPM considers that there is sufficient geological logging determinations to enable estimation of the geological and grade continuity of the deposit to an accuracy suitable for the maximum Indicated classification applied (see ***Section 7-4***).

6.9 Sample Security

Historical sample security procedures were undertaken according to Soviet standards which was described in the exploration reports. Based on these reports the procedures are acceptable.

6.10 Data Verification Statement

Central Mynkuduk

While only the 1981 to 1989 drilling QAQC for Central Mynkuduk was supplied and no drill hole passports were available, the review of the historical data undertaken by RPM confirms the methods applied and the suitability of the gamma logging as the primary U analysis. As noted in **Section 7**, a generational review was undertaken which did not identify any material issues. While no QAQC was supplied for Stage 1 of Central Mynkuduk, similar procedures were likely in place. Additionally, the Stage 2 Central Mynkuduk drilling accounts for over 90% of the mineralised intercepts, as such the lack of QAQC for Stage 1 is not consider a material issue.

Given the operation have been in production for over 12 years along with discussions with the site personnel, RPM considers the database provided to be suitable for resource estimation and the classifications applied.

Zhalpak

The complete set of QAQC data was provided for the 1971-1991 drilling for Zhalpak, although no drill hole passports were available. Based on the review of the historical data and QAQC information provided RPM opines that the database provided meets the requirements for precision and accuracy from which a Mineral Resource in line with the recommended guidelines of the JORC Code can be derived.

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7. JORC MINERAL RESOURCES

Mineral Resources have been independently estimated and reported by RPM in compliance with the recommended guidelines of the JORC Code (2012).

7.1 Mineral Resource Classification System under the JORC Code

A "Mineral Resource" is defined in the JORC Code as **'**a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories**.'** Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results.

For a Mineral Resource to be reported, it must be considered by the Competent Person to meet the following criteria under the recommended guidelines of the JORC Code:

- There are reasonable prospects for eventual economic extraction.
- Data collection methodology and record keeping for geology, assay, bulk density and other sampling information is relevant to the style of mineralisation and quality checks have been carried out to ensure confidence in the data.
- Geological interpretation of the resource and its continuity has been well defined.
- An estimation methodology that is appropriate to the deposit and reflects internal grade variability, sample spacing and selective mining units.
- Classification of the Mineral Resource has taken into account varying confidence levels and assessment and whether appropriate account has been taken for all relevant factors i.e., relative confidence in tonnage/grade, computations, confidence in continuity of geology and grade, quantity and distribution of the data and the results reflect the view of the Competent Person.

7.2 Area of the Resource Estimation

Two areas are reported in the Statement of Mineral Resources, both are Roll Front style U deposits with majority of the mineralisation hosted within reduced porous and permeable lithology. The areas include:

- Central Mynkuduk: extends in a broadly west north west-east south east direction for a strike length of over 27km with mineralisationcontinuing along strike in both directions for many more kilometres within licenses not held by the Company. Two main continuous mineralised channels have been delineated with a number of smaller rafts of mineralisation occurring above and below the main body. The extent of the drilling at Central Mynkuduk is shown in **Figure 7-2**.
- Zhalpak: extends over a southeast-northwest strike length of mineralised zones ranging from 3km up to 22km with multiple tabular bodies defined over a width of 5km. The extent of the drilling at Zhalpak is shown in **Figure 7-8**.

Intercalated zones of impermeable clay occur within the mineralised bodies at both deposit which whilst estimated by RPM have been excluded from reporting of the Mineral Resource due to their impermeable nature which prevents them from being leached using the current mining method.

7.3 JORC Statement of Mineral Resources

Results of the independent Mineral Resources estimate for the Project are tabulated in the Statement of Mineral Resources in **Table 7-1** below, which are reported in line with both the requirements of the 2012 JORC Code and the reporting standards of Chapter 18 of the HKEx Listing Rules. The Statement of Mineral Resources is

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therefore suitable for public reporting. The Statement of Mineral Resources shown in **Table 7-1** and graphically in **Figure 7-1** which includes the Ore Reserves reported in ***Section 8***.

Table 7-1 Statement of JORC Mineral Resources for the Projects as at 31st of December 2020

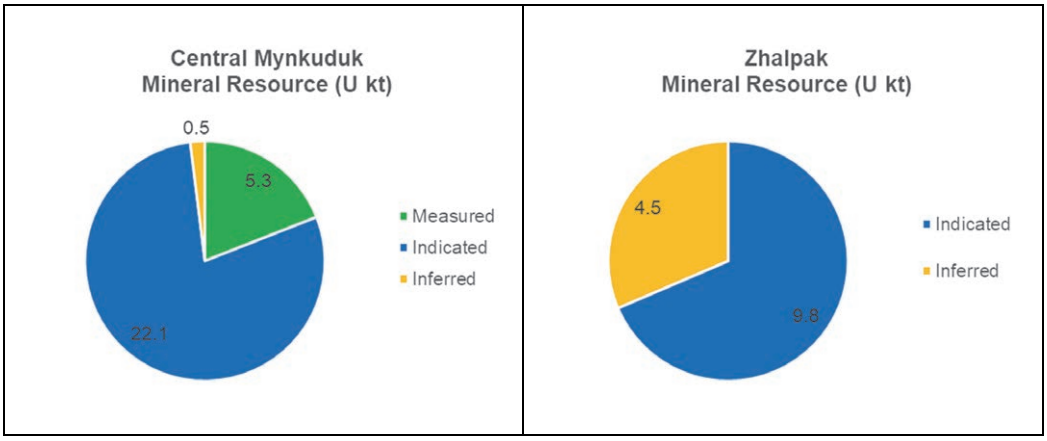
Area	Class	Quantity Mt	U %	U kt
Central Mynkuduk	Measured	21.3	0.025	5.3
	Indicated	81.8	0.027	22.1
	Inferred	1.5	0.036	0.5
	Total	**104.6**	**0.027**	**28.0**
Zhalpak	Measured	-	-	-
	Indicated	31.0	0.032	9.8
	Inferred	15.7	0.029	4.5
	Total	**46.7**	**0.031**	**14.3**
Total	Measured	21.3	0.025	5.3
	Indicated	112.8	0.028	31.9
	Inferred	17.3	0.029	5.0
	Total	**151.4**	**0.028**	**42.6**

Note:

1. ***The Company Exploration Licence over the Zhalpak Mineral Resource area expired on the 31.05.2018. The Company's management stated that rather than pursuing an extension to the trial mining licence they will instead apply for a mining licence across the whole field with this process commenced in 2020 and expected to be completed in 2021. The legality of the ownership of the licence by the Company cannot be verified by RPM. Further details are provided in Section 3.***
2. *RPM has reported the resources assuming the Company has a 100% equity in the both Projects and strongly advises the reader to consult a legal opinion.*
3. *The Mineral Resources have been compiled under the supervision of Mr. Bob Dennis who is a consultant to RPM and a member of the Australasian Institute of Geoscientists. Mr. Dennis has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
4. *All Mineral Resources figures reported in the table above represent estimates at 31st of December 2020. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
5. *Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).*

A geological cut-off grade of 0.02U%*m was used for Zhalpak and 0.06U%*m for Central Mynkuduk was used in development of the 3D solids, however no cut-off grade was applied to the reporting of the resource as the In-situ Leaching mining method extracts all of the resource inside an extraction cell which is considered economic. The geologic interpretation models consist of a set of 3D solids, generated using implicit modelling, one for each interpreted rock type, such that the metal content was estimated considering the whole volume of the blocks. As such this method does not incorporate ore loss or dilution into the block estimates.

Figure 7-1 Graphical Representation of the Mineral resource Quantities



7.4 Estimation Parameters and Methodology

While Table 1, as required by the JORC Code 2012 edition, is presented in **Appendix C** for reference a summary of the resource estimate parameters is provided below:

7.4.1 Central Mynkuduk

- The Mineral Resource area extends over a west north west-east south east strike length of 27 km with two large tabular channels defined over a width ranging from 50 m to 800 m and included within the 70 m vertical interval from -150 mRL to -80 mRL. Smaller rafts of mineralisation were also defined above and below the main mineralised body which had shorter ranges. Extent of the drilling at Central Mynkuduk is shown in **Figure 7-2**.
- The Mynkuduk deposit is confined to the lower portion of the U bearing fronts of the formation oxidation zone and has simple morphology. Mineralisation relates to the permeable sand and is controlled by boundaries of the zones of the formation oxidation zone.
- Geological models were developed for Central Mynkuduk deposit using logged permeability codes in the supplied data which was subsequently imported into Leapfrog software, where each of main U bearing permeable zones were modelled. Permeable horizons were separated into permeable zones where internal impermeable zones were intercepted and the resulting wireframes consisted of two major lenses. To form ends to the wireframes, the end sections were extrapolated to position quarter of the distance to the next sections. Diagrams showing various views of the mineralisationand drilling are shown below in **Figure 7-3 and Figure 7-4.**
- Mineralisation wireframes were created using 0.06 U%*m cut-off which was considered appropriate by RPM. This is essentially equivalent to an 0.01% U cut-off.
- The Mineral Resource estimate is defined by surface diamond drilling. Drilling initially commenced on 800 m by 50m profiles; however, 100m by 50m and 100 m x 25 m profiles were drilled in the central portion of the main mineralised body. This is summarised in **Table 7-2** and shown graphically in **Figure 7-9.** In addition to the exploration data, RPM was provided with production drilling data for several blocks within the mining area. These holes were not included in the resource estimate as they were in depleted areas, rather they were utilised as part of the reconciliation and validation process to confirm the estimate.
- 1,332 surface drill holes for a total of 478,330 m were utilised to interpret the mineralisation. All holes were gamma logged, however 787 holes intersected mineralisation for which the U content was calculated. The remaining gamma logged holes were interpreted to contain no mineralisation and no calculations of U content were undertaken.

Figure 7-2 Drill Hole Extents Central Mynkuduk

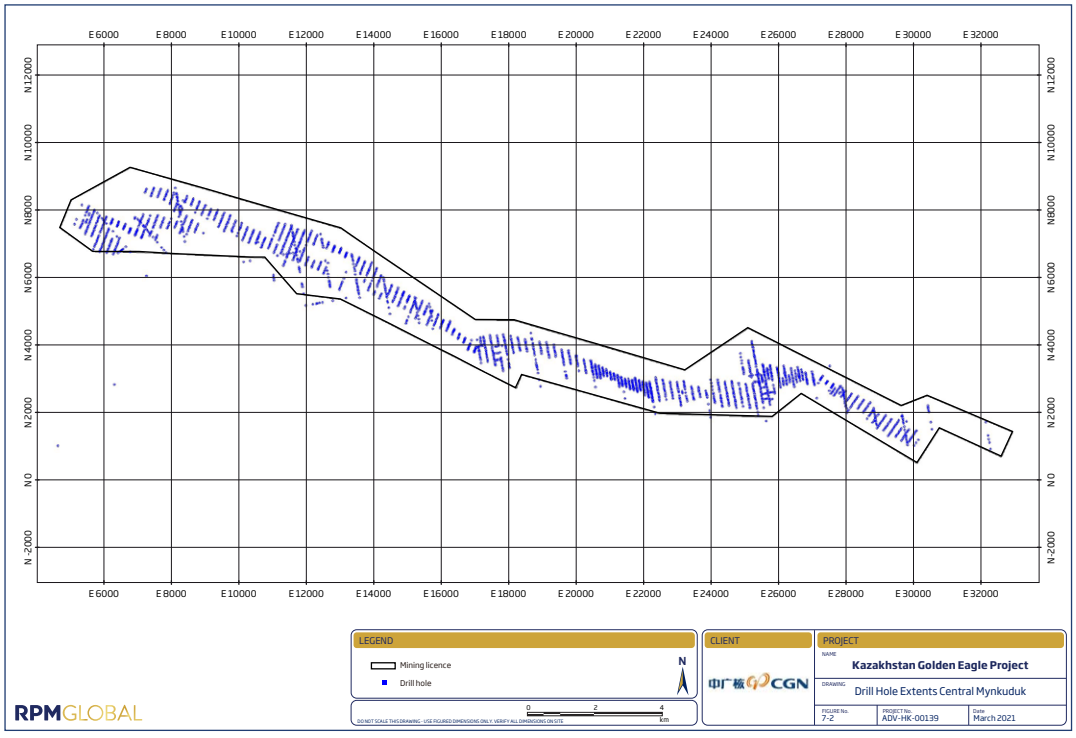


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Table 7-2 Summary of Drilling at Central Mynkuduk

Stage	Database Total						In Mineral Resource		
	No. of Holes	Metres	gamma-logged holes	gamma-logged metres	Chemical assayed Holes	Chemical assayed metres	Gamma-logged Holes	Gamma-logged metres	Intersection Metres
1	1,997	696,022	1,936	13,209	737	6,778	1,635	12,528	11,457
2	78	27,288	-	-	-	-	-	-	
Total	**2,075**	**723,310**	**1,936**	**13,209**	**737**	**6,778**	**1,635**	**12,528**	**11,457**

- In addition to the geophysical QAQC as outlined in **Section 6.7.3,** in order to understand sample support issues RPM carried out a QQ analysis for gamma values versus chemical assays as shown in **Figure 7-5**. The QQ plot indicates the slight bias observed between Chemical assayed holes and gamma logged holes. While no material variations can be observed between the gamma and chemical assays during the qualitative review, RPM undertook an average length weighted U% grade analysis within the wireframe to compare the other overall grades for chemical assays. A 1% variation was determined with 0.029% for chemical analysis while the gamma U% grades for the same zone has average value of 0.028%. This results in a radioactive equilibrium factor (REF) is 0.99 which is close to equilibrium**.**
- All drill hole collars were surveyed using local coordinate systems while all holes were drilled vertically and down-hole surveys were routinely surveyed at every 20m and at the end of the holes.
- Samples were composited to 5m intervals using geology constraint compositing function. After review of the Project statistics, it was determined that high grade cuts were required. Various cuts were applied to individual domains resulting in the cutting of 4 samples in total which reduces overall average grades by <1%. Total reduction in overall metal content was <1%. Summary statistics for the composites are summarised in **Figure 7-5** *and* **Table 7-3**. While a 5m composite was utilised, RPM noted that generally a 6m maximum extraction width is used. RPM undertook a review of the impact of this on the extraction method and determine no material difference would occur due to the average width of the mineralisation.
- Mineralisation continuity was examined via variography with RPM interpreting experimental variograms for U in all zones. The downhole variogram provides the best estimate of the nugget value which was 0.22 (U). Interpreted Kriging and interpolation parameters are summarised in **Table 7-4.** Interpreted variogram maps are shown in **Figure 7-6.**
- The block dimensions used in the model were 25m EW by 50m NS by 5m vertical with sub-cells of 6.25m by 12.5 m by 1.0m (**Table 7-5**). This was selected as the optimal block size as a result of kriging neighbourhood analysis ("KNA"). Block model is rotated NW 290^0 to match the strike of the mineralisationzones.
- Ordinary kriging ("OK") grade interpolation were used for the estimate with interpretations guided by lithology and mineralisation. Up to three passes were used to estimate the blocks in the model with 79.9% of blocks filled in the first pass, 18.0% of the blocks filled in the second pass and the remaining 2% of blocks filled in the third pass. The mineralisation wireframes were treated as hard boundaries for all estimation purposes, that is, only assays from within each wireframe were used to estimate blocks within that wireframe. RPM notes that inflow of groundwater from outside of the resource may occur which could potentially inject additional U into the system. RPM had discussions with the production team of the Company and it was interpreted that this would be not be a material issue, as such a static model was completed.
- Mineralised bodies generally form flat lying bedded zones however locally they tend to have variable dip and strike angles, as such, RPM decided to use dynamic anisotropy search which will deliver the most robust results for the deposit. The dynamic searches were calculated from middle plane of upper and lower contacts of the mineralised zones and assigned to block model for the estimation purpose. RPM notes that some groundwater flow might occur from outside the resource, however this was considered immaterial as limited U would be contained in this inflow to impact the resource estimate.
- Bulk Density applied to the Central Mynkuduk deposit was 1.70t/cu.m which is based on data as summarised in **Section 6.5**.
- The estimate was depleted for historical extraction using depletion polygons reflecting the current production wellfields and each polygon actual production as at December 31st 2020. This approach

maintains the mineralisation tonnage but reduces the in-situ grade to reflect the removal of metal from the resource area as **Figure 7-18**.

Table 7-3 Composite Statistics Central Mynkuduk

Statistics	All zones	Upper Channel	Lower Channel
Element		**U%**	
Samples	2,619	1,205	1,414
Minimum	0.0027	0.015	0.00268
Maximum	0.6	0.6	0.6
Mean	0.048	0.045	0.05
St Dev	0.034	0.047	0.053
Coef Var	1.0	0.97	1.02
Variance	0.0012	0.0022	0.0028
Top Cut	0.60	0.60	0.59
Number Cut	4	1	3
Cut Mean	0.048	0.04	0.05
Cut CV	1.02	0.97	1.02

Table 7-4 Variogram Models Central Mynkuduk

Domain	Major Direction	Co	Structure 1				Structure 2			
			C1	A1	Maj/Semi	Maj/Minor	C2	A2	Maj/Semi	Maj/Minor
Mineral	00-->290	0.22	0.58	154	6	81	0.2	565	10	181

Table 7-5 Central Mynkuduk Estimation Parameters

Parameter	Pass 1	Pass 2	Pass 3
Block Size (X, Y, Z)	**25**	**50**	**5**
Search Type	dynamic search		
Search Radius	300	600	1800
Minimum Samples	4	4	1
Maximum Samples	24	24	10
Max. Sam. Per Hole	3	3	1
Block discretisation	3X by 5Y by 2Z		
Percentage Blocks Filled	80%	18%	2%

Figure 7-3 Central Mynkuduk Mineral Wireframes (Plan View)

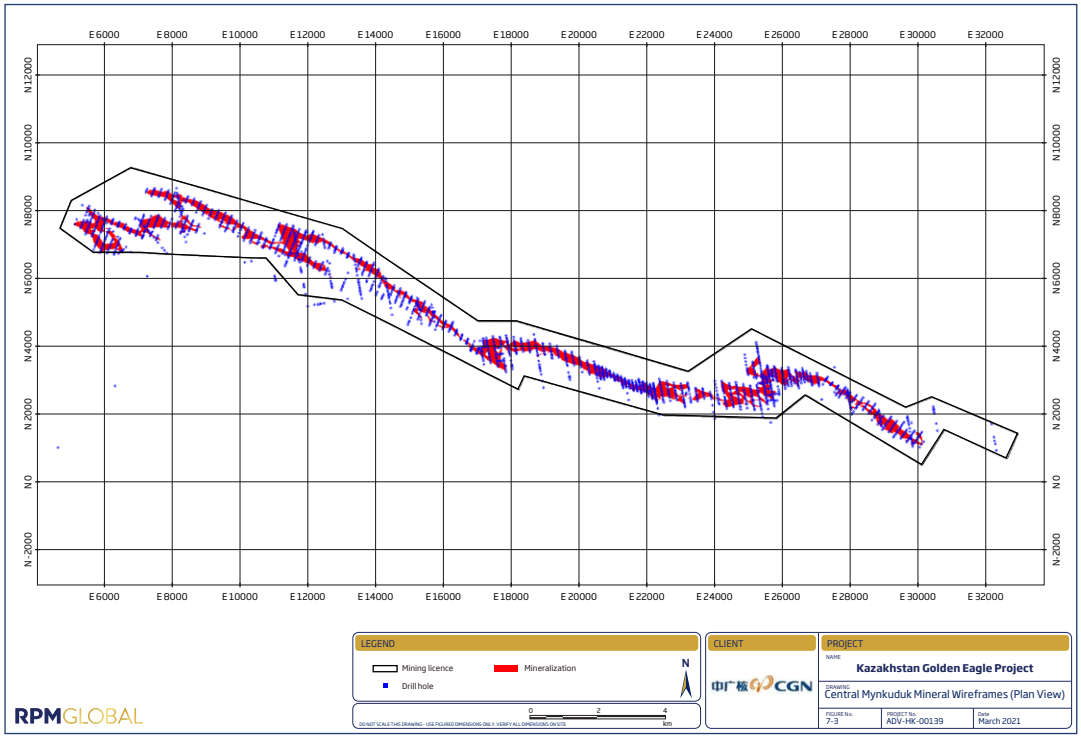

Figure 7-4 Central Mynkuduk Mineral Wireframes Cross Section

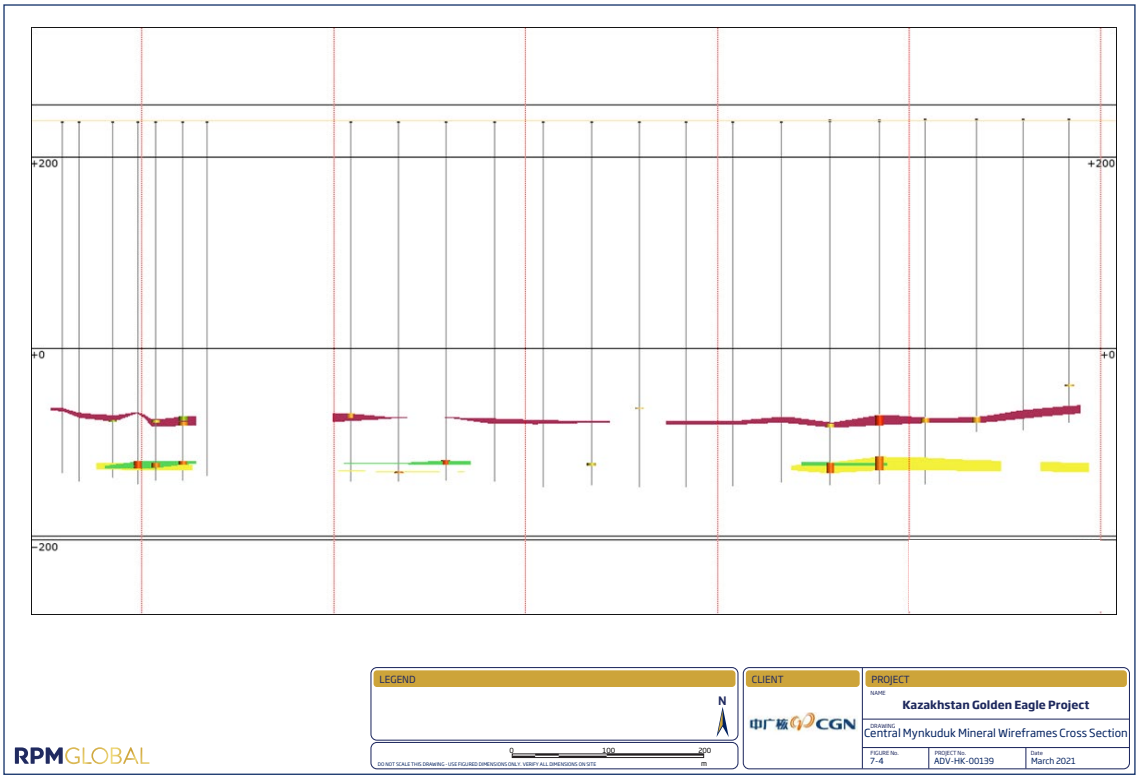

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Figure 7-5 Central Mynkuduk - Q-Q Plot Gamma vs. Chemical Results

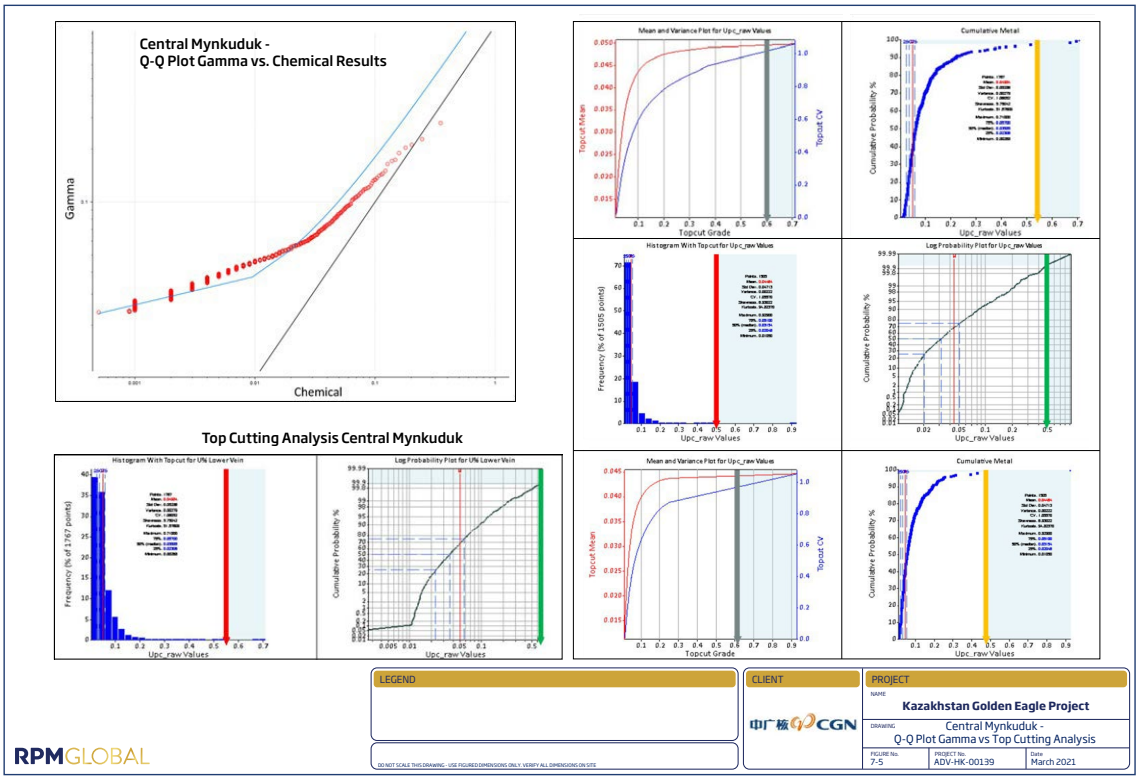

Figure 7-6 Continuity Models for Central Mynkuduk

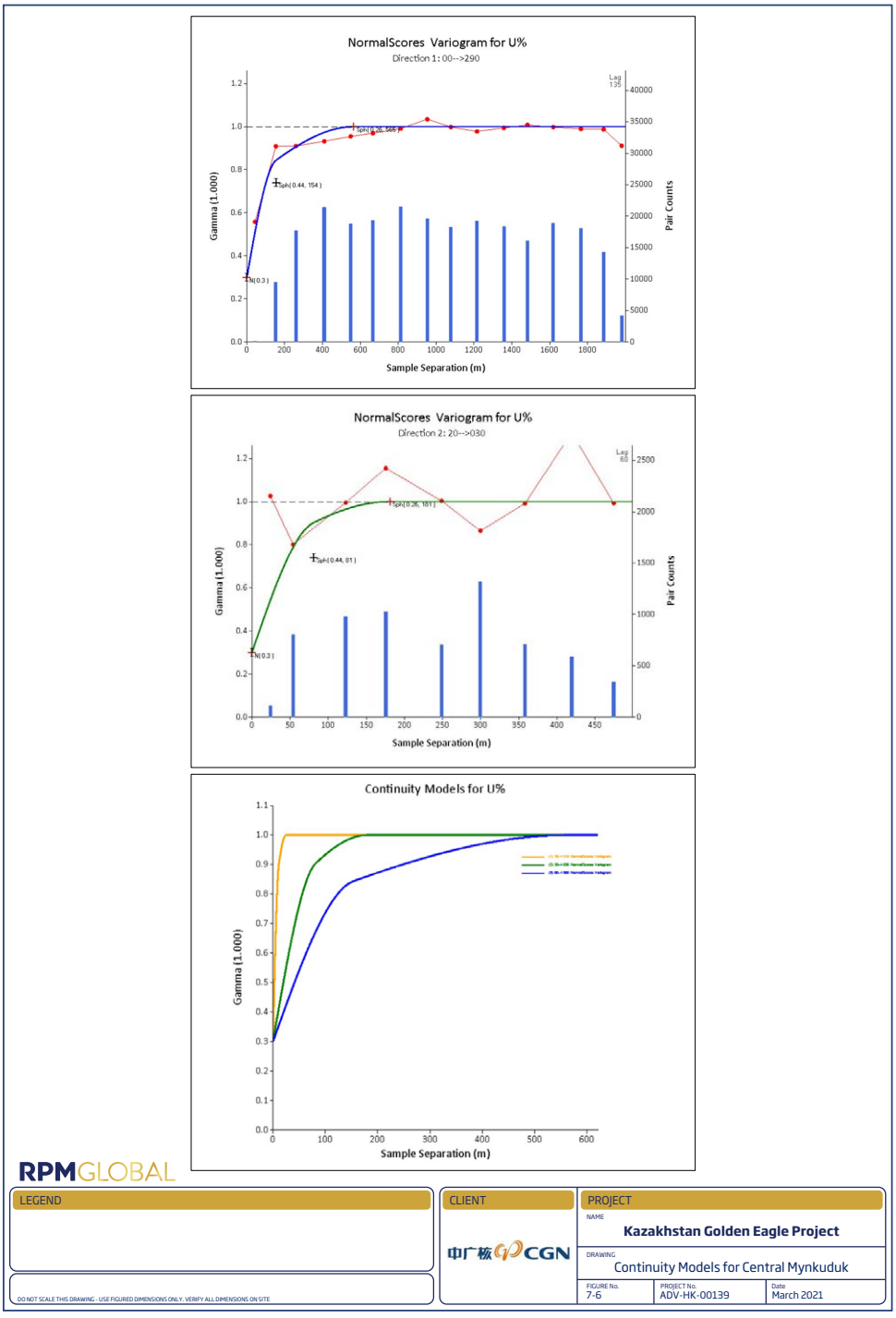

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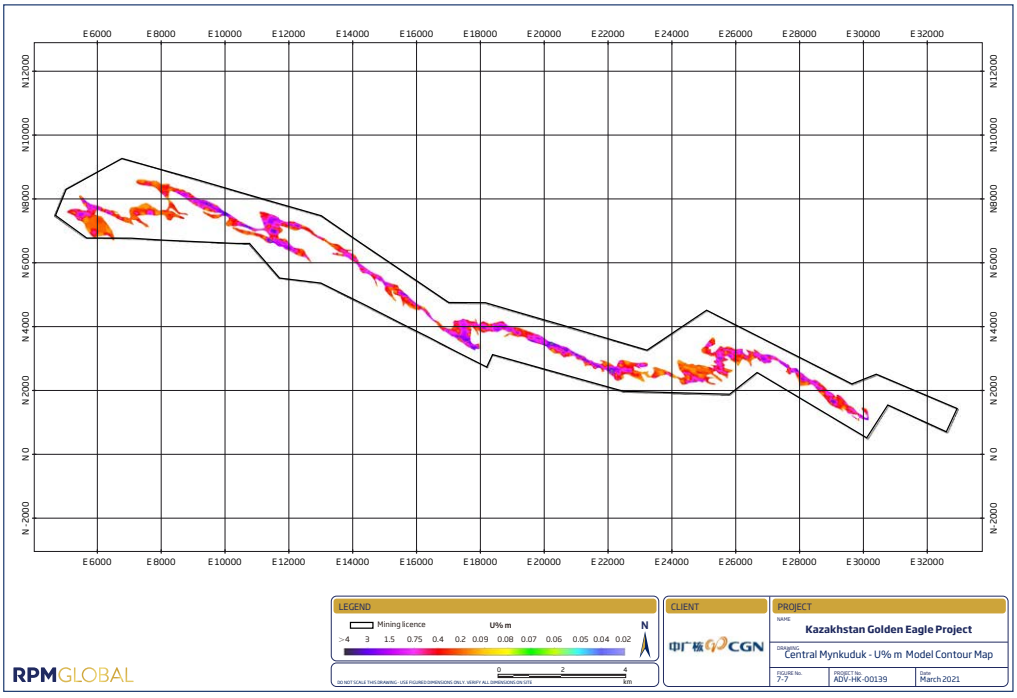
Figure 7-7 Central Mynkuduk – GT U% m Model Contour Map



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7.4.2 Zhalpak

- The Mineral Resource extends over a southeast-northwest strike length of 22km with multiple tabular bodies defined over a width of 5km and includes the 75m vertical interval from 153mRL to 78m RL. Extent of the drilling at Zhalpak is shown in **Figure 7-8**.
- The Projects are interpreted to be Roll Front style U deposits with majority of the mineralisation hosted within reduced porous and permeable lithology.
- The Mineral Resource estimate is defined by surface diamond drilling completed between 1971 and 2016. Drilling initially commenced on 200m by 50 profiles; however, 100m by 25m profiles were drilled in the central portion of the main mineralised body with minor portion of the area has drilled in 50x25m. They are summarised in **Table 7-6** and shown graphically in **Figure 7-9**
- 2,515 surface drill holes for a total of 365,323m were utilised to interpret the mineralisation. All holes were gamma logged, however 2,012 holes intersected mineralisation from which the U content was calculated. The remaining gamma logged holes were interpreted to contain no mineralisation and no calculations of U content were undertaken. In addition to the gamma logging a total of 1,221 holes have chemical analysis to determine the U content. Of the 2,515 holes, 1,093 holes for total of 158,043m were included in the mineral resource with 805 having chemical analysis for the U content.

Table 7-6 Summary of Drilling at Zhalpak used in Mineral Resource

Year	Database Total						In Mineral Resource		
	No. of Holes	Metres	Gamma-logged Holes	Gamma-logged metres	Chemical assayed Holes	Chemical assayed metres	Gamma-logged Holes	Gamma-logged metres	Intersection Metres
1971	30	4,645	20	2,943	19	2,807	10	1,478	33
1972	137	20,036	91	13,179	116	16,897	28	4,010	107
1973	329	47,638	261	37,787	294	42,593	127	18,364	430
1974	1	138	1	138	1	138	-	-	-
1979	4	579	4	579	3	439	1	140	3
1981	9	1,922	5	1,081			2	421	7
1982	3	416	3	416	2	276	3	416	9
1984	1	178	-	-	-	-	-	-	-
1987	2	292	2	292	1	144	1	144	10
1988	778	110,008	659	93,401	302	42,409	376	53,215	1,465
1989	761	112,109	588	86,275	287	41,954	311	45,491	1,282
1990	210	31,440	165	24,861	89	13,281	84	12,676	379
1991	172	24,740	154	22,392	80	11,610	115	16,699	492
1993	1	87	-	-	-	-	-	-	-
2016	10	1,464	10	1,464	2	292	7	1,022	40
NA	67	9,629	49	7,255	25	3,606	28	3,967	91
Total	**2,515**	**365,323**	**2,012**	**292,063**	**1221**	**176,446**	**1,093**	**158,043**	**4,349**

Source: Provided by the Company

- Geological models were developed for the Projects using logged permeability codes in the supplied data which were subsequently imported into Leapfrog software. Three separate sets of wireframing was intepretedincuding:
  - Grade envelopes were interpreted for the area which included continuous mineralisation over 0.02U%*m within the main permeable horizon.
  - Modelling of internal impermeable zones inside main permeable mineralisation.
  - Intepretation of non-mineralised zones occurring within the main permeable horizon which has no gamma nor chemical assay analysis.

- 66 continuous, geologically robust lenses were interpreted. To form ends to the wireframes, the end sections were extrapolated to a position quarter the distance to the next section. Diagrams showing various views of the mineralisation and drilling are shown below in **Figure 7-11** and **Figure 7-12.**
- Mineralisation wireframes were created using a 0.02U%*m cut-off which was used by the Company in early 2020 estimate and is considered suitable by RPM. RPM notes that this was based on the gamma log data only, the chemical assays were not utilised in the estimate as noted below.
- In addition to the geophysical QAQC as outlined in **Section 6.7.3,** in order to understand any sample support issues RPM carried out a QQ analysis for gamma values versus chemical assays as shown in **Figure 7-10**. The QQ plot indicates a slight bias can be interpreted between Gamma and Chemical assays. As observed in the QAQC, the gamma logged holes have slightly lower values above 0.08% U however they are along x=y line. In addition to the QQ plot, RPM undertook an average length weighted U% grade analysis within the wireframe to compare the other overall grades for chemical assays. A 2% variation was determined with 0.034% U for chemical analysis while the gamma U% grades for the same zone has average value of 0.033% U. This results in a radioactive equilibrium factor (REF) is 1.02 which is close to equilibrium as shown in **Figure 7-10** As result of suitable QAQC results and RPM considers the gamma logging data to be suitable for resource estimation. Even though mineralisation at Zhalpak is close to equilibrium, RPM notes that equilibrium could potentially be variable in different parts of the deposit and further analysis should be undertaken when additional data is supplied.
- Drill hole collars were surveyed in a local coordinate system with all holes drilled vertically. Down-hole surveys were routinely surveyed at every 20m and at the end of the holes as outlined in **Section 6**.
- Samples were composited to single intersection per hole using a geology constraint compositing function. After review of the Project statistics, it was determined that high grade cuts were required. Various cuts were applied to individual domains resulting in the cutting of 17 samples in total which reduces overall average grades by 5%. Summary statistics for composites in main and all combined resource zones are summarised in **Table 7-7.**

Table 7-7 Summary Statistics for Composites in Main Resource Zones (obj1, 8, 28, 58) and Combined all Zones (Gamma data)

Statistics	All Zones	1	8	28	58	Rest of zones
Assay	U %					
Samples	1755	219	330	172	163	871
Minimum	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Maximum	1.0940	0.2460	0.4490	0.2190	0.2220	1.0940
Mean	0.0353	0.0297	0.0433	0.0357	0.0320	0.0341
St Dev	0.0456	0.0296	0.0448	0.0303	0.0242	0.0537
Coef Var	1.2929	0.9965	1.0357	0.8478	0.7560	1.5733
Variance	0.0021	0.0009	0.0020	0.0009	0.0006	0.0029
Percentiles						
10%	0.0130	0.0112	0.0130	0.0139	0.0140	0.0120
20%	0.0150	0.0140	0.0160	0.0179	0.0160	0.0150
30%	0.0180	0.0160	0.0200	0.0200	0.0190	0.0170
40%	0.0209	0.0190	0.0260	0.0248	0.0220	0.0200
50%	0.0240	0.0210	0.0310	0.0282	0.0250	0.0230
60%	0.0288	0.0240	0.0370	0.0320	0.0300	0.0260
70%	0.0350	0.0279	0.0450	0.0385	0.0341	0.0321
80%	0.0440	0.0351	0.0620	0.0457	0.0430	0.0405
90%	0.0666	0.0550	0.0870	0.0634	0.0574	0.0610
95%	0.0886	0.0820	0.1206	0.0844	0.0679	0.0855
97.50%	0.1303	0.1251	0.1473	0.1113	0.0856	0.1196
99%	0.1936	0.1520	0.1881	0.1766	0.1106	0.2466
Top Cut		-	0.20	0.15	-	0.1 to 0.25
Number Cut	17	-	2	3	-	12
Cut Mean	0.0336	0.0297	0.0421	0.0349	0.0320	0.0313
Cut CV	0.905	0.9965	0.8741	0.755	0.756	0.9284

- Mineralisation continuity was examined via variography. RPM interpreted the experimental variogram for U and Ra for both permeable and impermeable zones using all domain samples. The downhole variogram provides the best estimate of the nugget value which was 0.33 for the permeable domain. Interpreted Kriging and interpolation parameters are summarised in **Table 7-8** and **Table 7-9**, while interpreted variogram maps are shown in **Figure 7-13**.

Table 7-8 Variogram Parameters

Domain	Element	Major Direction	C0	Structure 1				Structure 2			
				C1	A1	Maj/Semi	Maj/Minor	C2	A2	Maj/Semi	Maj/Minor
Permeable	U%	00-->330	0.33	0.50	115	2.50	54.95	0.17	602	2.30	95.59
	Ra%	00-->330	0.19	0.54	106	2.25	29.42	0.26	243	1.50	12.94
Impermeable	U%	00-->330	0.33	0.45	114	2.61	37.97	0.22	493	2.65	64.87
	Ra%	00-->330	0.36	0.33	176	2.29	13.87	0.31	687	1.05	28.16

Table 7-9 OK Estimation Parameters

Parameter	Pass 1	Pass 2	Pass 3
Search Type	dynamic search		
Major-Semi Major Ratio	2		
Major-Minor Ratio	10		
Search Radius	210	400	5,000
Minimum Samples	6	4	2
Maximum Samples	16	16	8
Max. Sam. Per Hole	3	3	3
Block discretisation	3X by 5Y by 2Z		
Percentage Blocks Filled	54%	33%	13%

- The block dimensions used in the model were 25m EW by 50m NS by 5m vertical with sub-cells of 3.125 m by 6.25 m by 0.3125 m. This was selected as the optimal block size as a result of kriging neighbourhood analysis ("KNA"). Block model is rotated NW 320^0 to match the strike of the mineralisation zones.
- Ordinary kriging ("OK") grade interpolation was used for the estimate. Up to three passes were used to estimate the blocks in the model with 54% of blocks filled in the first pass and 33% filled in the second pass. Importantly due to the close spaced drilling in the area, permeable object 8, search was reduced to 100m in the first pass and extended to 210m in second pass allow the local variability of the grades . The mineralisation wireframes were treated as hard boundaries for all estimation purposes, that is, only U content from within each wireframe were used to estimate blocks within that wireframe. RPM notes that inflow of groundwater from outside of the resource may occur which could potentially inject U into the system. RPM had discussions with the production team of the Company and it was interpreted that this would be not be a material issue, as such a static model was estimated.
- Mineralised bodies generally form flat lying bedded zones however, locally they tend to have variable dipping and striking angles. Because of this RPM decided to use a dynamic anisotropy search which will deliver most robust results for the deposit. The dynamic searches were calculated from the middle plane of upper and lower contacts of the mineralised zones and was assigned to block model for the estimation purpose.
- 200 samples were tested, including 145 from the mineralised zones. The tests were carried out immediately after core recovery from the hole. Average density of rocks from the mineralised zones for Zhalpak is 1.95 t/m3, dry density 1.64 t/m^3, moisture 16.57%. These determinations were also cross checked by Instantaneous Fission Neutron {"IFN") logging. 1.64 t/m^3 for the resource estimate is considered reasonable based on the rock types and the information provided to date.
- The estimate was depleted for historical extraction using depletion polygons reflecting the current production wellfields and each polygon actual production as at April 30th 2020. This approach maintains

the mineralisation tonnage however reduces the in-situ grade to reflect the removal of metal from the resource area.

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Figure 7-8 Plan of Drilling at Zhalpak

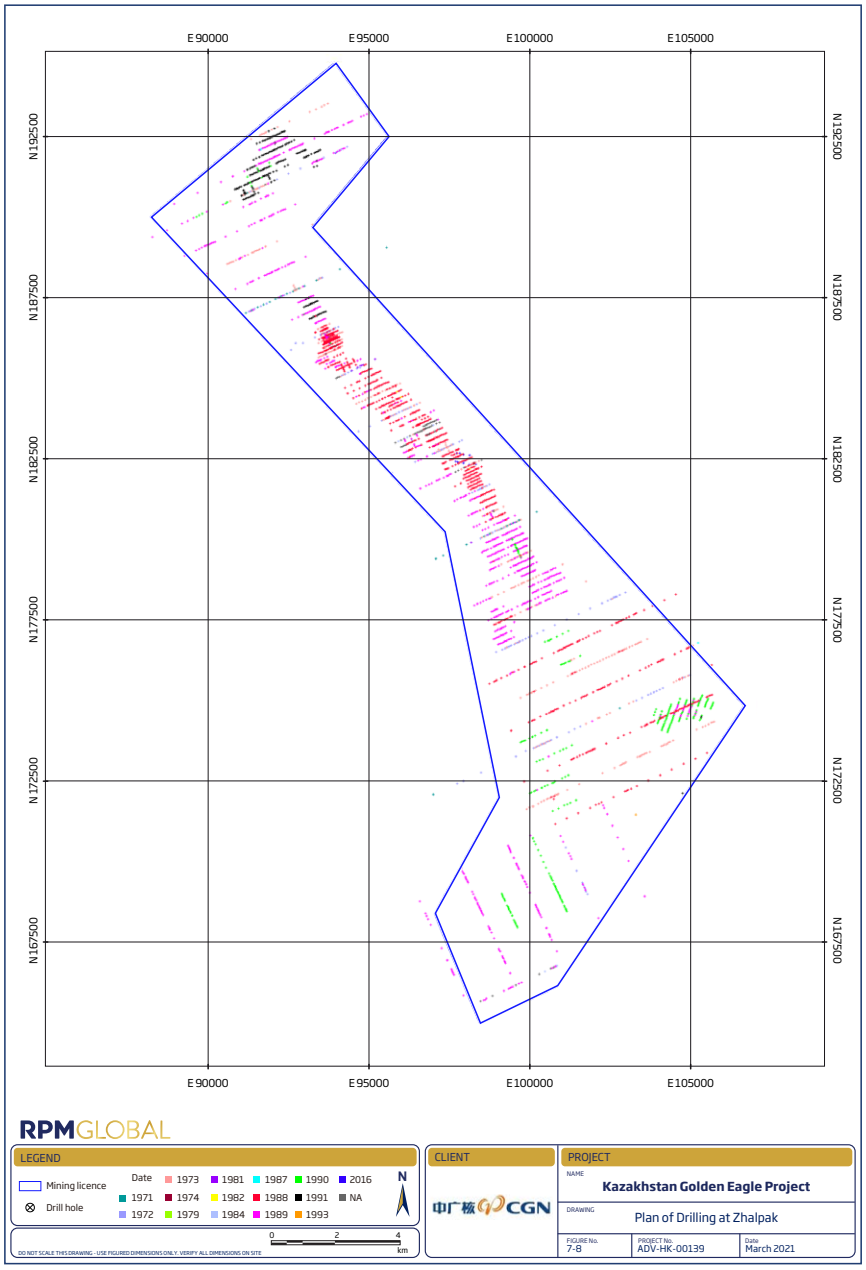

Figure 7-9 Holes with Gamma and Assay Data

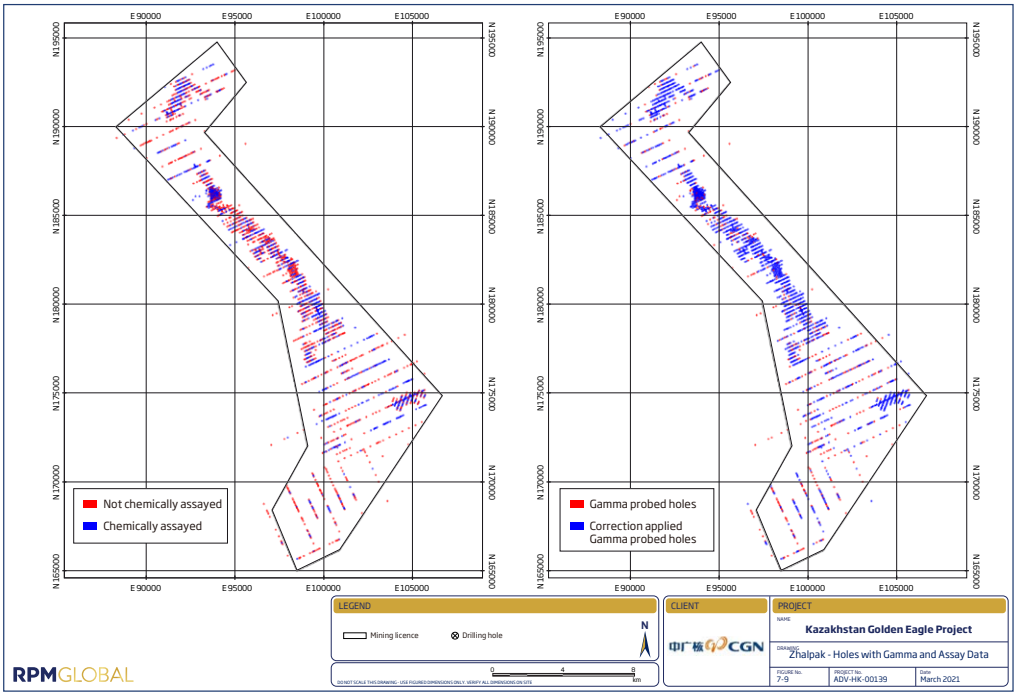

Figure 7-10 Zhalpak QQ Plot – Gamma vs Chemical Assays

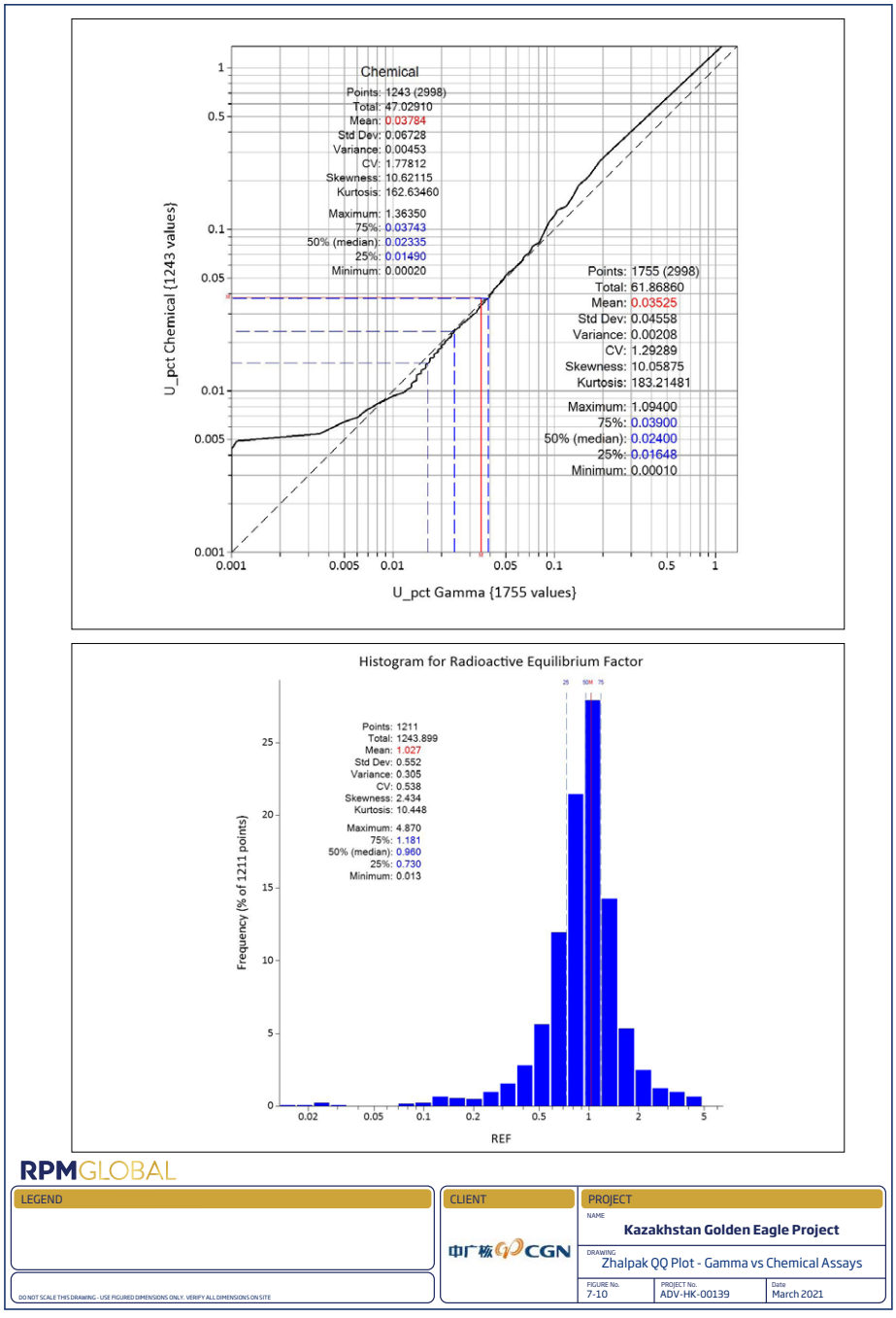

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Figure 7-11 Zhalpak Mineralisation Wireframes (Plan View)

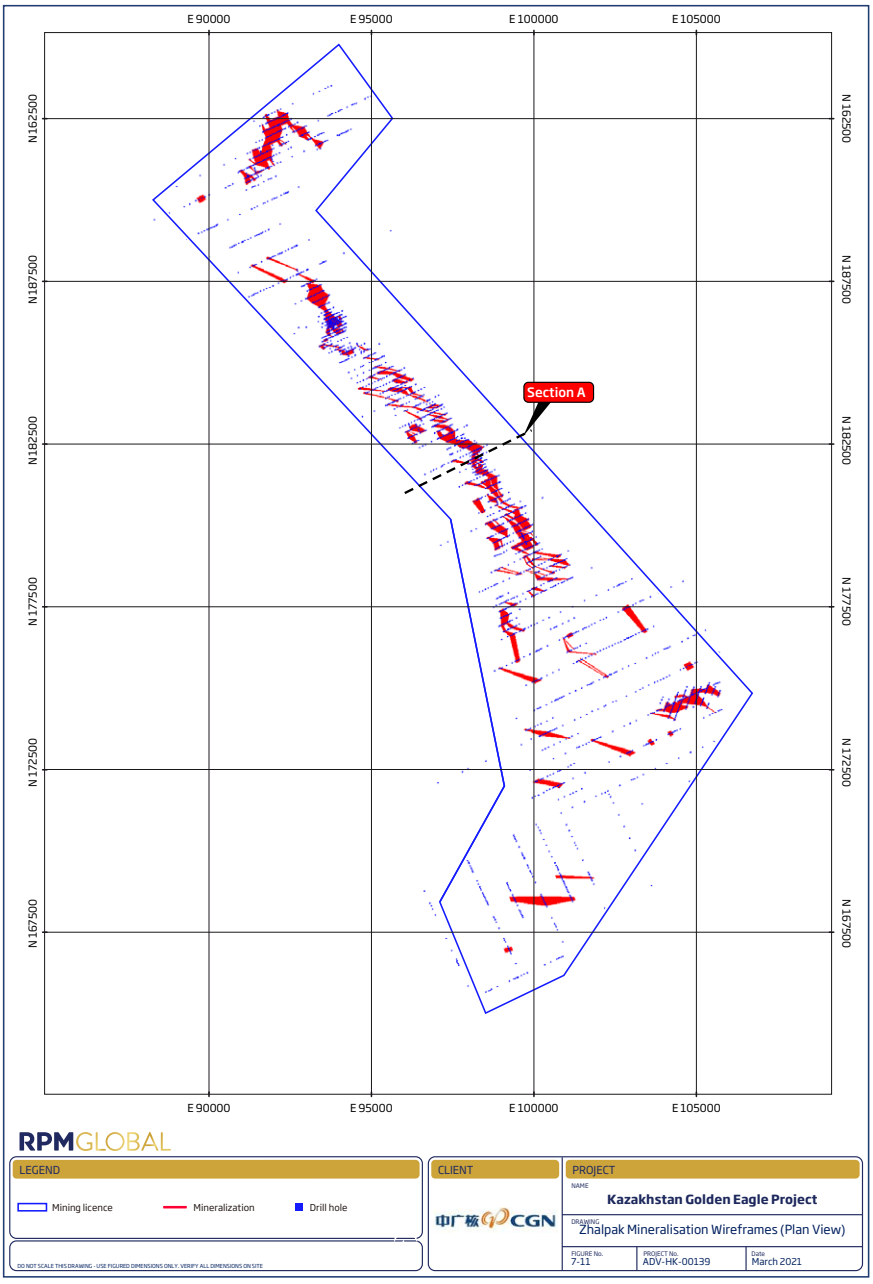

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Figure 7-12 Zhalpak Typical Cross Section

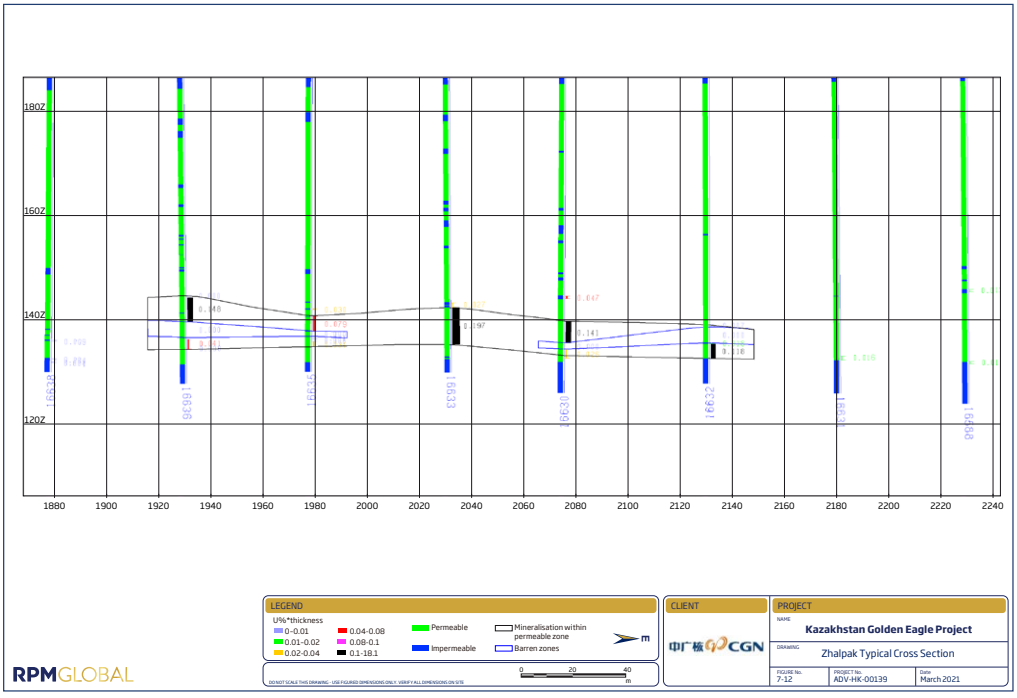


Figure 7-13 Zhalpak – Uranium Continuity Models

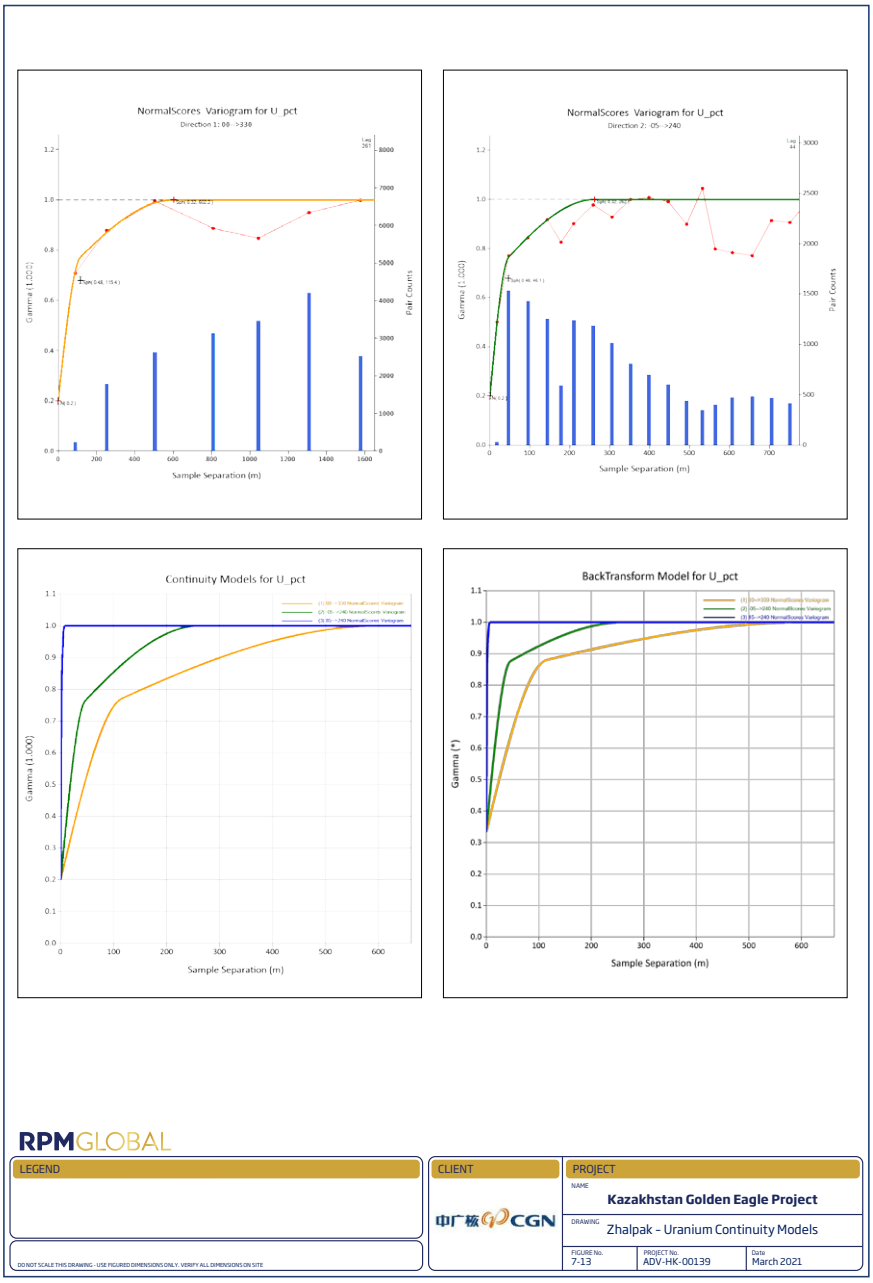
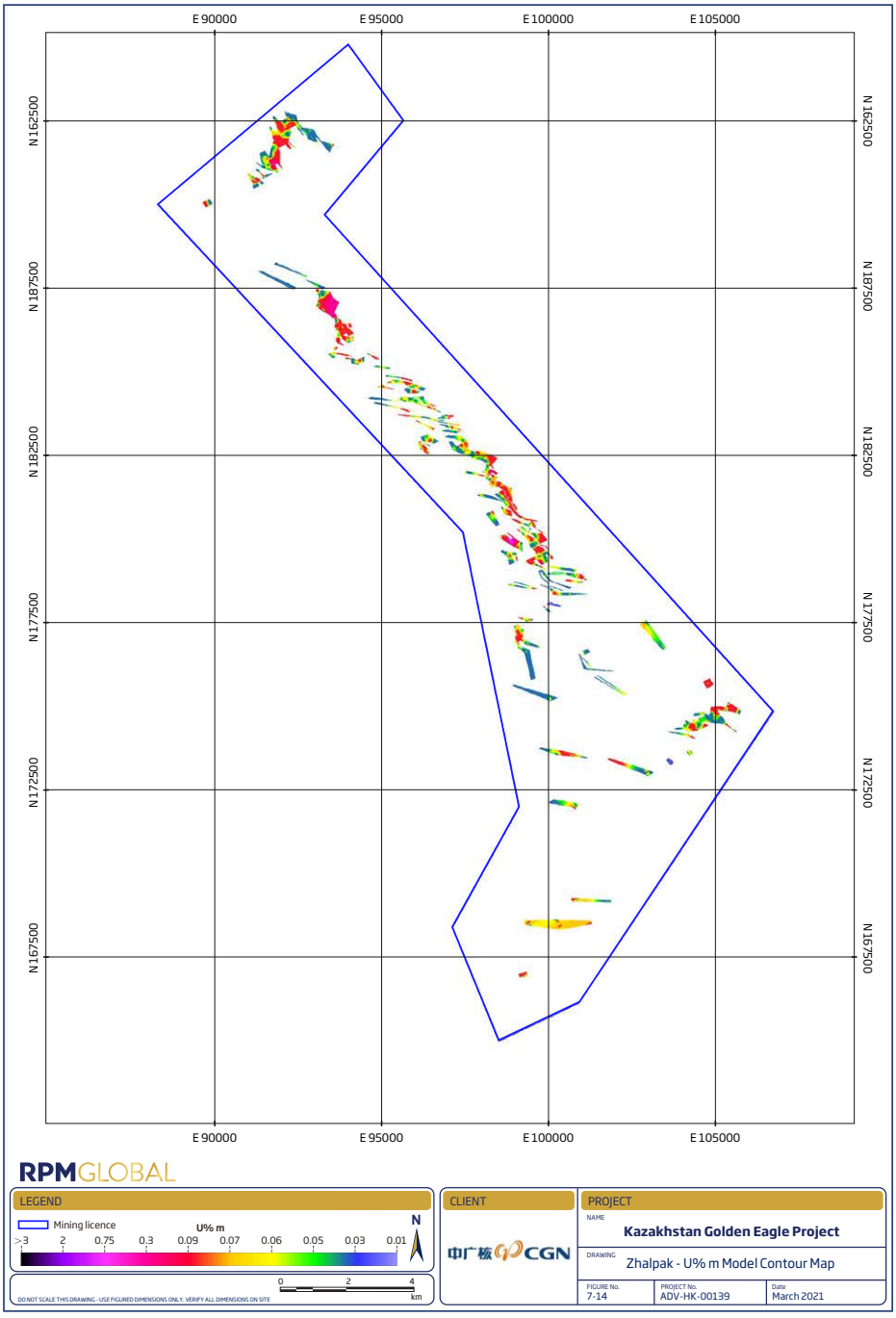


Figure 7-14 Zhalpak - U% m Model Contour Map



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7.4.3 Validation

A 4-step process was used to validate the estimation for the Project; as outlined below:

- Visual Inspection of the Blocks;
- Mathematical Comparison by Domain;
- Swath plots including different estimation methods; and
- Reconciliation to historical production for producing blocks at Central Mynkuduk

Central Mynkuduk

Overall, the assessment indicated that the trend of the modelled grade was fairly consistent with the drill hole grades as illustrated in **Figure 7-15**. Some over-extrapolation can be seen in areas with limited drilling, primarily on the periphery of the mineralisationenvelopes.

A quantitative assessment of the estimate was completed by comparing the average grades of the sample file input against the block model output for all the lodes. The comparative results are tabulated in **Table 7-10**. A local bias check was performed using swath plots in easting,northing and striking directions as seen in **Figure 7-16.**

Table 7-10 Statistical Results Block Estimates vs Composites

Object	Wireframe Volume	Block Model		Composites		Comparison	
		Resource Volume	U %	Number of Comps	U %	Volume WF/BM (%)	U Grade comp/bm (%)
Upper Channel	35,635,000	35,693,750	0.045	1,203	0.045	0.2	0.0
Lower Channel	41,300,000	41,377,500	0.049	1,476	0.050	0.2	2.0
Total	**76,935,000**	**77,071,250**	**0.047**	**2,679**	**0.048**	**0.2**	**2.1**

Results of the swath plots comparison indicates that while local variation is evident the swath plots highlight a good overall correlation exists between the block estimates and the composite grades within each mineralised domain. This good correlation of the drill holes and interpolated block model is further supported with visual checks that were completed.

Figure 7-15 Visual Validation of Block Model and Drillholes

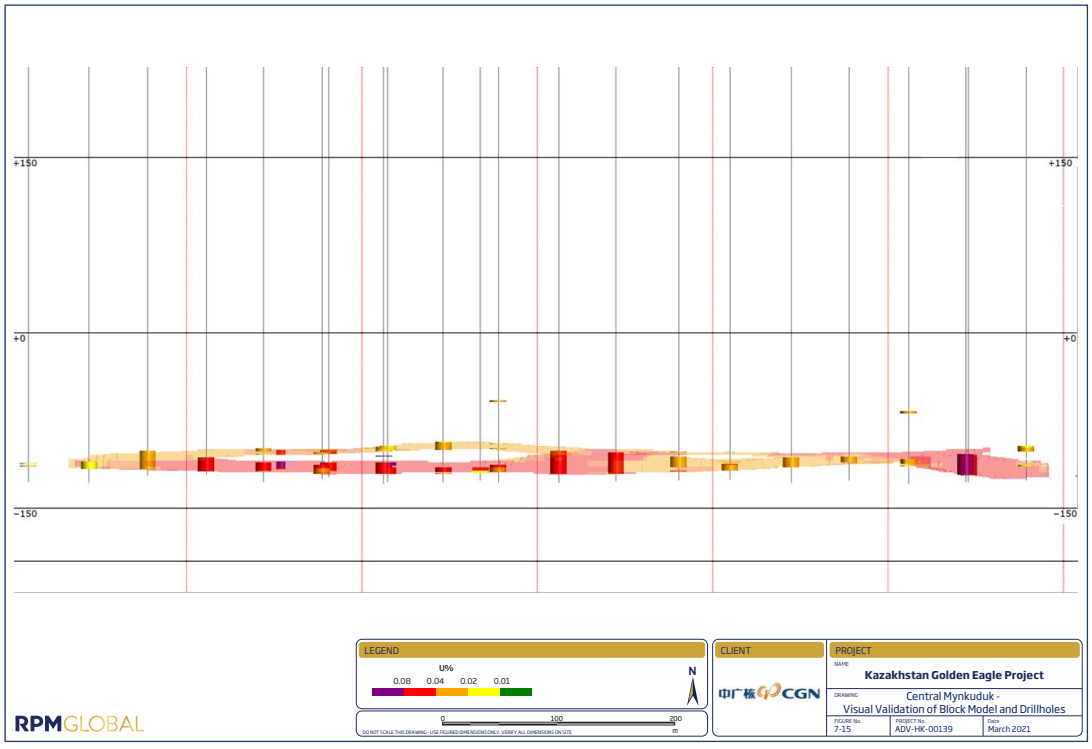

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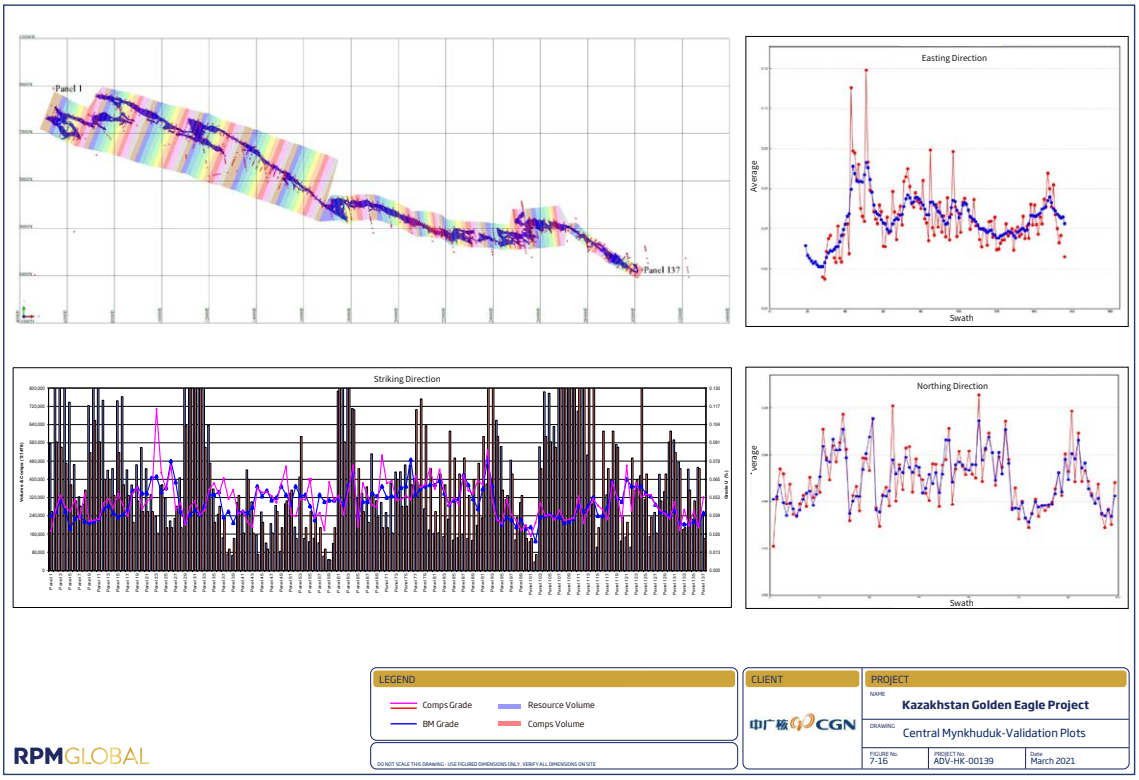
Figure 7-16 Central Mynkuduk − Validation Plots



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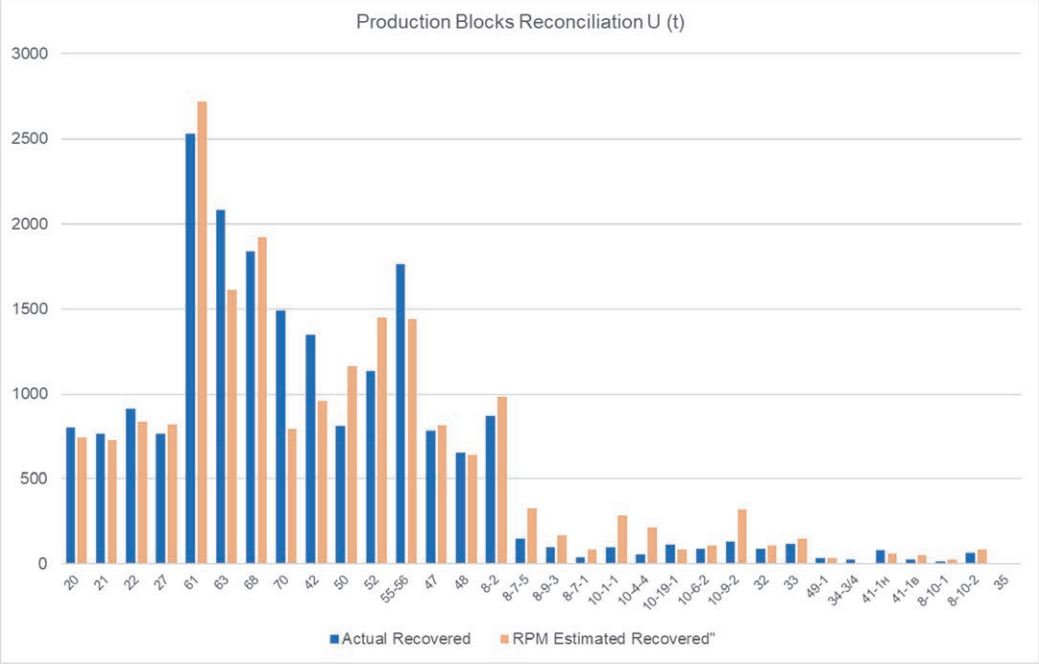
Central Mynkuduk Production Reconciliation

As a further step in the validation RPM has reported the recovered U t from each of the production blocks against the RPM resource estimated quantities for the same blocks. **Table 7-11** shows the overall reconciliation whilst **Figure 7-17** graphically shows the reconciliation block by block. Whilst the overall tonnage reconciles very well between the two there are variances at a block by block scale. This is primarily due to the re-blocking of some of the production blocks by the Company with the exact boundary of some of the larger blocks having changed in 2018. The results of this comparison in RPM's opinion further indicates that the estimate is a good representation of the metal quantities in the deposit.

Table 7-11 Overall Reconciliation up to December 2020

Company Estimated In Situ		RPM Estimated In Situ		Variance %	
In Situ U (t)	Recovered U (t)	In Situ U (t)	Recovered U (t)	In Situ	Recovered
25,035	19,808	25,623	19,759	2.3	-0.2

Figure 7-17 Reconciliation by Block of Actual Production and RPM estimated Recovered U t Quantity up to December 2020



Production Drilling Reconciliation

RPM has been provided with the production well information (injection and extraction holes) for 5 blocks which have recently commenced production. These wells are drilled on 20m by 30m spacing's and form the final set of drill results prior to production commencing. RPM has utilized these results to do a direct spatial comparison of each area with the results show in **Table 7-12**. The results show a reasonable comparison with 4 of the 5 blocks having a variation of less than 10%, with Block 3 having limited samples per area size. A review of this block highlights that the production wells show good visual comparison with larger variation which is the result of the limited number of samples.

Table 7-12 Central Mynkuduk Production Well Reconciliation

RPM Block model		Grade Control Production Holes			Grade Variance
GC Panel	U Cut	holes	U%	thickness, m	GC vs RPM Model
1	0.039	24	0.036	3.4	-9%
2	0.038	27	0.040	3.3	5%
3	0.039	43	0.054	1.8	37%
4	0.045	52	0.044	2.6	-2%
5	0.042	13	0.040	3.9	-3%
Grand Total	**0.041**	**159**	**0.043**	**2.7**	**4%**

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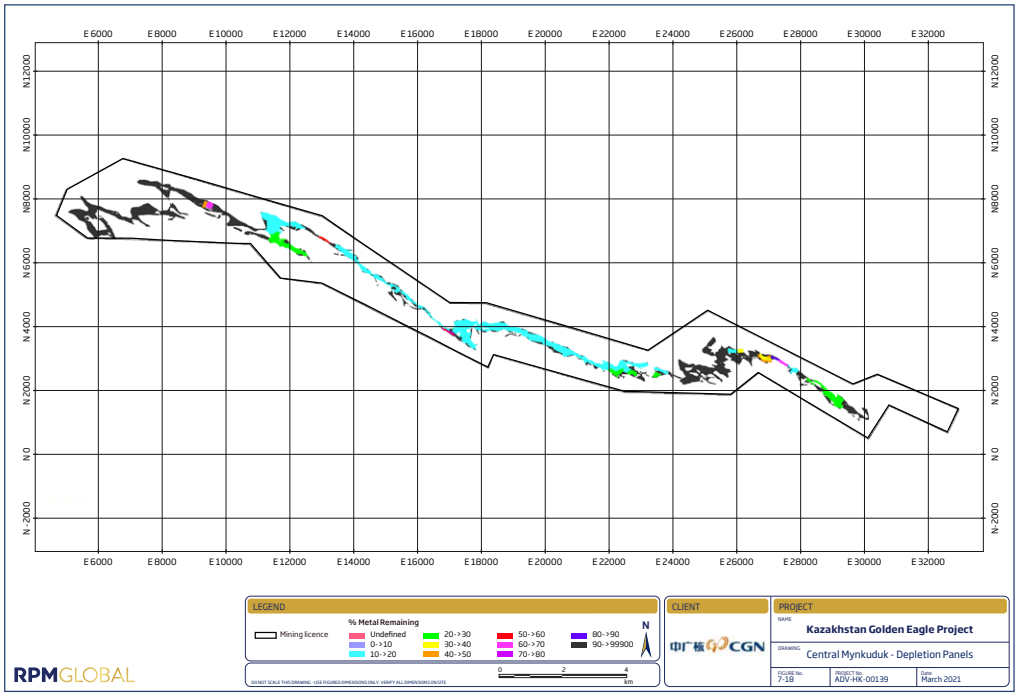
Figure 7-18 Central Mynkuduk - Depletion Blocks



RPMGLOBAL

Zhalpak

The qualitative visual assessment was completed by slicing sections through the block model in positions coincident with drilling. Overall, the assessment indicated that the trend of the modelled grade was consistent with the drill hole grades. A quantitative assessment of the estimate was completed by comparing the average grades of the sample file input against the block model output for all the lodes. The comparative results are tabulated in **Table 7-13.**

Table 7-13 Zhalpak - Average Composite Input v Block Model Output

Object	Block Model		Composites		Comparison
	Resource Volume	U_cut_OK %	Number of Comps	U_cut %	U grade comp/bm
1	4,882,318	0.030	219	0.030	0.0
2	130,450	0.025	17	0.025	0.0
3	335,406	0.034	35	0.033	0.0
4	253,851	0.023	6	0.023	0.0
5	120,050	0.019	3	0.019	0.0
6	190,869	0.025	9	0.025	0.0
7	93,060	0.019	10	0.020	0.0
8	3,377,271	0.040	330	0.042	0.0
9	14,502	0.078	5	0.073	-0.1
10	33,136	0.043	4	0.046	0.1
11	167,279	0.034	18	0.033	0.0
12	145,618	0.045	26	0.048	0.1
13	30,975	0.102	7	0.093	-0.1
14	56,134	0.022	6	0.025	0.1
15	91,010	0.055	10	0.053	0.0
16	289,502	0.028	20	0.027	0.0
17	122,113	0.035	10	0.035	0.0
18	50,903	0.040	4	0.039	0.0
19	65,118	0.036	6	0.039	0.1
20	183,246	0.032	7	0.032	0.0
21	441,907	0.031	36	0.032	0.0
22	180,731	0.041	17	0.044	0.1
23	126,813	0.027	14	0.027	0.0
24	53,516	0.044	6	0.045	0.0
25	203,613	0.034	24	0.031	-0.1
26	220,667	0.027	24	0.028	0.0
27	290,509	0.032	16	0.033	0.1
28	2,239,520	0.034	172	0.035	0.0
29	79,205	0.024	10	0.024	0.0
30	76,257	0.028	4	0.027	0.0
31	170,172	0.024	18	0.026	0.1
32	873,712	0.023	27	0.027	0.1
33	169,751	0.050	14	0.045	-0.1
34	264,063	0.034	9	0.037	0.1
35	245,654	0.034	19	0.035	0.0
36	468,274	0.040	34	0.039	0.0
37	802,295	0.033	45	0.034	0.0

Object	Block Model		Composites		Comparison
	Resource Volume	U_cut_OK %	Number of Comps	U_cut %	U grade comp/bm
38	358,154	0.037	21	0.035	0.0
39	829,919	0.027	44	0.030	0.1
40	237,054	0.024	15	0.025	0.1
41	131,982	0.018	6	0.021	0.1
42	269,995	0.030	15	0.029	0.0
43	172,699	0.019	17	0.019	0.0
44	127,551	0.059	7	0.054	-0.1
45	326,013	0.025	21	0.025	0.0
46	137,408	0.028	8	0.033	0.1
47	63,092	0.014	7	0.014	0.0
48	59,369	0.028	5	0.029	0.0
49	111,346	0.019	4	0.020	0.0
50	170,709	0.018	8	0.018	0.0
51	1,063,385	0.024	40	0.023	0.0
52	431,256	0.023	12	0.025	0.1
53	160,773	0.034	7	0.029	-0.2
54	62,708	0.030	8	0.030	0.0
55	446,368	0.025	10	0.027	0.1
56	161,707	0.023	6	0.023	0.0
57	187,537	0.035	7	0.035	0.0
58	2,105,585	0.032	163	0.032	0.0
59	120,453	0.043	8	0.043	0.0
60	83,667	0.024	7	0.024	0.0
61	60,376	0.011	3	0.011	0.0
62	333,728	0.026	9	0.030	0.1
63	657,550	0.021	17	0.020	-0.1
64	480,310	0.020	12	0.019	0.0
65	203,467	0.028	6	0.028	0.0
66	1,405,975	0.029	21	0.029	0.0
Total	**28,499,606**	**0.031**	**1,755**	**0.031**	0.0

To check that the interpolation of the block model correctly honoured the drilling data, validation was carried out by comparing the interpolated blocks to the sample composite data. RPM created validation panels along the strike of the mineralisation to closely check estimated grades against the drill hole grades. Validation results for all domains and main object 8 and 28 are summarised in **Figure 7-19 and Figure 7-20.**

Figure 7-19 Zhalpak - Validation Plots for Object 8 and 28– Strike Panels

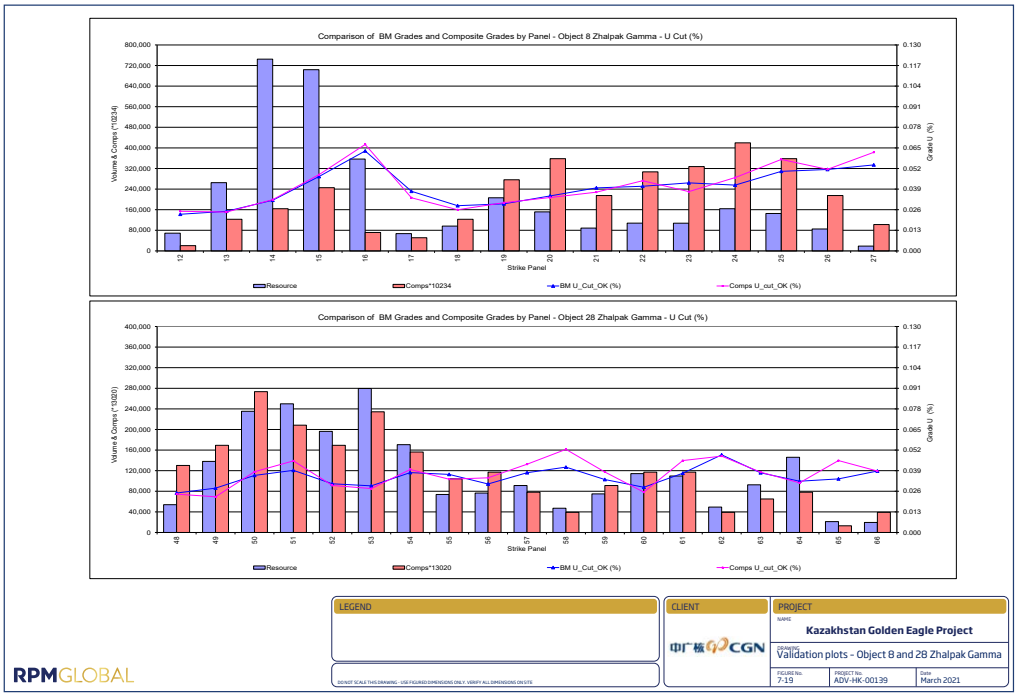


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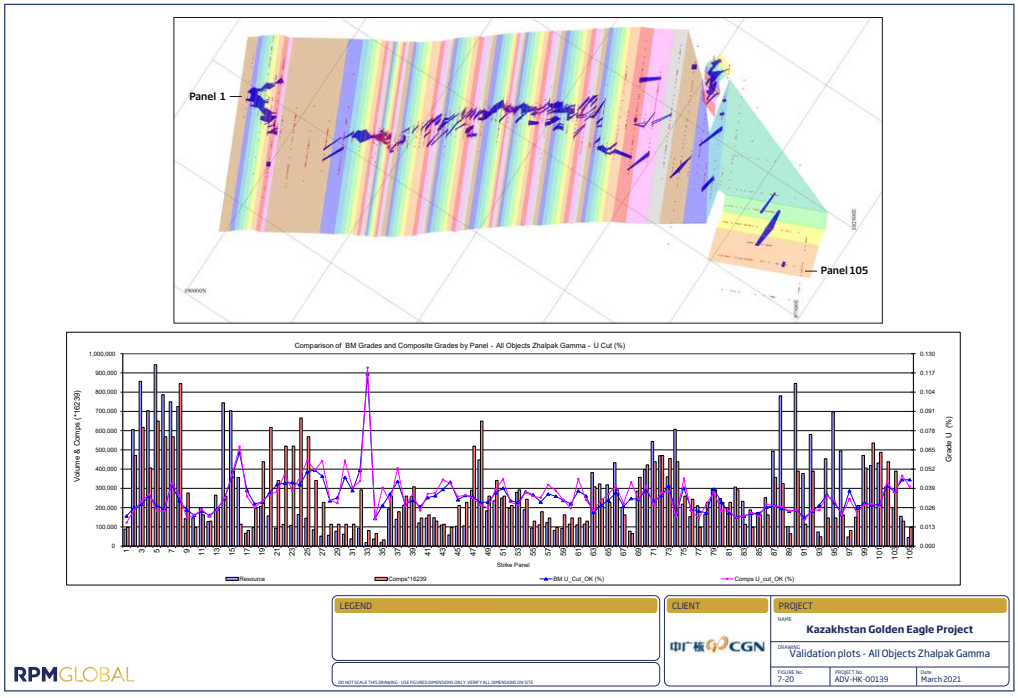
Figure 7-20 Zhalpak - Validation Plots for All Objects – Strike Panels



Zhalpak Production Reconciliation

The reported production for the Zhalpak deposit up to April 2020 was prepared and reviewed by RPM on data provided by Kazatom. No mining has occurred since April 2020 at the project. The depletion was based on RPM's model and reconciliation of the data from the two sources was compiled by RPM and is shown in ***Table 7-14***.

Table 7-14 Reported Production up to April 2020 - Zhalpak

RPM 2021 model					Kazatom data		
Production Block	Tonnes	U %	U t	Recovered U t	U t	Recovered U t	Production Recovery %
opv1	231,596	0.0279	65	34	70	37	52.51
opv2	612,658	0.0295	181	122	181	122	67.53
opv3	215,490	0.0384	83	45	98	54	54.78
Total	**1,059,744**	**0.0310**	**328**	**201**	**349**	**213**	**60.94**

The reported mine production has returned slightly higher U tonnes (5%) than the depleted portion of the 2021 Mineral Resource. This suggest that the model has under-reported the deposit by a relatively minor amount. Overall, the reconciliation figures provide strong support to the 2021 Mineral Resource Estimate.

The review of the mathematical comparison indicates that while local variation can be seen the swath plots highlight that a good overall correlation exists between the block estimates and the composite grades within each mineralised and estimated domain. This good correlation of the drill holes and interpolated block model is further supported when a visual inspection is completed and most importantly both the production reconciliation and production well comparison is excellent and within acceptable limits. As a result of the validation completed, RPM considers the estimate is representative of the composites and is indicative of the known controls of mineralisation and the underlying data.

7.4.4 Classification

Central Mynkuduk

The Mineral Resource was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, geological modelling, sample spacing and mineral continuity. The Measured Mineral Resource was defined as any resource with drill spacing within 25 metres across strike and <200 metres along strike or areas drilled to 50m across strike and 100m along strike. Indicated Mineral Resource was defined as any resource with drill spacing within 50 metres across strike and <200 metres along strike. Inferred Mineral Resource was defined as any resource represented by a single drillhole intercept or narrow channels cross cutting the main strike of the mineralisation. Mineral Resource classification has only been applied to the permeable zones. Classification for Central Mynkuduk is shown in **Figure7-21.**

As part of deriving the classification RPM considered the semi-variogram model discussed in ***Section 7.4.1***. Whilst close to 80% of the sill is reached at a distance of 160m the geological continuity of the main mineralised channels extends for many kilometres as delineated through a consistent drilling grid and is reflective of the style of mineralisation. Additionally, as shown in the grade thickness contour plot in **Figure 7-8** the grade thickness continuity along strike is reasonably similar ranging from 0.15 – 0.25 U% m over the bulk of the deposit with similar grade contours extending up to 4 km within the main channel. To that end RPM was comfortable using slightly longer ranges than normally employed for traditional metalliferous deposits for defining the higher classification of resources. The classification is further supported by the reconciliation discussed in ***Section 7.4.3*** and a significant production history across most of the resource area.

Zhalpak

The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced drilling

of less than 250m by 50m, and where the continuity of the mineralised units was considered reasonable. This 250m spacing is equivalent to approximately a half of the observed major direction variogram range of 600m for the main zones and 85% of the total sill. Inferred Mineral Resources were assigned to those portions of the deposit where drill hole spacing was greater than 250m by 50m or where small, isolated pods of mineralisation occur outside the main mineralised channels and have at least 3 drill hole intersection. The distribution of the various resource categories is shown in **Figure7-22.**

Figure 7-21 Mineral Resource Classification Central Mynkuduk

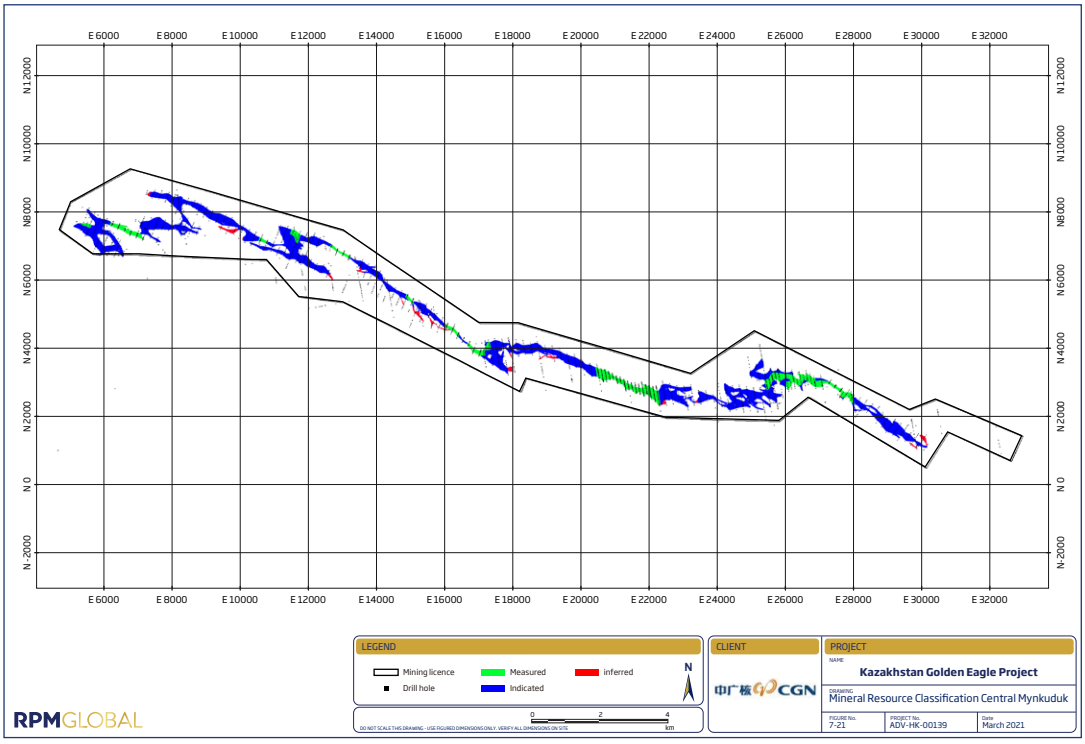


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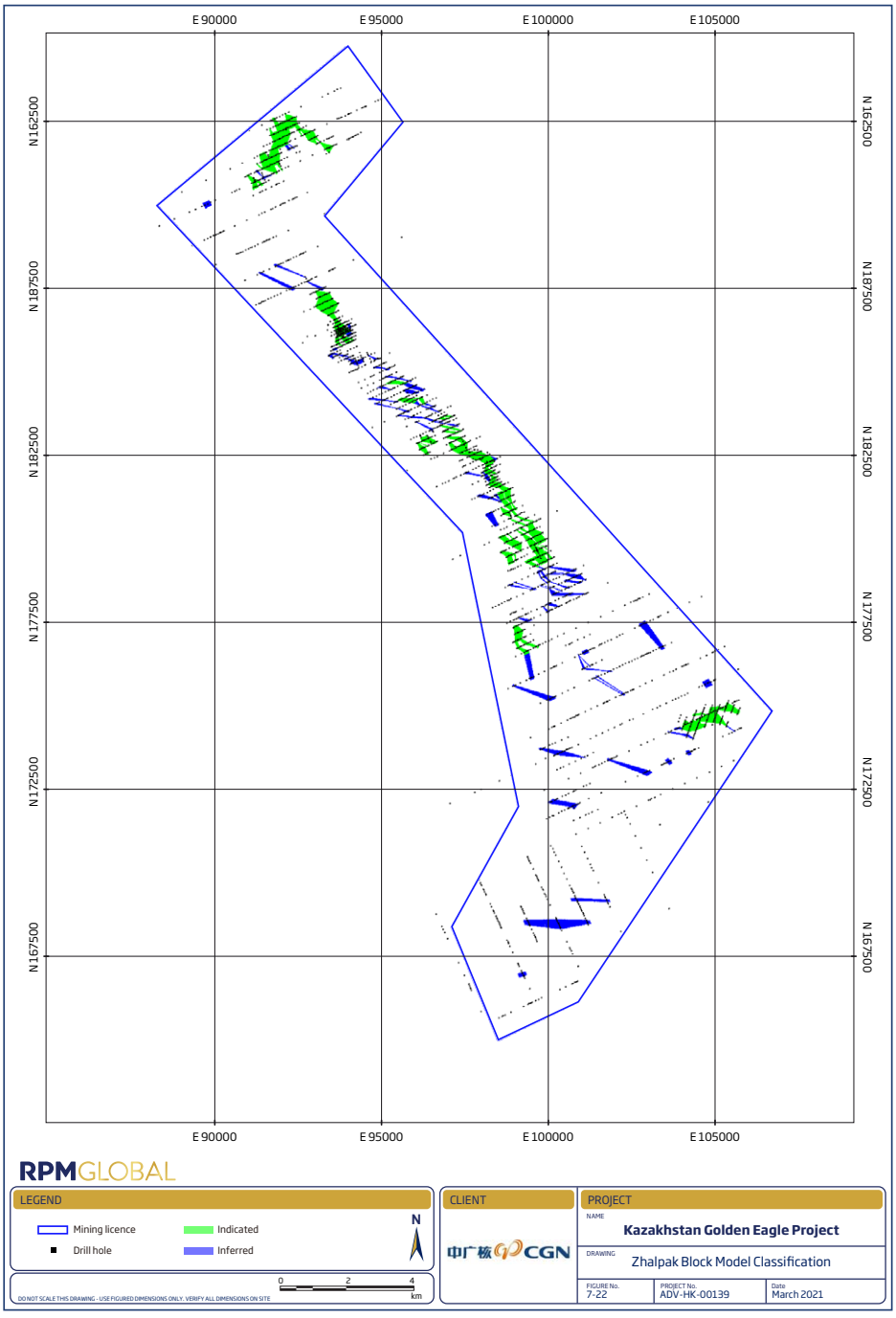
Figure 7-22 Zhalpak Block Model Classification



7.5 Exploration Potential

7.5.1 Central Mynkuduk

Over 95% of the resource area has been extensively drilled and is included in high confidence Measured and Indicated Mineral Resources as summarized in ***Section 7.3***. A small area of broader spaced drilling occurs at the south end of the licence which shows potential to host similar mineralisation as defined to date across a strike length of 2km. This is unlikely to be a material addition to the already reported Mineral Resources but should be targeted as part of future exploration programs for completeness.

7.5.2 Zhalpak

Following a review of the data RPM considers exploration potential at Zhalpak deposit to be low with the majority of the deposit area tested. There is some potential to increase the resource on a small scale in areas currently only broadly drilled. RPM considers that there is good potential to expand the currently defined Indicated resource with further infill drilling as 31% of total resource is currently classified as Inferred Mineral Resource. This presents a good potential for increase in confidence with further drilling.

7.6 Variation from 2018 Company Reporting

No material variation of Mineral Resources and the 2018 resource statements occur on a global basis; however, variation does occur for the classification which is applied. This occurs for two primary reasons:

- RPM's 2020 resources are based on an updated production and depletion data, as well as further understanding of the mineralisation, through review of the individual block production over time via block passports.
- Re-interpreted and estimation using new parameters based on the recent production history, which has resulted in less confidence in some outer regions of the deposits along strike, as a result the classification was decreased to be in line with suitable methods.

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8. JORC ORE RESERVES

The JORC Code defines an 'Ore Reserve' as 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. (JORC Code - Clause 28).

8.1 Areas of Ore Reserves

Two areas are reported in the Statement of Resources., Both are Roll Front style U deposits with the majority of the mineralisation hosted within reduced porous and permeable lithologies. The areas include:

- Central Mynkuduk: extends in a broadly west north west-east south east direction for a strike length of over 27 km, with mineralisationcontinuing along strike in both directions for many more kilometers within licenses not held by the Company. Two main continuous mineralised channels have been delineated with a number of smaller rafts of mineralisation occurring above and below the main body. The extent of the drilling at Central Mynkuduk is shown in **Figure 7-2**. Probable reserves have been defined for this deposit.
- Zhalpak: extends over a southeast-northwest strike length of 22 km with multiple tabular bodies defined over a width of 5 km. The extent of the drilling at Zhalpak is shown in **Figure 7-8**. RPM has not reported Ore Reserves for Zhalpak however has instead completed a scoping level study on the Indicated Mineral Resources as discussed in **Section 9 and 10** of this Report.

8.2 JORC Statement of Ore Reserves

The Proved and Probable JORC Ore Reserves estimate for the Projects are summarized in **Table 8-1.** The JORC Ore Reserves estimates reported below are included in, and not additional to, the Measured and Indicated Mineral Resources quantities reported in ***Section 7***. RPM has estimated the total undiluted Ore Reserves to be **92.3 Mt** at an average grade of **0.026 % U,** all of which is classified as Probable Ore Reserves due to the nature of ISL projects.

Table 8-1 Statement of JORC Ore Reserves Estimate as of 31st December, 2020

Area	Class	Quantity Mt	U %	U kt
Central Mynkuduk	Proven	-	-	-
	Probable	92.3	0.026	23.6
	Total	**92.3**	**0.026**	**23.6**

Notes:

1. *The Statement of JORC Ore Reserves has been compiled under the supervision of Mr. Murray Brooker who is a consultant to RPM. Mr. Brooker has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
2. *The JORC Ore Reserve are undiluted for effective thickness as discussed below and in Section 10.1.2 of this report*
3. *Metal content is post leach recovery (90%) within extracted PLS.*
4. *Figures reported are rounded which may result in small tabulation errors. Ore Reserves have been estimated under the 2012 Edition of the JORC Code.*
5. *Tonnages are metric tonnes.*
6. *Ore Reserves do not account for in pipe or within the plant U content.*

The tonnages outlined in **Table 8-1** excludes "leach dilution" which is the effective volume of sediments leached through the ISL recovery method surrounding the targeted leach horizons. This is however incorporated into the LOM Schedule for the project to allow for the appropriate estimation of pumping volumes, PLS grade and OPEX. The LOM quantity after leach dilution is estimated at **129.9 Mt** at an average grade of **0.018 % U** Refer to **Section 10.1.2** of this Report for more detail.

8.3 JORC Ore Reserves Estimation Procedure

Ore Reserves were estimated using a suite of specialised geological and mine planning software. The approach typically includes optimisation supported by life of mine production scheduling which has been completed by RPM. The input parameters selected are based on the review of the historical production and schedules completed by the Company, discussions with site personnel and site visit observations. To enable the estimation of JORC Ore Reserves, RPM has:

- Reviewed approach, assumptions and outcomes from the Company mine planning studies, including the operating and capital cost forecasts.
- Reviewed information on current operations performance, including operating costs and block and plant processing recoveries.
- Reserves are based on the end of December 2020 depletion surfaces or polygons provided by the Company. As a result, all Ore Reserves and production schedules presented in this report reflect the Reserves as at the 31st December, 2020.
- Reviewed the extraction and injection layout and method and current life of block layout designs.
- Reviewed methodology used to estimate recovery parameters.
- Compared production schedules generated by the Company with those generated by RPM.
- The Mineral Resource geological confidence limits of Measured, Indicated and Inferred polygons were overlaid on the mine plan and Inferred or any unclassified Resources excluded from the estimate.
- The Ore Reserve was then categorised as Proved or Probable based on the Ore Resource confidence, application of modifying factors and the level of detail in the mine planning, with all reserves classified as Probable.
- Generated a discounted cash flow model for the LOM schedule incorporating operating and capital costs and revenue as detailed in **Section 12** and outlined below. RPM reviewed the operating and capital cost estimates prior to applying them in the economic model

8.4 JORC Ore Reserves Estimation Parameters

See **Section 10** for detailed discussions on the Ore Reserves and scheduling parameters utilised.

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9. In-situ Leaching and Uranium Processing

The Central Mynkuduk deposit is in full commercial operation with Ore Reserves estimates and resultant schedules based on the uranium extracted via in-situ leaching. The Zhalpak deposit has been subject to test leaching operations, but has not yet been developed as a commercial operation. No 'traditional' open pit or underground mining methods are applied, as such, no rock disturbance is required with dissolution of uranium extraction by a series of pumping wells ranging in depth from 150m (Zhalpak) to 360m (Central Mynkuduk).

9.1 Summary

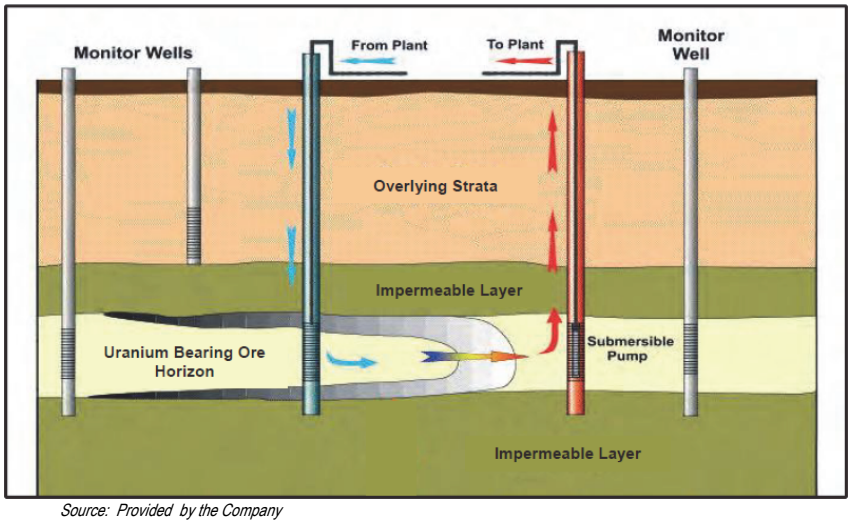
The ISL mining method is a well-known and commonly utilised mineral extraction method in Kazakhstan and the greater uranium industry. Over the Life of Projects ("LOM") ore, based on the currently stated Ore Reserves is planned to be extracted from the Central Mynkuduk operation. Whilst a significant Mineral Resource has been estimated for the Zhalpak area, the project is still under development with further studies necessary to reach sufficient confidence in modifying factors from which Ore Reserves can be estimated. To that end RPM has not reported Ore Reserves for Zhalpak.

Mining is performed via a series of blocks, with injections and extractions wells utilised to produce a 'pregnant' solution of uranium. The Company aims to have 14 active blocks within the Central Mynkuduk deposit (from a total of 72) to enable a relatively constant solution grade to the Central plant. The Central Mynkuduk plant has a throughput rate of 3,500 cu.m/hr which result in a typical yearly capacity of 2,000 t of contained U within the yellow cake product per annum.

The uranium is present as fine uraninite (UO_2) on the surfaces of sands, silts and clays and is readily dissolved in sulphuric acid and forms water soluble uranyl sulphate (UO_2SO_4).

A well field is prepared, known as a pattern, to solubilize and then extract the uranium for final recovery on the surface. Unlike other patterns commonly used in the ISL industry, the nature of the deposits means that the pattern consists of two parallel lines, with one side consisting of the injection wells and the other side the extraction wells. The arrangement is shown in **Figure 9-1,** where acid bearing solution is injected in the uranium bearing sediments and extracted in a nearby well after passing through the uranium bearing sediments.

Figure 9-1 Cross Section of an ISL Operation



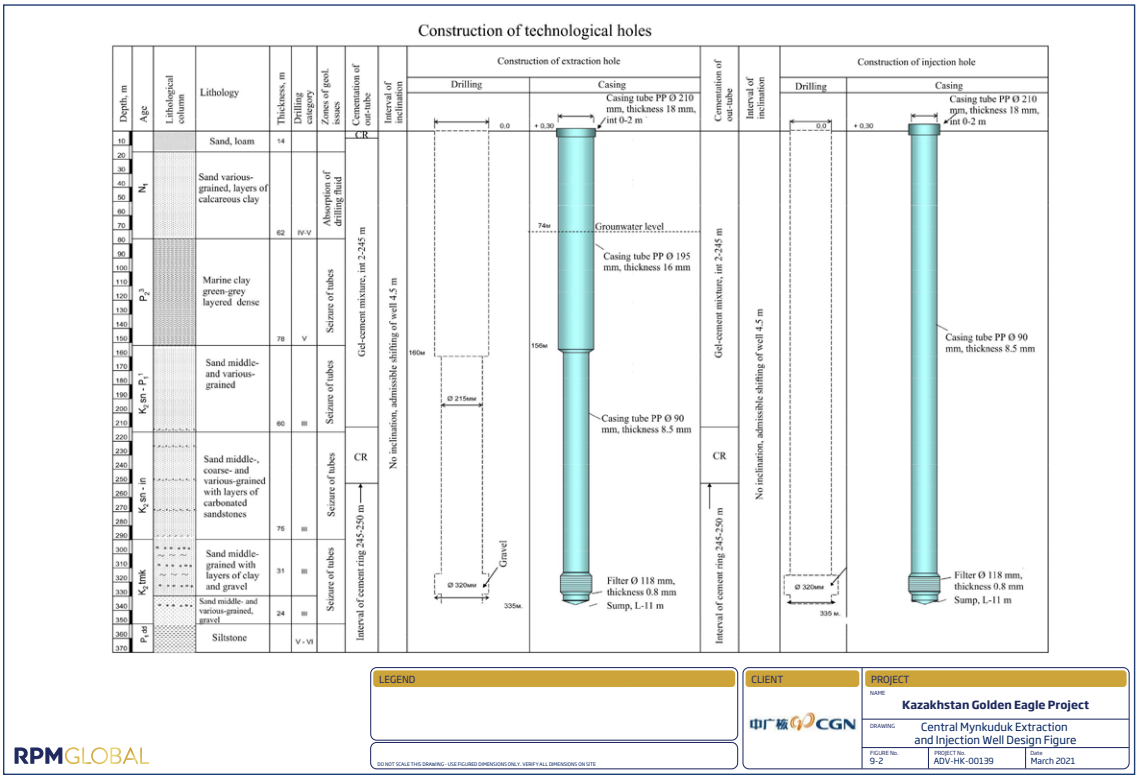
Source: Provided by the Company

A feature of all ISL operations is that they operate in confined aquifers and under 'negative' pressure, that is, more solution is recovered from the aquifer than is pumped into it. The initial stage of leaching is called acidification, where acid solution is pumped into the uranium bearing sediments to 'prepare' the uranium

minerals for leaching, mitigating potential issues with soluble calcium minerals (precipitation of gypsum) and acid consuming species.

The details of the design of the extraction and injection wells for Central Mynkuduk are shown in **Figure 9-2**. The design of the wells is similar for Zhalpak with the wells being much shallower as the mineralised zone occurs between 140-150m in depth at Zhalpak.

Figure 9-2 Central Mynkuduk Injection and Extraction Well Design



9.2 Processing Plant

On the surface, the uranium bearing solution ('pregnant leach solution' or PLS) is contacted with anionic resin which adsorbs the uranyl sulphate. The loaded resin is then subsequently treated by ammonium nitrate to strip the resin and the barren solution, after pH adjustment with sulphuric acid, is pumped back into the uranium bearing sediment. This recirculation continues until at least 90% uranium extraction (government mandated) has been achieved.

The uranium is precipitated from the strip solution with hydrogen hydroxide to form 'yellowcake' (U_3O_8). The Central Mynkuduk plant layout is shown in **Figure 9-3** while the 'yellowcake' process flowsheet is presented in **Figure 9-4** noting the yellowcake is further refined at another facility which is operated by a third party.

The Zhalpak trial operation only produces resin on site which is transported to Central Mynkuduk for further refining to yellow cake.

9.3 Testwork

During the detailed exploration laboratory GRE-27 undertook 20 tests on leaching of uranium from mineralised rocks. The tests' duration was 47.5 to 222 hours with a recovery rate reaching 87 to 98% with a liquid: solid rate ranging between 1.2 to 5.1 cub.m/t. This resulted in an average concentration of uranium in PS of between 63 to 249.4 mg/l. Sulphur consumption was recorded between 3 and 13.2 kg/t ore and 8.6 to 46.7 kg/kg U. Rhenium concentration was being varied from 0.08 to 2.0 mg/l with average 0.57 mg/l. Scandium recovery was varied from 2 to 32% with average 14.2%. As such the later two are regarded as being uneconomic.

Figure 9-3 Mynkuduk Plant Layout

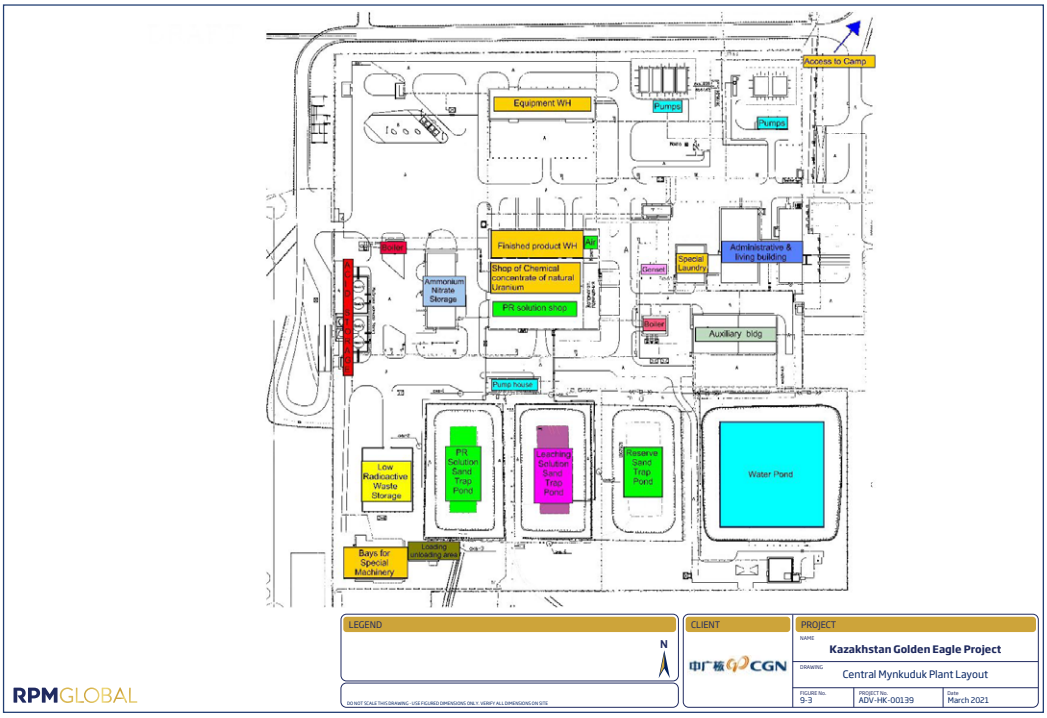


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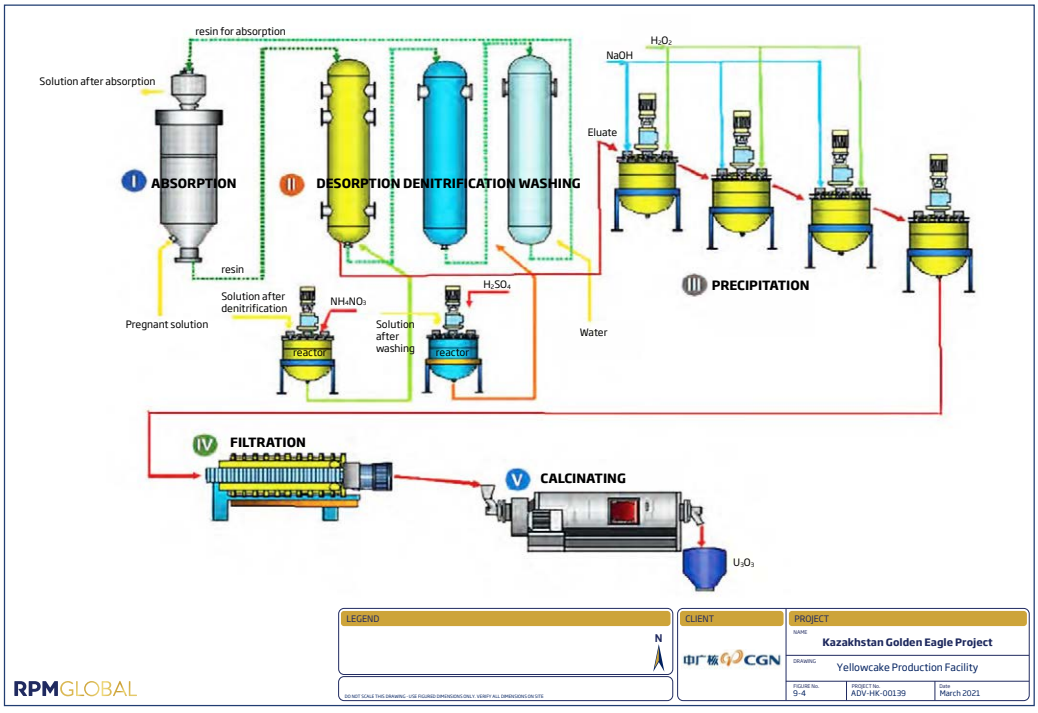
Figure 9-4 Yellowcake Production Facility



9.4 Historical Production

The historical production over the previous 64 full production years shows a relatively stable operation where production averaged 1,900 tpa of U_3O_8 with mining uranium recoveries around 90% (refer to **Table 9-1**). RPM notes total production decreased to 1,600 t of contained uranium in 2019 and 1,300 t in 2020 due to failing uranium prices and is forecast to remain at 1,600 t this level for years - 2021 before ramping back up to 2000 U t in the long-term.

Table 9-1 Central Mynkuduk Historical Production

Measure	Units	Year					
		2015	2016	2017	2018	2019	2020
Active Wells	No.	1,869	1,941	1,551	1,753	1,901	1,807
Injection/Extraction Well Ratio	-	3.60	3.04	2.52	2.92	2.99	3.32
Constructed Wells	No.	447	516	431	321	382	380
Injection/Extraction Well Ratio	-	2.80	2.15	2.40	1.99	2.36	2.37
Well Depth (average)							
Zhalpak	m	-	-	-	-	-	-
Central Mynkuduk	m	365	350	343	343	350	342
Injection Rate (average)							
Zhalpak	m^3/h	-	-	-	1.28	1.41	1.33
Central Mynkuduk	m^3/h	2.39	2.26	2.16	2.55	2.38	2.43
Overall	m^3/h	2.39	2.26	2.16	2.50	2.35	2.41
Extraction Rate (average)							
Zhalpak	m^3/h	-	-	-	3.46	3.86	3.70
Central Mynkuduk	m^3/h	8.37	6.70	6.09	7.39	6.79	6.74
Overall	m^3/h	8.37	6.70	6.09	7.24	6.69	6.71
'Mined' Quantity	t	4.47	4.97	4.46	4.08		
Grade	% U	0.045	0.045	0.045	0.045		
Contained Uranium	t	2,009	2,235	2,002	1,834	1,641	
Produced Uranium	t U	1,770	1,953	1,898	1,656	1,610	
Contained Uranium	t	1,835	2,036	1,710	1,735	1,724	1,362
Produced Uranium	t U	1,808	2,010	1,691	1,710	1,690	1,338
	t U_3O_8	2,132	2,370	1,994	2,017	1,993	1,578
PLS Uranium Recovery							
Zhalpak	%	-	-	-	98.1	96.8	96.7
Central Mynkuduk	%	98.5	98.7	98.9	98.6	98.1	98.3
Overall	%	98.5	98.7	98.9	98.6	98.1	98.3
Overall Uranium Recovery	%	88.1	87.4	94.8			
Sulphur Consumption							
Zhalpak	kg H_2SO_4/kg U	-	-	-	42.1	36.4	43.2
Central Mynkuduk	kg H_2SO_4/kg U	76.8	67.6	77.6	58.2	64.8	81.8
Overall	kg H_2SO_4/kg U	76.8	67.6	77.6	57.2	63.4	81.4
PLS Volume	m^3	26,256	26,186	19,073	22,102	27,271	22,875
PLS Grade	mg/L	69.9	77.8	89.6	78.5	63.2	59.5

Source: Provided by the Company

Table 9-2 summarises the recent drilling history for extraction, injection and monitoring holes, as well as that required for monitoring. Operational exploration drilling is also included for reference. The significant drop in

the drilling and subsequent costs (refer to **Table 12-2**) was due to the adoption of a simpler pattern in 2018, namely parallel rows of injection and extraction drill holes versus the historical hexagonal pattern.

Table 9-2 Central Mynkuduk Recent Production Drilling

Name	Unit	2017	2018	2019	2020
Extraction	**Nos. of holes**	104	59	89	105
	m	35,835	19,365	31,457	35,889
Injection	**Nos. of holes**	250	108	210	249
	m	84,717	35,283	74,116	85,034
Monitoring	**Nos. of holes**	46	5	5	1
	m	1,663	1,740	1,803	371
Increased depth	**Nos. of holes**	26	52	34	4
	m	9,414	NR	11,251	1,425
Operational exploration	**Nos. of holes**	NR	38	44	21
	m	16,172	13,466	15,263	7,288
Total Drilling	**Nos. of holes**	**431**	**262**	**382**	**380**
	m	**147,801**	**88,650**	**133,890**	**130,007**

Source: Provided by the Company

Table 9-3 and **Table 9-4** provide recent historical data on consumables, noting a significant decrease in unit consumption rates in 2018.

Table 9-3 Central Mynkuduk Consumable Consumptions

Consumables		Unit	2017	2018	2019	2020
Mining/leaching						
Sulphuric acid (92,5%)	Acidification	metric tonnes	14,684	4,888	23,931	30,760
	Leaching		127,100	95,756	89,426	86,197
	Total		**141,784**	**100,644**	**113,357**	**116,957**
Power		MWh	31,259	38,125	41,026	34,912
Yellow cake production						
Sulphuric acid (92,5%)		metric tonnes	3,621	2,825	2,935	2,404
Ammonium nitrate		metric tonnes	4,993	4,265	4,351	3,555
Ammonium water		metric tonnes	NR	NR	NR	174
Sodium hydroxide		metric tonnes	1,204	1,018	1,054	775
Ion exchange resin	Ortalyk	m^3	68	NR	NR	NR
	AO NAK KAP		19	NR	NR	NR
	Total		**87**	**99**	**121**	**86**
Filter cloth		m^2	173	206	NR	NR
Power		MWh	11,105	5,527	11,368	9,349
Compressed air		Mm^3	33	NR	NR	NR
Heat		Gcal	1,189	NR	NR	NR
Water		1000 m^3	148	137	NR	NR

Source: Provided by the Company

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Table 9-4 Central Mynkuduk Consumable Metrics

Consumable		Unit	2017	2018	2019	2020
Mining / leaching						
Sulphuric acid (92.5%)	Acidification	kg/kg U	15.22	3.60	14.80	23.27
		kg/t ore	3.60	NR	3.60	3.60
	Leaching	kg/kg U	70.53	59.85	55.55	65.20
	Total	kg/kg U	**85.75**	**63.45**	**70.35**	**88.47**
Power		kWh/m^3	1.54	1.79	1.56	1.55
Yellowcake production						
Sulphuric acid (92.5%)		kg/kg U	2.01	1.77	1.83	1.82
Ammonium nitrate		kg/kg U	2.77	2.67	2.70	2.69
Ammonium water		kg/kgU	NR	NR	NR	1.51
Sodium hydroxide		kg/kg U	0.67	0.64	0.65	0.64
Ion exchange resin	*ORTALYK*	m^3/kg U	0.074	NR	NR	NR
	AO NAK KAP		0.032	NR	NR	NR
	Total		**0.060**	**0.060**	**0.08**	**0.070**
Filter cloth		m^2/kg U	0.0001	0.00013	NR	NR
Power		kWh/kg U	4.30	3.45	7.06	7.07
Compressed air		m^3/kg U	18.09	NR	NR	NR
Heat		Gcal/kg U	0.001	NR	NR	NR
Water		m^3/kg U	0.08	0.09	NR	NR

Source: Provided by the Company

9.5 Zhalpak Trial Production

A trial leach was conducted on the Zhalpak deposit from 2017 to April of 2020 and recovered total of 213t. The actual values for the various operational parameters were basically met as summarised in **Table 9-5**. RPM notes not detailed information was provided for the 2020 production to April.The plant layout is presented in **Figure 9-5.**

Table 9-5 Zhalpak Trial Production Data

Measure	Unit	2017			2018			2019		
		Plan	Actual	Deviation from plan (±)	Plan	Actual	Deviation from plan (±)	Plan	Actual	Deviation from plan (±)
Solution (PLS) recovered	kcu. m.	135	135	0	865.8	857.9	-7.9	918	932	14
Uranium concentration in PLS	mg/L	47	47	0	130.5	130.6	0.1	90	88.8	-1.2
Recovered uranium	t	6	6	0	113	112.1	-0.9	83	83	0
Final product	t	5.3	5.3	0	108.6	107.7	-0.9	80	80	0
Sulphiric acid (acidification)	kg/kgU	21	21.3	0.3	27.4	29.4	2	50.24	39.32	-10.92
Sulphiric acid (processing)	kg/kgU	2.2	2.16	-0.04	2.22	2.15	-0.07	1.95	1.95	0
Ammonium nitrate	kg/kgU	3.2	3.21	0.01	3.2	3.2	0	2.7	2.84	0.14
Sodium hydroxide	kg/kgU	NR	NR	-	0.68	0.69	0.01	0.65	0.83	0.18
Ion exchange resin	kg/kgU	NR	NR	-	0.075	0.075	0	0.08	0.08	0
Filter cloth	kg/kgU	NR	NR	-	0.0002	0.00008	-0.00012	NR	NR	-
Power (leaching)	kWh/kgU	1.98	0	-1.98	3.57	3.61	0.04	0.81	0.65	-0.16
Power (processing)	kWh/kgU	2.9	0	-2.9	3.57	3.61	0.04	3.6	3.52	-0.08
Water supply for technology	m^3/kgU	NR	NR	-	0.09	0.08	-0.01	NR	NR	-

Source: Explanatory Note, DP Ortalyk LLP Financial and Economic Reports for 2017and 2018

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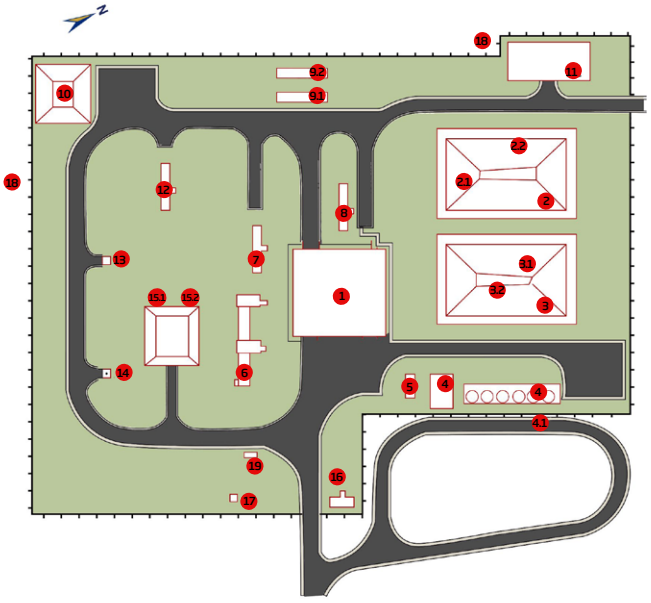
Figure 9-5 Zhalpak Plant Layout



1	Sorbtion Area	9.1	Genset 1
2	PR Solution Sand Trap. 400 m^3	9.2	Genset 2
2.1	PR Solution Pump Station	10	LFO Tank 2 x 10 m^3
2.2	PR Solution Level Control	11	Low Radiative Temp. Storage
3	Leaching Solution Sand Trap, 400 m^3	12	Pump Station
3.1	Leaching Solution Pump Station	13	#1 Borehole Shelter
3.2	Leaching Solution Level Control	14	#2 Borehole Shelter
4	H_2S Tank 6 x 15 m^3	15.1	Firewater Tank 50 m^3
4.1	H_2S Unloading Ramp	15.2	Firewater Tank 50 m^3
5	First Aid	16	Check - point Gate
6	Decontamination Point & Canteen Blocks (B1,B2,B3,B4)	17	WC
7	Lab & WH	18	Fence
8	Control & Switch Board Room	19	Containerized Area for Hard House - hold waste

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LEGEND

Road Building

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

中广核 CGN

PROJECT

NAME: Kazakhstan Golden Eagle Project

DRAWING: Zhalpak Plant Layout

FIGURE No.	PROJECT No.	Date
9-5	ADV-HK-00139	March 2021

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10. Life of Project Schedule

The production plans for the current Assets prepared by RPM, as shown in **Table 10-1 and Figure 10-1,** are based on the Ore Reserves plus the scoping study schedule for Zhalpak post 2022. Based on the total mineable economic material, the development sequence, block designs, the forecast extraction for the operations are shown in **Table 9-1** as at 31st December 2020. RPM considers the proposed Life of Project Development Sequence and Production Forecast to be reasonable and achievable based on the current forecasts and designs. RPM does however recommend that further optimisation and long-term planning be completed to confirm and optimise the LOM plan outcomes on an ongoing basis as per normal industry practices. This optimisation should focus of the sequence of block development in conjunction with capital and operating cost analysis to maximise the profitability of each operation in particular the extraction and grade management for the PSL volumes.

Table 10-1 presents the forecast production and operating metrics until closure in 2036. The production is largely based on the Central Mynkuduk operation which runs until 2033, with Zhalpak (currently not defined as reserves) proposed to commence well field establishment in 2022 and ramp up to full production from 2023 to 2026 and operates at circa 800 tpa U through to closure in 2036. The Central Mynkuduk operation decreased throughput to 1,600 tpa U in 2019 and is forecast to produce 1,300t during 2020 due to COVID -19. Production is forecast to increase to 1,600 again in 2021 as a reflection of market conditions and intends to ramp back up to approximately 2,000 tpa U from 2023 for the remainder of the operational life.

RPM notes the following regarding the schedule:

- The Central Mynkuduk material is entirely derived from the Ore Reserves to a PFS level of accuracy for the Life of Project, no inferred or additional material is included.
- RPM has assumed that the point of sale is at the gate of the refinery and as such the final product is recovered U at the plant in yellow cake form.
- No Reserves are estimated for Zhalpak. The quantities included in the schedule are based on a Scoping Study undertaken by RPM to an accuracy of 50% based on the Indicated material only, with no Inferred material included in the LOM schedule.
- The Central Mynkuduk schedule is more complex than the Zhalpak schedule due to the three existing pumping stations and the relatively large area of the deposit that has been developed and leached to various levels of depletion. The initial years of the LOM schedule focus on extracting the material in the developed areas first and then expanding out to new areas.
- In completing its schedule for Central Mynkuduk, RPM noted that so as to maintain uranium production from (2021 to 2023) a significant investment in establishment of new injection and extraction wells is necessary to meet the forecast metal production rate. This is reflected in the below life of project schedule and will impact capital requirements during those years. This occurs again in 2027-2029 ahead of the project winding down with leaching continuing for a number of years after establishment of the last working area.
- RPM has followed the approach that is understood to have been taken on site by developing a schedule focusing on maintaining the production rate by developing new areas each year. RPM considers that this approach may be sub-optimal and that optimisation of the Central Mynkuduk LOM schedule should be considered as the project develops further. The results of the optimisation would be able to assist the site management in determining what level of new area development best matches the prevailing market conditions.
- The Zhalpak production schedule is based on the assumption that a new plant will be constructed and increased capacity of the resin plant. As such further CAPEX will be required as outlined in **Section 12**.

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Table 10-1 Forecast Life of Project Schedule

Measure	Unites	Year total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Constructed Wells																		
Zhalpak	No.	**7,971**		211	643	805	717	743	730	883	751	641	679	521	537	111		
Injection	km	**750**		20	60	76	67	70	69	83	71	60	64	49	50	10		
Extraction	km	**446**		12	36	45	40	42	41	49	42	36	38	29	30	6		
Central Mynkuduk	No.	**5,413**	855	550	760	490	284	344	395	745	652	153	185					
Injection	km	**772**	118	76	105	67	39	47	54	102	90	34	41					
Extraction	km	**460**	70	45	62	40	23	28	32	61	53	20	24					
Extraction Rate (average)																		
Zhalpak	cu.m/h	**1,504**			227	471	1,609	2,015	1,793	1,858	1,827	2,209	1,879	1,605	1,698	1,304	1,343	1,219
Central Mynkuduk	cu.m/h	**2,462**	2,508	3,787	2,942	3,021	2,587	2,618	3,062	2,331	2,868	1,941	1,335	1,514	1,533			
Total	cu.m/h	**3,373**	2,508	3,787	3,169	3,492	4,196	4,633	4,855	4,189	4,695	4,150	3,214	3,119	3,231	1,304	1,343	1,219
In Situ Aquifer Quantity																		
Zhalpak	Mt	**30.4**			0.3	0.7	2.6	3.0	2.7	2.8	2.7	3.3	2.8	2.4	2.6	1.9	2.0	0.5
Central Mynkuduk	Mt	**92.3**	8.9	14.1	12.3	12.9	9.6	6.9	8.3	5.6	5.7	4.0	2.3	1.5	0.2			
Total	Mt	**122.7**	8.9	14.1	12.7	13.6	12.2	9.9	11.0	8.4	8.4	7.3	5.1	3.9	2.8	1.9	2.0	0.5
Insitu Aquifer Grade																		
Zhalpak	% U	**0.032**			0.019	0.042	0.023	0.031	0.034	0.034	0.034	0.028	0.033	0.039	0.035	0.035	0.029	0.017
Central Mynkuduk	% U	**0.026**	0.020	0.013	0.018	0.017	0.024	0.033	0.026	0.036	0.034	0.045	0.072	0.081	0.045			
Total	% U	**0.027**	0.020	0.013	0.018	0.019	0.023	0.032	0.028	0.036	0.034	0.038	0.051	0.055	0.035	0.035	0.029	0.017
Active Aquifer Quantity*																		
Zhalpak	Mt	**69.4**			0.4	1.6	5.6	7.0	6.2	6.5	6.4	7.7	6.5	5.6	5.9	4.5	4.7	0.8
Central Mynkuduk	Mt	**129.9**	11.3	8.6	11.8	15.2	12.5	10.9	11.5	8.9	9.1	8.3	12.2	9.2	0.4			
Total	Mt	**199.3**	11.3	8.6	12.2	16.8	18.1	17.9	17.7	15.4	15.5	16.0	18.7	14.8	6.3	4.5	4.7	0.8
Active Aquifer Grade*																		
Zhalpak	% U	**0.014**			0.015	0.018	0.011	0.013	0.015	0.015	0.015	0.012	0.014	0.017	0.015	0.015	0.012	0.012
Central Mynkuduk	% U	**0.018**	0.016	0.021	0.019	0.015	0.018	0.021	0.019	0.023	0.021	0.022	0.014	0.014	0.025			
Total	% U	**0.017**	0.016	0.021	0.019	0.015	0.016	0.018	0.018	0.019	0.018	0.017	0.014	0.015	0.016	0.015	0.012	0.012
PLS Volume																		
Zhalpak	kcu.m	**176,452**			1,991	4,129	14,092	17,655	15,705	16,275	16,007	19,354	16,458	14,056	14,872	11,425	11,763	2,670
Central Mynkuduk	kcu.m	**270,660**	21,970	33,174	25,772	26,464	22,662	22,934	26,823	20,420	25,124	17,003	11,695	13,263	3,357			
Total	kcu.m	**447,112**	21,970	33,174	27,763	30,593	36,754	40,588	42,528	36,695	41,130	36,357	28,153	27,318	18,230	11,425	11,763	2,670
Uranium Mine Recovery																		
Total In-situ Uranium	t U	**33,455**	1,808	1,806	2,301	2,573	2,838	3,221	3,120	2,984	2,845	2,764	2,643	2,226	986	678	570	93
Extracted Uranium in PLS																		
Zhalpak (90%)	t U	**8,744**			53	264	529	839	842	843	841	844	841	844	798	610	513	84
Central Mynkuduk (90%)	t U	**21,228**	1,608	1,626	2,033	2,033	2,033	2,033	1,931	1,834	1,728	1,626	1,524	1,125	94			
Total																		
PLS Uranium Recovery																		
Zhalpak (94.9% recovery)	t U	**8,298**			50	251	502	796	799	800	798	801	798	801	757	579	487	79
Central Mynkuduk (98.4%)	t U	**20,888**	1,582	1,600	2,000	2,000	2,000	2,000	1,900	1,805	1,700	1,600	1,500	1,107	92			

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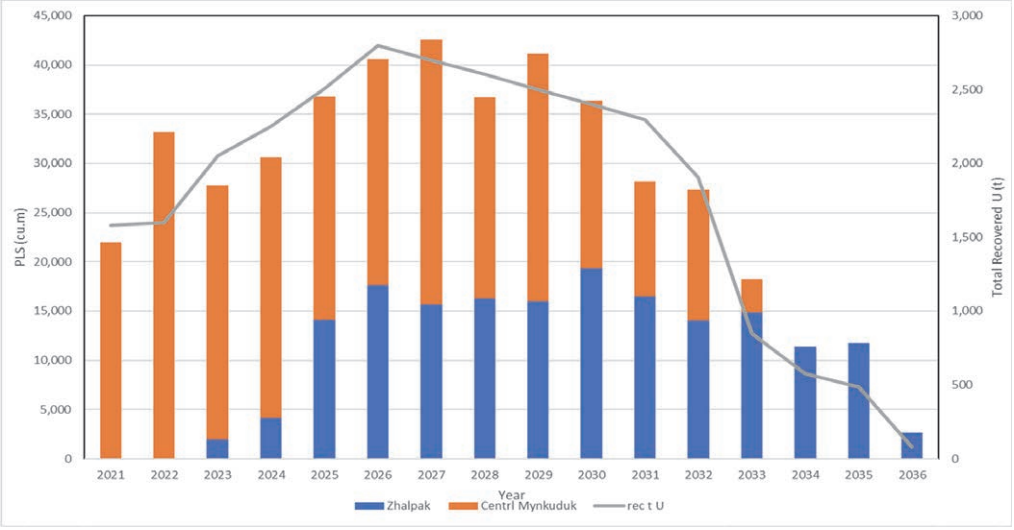
Overall	t U	**29,186**	**1,582**	**1,600**	**2,051**	**2,251**	**2,502**	**2,797**	**2,699**	**2,605**	**2,498**	**2,401**	**2,298**	**1,908**	**850**	**579**	**487**	**79**
	$t U_3O_8$	**34,425**	**1,866**	**1,887**	**2,419**	**2,655**	**2,951**	**3,299**	**3,183**	**3,073**	**2,947**	**2,832**	**2,710**	**2,250**	**1,002**	**683**	**574**	**94**
Sulphur Consumption																		
Zhalpak	kt	**951**		5.5	21.3	43.4	63.4	91.0	90.6	94.6	91.2	88.3	89.3	85.2	81.8	54.6	43.7	7.1
Central Mynkuduk	kt	**1,620**	130.1	131.6	167.1	155.2	153.5	156.3	144.8	145.8	132.3	115.1	107.1	74.5	6.1			
Overall	kt	**2,571**	130.1	137.1	188.4	198.6	216.9	247.2	235.4	240.4	223.4	203.5	196.4	159.7	87.9	54.6	43.7	7.1
PLS Volume	kcu.m																	
Zhalpak	kcu.m	**176,452**			1,991	4,129	14,092	17,655	15,705	16,275	16,007	19,354	16,458	14,056	14,872	11,425	11,763	2,670
Central Mynkuduk	kcu.m	**270,660**	21,970	33,174	25,772	26,464	22,662	22,934	26,823	20,420	25,124	17,003	11,695	13,263	3,357			
mg/L																		
Zhalpak	mg/L	**49.6**			27	64	38	48	54	52	53	44	51	60	54	53	44	31
Central Mynkuduk	mg/L	**78.4**	73	49	79	77	90	89	72	90	69	96	130	85	28			

Note: Includes effective leach thickness dilution as discusses in Section 10.1.2 of this Report. This parameter is only used to estimate PLS volumes and grades*

Figure 10-1 Graphical Representation of Life of Project Plan



10.1 Mining Schedule Procedures

10.1.1 Mining Limits and Parameters

The life of mine production schedules were prepared using Gemcom Minesched scheduling software along with the RPM (2020) block models and the drill hole layouts as detailed in **Section 9** of this report.

The parameters utilised within the schedules for both deposits included:

- Leach Recovery of Resource: 90%. This is based on the regulatory requirement to extract 90% over the life of the block. Historical production supports this assumption.
- Process Recovery from Leachate: Central Mynkuduk 98.4%, Zhalpak 94.9%. These recoveries are based on the detailed test work undertaken as well as historical production records provided by the Company.
- Average 60 to 70 days of acidification prior to commercial production based on historical production.
- Minimum thickness of 4m was utilised.

Each schedule was set up and undertaken differently due to operational difference with details of assumptions and results provided below.

10.1.2 Effective Leach Dilution

Both Central Mynkuduk and to a greater extent Zhalpak leach multiple uranium bearing horizons across the profile of the deposit within permeable sediment horizons. Whilst targeted leaching is carried out, through the use of specific screen intervals in the well instalation, the presence of adjacent and interbedded permeable but non mineralised host sediments results in a significant amount of dilution (reflected in the Effective Leach Thickness) whereby leach solution extends beyond the targeted horizons between the injection and extraction holes. The minimum mining thickness for the projects is considered to be 6 m. Zhalpak has a thinner average resource thickness and greater effective dilution.

Table 10-2 outlines the effective dilution applied by the Company to the mineable quantity estimates, with material at a 0 U% grade incorporated into the estimate with the mineralised material (refer to Table 8−1).

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Table 10-2 Effective Thickness Dilution for Reserve and Mineable Quantity Estimate

	Zhalpak	Central Mynkuduk
Average Thickness of resource (m)	3.3	6.05
Effective Leach Thickness (m)	7.5	11.05
Effective Dilution	**127%**	**83%**

RPM has applied the same effective thickness dilution to its in situ mineable quantity for Zhalpack when deriving the PLS quantity and grades. The reserve estimate in section 8 accounts for the greater volume of sediments exposed to the acidification and leaching and the continued dilution of the leach solution with groundwater present in those sediments during the extraction from blocks. The effective dilution is considered to be greater at Zhalpak, due to geological conditions there. The effective dilution is based on operational information for both projects and evaluation of the volumes of PLS recovered and the uranium content extracted.

10.1.3 Central Mynkuduk Schedule

The Central Mynkuduk schedule commences with the areas currently developed and partially depleted after which it is assumed that drilling of new holes can take place on an ongoing basis to facilitate new block areas to be developed.

An overall fluid factor of 2.7 cu.m/t was used across the site and it is assumed that the three polygon areas will continue operation with a combined maximum pumping capacity of 3,500 cu./hr. A Uranium production limit applied by the Company of 1,300 tpa was used for 2020 with a 1,600 tpa in 2021 forecasts followed by 2,000 tpa from 2022 onwards. These production limits have resulted from COVID-19 restrictions as well as resultant market demand. **Table 10-1** summarises the schedule results.

The Life of Project schedule was separated into three stages for scheduling as shown in **Figure 10-3, Table 10-3** and 錯誤! 找不到參照來源。:

- **Stage 1** – Currently producing area. The measured and indicated Mineral Resources in these areas have been partially depleted with all wells and infrastructure in place for ongoing operations.
- **Stage 2** – Designed area. The measured and indicated Mineral Resources in these areas are not depleted and have not had injection or extraction wells drilled although they have been designed by the Company. The represent the near term (2 to 4 years) of the forecast production.
- **Stage 3** – Un-designed area. The measured and indicated Mineral Resources in these areas were not designed by the Company and RPM has carried out the design of the blocks to extract the uranium. As noted above these areas should be the focus of optimisation as further exploration and infill drilling is undertaken.

Based on production records provided, more than half the total area of 789 Ha has been developed and at least partially depleted. **Table 10-3** below and graphically in **Figure 10-3** show the new area required to be developed per year as well as the tonnes of Resource contained within that area which requires initial acidification prior to commencing production leaching.

Table 10-3 Central Mynkuduk - New Area and Resource Tonnes Developed as per LOM Schedule

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
New Area Developed requiring establishment of well field (Ha)	56.0	36.0	49.8	32.1	18.6	22.5	25.9	48.8	42.7	16.0	19.3	2.0
New Resource Tonnes for Initial Acidification (Mt)	7.3	7.4	10.0	6.6	6.1	6.9	5.5	7.6	5.7	2.7	2.3	0.4

While RPM presents the schedule on an annual basis, each block is operated separately with its own forecast and U recovery estimate. **Figure 10-2** shows an example of Block 62-1 forecast and actual recoveries to date. The individual blocks are forecast with the target to achieve the desired PLS volume and grade to achieve the U product. Each block is monitored with samples taken of the PLS each day upon extraction as well as

monitoring of the volume. These samples provide live readings to a central control room with operating overseeing the PLS into the plant.

Figure 10-2 Forecasting and actual data of mining parameters on example of block 62-1

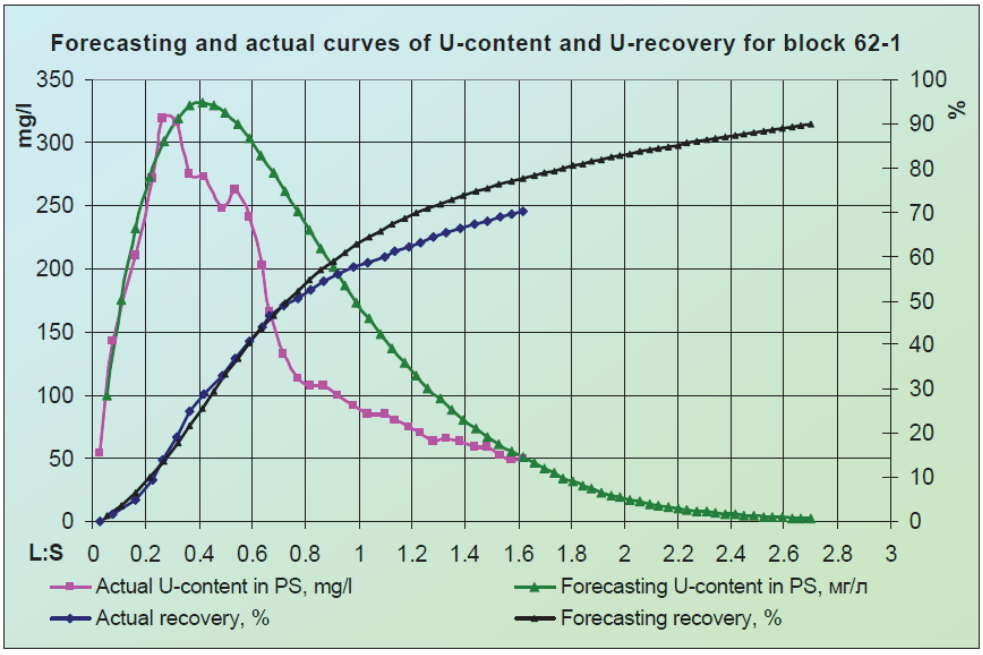
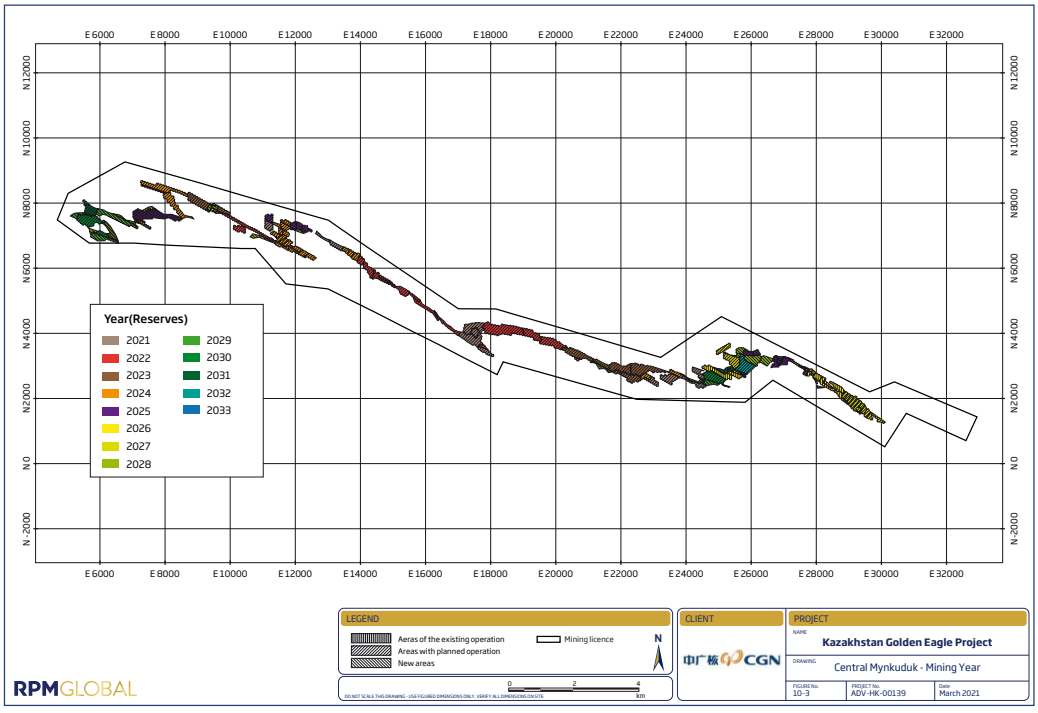


Figure 10-3 Central Mynkuduk LOM Schedule



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10.1.4 Zhalpak Schedule

The Zhalpak schedule is based on an expanded operation following the successful completion of trial production. No Ore Reserves have been estimated with the entire schedule based on the mine scoping study. RPM notes only the Indicated resources are included in the schedule which is considered to have an accuracy of +/- 50%.

RPM assumes as part of its schedule that a detailed pre-production study and associated final teswtwork and necessary approvals will be received in 2021 for the full scale development and operations commencing in 2022, as shown in **Table 10-4** 錯誤! 找不到參照來源。 after establishment of the well fields and associated surface infrastructure.

An overall fluid factor of 2.3 cu.m/t was used across the site and it was assumed that two pumping facilities will be developed with production advancing north and south simultaneously from the Trial Area. The resultant area schedule is summarised in **Table 10-4** *錯誤! 找不到參照來源。* and shown graphically in **Figure 10-3**

The trial area was 16 Ha which represents less than 0.5% of the total area of the reported Indicated Mineral Resources (833 Ha). **Table 10-4** below shows the new area required to be developed per year as well as the tonnes of Resource contained within that area.

Table 10-4 Zhalpak - New Area and Resource Tonnes Developed as per LOM Schedule

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
New Area Developed requiring establishment of well field (Ha)	22	67	84	75	78	76	92	78	67	71	54	56	12
New Resource Tonnes for Initial Acidification (Mt)	1.84	5.60	7.01	6.24	6.46	6.36	7.68	6.53	5.58	5.91	4.54	4.67	0.96

10.1.5 Zhalpak Mineable Quantity Estimate

RPM has completed a Mineable Quantity estimate for the Indicated portion of the Zhalpak Mineral Resource. RPM notes that this estimate is not an Ore Reserve as per the definition of the JORC Code as it is supported only by Scoping study level of confidence technical inputs.

Table 10-5 Zhalpak – Mineable Quantity Estimate

Area	Quantity Mt	U %	U kt
Zhalpak	30.4	0.032	9.7

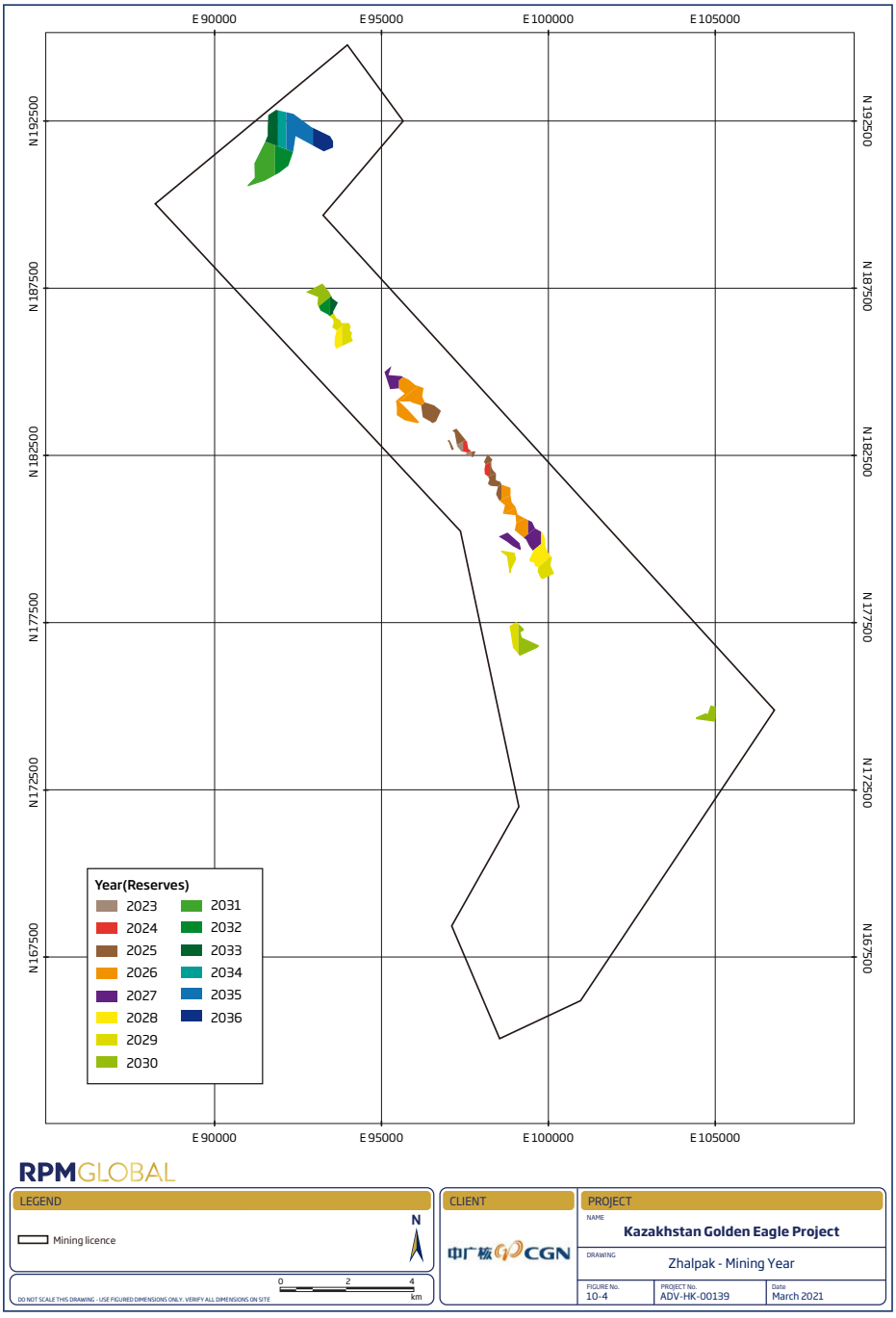
Note: The Mineable Quantity Estimate are undiluted for effective thickness as discussed below and in Section 10.1.2 of this report

A high-level economic assessment completed by RPM shows that based on the currently assumed modifying factors and long term consensus forecast of 30USD / U lb, the Zhalpak scoping study presents positive cashflow, as such RPM considers the production schedule to be suitable for presentation in this Report. A review of the key project drivers shows the NPV to be highly sensitive to U price, as such in future studies analysis to optimize the cost profile and long term sales price should be undertaken.

RPM notes that Mineral Resources that are not Ore Reserves do not have demonstrated economic viability, and as such there is no certainty that the scoping study and economics will be realized at Zhalpak as the studies progress.

The tonnages outlined in **Table 10-5** excludes “leach dilution” which is the effective volume of sediments leached through the ISL recovery method surrounding the targeted leach horizons. This is however incorporated into the LOM Schedule for the project to allow for the appropriate estimation of pumping volumes, PLS grade and OPEX. The LOM quantity after leach dilution is estimated at **69.4 Mt** at an average grade of **0.014 % U** Refer to **Section 10.1.2** of this Report for more detail.

Figure 10-4 Zhalpak LOM Schedule (Scoping Study)



11. INFRASTRUCTURE AND LOGISITCS

11.1 General

The Central Mynkuduk and Zhalpak site locations are shown in **Figure 1-1 and Figure 3-1**. All of the required infrastructure for the Central Mynkuduk and Zhalpak Project is in place to support the Ore Reserves Schedule as presented in Section 10. The sites are serviced by excellent roads and it is well situated for shipping and receiving of the required supplies. RPM considers the infrastructure for the Mynkuduk and Zhalpak Project appropriate and acceptable.

The existing infrastructure facilities are summarized in **Table 11-1** while the Central Mynkuduk site view is shown in **Figure 11-1**.

Table 11-1 Mynkuduk/Zhalpak Infrastructure Summary

Facility	Description
Off Site Roads	Access to Mynkuduk site is 70 km from the town of Tailkonur and 240 km from the rail station Shieli. Access to Zhaplak is 85 km on paved side roads from the town of Kyzemshek. There is an asphalt road between Zhalpak and Mynkuduk.
Water supply	Mynkuduk & Zhalpak: process water supplied from wells. Drinking water for Zhalpak is delivered by contractor.
Water treatment	Mynkuduk: Reverse Osmosis Plant with additional treatment used for drinking.
Power supply	Mynkuduk: via existing 110 kV overhead power line. 1 MW solar power plant on site. 280 kW emergency gentset. 7 MW total power requirement. Zhalpak: via 6 kV overhead power line.
Fuel supply	Mynkuduk & Zhalpak: by contractor.
Office Buildings	Mynkuduk & Zhalpak: all major buildings are in place to support production
Camp	Mynkuduk: available with recreation facility. Zhalpak: not available, personnel is transported back and forth to other camps in the region, however onsite kitchen facilities for workers
Communications	Mynkuduk & Zhalpak: radio, phone land line, mobile phones, cable television, CCTV systems.
Waste Water Treatment Plant	Available at both sites.
Non-radioactive industrial solid waste Low Radiation Waste Storage	Mynkuduk & Zhalpak: designated dump area. Mynkuduk - 80,000 cu.m capacity Zhalpak: temporally storage only. Capacity unknown.

Source: RPM observations on Site and Information provided by the Client

Figure 11-1 Central Mynkuduk site view

11.2 Offsite Roads

Access to Central Mynkuduk site is via a 70 km asphalt road from the town of Tailkonur (and further to Shemkent) and 240 km from the rail station Shieli. Access to Zhaplak is 85 km on asphalt road from the town of Kyzemshek.

An asphalt road connects the Zhalpak and Central Mynkuduk sites which is suitable all year round and in suitable conditions for planned production.

11.3 Water Supply

Non-potable water on the sites is delivered from artesian wells in confined aquifers. The total capacity of water supplied to Central Mynkuduk site is up to 862cu.m/day. The capacity of artesian water wells for Zhalpak was not provided, however given the test operation that has been conducted it is likely to be suitable.

11.3.1 Fire Water

Both sites have firewater systems in place. The Central Mynkuduk site has two firewater ponds at a capacity of 150 cu.m each while the Zhalpak site has two firewater tanks at a capacity of 50 cu.m each. RPM in opinion, that the available capacity of fire water system is suitable for the scale of the operation. Furthermore as noted in **Section 13**, the required permits are in place

11.3.2 Treated water

Both sites have R.O. water treatment plants sufficient for forecast production requirements.

11.3.3 Potable Water Supply

Central Mynkuduk: Operational water treatment plant on site with additional treatment making local water suitable for drinking however RPM is aware that water for the camp is also trucked in for use.

Zhalpak: Drinking water is delivered by a contractor. There is a potable water tank with a capacity of 50 cu.m.

11.4 Power Supply

Central Mynkuduk: The majority of the power is supplied from the existing 110 kV overhead power line connected to the onsite110/10kV main substation and then internally distributed on site to one 10/6 kV and two 10/0.4 kV substations. The Company has also installed solar panels which have a 1MW capacity. The solar power supplies power to the mine site pumps while a 280 kW diesel power plant to provide back-up power in the case of an emergency. The total power requirement for the Central Mynkuduk plant is 7 MW.

Zhalpak: Power is supplied from the existing 6kV overhead power line and further 6/0.4 kV substation while two diesel generators on site for back-up power. RPM was not able to confirm their total capacity, however as per information received during the site visit, it is sufficient for an emergency situation.

In RPM's opinion, both sites, Central Mynkuduk and Zhalpak have sufficient power supply to support the ongoing operations as per the Ore Reserve schedule.

11.5 Compressed Air

Both sites have air compressor stations installed in a designated room with a noise protection requirement, adequate ventilation and heat dissipation is necessary to ensure the temperature is within the limits set by the manufacturer of the compressors. Air compressor stations have sufficient capacity for the process needs.

11.6 Boiler house

Both Central Mynkuduk and Zhalpak have light fuel oil (LFO) fired boiler houses on site to supply the heat required for process needs and heating of buildings.

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11.7 Warehouse (WH)

Both sites have all required Warehouses and spare parts, shown in **Section 9**.

11.8 Mobile workshop/Garage

Only the Central Mynkuduk site has a designated maintenance bay and garage for mobile fleet, however this is suitable for the level of production at Zhalpak.

11.9 Fuel Supply and Storage

Fuel supply for both sites is provided by the Contractor.

Mynkuduk: has on site LFO tanks for emergency Genset and mobile equipment. RPM was not able to confirm their capacity however observed both on site and through discussions with site personnel suitable for ongoing operations during the winter months.

Zhalpak: has two on site LFO tanks with a capacity of 10 cu.m each, designated for diesel generators.

11.10 Camp

The Mynkuduk site has its own camp with a recreation facility and a capacity of up to 150 people. During the site visit RPM noted the excellent facilities onsite.

Zhalpak does not have accommodation camp onsite with Personnel is transported daily back and forth from the town of Kyzemshek, 85 km away or nearby camps of other companies within th. An onsite kitchen provided food for site personnel.

11.11 Buildings and Facilities

The Mynkuduk buildings and facilities layout shown in **Figure 9-2** include the following:

- Administrative and Office buildings;
- Special Laundry;
- Auxiliary building;
- Equipment Warehouse;
- Acid Storage
- Air compressor station
- Gen.set building
- Boiler house
- Ammonium Nitrate Storage
- Finished Product Storage (Yellow Cake)
- Shop of natural Uranium chemical concertation
- PR solution shop
- Low Radioactive Waste Storage
- Sand Trap Pond for PR solution
- Reserve Sand Trap Pond
- Sand Trap Pond for Leaching Solution
- Water Pond
- Fire water

- Pump House
- Special Machinery Bays
- Loading/Unloading
- Standalone Camp (not shown)

The Zhalpak site building and process facilities, shown in **Figure 9-4** include the following:

- Adsorption Shop
- PR solution sand trap pond
- PR solution Pump Station
- Leaching solution sand trap pond
- Leaching solution Pump Station
- Sulfide Acid Storage tanks
- Sulfide Acid unloading ramp
- First Aid Station
- Decontamination point and Canteen (50 people capacity)
- Lab and Warehouse
- Control and Switchboard room
- Two diesel generators
- LFO tanks
- Temporally Low Radioactive Waste Storage
- Pump Station
- Shelters for borehole#1 and #2
- Firewater tanks
- Security check point
- WC
- Storage area for containerized solid house-hold waste

11.12 Reagents Storage

Both sites have designated storage capacity for all reagents as per local regulations and permitting. RPM inspected these storage areas and were considered suitable with protection from the extreme weather conditions in the region. Reagents storage locations are shown in **Figure 9-3 and Figure 9-5** at Central Mynkuduk and Zhalpak respectively.

All areas where the preparation and dosing of reagents systems take place are contained and equipped with floor drainage pumps for the return of any leaks to the preparation system. In addition, points with eyewash showers for emergency care.

11.13 Communication system

Radio, phone lands line, mobile phones, cable television, CCTV systems are available for the operation continuously, 24 hours a day.

11.14 Waste Water Treatment Plant (WWTP)

The wastewater treatment plant is in place on both sites and have sufficient capacity.

11.15 Supply and Product Transportation

All supply and waste disposal is undertaken by Trade and Transport Company LLP, subsidiary of the JSC "Kazatomprom" (National Atomic Company). RPM notes that this company is completely independent of the Company, and acts as a contractor with all necessary permits and contracts in place.

Central Mynkuduk site: Finished Product, Yellow Cake is trucked to the rail station (240 km) then railed to the refinery 2,500 km away. While the point of sale for the Company is at the gate of the refinery, all product transport from site is undertaken by a third contractor is utilized for transportation, under the control of Kazatomprom at the cost of the Company. This third party controls and is responsible for all aspects of security of the product, transportation and delivery to the refinery. This third party is accredited as per regulation for uranium transportation with special clearance from the safety and security department of the government.

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12. CAPITAL AND OPERATING COSTS

The Capital and Operating costs outlined below reflect the Life of Project Schedule which is summarized in ***Section 9***. **All costs are assumed to be USD unless denoted otherwise and are real costs with no inflation incorporated**.

Cost data for the individual projects was generally not available and has been combined, which are held by the Company. Where the costs have been reported in the Kazakh currency Tenge, they have been converted to USD using historical exchange rates as summarized in **Table 12-1.**

Table 12-1 Exchange Rates

Calendar Year	Exchange Rate (KZT/USD)
2015	228.455
2016	341.665
2017	325.511
2018	346.925
2019	386.000
2020	426.000

Forecast costs have been based on the 2019 exchange rate.

The Central Mynkuduk operation has been producing yellow cake for over ten years and has established a consistent operating and capital cost profile. Zhalpak recently completed trial production in April 2020, with a subsequent Kazak standard Feasibility Study completed. Nonetheless, the operational requirements are very similar between the operations as document in a 2016 mining study and recent production.

This section provides an overview of the annualised costs for the Central Mynkuduk and Zhalpak Ore Reserve Schedule, while the LOM Zhalpak costs are provided on a unit cost basis as per the accuracy of the scoping study undertaken.

12.1 Capital Costs

For an ISL operation, the primary capital cost is the recurring capital costs associated with the development of the well field, which consists of drilling injection, extraction and monitoring holes, installing down hole piping as well as surface piping and electrical distribution systems as well as pumps.

For these assets, the drilling costs are captured as operating costs, while the associated piping, equipment and infrastructure costs are recorded as capital costs.

12.1.1 Historical

Table 12-2 provides a summary of the capital costs between 2015 and 2018, which is predominantly associated with the wll preparation of Central Mynkuduk operation. No capital costs were provided for 2019 and 2020. The capital cost varied between ten and seventeen million dollars per annum. Well construction is the primary cost followed sustaining capital (infrastructure and equipment replacement as well as maintenance) and a provision towards closure costs. In 2018, an Expansion cost was recognized resulting in the increase in the sustaining capital.

RPM notes that well drilling is included in operating costs while well preparation, piping and pump installation are capilised hence the capital required per year is a reflection predominately of drilling requirements.

Table 12-2 Central Mynkuduk Historical Capital Costs

Cost Centre	Capital Cost (M USD)			
	2015	2016	2017	2018
Well Preparation	10.35	8.62	7.85	5.95
Expansion	0.00	0.00	0.00	2.08
Sustaining	2.45	1.44	1.67	8.60
Liquidation Fund / Closure	0.62	0.32	0.52	0.36
Total	**13.41**	**10.37**	**10.04**	**16.99**
Measure	**USD/kg U_3O_8**			
Capital Intensity	**7.58**	**5.31**	**5.29**	**9.26**

Source: Provided by the Company

The capital invested ranges from USD 5.29/kg U_3O_8 to USD9.26/kg which is considered reasonable for the style of operation. RPM notes the general decrease in until 2018, this is a reflection of the decreasing well construction and associated CAPEX. In 2018 an overall decrease in production occurs from 2,000 t U to 1,600 t U as such the costs increase. This production capacity it to continue after 2020 which is forecast to produce 1,300 t

12.1.2 Zhalpak Trial

From 2017 until April, 2020, a trial leach commenced on the Zhalpak deposit. Some USD14.6 million was spent during 2017 installing infrastructure, principally roads, to support the trial and potential on-going extraction activities (refer to **Table 12-3**). Well establishment costs were accounted for in the operating cost reports for Zhalpak and not capitalized.

Table 12-3 Zhalpak Trial Capital Costs

Cost Centre	Expenditure (USD)
Pilot plant	517,086
Transmission line	3,731,348
Roads	10,346,392
Total	**14,594,826**

Source: Provided by the Company

12.1.3 Forecast Zhalpak Capital Costs

Forecast capital costs include expansions of the plant to meet the forecast productions. This includes expansion of the current hydraulic smelter plant and construction of a yellow cake facility with smaller capacity than Central Mynkuduk. The total CAPEX of the plant 20M USD plus a 20% contingency to be constructed over a 2 year period from 2021 as noted in **Section 10**. This forecast is based on the information provided to RPM from the Client and the Company, consensus exchange rate forecasts and RPM's schedule.

In addition to the CAPEX all production drilling and well construction is capitalized as with Central Mynkuduk. The forecast for these aspects aswell as sustaining capital and is based on the 2018 and 2019 Central Mynkuduk costs, resulting in the following unit costs to be applied.

- **Well construction** – 8,500 USD per hole. This includes drilling CAPEX of installation of the casing, screens and pumping systems.
- **Sustaining Capital** – 0.0822 USD per PLS cu.m. This includes both the plant and pumping system maintenance.
- **Liquidation Fund / Closure** – 0.25 USD per t recovered U.

These costs are assumed as similar cost profiles are expected, however these are considered to be at 50% accuracy to reflect the scoping level of study which is applied for Zhalpak.

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12.1.4 Forecast Central Mynkuduk Capital Costs

Forecast capital for Central Mynkuduk is relatively consistent, typically ranging between USD 6 and 10 M per annum however decreases towards the end of the mine life sure to decreased drilling requirements as presented in **Table 12-4.** Well construction costs (which make up the majority if the costs) are assembled based on first principles, based on historical unit costs, such as the construction costs per well and while sustaining capital and closure costs are based on PLS volume and recovered U totals per year. RPM considers the capital costs to the reasonable for the planned production based on recent historical performance.

Table 12-4 Forecast Central Mynkuduk Capital Costs

Cost Centre	Capital Cost (M USD)												
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Well Construction	7.27	4.67	6.46	4.17	2.41	2.92	3.36	6.33	5.54	1.30	1.57		
Sustaining	1.81	2.73	2.12	2.18	1.86	1.89	2.21	1.68	2.07	1.40	0.96	1.09	1.10
Liquidation Fund / Closure	0.40	0.40	0.50	0.50	0.50	0.50	0.48	0.45	0.43	0.40	0.37	0.28	0.02
Total	**9.47**	**7.80**	**9.08**	**6.84**	**4.78**	**5.31**	**6.04**	**8.46**	**8.03**	**3.10**	**2.91**	**1.37**	**1.13**
Capital Intensity (USD per rec kg U)	**5.99**	**4.88**	**4.54**	**3.42**	**2.39**	**2.65**	**3.18**	**4.69**	**4.72**	**1.94**	**1.94**	**1.24**	**12.19**

12.2 Central Mynkuduk Operating Costs

Mining operations typically are separating into geology, mining processing and post processing to market. Although an ISL operation does not employ conventional mining practices, the operating cost data does identify mining as a cost centre. This is the costs associated with extracting the uranium from the deposit, which includes drilling of the wells, the power costs associated with pumping the solutions down and out of the wells and transport of the solutions to the processing facility as well as the sulphuric acid costs.

The processing costs relate to the recovery of the uranium from PLS, following receipt at the plant) and production to yellow cake, with subsequent purification costs at a toll refining facility. G&A reflects the standard General and Administration costs, while MET is the Mineral Extraction Tax that is applied by the government.

12.2.1 Historical

Table 12-5 presents the reported operating costs with the primary costs are associated with consumbales and preparation of the wells.

Table 12-5 Central Mynkuduk Recent Total Operating Costs

Cost Centre	Expenditure (k USD)			
	2017	2018	2019	2020*
Materials	15,425	10,643	10,726	7,972
Power	1,615	1,755	1,943	1,626
Mining preparation	1,822	7,711	6,813	5,097**
Processing/ Site Costs	13,738	13,638	14,576	14,494
Depreciation (fixed assets)	836	1,350	445	362
Depreciation (liquidity fund)	13	435		
Mining Resource Tax	2,030	7,629	7,602	6,161
Product Transport	NR	577	NR	NR
General and Administrative	2,325	2,414	2,118	2,178
Sales	NR	2,797	94	88
Refining	774	5,993	5,447	3,991
Financing	NR	629	546	622
Other				
Total	**39,716**	**56,626**	**50,310**	**42,591**

Source: Provided by the Company
** - Client provided data containing summary cost for Central Mynkuduk and Zhalpak. Note Zhalpak was only to april, 2020.*
*** - This includes Sulphur acid for acidification in total 2,246 k USD (new approach of accoutning of Kazatom)*

RPM notes the decrease costs in 2020 compared to previous years. This is primarily due to the decreased production in 2020, with material power and refining all dreased where as G and A financing and site costs all relatively consistent. These decreased costs are also influenced by the changing exchange rate which decreased from 386 KZT per USD in 2019 to 426 in 2020, as noted in **Section 12.2.2**.

Given the large portion of the well construction is to the overall costs a breakdown of the costs associated with the operation of the wells was provided for 2017 and is summarised in **Table 12-6** and consumables in **Table 12-7.** Of the 10.8 MUSD total material costs of mining, not surprisingly, drilling and piping materials dominated these costs, having noted this the piping costs are CAPEX. The remainder of the costs are associated with the sulphuric acid for acidification and leaching. RPM has not been provided with the full breakdown of the 2019 data.

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Table 12-6 Central Mynkuduk Well field Operating Costs (2017)

Cost Centre	Expenditure (k USD)		
	Plan	Actual	Deviation from plan (±)
Drilling	**4,511**	**4,505**	**5.88**
NAK KAP JSC Agreement	**3,963**	**3,253**	**710.0**
Extraction holes	1,493	1,240	253.0
Injection holes	2,404	1,966	437.1
Monitoring holes	65.7	45.9	19.9
DP ORTALYK LLP Agreement	**547.9**	**1,252**	**-704.1**
Exploratory holes	129.5	256.9	-127.4
Extraction holes	418.4	579.0	-160.5
Injection holes	0	416.2	-416.2
Downhole geophysics	**713.0**	**557.9**	**155.2**
NAK KAP JSC Agreement	542.5	428.6	113.9
DP ORTALYK LLP Agreement	170.6	129.2	41.32
Relocation of drilling rigs	**16.80**	**9.07**	**7.73**
Environmental support	**87.97**	**72.90**	**15.07**
Drilling water supply	**8.28**	**8.44**	**-0.16**
Acidification	**499.5**	**332.0**	**167.5**
Sub-stations (power)	**0**	**23**	**-23.35**
Power lines	**0.92**	**0.71**	**0.21**
Site access roads	**95.78**	**40.80**	**55.0**
Control centre	**162**	**1,125**	**-962.9**
Research	**0**	**287.5**	**-287.5**
Piping materials	**0**	**13.93**	**-13.9**
Polymer pipes	0	8.16	-8.16
Other material	0	5.77	-5.77
Well piping	**1,463**	**1,120**	**343.3**
Steel pipes	5.62	0.93	4.68
Polymer pipes	63.74	26.57	37.2
Submersible Pumps	551.2	301.2	250.0
SHAPP hose	44.80	29.78	15.0
Cable production	21.37	28.65	-7.3
Stop valves	5.50	7.35	-1.8
Other materials	353.4	318.1	35.3
Construction & installation services	417.7	407.5	10.3
Total	**7,558**	**8,096**	**-537.9**
Per 1 kg U of inventory growth	8.30	8.40	-0.10
Per 1 kg U of output	4.05	4.49	-0.44

Source : Provided by the Company

Table 12-7 provides a breakdown of the consumable costs within the plant which is dominated by sulphuric acid. Consumable costs dropped signficantly in 2018 due to lower acid leaching requirements (less akaline uranium bearing sediments) due ot the lower production requriements. It is noted that power costs increased during 2018, reflecting greater PLS volume at a lower grade.

Table 12-7 Central Mynkuduk Consumable Costs

Consumables		Expenditure (k USD)			
		2017	2018	2019	2020
Mining / leaching					
Sulphuric acid (92.5%)	Acidification	1,336	415	1,806	2,246
	Leaching	11,582	8,122	6,750	6,313
	Total	**12,918**	**8,536**	**8,556**	**8,559**
Power		1,202	1,532	1,521	1,267
Yellowcake production					
Sulphuric acid (92.5%)		330	240	222	176
Ammonium nitrate		1,100	768	957	735
Ammonium water		NR	NR	NR	18
Sodium hydroxide		921	707	683	459
Ion exchange resin		NR	251	308	196
Filter cloth		NR	14	-	-
Power		NR	222	422	330
Total Reagents		**15,269**	**10,516**	**10,726**	**10,143**
Total Power		**1,202**	**1,755**	**1,943**	**1,597**

Source : Provided by the Company

Based on reported consumable quantities and the reported consumable costs, a calculation of the unit costs for each consumable finds that the costs are reasonable and in line with market prices (refer to **Table 12-8**). It is noted that power costs are low as are labour costs however this is expected within Kazakstan as compared to international projects.

Table 12-8 Central Mynkuduk Consumable Unit Costs

Consumable	Unit Costs(calculated)				
	Unit	2017	2018	2019	2020
Sulphuric acid (92.5%)	USD/metric tonne	91.11	84.82	75.49	73.18
Power	USD/kWh	0.038	0.040	0.037	0.036
Ammonium nitrate	USD/metric tonne	220	180	220	207
Ammonium water	USD/metric tonne	-	-	103	105
Sodium hydroxide	USD/metric tonne	765	695	592	593
Ion exchange resin	USD/cu.m	-	2,534	-	2,276
Filter cloth	USD/m^2	-	67.33	-	-

Source : Provided by the Company

12.2.2 Forecast Costs

Table 12-9 summarises the forecast operating costs for the Central Mynkuduk operation for the Ore Reserve Life of Project as outlined in **Section 10**. As can be observed these are relatively constant between USD 50 and 60 million per annum resulting in total operating cost of between 12 and 14 USD per pound of recovered U. RPM has based its forecasts on the following assumptions:

- The LOM schedule and volumes for drilling, initial acidification and ongoing leaching will be as outlined in **Section 10**.

- Drilling costs are based on units per meter of the 2020 costs provided by the Company
- Leaching and Acidification Sulphur acid consumption and power costs were based on average price of acid per tonne and PSL volume in 2020
- All other costs estimated based on 2020 costs as provided by the Company and estimated back of 2020 production outcomes.

RPM notes that will variation occurred from the previous years, these are not considered material changes, and 2020 is likely to reflect the long-term average particulrly the consumable . Of importance is all costs are coverted to USD from KZT. As noed in Table 12-1 signficant changes in the exchange rate have occurred which impacts the USD costs, however minimal variation are observed in the KZT costs.

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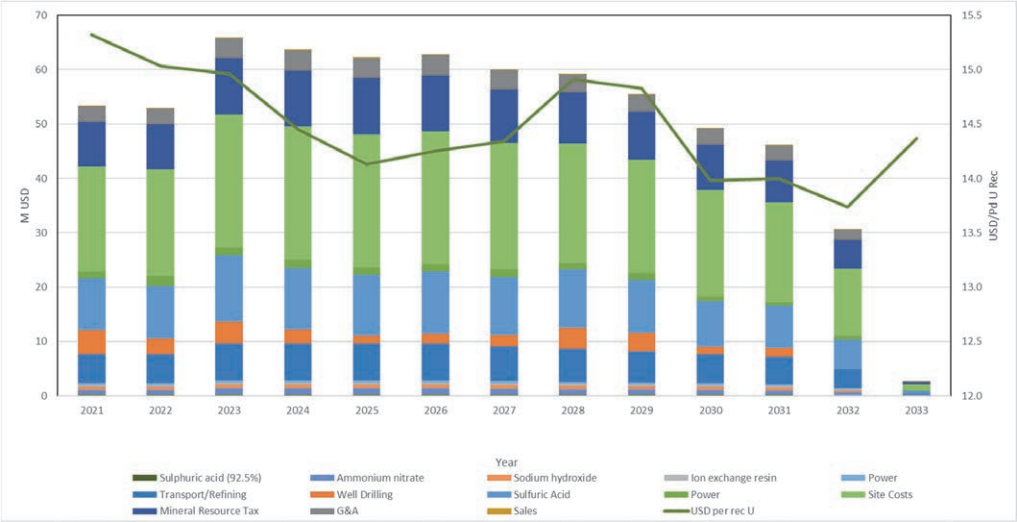
Table 12-9 Forecast Central Mynkuduk Operating Costs

Cost Centre	Operating Cost (M USD)														
	Comment	Unit Rate	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Mining															
Well Drilling	*per m*		4.5	2.9	4.0	2.6	1.5	1.8	2.1	3.9	3.4	1.3	1.5		
Injection		*23.8*	2.8	1.8	2.5	1.6	0.9	1.1	1.3	2.4	2.1	0.8	1.0		
Extraction		*23.8*	1.7	1.1	1.5	1.0	0.6	0.7	0.8	1.5	1.3	0.5	0.6		
Sulfuric Acid	*per t Acid*	*73.0*	9.5	9.6	12.2	11.3	11.2	11.4	10.6	10.6	9.7	8.4	7.8	5.4	0.4
Power	*per PSL cu.m*	*0.06*	1.23	1.86	1.45	1.48	1.27	1.29	1.50	1.15	1.41	0.95	0.66	0.74	0.19
Processing															
Sulphuric acid (92.5%)	per t rec U	133	0.21	0.21	0.27	0.27	0.27	0.27	0.25	0.24	0.23	0.21	0.20	0.13	0.01
Ammonium nitrate	per t rec U	570	0.90	0.91	1.14	1.14	1.14	1.14	1.08	1.03	0.97	0.91	0.85	0.58	0.05
Sodium hydroxide	per t rec U	347	0.55	0.56	0.69	0.69	0.69	0.69	0.66	0.63	0.59	0.56	0.52	0.35	0.03
Ion exchange resin	per t rec U	148	0.23	0.24	0.30	0.30	0.30	0.30	0.28	0.27	0.25	0.24	0.22	0.15	0.01
Power	per t rec U	250	0.40	0.40	0.50	0.50	0.50	0.50	0.48	0.45	0.43	0.40	0.37	0.25	0.02
Site Costs	per t rec U	12,229	19.35	19.57	24.46	24.46	24.46	24.46	23.24	22.07	20.79	19.57	18.34	12.38	1.03
Mineral Resource Tax	per t rec U	5,198	8.22	8.32	10.40	10.40	10.40	10.40	9.88	9.38	8.84	8.32	7.80	5.26	0.44
G&A	per t rec U	1,838	2.91	2.94	3.68	3.68	3.68	3.68	3.49	3.32	3.13	2.94	2.76	1.86	0.16
Sales	per t rec U	74	0.12	0.12	0.15	0.15	0.15	0.15	0.14	0.13	0.13	0.12	0.11	0.07	0.01
Transport/Refining	per t rec U	3,367	5.33	5.39	6.74	6.74	6.74	6.74	6.40	6.08	5.73	5.39	5.05	3.41	0.28
Total		**664.79**	**53.41**	**52.98**	**65.94**	**63.70**	**62.28**	**62.81**	**60.03**	**59.27**	**55.54**	**49.28**	**46.24**	**30.64**	**2.68**
Total	**USD per pound rec U**	14.5	15.3	15.0	15.0	14.5	14.1	14.3	14.3	14.9	14.8	14.0	14.0	13.7	14.4

Figure 12-1 Graphical Representation of Central Mynkuduk LOM Costs



12.3 Zhalpak Operating Costs

12.3.1 Historical Operating Costs

From 2017 through April 2020, a trial leach commenced on the Zhalpak deposit . Total operating costs amounted to USD 8.9 in 2017, with USD 2 million spent on preparation (**Table 12-10**) and the remaining USD 6.8 million extracting and recovering the uranium during 2018 followed by USD 3.8 million in 2019 (**Table 12-11**). The decrease in operating costs is associated with no ongoing drilling for the three areas

Table 12-10 Zhalpak Trial 2017 Operating Costs

Cost Centre	Expenditure (USD)
Piping	462,169
Resource preparation	788,260
Geological survey	462,169
Sulphuric acid (acidification)	326,091
Total	**2,038,688**

Source : Provided by the Company

Table 12-11 Zhalpak Trial 2018 – 2019 Operating Costs

Cost Centre	2018 (k USD)	2019 (k USD)
Consumables	45	111
Power	7	10
Labour	11	
Processing	2,635	407
Services	2,282	1,960
Preparation/geological survey	569	312
MinRes Tax	764	571
Other	361	277
G&A	83	104
Financing	77	141
Implementation	3	
Total	**6,836**	**3,893**

Source : Provided by the Company

12.3.2 Forecast Operating Unit Costs

A review of the operating costs of the Zhalpak trial production highlights that the majority of the costs are not indicative of the likely cost base of a project in commmercial production. As such to forecoast potential operating costs, RPM has utilized several sources to derive reasonable operating unit costs for the LOM including recent short term costs from the trial production, the 2020 Feasibility Study, 2019 Central Mynkuduk as well as RPM's own in-house database for the longer term cost forecasts.

Table 12-12 outlines the unit costs for the Zhalpak LOM scoping study which is assumed to commence in 2022. The following assumptions have been made for these forecasts:

- The same process will be in place, as outlined in Section 10.
- The unit costs for drilling and sulfuric acid were assumed as Central Mynkuduk, as the same contractor is in place for both operations.
- The power cost was kept in line with the 2020 forecast rather than apply the Central Mynkuduk cost as Zhalpak will be supplied from the mains lines rather than the solar power generators.
- All processing and tax costs assumed to be the same with a 20% contingency included in the other and G&A costs assumed to be required for the increased production and oversight,

Table 12-12 LOM Scoping Study Forecast Operating Costs

Cost Centre	Unit	Cost
Mining		
Well Drilling	*per m*	
Injection		*23.8*
Extraction		*23.8*
Sulfuric Acid	*per t Acid*	*73*
Power	per PSL cu.m	0.008
Labour	per t rec U	100
Processing	per t rec U	24,472
MinRes Tax	per t rec U	7,096
Other	per t rec U	4017
G&A	per t rec U	928

RPMGLOBAL

13. ENVIROMENT AND SOCIAL

This section of the report provides a detailed review of the environmental and social management aspects of the Projects. The review is based on a detailed evaluation of the important components of the environmental and social facets of the Project identified from the site visit, interviews, presentations, and document review. The Project continues to be viable from the environmental and social perspective. It appears that the potential social and environmental impacts resulting during all phases of the Project can be mitigated. The Company appear to have the organizational capacity to address environmental and social issues, and health and safety management

13.1 EHSS Assessment Overview

A high level review of the environmental, health and safety indicates that the Project has a typical risk profile which is associated with projects of similar styles and maturity in the region. All required Environmental Impact Studies have been completed resulting in the approved permits and licenses being gained for planned production in the near term. RPM notes that approvals are required for the future development into operation of the Zhalpak Project with trial production to cease in 2020. During the site visit RPM noted that appropriate procedures are in place to manage and mitigate the associated risks and that the Company is following the required regulations of the state.

Current and potential problems from an EHSS perspective may be caused by:

- Failure to comply with legislative requirements of the Republic of Kazakhstan (RoK) in the area of environmental protection (EP), labor protection (LP), occupational health & safety (H&S), and radiation safety (RS).
- Failure to fulfill obligations that may lead to administrative and/or judicial prosecution by environmental and healthcare regulatory agencies.
- Delays in issuing or re-issuing mandatory permits, and
- Untimely resolution of social and/or labor conflicts.

The topics covered in this chapter include the following:

- Reviewing and analyzing the available documentation to identify significant data gaps and discrepancies, to define potential obligations in terms of EHSS risks and/or to identify issues that may significantly hamper the future developments by the Company;
- Reviewing the EHSS mandatory permits (validity of the existing permits, the probability that new permits may not be issued and/or renewed, the absence of mandatory permits) and the rates and limits set thereby in accordance with legislative requirements of the RoK;
- Assessing actual environmental emissions using industrial environmental control data (air emissions, wastewater discharges, waste generation, soil and groundwater contamination);
- Assessing social, community, and corporate social responsibility (CSR);
- Assessing the implementation of environmental protection measures aimed at improving technological processes and improving equipment efficiency;
- Assessing if the Company budgets related to EP, LP, H&S, and RS are adequate to ensure the efficiency of these measures and reviewing other costs related to pollution payments, fines, reimbursement of environmental damages, and unforeseen economic sanctions linked to environmental risks;
- Evaluating significant environmental, social, H&S, and RS risks associated with the Company's activities;
- Assessing the extent of compliance with legislative requirements of the RoK in the area of radiation safety, recording and control of radioactive substances, equipment and facilities containing radioactive substances, as well as industrial radiation control at workplaces.

Under Article 40 of the Environmental Code (EC) of the RoK, the Company is classifiable as a Category 1 Environmental Hazard (for companies involved in mineral extraction) and a Class 2 Hazard under the sanitary classification of production facilities (facilities where, in case of an accident, radiation exposure is limited to the

sanitary protection zone, the SPZ). This means that authorized environmental protection agencies of the RoK carry out the State Environmental Expert Review (SEER) and the State Environmental Control of the Company's production activities. The Company is also obliged, upon receipt of the Emission Permit, to develop an Environmental Action Plan (EAP) and a program and a schedule of the Industrial Environmental Control (IEC). The Company must keep the IEC data records and submit the environmental impact data for the previous year to the RoK state pollutant release and transfer register on an annual basis by April 1 of the current year. It is understood this is undertaken and completed as per the regulatory requirements.

13.2 Approach

The EHSS due diligence of the Company's operations included the following:

- Reviewing documents provided in the Virtual Data Room (VDR);
- Compiling an information request, making additional inquiries, and obtaining information from the Company personnel;
- Reviewing documentation available at the Company's facilities including:
  - programs and plans;
  - guidance documents;
  - Permits;
  - Reports by the SEER Committee;
  - EIA (OVOS) documents;
    - Amendments and additions to the draft project design document entitled "The Second Stage of the ISL Mining in the Central Area of the Mynkuduk Uranium Deposit", 2016;
    - "The Second Stage of the ISL Mining in the Central Area of the Mynkuduk Uranium Deposit", the Environmental Protection Chapter, 2011;
    - The project design documentation entitled "The Second Stage of the ISL Mining in the Central Area of the Mynkuduk Uranium Deposit", 2010;
  - IEC reports;
  - Service provision contracts;
  - Inspection reports issued by the EP agencies of the RoK and the Company's reports on addressing the agency requirements;
  - other materials;
- Developing detailed EHSS checklists;
- Reviewing the available public information (the RoK legislation, plans and programs, reports submitted to state authorities and NAC Kazatomprom, and other);
- Visiting Central Mynkuduk Sites and facilities including the Zhalpak deposit to conduct visual observations and inspections;
- Discussions and interviews with the Company personnel.

13.3 EHSS Governance and Management System

13.3.1 Organizational EHSS Structure

The Industrial Safety Department (ISD), which reports to the Company's CEO, is responsible for operations relating to EP, LP, H&S, and RS. The Department employs 16 people: 8 engineers, including 1 environmental specialist and 8 radiation control technicians. The persons responsible for EP and RS within the Company are appointed from among the Company's engineering and technical personnel, specifically the Deputy General Director of Production, the Chief Engineer, and the Head of Security Service. The ISD structure meets the legislative requirements of the RoK, although the number of environmental specialists employed by the ISD appears to be insufficient given the considerable amount of work, especially in the area of waste management.

Third-party organizations are subcontracted by the Company to carry out analytical work and consulting services, which include: radiological control (measurements at workplaces; measurement and analysis of air quality, water quality, and soil); control measurements at air emission sources; analysis of the impact of the solid domestic waste (SDW) landfill on the environment; the sampling and analysis of drill cuttings and water at the drilling sites; developing inventories and obtaining approvals from state EP agencies for greenhouse gas (GHG) emission sources. The Company's contractors are selected in accordance with the EP and H&S requirements for contractors engaged in various types of activities within the Company's license area.

The Company has no public relations or Corporate Social Responsibility (CSR) specialists. NAC Kazatomprom personnel handle all matters relating to interaction with the stakeholders including the public and local government agencies. The ISD of NAC Kazatomprom provides methodological support for environmental activities and carries out corporate environmental control.

Based on the review of ISD staff job descriptions, assessment of the Department's headcount, information on implementation of the EAP, and environmental and radiation safety measures implemented in recent years indicate that the ISD has a sufficient operational budget.

13.3.2 Environmental Management

Policies, Plans, and Programs

The Company has a number of EP, H&S, and RS policies, plans, and programs designed to ensure compliance with the relevant regulatory requirements. These include:

- The environmental monitoring programs, EAPs, IEC program, radiation monitoring program and schedules, instruction manuals on the procedure for work performed at environmentally hazardous facilities, the Environmental Management System (EMS) manual;
- The OVOS materials for all operational projects related to the development of the Mynkuduk and Zhalpak deposits (the three OVOS documents prepared in 2010, 2011, and 2016); the SEER reports related to the OVOS materials; calculations of the maximum allowable air emissions (MAE), maximum allowable wastewater discharges (MAD), and waste generation and disposal limits (WGDL);
- contracts, terms of references (TOR) for work performed/services provided, the completion certificates of work performed/services provided, other;
- the certificates of conformity for fuel, raw materials, equipment, hazardous waste certificates, waste disposal certificates, emission inventory data;
- orders for setting up the ISD; job descriptions of the Department's personnel; documents confirming the required professional training and refresher training of the environmental service personnel; orders on the appointment of the persons responsible for maintaining industrial waste records and conducting environmental monitoring;
- reports on the IEC, environmental monitoring, and radiation control;
- support documents (work instructions, checklists, schedules);

In 2018, the Company adopted its policy in the area of quality management, EP, LP, and RS. The policy outlines the principles, goals, and objectives aimed at ensuring compliance with the legislative requirements of the RoK.

The Company has developed an EAP for 2019-2028 which includes the protection measures for air quality, water resources, soils and lands, flora and fauna, measures for rational waste management, radiation and chemical safety, and training of the Company personnel. The total cost of work to be executed under this EAP over the 10-year period is approximately US$185,350 of the Company's own funds. The most significant portion of this budget was planned to be allocated for soil and land protection (up to 40%).

The EAP does not include any major upgrades of environmental protection equipment or technologies, but rather focuses mainly on improving the management system. The EAP does not include any measures or actions aimed at implementing the "NAC Kazatomprom Roadmap in Environmental and Social Areas for 2019-2021", so the Company may be required to allocate additional financial resources during 2020-2021.

The Company has also developed a waste management program (WMP) for 2019-2028 aimed at gradually reducing the amount of accumulated and generated waste by improving its waste management practices. The WMP, which is to be financed using the Company's own funds, does not provide any data on the cost of waste management measures, which, according to the IDS specialists, will be determined annually as a part of the Company's budget. As a result, it is not possible to assess the effectiveness of the WMP at this stage, while according to the EAP for 2019-2028, waste management cost amounts to US$23,185.

Groundwater conditions are monitored in accordance with the "Regulations for the Use of Monitoring Wells to Monitor Environmental Impacts on Groundwater from the In-Situ Leaching (ISL) Process" (dated April 15, 2002), approved by NAC Kazatomprom, and the "Map of the ISL Monitoring Frequency, Solution Sampling, and Monitoring of Well Integrity at the Proposed ISL Areas".

The Company has implemented an EMS based on the ISO 14001 standard and an occupational safety management system in accordance with OHSAS 18001.

In 2014, as part of its obligations under ISO 14001 and OHSAS 18001, the Company issued "Guidelines for Environmental Management and Occupational Safety and Labor Protection Management Systems".

The environmental inspection certificates, issued by the Department of Environment of the Turkestan Region (hereinafter referred to as the Department) in 2016 and 2019 based on the environmental inspections of the Company's documentation, did not contain any critical comments on the content of these documents. According to these inspections by the Department all mandatory environmental documentation available at the Company is in compliance with the laws and regulations of the RoK.

Environmental Fees and Fines

In accordance with the laws and regulations of the RoK, environmental emission fees are paid for: 1) air emissions from stationary sources; 2) wastewater discharges to water bodies; 3) storage and disposal of industrial and domestic waste. The tariffs are specified in the Tax Code of the RoK for all types of emissions, for each pollutant, and each type of waste. Meeting the tax obligations relating to the environmental emissions does not exempt the nature user from the obligation to pay for impacts and damages caused to the environment. Under the current RoK legislation, the Company is responsible to pay for environmental damages regardless of its payments of the environmental emission fees.

The environmental emission fees paid by the Company during years 2016 to 2019 amounted to US$13,930. Between 2016 and 2019, the annual payment has decreased due to the reduction of emissions as a result of implementation of EP measures. Air emissions fees are a significant part of this amount (about 30 to 60%).

In 2016, the inspection of the Company conducted by the Department detected violations of the legislative requirements of the RoK. The Company was instructed to eliminate these violations before June 1, 2016 and to pay an administrative fine of US$4,170. The fine was paid in accordance with the Report on Administrative Offense of April 1, 2016.

In 2019, the Company paid about US$230 as compensation for environmental damages caused by excessive air emissions in accordance with the Department's Order of July 19, 2019. No other fines or orders were issued by the Department between 2016 and 2019.

RPM notes that these fines are not material to the Company and have been resolves with no further requirements.

Environmental Control

In accordance with the laws and regulations of the RoK, the Company carries out the IEC, which includes air quality, groundwater, and soil monitoring covering areas beyond the boundaries of the mine allotment and the SPZ; quarterly radiological and radiation monitoring; developing an inventory of and reporting on GHG emissions; and waste management. The IEC is conducted in accordance with the "Plan and Schedule for Industrial Environmental Control for the Central Mynkuduk" approved by the Company and coordinated with the Sanitary and Epidemiological Inspectorate (SEI) of the RoK.

The Company also performs weekly environmental checks at its facilities, a routine inspection of gas treatment units, and collects the spent mercury-containing lamps. In accordance with the schedule approved by the Department, a quarterly radiological analysis of air emissions, wastewater discharges, and groundwater samples collected from the monitoring wells is carried out by the Reaktivsnab LLP laboratory, which holds the required certifications and permits for this work.

The Company submits the internal environmental inspection reports to NAC Kazatomprom. In addition, the reports on the IEC and radiological monitoring are submitted to the Committee for Atomic and Energy Supervision and Control of the Ministry of Energy of the RoK on a quarterly basis. These quarterly reports contain the following information: the quantities of uranium (yellow cake) produced; electricity and water consumption data; quantities of air emissions and wastewater discharges; quantities of generated waste; environmental payments; information on environmental violations, incidents, and accidents occurred.

In 2019, the Department noted the submission of inaccurate information in the Company's IEC report (the Department's certificate of June 21, 2019). The Company rectified this problem by tightening control over the information contained in the IEC reports. Currently, the IEC reports are carefully checked by an assigned ISD specialist and in case of any discrepancies, the Department is duly advised of a problem within three days (the IEC report of August 14, 2019). There have been no other instances of failures to comply with the reporting schedule and/or submission of incorrect information.

Based on a resolution by NAC Kazatomprom, the Company periodically conducts third-party audits to verify compliance with the requirements of the RoK legislation and the internal guidance documents of NAC Kazatomprom subsidiaries. For example, in 2019 an environmental audit was conducted at the Company by JV Inkai[1] specialists.

Thus the EMSis considered satisfactory in regards to its scale, complexity, adherence to the RoK regulatory guidelines, and the overall risk profile of the Company.

The key EHSS aspects relating to the Company assets are discussed below in Section 13.4.

13.4 Assets:Central Mynkuduk and Zhalpak

13.4.1 Asset Structure

The Company assets – the Central Mynkuduk and the Zhalpak uranium deposits – are located in the central part of the Betpak-Dala desert, in the central part of the Chu-Sarysu depression, and in the central area of the Mynkuduk uranium deposit.

The ISD supports both assets of the Company. All permits, licenses, the environmental documentation (OVOS, plans and programs, instruction manuals, schedules, etc.) and the EHSS documentation are prepared and approved by the state agencies for the Company as a whole without separating its assets.

The information provided in the sections below refers to both assets of the Company.

13.4.2 EHSS Setting and Context

The Kyzemshek village with a population of about 3,000 people (according to the OVOS of 2016) located 80 km to the south-west of the mine allotment area is the closest large settlement to the Company's operations. The Taikonyr village is located 55 km to the north-west of the mine allotment area and has a population of about 600 people. The Taukent village (with a population of about 6,550) is located 195 km to the north of the mine allotment area[2]. There areno other nearby villages or permanent residents in the area. The nearest railway stations are: Kyzylorda (210 km), Shieli (220 km), and Sozak (250 km). Administratively, the Company assets

[1] JV Inkai is one of the subsidiaries of Kazatomprom.

[2] According to the 2009 census; no later data are available.

are located in the Sozak District of the Turkestan Region. The economic development of the region significantly depends on uranium ore extraction and other activities of the Company.

There are no forests, farmlands, traffic arteries, permanent surface water bodies, specially protected natural areas, and/or cultural heritage areas in close proximity to the location of the Company assets.

The public health legislation of the RoK establishes an SPZ for an industrial enterprise defined as an area with special land use requirements, which ensure reducing air pollution values to the levels of acceptable ambient air quality standards. It is prohibited to place within an SPZ any residential buildings, recreational areas, rest areas, sports facilities, and/or playgrounds. The purpose of an SPZ is to serve as a protective barrier that ensures the appropriate level of public safety during regular operations of the facilities. The actual SPZ size is determined by calculating the dispersion of harmful air emissions for substances characterized by the largest dispersion areas.

The actual SPZ size for the Mynkuduk deposit was calculated using cumulative emissions of nitrogen dioxide plus sulfur dioxide, which provide the largest dispersion area taking into account the wind rose. Given the anticipated impacts to air quality and the calculation of ground-level concentrations of air pollutants and radioactive substances, the SPZ size was determined to be 500 m for the mine camp.

The SPZs of the ISL mining areas are 250 m considering that there are virtually no air emissions and that the potential impacts in emergency situations are limited to the footprint of the ISL areas.

According to the SPZ calculations, no exceedances of permissible average annual volumetric activity (AAVA) of radionuclides at the SPZ boundaries are expected.

Separate SPZs have been established for other facilities located at Site No. 1 and the SDW landfill.

13.4.3 Heritage Values

There are no monuments located in the vicinity of the Company assets that have architectural and/or artistic values or are of scientific interest in studying the folk architecture of Kazakhstan, which are registered with the heritage protection agencies of the Committee of Culture of the RoK.

13.4.4 Natural Hazardous Phenomena

Information on hazardous natural processes for the Central Mynkuduk and Zhalpak deposit areas was obtained from the OVOS materials (2010, 2011 and 2016), internal reports provided by Kazatomprom subsidiaries, JSC Volkovgeology, and state climate and hydrological databases.

There are no adverse natural processes (floods, earthquakes, tornadoes) or conditions conducive to the emergence and spread of epidemics in the area where the Company assets are located. The seismicity of this area, determined according to the SNiP (construction standards and regulations) 2.03-30-2006 of the RoK, can reach magnitude 6 earthquake on the MSK-62 scale (equivalent to the 12-magnitude Richter Scale).

13.4.5 Air Emissions

The region features an extreme continental climate, long hot summers, cold winters with little snow, sharp fluctuations in daily and monthly temperatures, a small amount of precipitation, constantly blowing winds, and significant evaporation. The average annual air temperature is +9.9°C. The absolute minimum temperature is -41°C, whereas the absolute maximum temperature is +44°C. Average annual rainfall does not exceed 45-125 mm (the greatest amount of rainfall occurs from March to May). A small amount of precipitation during hot summers with long periods without precipitation forms a high natural dust background. In the absence of precipitation, the highly dusty air may preserve a high concentration of various substances for a long time. The background concentrations of the most common substances are as follows: 0.1 mg/cu.m of SO_2, 0.03 mg/cu.m of NO_2, 1.5 mg/cu.m of CO, and 0.2 mg/cu.m of dust.

The Company has registered 83 stationary sources of emission of polluting substances including:

- 69 “organized sources”: sorption, sorption-desorption columns for PS; denitration and washing columns; precipitating columns; a filter press, chemicals preparation reactors, an ammonium nitrate warehouse; a

welding station; a repair shop; machine tools; a fuel and lubricant depot; a diesel fuel depot; diesel fuel storage tanks; mini-boiler plants.

- 14 “non-organized sources”: PS and LS sand sumps, a slurry reservoir, an acid receiving ramp, a boiler plant and fuel and lubricant storage tanks, a diesel generator, mobile compressors and a welding unit, a sorption unit, storage tanks, sulfuric acid warehouse pumps, PS and LS pumps, and a wastewater storage pond.

Within the Cerntral Mynkdudk Processing PLant area a total of 43 air emission sources were identified including PS sorption columns, PS desorption columns, the general ventilation system, the ammonia acid warehouse, PS and LS sumps, sulfuric acid storage tanks, and other.

Within the storage tanks areas a total of 5 air emission sources were identified including 4 boiler plants and a diesel fuel storage tank.

Within the ISL mine a total of 9 air emission sources were identified including compressor units and air separators.

Within the western polygon a total of 10 emission sources were identified including liquid material storage tanks, boilers, liquid reagent depots, and an emergency diesel generator.

Within the eastern polygon a total of 9 emission sources were identified including liquid material storage tanks, boilers, a diesel generator, a process station, a pumping station, a LS sand sump, and a PS sand sump.

At the Zhalpak site a total of 9 air emission sources were identified including a sorption unit, a tank, sulfuric acid pumps, a PS pump, a LS pump, and a PS sump.

There are no significant air emission sources within or near the Mynkuduk deposit. The main polluting substances are ammonia, nitrogen oxide and dioxide, carbon monoxide, sulfur dioxide, soot, sulfuric acid aerosol, methylbenzene, butyl acetate, acetone, welding gases, fuel vapors, ammonium nitrate, and other. The total number of polluting substances is 30.

The qualitative and quantitative information on the air emissions is included in the maximum allowable air emissions (MAE) permit application in 2018. The MAE permit application includes new sources of air pollution located in the Western and Eastern Flanks of the Zhalpak deposit.

The MAE permit application was approved the State Environmental Expert Review Department on November 11, 2018. The MAE permit issued by the Ministry of Energy of the RoK is valid for years 2019 through 2028. Based on the permit conditions the Company is allowed up to 277.1 tons of air emissions annually.

The OVOS materials indicate that no massive air emissions can occur in the main production areas. Massive emissions of diesel fuel combustion products may occur at the boiler plants. However, following the boiler plant operational requirements and performing timely repair of burners significantly reduces a possibility of massive air emissions of harmful substances by the boiler plants.

The sources of emission of radioactive substances are the ventilation chambers of the PSPS facilities, the refining production facilities, PS and LS sand sumps, and a sludge collector. An insignificant amount of radioactive aerosols with a particle size of less than 1 μm is emitted and upon emission, these aerosols are absorbed by dust suspended in the ambient air and quickly settle. The allowable ground-level concentrations of radionuclides are provided in the MAE permit. The IEC reports indicated no exceedances of the MAC (maximum allowable concentrations) values of radionuclides at the SPZ boundaries.

Accidental air emissions may occur in case of violation of normal operating conditions. No accidental air emissions were recorded in the reports on the Company’s compliance with the environmental requirements in 2016 and 2019 and in the IEC quarterly reports submitted by the Company to the regulatory authorities. To prevent emergency situations, regular preventive and routine repairs are performed and the measures aimed at preventing emergency situations are implemented. The Company has an approved Emergency Response Plan.

Unfavorable meteorological conditions (UMC) hampering the dispersion of air pollutants and radioactive aerosols include low wind speed. The Company has developed a plan of measures to reduce air emissions during period of UMC, which was approved by the SEI.

The IEC is performed according to the approved quarterly schedule to measure the air emissions of sulfuric acid, nitrogen dioxide, ammonia, ammonium nitrate, carbon, sulfur dioxide, and carbon monoxide. The results of these measurements are compiled in accordance with Form No. 2-TP (Air), and are included in the IEC reports generated by the Company or its contractors. Compliance with the MAE limits is monitored at the air pollution sources equipped with air quality samplers, and at the ground-level at the SPZ boundaries. The monitoring procedures are performed using certified methods and instruments listed in the instruments register of the RoK. Monitoring reports are submitted on a quarterly basis to the Department and NAC Kazatomprom.

According to the IEC data for 2019 and the OVOS materials for 2010, 2011 and 2016, the calculated ground-level concentrations of all air pollutants do not exceed the MAC values at the SPZ boundaries. The quantity of actual air emissions is below the level approved in the MAE permit.

The scheduled inspection carried out by the Department in Q2 of 2019 detected the following instances of non-compliance:

- When performing the measurements, it was determined that the MAE limits for carbon monoxide recorded at air emission source No. 0043 (the heating boiler in the mine camp) were exceeded: the actual emission value was 1.024386 g/s while the allowable limit is 0.1496 g/s (paragraph 2 of Article 199 of the “Environmental Code of the RoK”);
- The measurement of exhaust emissions from motor vehicles indicated that the MAC values were exceeded by three motor vehicles: the measured for these 3 vehicles were 3.52-78.0, 6.39-93.6, and 6.39- 94.5, respectively, while the MAC values were 1.6-50.

During the audit, the Company submitted a report on the elimination of all non-compliances (dated August 18, 2019). In particular, the burner of the mine camp boiler and the fuel equipment of the motor vehicles were either repaired or upgraded.

The risk of significant air pollution is considered low due to a number of factors including general compliance with the MAE limits (except few isolated instances of non-compliance), not exceeding the MAC values for air emissions as confirmed by the IEC results, and the fact that the OVOS materials for 2010, 2011, 2016 indicated satisfactory air quality within the mine allotment area. If these conditions are not met air pollution may potentially become a basis for holding the Company administratively liable, imposing payments and fines for excess air emissions.

13.4.6 Radionuclide Levels in Air and Soil

The quantities of long-lived radionuclides in air and soil (U-238 with long-lived decay products) are at the background level for this region. Factoring-in dust concentration in the air of 0.1 mg/cu.m and an average wind speed of 1.9-3.9 m/s, the values of total activity of LAA (long-acting actinides-radionuclides) in the air are considerably below the allowable value of 0.04 Bq/cu.m (for humans). For example, maximum concentration of U-238 in soil is 0.001% (10.0 mg/kg) or 120.4 Bq/kg, and maximum concentration of thorium in soil is 0.0013% (13.0 mg/kg) or 53.04 Bq/kg, maximum concentration of U-238 in the air is 0.00001204 Bq/cu.m or 0.0003 in AAVA fractions, and maximum concentration of thorium in the air is 0.000005304 Bq/cu.m or 0.001 in AAVA fractions.

The main sources of air emissions of radioactive substances are the Central Site facilities and the distribution transformer substation (ventilation emissions from the PSPS and the refining production facilities, the PS and LS sand sumps, and the sludge collector). The total radiation dose within the Site (calculated only for the direct routes of irradiation and inhalation of nuclides) is 0.358 or 35.8% of the AAVA for humans with the Company personnel working in this area used as a critical group for these calculations.

Contamination of the soil surface caused by accidental spills of PS also triggers the entry of radon and thoron into the ambient air at workplaces. The calculation of surface concentrations shows that for the indicated parameters the concentrations of radon and its DDPs (daughter decay products) in the ambient air are below 5% of the allowable limit. Accordingly, the contribution of the short-lived radionuclides, released from the PS at the points of spillage, to the annual personnel exposure dose is negligible.

Dust containing elevated amounts of radionuclides can rise from PS spills. The dust rises mainly due to strong wind and vehicular traffic. The low concentration of radionuclides in soils at the spillage points, low dust content in the air due to predominantly low wind speeds and the resistance of drying crusts to wind erosion, and other factors result in a low probability of a significant influx of radionuclides into the air. Due to the low concentration values, the LAA levels at the SPZ boundaries at Sites No. 1, 3, 4, 5 are not calculated.

The OVOS materials for 2006, 2011, and 2016 indicate that the air quality at the Mynkuduk deposit is characterized by slightly elevated levels of radionuclides.

13.4.7 Electromagnetic Radiation, Noise, and Vibration

There is no electromagnetic radiation at the mine allotment area that would have an adverse effect on the health of the Company personnel and its contractors. Insignificant electromagnetic radiation can be generated by electric motors, which power fans, pumps, and other equipment. However, provided that the requirements for the assembly and installation of equipment are complied with, they do not exceed the acceptable electromagnetic radiation levels. Therefore, no special measures have been developed and these types of impact are not monitored. There are no high-voltage power lines or any other facilities capable of exerting electromagnetic effects on the human body and/or the environment in the area where the Company facilities are located.

Sources of noise in the buildings and facilities at the Company mine allotment area are mostly the production equipment fans, mixing units, and electric motors. No calculations of noise levels have been performed for the domestic services center, the local hostel, and the hotel complex since the walls and housings of the supply and exhaust fans have good acoustic insulation according to the construction and installation specs. The indoor noise produced by the fans does not affect the personnel since the fans are operated only for a maximum period of one hour (in shower rooms, changing rooms, and other places). The permissible noise levels for these rooms are below 60 dB, thus meeting the requirements of the relevant RoK standards (GOST).

The noise levels recorded inside the control and instrumentation rooms are within 20 dB, and the noise levels recorded at the measurement points at workplaces inside the refining shop and PSPS are below 80 dB, also meeting the GOST requirements for these facilities. In other places on premises the noise levels are lower.

There are no permanent workplaces at the Sites around the slurry reservoirs and pumping stations, while the production process in other areas is fully automated and does not require the constant presence of people there. There are no sources of noise in the mine camp, which would adversely impact human health. There are no residential buildings adjacent to the Sites and, therefore, no noise levels generated at these facilities have been calculated or monitored.

There are no sources of vibration at the Company facilities, which would affect the health of the personnel. The equipment is installed on separate foundations and vibration isolation supports to minimize effect of vibration on the human body.

As part of the IEC, noise and vibration monitoring is conducted on a quarterly basis and based on the results of this monitoring the noise and vibration levels do not exceed the acceptable limits. There have been no complaints from the Company personnel regarding noise or vibration. The absence of sources of electromagnetic radiation and vibration, and meeting the noise levels standards indicate that there are no potential environmental or health-related risks associated with electromagnetic radiation, noise, and vibration.

13.4.8 Water

Water Supply and Wastewater

There is no surface water within the mine allotments and the land area is not flooded by surface water.

Water is used by the Company in accordance with a special water use permit, which is issued to users of groundwater for domestic and industrial use. This permit is issued by the Shu-Talass Basin Department of the RoK, dated February 10, 2006 and valid until January 16, 2022. The Company's water requirement is 310,000 cu.m per year and the special water use permit sets water withdrawal limits of 50 to 2000 cu.m per day. The source of water supply for the Company operations is from water supply wells No. 0837-0840.

The maximum allowable wastewater discharges (MAD) permit application was approved by the SEER Department on December 13, 2018. The MAD permit is valid through 2028. The wastewater discharge limits are set for BOD, COD, nitrates, nitrites, and other parameters (a total of 11 substances) for each water outlet. Based on the MAD permit conditions the Company is allowed to discharge up to 52.6 tonnes of wastewater per year.

As of January 1, 2007, usable groundwater resources were estimated at 861.9 cu.m per day for a period of 27 years. The SPZ for the water intake is 200 m. Some quantities of the groundwater required for domestic use and operations are treated at membrane desalination water treatment facilities. Water quality data for all water wells are available at the SEI.

The Centra Mynkuduk Project uses four wells 160 to 180 m deep (including three operational wells and a standby well). There are four water storage tanks with a capacity of 250 cu.m each. Two storage tanks are designed for storing untreated water used for operations and two other storage tanks are used to store drinking and domestic use water for the Company personnel.

The domestic wastewater (about 88,877 cu.m per year) is discharged via gravity and by pumps to a biological wastewater treatment facility, which is then pumped to the wastewater storage pond located at Site No. 1. During the warm season, the treated wastewater from the storage pond is used for domestic water needs for about six months, while excess water is used for operational needs and is pumped back into the process.

The biological wastewater treatment facility has a 200 m SPZ, which is a part of the Site No. 1 SPZ of 500 m.

The treated domestic wastewater is mixed with the treated industrial wastewater used for ISL mining and ore processing operations. No wastewater is discharged into the environment. All process solutions are contained in a closed circulating system. The wastewater discharges from the ISL mining and processing operations are supplied to the injection solution preparation unit.

The production buildings are equipped with impermeable floors. The petroleum products warehouse is equipped with its own industrial and storm water sewers designed to collect the industrial wastewater and storm water discharges.

The production facilities are wet-scrubbed at the end of each shift. In case of an emergency spill these facilities are cleaned up immediately after the incident. General cleaning of all rooms and workplaces is performed on a monthly basis. The wastewater received from washing floors and the shower rooms is pumped back into the process.

Storm and melt water is collected and fed to the wastewater treatment plant, where the wastewater is cleaned from mechanical impurities and petroleum products to reach the MAC levels for irrigation water. The captured contaminants are disposed of in the areas approved by the SEI.

Two artesian wells are the source of water supply at the western polygon. The water supply system functions as follows: water is supplied from the water wells to the source water storage tanks providing for a fire-fighting water reserve and then from the storage tanks it is supplied to the desalination unit and for indoor and outdoor fire-fighting needs.

A separate sewer system is used at the Sites. The contaminated wastewater is supplied to the biological wastewater treatment facility (with a treatment capacity of 30 cu.m/day), which is then discharged to the wastewater storage pond. The wastewater storage pond consists of two sections designed for receiving and storing the treated wastewater during the cold season (about 7 months). The treated wastewater accumulated during the cold season and the newly supplied treated wastewater is used for irrigation and to rinse off asphalt and concrete surfaces. The dehydrated sludge (about 13 tons per year) is disposed of at the SDW landfill.

The eastern polygon uses two water supply wells (an operating well and a standby well). The well yield is 22.5 cu.m/day. Water is stored in two source water storage tanks and two drinking water storage tanks.

The petroleum products and sludge removed from the treatment facilities and accidentally spilled petroleum products are disposed of at an open area designed for temporary storage of low-level radioactive waste (LRW) and are subsequently transported for their final disposal at the radioactive waste disposal site (RWDS) of Kazatomprom-SaUral LLP located 70 km from Central Mynkuduk.

The pipes used for water supply, storm water, domestic, and industrial wastewater discharges are made of plastic and polyethylene. Shut-off fittings significantly reduce the risk of emergency situations arising from soil and groundwater contamination from wastewater spills.

Ensuring compliance with the MAD limits is a part of the IEC. According to the IEC data for 2019, the actual volume of wastewater discharges during the past three years has been significantly lower than the approved volume, and the regulated polluting substances do not exceed the approved limits. Wastewater samples are collected and analyzed on a quarterly basis at the points prior to entering the wastewater treatment plant and at its outflow. Wastewater samples are analyzed for pH, ammonia, nitrites, nitrates, hardness, calcium, magnesium, iron, sulfates, chlorides, petroleum products, total and suspended solids, turbidity, residue, surfactants, and BOD-5.

In 2019, the Department noted an inefficient operation of the wastewater treatment facilities. Efficiency of mechanical and biological cleaning of wastewater was 21% and 46%, respectively. A number of parameters in the wastewater discharged to the wastewater storage pond exceeded the MAD limits including: ammonium ions - 1.02 times, suspended solids - 1.4 times; nitrates - 3.11 times; and COD - 1.24 times. To address this non-compliance situation, the Company cleaned up the sumps, and inspected and cleaned the sewer systems in June-August of 2019 and submitted a report to the Department on August 14, 2019. The Company also developed a work plan, where they proposed a schedule of carrying out inspections and cleaning of the sewer systems twice a month. The wastewater sample analytical results are included in the reports of the Reaktivsnab LLP testing laboratory, which is subcontracted by the Company for water quality monitoring.

13.4.9 Groundwater

The Mynkuduk ore district is located within the Sozak artesian formation, which is a part of the Chu-Sarysu artesian aquifer system. Two hydrogeological units are identified in the cross-section of the Chu-Sarysu artesian aquifer system:

- The upper Mesozoic-Cenozoic unit containing confined and unconfined groundwater;
- The lower Mesozoic-Cenozoic unit containing interstitial and karst groundwater.

The groundwater formations in the Miocene and Pliocene sediments are mostly present in the takyr areas and land surface depressions. The rest of the mine allotment territory contains some localized areas of perched groundwater.

The groundwater system in the fractured Paleozoic rocks occurs at great depths and has not been sufficiently studied. The Permian deposits represented by siltstone, mudstone, and sandstone are very close to land surface at a depth of 3-4 m and are highly fractured. These groundwater formations are characterized by low hydraulic conductivity values and low well yields of about 0.02-0.4 L/s. Groundwater is recharged by infiltration of precipitation in the outcrop areas.

The studies conducted by JSC Volkovgeology showed that groundwater in the mine allotment area is saline and highly mineralised (3.3 to 6.1 g/l), and have an elevated concentration of radium (10^{-10} to 10^{-9} g/l), and some trace elements. The water in the ore-bearing aquifers is characterized by high concentrations of uranium radionuclides (Ra-226, Rn-222, Po-210, Pb-210), and is banned for domestic use under the laws and regulations of the RoK.

Detailed exploration and specialized studies by Volkovgeology and others showed that the ISL uranium mining has virtually no impact on the quality of groundwater outside the mine allotment area. A preliminary forecast of migration of the residual solution upon completion of the ISL operations (based on some field testing and groundwater flow and mass transport modeling studies at the Inkai uranium deposit) showed that a natural attenuation process is taking place in groundwater and its chemical composition will naturally return to its pre-mining conditions prior to migrating outside of the mine allotment.

Possible external sources of groundwater contamination may include leaks of some chemicals from storage tanks, pipelines; contaminated areas within the mine allotment; the mine camp; the ISL production units; transportation routes; the waste storage areas (the SDW landfill, the slurry reservoir, and the LRW storage areas); migration of PS and LS to the aquifers located above or below the ore-bearing formation due to some defects (or fractures) in well casing or cemented annulus; and other.

A set of measures and continuous monitoring are envisaged in the Company asset areas to eliminate potential groundwater contamination. Two monitoring wells are installed for groundwater quality monitoring at the production and domestic waste disposal area: one well is located upgradient and the second well is located downgradient from the waste disposal area at about 50 m to 100 m distance from its footprint. Groundwater quality is monitored for bacteriologic and chemical parameters. At the Sites where above-ground structures are located (such as the slurry reservoir, sand sumps with process solutions, tanks at the open LRW storage pad, fuel farm, petroleum products, and sulfuric acid warehouses), the groundwater conditions are monitored in the Quaternary aquifer using four 20 m deep monitoring wells located along the perimeter of these facilities. These wells are part of the operational monitoring well network to monitor groundwater conditions during ISL operations and later during the closure phase. According to the groundwater sampling from the shallow monitoring wells, no exceedances of groundwater quality standards were detected (the IEC report for Q3 2019). Concentrations of the monitored chemical constituents in the groundwater are within the natural background levels.

The groundwater migration beyond the production units must be monitored using monitoring wells installed in the ore-bearing formation, and in the aquifer above and below the ore-bearing formation downgradient from the production units in accordance with the guidance document on the use of monitoring wells to monitor impact of ISL on groundwater approved by NAC Kazatomprom on April 15, 2002.

According to the report No. 3-1-1-8/82310 entitled “The ISL Mining of the Central Area of the Mynkuduk Uranium Deposit” prepared by the SEER Department of the Ministry of Environmental Protection of the RoK (dated October 21, 2005) the monitoring wells were supposed to be drilled and installed outside of the production unit to monitor potential groundwater contamination and plume migration. A need for such monitoring wells is also discussed in the OVOS materials entitled “The Second Stage of Development of the Central Area of the Mynkuduk Uranium Deposit” in 2010. According to this OVOS the following monitoring wells were recommended to be drilled and installed:

- two monitoring wells 655-670 m deep in the ore-bearing formation;
- a 625-635 m deep monitoring well in the aquifer above ore-bearing formation;
- a 680-690 m deep monitoring well in the aquifer below the ore-bearing formation.

In 2016, the Department determined that the Company did not install these deep monitoring wells (the inspection report and the order of April 1, 2016). The Company did not provide a report (or other documentation) demonstrating its compliance with the Department’s order. The OVOS materials for 2011 and 2016 also do not contain any information indicating that these monitoring wells had been installed and the Company had been monitoring groundwater quality in the deep aquifers. The IEC report for Q3 2019 states that these monitoring wells are planned to be drilled and installed. During the site visit and discussions in November 2019, the Company personnel was not able to confirm that these deep monitoring wells had been installed and that the Company had been carrying out groundwater monitoring in the ore-bearing formation outside of the production units and in the aquifers above and below the ore-bearing formation.

Failure to produce any information on these deep monitoring wells and groundwater monitoring indicate the lack of information regarding some potential groundwater contamination in the ore-bearing formation outside of the production units and in the aquifers above and below the ore-bearing formation.

The risk of groundwater contamination in the ore-bearing formation outside of the production units and in the aquifers above and below the ore-bearing formation is quite significant, given the lack of information on groundwater monitoring in these aquifers. If groundwater contamination does exist and the groundwater plume(s) migrated outside of the production units and into the aquifers above and below the ore-bearing formation it will be necessary to take the following measures: 1) identify and delineate the groundwater plume(s) in the aquifers above and below the ore-bearing formation, 2) prepare a groundwater remediation plan, 3) obtain an approval for the groundwater plume delineation and remediation plan from the Department, 4) implement the groundwater plume delineation and remediation plan, and 5) obtain an approval from the Department for the successful groundwater remediation.

Detecting groundwater contamination outside of the production units and/or in the aquifers above and below the ore-bearing formation may require a significant budget for developing and implementing the groundwater plume delineation and groundwater remediation efforts, and can potentially lead to criminal prosecution of the Company's executives.

13.4.10 Waste

The Company follows waste classification in accordance with the legislation of the RoK and the international waste identification code. According to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal the Company uses the three levels of waste hazards:

- Green - G index
- Amber - A index
- Red - R index.

Pursuant to public health requirements for the collection, use, application, neutralization, transportation, storage, and burial of production and consumption wastes, wastes are divided into five hazard classes in accordance with their potential impacts on the environment and human health (toxicity level):

- Class 1 – extremely high hazard (red level);
- Class 2 – high hazard (amber level);
- Class 3 – moderate hazard (amber level);
- Class 4 – low hazard (green level);
- Class 5 – no hazard (green level).

The Company generates solid domestic waste and production waste: radioactive and non-radioactive.

The waste generation and disposal limits (WGDL) permit application was compiled for each type of waste (except radioactive waste) based on the actual waste quantities. The WGDL permit application was approved by the SEER Department on November 28, 2018 and this permit is valid through December 24, 2028. This permit contains some provisions for an increase in the quantities of waste during 2019-2028 from 10,925.8 tons in 2019 to 13,269.9 tons in 2028 due to the planned expansions in the Western and Eastern Flanks.

13.4.11 Radioactive Waste

According to the public health regulations of the RoK, solid waste shall be regarded as radioactive if concentrations of radionuclides exceed the following levels:

- 100 kBq/kg (2.7x10-6 Cu/kg) for beta emitting radionuclides3;
- 10 kBq/kg (2.7x10-7 Cu/kg) for alpha emitting radionuclides;
- 1 kBq/kg (2.7x10-8 Cu/kg) for trans-uranium radionuclides.

Liquid radioactive waste and solid radioactive waste (SRW) include: wastewater generated during cleaning facilities or workplaces; wastewater generated during washing hardware at the laboratories; sludge contaminated with radionuclides generated during washing of motor vehicles and equipment at the decontamination facility; tools, gloves, personal protective equipment (PPE), other, which are contaminated with radionuclides; sediments in the sand sumps containing PS and LS; sludge from sludge collectors containing process solutions; pieces of pipes and faulty equipment; and other.

Liquid radioactive wastes are recycled by returning the spent solutions to the process cycle. According to the OVOS materials, the estimated quantities of SRW should not exceed 100 tons per year. A temporary permit for burial of SRW is obtained annually. SRW is collected directly at the place where it is produced, separately from other solid waste and is strictly separation based on its ignitability and flammability characteristics.

SRW is placed into reusable collection containers located in a sheltered temporary storage area. Once filled, the containers are transported to the RWDS of Kazatomprom-SaUran LLP according to the procedures specified in the RoK legislation. SRW is transported in specially equipped vehicles. Temporary storage of SRW

[3] Cu or Bq are the radioactive source activity (kBq/kg is 1,000 Becquerel per kilogram).

at the Company's territory must not exceed one month. An ISD specialist appointed by the Company's CEO is in charge of collection, storage, and consignment of radioactive wastes.

LRW includes contaminated soils (generated during emergency or technological spills of PS or LS), core or cuttings generated in the course of drilling operations through the ore zone; sediments accumulated at the PS and LS sand sumps; dismantled equipment unfit for full decontamination; building structures and elements; spent resins; filter cloth; chemical reagents; radioactive metal scrap (pieces of pipes, valves, shutters, furnaces, etc.). LRW is temporarily placed in an LRW temporary storage place. Quantities of LRW generated by the Company should not exceed 120 tons per year.

13.4.12 Drilling Sludge

Drilling of ISL wells requires the construction of two main mud pits with 35-40 cu.m capacity for muds and cuttings generated during drilling through the ore-free rock intervals and the construction of a special mud pit of at least 6 cu.m capacity for muds and cuttings generated during drilling through the ore-bearing formation.

If concentrations of radionuclides in the cuttings from the ore-bearing formation exceed the permissible radioactivity level the cuttings are transported to the temporary SRW storage area. If the cuttings do not contain detectable levels of radionuclides, these cuttings are transported to the sludge collector located in the ISL wellfield area.

The sludge collector occupies an area of 5 hectares and has a capacity of 14,369 cu.m. The bottom of the sludge collector is equipped with a very low permeability liner made of bentonite to protect groundwater. The maximum permissible quantity of drilling sludge to be generated in 2019 was 10,710.98 tons.

13.4.13 Non-Radioactive Production Waste

The Company's non-radioactive production waste includes:

- Spent materials, equipment, and spare parts;
- SDW generated by the Company personnel.

The 1st group of production waste includes spent luminescent bulbs (Class 1 hazard); lead and acid from spent accumulators, oiled rags (Class 3 hazard); used automobile tires and tubes (Class 4 hazard); non-radioactive scrap metal, non-radioactive drill cuttings, plastic bags and containers, construction debris and street sweepings (Class 5 hazard).

Such waste is stored in containers and bags in the temporary waste storage areas within the Company territory and in the mine camp area, and, once these containers and bags are filled they are transported to the SDW landfill, or transferred over to specialized enterprises for processing, regeneration, decontamination, and/or disposal. The maximum permissible quantity of waste for all types of wastes, except radioactive waste, is 10,763.18 tons per year; 162.2 tons per year of the total amount are transferred over to outside organizations.

SDW at the mine camp is collected in disposable containers (bags, bins, etc.) and standard dumpsters. The SDW is transported from is generation point to the SDW landfill by a tractor chaser bin. The SDW landfill is located in the village of Kyzemshek, Sozak District. The total area of the landfill is 5 hectares. The landfill is intended as a disposal site for the mine camp and has a service life of 20 years. The SPZ for the landfill is 1,000 m.

The annual limit of SDW generation is 52.2 tons per year; the waste is Class 5 hazard (green level) and can only be disposed of at the SDW landfill. There are no buildings, engineering infrastructure facilities, and/or gardens in the area. The permit for waste burial at the SDW landfill is valid until April 24, 2022. Compared with the previously set waste disposal limits of 128 tons per year, the current waste disposal limit at the SDW landfill has been reduced to 52.2 tons per year due to reduction biodegradable wastes, which are allowed to be disposed of at the landfill. When the landfill will be filled to its capacity, it will undergo reclamation.

A separate WGDL permit application was compiled for the SDW landfill, which was approved by the SEER Department on April 2, 2018. This permit is valid until April 4, 2022.

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13.4.14 Waste Management

Waste management is carried out in accordance with the Company's Waste Management Plan (WMP) developed for 2019-2028. The main goal of the plan is to decrease the quantities of waste (specifically, hazardous waste) by using alternative materials, technologies, processes, and/or techniques. The WMP is being implemented as part of the Company's EAP for years 2019-2028. Liquidation of all unauthorized dumps is planned during this period. The Company also developed and has been implementing the Regulations for Management of Hazardous and Non-Hazardous Production Waste (2015).

The studies conducted in the course of developing the WMP in 2018, the OVOS materials for 2010, 2011, and 2016, and the IEC data have shown that the current and future (up to 2028) annual quantities of waste disposal are acceptable for being disposed of at the existing landfills and waste storage areas and should not cause significant environmental issues related to the waste disposal. The waste storage and disposal practices used by the Company are in compliance with the public health rules and regulations of the RoK. According to the OVOS data for 2011 and 2016, concentrations of heavy metals in the soil at the SPZ boundaries of the landfills do not exceed the MAC values for soil.

Air pollution monitoring at the SPZ boundaries of the SDW landfill and the sludge collector is conducted on a quarterly basis in accordance with the IEC. There have been no air emissions exceeding the MAC values at the SPZ boundaries according to the IEC reports.

Pursuant to the legislation of the RoK, the Company has compiled a waste inventory and has obtained certificates for all types of wastes that it generates. The IEC reports on the conditions of waste disposal facilities are submitted on a quarterly basis to the Department and NAC Kazatomprom. No waste management violations were identified in the report on the Company audit conducted by the Department in June 2019. No material risks are expected in regards to the Company's waste management.

13.4.15 Soil

The topography within the mine allotment territory is mainly flat and is represented by barchan and ridgy masses. The topsoil is a thin 0.15-0.20 m layer stabilized by scanty pseudo-steppe vegetation.

Predominantly grey-brown desert crust soil as well as occasional takyrs and desert saline soil occur with the mine allotment territory. The land at the production area is not fit for agricultural production, therefore, no removal and storage of the topsoil layer for subsequent reclamation is carried out by the Company. The soil does not contain excessive concentrations of radionuclides or harmful chemical substances.

Possible sources of soil contamination include leakages of process solutions through pipelines; spills of sulfuric acid and petroleum products; discharges of solutions and slurries during cleaning of ISL wells, sand sumps, and the sludge collector.

Evaluation of the content of radionuclides in soil within the SPZ is conducted once a year using a walking gamma survey. No anomalous radioactivity levels in soil have been detected. All readings are within permissible values and do not exceed 0.17-0.18 mcSv/hr[4].

Additionally, soil sampling for general chemical analysis is performed as part of the IEC. In 2017, a total of 578 soil samples were collected and analyzed, and no exceedances of MAC values in soils were found.

In 2019, the Department identified two polluted soil areas: 1) a 6 m^2 area with traces of sulfuric acid spillage (in the vicinity of the sulfuric acid main pipeline in Block 63.2), and 2) a 268 m^2 area (Eastern part of Block 10), where soil was contaminated as a result of PS discharge. The soil samples from these areas showed the following exceedances over the MAC values: concentration of sulfate was 69 times higher than the MAC value, concentration of chloride was 67 times higher than MAC, concentration of calcium was 33 times higher than MAC, and concentration of magnesium was 46 times higher than MAC (the Department's inspection report of June 21, 2019).

[4] Micro-sivert per hour.

These areas were remediated by the Company: the contaminated soil from the eastern part of Block 10 (2,000 kg) and 215 kg of contaminated soil from Block 63.2 were transported to the RWDS. A confirmation test was conducted in the PS spillage area and it showed that the gamma radiation exposure dose rate (EDR) level was 0.28-0.49 mcSv/hr, which is below the MAC value of 0.8 mcSv/hr. The cost of this remediation effort was about US$870 according to the report of August 14, 2019.

Soil pollution monitoring is conducted on a quarterly basis. The monitoring includes measuring the following parameters: pH, nitrates, copper, arsenic, and petroleum products. According to the IEC reports for 2016-2019, and also according to the OVOS materials, there have been no exceedances of MAC values in the soil in all areas, where the monitoring was performed (except for the instances discussed above).

If the ISL operations are carried out in accordance with the required guidelines; the Company takes the required measures to prevent soil contamination, continues monitoring of the soil quality, and, if necessary, undertakes soil remediation in a timely fashion no considerable risk of soil contamination is anticipated at the Company assets. If these conditions are not met soil contamination may potentially become a basis for holding the Company administratively liable, imposing payments and fines for soil damage.

13.4.16 Flora and Fauna

Flora

Vegetation in the mine allotment area is scanty and is mainly represented by the following: turan absinthial and saltwort communities, glasswort, biyurgun and absinthial communities, and also a combination of white-ground wormwood and black saxaul brushwoods. The vegetation is rather monotonous and consists mainly of absinthial-saltwort and glasswort communities (*Salsola arbusculiformis, Salsola orientalis, Artemisia terrae-albae, Artemisia turanica*) with frequent patches of biyurgun (*Anabasis salsa*).

The mine allotment territory is home to two species of tulips entered in the Red Book of the RoK: the Alberta tulip (*Tulipa albertii*) and the Bortschev tulip (*Tulipa bortszczowii Regel*). Additionally, there are Central Asia desert and Kazakhstan endemics, including the turanifitum (*Symphytum officinale*) and Syr-Darya bur grass *(Anabais jaxartica*).

Disturbance of the topsoil layer due to exploration drilling covers a relatively small area and has no overall impact on the vegetation in the mine allotment area. A study conducted in the Inkai deposit in very similar conditions showed that concentrations of heavy metals in the plants was as follows: lead – 0.98-19.6 mg/kg; molybdenum – 0.10-0.98 mg/kg; chromium – less than 0.98 – 4.9 mg/kg; copper – 1.96-5.88 mg/kg; manganese – 9.8-58.8 mg/kg; nickel – less than 0.98 mg/kg; zinc – less than 0.98 – 4.9 mg/kg; and cobalt – less than 0.1-0.3 mg/kg. The total radionuclides content in the plant samples was 74.1 Bq/kg.

The OVOS materials from 2011 note that in recent years, vegetation has basically recovered to its original pre-mining conditions.

Fauna

The scanty flora and severe climate conditions have a negative impact on the diversity of the local fauna. At present, the fauna maintains its natural balance.

Birds and mammals are among the most noticeable and important elements of fauna in the mine allotment area. Birds are the most numerous, mobile, and visible vertebrates in the territory. They can be observed at any time of year. The greatest diversity of birds is found during spring and fall migrations (April-May and September-October). Up to 150 different species of birds can be seen during these periods, among which there are at least 20 rare or endangered species. Out of them 8 species of birds may nest in the vicinity of the Company assets: steppe imperial eagle (*Aquila nipalensis*), demoiselle crane (*Anthropoides virgo*), black-bellied sandgrouse (*Pterocles orientalis*), pin-tailed sandgrouse (*Pterocles alchata*), eagle-owl (*Bubo*), and other. The remaining 12 species can only be found during migration and nomadic migration: pink pelican (*Pelecanus onocrotalus*), Dalmatian pelican (*Pelecanus crispus*), red-breasted goose (*Branta ruficollis*), whooper swan (*Cygnus cygnus*), small swan (*Cygnus bewickii*) fish-hawk (*osprey*), golden eagle (*Aquila chrysaetos*), white-tailed eagle (*Haliaeetus albicilla*), saker falcon (*Falco cherrug*), peregrine falcon (*Falco peregrinus*), bustard (*Otis tarda*), and little bustard (*Tetrax tetrax*).

Two species of insects recorded in the Red Book of the RoK – hawk flies (*Satanas gigas*) and digger wasps (*Sphex flavipennis*) – can also be seen within the mine allotment area.

Up to 35 species of mammals are to be found in the vicinity of the mine allotment area and the adjacent territories. The species composition of mammals is of a distinctly desert nature. These are yellow spermophile (*Spermophilus fulvus*), little jerboa (*Allactaga elater*) and great jerboa (*Allactaga major*), giant day jird (*Rhombomys opimus*) and tolai hare (*Lepus tolai*). There are seven species of predators – the wolf (*Canis lupus*), the fox (Vulpes vulpes), the steppe polecat (*Mustela eversmanni*), and the manul cat (*Otocolobus manul*). Insect eaters and bats are scantily represented as follws: the eared hedgehog (*Hemiechinus auritus*), the lesser shrew (*Sorex minutus*), the whiskered bat (*Myotis mystacinus Kuhl*), and the common pipistrelle (*Pipistrellus pipistrellus*). There are two species of wild hoofed mammals: the saiga antelope (*Saiga tatarica*) and the goitered gazelle (*Gazella subgutturosa*).

Two species of mammals are listed in the Red Book of the RoK: the marbled polecat (*Vormela peregusna*) and the goitered gazelle (*Gazella subgutturosa*).

Poisonous and pathogenic spiders and mites encountered in and around the Company assets include the steppe spider (*Lathrodectus tredecimguttatus (Rossi)*), the ground spider (*Lycosa nordmanni*), the spotted scorpion (*Mesobuthus eupeus C.L. Koch*), the black scorpion (*Orthochirus scrobiculosus Geube*), and ixodid ticks (*Hyalomma asiatica, Dermacentor daghestanicus, Rhipicephalus pumilio*). Poisonous snakes inhabiting the area include the steppe ribbon snake (*Psammophis leneolatum*) and the copperhead snake (*Agkistrodon halis*). The Company personnel and contractors have been duly warned about the existence of poisonous and pathogenic arthropods as well as dangerous reptiles.

Development of the deposits does not exert a significant impact on rare fauna species since they occur widely in the mine allotment area and adjacent territories. Animal migration routes do not cross this area. No death of individual small animals or destruction of their habitats has been noted during construction activities. There are no tall buildings or structures in the asset areas that could hamper the migration or nesting of birds. Protective devices are installed on metal structures of the power transmission lines and the structures are grounded in order to protect birds against electric shock.

According to surveys conducted among the Company's employees, there have been no complaints from the local population regarding the extinction of any rare animals throughout the mine allotment area during the entire period of development. The current expenses for maintaining biological diversity are related to some general land management, although these expenses are negligibly small (about US$1,030 over the past 10 years).

Since no maps (or sketches) of habitats of the Red Book species of plants and animals are provided in the OVOS materials, it is possible that publicly available small-scale maps were used for planning mining operations and other activities in the mine allotment area. Therefore, it is not possible to fully prevent a risk of potential damage or destruction of Red Book animal and plant habitats. In order to minimize this risk, as part of the implementation of the "NAC Kazatomprom Roadmap in Environmental and Social Areas for 2019-2021", the Company should identify and map the Red Book animal and plant habitats. There are also some current plans to identify the areas that have already been disturbed by mining operations. Such maps (or sketches) should be used for planning mining operations and other Company's activities. These types of maps (or sketches) may already exist, but they were not provided for evaluations along with the other EHSS materials.

13.4.17 Social & Community

As was noted above in the EHSS Setting and Context section, the closest relatively large settlement to the mine allotment area is the village of Kyzemshek with a population of about 3,000 people. Kyzemshek is located 80 km to the south-east of the mine allotment area. The Taikonyr village is located 55 km to the north-west of the mine allotment area and has a population of about 600 people. The Taukent village (with a population of about 6,550) is located 195 km to the north of the mine allotment area. There are no other villages or residents in the region in close proximity to the mine allotment area. As of May 1, 2016, the population of the Sozak District was 61,337. Compared to the population as of May 1, 2015, the population of this district had increased by 1,317 people, or by 2.2%. The number of official unemployed registered at the employment service and receiving unemployment benefits is 628 persons, or 6.4% of the working age population. Of the total number of registered unemployed, 88% are men and 12% are women (the OVOS materials, 2016).

In terms of agroclimatic conditions, the region is located in an arid hot sub-mountainous and mountainous area. The local farm producers are mainly engaged in animal husbandry. There are some farmsteads in the direct proximity of the villages and the land is used for occasional pasturing of animals: sheep, goats, cattle, and camels. Pasture conditions are poor and its potential is limited due to low precipitation, scanty vegetation, widely spread solonetz soils, and insufficient surface water.

The local infrastructure is insufficiently developed. For instance, the municipal heating system is not functional. Medical and dental services are reduced to a minimum; the school financed by the district administration is in a poor shape. There are very few opportunities for recreation, except fishing (people typically travel to the Karatau foothills) and hunting. As noted in the OVOS materials (2016), starting from 1998, a drastic decrease in the population was observed in the Sozak District across all age groups. However, starting in the year 2000, the negative demographic trends in the district have been offset by the population growth in the village of Kyzemshek, where the number of women, teenagers, and children has virtually doubled.

The development of uranium deposits plays a leading role in the district's economy. Geologic exploration and mining activities are carried out mainly through the state budget funding and foreign investments. In the Sozak District, the share of the mining industry in the overall industrial production is at 80.6 %. Mining companies are the main producers in the Turkestan Region.

Employment opportunities in the Turkestan Region are quite limited. Most residents Kyzemshek work at NAC Kazatomprom mines. The rest of the population either engages in private business, animal husbandry, grows crops to support their families, or else do not work or study anywhere. Thus, the main employers in the the Sozak District are the uranium mining companies located in the villages of Taukent and Kyzemshek, which account for about 70% of the district budget in terms of tax revenue.

The development of the Company assets and an increase in the uranium production plays a pivotal role in the social and economic life of the district in regards to employment of the local population. With the exception of several experts possessing the required expertise, most of the Company's employees come from the local population. Reportedly, most local people have a positive opinion about expansion of the mining industry in the area and foresee new employment opportunities, a way to improve the standard of living of the local population, and to stabilize the local communities.

The Akimats (government agencies) also have a high opinion of the Company and its activities, and they closely collaborate with the Company in various areas including social support to families in need; employment of the local residents; education of youth; abandoned land reclamation; handing over abandoned production facilities; and other. According to the information obtained verbally from the Company's employees, the Company provides CSR support to the local population and administration of the village of Kyzemshek in resolving some concrete social problems: it provides material support in preparing children for school, conducts thematic lessons for schoolchildren, arranges village festivities, and other. The Company has not provided any information on its budget allocated for these activities.

The burial of radioactive waste has been one of the most important problems in the Turkestan Region in conjunction with the launch in the 1970s of commercial production at a number of uranium deposits using ISL mining. Lack of information on the pollution of the local environment and adjacent villages may trigger a negative attitude among the local population to the continuous development of uranium deposits. People are getting concerned about their health and about H&S of various forms of activities within the zone of influence of the Company assets.

The 2019-2028 Environment Protection Plan includes the ongoing disclosure of environmental information to the Company's employees. In order to manage the environmental and health-related concerns, the "NAC Kazatomprom Roadmap in Environmental and Social Areas for 2019-2021", being implemented by all of the Company's subsidiaries, contains a number of measures including identification and mapping of land use and nomadic cattle raising; identification of potential influence receptors; identification of stakeholders expressing interest in environmental and social aspects of the regional development, and other. Based on the available information, the Company will develop plans of interaction with the local population, which are to be updated on an annual basis.

There are no indigenous peoples in the region. The land on which the Company has its mine allotment area has been provided to the Company by the Akimat of the Turkestan Region under a temporary land use agreement.

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13.4.18 Radiation Safety and Health & Safety

The Mine has all necessary insurances, permits, state licenses issued by the Atomic Energy Committee and the Ministry of Energy of the RoK for mining and processing of ore containing radionuclides, and for performing works connected with the life cycle of facilities using atomic energy, and also the state precursor chemical license (for sulfuric acid).

Radiation Safety

Activities aimed at ensuring RS are conducted on the basis of the following licenses and certificates:

- The state license for activities related to managing radioactive waste (issued on November 2, 2015 and valid until November 2, 2022);
- The state license for managing radioactive substances, instruments, and installations (issued on May 19, 2015 and valid until May 19, 2020);
- The radiation hygiene certificate issued on April 16, 2019 (termless).

The Company has instructions on RS, instructions on prevention and elimination of the consequences of radiation accidents, a list of potential radiation-related accidents, and an emergency response plan to protect personnel in case of a radiation accident. The Company personnel undergo annual training on radiation protection and safety.

Order No. 95-M dated April 10, 2019 appoints the following persons responsible for RS at the Company: Deputy General Director for Production, Chief Engineer, and Chief Technical Manager of the ISD. All responsible persons have been duly certified by the Atomic Energy Committee of the RoK. The ISD personnel have been issued special training certificates related to managing radioactive waste.

The procedures for radioactive waste management are regulated by the Program of Radiation Safety Quality Assurance developed by the Company. The radioactive substances are managed in accordance with the Instruction on Radiation Safety of NAC Kazatomprom and the RoK's public health and epidemiological requirements for ensuring RS.

The industrial safety service performs radiation monitoring. The Company personnel exposure doses are registered and recorded in the exposure charts on a quarterly basis.

Radiation monitoring in the production areas and within the SPZ is conducted according to the schedule approved by the Sozak District radiation protection board. The ISD conducts measurements to identify EDR for gamma emissions, equivalent equilibrium volumetric activity (EEVA) for radon, surface contamination by alpha and beta emitting radioactive materials, and also the total specific alpha and beta activity of water and soil. There were no cases of exceeding permissible levels of radiation exposure in 2017 and 2018. In 2018, six instances of exceeding reference levels were identified in the course of conducting radiation monitoring[5]: two instances in the pregnant solution receipt unit (PSRU) and four cases in the ISL wellfield areas. The Company cleaned up the contaminated areas and the contaminated materials were transported to the RWDS. No other violations or non-compliances were identified.

Overall, the radiation situation at the Company assets remains stable, while all required measures aimed at ensuring RS are being implemented. The only non-compliance identified in the course of reviewing available documentation was the fact that the Company did not have (or failed to provide for inspection) the Potential Radiation Accident Prevention and Response Action Guide for Personnel. The lack of this document is a violation of the sanitary and epidemiological regulations of the RoK on Provision of Radiation Safety (the RoK Minister of Health's Order No. ҚР ДСМ-97 dated June 26, 2019). In case of a radiation emergency, the lack of this document can result in criminal liability being brought against the Company's executives.

[5] The organization administration sets so-called "reference levels" (doses, activity levels, flow densities, etc.). Such levels are set in order to ensure the conditions in which radiation impacts will be below the permissible levels, taking into account the radiation safety level set at the organization.

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Health & Safety

The Company has all main documentation required by Law No. 188-V 3RK on Civil Protection of the RoK dated April 11, 2014 and the Rules No. 297 on Ensuring Industrial Safety in Geological Exploration, Mining, and Processing of Uranium (Order of the Acting Minister for Investment and Development of the RoK dated December 26, 2014):

- The Safety Declaration;
- The Emergency Response Plan;
- Regulations on Industrial Control;
- Process Regulations.

No violations of statutory requirements have been identified in the course of inspections of these documents by regulatory agencies of the RoK.

However, the Company does not have or did not provide for inspection some administrative orders required by the Industrial Safety Regulations on Operation of Equipment Working Under High Pressure (the Minister's Order No. 358 of the Ministry of Investment and Development of the RoK dated December 30, 2014) and by the Industrial Safety Regulations on Geologic Exploration, Extraction and Processing of Uranium (the Acting Minister's Order No. 297 of the Ministry of Investment and Development of the RoK dated December 26, 2014):

- the order for appointing responsible persons for safe operations of high pressure vessels;
- the order for appointing responsible persons for good operational conditions and safe operations of the pumping stations.

Absence of these administrative orders may be considered by the regulatory agencies as a lack of internal control, causing potential danger to the life and health of people, and may result in the imposing of fines: an initial fine of US$1,300; a fine of US$3,260 for the repeated violation, and may eventually lead to a temporary suspension of the Company operations.

The documentation produced by the Company also lacks information on the availability of programs of initial inductions at workplaces. The lack of such programs is a violation of the Rules and Terms for Conducting Training, Briefing, and Knowledge checks on the issues of H&S and LP for the Company personnel.

Apart from the non-compliance issues, additional matters related to the best management practice were identified as follows:

- The Company does not have or did not provide for inspection a contractors' management program. Developing and implementing such a program is a standard practice; it defines H&S and LP procedures and requirements for the contractors' work performed at their client's facilities and premises. The contractors are responsible for its employees and subcontractors. Any serious accidents that may involve contractors or their subcontractors performing work for or providing services to the Company may attract media attention to the Company's activities, which, in turn, may lead to some reputational and/or financial risks.
    - Availability of a comprehensive list of chemicals used by a company is also a common practice. The Company does not have or did not provide for inspection the list of chemicals and the Material Safety Data Sheets (MSDS). The MSDSs provide the Company personnel and its contractors the necessary information on the properties and hazards of the substances the Company uses, and also on the main risks related to using these substances. The availability of the MSDS sheets facilitates safe management of the substances used by the Company and, consequently, reduces or prevents potential injuries, fatalities, and/or material losses.
    - The existing Company risk register as of May 8, 2019 does not cover many potential hazards and requires a further development. The identification of most possible hazards would allow the Company to define effective prevention and mitigation measures. Two examples are provided below:
        - Only 3 hazards were identified for operations of the Company's vehicles used for transportation of its personnel: emergency situations due to a technical failure of vehicles, emergency situations due to a driver's alcoholic intoxication, and collisions with other vehicles/objects. It should be noted that there

are many more potential hazards related to operations of the Company's vehicles, such as a possible driver's fatigue/sickness, failure to observe speed limits, improper road conditions, etc.

- In the section related to the sulfuric acid storage facility, only hazards related to equipment maintenance are provided (repair of acid transfer lines, pumps, and lights). It should be noted that some other potential risks related to offloading and further transfer of acids, the need to use acid-proof clothes and footwear, etc. are not included in the risk register.

Systematic inspections of the sulfuric acid tanks, the conditions of siphon devices and acid pipeline connections, etc., have been carried out by the Company in order to ensure safe handling of sulfuric acid. Equipment inspections and technical maintenance are conducted as per approved schedules of preventative maintenance. All works connected with the repair of pumps, pipelines, and check valves are performed under the work permit for hazardous operations and the Company personnel's and contractors' use of PPE.

The availability of main documentation on H&S, LP, and RS points to a sufficiently high level of control over the compliance with the regulatory requirements of the RoK at the Company assets. According to the documentation provided, the Company has H&S and Environment Management System, which allows its personnel to carry out a multi-tier control at the work places. The Company also developed H&S operating procedures and work safety instructions. The Company personnel are provided with all necessary PPE including special clothing, special footwear, and other approved by the Company's CEO.

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14. MINE RISKS AND OPPORTUNITY ASSESSMENT

Risk Ranking	Risk Description and Suggested Further Review	Potential Mitigant	Area of Impact
H	**Zhalpak Licence** The exploration licence for Zhalpak is currently expired. The Company has decided that instead of applying for the licence validity extension they will instead progress the technical work and consultations required to be granted a Mining Licence for the entire project area. As at the time of this Report this work is ongoing and neither renewal of the exploration licence or granting of a mining licence has occurred.	Ongoing study work and consultation with the newly formed Central Committee of Mining CCM.	Reporting of Resources and Reserves and future development plans.
M	**Potential Impacts to Groundwater** According to the report No. 3-1-1-8/82310 prepared by the SEER Department of the Ministry of Environmental Protection of the RoK (dated October 21, 2005) the deep monitoring wells were supposed to be drilled and installed at the Company assets to monitor potential groundwater contamination and plume migration. The OVOS of 2010 provides details on these monitoring wells: • two monitoring wells 655-670 m deep in the ore-bearing formation; • a 625-635 m deep monitoring well in the aquifer above ore-bearing formation; • a 680-690 m deep monitoring well in the aquifer below the ore-bearing formation. The Company failed to produce any information on the status of these deep monitoring wells and results of groundwater monitoring, which indicates the lack of information regarding some potential groundwater contamination in the ore-bearing formation outside of the production units and in the aquifers above and below the ore-bearing formation. Detecting groundwater contamination outside of the production units and/or in the aquifers above and below the ore-bearing formation may require additional budget for developing and implementing the groundwater plume delineation and groundwater remediation efforts, and can potentially lead to criminal prosecution of the Company's executives. It is noted that no contamination has been report to date over the 12 year operation of the project.	If groundwater contamination does exist and the groundwater plume(s) migrated outside of the production units and into the aquifers above and below the ore-bearing formation it will be necessary to take the following measures: 1) identify and delineate the groundwater plume(s) in the aquifers above and below the ore-bearing formation, 2) prepare a groundwater remediation plan, 3) obtain an approval for the groundwater plume delineation and remediation plan from the Department, 4) implement the groundwater plume delineation and remediation plan, and 5) obtain an approval from the Department for the successful groundwater remediation.	The mine allotment area and adjacent areas.
L	**Potential Air Pollution** Air pollution may be caused by: • ventilation emissions of radioactive substances from the PSPS and the refining production facilities, the PS and LS sand sumps, and the sludge collector;	Continuous monitoring of air quality according to the IEC in all areas of potential air emissions,	All Company Sites and all facilities.

Risk Ranking	Risk Description and Suggested Further Review	Potential Mitigant	Area of Impact
	• vapors of sulfuric acid released due to depressurization of containers with sulfuric acid or sulfuric acid spills; Air pollution may potentially become a basis for holding the Company administratively liable, imposing payments and fines for excess air emissions. No issues have been noted over the operations and the company has well documented procedures for this risk		
L	**Potential Soil Contamination** Possible sources of soil contamination by chemical and radioactive substances, acid, and petroleum products include: • leakages of process solutions through pipelines; • spills of sulfuric acid and petroleum products; • discharges of solutions and slurries during cleaning of ISL wells, sand sumps, and the sludge collector. Soil contamination may potentially become a basis for holding the Company administratively liable, imposing payments and fines for soil damage.	Continuous monitoring of the ISL process, pipeline conditions, and cleaning of ISL wells, sand sumps, and the sludge collector.	The ISL wellfields.

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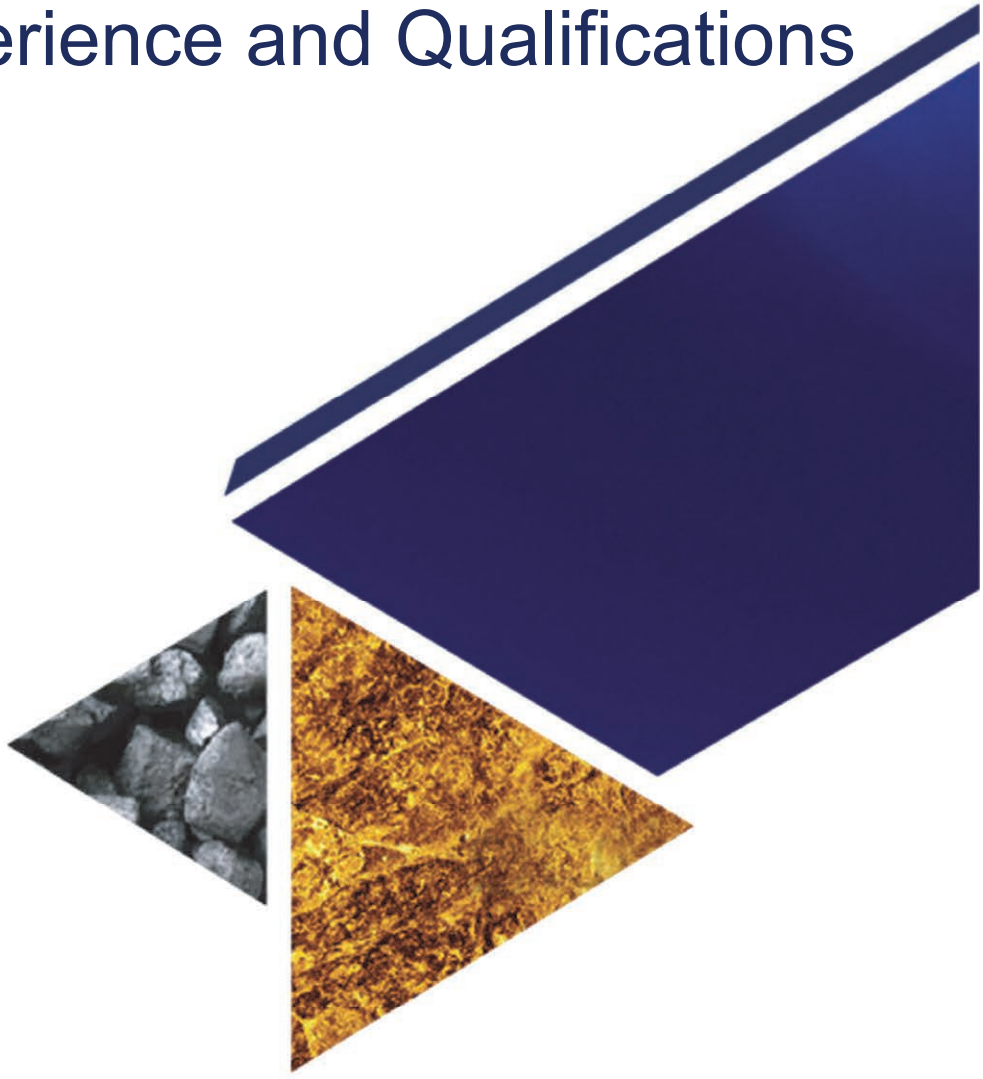
Appendix A.
Experience and Qualifications



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Team Member Biographys

Mr Robert Dennis (Brisbane) – Team Lead Kazakhstan and Tanzania Projects

Mr. Dennis is a Competent Person and Qualified person (JORC and NI 43-101) for both base and precious metals as well as uranium who was born and educated in Queensland Australia. He gained a BSc majoring in geology with First Class Honours from Queensland University in 1978.

Bob has over 39 years of professional experience which includes significant time spent working in both exploration and production on base and precious metals projects. Bob has gained significant Uranium experience globally working on projects located in Africa, Central Asia, Australia, Mongolia and Russia. He has been involved in the Due Diligence of eleven uranium projects covering all major uranium deposit types but including four ISL Projects. Bob has also been involved in the discovery, exploration and Resource definition of uranium projects. Bob is a member of the AusIMM) and AIG and is a Qualified Person for NI43-101 as well as a Competent Person for Resources for JORC 2012.For the past 7 years Bob has been involved in numerous M&A projects either in China or for Chinese companies looking at investments overseas.

Bob's location in Brisbane will give him a significant overlap with the Beijing time zone during business hours and with our North America technical team early in the day ensuring clear and ready communication with the Client.

Jeremy Clark, HKEx Conpliance Manager

With over 20 years of experience working in the mining industry Jeremy has gained extensive practical and technical experience working in a large range of commodities globally having worked on or reviewed over 400 projects. Jeremy has held various roles from exploration to production through to consulting, resulting in a detailed understanding of development of projects through the mining cycle for the past 13 years.

Jeremy has worked as an International consultant having worked and lived in Australia, America, Africa and Asia where he held the role of Principal Geologist and Country Manager. Recently Jeremy has been the project manager, principal project reviewer and/or acted as Competent Person for a number IPO's, transactions, major mining studies and major high level and detailed Due Diligence reviews completed under the JORC Code (or international standards). This work has included project managing independent technical review, scoping studies and pre-feasibility studies in all major mining jurisdictions in the world including Australia, Asia, the Americas and Africa as well as in in the developing centres of central Asia.

Since the implementation of the updated HKEx Chapter 18 listing Rules in July 2010, Jeremy has gained a detailed understanding of the technical requirements and the stringent regulatory approval process which each company must go through. As a CP/QP (JORC/HKEx/NI 43-101) for numerous deposit and commodity styles gained through his work in Australia, South America, China, Mongolia, CIS, Indonesia and Africa, and having supervised or compiled several successful large Independent Expert listing documents for IPO's and listing documents on the leading global financial exchanges, Jeremy is uniquely placed to highlight the key risks and requirements of the HKEx Chapter 18 listing rules.

Having lead the technical aspects of transactions of a combined value of over 12Billion USD, Jeremy is a worlds leading expert of major financial exchange rules and transactions with a long track record of successful on time delivery to meet investor expectation throughout the world, including the London, Australian, Hong Kong and Toronto Stock Exchanges. Jeremy unique skill set enables a detailed understanding of the requirements of both investors and financial institutions in regards to development of projects and delivering on value.

With relevant experience in a wide range of commodity and deposit types, Jeremy meets the requirements for Qualified Person for 43-101 reporting, and Competent Person ("CP") for JORC reporting for most metaliferous deposit types

Artur Zakis – Senior Geologist

Artur is a professional geologist with more than 15 years of experience in exploration and economic geology on copper, manganese, iron, gold and industrial minerals deposits. Artur's professional skills include, but are not limited to, mineral potential forecasting, design and implementation of exploration plans, pre-feasibility and feasibility studies including resource estimation, management and supervision from exploration till estimation of mineral resources and ore reserves. Artur has strong and successful experience in Soviet/Russian exploration standards and resource classification including roles in state expert on exploration projects Artur is very familiar

with the classification and reporting of mineral resources and ore reserves on JORC, NI 43-101 and SAMREC and has been involved in numerous independent technical audits for the purpose of investment.

Oyunbat Bat-Ochir – Senior Geologist

Oyunbat is geologist with 9 years of experience in Mongolian mining industry. He has technical background in fields of exploration and mapping projects for base metals and gold including detailed mapping and logging, supervision of designing various holes, data analysis and implementation of QA/QC. He also has strong background on GIS softwares for processing data analyses.

After joined RPM in 2012 Oyunbat has worked on Due Diligence, Resource Estimation, GRL, ITR, Exploration advisory projects for Iron, Copper-gold, Molybdenum, Tungsten mineral commodities.

Dr. Andrew Newell – Executive Consultant – Processing

Dr. Newell is a Senior Metallurgical Engineer with over 39 years of experience who attained his PhD (Base-Metal & PGM Sulfidisation / Flotation) from the University of Cape Town, South Africa and continues to give expert academic presentations on technical issues and solutions surrounding gold extraction.

Dr Newell has a variety of operating, managerial, technical and consulting experience from various roles in base, precious and industrial minerals processing. Andrew has participated in many Technical Due Diligences for a wide range of commodities including gold, copper-gold, copper-molybdenum, lead and zinc, nickel, hematite, magnetite, uranium, mineral sands and titanium dioxide, covering a wide range of processes including:

- Flotation ('oxide' and sulphide);
- Gravity (diamonds and hematite, gold);
- Ore sorting;
- Comminution (including HPGR);
- Magnetic separation;
- Leaching (heap, tank, pressure [nickel, copper gold and uranium]);
- Smelting (copper, gold and nickel);
- Sintering;
- Electrowinning (copper and gold); and
- Dewatering (thickening and filtration).

Tony Cameron, Executive Technical Consultant – Beijing, China - B.Eng. (Mining)

Tony is a mining engineer with over 30 years of experience in the mining industry. In his recent consulting work, Tony has been involved with reserve estimation, due diligence investigations, studies ranging from scoping level to bankable feasibility, mine optimisation, design and scheduling, operational and management audits, contract tenders, and general project management on a wide range of projects. Most of Tony's technical work in Beijing over the past 8 years has been focused on assisting clients in accessing capital through either equity or debt finance and Tony has developed an understanding of the requirements of the various financial market globally having been directly involved with successful transactions on the Hong Kong Exchange and a number of ASX, TSX and AIM transactions. Commodity experience includes gold, copper, nickel, iron ore, manganese, coal, uranium, tin, mineral sands, molybdenum and diamond. Country experience includes Australia, South Africa, Zambia, Ghana, Namibia, Botswana, Malawi, DR Congo, Nigeria, Mauritania, Spain, Finland, Alaska, Canada, Panama, Peru, Argentina, China, Mongolia, Indonesia, Malaysia, and Bangladesh.

Tony has also worked remotely on projects from various other countries during his time as a consultant based in Perth and Beijing. Tony specialises in the development of ore reserve estimates that are based on robust optimisations, practical designs, and achievable schedules. Tony is an expert user of Gemcom software for mining applications (including Surpac, Whittle and Minesched). Tony also specialises in drafting contracts and managing contract tenders. This includes providing ongoing assistance in managing the contracts and dispute resolution. Tony has an in depth knowledge of the Asian reserve reporting systems and has gained significant experience in both reviewing projects based on these systems and in converting projects from this region to international standards of reporting such as JORC, NI 43-101 and SAMREC.

Tony meets the requirements for Qualified Person for SAMREC / NI 43-101reporting, and Competent Person for JORC reporting for most metalliferous and non-metalliferous Ore Reserves and is a Fellow of the Australian Institute of Mining and Metallurgy (Membership No: 108264).

Murray Brooker – Senior Consultant - Brine

Murray has conducted numerous project evaluations and due diligence assessments of lithium and potassium brine projects, hard rock lithium and industrial mineral projects. Murray has undertaken evaluations on over 35 salt lake lithium and potassium projects, with detailed field program management and field evaluations on 15 of these projects, including drilling and engineering assessments to the definitive feasibility level over periods from months to years. Murray has experience with production assets, and was formerly the Chief Geologist for Orocobre on the Olaroz lithium brine project in Argentina. Murray is a key innovator in the field of lithium brine assessments, looking to develop best practices and utilise technology available from the Oil Industry and other sources to assist in lithium exploration and development.

Extensive experience as a lithium consultant for over 10 years, in South America, Australia and Asia. Experience includes project and due diligence assessments, JORC and NI43-101 compliant reporting of minerals project and resources, exploration program design and supervision. Clients include Orocobre, developer of the first major greenfields lithium brine project in 20 years and Agrimin - an aspiring SOP potash developer in Australia.

Responsible for managing a group of geoscientists conducting project evaluations and project generation using interpretation of satellite imagery, geological and geophysical data and field project mapping/sampling/drilling. Exploration and mining project expertise includes regional, belt and country scale project generation/targeting, advanced project assessments to feasibility level and evaluation of large tenement packages successfully generating new prospects.

Groundwater and environmental experience includes salt lake brine extraction, groundwater supply assessments; environmental impact statements and REFs/SEEs; contaminated site assessments and general hydrogeology; remedial action plans; soil/water remediation systems; environmental audits and technical reviews; project and financial management; drilling program management; mine site development and environmental issues; regional and project geological assessments and use of GIS/3D geological modelling software.

Victor Raykin – Principal Consultant - EHSS

Over twenty five years of hands-on experience in the technical, administrative, and financial management of large-scale multi-discipline environmental and social programs in the USA and internationally. Directed services for many Fortune 500 and Fortune Global 500 companies in the following sectors: mining and metals, oil and gas exploration and development, heavy and light manufacturing, chemical, agricultural, pulp and paper, railway transportation, construction, utilities, engineering, law, banking, financial, and insurance. Extensive experience in business development and project execution. Exceptional leadership and communication skills. Excellent judgment, problem solving, negotiation, and conflict resolution skills. Proven ability to work with diverse stakeholders including corporate executives, industrial owners, facility managers, contractors, vendors, government regulators, bankers, attorneys, insurance brokers, and NGOs. Extensive technical expertise in earth sciences, computer modeling, environmental investigations, and hydrogeology.

Philippe Baudry – Executive General Manager – Advisory Consulting

Mr. Baudry is a geologist with over 20 years of experience in the mining industry. With a strong background in mine geology gained working in large and medium scale open cut and underground gold mines in Western Australia for 7 years, Phil gained a post graduate qualification in Geostatistics leading to a specialization in resource estimation and project evaluation. Over the last 14 years Phil has worked as a consultant focused on the Asian and Russian regions. After 3 years living and working in Russia developing 2 porphyry copper projects and conducting due diligence in gold Projects, Phil moved to Beijing where for the past 10 years he has built up and managed RPM's business in north Asia including offices in China, Hong Kong, Mongolia and Russia before taking over responsibility for RPM's global consulting & advisory division which includes over 100 employees in 22 offices.

During his time in Asia, Phil has worked closely with leading financial institutions across Asia, America and Europe and large Chinese SOE's on transactions ranging from Due Diligences to IPO's and has gained detailed understanding of the requirements of both investors and banks in regards to public technical report requirements and listing processes on various financial exchanges. Phil is actively involved in a number of project financings in Turkey, Africa and Australia as lenders engineer for leading European banks and private financiers. Through

this work Phil has gained a deep insight into debt financing processes and requirements including IFC PS and EP3 requirements. Phil has an in depth knowledge of the Soviet and other Asian resource/reserve reporting systems and has gained significant experience in both reviewing projects based on these systems and in converting projects from this region to international standards of reporting such as JORC.

Philippe is a Member of AIG and is a Competent Person and Qualified person (JORC and NI 43-101) for both base and precious metals Mineral Resources.

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RPMGlobal Uranium Projects Experience

North American Uranium Projects

CGN Mining Company Limited RPM conducted the technical due diligence review for CGN Mining's major acquisition of 19.99% equity interest in Fission Uranium Corp followed by the preparation a Competent Person Report. The CPR was publicly disclosed in the Company's circular on the Hong Kong Stock Exchange on 7th March 2016, which included RPM undertaking and reporting of an Independent Mineral Resources estimate under the requirements of the JORC code as well as compilation of a Consolidated Project Development Plan and Life of Mine Schedule. The total transaction value was approximately CDN$ 82million.

Confidential Client RPM has conducted a technical due diligence review and valuation for the acquisition of multiple uranium properties in the Athabasca Basin, Canada. The valuation used the comparable sales method to establish a range of expected values for the properties for a potential investor.

USBM RPM prepared Profile Deposit Reports and reviewed the uranium leaching data for various uranium deposits located in Canada, USA, Argentina and Brazil, including Jean Lake, Georgia Lake, Elliot Lake, La Viquita, Rio Tercero, Santa Gertrudis, Serra, Minas Gerais, Anchieta, Alcobaca, Aracruz & Sao Joaoa de Barra.

COGEMA Mining RPM prepared a valuation of three main uranium holdings in Wyoming (USA) consisting of properties in the Shirley Basin as well as the Irigary and Christensen Ranch deposits. Company data were utilized to project capital and operating costs for re-establishing production from the idle tracts, and incorporated a market price for uranium to establish expected cash flows.

Homestake Mining RPM prepared the Slope Design Study, Waste Dump Stability Evaluation, Co-ordinate and completed the revised Reclamation/Closure Plan for the Pitch uranium project in Colorado, USA.

Jackpot Uranium Mine RPM was retained by Kennecott Uranium Company to complete geologic mapping of the east and west declines located at the Jackpot Uranium Mine in Wyoming. The project included mapping of lithologic contacts, structural features and sedimentary features, description of strata, and measuring and recording strike and dip of structural and sedimentary features.

Petrotomics Uranium Properties RPM prepared a conceptual valuation of uranium resources at the Petrotomics properties in Shirley Basin, Wyoming for Texaco Exploration and Production Inc. RPM's valuation included determination of the quantity of resources potentially available to in-situ leaching (ISL) operations; estimate of capital and operating costs of potential ISL production; outlook for future uranium prices; and preparation of discounted cash flow valuation of the recoverable resource. The information was used by Texaco in assessing the market value of the remaining resources,

American Soda RPM was retained by American Soda to complete a due diligence review of their sodium bicarbonate operations to provide project technical documentation for financial purposes. The project consisted of a solution leaching operation and processing facilities that had been in production for 1.5 years, utilizing pressurized, superheated water to extract sodium bicarbonate from a well field, at a production rate of 1 million tons per year. The RPM team reviewed the project resources/reserves, well field production, and down- stream processing facilities, with evaluations of heat exchange and produced solution concentrations, and documented the findings in a technical report suitable for use by financial institutions

Hanlong (Australia) Resources RPM completed the Mt. Taylor Technical Review for the client, which is located in Wyoming, USA.

Plateau Resources RPM prepared Mine Plan (UG) and Processing Plant Review, Preliminary Project Evaluation and Mineable Reserves Estimate for various projects located in Colorado, USA, including Plateau, Tony M, Frank M and Shootaring Canyon.

Atlas Minerals RPM conducted series of technical review services for the client's Farley, Velvet project located in Utah, USA. These projects include compilation of Feasibility Study, Trade-Off Studies (Mine Access, Final Product Flowsheet), Comparison of Processing Options, Review and EVALUATION OF Mineral Inventory and Reserves, Audit.

Texaco Exploration and Production RPM provided Conceptual Valuation of Petrotomics Uranium Properties for the Shirley Basin, Wyoming, USA.

Marline Oil Corporation RPM provided seriese technical projects for the Dan, Coles Hill uranium projects in Virginia, USA. These works include Preliminary Feasibility Study, Geotechnical Survey, Order of Magnitude Study, Reserve Estimate, Slope Angle Estimate, Cash Flow Analysis, Review Mine Plan and CAPEX and OPEX.

Daewoo International Corp RPM provided Geological Review and Exploration Potential for Lost Creek uranium project in Wyoming, USA.

Confidential Client RPM conducted a due diligence review of uranium assets in Wyoming, USA. The review included assets with conventional mining potential and also potential solution mining (ISR) opportunities.

Confidential Client RPM conducted a due diligence review of potential uranium in-situ recovery (ISR) properties in Wyoming (USA).

Confidential Client RPM conducted a due diligence review of an uranium asset in Wyoming (USA) with underground mining potential.

Confidential Client RPM Conducted a due diligence review and valuation of uranium properties in Western Colorado (USA) with emphasis on assets with underground mining potential.

Confidential Client RPM Completed a conceptual open pit mine plan for a uranium deposit in Wyoming, USA.

Australia Uranium Projects

Cameco RPM prepared Pre-feasibility Study for Yeelirrie uranium project in Western Australia.

BHP Billiton RPM provided Mine Design and Scheduling for Yeelirrie project located in Western Australia.

BHP Billiton RPM has provided Mine Scheduling services and implemented the XPAC scheduling package to improve extraction efficiency at the giant underground copper-gold-uranium mining operation for Olympic Dam, South Australia.

Confidential Client RPM has conducted a full technical due diligence review and valuation of a uranium exploration project in the Northern Territory of Australia. The valuation used the comparable sales method to establish a range of expected values for the properties for a potential investor, and a suggested framework for investing in the project.

Confidential Client RPM conducted a full technical due diligence review and valuation of an ISL uranium project in Australia.

Confidential Client RPM has conducted a full technical due diligence review and valuation of a potential underground/open cut uranium project in South Australia.

Confidential Client, Australia. RPM is implementing the XPAC scheduling package to facilitate the most effective scheduling of the resource.

Europe Uranium Projects

Tournigan Energy RPM prepared the Preliminary Assessment on the Kuiskova uranium project in Slovakai.

Concord/Energy Fuels RPM prepared Geolgoical Mondelling and Mine Planning for the Ryst Kuil uranium project in Czech Republic.

Mydlovary MAPE Remediation Project RPM was retained by DIAMO, s.p. through a grant by the U.S. Trade Development Agency to complete a feasibility study for the Mydlovary MAPE Remediation Project, located near the village of Mydlovary in the Czech Republic. The overall objective of this project was to develop a Feasibility Study to determine the best remediation method for the MAPE facility, a former uranium milling facility and associated tailings disposal area. The basis of the best remediation approach considers both technical and economic issues and must meet the financial, regulatory and organizational requirements of the project.

Rozna Mine Uranium Mill RPM was retained by DIAMO, s.p. through a grant by the U.S. Trade Development Agency, to complete a feasibility study for the Rozná Mine Wastewater Treatment Project associated with the Dolní Rozínka mineral processing facility in Moravia, Czech Republic. A feasibility level closure design analysis was completed for two tailings impoundments associated with the uranium mine and mineral processing site. During mining and milling operations the facility operated at a net positive water balance with the inflows from direct precipitation to the tailings, seepage interception, storm water runoff and some mine dewatering water exceeding the losses of water from the system. Treatment processes consisted of barium chloride treatment ($BaCl_2$), ion exchange (IX), multi-stage evaporation and electrodialysis (EDA). At the time mining ceased in 2006, the net excess volume of water was projected to increase to levels requiring an increased water treatment capacity. RPM/HC completed an alternatives analysis to determine the best option for wastewater treatment relative to economic and technical considerations and provided recommendations regarding the sequencing of closure to minimize the infiltration of surface water and reduce total water volume to be treated.

Confidential Client RPM is currently working on a technical due diligence review for an underground uranium project in Eastern Europe.

Africa Uranium Projects

Ryst Kuil Uranium Deposit At the request of Concord/Energy Fuels, RPM prepared an estimation of the mineable resources at the Ryst Kuil uranium deposit in South Africa. Capital equipment and development expenditures were forecast, and an operating cost was applied to determine general economics of the property. The purpose of the study was to allow Concord to assess the mineable aspects of its participation in this property.

Globe Uranium RPM provided maiden JORC Reserve for the Kanyika uranium and niobium project in Malawi.

KEPCO RPM provide Tchnical Assessment for the Imouraren uranium project in Niger.

Confidential Client RPM has conducted a full technical due diligence review and valuation of a potential open pit uranium project in Namibia.

Russia / Asia Uranium Projects

Mitsui RPM provide annual technical auditing to ARMZ's operations in Russia, including review of Geology, Resource, Engineering, Feasibitliy Study, Processing and Financial aspects.

Live Energy Co. RPM conducted Exploration Advise, Resources Estimate and Scoping Study including testwork, acid leach and ISL for Chuluut uranium project located in Mongolia.

Confidential Client RPM is conducting a technical due diligence study, including a review of project economics, on a uranium project in pre-feasibility in Russia.

Confidential Client RPM prepared the Due Diligence and Ongoing Advisory (Geological, Mining and Processing) for Elkon uranium and gold project located in Yakutia, Russia.

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Appendix B. Glossary of Terms

Appendix B – Glossary of Terms

- AA atomic adsorption (analytical procedure)
- C Centigrade degrees
- CGN CGN Mining Company Limited or the Client
- cm centimeter
- COG Cut-Off Grade
- CRM Certified Reference Material
- Cv Coefficient of variation
- DD diamond-drill hole
- DDH diamond-drill hole
- DH diamond-drill hole
- DIA Declaration of Environmental Impact
- dia diameter
- EDA exploratory data analysis
- EHS Environment, Health, and Safety
- EIA Environmental Impact Assessment
- EP Equator Principles
- EPC Engineering, Procurement, and Construction
- EPA Environmental Protection Agency
- ESIA Environmental and Social Impact Assessment
- ESMS Environment and Social Management System
- FOZ Formation oxidation zones
- FS Feasibility Study
- G&A General & Administrative (costs)
- hr hour
- ID2 inverse distance squared (reserve estimation method)
- IDC inverse distance cubic (reserve estimation method)
- IDW Inverse Distance Weighted (interpolation method)
- IFC International Finance Corporation
- IK Indicator Kriging (reserve estimation method)
- Kazatom Kazatomprom or the Company
- KE Kriging Efficiency
- kg kilogram
- km kilometer
- KSR Kriging Slope of Regression
- kV kilovolt
- kW kilowatt
- kWh kilowatt hour
- kWh/t kilowatt hour per tonne
- l and L liters

- lb pound (avoirdupois)
- M million
- m meter
- cu.m cubic meters
- Ma million years
- masl meters above sea level
- mm millimeters
- m/sec meters per second
- MT million tonnes
- Mtpa million tonnes per annum
- MW megawatts
- OK Ordinary Kriging (reserve estimation method)
- pH negative log of hydrogen ion concentration (measure of acidity/alkalinity)
- PLS Pregnant Leach Solution
- PS Performance Standard (of IFC)
- QA/QC Quality Assurance/Quality Control
- QKNA Quantitative Kriging Neighborhood Analysis
- QQ Quantile-quantile (of statistical data plots)
- RC reverse circulation (drill hole)
- RPM RPMGlobal
- S sulfur
- S2- sulfide sulfur
- SE search ellipsoid
- s.g. specific gravity
- SLS solid-liquid separation
- StdDev Standard Deviation
- tpa tonnes per annum
- tpd tonnes per day
- U Uranium
- U_3O_8 Yellow Cake
- USD United States dollar
- V volt
- WHO World Health Organization
- WRSA waste rock storage area
- XRD X-Ray Diffraction (mineralogical analysis)
- XRF X-Ray Fluorescence (chemical analysis)

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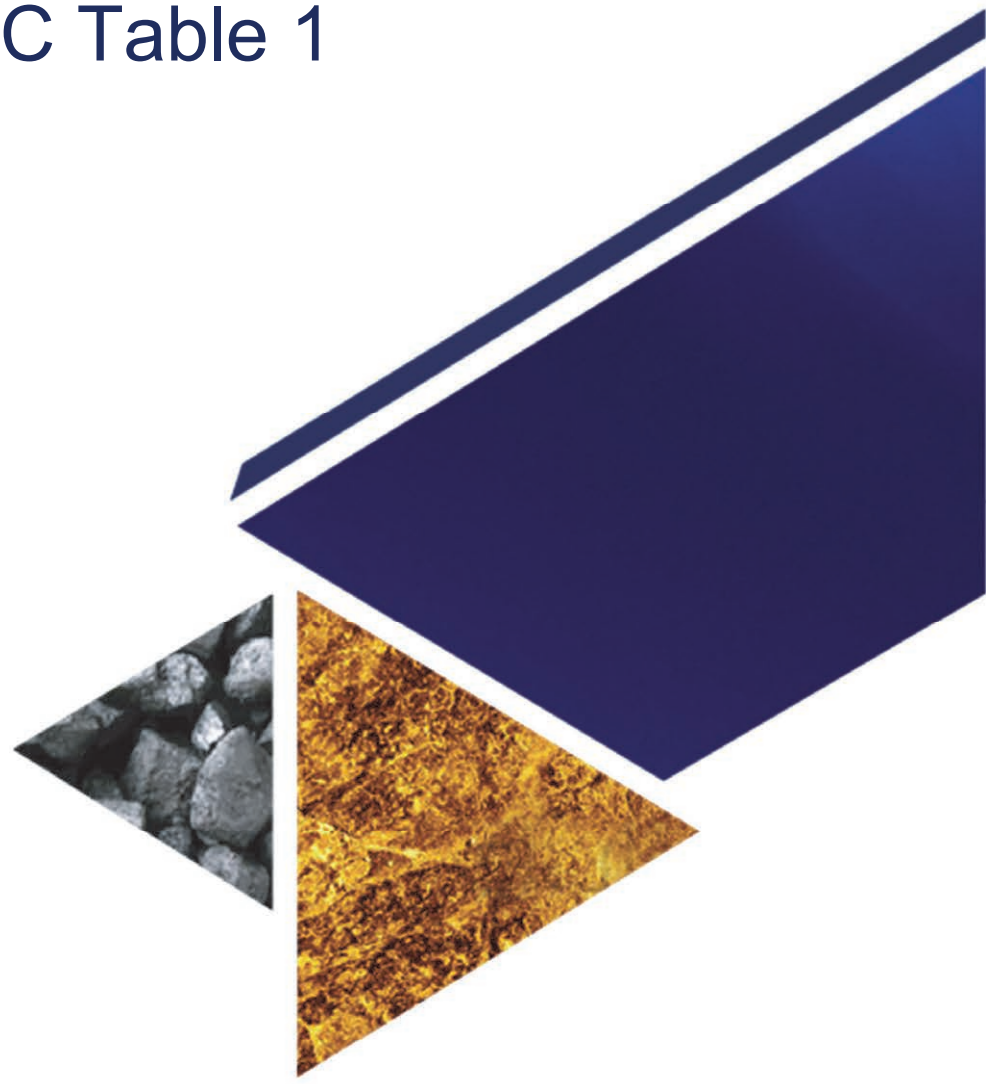
Appendix C.
JORC Table 1



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Central Mynkuduk

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ Core samples were taken on all diamond drill holes with radioactivity higher than 40μR/h and linear core recovery >70% ▪ Half core was collected and sampled with varying sample lengths ranging from 0.15m to 1.2m. Material with limited radioactivity were sampled on 0.2m to 0.3m intervals. ▪ Sample analysis included U and Ra determination, grain size and carbon content. Geochemical analysis including Se, Re, Sc, Y and some REE were completed during the second stage drill campaigns. Analysis for these secondary elements were selected within U-bearing intervals. ▪ Thorium concentration was determined by XRF method on 232 U bearing samples. Potassium concentrations were measured in 86 samples using flame photometric method. ▪ U-Ra samples were analyzed according to Standards of Scientific Council of Analytical Methods. ▪ U-content was determined by XRF with a lower detection limit of 0.0004%. Selenium was determined by X-Ray while rhenium was determined by chemical and spectrographic methods. ▪ CO_2 content was determined by dissolution of the sample in 10% HCl.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ Drilling techniques at Central Mynkuduk utilized both diamond and percussion drilling. ▪ A total of 787 drill holes representing 285,431m of drill core include prospecting, exploration and hydrogeology. ▪ Core drilling utilized hole diameters of 89mm, percussion holes were drilled at 118-132mm. ▪ Core drilling was used to determine lithological boundaries and definition of oxidation zone. Percussion drilling was used for infill

Criteria	JORC Code explanation	Commentary
		drilling. Drill hole lengths range from 350m to 360m.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ 82% of the core holes had recoveries >70%; RPM considers this to be acceptable for the style of mineralisation, particularly given that the estimates were undertaken with gamma logging corrections.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ All core samples were logged primarily for grain size, clay content, texture, structure and mineralisation. ▪ Drill holes are geophysically and radiometrically logged with various down-hole instruments to indirectly determine the uranium content. ▪ Gamma logging was used to determine the uranium grade and thickness on 10cm intervals. Correction factors were applied to determine overall U-content. ▪ All geophysical methods were completed using geophysical instrument type SK-1-74. ▪ Calibration of equipment was undertaken every 6 months using standard sources. ▪ No geotechnical logging was completed.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	▪ Core was cut and halved. One half was used for U and Ra determination. The remaining half was used to assist with gamma-log interpretation, density measurements, moisture content, chemical control analysis, selenium grade determination and to measure physical properties. ▪ Average weight of the samples reached up to 7kg which were crushed to 1mm and split to an average weight of 0.2kg.

Criteria	JORC Code explanation	Commentary
	▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ All QAQC samples and procedures were taken in accordance with USSR and RK standards. ▪ QAQC results from Stage 2 drilling were provided. ▪ A total of 188 field duplicates were taken during Stage 2 drilling. Results indicate field duplicates to be within acceptable limits as per the Soviet standard. Scatter plots support an acceptable level of accuracy. ▪ A total of 198 pulp duplicates were taken. Scatter plots support that the applied sampling methods are within acceptable limits. ▪ Internal and external repeat assaying was completed for Central Mynkuduk including internal repeat on pulp samples within the laboratory, internal duplicate pulp samples within the primary lab using different chemical analysis methods and external pulp duplicates within an external laboratory. ▪ Results of laboratory QAQC indicate very good correlation with the primary sample ▪ Geophysical QAQC results show suitable levels of accuracy but do show some variation. This variation is not material.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ Independent reviews and validation have been undertaken. No material issues have been identified.
Location of data points	▪ *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ Topography locations were based on state geodetic points and were undertaken by a sub-contractor. They are considered to be suitable in accuracy. ▪ Downhole surveys for all exploration holes were completed on 20m intervals. Minimal deviation was observed.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Drill spacing is generally 200m by 50m and 100m by 25m in areas of infill drilling. RPM deems this to be appropriate. ▪ Geological understanding and grade continuity have been established.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ Sampling methodology is acceptable within consideration of the deposit type. Mineralisation is flat-lying and constrained.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Sample security was not reviewed in detail.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ Drilling and sampling procedure review indicates suitable practices were utlised with no material issues. QAQC samples show suitable levels of accuracy and precision and ensure confidence.

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Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ The CM project is located within a single exploration permit which is held by the LLP "Mining company "Ortalyk" in accordance with the Contract 3610-TPI of 31.05.2010 (Add 4 of 19.10.2017), and has an expiration date of 31.05.2018. ▪ The Central Mynkuduk deposit is contained within a single mining permit. In 2005 JSC "NJSC "Kazatomprom" received the mineral rights (Contract on exploration and mining). The Contract is registered under the number 1796 and dated 08.07.2005 with an expiration period to 08.07.2033. Mining and operation permissions were transferred to LLP "Mining company "Ortalyk" according to amendment 3 on the 19.10.2017. Current mining allotment is 46.976 sq.km with a maximum depth 370 m.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Regular geological reconnaissance of the territory commenced in 1958 by the state geological survey. These works included drilling however due to low core recovery geological connection of the permeable rocks was difficult during this early exploration. Special uranium prospecting commenced in 1961 by the Volkov expedition. The Volkov expedition explored the Uvanas deposit in 1967; the Mynkuduk and Zhalpak deposits in 1972; the Kanzhugan and Moinkum in 1970; Inkai in 1976-78 and Budenovskoye in 1979. Thus, before 1980 two large uranium districts were discovered: Mynkuduk uranium district and Kanzhugan uranium district (located in southwest part of the territory). ▪ The CM deposit was discovered in 1970 by party # 27 of the Volkov expedition (JSC "Vovkovgeologiya") after the drilling on line 416..
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The Mynkuduk Formation (K2t1 mk) was defined in 1973 at the Mynkuduk deposit and comprises grey-coloured and variegated alluvial and lacustrine-alluvial sediments accumulated in the Turonian System, which generally extends from the south-east to the north-west ▪ There is a geochemical boundary between the variegated and grey coloured sub-formations which corresponds to the paleo groundwater

Criteria	JORC Code explanation	Commentary
		table level of the Danian-Early Paleocene period. ▪ Grey medium-grained cross-bedded feldspar-quartz sand with pebble and gravels are developed in the grey coloured sub formation. Often containing carbonized detritus with iron di-sulphides this sub-formation is U bearing within the Zhalpak deposit. ▪ Sediments of the variegated sub-formation are predominately represented by medium and fine-grained sands of green-yellow-brown-red hues. The upper portion of the sub-formation comprises red-brown carbonized clays that are the regional boundary separating saline Cretaceous waters from fresh Paleogene waters. The thickness of variegated sub-formation varies from 20m to 60m. ▪ The Mynkuduk deposit is confined to the lower portion of the ore-bearing fronts within the FOZ and has simple morphology. The thinning of the lower zone has a step nature depending on different composition and permeability of the hosting rocks. ▪ The Central Mynkuduk Formation contains thick lenses of grey clay throughout the stratigraphic sequence which are the reason for the heterogeneity of the Mynkuduk Formation. Average grain size of permeable rocks within the key sub levels are constant across the different parts of the deposit ▪ Localization of uranium mineralisation is dependent on the geochemical type of host rocks. The Mynkuduk Formation contains four geochemical types: diagenetically reduced grey-colored; diagenetically and epigenetically reduced green-grey and green-colored; non-reduced primary red-colored and variably; epigenetically oxidized formation.
Drill hole information	▪ *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:* – *easting and northing of the drill hole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*	▪ Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
	– *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Exploration results are not being reported. ▪ Not applicable as a Mineral Resource is being reported.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	▪ All drilling at CM drilled vertically and mineralisation is generally sub-horizontal.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	▪ Relevant diagrams have been included within the Mineral Resource report main body of text.
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*	▪ The report is believed to include all representative and relevant information and is believed to be comprehensive.

Criteria	JORC Code explanation	Commentary
	practiced to avoid misleading reporting of Exploration Results.	▪ Exploration results are not being reported.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ All interpretations for CM mineralisation are consistent with observations made and information gained during drilling at the project.
Further work	▪ *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ No infill drilling was planed ▪ Refer to diagrams in the body of text within the Mineral Resource report.

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Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ Drilling data has been verified as part of validation procedure. Collar, survey, lithology, chemical assays, gamma assays data was imported and validated. Errors were reviewed and corrected. ▪ Detailed geologic logging was accompanied by gamma geophysical downhole surveys with readings every 10cm. ▪ Data review undertaken by RPM did not identify any material issues.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit was conducted by Jeremy Clark, Artur Zakis and Irina Gorkina in November 2019. No major issues were identified.
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ The Central Mynkuduk deposit is confined to the lower portion of the ore-bearing oxidation zone and has simple morphology. It is hosted within the permeable sands and controlled by the oxidation zone that form part of a larger regional front of oxidation. ▪ Mineralsation is comprised of two main lenses that extend along strike between 8km and 27 km and have an average thickness between 0.9m and 27m. ▪ A permeability geology model was developed for Central Mynkuduk using the logged permeability codes. Permeable zones were grouped and modelled resulting in three permeability zones. Permeability 1, 2 and 18. ▪ Using the gamma geophysical data, two major zones of mineralisationwere modelled. Mineralisation wireframes were created using a 0.06%U*m cut-off. ▪ Mineral wireframes were extrapolated a maximum of one half the drill hole spacing.
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.*	▪ The Mineral Resource area extends over a strike length of 27km, with two tabular mineral zones defined over a width ranging from 50m to 800m. Average mineral thickness between 0.9m and 27m.

Criteria	JORC Code explanation	Commentary
		▪ Mineral extends from 8680N to 940N and 5105E to 32280E ▪ Mineral intercepts are at approximately -80mRL to -150mRL below topography. ▪ Variography conducted on the dataset indicate good along strike continuity with little variability.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	▪ Central Mynkuduk used estimation parameters derived from modelled variograms. Ordinary Kriging (OK) was used to estimate average block grades in a three-pass estimation methodology using Leapfrog Geo/EDGE™ version 5.0.3 software. ▪ Mineralisation was constrained by mineral resource wireframes with a minimum U%*m cutoff of 0.06%. Hard boundaries for each mineral zone were used during estimation. ▪ Samples were composited into 5m intervals. ▪ Sample dataset shows low coefficient of variation overall. ▪ Geostatistical analysis was conducted on sample data to determine top-cutting. Analysis indicates overall metal reduction of <1% as a result of sample capping. A capping limit of 0.6%U was applied. ▪ Parent block dimensions used were 25m x 50m x 5m with sub-blocking. The model was rotated to the NW 290° direction to align along the strike of the mineralisation zones. Parent block size was selected based on Qualitative Kriging Neighborhood Analysis (QKNA) results and is deemed reasonable considering the drill spacing and nature of mineralisation. ▪ A dynamic ellipsoid search was applied to account for the variation of mineral orientation and estimation parameters were derived from modelled variograms. A 3-pass estimation approach was applied with the first pass of 300m having a minimum of 4 samples to a maximum of 24 samples with a 3 drill hole limit. The second pass of 600m with a minimum of 4 samples to a maximum of 24 samples with a 3 drill hole limit. The third pass of 1,800m with a minimum of 1 sample to a maximum of 10 samples with 1 drill hole limit. ▪ Only U% and U%*m were modelled.

Criteria	JORC Code explanation	Commentary
		▪ Block estimates were validated visually, statistical comparison of block estimates with composites, swath plot validation and reconciliation to historical production. Visual validation indicates modelled grade to be consistent with drill hole grades overall. Validation plots show good correlation to composites. ▪ Production reconciliation indicates overall tonnages reconcile well with minor variation on local scale. Overall estimates are considered to be well represented of metal quantities in the deposit.
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ The Mineral Resources have been reported in total because all is available for leaching and take/no take decisions are taken on a leach cell size basis at the Reserves stage. Mineralisation boundaries were modelled at a 0.01% U% cutoff which acts as a lower cut.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ RPM has assumed the deposit to be mined with an insitu leaching (ISL) technique. Mineralisationgrade, continuity and thickness are deemed appropriate within the Central Mynkuduk area.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ Metallurgical testing has been completed for the Central Mynkuduk deposit. ▪ Mineral recovery at the Central Mynkuduk deposit is expected to be 90%.
Environmen-tal factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects*	▪ No environmental assumptions were made.

Criteria	JORC Code explanation	Commentary
	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.	
Bulk density & Moisture Measurements	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ Bulk density and moisture measurements were taken from each lithological rock type. A total of 914 samples were taken at a spacing of 800m x 100m. Additionally density and moisture data is available from geophysical instruments. ▪ Average moisture content was 14.7% and average dry density was 1.7 t/m³. ▪ A bulk density measurement of 1.7 t/m³ was applied to resource block estimates. ▪ Tonnages and grades were estimated on a dry insitu basis.
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ Mineral Resource at Central Mynkuduk was classified as Measured, Indicated and Inferred Resource based on data quality, geological interpretation, sample spacing and mineral continuity. ▪ Measured Resource is defined as any resource within 25m across strike and <200m along strike. ▪ Indicated Resource is defined as any resource within 50m across strike and <200m along strike. ▪ Inferred Resource is defined as any resource represented by a single drill hole intercept or narrow channel cross cutting the main strike of mineralisation. ▪ Classification only applies to Permeable zones. ▪ Results from variogram modelling utilized in classification determination.
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ Internal validation of Central Mynkuduk conducted by RPM

Criteria	JORC Code explanation	Commentary
		confirms results of the resource estimates. Includes comparisons to recovered U.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ Data integrity found no material issues and has been deemed acceptable by RPM. ▪ QAQC procedures are within USSR standards. Samples analyzed according to local standards. ▪ Mineral continuity and permeability zones have been adequately interpreted and estimated to characterize the Mineral Resource classification. ▪ Historical production reconciles well with RPM's resource estimates adding to overall resource confidence.

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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	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The independent Mineral Resources estimates completed by RPM have been utilised for the Ore Reserve estimate. ▪ The JORC Measured and Indicated Mineral Resources quantities are inclusive of and not additional to the Ore Reserves reported
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ Mr. Jeremy Clark (On behalf of the CP) visited the site from November 18th through November 23rd, 2019. The outcome of those visits was an in-depth understanding of the Project.
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Ore Reserves were estimated using a specialised mine scheduling software package to calculate the production schedule. The input parameters selected by RPM are based on the review of the hydrological and mining studies completed by the Company, historical production and reconciliation as well as discussions with site personnel and site visit observations. ▪ The estimation of JORC Ore Reserves were prepared based on studies of Pre-Feasibility level confidence and actuals from the current operations with over 2/3 of the resource area already under production.
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ Due to the non-selective nature of the in situ leaching (ISL) mining method traditional cut off grade optimization is not carried out as part of the mine planning process. A minimum leaching thickness of 6m is applied to the resource estimate with a minimum intercept grade of 0.01 U%. RPM's designed leaching polygons only covered areas of the resource which meet the current intercept cutoff grades applied by the Company.
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimization or by preliminary or detailed design).*	▪ Reconciliation of past production for this mine was used to determine appropriate mining modifying factors for conversion of the Mineral Resource to Ore Reserves. ▪ ISL mining extracts uranium progressively via the addition of acid to a production block. ISL is

Criteria	JORC Code explanation	Commentary
	▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimization (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	effectively the only economic way to extract the available U concentrations at the depths where it is present. ▪ The ISL method allows for extracting U deposits and does not require excavation of the host rock, as the extraction is undertaken by leaching. Geotechnical parameters are not important for extraction, as no excavation is made, although porosity and permeability characteristics are the keys to economic extraction. ▪ As there is no excavation and all extraction is via wells and pumping pit and stope optimisation is not undertaken. ▪ A minimum thickness of 6 m is applied for leaching in the production blocks. ▪ Because adjacent material is also subject to leaching there is an overall dilution of the U grade compared with whether the fluid could only be extracted from the productive interval. This dilution is taken into account in the effective thickness of the reserve units. ▪ There are no inferred resources defined for this deposit. ▪ Drilling of injection and recovery wells is required for ISL mining of the defined reserves. This involves installing a central extraction well in each production block, with injection wells surrounding the injection well. Acid solution is injected and the U recovered in the pregnant leach solution (PLS) from the extraction well, which is pumped to draw the acid solution through the target sediments.
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.*	▪ The metallurgical process consists of producing PLS from leaching and providing this to a resin plant, where the U is extracted from the leachate. The U is then converted to yellow cake in the processing plant. ▪ The metallurgical process is well-tested. ▪ A considerable amount of metallurgical test work has been conducted and the project is currently in production. ▪ Pilot test work was conducted prior to production, and the project has now been in production for over 10 years.

Criteria	JORC Code explanation	Commentary
	▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ The process recovery is projected to be approximately 98.4% based on the historical performance of the plant. ▪ Bulk samples are not required for further metallurgical testing
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ Because the U is extracted using the ISL technique there is no extraction of rocks at surface and no generation of waste rock that could generate contamination such as acid mine drainage. Drilling waste from holes is disposed of in a central location and this is believed to be permitted/compliant with the licence and environmental conditions. ▪ Installation of monitoring wells is required by government agencies, to monitor whether U mineralised groundwater has migrated beyond the mining property or above and below the production horizons. ▪ The in-situ leaching and processing are covered by a single Environmental Permit. As an operating mine that has undergone production and processing for over 10 years no adverse environmental restrictions are anticipated. ▪ Installation of monitoring wells will be required as part of environmental requirements for mining.
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ The project is an operating mine site and has appropriate infrastructure to allow it to operate as a mine. ▪ Additional production wells and surface piping are required as part of ongoing mining operations, with new production wells installed every year.
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.*	▪ The project is an operating mine site and the capital and operating costs of the operation are well understood, due to the period of operation. Costs are based on information provided by the operator. ▪ Assumptions of the commodity price involve a long term commodity price of US30/lb ▪ Deleterous elements are not known to be present in sufficient concentrations to affect the product quality and price

Criteria	JORC Code explanation	Commentary
	▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ The product value is assumed at the point of the mine gate. ▪ A standardised refined product is sold.
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *the derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ A Uranium price of US30/lb was provided by the Company and confirmed by RPM as reasonable using published metal price forecasts. ▪ An exchange rate of USD/TENGE 426 (the 2020 exchange rate) was provided by the Company and validated by internal RPM data bases.
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ The project is currently producing U saleable product and the company has established clients and sales contracts. ▪ The product quality is believed to be acceptable for international markets. ▪ The Uranium market is currently in a depressed state and the company has responded by reducing production. However, production is planned to increase in response to expected improvements in the market within the next few years.
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ Central Mynkuduk has been in-situ leaching since 2007 and the inputs into the economic modelling are based on actual data gathered from 2007 to 2020. The economic modelling demonstrates that the Project is cash flow positive. ▪ The base case results in a positive economic outcome as assessed by RPM's NPV calculation (@10% DCF). ▪ The NPV is highly sensitive to the Uranium price, with an accepted long term value of US$30/lb used for this report.
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ The region around the mine is sparsely populated and U production

Criteria	JORC Code explanation	Commentary
		is an important source of employment in the region. ▪ The project has a typical risk profile for the project type and location.
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	▪ The project is believed to hold all the relevant approvals for production, including valid tenement status. ▪ Fluid management issues are addressed by site. ▪ All legal and marketing arrangements are in good standing. ▪ Government agreements and approvals are in line with current operations and proposed
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ The Ore Reserve has been classified as entirely Probable in accordance with the JORC Code, taking into account the ISL method of extraction. ▪ The Ore Reserve corresponds to the Mineral Resource classifications of Measured and Indicated. ▪ The deposit's geological model is well constrained. The Ore Reserve classification is considered appropriate given the nature of the deposit, the moderate grade variability, drilling density, low structural complexity, and long mining history. ▪ No Inferred Mineral Resources were included in the Ore Reserve estimate. ▪ The classification appropriately reflects the Competent Person's view of the deposit. ▪ The Probable reserve has been derived from Measured resources (21%) and Indicated resources (79%).
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ RPM has completed an internal review of the Ore Reserve estimate and found it to be reasonable.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The Ore Reserve is the result of many different factors, with the U price an important control on the Reserve tonnage. ▪ The reserve estimation has been compared to actual production data for blocks that have been exploited, with acceptable results. ▪ RPM has used mine design practices and estimates based on the operational factors measured during the 12 years of production between 2007 and 2020. No statistical analysis procedures have been applied. ▪ The Ore Reserve report is a global assessment of the Central Mynkuduk In-situ leaching operations based on the assumption that the mine will continue operating. ▪ The accuracy and confidence limits are based on the current designs and cut-off grade analysis employed in the economic evaluation. Material changes to the economic assumptions including the operating assumption and the revenue factors may materially impact the accuracy of the estimate. ▪ The Ore Reserve has utilised parameters provided by the site management team as made available.

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Zhalpak

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ Detailed procedures and QAQC results were provided within the 2019 GKZ resource report for all of the information used to complete the resource estimates for Zhalpak. ▪ Drilling at Zhalpak utilised surface diamond and Percussion drilling which utilised 89mm hole diameter drill bits to produce 70-75 mm drill core. Percussion holes were drilled with 118-132mm diameter drill bits. ▪ Core samples were collectedon all diamond core based on geology and core intervals with radioactivity higher than 40μR/h and linear core recovery of at least 70%. ▪ Samples were composited over the entire mineralised intervals and were collected on sawn ½ core. Length of the samples varied from 0.15 to 1.2m with majority of the samples having length between 0.3 and 0.60m. The host rock with limited radioactivity were sampled on 0.2 to 0.3m length. ▪ Downhole geophysical surveys were undertaken on every hole with the aim to complete the following: a. Detecting the radioactivity gamma anomalies in the holes; b. Determination of the depth, boundaries and thickness of intervals and U content for the resource estimation: c. Lithological description of section; d. Dividing U bearing permeable and impermeable rocks and the lithological filtration; e. Core recovery evaluation; f. Classification of rocks depending on lithological-permability types and calculation of filtration coefficient (hydraulic conductivity) through sections ▪ All geophysical methods were completed using geophysical instrument type SK-1-74. Gamma logging was the main method for detecting radioactive anomalies and determination of the thickness and average content of uranium. All analysis was undertaken in accordance with Soviet Standards. Crystals NaI (Tl) with the size 30×70 mm

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Criteria	JORC Code explanation	Commentary
		were used for detectors of the gamma-quants. ▪ Calibration of the radiometers was undertaken every 6 months using special field calibration equipment. Calibration was undertaken using standard sources Ra-226 series 10 # 218 (1.06 mg Ra), # 327 (1.00 mg Ra) series 2 # 1290(0.180 mg Ra) and series C41 # 814 (0.093 mg Ra). ▪ Following geophysical analysis, the U content was calculated as well as the boundary depths of the U bear units. Gamma-logging data was prepared by digitizing of gamma-curves on a 1:50 scale in μR/h on each 10cm interval with all anomalies higher than 50 μR/h digitized. The following information was utilised in the digitizing of the data: a. Coefficient K_0 taking into account the gamma-activity (μR/h) per 0.01% in U-equal units depending on type and size of the detector in gamma-logging equipment; b. Coefficient Vk depending on mineralisation density, hole construction, geophysical equipment and contact orientation of the mineralisation. ▪ In addition to the main parameters, the coefficients for determining the measured gamma-activity to normal conditions of ore layers and to air-dry conditions include: a. Correction for absorption of x-ray by drilling fluid (Cdf) and by casing tubes (Cct), and b. Correction on moisture (Cm) ▪ Following the digitization, a second analysis was undertaken which included the determination of mineralisation boundaries, thickness and average U-content. This analysis requires using calculations taking in account radioactive equilibrium of U-Ra, correction on radioactive equilibrium U-Ra (Ceq) and calculations on radioactive equilibrium Ra-Rn (CRn).
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ Diamond drilling was carried out with 89mm rods producing 70-75mm core. Drilling was carried out with ZIF-1200MR Kazak drill rigs. ▪ All drill holes were drilled vertical and core was not orientated.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ Core recoveries were measured for a total of 374 diamond holes and 308 of the diamond holes have core recovery over 70% while remaining 66 holes have core recovery of less than 70%. ▪ RPM notes that the >70% recovery is considered suitable for chemical analysis, however samples used for the resource estimate were based entirely on the downhole gamma log calculated U content combined with chemical analysis to confirm the gamma logs and calculation of the correction for disequilibrium. ▪ No relationship exists between sample recovery and grade as assays (samples) are sourced from detailed gamma logs.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ All sampled core was geologically logged according to National Standards that includes description of colour, composition and size of clastic material, clay ratio, texture, associated mineralisation and measurements of radioactivity by portable radiometers every 0.1m.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Core samples were taken from all diamond core based on geology and collected of core intervals with the radioactivity higher than 40 μR/h and linear core recovery at least 70%. ▪ Samples were composited to the entire mineralised intervals and were collected from half core material following cutting along the central axis. The lengths of the samples varied from 0.15 to 1.2 m with the majority of samples having lengths between 0.3 and 0.6 m. Host rocks with the limited radioactivity were sampled on 0.2 to 0.3 m lengths. ▪ Samples included the following analysis: – U and Ra determination; – Grain size and carbon content; – Geochemical assay including Se, Re, Sc, Y, some REE determination were undertaken during the second stage of exploration only; – Metallurgical tests on leaching; – Mineralogical researching of the mineralisation and host rocks. ▪ Analysis for secondary elements commenced during the second stage of

Criteria	JORC Code explanation	Commentary
		exploration. Re and Sc determinations were undertaken within U bearing intervals from the core holes with core recovery at least 70% and U-content ≥0.01%. REE and Y were analysed within samples collected from mineralised and barren rocks within the unaltered and oxidized zones. RPM notes that the highest U and Ra samples were also analysed for selenium content. ▪ Thorium concentration was determined by the XRF method on 232 U bearing samples. Potassium concentrations were measured in 86 samples using the flame photometric method. ▪ Sampling for grain size determination and carbonate content was undertaken for analysis of the permeability and ability to leach via the in-situ method. Samples were collected on a hole spacing of 400 by 50 to100 m and in most cases specific holes were drilled to collect these samples. ▪ The average weight of the samples reached up to 7.0 kg which were initially crushed to 1 mm and split to an average weight 0.2 kg. ▪ U-Ra samples were analyzed in the Central laboratory of Volkov according to Standards of the Scientific Council of Analytical Methods (Soviet Standards). U-content was determined via XRF with the minimum limit 0.0004% while Ra-content was undertaken by complex gamma-ray-spectral method with the minimum limit 0.0006%. ▪ Associated elements were also analyzed in the Central laboratory of the Volkov expedition. Selenium was determined by the X-Ray method. While rhenium was determined by chemical and spectrographic methods. ▪ CO_2 content was determined in the field-laboratory with previous dissolution of the sample in 10% HCl. ▪ Additionally, various geophysical logging and sampling techniques were carried out on all holes. All geophysical methods were completed using geophysical instrument type SK-1-74. Gamma logging was the main method for detecting radioactive anomalies and determination of thickness and average content of uranium. All analysis was undertaken in accordance with Soviet Standards. Crystals NaI (Tl) with the size 30×70 mm were used for detectors of the gamma-quants.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ QAQC procedures were utilised which includes validation of chemical analysis through field duplicates of the remaining half core samples, pulp duplicates and internal laboratory repeats. Additionally, U and Ra contents were calculated by comparing the chemical analysis to the gamma logs, as well as IFN surveys, which were completed on 5% of the holes. ▪ All QAQC samples and procedures were undertaken according to USSR and RK standards, however only Stage 2 exploration data QAQC was provided to RPM. No data was provided for earlier stages of exploration such as initial prospecting and first stage of exploration, however similar systems are assumed to be in place as per Soviet procedures. RPM notes that stage 2 accounts for over 90% of the data used in the estimate.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ Geophysical logging is completed for each exploration hole which is then cross checked against the assay results and lithological logging conducted on site. The correlation between the different data sources was well within acceptable limits. • All data is recorded in hard copy initially as per the very strict Kazakhstan standards for collection of geological information. This data is then digitized prior to its use in the resource estimation. • As part of certification of the mineral resource by the ministry of natural resources the underlying raw data is audited independently by the ministry with an opinion letter provided on the quality of the underlying data and whether it has been collected in line with the required standards. The data collected for Zhalpak was deemed to have meet the required standards.
Location of data points	▪ *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ All drill hole collars were surveyed in a local coordinate system utilising theodolite traverses and levelling courses. ▪ Downhole surveys were measured for all holes regardless of the drill orientation every 20m and at the end of the holes using a magnetic inclinometer KIT-1. All holes were drilled vertically. Minimal deviation occurred in most of the holes as expected for vertical holes. ▪ No topographic surface was provided by the client and RPM notes there are minor differences in drill collars RL and

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Criteria	JORC Code explanation	Commentary
		RPM created the topo surface from the hole collar position.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Drilling has been completed between 1971 and 2016. Drilling initially commenced on 200m by 50m profiles; however, 100m by 25m profiles were drilled in the central portion of the main mineralised zone at Zhalpak deposit. ▪ The spacing is considered sufficient to establish geological and grade continuity appropriate for a Mineral Resource Estimation. ▪ Samples were composited to a single intersection per hole using geology constraint compositing function.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ All drilling at Zhalpak are vertical holes and mineralisationis Roll Front style U deposit hosted within flat bedded reduced, porous and permeable lithology. ▪ No orientation-based sampling bias has been identified in the data.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Not known, assumed appropriate as per historic soviet and Kazakh standards.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ RPM visited the project area in November 2019 and found that all procedures and practices conform to industry standards.

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Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ The Zhalpak project is located within a single exploration permit which is held by the LLP "Mining company "Ortalyk" in accordance with the Contract 3610-TPI of 31.05.2010 (Add 4 of 19.10.2017), and has an expiration date of 31.05.2018. ▪ The Company stated that they sent necessary documents for license prolongation however no information has been provided to RPM to confirm the status of the permits. The size of the previous license is 145.8 sq.km.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Regular geological reconnaissance of the territory commenced in 1958 by the state geological survey. These works included drilling however due to low core recovery geological connection of the permeable rocks was difficult during this early exploration. Special uranium prospecting commenced in 1961 by the Volkov expedition. The Volkov expedition explored the Uvanas deposit in 1967; the Mynkuduk and Zhalpak deposits in 1972; the Kanzhugan and Moinkum in 1970; Inkai in 1976-78 and Budenovskoye in 1979. Thus, before 1980 two large uranium districts were discovered: Mynkuduk uranium district and Kanzhugan uranium district (located in southwest part of the territory). ▪ The Zhalpak deposit was discovered in 1964 after the prospecting works of the Volkov expedition. Detail exploration of the deposit was started in 1988 by expedition # 27.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The Zhalpak Formation (K2km-m gp) overlies the Inkuduk Formation with sporadic gaps and is separated into two sub-formations: - the lower grey-coloured; and - the upper variegated sub-formations. ▪ There is a geochemical boundary between the variegated and grey coloured sub-formations which corresponds to the paleo groundwater table level of the Danian-Early Paleocene period. ▪ Grey medium-grained cross-bedded feldspar-quartz sand with pebble and gravels are developed in the

Criteria	JORC Code explanation	Commentary
		grey coloured sub formation. Often containing carbonized detritus with iron di-sulphides this sub-formation is U bearing within the Zhalpak deposit. ▪ Sediments of the variegated sub-formation are predominately represented by medium and fine-grained sands of green-yellow-brown-red hues. The upper portion of the sub-formation comprises red-brown carbonized clays that are the regional boundary separating saline Cretaceous waters from fresh Paleogene waters. The thickness of variegated sub-formation varies from 20m to 60m. ▪ Zhalpak is located at the north-eastern portion of the Shu-Sarysu Basin. The mineralisation is confined to the sub-meridian oxidation front within the Zhalpak Formation. The deposit has a simple geometry and reasonable continuity within the main zone; however, this decreases in the margins of the deposit. ▪ Both lower and upper formation zones are identified within the deposit with uranium mineralisation controlled by formation oxidation and primarily located at the bottom of upper (Zhalpak) level within the Zhalpak Formation. The FOZ is developed in both up and down the sub-levels of the Zhalpak Formation unevenly due to difference of reducing properties. ▪ U-mineralisation is generally interpreted for zones which have a U content >0.01%. This zone is weakly increased in the content of other elements, mainly chalcophiles, due to the increased sulfide content associated with the primary reducing mineralisation events. Slightly increased Fe content is indicative of this zone. ▪ High U content occurs in fraction 0.5 - 0.25 mm (average 14.2%) for all ore types due to increased volume of this grain size within the deposits. Type III proportion of the U increases in fine-grained classes (0.25 - 0.05 mm) due to increased concentration of associated U-bearing leucoxene.
Drill hole information	▪ *A summary of all information material to the under-standing of the exploration results including a*	▪ Exploration results are not being reported.

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Criteria	JORC Code explanation	Commentary
	tabulation of the following information for all Material drill holes: – *easting and northing of the drill hole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Exploration results are not being reported. ▪ Not applicable as a Mineral Resource is being reported.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	▪ All drilling at Zhalpak drilled vertically and mineralisation is generally sub-horizontal.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole*	▪ Relevant diagrams have been included within the Mineral Resource report main body of text. ▪

Criteria	JORC Code explanation	Commentary
	collar locations and appropriate sectional views.	
Balanced Reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ The report is believed to include all representative and relevant information and is believed to be comprehensive. ▪ Exploration results are not being reported.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ All interpretations for Zhalpak mineralisation are consistent with observations made and information gained during drilling at the project. ▪ Additional infill drilling was carried out for Zhalpak deposit however no information was provided to RPM.
Further work	▪ *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ Additional infill drilling was completed but the information was not provided to RPM. Infill drilling needs to be carried out prior to any U extraction. ▪ Refer to diagrams in the body of text within the Mineral Resource report.

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Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ The database has been systematically validated by company geologists. Original drilling records were compared to the equivalent records in the data base (where original records were available). Any discrepancies were noted and rectified. ▪ Client provided various excel sheets of drilling data which were compared against the hard copy cross sections.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit was conducted by Jeremy Clark and Artur Zakis of RPM during November 2019. They inspected the deposit and project area. During this time, notes and photos were taken. Discussions were held with site personnel regarding drilling and sampling procedures. No major issues were encountered. ▪ A site visit was conducted, therefore not applicable.
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ The confidence in the geological interpretation is considered to be good and is based on high quality diamond core drilling. ▪ Geochemistry and geophysical gamma logs have been used to assist identification of lithology, permeability zones and mineralisation. ▪ The deposit consists of sub-horizontal bedded mineralisationhosted within a permeable horizon. High grades were also observed in impermeable horizons however they were excluded from all the resource estimation as they can't be extracted with the production method. The current interpretation is considered robust. ▪ Geology logging combined with geophysical logging confirmed the mineralisationcontinuity.
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.*	▪ The Zhalpak Mineral Resource area extends over a north-south strike length of 26.2km (from 166,540mN – 192,710mN), has a maximum width of 17.1km (88,565mE – 105,695mE) and includes the 80m vertical extent from 155mRL to 75mRL.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation*	▪ Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed

Criteria	JORC Code explanation	Commentary
	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. ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	suitable for the Zhalpak Mineral Resource due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was quarter the drill spacing. drill sections were half drill hole spacing. ▪ Various Mineral Resource estimates have been completed and trial mining occurred at Zhalpak since 2017. RPM carried out reconciliation for the Zhalpak deposit vs the ttial production blocks which compared well.Previous estimates were compared and considered reasonbale based on the various styles applied. ▪ U uncut % and U cut% were interpolated into the block model. ▪ The parent block dimensions used were 50m NS by 25m EW by 5m vertical with sub-cells of 3.125m by 1.5625m by 0.625m. The parent block size dimension was selected based on the results obtained from Kriging Neighbourhood Analysis that suggested this was the optimal block size for the Zhalpak dataset. ▪ A dynamic search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography derived from Objects 11. Three passes were used for each domain. For the majority of the areas a first pass had a range of 210m, with a minimum of 6 samples. For the second pass, the range was extended to 400m, with a minimum of 4 samples. For the final pass, the range was extended to 5,000m, with a minimum of 1 sample. A maximum of 16 samples was used for first 2 passes while final pass used maximum of 80 samples. 3. The main permeable object 8 which occurs within the area of close spaced drilling utilised a shorter first pass of 100, and second of 200m. ▪ U was extracted through injection and leaching, no waste removal is needed. ▪ Mineralisation wireframes were created using 0.02U%*m cut-off which were previously used by the Company and is considered suitable by RPM. RPM notes that the wireframes were based on the gamma log data only, the chemical assays were not utilised in the estimate Further information is provided in the mian body of this report. ▪ The wireframes were applied as hard boundaries in the estimate.

Criteria	JORC Code explanation	Commentary
		▪ Samples were composited to single intersections per hole using the geology constraint compositing function. After review of the Project statistics, it was determined that high grade cuts were required. Various cuts were applied to individual domains resulted in cutting 17 samples in total which reduces overall average grades by 4%. ▪ Validation of the model included detailed comparison of composite grades and block grades by strike panels. Validation plots showed good correlation between the composite grades and the block model grades.
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ Tonnages and grades were estimated on a dry in-situ basis.
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ The Mineral Resource is reported as in-situ and depleted for historical extraction using depletion polygons reflecting the current production wellfields and each polygon's actual production as at December 31 2020. This approach maintains the mineralisation tonnage but reduces the in-situ grade to reflect the removal of metal from the resource area. ▪ The Mineral Resources have been reported in total because all is available for leaching and take/no take decisions are taken on a leach cell size basis at the Reserves stage. Mineralisation boundaries were modelled at a 0.01% U% cutoff which acts as a lower cut.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ RPM has assumed that the U could be extracted using in-situ leaching technique.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary*	▪ Detailed information was provided regarding the metallurgical test work however an onsite sorption plant was

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Criteria	JORC Code explanation	Commentary
	as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	built for trial production of uranium enriched resin that is transported to the Central Mynkuduk processing plant for further processing to yellow cake. The trial was successful.
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ No assumptions have been made regarding environmental factors. Client will work to mitigate environmental impacts as a result of any future mining or mineral processing. ▪ RPM understands that it has been and still is in compliance with the country law and regulations and all permitting, and tenement expenditures have been met.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ 200 samples were tested, including 145 from the mineralised zones. The tests were carried out immediately after core recovery from the hole. Average density of rocks from the mineralised zones for Zhalpak is 1.95 t/m3, dry density 1.64 t/m^3, moisture 16.57%. These determinations were also cross checked by Instantaneous Fission Neutron {"IFN") logging. RPM accepted 1.64 t/m^3 for the resource estimate.
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in*	▪ The Mineral Resource is estimated in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' prepared by the Joint Ore Reserves Committee of The

Criteria	JORC Code explanation	Commentary
	tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	Australasian Institute of Mining and Metallurgy, Australian Geoscientists and Minerals Council of Australia (The JORC Code 2012). ▪ The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced drilling of less than 250m by 50m, and where the continuity of the mineralised units was considered reasonable. This 250m spacing is equivalent to approximately half of the observed major direction variogram range of 567m for the main zones and 70% of the sill. Individual small pods within the main permeable zones are also classified as indicated as they are part of the main zones which are separated by impermeable layers. ▪ Inferred Mineral Resources were assigned to those portions of the deposit where drill hole spacing was greater than 250m by 50m or where small isolated pods of mineralisation occur outside the main mineralised channels, and to geologically complex zones. A number of the western and southwestern zones are defined by single drill holes. These were also included as Inferred Mineral resource as they are considered to have the characteristics of the main Zhalpak mineralisation, however they are in the early stages of exploration and the mineralisation remains open and untested in strike directions (NW). ▪ The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on interpretation of drill hole data producing a robust model of mineralised domains. Validation of the block model shows good correlation of the input data to the estimated grades. ▪ The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ Internal audits have been completed by RPM which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed*	▪ The lode geometry and continuity has been adequately interpreted to reflect the applied level of Indicated and Inferred Mineral Resource. The supporting data quality is good and the drill holes have

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Criteria	JORC Code explanation	Commentary
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	detailed gamma logs produced by various equipment with qualified geologists. Radioactive equilibrium factor is calculated and was close to 1. ▪ Mineralisationwireframes outside the main channel ways at western and south western zones are classified as inferred mineral resource when supported by 1 or 2 hole intersections. For these continuity along the strike may not be continuous as it is currently modelled. Infill drilling needs to be carried out to confirm this continuity. ▪ The Mineral Resource statement relates to global estimates of tonnes and grade. ▪ Trial small scale mining occurred at Zhalpak and reconciliation data indicates that some differences can be noted however differences were mainly due to wireframing approach (extrapolation distances etc)
Mineral Resource estimate for conversion to Mineable Quantities	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The independent Mineral Resources estimates completed by RPM have been utilised for the evaluation of Mineable Quantities (not Reserves – as qualified below) and development of a production schedule for the Zhalpak project, based on the available data. ▪ As part of its scoping study for Zhalpak, RPM has estimated the Mineable Quantities for the Indicated portion of the Mineral Resource only, following the application of modifying factors considered suitable based on the data available. Both the in situ and effective leach diluted quantities are presented in the report. ▪ RPM notes that Mineable Quantities are not Ore Reserves as defined by the JORC Code as they are not supported by at least pre-feasibility study level operational parameters. Additionally; as at the time of this report the Company does not have the required approvals and licences to bring Zhalpak into production. ▪ The production schedule is based on a scoping study completed by RPM and does not rely on the project inferred resources.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	▪ Mr. Jeremy Clark (On behalf of the CP)) visited the site from November 18th through November 23rd, 2019. The outcome of those visits was an in-depth understanding of the Project.

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	▪ *If no site visits have been undertaken indicate why this is the case.*	
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Mineable Quantities were estimated using a specialised mine scheduling software package to calculate the production schedule. The input parameters selected by RPM are based on the review of the hydrological and mining studies completed by the Company, historical production and reconciliation as well as discussions with site personnel and site visit observations. ▪ RPM notes that Mineable Quantities defined for Zhalpak are not Ore Reserves as defined by the JORC Code, as they are not supported by at least pre-feasibility study level operational parameters. Additionally; as at the time of this report the Company does not have the required approvals and licences to bring Zhalpak into production. ▪ Studies of Pre-Feasibility level confidence are not available, although production information from the test operations was evaluated and utilised in the estimates of Minerable Quanitites.
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ Due to the non selective nature of the in situ leaching mining method traditional cut off grade optimization is not carried out as part of the mine planning process. A minimum leaching thickness is applied to the resource estimate of 6m with a minimum intercept grade of 0.01 U%. RPM's designed leaching polygons only covered areas of the resource which meet the current intercept cutoff grades applied by the Company.
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimization or by preliminary or detailed design).* ▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for*	▪ Reconciliation of test production for this mine was used to determine appropriate mining modifying factors for conversion of the Mineral Resource to Mineable Quantities. ▪ In-situ leaching has been successfully used at other operations such as Central Mynkuduk for many years and is appropriate for this style of deposit. Test production was carried out between 2017 and 2020. ▪ Mining blocks have been designed using operational parameters from Zhalpak. ▪ The average leaching recovery factor applied is 90% of the Uranium within the defined blocks. ▪ No dilution has been applied as it is not relevant to this mining method and is included in the estimate through the effective thickness of the mineralisation.

	pit and stope optimization (if appropriate). ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ Inferred Mineral Resources have not been included in the mining blocks used to define Mineable Quantities. ▪ Infrastructure is currently installed for part of the proposed mine operation, but additional processing and well field infrastructure will be required for commercial production. ISL U production requires an extensive and continuous investment in production wells and acid for leaching.
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ Leachate pumped from the planned operation will be treated in the resin process facility. Uranium is precipitated to form yellowcake (U3O8) in another facility. The ISL process is well known and commonly used throughout the uranium industry, particularly in Kazakstan, Test production was carried out at Zhalpak between 2017 and 2020. The process recovery is projected to be approximately 94.9% based on the historical performance of the plant. ▪ Bulk samples are not required for further metallurgical testing.
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ The in-situ leaching and processing are covered by a single Environmental Permit. As an advanced development project that has undergone test mining and processing no adverse environmental restrictions are anticipated. ▪ Installation of monitoring wells will be required as part of environmental requirements for mining. ▪
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with*	▪ Existing site infrastructure is in place. Additional boreholes, pipes, and pumps will be installed and treated as operating expenses as the leaching advances in accordance with the LOM schedule.

	which the infrastructure can be provided, or accessed.	
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ Only sustaining capital has been utilised based around historic costs from operations. ▪ The operational cost estimates are based on actual historical costs. ▪ Borehole drilling and surface piping extension is included as operating costs. ▪ The Uranium price forecast was supplied by the company and/oe third parties and reviewed by RPM. ▪ The exchange rate forecast was supplied by the Company and reviewed by RPM. ▪ Transport charges are based on current site operating conditions and Central Mynkuduk. ▪ Treatment and refining charges have been applied as per ongoing experience. ▪ Minimal royalties are payable to the land owner.
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *the derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ A Uranium price of US30/lb was provided by the Company and confirmed by RPM as reasonable using published metal price forecasts. ▪ An exchange rate of USD/TENGE 426 (the 2020 exchange rate) was provided by the Company and validated by internal RPM data bases and consultation with the Client data.
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ The demand for Uranium is considered in the consensus forecast price used. ▪ It was considered that Uranium will continue to be marketable beyond the life of these Reserves.
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including*	▪ Zhalpak has undergone trial in-situ leaching from 2017 to 2020 and the inputs into the economic modelling are based on actual data. The economic modelling

	estimated inflation, discount rate, etc. ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	demonstrates that the Project is cash flow positive. ▪ The base case results in a positive economic outcome as assessed by RPM's NPV calculation (@10% DCF). The NPV is most sensitive to the Uranium price.
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ The region around the mine is sparsely populated and U production is an important source of employment in the region. ▪ The project has a typical risk profile for the project type and location.
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	▪ Fluid management issues are addressed by site. ▪ All legal and marketing arrangements are in good standing. ▪
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ RPM notes that Mineable Quantities defined for Zhalpak are not Ore Reserves as defined by the JORC Code, as they are not supported by at least pre-feasibility study level operational parameters. Additionally; as at the time of this report the Company does not have the required approvals and licences to bring Zhalpak into production. ▪ The deposit's geological model is well constrained. The lack of an Ore Reserve classification is considered appropriate at this stage, given the lack of a pre-feasibility study and required approvals and licences. ▪ No Inferred Mineral Resources were included in the Mineable Quantities estimate.

Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ RPM has completed an internal review of the Ore Reserve estimate and found it to be reasonable.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ RPM has used mine design practices and estimates based on the operational factors measured during the test production between 2017 and 2020. No statistical analysis procedures have been applied. ▪ The Mineable Quantities report is a global assessment of the Zhalpak In-situ leaching operations based on the assumption that the mine will receive the necessary permits and will be developed. ▪ The accuracy and confidence limits are based on the current designs and cut-off grade analysis employed in the economic evaluation. Material changes to the economic assumptions including the operating assumption and the revenue factors may materially impact the accuracy of the estimate. ▪ The estimate of Mineable Quantities has utilised parameters provided by the site management team as made available.

– END OF REPORT –

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The following is the text of the valuation report on the Target Interest received from China Enterprise Appraisals Company Limited dated 25 May 2021 for the purpose of inclusion in this circular.

CENTRAL MYNKUDUK AND ZHALPAK URANIUM PROJECTS, REPUBLIC OF KAZAKHSTAN

49% EQUITY INTEREST IN MINING COMPANY ORTALYK LIMITED LIABILITY PARTNERSHIP

PROJECT NO.: VAL20202020

VALUATION DATE: 31 DECEMBER 2020

Prepared for
CGN Mining Company Limited

Prepared by
China Enterprise Appraisals Company Limited

PROJECT NO.: VAL20202020

25 May 2021

Board of Directors

CGN Mining Company Limited
Room 1903, 19/F, China Resources Building,
26 Harbour Road, Wanchai
Hong Kong

Dear Sir/Madam,

Valuation of 49% Equity Interest in Mining Company "Ortalyk" LLP

In accordance with the instructions from CGN Mining Company Limited ("CGN Mining" or the "Company"), China Enterprise Appraisals Company Limited ("CEA") is engaged to assist in the analysis pertaining to the fair value of 49% of equity interest (the "Equity Interest") in Mining Company Ortalyk LLP ("Ortalyk" or the "Target Company") as of 31 December 2020 (the "Valuation Date"). The primary asset of the Target Company is the Central Mynkuduk uranium project and the Zhalpak uranium project located in the Sozak District, South Kazakhstan Province, Republic of Kazakhstan (the "Mineral Assets").

It is our understanding that our valuation will be used by the management of the Company and its advisors for public disclosure purpose in relation to a disclosable transaction involving the Target Company as required by The Stock Exchange of Hong Kong Limited ("SEHK"). This Competent Evaluator's Report ("CER") containing the results of our analysis and opinion is prepared in accordance with "Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets[1] (the "VALMIN Code") and the Chapter 18 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("Chapter 18 Listing Rules").

Our work was performed subject to the limiting conditions and general service conditions described in this report. The standard of value is Market Value as defined by the VALMIN Code. The reserve depletion natural of the Mineral Asset implies the premise of value is not of going concern under the assumption of no reserve replacement.

We express no opinion and accept no responsibility for the accuracy and completeness of the financial information or other data provided to us by others. We assume that the financial and other information provided to us is accurate and complete, and we have relied upon this information in performing our valuation.

[1] 2015 Edition, prepared by The VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists

The fees of this engagement reflect the complexity of the valuation, the amount of and state of the data available and the specific assessment or valuation difficulties encountered. Under no circumstance our fees are dependent on the conclusions of the valuation nor the success or failure of the reason for which the valuation was commissioned.

SUMMARY OF SALIENT FACTS

Commissioning Entity	CGN Mining Company Limited (1164.HK)
Mineral Asset Valued	49% equity interest of Mining Company Ortalyk LLP which owns both the Central Mynkuduk uranium project and the Zhalpak uranium project.
Owner and Operator	Mining Company Ortalyk LLP is the owner and operator of both the Central Mynkuduk uranium project and the Zhalpak uranium project.
Location of the Mineral Asset	The Mineral Asset is located in the Sozak District, South Kazakhstan Province, Republic of Kazakhstan.
Mineral Resources and Ore Reserves	The CPR reported Mineral Resources and Ore Reserve estimation under the JORC-Code as follows: ***Central Mynkuduk*** Proved Reserves: N/A; Probable Reserves: 23.6 ktU Measured Resources: 5.3 ktU; Indicated Resources: 22.1 ktU; Inferred Resources: 0.5 ktU. ***Zhalpak*** Measured Resources: N/A; Indicated Resources: 9.8 ktU; Inferred Resources: 4.5 ktU.
Stage of Development	Central Mynkuduk uranium project is in production since 2016 and an expansion plan has been approved by the Company and is to undertake additional production wells for ISL mining. It also operates a processing plant. Zhalpak uranium project has completed exploration and has commenced pioneer mining and trial production. It has the plan to build a processing plant. A study to the level of PFS (as assessed by the Competent Person) has been completed but no detailed feasibility study has been carried out.
Practitioners	Competent Evaluator: **John S. DUNLOP** MEngSc (Mining), FAusIMM, FIMMM Securities Expert: **Charlie Z. YANG** PhD (Min Eco), MFin, MAusIMM, CFA

Intended Users and Intended Use	This CER is to provide an independent third-party's opinion for the management of the Company, its advisors, the Stock Exchange of Hong Kong Limited and the public shareholders and potential shareholders of the Company in their assessment of the Market Value of the Mineral Assets for public disclosure purpose.
Valuation Standard	The VALMIN Code
Standard of Value	Market Value
Approaches	Income Approach (Discounted Cash Flow Method) Market Approach (Comparable Transactions Method)
Valuation Date	31 December 2020
Report Date	25 May 2021
Conclusion of Values	Valuation range: 49% equity interest in Mining Company Ortalyk LLP: US$ 367 – 504 million Preferred value: US$ 435 million, being the midpoint of the valuation range

I. INTRODUCTION

In accordance with the instructions from CGN Mining Company Limited ("CGN Mining" or the "Company"), China Enterprise Appraisals Company Limited ("CEA") is engaged to assist in the analysis pertaining to the fair value of 49% of equity interest (the "Equity Interest") in Mining Company Ortalyk Limited Liability Partnership ("Ortalyk" or the "Target Company") as at 31 December 2020 (the "Valuation Date"). The primary asset of the Target Company is the Central Mynkuduk uranium project and the Zhalpak uranium project located in the Sozak District, South Kazakhstan Province, Republic of Kazakhstan (the "Mineral Assets").

It is our understanding that CNG intends to acquire 49% equity interest of Ortalyk and our analysis will be used by the management of the Company and its advisors for public disclosure purpose as required by The Stock Exchange of Hong Kong Limited ("SEHK"). A Competent Evaluator's Report (the "CER") containing the results of our analysis and opinion will be prepared in accordance with "Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets[2] (the "VALMIN Code") and the Chapter 18 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("Chapter 18 Listing Rules"). Unless otherwise stated, the currency used in this valuation and the CER is the United States Dollar ("US$"), being the official currency of the United States.

1. Intended Users

The intended users of this CER (the "Intended Users") are the management of the Company, its advisors, the SEHK and the public shareholders and potential shareholders of the Company. This CER is not to be copied or made available to any persons other than those indicated in this CER without the express written consent of the Competent Evaluators ("CE").

2. Purpose and Intended Use of Valuation

The intended use of this CER (the "Intended Use") is to provide an independent third-party's opinion of the Market Value of the Mineral Asset for public disclosure purpose. The Market Value of the Mineral Asset will change substantially should the unique facts and circumstances of the Mineral Asset and our scope limitations change in the CER.

3. Commissioning Entity

The Commissioning Entity is CGN Mining Company Limited with the address of Room 1903, 19/F, China Resources Building, 26 Harbour Road, Wanchai, Hong Kong.

[2] 2015 Edition, prepared by The VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists

4. Basis of Valuation

We have performed the valuation on the basis of Market Value which is defined as "*the estimated amount (or the cash equivalent of some other consideration) for which the mineral asset should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction after appropriate marketing where the parties had each acted knowledgeably, prudently and without compulsion*" by the VALMIN Code.

The term Market Value in this context has the same intended meaning and context as the IVSC term of Fair Value.

A preferred value will be selected as the most likely figure from a range of value after taking account of risk and the possible variation in ore grade, metallurgical recovery, capital and operating costs, commodity prices, and exchange rates.

According to the VALMIN Code,

> *"Value should be selected as the most likely figure from within a range after taking account of risks and the possible variation in ore grade, metallurgical recovery, capital and operating costs, commodity prices, exchange rates and the like."*

Unless otherwise stated, value refers primarily to Market Value in this CER.

5. Scope of Valuation

We were engaged by the management of the Company to assist in their determination of the fair value of the Mineral Asset as at the Valuation Date.

It is our understanding that our analysis will be used by the management of the Company and its advisors for public disclosure purpose as required by SEHK. A CER containing the results of our analysis and opinion will be prepared in accordance with the 2015 Edition of the VALMIN Code and the Chapter 18 Listing Rules.

The valuation performed is a valuation of Market Value and with reference to the VALMIN Code. The report has been written in a narrative form designed for a wide range of readers with different experience with the mining industry.

The Market Value estimate presented in this report is based on market evidence, economic conditions, forward looking trends and political conditions as at the Valuation Date. The value estimate is valid only on the Valuation Date stated in this report.

The Market Value estimation developed in this report, and the underlying projections and calculations developed to derive and support the estimate, are dependent on opinions of the Experts. Reliance on this valuation is at the reader's and Intended Users' own risk. The liability of Mineral Asset is limited to that contained in the contractual agreement with the Company.

6. Unique Circumstances

Every valuation contains unique aspects that have an impact on the valuation approach and methodologies considered and applied. In this valuation, the following unique facts and circumstances are specifically identified to inform the Intended Users of this CER.

Special circumstances of relevance to mining projects or properties can have a significant impact (both positive and negative) on value and modify valuations which might otherwise apply. These include:

- The Central Mynkuduk uranium project was commissioned in 2007 and the Zhalpak uranium project commenced trial production in 2017 (ceased since April 2020);

- Pregnant leach solution ("PLS") from the Zhalpak trial production is currently sent to hydrometallurgical plant at Central Mynkuduk for processing but it is planned to construct its own plant. The valuation is based on Zhalpak operating its own plant;

- Sufficient number of comparable companies and comparable transactions can be identified for performing discount rate analysis and market approach based analysis;

- All Inferred Resources of the Mineral Assets are excluded from this valuation in accordance with the Chapter 18 Listing Rules of SEHK;

- Specific risks that may have impact on the valuation of the Mineral Asset are discussed in relevant sections of this CER; and

- Some documents obtained were not written in English but in Russian or Kazakhstani. The Experts have relied on documents in languages other than English to perform this valuation.

7. Data Verification

The CEs and other professionals assisting them, have undertaken a moderate level of verification of important information and data relied upon, to assure themselves of its validity, but beyond that it is not a part of this investigation. No responsibility is assumed for errors and omissions, nor is responsibility assumed for information not obtained through diligent inquiry and investigation. In addition, the CEs have taken its own due diligence to the best ability and relied upon the information made available to us. We assume that all information and data supplied by the Company and its representatives and used in this CER is accurate, complete and appropriate.

8. Previous Valuation and Transaction

We understand that as part of the due diligence process of this transaction, an independent asset valuer has been engaged by KAP to perform a valuation of "100% share capital of Mining Company Ortalyk LLP" and determine the "fair market value for the purpose of realization" in accordance with the Valuation Standards of Republic of Kazakhstan and International Valuation Standards ("KAP Valuation"). As at the Valuation Date, the KAP Valuation has not been completed and we have not been able to receive a final copy of the KAP Valuation.

We are not aware of any previous transactions involving the Mineral Assets or the Target Company.

9. Compliance with the VALMIN Code

The information in this report that relates to Technical Assessment and Valuation of Mineral Assets reflects information compiled and conclusions derived by Mr. John Dunlop, the Competent Evaluator and a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM).

The Practitioners, including Mr. John Dunlop, the Competent Evaluator, and Dr. Charlie Z. Yang, the Securities Expert, have sufficient experience relevant to the Technical Assessment and Valuation of the Mineral Assets under consideration and to the activity which they are undertaking to qualify as a Practitioner as defined in the 2015 edition of the 'Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets'. Mr. John Dunlop and Dr. Charlie Z. Yang consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Neither of the Practitioners are permanent employees of the Commissioning Entity.

10. Independence

Neither the Practitioners nor associates of CEA have any interest or entitlement in the securities or assets of the Company or its subsidiaries. CEA will be paid a fee for this valuation comprising its normal professional rates and reimbursable expenses. The fee is not contingent on the conclusions of this CER. Furthermore, the Practitioners have no present or prospective interest of the Mineral Asset, no personal interest with respect to the parties involved, and no bias with respect to the Mineral Asset under the valuation of this report or to the parties involved with this engagement.

11. Forward Looking Statement

Estimates of uranium prices, projections of output and financial forecasts, are statements with inherent forward-looking nature. Actual performance may differ from projections of future performance due to various reasons beyond the control of the Competent Evaluators, including, but not limited to, inherent uncertainties in geologic data interpretation; occurrence of unforeseen geological conditions; change or lack of development in key domestic and international markets; material changes in market prices;

variances in the execution of construction and production plans; and significant changes in projected materials, supplies, parts and equipment, operating costs, and expenditures. Imposition of different central, regional, and/or local government policies could affect future uranium production. Possible variations of future performance from projections presented in this report are addressed in more detail in specific sections of this report. Comments on the risks inherent in the various operations are discussed in the appropriate sections.

12. Sources of Information

- A Competent Person's Report titled "Golden Eagle Project, Republic of Kazakhstan Competent Person Report" issued by RPM Global ("Competent Person") dated April 2021 (the "CPR");
- Subsoil Use Agreement of Central Mynkuduk (No. 1796) dated 8 July 2005 and all its Addendums dated 24 October 2013 and 19 October 2017;
- Subsoil Use Agreement of Zhalpak (No. 3610-TPI) dated 8 July 2005 and all its Addendums dated 11 January 2012 and 3 July 2015;
- Production records of both Central Mynkuduk and Zhalpak;
- Financial forecast model of Ortalyk LLP for 2019 to 2023;
- Zhalpak construction timetable for 2020 to 2023;
- Financial information of Target Company, Ortalyk LLP as of 30 Sept 2020;
- Zhalpak pilot mining design;
- Sales agreements between 2005 and 2017; and
- Accountant's Report from PricewaterhouseCoopers dated 25 May 2021.

13. Site Inspection

The valuers Mr. John Dunlop and Dr. Charlie Yang, together with other CEA representatives have conducted a site inspection in Kazakhstan during the period of November 18, 2019 and November 23, 2019.

On November 19, 2019, we visited the Target Company's head office in Shymkent and attended a kick-off meeting in the morning. A team including the valuers Mr. John Dunlop and Dr. Charlie Yang, due diligence team of the Company, 3 representatives from RPM Global and Ortalyk LLP's representatives (including its Vice General Manager in charge of operation) started the site inspection journey in the afternoon. The journey to the Central Mynkuduk from Shymkent is approximately 400 kilometres and took 7 hours. We arrived at 21:30, and stayed in the Central Mynkuduk employees' dormitory.

On November 20, 2019, the valuers and other site visit team members visited the Central Mynkuduk site with the company of representatives from Ortalyk LLP (including the mine manager at Central Mynkuduk and other managers). At 9 am, all personnel first conducted a safety training at the base camp. The main contents included the introduction of Kazatomprom's universal safety principles, emergency handling, radiation protection knowledge and requirements, and safety accident reporting mechanism. Next, after putting on the required protection suits, the team was taken by a bus to conduct a site inspection of Central Mynkuduk mine site. We examined the distribution and pipeline layout of existing injection and extraction wells, and acquired key production data such as injection and pumping volume and grade. At the same time, we also learned about the distribution of the new production wells. We checked the flow rate and ratio of some injection and extraction wells by sampling. During our visit, the site of Central Mynkuduk was operating normally and orderly. After returning from the site to the base camp, we conducted a brief discussion with the site staff.

After lunch at base camp, all members of the team took a bus to the Zhalpak uranium project site, 80 kilometers away, for a site inspection. The one-way journey took about 2 hours. After arriving at the Zhalpak site, the team inspected the operation accompanied by mine manager and other management staff from Zhalpak project. It was observed on the site that there is currently a small-scale trial mining operation at Zhalpak. The acidification workshop has been completed and trial production has begun to complete the production processes such as acidification, ion exchange, and dialysis. At the same time, according to the management of Zhalpak, resin from Zhalpak was currently transported to the hydrometallurgical plant at Central Mynkuduk for further processing. We inspected a production well that was undergoing maintenance and cleaning at the site, and collected data related to maintenance costs. Because the project is still in the early stage of trial production, the information available on our site is relatively limited.

After the on-site inspection at Zhalpak, the entire team was taken back to Central Mynkuduk base camp with another 2 hours (80 kilometers) drive, and arrived in the evening.

On November 21, 2019, the valuers continue to inspect the production base at Central Mynkuduk and visited the hydrometallurgical plant at Central Mynkuduk. After completing the appropriate protective measures, we first visited the hydrometallurgical plant to inspect the process and the facilities of the plant. We visited two separate chemical storage warehouses, as well as forwarder truck bays for products that store the final product (ie, yellowcakes). We saw five inverted cone storage trucks full of yellow cakes at the scene. These storage trucks will be shipped in batches of 16 units. During our visit, the hydrometallurgical plant was operating normally and orderly.

In addition, at the production base, we also inspected the overall layout of the Central Mynkuduk production base, the locations of major production facilities, and the living supporting facilities through the base structure sand table. We also visited the acidification tank, laboratory, archive room, and model. Demonstration area and other facilities reviewed geological exploration maps and checked some key production data.

After lunch, we started our journey back to Shymkent at about 6pm that night.

The valuers and other CEA representatives spent two more days in Ortalyk LLP's head office in Shymkent to gather information from and conduct interviews with management of Ortalyk LLP.

The valuers deem the site inspection to be effective and all objectives have been achieved.

Photographing and videoing was strictly prohibited in the Central Mynkuduk and Zhalpak premises.

Due to the COVID-19 pandemic, no foreigners are allowed to enter Kazakhstan and therefore no more recent visits were made. Based on our discussions with the management, there are no material change to the operation of both Central Mynkuduk and Zhalpak projects and appropriate measures have been taken to ensure safety and minimum disruption of the operations.

II. MINERAL ASSET

RPM has been commissioned by the Company to perform a comprehensive independent technical review of the Mineral Assets and prepared a CPR. Important technical information of the Mineral Assets reported in the CER, including but not limited to geology, Mineral Resources, Ore Reserves, mining and processing, production, operating expenses and capital expenses, are preliminarily from the CPR. Please refer to the CPR for more details of the Mineral Asset.

1. Mineral Asset Location, Access and Infrastructure

The Mineral Assets are located 500 km to the north-west of the provincial capital of Shymkent in the Sozak District, South Kazakhstan Province, Republic of Kazakhstan. The Mineral Assets are in Shu-Sarysu basin (north of Shu River) and hosted within the world renown Syr-Darya Uranium Province and accessed via a good quality paved national highway. Shymkent operates regular domestic flights to Almaty and Nur-Sultan which connect to major international cities in Asia and Europe.

Figure II-1. Location of the Mineral Assets

Source: CPR

2. Mineral Asset Ownership, Agreements and Tenure Status

The Central Mynkuduk deposit is contained within a single mining permit. In 2005 JSC "NJSC "Kazatomprom" received the mineral rights (Contract on exploration and mining). The Contract is registered under the number 1796 and dated 8 July 2005 with an expiration period to 8 July 2033. Mining and operation permissions were transferred to LLP "Mining company "Ortalyk" according to Addendum 3 on 19 October 2017. Current mining allotment is 46.976 square kilometre (sq.km) with maximal depth 370 metre (m).

The exploration permit for the Zhalpak deposit is held by the LLP "Mining company "Ortalyk" in accordance with the Contract 3610-TPI of 31 May 2010 (Addendum 4 of 19 October 2017), and has an expiration date of 1 May 2018. The Target Company stated that they have sent necessary documents for license prolongation. However, no information has been provided to confirm the status of the permits. The Geological allotment of the previous licence is 145.8 sq.km.

Mining Company Ortalyk LLP has the following permits relating to current activity on uranium deposits:

- Subsoil Use Agreement of Central Mynkuduk (No. 1796);
- Subsoil Use Agreement of Zhalpak (No. 3610-TPI);
- state license on mineral processing excluding processing of widespread minerals (Industrial Minerals);
- license on using radioactive materials, devices and equipment containing radioactive materials; and

- state license on activity related to acquisition, storage, using and destruction of precursors.

Please note that our work scope specifically excludes providing any legal opinion on all aspects of legal issues, land titles and agreements. We have NOT independently verified the status of these licenses and permits but rely on legal due diligence conducted by professional lawyers. The Intended Users should not rely on this CER to replace any legal due diligence or take any part of this CER as a legal advice.

3. Mineral Asset Current Operation Status

Central Mynkuduk was commissioned in 2007 and has been in continuous production since, producing 19,791 tonne (t) of Uranium (U) as at the end of December 2020. In addition, the Zhalpak Project commenced trial production in 2017 and is completed in April 2020, having produced 213 t of U. There is currently no leaching activities at Zhalpak. The current Life of Mine ("LOM") schedule (Ore Reserve Schedule) within Central Mynkuduk is planned to be sourced from three polygon areas namely the western, central and eastern polygons. Each polygon within the Central Mynkuduk Project operates independently with three dedicated pumping lines servicing each polygon. Pregnant solution is processed via the onsite sorption/desorption processing plant into yellow cake which is subsequently transported by truck to Taukent railroad station (250 km) with further transportation by railroad to Ust-Kamenogorsk metallurgical plant. Production capacity of the plant at Central Mynkuduk is 3,500 cubic metre per hour (m^3/hr) of pregnant solution to produce 2,000 t U per annum. The currently defined mine life for Central Mynkuduk is approximately 13 years to 2033.

The Zhalpak project has completed the trial mining operations and obtain additional recovery data and technological parameters for updating a feasibility developed to submit to relevant government authorities for approval and support the decision to commence operations. There are three polygons under operations which feed the onsite sorption plant to produce a U-enriched resin that is processed to yellow cake at the Central Mynkuduk plant. Certain supporting infrastructure is in place for both Ore Reserves schedules but additional capital requirements to support the planned production are still needed.

Zhalpak Project has a scoping level of accuracy (+/- 50%) assessment of the likely production schedule for the currently defined Indicated Mineral Resource at Zhalpak. Establishment of the well field is planned to commence in 2022, with first production in 2023, ramping up to full production by 2026. Assuming circa 800 t U per annum production rate, the mine life for the Zhalpak Indicated Mineral Resource to be approximately 14 years from 2023 to 2036.

Test production ceased in April 2020 and an updated Kazak feasibility study was completed reflecting the results of the test production. With further testwork updated resources and reserves are planned to be developed. According to the CPR, this potentially will significantly increase the amount of Indicated Resource which could be included in future Ore Reserve estimates. As such, the final mine life and production rate may vary.

4. Regional and Local Infrastructure

Extensive regional infrastructure is in place which includes railroad, paved road, electric lines etc. Roads and railroads are widely used to supply necessary materials and transport products between the Company's facilities including the third party Ust-Kamenogorsk metallurgical plant. Regional roads and railroads are government controlled and maintained. Electric power is provided through a regional electric company via lines however onsite solar panel supply 16% of the required power for the operations.

Local infrastructure comprises both permanent paved and temporary unpaved roads. Local paved roads connect Central Mynkuduk with Zhalpak and Western and Eastern polygons within the Central Mynkuduk Project.

All infrastructure reviewed is considered to be of high quality allowing for large-scale industrial activity.

5. Geology and Mineralisation

The Upper Cretaceous sediments lie unconformly over the deeply eroded Palaeocene-Eocene contact and are represented by only continental formations. The sediments contain un-eroded relics of reddish dense clays with inclusions of quartz pebbles and gravels, and siliceous rocks with intercalations of sand clay sandstones of various grain sizes. The units thickness usually does not reach more than 10-15m, termed the Cenomanian Formation (K2sm).

The Upper Cretaceous units are subdivided into three independent formations: Mynkuduk (early Turonian), Inkuduk (late Turonian-Coniacian-Santonian) and Zhalpak (Campanian-Maastricht). The thickness of the formations increases from northeast to southwest.

The territory of the Shu-Sarysu Basin is a large epicaledonian structural trough characterised by a three-level structure. In vertical section, the following stratigraphic levels are identified: the lower level (folded Caledonian basement), the middle level (intermediate semi-platform or lithified sedimentary layer) and the upper level (Mesozoic-Cenozoic platform cover).

The geological structure of the basement has been interpreted from geophysical works and rare drill holes. Basement lays on depth 2-3 km, rarely upper up to 300-400 m. The oldest facies have Proterozoic age and are represented by bi-mica feldspar-quartz schists. Beside these rocks, the basement contains Cambrian and Lower-Middle Ordovician sandstone, gravelite, aleurolite which are intruded by Lower Paleozoic mafic and ultramafic intrusions.

Uranium mineralisation is confined to the boundaries of the formation oxidation zone (FOZ). Epigenetic oxidation in section consists of two thick multilayer formation zones: lower and upper. Lower zone relates to Mynkuduk and Inkuduk Formations, upper to the Zhalpak Formation.

Central Mynkuduk and Zhalpak deposits are the typical hydrogenic role front uranium deposits related with U bearing formation oxidation zones that developed in permeable terrigenous rocks. All deposits of the Shu-Sarysu Basin related to one regional front of oxidation that is developed inside the Cretaceous and Paleogene age formations. The main stage of ore-genesis occurred in the late Oligocene age and related to long-term gap between the deposition of later Eocene clays and early Miocene red colour formations.

Development of the U-bearing oxidation zone has several stages with initial activation of infiltration processes followed by slowdown and until infiltration ceased. Introduction by deposition and removal by dissolution of the uranium are both constant simultaneous processes in the deposits.

Mineralisation of the deposits are in the geochemical equilibrium with the hosting rocks when introduction equals removal. Due to these processes, mineralised bodies look like a strip in plan view and develop typical roll fronts in cross section view.

The Mynkuduk deposit is confined to the lower portion of the ore-bearing fronts within FOZ and has simple morphology. The thinning of the lower zone has a step nature depending on different composition and permeability of hosting rocks.

Mineralisation of the Central Mynkuduk project is related to enlargement of the Mynkuduk Formation. It is hosted within permeable sands and controlled by the boundary of the FOZ that form part of one large regional front of oxidation.

The Central Mynkuduk Formation contains thick lenses of grey clay throughout the stratigraphic sequence which are the reason for the heterogeneity of the Mynkuduk Formation.

Localization of the uranium mineralisation is dependent on the geochemical type of the rocks. The Mynkuduk Formation contains four geochemical types: diagenetically reduced grey-coloured; diagenetically and epigenetically reduced green-grey and green-coloured; non-reduced primary red-coloured and motely; epigenetically oxidized formation.

Zhalpak is located at the north-eastern portion of the Shu-Sarysu Basin. The mineralisation is confined to the sub-meridian oxidation front within the Zhalpak Formation. The deposit has a simple geometry and reasonable continuity within the main zone, however this decreases in the margins of the deposit.

Both lower and upper formation zones are identified within the deposit with uranium mineralisation controlled by formation oxidation and primarily located at the bottom of upper Zhalpak level within the Zhalpak Formation.

The boundary between the zone of U-dispersion and the unmineralised zone is defined only by the U content higher than or equal to 0.001%. Width of this zone usually reaches up to 0.5 km with the predominant form of U accumulation being through sorption, as such the low concentration of U does not allow crystals of U-minerals to form. Average Fe content is near 1% while the organic material is 0.03%.

U-mineralisation is generally interpreted for zones which have a U content >0.01%. This zone is weakly increased in other elements content, mainly chalcophile, due to the increased sulphide content associated with the primary reducing mineralisation events. Slightly increased Fe content is indicative of this zone which has been sub-divided into three distinctive zones.

The Central Mynkuduk deposit comprises 2 main orebodies and one minor. In horizontal view all of the bodies are presented by twisty narrow bands of different thickness and shape. The lenses extend along strike for between 8 km and 27 km, have widths between 50 m and 800 m, and thicknesses of between 0.9 m and 27 m.

The Clastic material, in terms of composition and proportion, is similar within both the mineralisation and hosting sand. It is represented by quartz, feldspar, clastic of the siliceous rocks, rare flakes of muscovite and biotite.

The sand contains small clasts of the sandstones with pyrite, rarely siderite or barite cement. Quartz is the main mineral that forms 80% (from 70 to 86%) of the weight. The Sand-gravel formation contains from 12 to 16% of siliceous rock clasts. Feldspar present in typically microcline and felsic plagioclase and consist of up to 7 to 18%. Associated minerals include leucoxene, ilmenite, tourmaline, staurolite, garnet, andalusite, distene, epidote, apatite and zircon, however rarely does grains of rutile and sphene occur. Clastic material is cemented by loose clay-siltstone material resulting in up to 5 to 20% of weight and contains grains of quartz, flakes of mica, grains of associated minerals, pyrite, siderite and limonite. Grains' size less than 0.05 mm which are typically clay materials within the cement is generally kaolinite, montmorillonite and thin-grained quartz.

The majority of uranium is in the disseminated form in permeable porous cement of the sands. Uranium minerals together with the fine-crystalized pyrite forms thin layers on clastic grains and thicker layers and crusts on the pyrite grains. Small proportions of the U is concentrated in charred organic material. Mynkuduk U minerals include circa 15% coffinite and 85% pitchblende.

According to the RPM, the ratio between coffinite and pitchblende varies within the U-bearing formations and does not have a correlation. In core samples and microscopic analysis coffinite (USiO4) and pitchblende (UO2) are typically indistinguishable, which is due to presence of the minerals with micro-intergrowths which are visible only in electronic microscope. Macroscopically both minerals occur as black, soft, soot minerals forming as disseminated minerals within loose permeable cement of sands, crusts on the surface of the terrigenous grains, in micro-fractures and pores of other grains. Rarely in relatively high grade material coffinite and pitchblende form nests in sands, fully replace organic fragments and develop on the leucoxene grains. In addition to the two main minerals, U is contained within leucoxene and ilmenite which have porous grains which are impregnated by U-minerals.

Mineralisation of the Zhalpak deposit is similar to the regional mineralisation as within the Central Mynkuduk Project. Mineralisation is hosted within clay-sand grey-coloured formations of the lower Zhalpak sub-level that are covered by oxidized and secondary-reduced clay-sand formations of upper sub-level. Lower sub-level covers gravel-sand-clay formations of the lower confining layer (aquiclude formation).

U bearing rocks are represented by grey and dark-grey gravel-sand with rare lenses of grey clay. Various sizes of grains within the sand occur however they are predominantly medium-grained (0.50-0.25 mm) in size. Sands are loose or slightly dense, with good permeability. Barren sands visibly are not distinguishable with similar composition, while higher U grade occur as darker spots with higher proportion of heavy fraction and charred organic.

Clastic material forms 67-90% of rock's volume and occurs as quartz (average 85%), fragments of siliceous rocks, feldspar, rare flakes of the muscovite and biotite. Chemical assays indicate that the average content of organic material within the sands of Zhalpak Formation is 0.06-0.12% however occurs up to 0.5% and occurs with charred organic material often pyritized. Grain size varies from 0.01 to 50 mm. Associated minerals form 0.2% of weight accumulating in heavy fraction of 0.25-0.10 mm and 0.10-0.05 mm. These minerals include pyrite, marcasite, siderite, goethite, hydrogoethite, leucoxene, ilmenite, staurolite, tourmaline, garnet, andalusite, zircon, epidote, kyanite, rutile, barite and apatite.

Porous cements consist of loose clay-siltstone material that forms 5 to 17 % of sands' volume. The cement consists of loosely rolled grains of quartz, siliceous rocks, feldspar and charred organic material with grain sizes less than 0.05 mm. Pores between siltstone grains are filled by clay minerals of kaolinite and montmorillonite mixed with thin quartz (<0.00n mm).

Within the Zhalpak deposit the mineralised bodies do not have distinct envelopes and mineralogical zonality as identified within Mynkuduk. This is interpreted to be due the dissolution of the mineralisation that led to migration of the material through to the dissolution of lower grade areas. It should be noted that the central portion of the mineralisation which contains the more continuous zones of U are in water-soluble form.

The region contains two hydrogeological formations. The Lower formation is comprised of the Paleozoic formations containing layered-fractures and fracture-vein groundwater types. The Upper hydrogeological formation comprises the Neogene-Quaternary loose-clastic formations and the Paleogene and Upper Cretaceous formations containing layer-porous groundwater type. The Upper Formation contains thick layers of impermeable clay of Eocene age dividing the upper level into two parts: upper with predominant artesian groundwater; and lower with high-pressure groundwater. The latter is the most important regarding to uranium deposits of the region.

Please refer to the CPR for more details on the regional geology, local geology, mineralisation, and hydrogeology of the Mineral Assets.

6. Resources

The Mineral Resources reported by RPM are in accordance with the 2012 Edition 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 (the "JORC Code").

Two areas are reported in the Statement of Mineral Resources, including Central Mynkuduk (extends in a broadly west north west-east south east direction for a strike length of over 27km with mineralization continuing along strike in both directions for many more kilometres within licenses not held by the Company. Two main continuous mineralised channels have been delineated with a number of smaller rafts of mineralisation occurring above and below the main body) and Zhalpak (extends over a southeast-northwest strike length of 22km with multiple tabular bodies defined over a width of 5km). Both areas are Roll Front style U deposits with majority of the mineralisation hosted within reduced porous and permeable lithology.

Results of the independent Mineral Resources estimate for the Mineral Assets are prepared by RPM and are tabulated in the Statement of Mineral Resources.

Table II-1. Statement of JORC Mineral Resources for the Projects as at 31st of December 2020

Area	Class	Quantity *Mt*	U *%*	U *kt*
Central Mynkuduk	Measured	21.3	0.025	5.3
	Indicated	81.8	0.027	22.1
	Inferred	1.5	0.036	0.5
	Total	**104.6**	**0.027**	**28.2**
Zhalpak	Measured	–	–	–
	Indicated	31.0	0.032	9.8
	Inferred	15.7	0.029	4.5
	Total	**46.7**	**0.031**	**14.3**
Total	Measured	21.3	0.025	5.3
	Indicated	112.8	0.028	31.9
	Inferred	7.3	0.029	5.0
	Total	**151.4**	**0.028**	**42.3**

Source: CPR

Notes:

1. The Company Exploration Licence over the Zhalpak Mineral Resource area expired on the 31.05.2018. The Company's management stated that all necessary documents had already been sent for permit prolongation however the Company did not provide any document to support this statement. Whilst trial production is continuing on site as at the date of this report, the legality of such production nor the ownership of the licence by the Company cannot be verified by RPM. Further details are provided in Section 3.

2. The Mineral Resources have been compiled under the supervision of Mr. Bob Dennis who is a consultant to RPM and a member of the Australasian Institute of Mining and Metallurgy. Mr. Dennis has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

3. All Mineral Resources figures reported in the table above represent estimates at 31st of December 2020. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

4. Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

A geological cut off grade of 0.01% U was used in development of the 3D solids, however no cut-off grade was applied to the reporting of the resource as the In-situ Leaching mining method extracts all of the resource which is considered economic. The geologic interpretation models consist of a set of 3D solids, generated using implicit modelling, one for each interpreted rock type such that the metal content was estimated considering the whole volume of the blocks. As such this method does not incorporate ore loss or dilution into the block estimates.

RPM has performed necessary validation and production reconciliation to the resources estimation. Whilst the overall tonnage reconciles very well between the two there are variances at a block-by-block scale. This is primarily due to the re-blocking of some of the production blocks by the Company with the exact boundary of some of the larger blocks having changed in 2018. In RPM's opinion, the estimate is a good representation of the metal quantities in the deposit based on the comparison.

7. Reserves

The JORC Code defines an 'Ore Reserve' as 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.

Two areas are reported in the Statement of Ore Reserves, Central Mynkuduk (extends in a broadly west north west-east south east direction for a strike length of over 27 km with mineralization continuing along strike in both directions for many more kilometers within licenses not held by the Company. Two main continuous mineralised channels have been delineated with a number of smaller rafts of mineralisation occurring above and below the main body) and Zhalpak (extends over a southeast-northwest strike length of 22 km with multiple tabular bodies defined over a width of 5 km. Only areas of the resource within the trial production area have been included in the Ore Reserves as the project is still under development with further studies necessary to reach sufficient confidence in modifying

factors from which Ore Reserves can be calculated). Both areas are Roll Front style U deposits with majority of the mineralisation hosted within reduced porous and permeable lithology.

Table II-2. Statement of JORC Ore Reserves Estimate as of 31st December, 2020

Area	Class	Quantity	U	U
		Mt	*%*	*kt*
Central Mynkuduk	Proven	–	–	–
	Probable	92.3	0.026	23.9
	Total	92.3	0.026	23.9

Source: CPR

Notes:

1. The Statement of JORC Ore Reserves has been compiled under the supervision of Mr. Murray Brooker who is an Associate Principal Hydrogeologist employed by RPM. Mr. Brooker has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.

2. Tonnages are metric tonnes.

3. Ore Reserves do not account for in pipe or within the plant U content.

4. Figures reported are rounded which may result in small tabulation errors. Ore Reserves have been estimated under the 2012 Edition of the JORC Code.

In addition, the Competent Person estimated the Mineable Quantities for the Indicated portion of the Mineral Resource only, following the application of modifying factors considered suitable based on the data available. Mineable Quantities are not Ore Reserves as defined by the JORC Code as they are not supported by at least pre-feasibility study level operational parameters. Additionally, the Company does not have the required approvals and licences to bring Zhalpak into production and no specific raw density measurements for Zhalpak is available.

Table II-3. Mineable Quantity Estimate as of 31st December, 2020

Area	Class	Quantity	U	U
		Mt	*%*	*kt*
Zhalpak	Mineable Quantities	31.5	0.032	10.2

Note: The Mineable Quantity Estimate are undiluted for effective thickness as discussed below and in Section 10.1.2 of this report

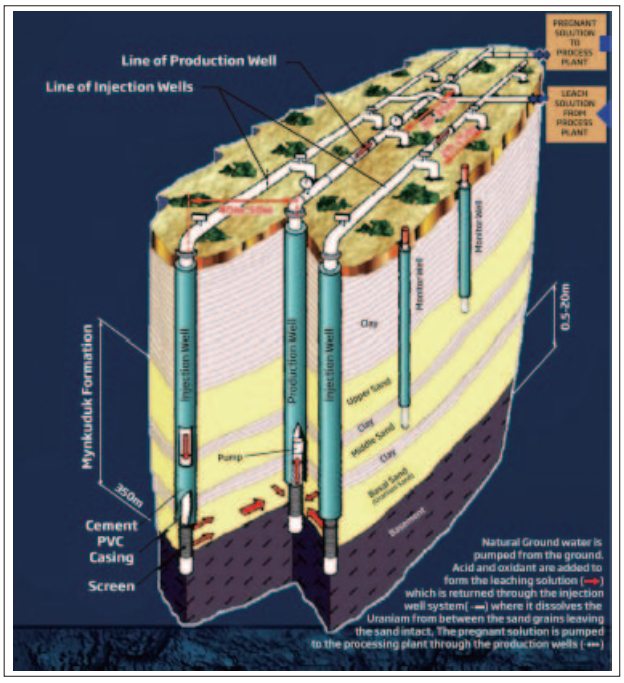
8. ISL AND PROCESSING

Central Mynkuduk and Zhalpak deposits are currently in operation with Ore Reserves estimates and resultant schedules based on the uranium extracted via in-situ leaching ("ISL") method of extraction. No 'traditional' open pit or underground mining methods are applied, as such, no rock disturbance is required with dissolution of uranium extraction by a series of pumping wells ranging in depth from 150m (Zhalpak) to 360m (Central Mynkuduk). Mining is accompanied by drilling of several types of holes. These are injection, extraction and operational exploration holes. The ISL mining method is a well-known and commonly utilised mineral extraction method in Kazakhstan and the greater uranium industry.

The uranium is present as fine uraninite (UO_2) on the surfaces of sands, silts and clays and is readily dissolved in sulphuric acid and forms water soluble uranyl sulphate (UO_2SO_4). A well field is prepared, known as a pattern, to solubilize and then extract the uranium for final recovery on the surface. Unlike other patterns commonly used in the ISL industry, the nature of the deposits means that the pattern consists of two parallel lines, with one side consisting of the injection wells and the other side the extraction wells. The arrangement is shown in Figure 9-1, where acid bearing solution is injected in the uranium bearing sediments and extracted in a nearby well after passing through the uranium bearing sediments.

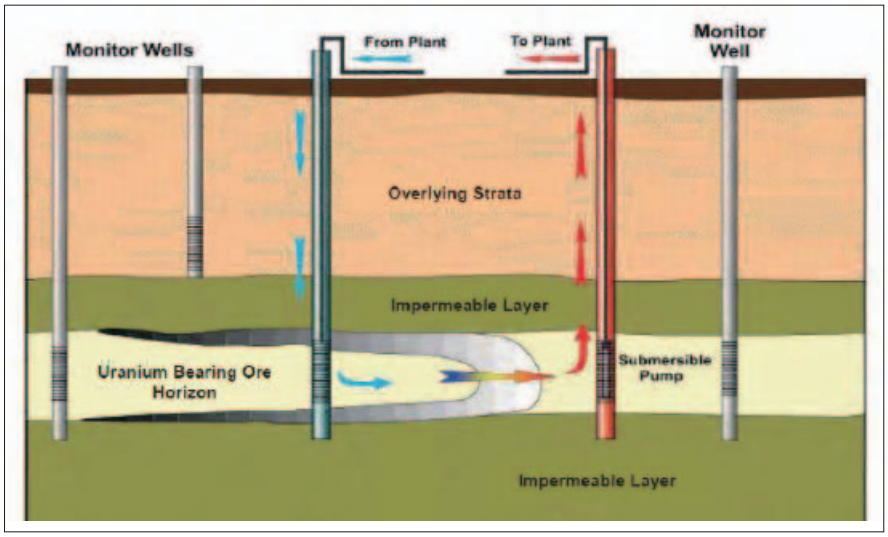
At Central Mynkuduk, each mining block contains approximately 10 to 15 extraction holes to remove the uranium solution (termed "Pregnant Solution") and 30 to 40 injection holes for injection of leaching solution in uranium-bearing layers. Subcontractor "Volkovgeology" undertakes drilling of the holes with depths ranging typically between 350-360m. Special tubes, pumps and sump equipment are inserted into the holes after the drilling prior to mining. Holes are typically percussion holes however 5% are diamond core with subsequent chemical analysis for quality control of the geophysical logging. Approximately 1,500 injection, 500 extraction and 200 operational exploration holes have been drilled in the Central Mynkuduk area since 2007. Approximately 200 total holes are drilled per year including 20 operational exploration holes for geological definition prior to short term resource estimation.

Figure II-2. ISL Schematic Central Mynkuduk Operation



Source: CPR

Figure II-3. Cross Section of an ISL Operation



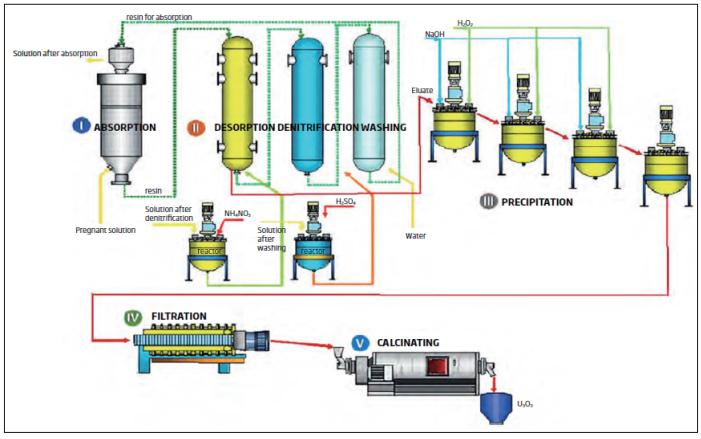
Source: CPR

On the surface, the uranium bearing solution ('pregnant leach solution' or PLS) is contacted with anionic resin which adsorbs the uranyl sulphate. The loaded resin is then subsequently treated by ammonium nitrate to strip the resin and the barren solution, after pH

adjustment with sulphuric acid, is pumped back into the uranium bearing sediment. This recirculation continues until at least 90% uranium extraction (government mandated) has been achieved.

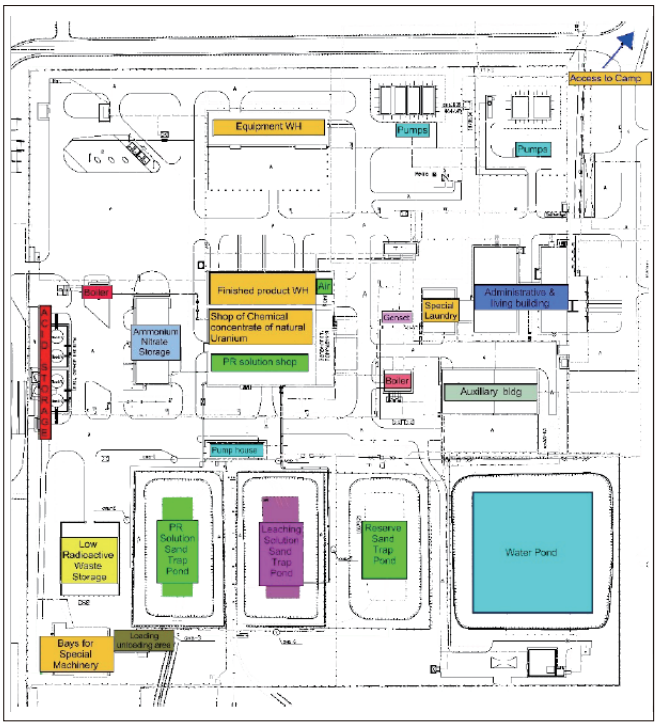
The uranium is precipitated from the strip solution with hydrogen peroxide to form 'yellowcake' (U^3O^8). The yellowcake is further refined at another facility which is operated by a third party. The Central Mynkuduk plant layout and the 'yellowcake' process flowsheet are shown in the diagrams below. Zhalpak trial operation only produces resin on site which is transported to Central Mynkuduk for further refining to yellow cake.

Figure II-4. Yellowcake Process Flowsheet



Source: CPR

Figure II-5. Central Mynkuduk Plant Layout



Source: CPR

Recovery Rates

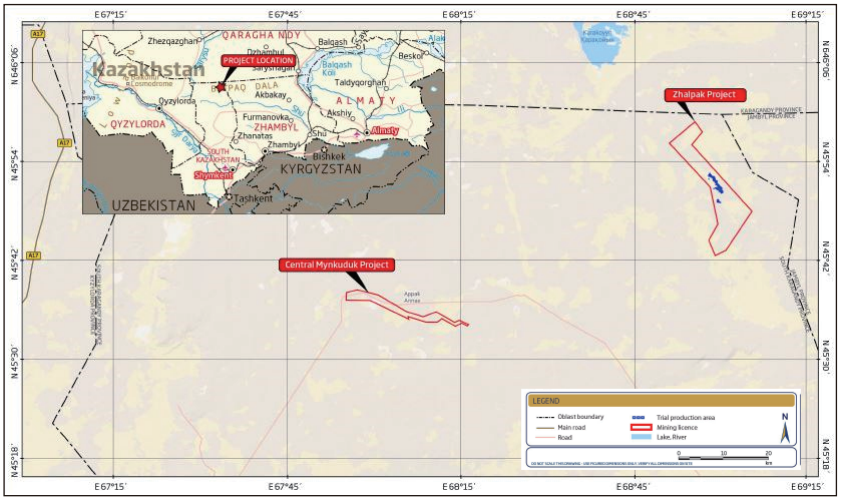
According to the CPR, both the Central Mynkuduk uranium project and the Zhalpak uranium project has an estimated uranium mine recovery of 90%, calculated using extracted uranium in PLS over total in-situ uranium per resource and reserve estimations.

However, based on past production records, the CPR stated that Central Mynkuduk uranium project has a slightly higher PLS uranium recovery at the processing plant of 98.4% while the Zhalpak uranium project has a recovery rate of 94.9%.

9. Infrastructure and Logistics

The Central Mynkuduk and Zhalpak sites are located 80km apart.

Figure II-6. Relative Locations of Central Mynkuduk and Zhalpak Sites



Source: CPR

All of the required infrastructure for the Central Mynkuduk and Zhalpak Project is in place to support the operation. The sites are serviced by excellent roads and it is well situated for shipping and receiving of the required supplies. We consider the infrastructure for the Central Mynkuduk and Zhalpak Project appropriate and acceptable.

Table II-4. Summary of Infrastructure at Central Mynkuduk and Zhalpak

Facility	Description
Off Site Roads	Access to Central Mynkuduk site is 70 km from the town of Tailkonur and 240 km from the rail station Shieli. Access to Zhaplak is 85 km on paved side roads from the town of Kyzemshek. There is an asphalt road between Zhalpak and Central Mynkuduk.
Water supply	Central Mynkuduk & Zhalpak: process water supplied from wells. Drinking water for Zhalpak is delivered by contractor.
Water treatment	Central Mynkuduk: Reverse Osmosis Plant with additional treatment used for drinking.
Power supply	Central Mynkuduk: via existing 110 kV overhead power line. 1 MW solar power plant on site. 280 kW emergency gentset. 7 MW total power requirement. Zhalpak: via 6 kV overhead power line.
Fuel supply	Central Mynkuduk & Zhalpak: by contractor.

Office Buildings	Central Mynkuduk & Zhalpak: all major buildings are in place to support production.
Camp	Central Mynkuduk: available with recreation facility. Zhalpak: not available, personnel is transported back and forth to other camps in the region, however onsite kitchen facilities for workers
Communications	Central Mynkuduk &Zhalpak: radio, phone land line, mobile phones, cable television, CCTV systems are available.
Waste Water Treatment Plant	Available at both Central Mynkuduk & Zhalpak sites.
Non-radioactive Industrial Solid Waste Low Radiation Waste Storage	Central Mynkuduk & Zhalpak: designated dump area, Central Mynkuduk's dump area has a capacity of 80,000 m3 and Zhalpak has a temporally storage only. Capacity unknown.

Source: CPR

10. Environmental, Health, Social and Safety Considerations

The Project continues to be viable from the environmental and social perspective. It appears that the potential social and environmental impacts resulting during all phases of the Project can be mitigated. The Target Company appear to have the organizational capacity to address environmental and social issues, and health and safety management.

A high level review of the environmental, health, social and safety ("EHSS") indicates that the Project has a typical risk profile which is associated with projects of similar styles and maturity in the region. All required Environmental Impact Studies have been completed resulting in the approved permits and licenses being gained for planned production in the near term. RPM notes that approvals are required for the future development into operation of the Zhalpak Project with trial production to cease in 2020. During the site visit RPM noted that appropriate procedures are in place to manage and mitigate the associated risks and that the Company is following the required regulations of the state.

Some current and potential problems from an EHSS perspective may be caused by:

- Failure to comply with legislative requirements of the Republic of Kazakhstan (RoK) in the area of environmental protection (EP), labour protection (LP), occupational health & safety (H&S), and radiation safety (RS);
- Failure to fulfil obligations that may lead to administrative and/or judicial prosecution by environmental and healthcare regulatory agencies;
- Delays in issuing or re-issuing mandatory permits; and
- Untimely resolution of social and/or labour conflicts.

Radiation Safety and Health & Safety

The Mineral Assets have all necessary insurances, permits, state licenses issued by the Atomic Energy Committee and the Ministry of Energy for mining and processing of ore containing radionuclides, and for performing works connected with the life cycle of facilities using atomic energy, and also the state precursor chemical license (for sulfuric acid).

Overall, the radiation situation at the Company assets remains stable, while all required measures aimed at ensuring radiation safety are being implemented. The only non-compliance identified in the course of reviewing available documentation was the fact that the Company did not have (or failed to provide for inspection) the Potential Radiation Accident Prevention and Response Action Guide for Personnel. The lack of this document is a violation of the sanitary and epidemiological regulations of the RoK on Provision of Radiation Safety (the Republic of Kazakhstan Minister of Health's Order No. КР ДСМ-97 dated June 26, 2019). In case of a radiation emergency, the lack of this document can result in criminal liability being brought against the Company's executives.

III. COMPANY OVERVIEW

The Company, CGN Mining, is intended to enter into a transaction with NAC Kazatomprom JSC ("KAP" or "Kazatomprom") to acquire a 49% equity interest of the Target Company, Mining Company Ortalyk LLP, a wholly owned subsidiary of Kazatomprom.

1. CGN MINING COMPANY LIMITED

CGN Mining Company Limited is a company registered in the British Cayman Islands and is listed on the Main Board of the Stock Exchange of Hong Kong with the stock code 1164.HK. The main business of the Company is the development and trading of natural uranium resources for use by nuclear enterprises.

The Company currently holds a 49% equity interest in Semizbay-U Limited Liability Partnership and sales rights of the off-take quantity of products and a 19.99% equity interest in Fission Uranium Corp. which is a Canadian uranium exploration company and owner of the Patterson Lake South uranium project.

2. NAC Kazatomprom JSC

Kazatomprom is the world's largest producer of natural uranium with priority access to one of the world's largest resource bases. Kazatomprom shares began trading on the Astana International Exchange and the London Stock Exchange in November 2018 with stock code KAP.AIX and KAP.LSE. Kazatomprom has a total market capitalisation of approximately US$4.24 billion as of the Valuation Date.

Kazatomprom is Kazakhstan's national operator for the export and import of uranium and its compounds, nuclear power plant fuel, special equipment and technologies. Kazatomprom has a total of 21,000 employees and 46 production facilities. Kazatomprom has the largest reserve base in the industry, with attributable uranium reserves of just under 300 ktU and accounts for approximately 40% of global primary uranium supply.

Kazakhstan sovereign wealth fund, National Welfare Fund Samruk-Kazyna is the controlling shareholder of Kazatomprom and owns approximately 81.28% of Kazatomprom. The remaining 18.72% is free float shares held by global public shareholders.

3. Mining Company Ortalyk LLP

Mining Company Ortalyk LLP is a legal entity established in the legal form of a limited liability company with 100 percent participation of NAC Kazatomprom JSC in the authorized capital. Mining Company Ortalyk LLP is registered in the Republic of Kazakhstan, Turkestan region, Suzak district, town Kyzemshek with certificate of state re-registration of the legal entity No 252-1958-13-TOO dated 8 December 2011.

The main activity of Mining Company Ortalyk LLP was to provide services of production, processing and holding of uranium mining and the preparatory work of the Central Mynkuduk uranium project for the main subsoil user, and its parent company, NAC Kazatomprom JSC. On 17 October 2017, NAC Kazatomprom JSC transferred the subsoil use agreement of Central Mynkuduk uranium project and Zhalpak uranium project to Mining Company Ortalyk LLP, and Mining Company Ortalyk LLP started to operate the Mineral Assets as the owner of the subsoil use agreements since 2018.

The authorised capital of Mining Company Ortalyk LLP is amounts to 27,164,074,000 tenge (or approximately US$ 102,945,934 million) and it has a total of 479 employees including both production personnel and administrative employees.

IV. KEY ASSUMPTIONS, RISKS AND LIMITATIONS

1. Major Assumptions

A number of general assumptions have been established in order to sufficiently support our conclusion of fair values. The general assumptions adopted in this valuation were:

- There would be no material change in the existing political, legal, fiscal, foreign trade and economic conditions in Kazakhstan;
- There would be no significant deviation in the industry trends and market conditions from the current market expectation;
- There would be no material change in interest rates or foreign currency exchange rates from those currently prevailing;
- There would be no major change in the current taxation law in Kazakhstan and in the origin of our comparable companies;

- All relevant legal approvals, business certificates or licenses for the normal course of operation are formally obtained, in good standing and that no additional costs or fees were needed to procure such during the application;
- Future revenue growth for the Mineral Asset would conform to those forecasted based on production schedule and uranium price projections;
- The amount of capital expenditure would conform to those forecasted by the Competent Person;
- The amount of operating costs would conform to those forecasted by the Competent Person;
- The production schedule and reserve movement over the projection period would conform to those forecasted by the Competent Person;
- The Target Company would retain competent management, key personnel, and technical staff to support the ongoing business operations;
- As per Chapter 18 Listing 18.33 (6), the valuation of the Mineral Asset must be limited to Measured and Indicated Resources only; therefore, the valuation will not include any Inferred Resources;
- Exploration licenses can be renewed when expired without any legal or operational barriers at an immaterial, minimal cost;
- No material legal risks related to sub-soil use license for Zhalpak;
- Subsoil use agreements can be renewed under similar terms and conditions in time;
- As exports are not subject to VAT, this valuation is on an ex VAT basis. Uranium price forecast is not subject to VAT and CAPEX estimation are on pre-VAT basis;
- While the CPR covers the economic benefits of the entire Mineral Assets, this valuation also attempts to establish the value of the 49% equity interest of the Target Company that the Company intended to acquire; and
- No material changes of the operations since our last site inspection in November 2019.

2. Risks Factors

The risks outlined below are limited to those technical risks that we believe to have impact on the valuation of the Mineral Assets. Other risks are undoubtedly present, and readers should also consider the additional areas of risk identified by the CPR.

Table IV-1. List of Key Risks

Risk	Risk Ranking	Descriptions & Comments
Price Risk	High	Uranium price are always volatile. Volatility in the uranium price will cause a direct effect on the valuation. Once a project has begun, price risk is a constant companion. Uranium price continues to stay at a low level in the past 5 years. Such low price has led to major uranium operators to reduce production, including Cameco's extended suspension of McArthur River and Key Lake operations and Kazatomprom's 20% reduction of production of all its producing mines. However, uranium price recovery has yet to take place and may remain at low level in near term, putting continuous negative pressure on profitability of the Mineral Assets.
Price Forecast Risk	High	This valuation relies on the forecast of future uranium price. Different forecasted uranium price will lead to different valuation results. In order to increase the accuracy of the valuation, we used both spot price and third-party consensus uranium price forecast to derive on the valuation results. Our valuation conclusion is specific to uranium price forecasts used and care should be taken by referencing to the uranium price forecasts used when interpreting our valuation conclusion.
Regulatory and Legal Risk	High	The exploration licence for Zhalpak is currently expired and no information has been provided to support the ongoing production. A potential legal review on its sub-soil use license is undertaking and no conclusion has been made.
Business Continuity	High	Disruptions to normal business and operations due to unforeseeable events such as a pandemic.

Risk	Risk Ranking	Descriptions & Comments
Construction and Operational Risk	Medium	By its very nature, the business of mineral development and production involves above average risk. Success depends on skilful design, construction, operation, management and marketing across the entire operation. Mining operations can also be hampered by force majeure circumstances as well as cost overruns caused by unforeseen events. In this instance, the construction and operational risk presents itself as the challenge to successfully continue the operation within the current operational cost and marketing constraints.
Cost Risk	Medium	Operational cost is a big risk. The more onerous the regulation and the more difficult the drill, the more expensive a project becomes. Couple this with uncertain prices due to worldwide production beyond any one company's control, there are some real cost concerns. With high domestic inflation, payroll can quickly rise to add another cost to the overall picture.
Geopolitical Risk	Low	As a strategic commodity, geopolitical factors also play a major role in uranium price fluctuations and supply uncertainties. Sanctions, wars, OPEC decisions, trade wars and other geopolitical events could often lead to fluctuation in uranium prices and operation disruptions.
Geological Risk	Low	Geological risk refers to both the difficulty of extraction and the possibility that the accessible reserves in any deposit will be smaller than estimated. Furthermore, no specific raw density measurements for Zhalpak was available to the Competent Person. The Mineral Asset is located in a proven, uranium rich region of Southern Kazakhstan, with long history of ISL uranium production. The Mineral Asset has established production with significant amount of the resources reported, providing a higher level of confidence.

Risk	Risk Ranking	Descriptions & Comments
Political Risk	Low	The primary way that politics can affect uranium is in the regulatory sense, but it is not necessarily the only way. Typically, an uranium company is covered by a range of regulations. It includes sudden strategic movements, nationalisation and/or shifting political winds that change the regulatory environment. Kazakhstan is considered to be political stable and transparency recently. Policy uncertainties could often lead to disruptions to operation and post the project at risk.
Funding Risk	Low	Significant investment on CAPEX and additional exploration is still required to maintain current level of operation of the Central Mynkuduk project as well as the processing plant of the Zhalpak project.
Economic Conditions	Low	Economic conditions, both domestic and global, may affect the perception of the value. Whilst this may rightly be perceived as a transactional risk to both the buyer and seller, it must be stressed that our valuation is expressly valid and only valid as at the Valuation Date.
Mineral Resource and Ore Reserve	Low	There is no certainty that the Mineral Resources will be realised as Ore Reserves, though this is considered unlikely. In addition, the actual quantities of saleable yellow cake produced may vary due to factors such as commodity price, ore grade and operating costs. Any substantial change to any of these parameters will affect the economic feasibility.

Source: CEA Analysis

3. Limitations

This report is mainly based on information provided by the Commissioning Entity, either directly from the site and other offices, or from reports by other organisations whose work is the property of the Company. Whenever appropriate, we have verified the reasonableness and accuracy of the data provided to its best ability. The Company has not advised us of any material change, or event likely to cause material change, to the designs or forecasts since the Valuation Date.

The work undertaken by CEA specifically excludes all aspects of legal issues, land titles and agreement related matters.

We accept no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report.

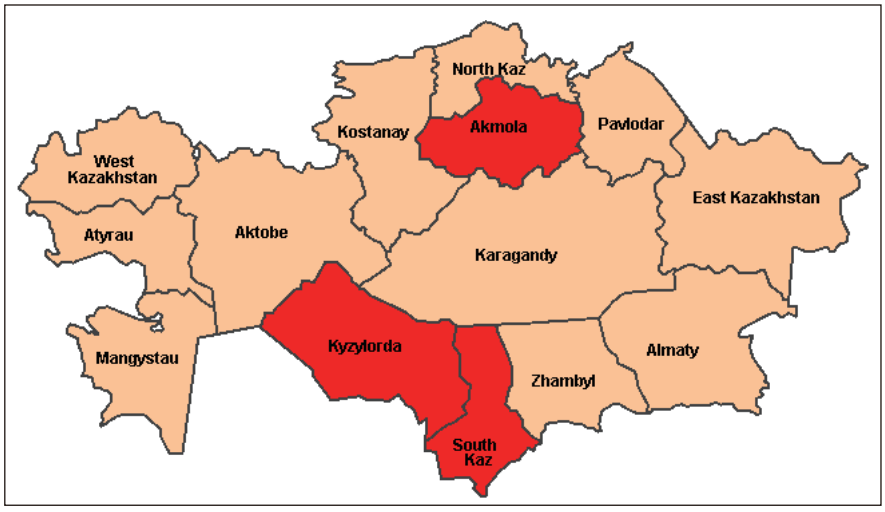
This report has been prepared using information that is available to CEA as at the Valuation Date. This report cannot be relied upon in any way if any material information provided to us changes. Unless otherwise requested by the Commissioning Entity, we are under no obligation and not intended to update the information contained in this report at any time.

V. KAZAKHSTAN URANIUM INDUSTRY OVERVIEW

1. Kazakhstan Uranium Industry[3]

Kazakhstan has been an important source of uranium for more than 50 years. Over 2001 to 2013 production rose from 2022 to about 22,550 tonnes U per year, making Kazakhstan the world's leading uranium producer. Capacity is around 25,000 tU/yr, but in October 2011 Kazatoprom announced a cap on production of 20,000 tU/yr, which was evidently disregarded. Of its 17 mine projects, five are wholly owned by Kazatomprom and 12 are joint ventures with foreign equity holders, and some of these are producing under nominal capacity. In 2017, 12,093 tU was attributable to Kazatomprom itself – 21% of world production, putting it ahead of Cameco, followed by Orano and Uranium One. In January 2017 Kazatomprom said that production would be reduced by about 10%, due to low prices; in December 2017 Kazatomprom announced that the reduction would be 20% from 2017 levels, enacted over a period of three years. The announced cuts amount to a producton deferral of 11,000 tonnes of natural uranium. In 2018 production was reduced to 21,705 tU, from 23,321 tU in 2017. However production in 2019 rose to 22,808 tU, an increase of about 5%.

Figure V-1. Major Uranium Production Provinces in Kazakhstan



[3] World Nuclear Association, February 2020
https://www.world-nuclear.org/information-library/country-profiles/countries-g-n/kazakhstan.aspx

Kazatomprom is the national atomic company set up in 1997 and owned by the government. It controls all uranium exploration and mining as well as other nuclear-related activities, including imports and exports of nuclear materials. It announced in 2008 that it aimed to supply 30% of the world's uranium by 2015 (it produced 39% in fact), and through joint ventures: 12% of the uranium conversion market, 6% of enrichment, and 30% of the fuel fabrication market by then.

2. Uranium Mining in Kazakhstan

Uranium exploration started in 1948 and economic mineralisation was found is several parts of the country and this supported various mines exploiting hard rock deposits. Some 50 uranium deposits are known, in six uranium provinces. Reasonably Assured Resources plus Inferred Resources to US$ 130/kgU were 679,000 tU in 2013.

In 1970 tests on ISL mining commenced and were successful, which led to further exploration being focused on two sedimentary basins with ISL potential.

Up to 2000 twice as much uranium had been mined in hard rock deposits than sedimentary ISL, but almost all production is now from ISL. Uranium production dropped to one-quarter of its previous level 1991 to 1997, but has since increased greatly.

Table V-1. Kazakh Uranium Production

Year	**Production** *(Tonnes U)*
2006	5,281
2007	6,637
2008	8,521
2009	14,020
2010	17,803
2011	19,450
2012	21,317
2013	22,451
2014	23,127
2015	23,607
2016	24,586
2017	23,321
2018	21,705
2019	22,808
2020	19,500

Source: Kazatomprom

In 2009 Kazakhstan became the world's leading uranium producer, with almost 28% of world production, then 33% in 2010 rising to 41% in 2014, and 39% in 2015 and 2016.

In January 2017, Kazatomprom announced a 10% cut in planned production for 2017. Then, in December 2017, it announced a 20% cut in planned production over three years, starting from January 2018. The company said that the revised production plan was to better align with demand. However in February 2019, the Kazakhstan Ministry of Energy announced that production would increase by 5% in 2019 to about 22,800 tU. 2020 production is expected to be similar to 2019.

On Dec. 4, 2017, NAC Kazatomprom JSC announced its intention to reduce planned uranium production by 20%, in order to better align its output with demand. The scheduled cuts will be enacted for a period of three years commencing January 2018. This will result in the production deferral of 11,000 tonnes over the period, of which an estimated 4,000 tonnes in 2018 alone representing approximately 7.5% of global uranium production for 2018 as forecast by UxC.

All except one of the operating and planned ISL mine groups are in the 40,000 square kilometre **Chu-Sarysu province** in the central south of the country and controlled by the state corporation Kazatomprom. Mines in the Stepnoye area have been operating since 1978, some in the Tsentralnoye area since 1982 – both in the **Chu-Sarysu basin/**uranium district, which has more than half the country's known resources. It is separated by the Karatau Mountains from the **Syrdarya basin/**uranium district to the south, where mines in the Western (No.6) area have operated since 1985. All have substantial resources.

The ISL mines and projects in the two central southern provinces are in four groups, as set out below. Production costs from these are understood to be low. Mining is at depths of 100-300 metres, though some orebodies extend to 800 metres. Uranium One in September 2007 was quoting "cash cost" figures of $8.00 to $10.50/lb for three mines it is involved with, though these may not include wellfield development and current figures are quoted below. A further feature of Kazakh uranium mining is that Kazatomprom plans to establish new mines in three years, compared with twice this time or more in the West, due to regulatory hurdles.

Inkai is the largest ISL mine, and Cameco's description of its operation is: Uranium occurs in sandstone aquifers as coatings on the sand grains at a depth of up to 300 metres. Uranium is largely insoluble in the native groundwater which is not potable due to naturally high concentrations of radionuclides and dissolved solids. Using a grid of injection and production wells, a mining solution containing an oxidant (sulfuric acid) is circulated through the orebody to dissolve the uranium. The uranium-bearing solution (generally containing less than 0.1% uranium) is then pumped to a surface processing facility where the uranium is removed using ion exchange resin. The water is re-oxidized and re-injected into the orebody. The uranium is stripped from the resin, precipitated with hydrogen peroxide and then dried to form the final product, U3O8. This process is repeated to remove as much uranium as is economically feasible. When mining at the site is complete, the groundwater will be restored to its original quality.

This is a closed loop recirculation system since the water from the production well is reintroduced in the injection wells. Slightly less water is injected than is pumped to the surface to ensure that fluids are confined to the ore zones intended for extraction. Monitor wells are installed above, below and around the target zones to check that mining fluids do not move outside a permitted mining area.

ISL uranium production in Kazakhstan requires large quantities of sulfuric acid[4], about 1.5 million tonnes per year (according to Argus Media), due to relatively high levels of carbonate in the orebodies. A fire at a sulfuric acid production plant in 2007 led to shortages, and due to the delayed start-up of a new plant, rationing continued until mid-2008. Extra supplies were sought from Uzbekistan and Russia, but uranium production well into 2009 was affected. Uranium One revised its 2008 production downwards by 1080 tU, which it said was "primarily due to the acid shortage" for its South Inkai and Kharasan 1 projects (70% and 30% owned respectively) which were just starting up.

3. Uranium trading

In April 2017, Kazatomprom announced the formation of a Swiss-based trading subsidiary TH Kazatom, to bring greater liquidity to the uranium market from late in the year. It will buy and sell on the spot market as part of its corporate transformation to align its pricing mechanism with "the way our customers want to buy", especially in European and US markets.

4. International Collaboration

Kazatomprom has forged major strategic links with Russia, Japan and China, as well as taking a significant share in the international nuclear company Westinghouse. Canadian and French companies are involved with uranium mining and other aspects of the fuel cycle.

In December 2006 China Guangdong Nuclear Power Group (now China General Nuclear Corporation – CGN) signed a strategic cooperation agreement with Kazatomprom, in May 2007 an agreement on uranium supply and fuel fabrication, and in September 2007 agreements on Chinese participation in Kazakh uranium mining joint ventures and on Kazatomprom investment in China's nuclear power industry. This is a major strategic arrangement for both companies, with Kazatomprom to become the main uranium and nuclear fuel supplier to CGN (accounting for a large share of the new reactors being built in China). In October 2008 a further agreement was signed covering cooperation in uranium mining, fabrication of nuclear fuel for power reactors, long-term trade of natural uranium, generation of nuclear electricity and construction of nuclear power facilities. In December 2014 a further agreement was signed with similar scope but focused on establishing a joint venture in Kazakhstan for the production of 200 t/yr of fuel assemblies. In December 2015 a further agreement was signed on the fuel fabrication project, to be at the Ulba Metallurgical. A CGN subsidiary, Sino-Kazakhstan Uranium Resources Investment Co, has invested in two Kazakh uranium mines, Irkol and Semizbai, through the Semizbai-U LLP joint venture. In 2015 CGN Mining Co bought the 49% Chinese equity in Semizbai-U.

[4] 70-80 kg acid/kgU (comprising 15-20% of the operating expense), compared with Beverley and Four Mile in Australia at around 3 kg/kgU

A framework strategic cooperation agreement was signed with China National Nuclear Corporation (CNNC) in September 2007 and this was followed in October 2008 with another on "long-term nuclear cooperation projects" under which CNNC was to invest in a uranium mine. Late in 2007 Kazatomprom signed an agreement with both GCNPC (now CGN) and CNNC for them to take a 49% stake in two uranium mine joint ventures and supply 2000 tU per year from them. In February 2011 CNNC signed a contract to buy 25,000 tU.

Early in 2009 Kazatomprom signed an agreement with CGNPC for establishment of a specialized company for the construction of nuclear power plants in China, since Kazakh plans to work with Russia's Atomstroy export developing and marketing innovative small and medium-sized reactors had been put on hold. In mid-2009 a feasibility study on this joint CGNPC project was underway, but no more has been heard since. In December 2015 both governments announced the establishment of a $2 billion fund for bilateral projects within the framework of the 'New Silk Road', now Belt & Road Initiative (BRI), the new Chinese investment program. CGN is working with Kazatomprom to build the Ulba-FA fuel fabrication plant.

In mid-2014 Kazatomprom said that 55% of Kazakh uranium production was exported to China.

At the end of August 2015, among $23 billion of China-Russia deals, JSC Samruk-Kazyna, the national holding company owning NAC Kazatomprom, signed deals worth $5 billion with Chinese companies and Kazatomprom agreed on transit of its products via China to North America.

5. Organisation, regulation and safety

The government corporation Kazatomprom was set up in 1996-7 to manage the government's stake in uranium mining and nuclear fuel production, as well as import and export of nuclear material. It also regulates uranium mining. KATEP, set up in 1993, formerly was responsible for all this but in 1997 became simply focused on nuclear power plants.

The regulatory body responsible for licensing and safety as well as safeguards compliance from May 2012 is the new Atomic Energy Agency of Kazakhstan. Formerly it was the Kazakhstan Committee on Atomic Energy (CAE), and before that (1992-96) the Atomic Energy Agency, under the Industry & New Technologies Ministry. The CAE included three departments: supervision and analysis, licensing and material monitoring, and security. It was abolished in May 2012 and replaced outside the Ministry by the new Atomic Energy Agency to take responsibility for atomic energy, nuclear and radiological safety, physical protection of nuclear materials and nuclear facilities, as well as compliance with non-proliferation requirements.

All uranium and nuclear operations – MAEK, Kazatomprom, KATEP, CAE/AEA and NNC, come under the Ministry of Energy & Mineral Resources. It operates under the 1997 Atomic Energy Law.

The National Nuclear Centre (NNC) was set up in 1992 to utilise the former Soviet military facilities for civilian research.

The Nuclear Technology Safety Centre (NTSC) was set up in 1997 with US support to manage the shut-down of the BN-350 reactor at Aktau, and foster safety of nuclear power.

VI. VALUATION APPROACHES AND METHODOLOGIES

The valuation of any asset can be broadly classified into one of three approaches, namely the cost approach, the market approach and the income approach. In any valuation analysis, all three approaches must be considered, and the approach or approaches deemed most relevant will then be selected for use in the fair value analysis of that asset.

Table VI – 1. Applicable Valuation Approaches for Different Stages of Mining Operation

Stage of Mining Operation	Valuation Approach		
	Cost	Market	Income
Exploration Projects			
Mineralisation may or may not have been identified, certain exploration may have been undertaken and specific targets identified, but Mineral Resources have not been identified	Yes	Yes	No
Pre-development Projects			
Mineral Resources identified and their extent estimated, a decision to proceed with development has not been made	Some cases	Yes	Some cases
Development Projects			
A decision has been made to proceed with construction or production, but not yet commissioned or operating at design levels. Economic viability of Development Projects will be proven by at least a Pre-Feasibility Study	No	Yes	Yes
Production Projects			
Tenure holdings – particularly mines, wellfields and processing plants – that have been commissioned and are in production.	No	Yes	Yes

Source: CIMVal Standards and Guidelines

1. Cost Approach

Cost approach is based on the principle of contribution to value. It evolves from the cost principle of accounting, on which most business financial statements are based. It is also known as asset-based approach. The fundamental accounting principle is the book value of assets minus the book value of liabilities equals the book value of the business owners' equity. In valuation, the fundamental valuation principle is the current value of assets minus the current value of liabilities equals the current value of the business or project owners' equity. They are economics identities. Based on the purpose and objective of the valuation, the valuer will apply the appropriate standard of value to the subject equity interest. If an asset-based approach is used, the valuer will apply a corresponding appropriate standard of value to all of the assets and liabilities of the subject company or project. One of the most commonly used methods is the appraised value method for which the fair value of the mineral asset approximates the amount of exploration expenditure incurred/likely to be incurred. Asset accumulation method is also widely used in which valuer restates all of the assets and liabilities of the subject company from their historical cost basis to the appropriate standard of value.

We have considered but rejected the cost approach for the valuation of the Mineral Assets because the Central Mynkuduk uranium project is in production while the Zhalpak uranium project is in trial production with a large-scale expansion has been planned, the Market Value of the Mineral Asset was determined by the ability to generate a stream of benefits in future, rather than the sunk cost or cost of replacement. According to the VALMIN Code, cost approach is not permitted to value the Mineral Asset at this stage.

2. Market Approach

While there are many ways to determine the value of mineral assets, one of the most reliable and the most likely to be accepted to resolve legal disputes is based on the price as determined by actual market transactions.

In the market approach, value is established based on the principle of competition. This simply means that if one thing is similar to another and could be used for the other, then they must be equal. Furthermore, the price of two alike and similar items should approximate one another. For the market approach to be used, there must be a sufficient number of comparable companies/transaction to make comparisons, or, alternatively, the industry composition must be such that meaningful comparisons can be made.

There are several different methods and variations under this approach:

Broad-based Method: It consists of determining the value of mineral assets by comparing it with the values of similar mineral assets under similar circumstances. This method is more difficult when applied to mineral assets because the underlying mineral assets have a number of unique characteristics that make it complicated to perform direct comparisons between different situations; characteristics such as quality and quantity of each mineral, mining and processing systems and costs, production quantities and products, and location and schedule of mining.

Comparable Transaction Method: Value is determined on a per unit basis, such as value per tonne. Differences in the mineral and property characteristics are reflected in the unit value of the mineral.

Industry Multiples Method: This method involves comparing the value of two or more publicly traded companies on the basis of stock price. If one of the companies is not publicly traded, financial and performance ratios taken as indicators of stock worth can be determined and compared.

We have considered and accepted the market approach (comparable transaction method) for the valuation of the Mineral Assets. The comparable transaction method under the market approach was selected as the primary valuation methodology because sufficient amount of comparable transactions with adequate information can be found and such method adequately reflects the market opinion of the Mineral Assets.

Other valuation methodologies under the market approach may not be appropriate to value these two projects after considering the amount of information available and the development status of the Mineral Assets.

3. Income Approach

The income approach is based upon the economic principle of anticipation (sometimes also called the principle of expectation). In the income approach, the value of the subject investment is the present value of the economic income expected to be generated by the investment. This is a general way of determining a fair value of a mineral asset by converting anticipated benefits into a present value amount.

In the income approach, an economic benefit stream of the asset under analysis is selected, usually based on historical and/or forecasted cash flow. The focus is to determine a benefit stream that is reasonably reflective of the asset's most likely future benefit stream. This selected benefit stream is then discounted to present value with an appropriate risk-adjusted discount rate. Discount rate factors often include general market rates of return at the valuation date, business risks associated with the industry in which the company operates, and other risks specific to the asset being valued.

Major methods commonly used under this approach are Discounted Cash Flows Method ("DCF") and Capitalised Future Economic Income Method.

We have considered the income approach and applied the DCF method of the income approach as the primary valuation methodology to the valuation of the Mineral Assets because:

- The Market Value of the Mineral Asset is determined by the ability to generate a stream of benefits in future;

- Economic benefit streams of the Mineral Asset could be identified based on historical and projected cash flows prepared by the Competent Person;

- Important parameters for the DCF analysis can be reasonable estimated or relied on with acceptable accuracy; and

- Income approach is suitable for valuing producing projects according to the VALMIN Code.

We also consider the implications on application of various valuation methodologies from difference in development stage of the Central Mynkuduk uranium project and the Zhalpak uranium project. As the Central Mynkuduk uranium project is a more advanced project with actual production and cost information from past operations, economic value of the project derived can be estimated with higher certainty and accuracy of parameters.

In conclusion, we use the Discounted Cash Flow method under the Income Approach and the Comparable Transaction method under the market approach as the primary valuation methodologies for the valuation of the Central Mynkuduk uranium project and the Zhalpak uranium project. In addition, we also use Industry Multiples Method under the Market Approach on the Mineral Asset as a secondary method to value the Mineral Asset and checking the reasonableness of the results derived from primary valuation methods.

Table VI – 2. Summary of Valuation Methodologies Adopted

Project	**Valuation Approaches & Methodologies**
Central Mynkuduk	Income Approach – DCF & Market Approach – Comparable Transaction
Zhalpak	Income Approach – DCF & Market Approach – Comparable Transaction

Application of these valuation methodologies are discussed in detail in the following sections. The valuation methodologies and principles have been applied to the Mineral Asset as at the Valuation Date. A value range has been formed after considering the results from applying all valuation methods. A single, preferred value was then selected based on this range of values. The valuation range is also required to be reported under the VALMIN Code.

VII. VALUATION

1. Discounted Cash Flow method

After considering that the Market Value of the Mineral Asset is determined by the ability to generate a stream of benefits in future, the economic benefit streams of the Mineral Asset could be identified based on historical and projected cash flows prepared by Competent Person or the Target Company, and independently verified by the Competent Person. Important parameters for the DCF analysis can also be reasonable estimated or relied on with acceptable accuracy. Therefore, we have considered and applied the DCF method of the income approach as the primary valuation methodology to the valuation of the Mineral Asset. Income approach is also suitable for valuing producing projects according to

the VALMIN Code. However, as Zhalpak uranium project has no formal production and is lack of a full scope feasibility study to a high degree of accuracy, parameters for Zhalpak project rely on proximate from other project and high-level estimates.

The essential elements of DCF are: (1) the expected cash flow streams to be discounted, and (2) the discount rate. The nature and underlying rationale for the assumptions used to derive the expected cash flow streams and the discount rate are discussed below.

The net cash flows from the Mineral Asset were estimated, and we discounted the sum to a present value at the appropriate discount rate, as illustrated below:

$$PV = \frac{E_1}{(1+k)} + \frac{E_2}{(1+k)^2} + \frac{E_3}{(1+k)^3} + \cdots + \frac{E_n}{(1+k)^n}$$

E_1, E_2, E_3, etc. = Expected economic income in the 1st, 2nd, 3rd periods, and etc.
E_n = Expected economic income in the last period
k = Discount Rate

The present value of the discounted cash flow represents the enterprise value ("EV") of the Mineral Asset. We computed the equity value from the EV by adopting the following formula:

Equity Value = EV – Total Debt + Cash and Cash Equivalents + Marketable Securities – Preference Shares – Minority Interest

We have reviewed the calculation and discussed with the management of the Company, the Target Company and the Competent Person about the validity of the projection. Our valuation was developed based on this financial projection. The nature and underlying rationale for the cash flow stream projection are discussed below.

a) Cash Flow Stream Projection Assumptions

i) Production Forecast

Based on the CPR and our interviews with the management of the Company and the Target Company, future production of the Mineral Asset is projected from the extraction of the uranium Ore Reserves (as per the Reserve Statement and production schedule in the CPR). The production volume generated over the life of the mines, each year, is according to the new injection and extraction well development plan made by the management of the Target Company and verified by the Competent Person as reported in the CPR. The table below outlines the production forecast of both Central Mynkuduk and Zhalpak uranium projects.

Table VII – 1. Production Schedules of Central Mynkuduk and Zhalpak Uranium Projects

Year	Uranium Production (tU)	
	Central Mynkuduk	Zhalpak
2021	1,582	–
2022	1,600	–
2023	2,000	50
2024	2,000	251
2025	2,000	502
2026	2,000	796
2027	1,900	799
2028	1,805	800
2029	1,700	798
2030	1,600	801
2031	1,500	798
2032	1,107	801
2033	92	757
2034		579
2035		487
2036		79
Total	**20,888**	**8,298**

Source: CPR

ii) Basis of Gross Revenue

Based on the CPR and our interviews with the management of the Company and the Target Company, future gross revenue of the Mineral Asset is projected from the economic benefit derived from the uranium production (as per the production schedule), the forecasted average uranium price over the life of the mines, each year, adjusting for price discounts (2%, according to an agreement between CGN and KAP, intended to be effective post-acquisition) and any factors that affects the VAT, and other duties applicable.

Refer to Appendix C for details of production quantity, forecasted uranium prices and revenue projection.

iii) Basis of Capital Expenditures

For an ISL operation, capital expenditures ("CAPEX") is mainly consists of the recurring capital costs associated with the development of the well field, which includes drilling injection, extraction and monitoring wells, installing down hole piping as well as surface piping and electrical distribution systems as well as pumps.

In consistent with the accounting principles, the drilling costs of these fixed assets are captured as operating costs, while the associated piping, equipment and other infrastructure costs are recorded as capital costs.

In addition, well construction cost is assembled based on first principles, based on historical unit costs, such as the construction costs per well and while sustaining capital and closure costs are based on PLS volume and the total recovered uranium per year.

Forecasted CAPEX as reported by RPM in the CPR for Central Mynkuduk is presented in the table below. We consider the CAPEX is reasonable for the planned production based on recent historical performance.

Table VII – 2. Capital Costs Forecast of Central Mynkuduk Uranium Project

Year	Central Mynkuduk Capital Cost (US$ Million)			
	Well Construction	Sustaining	Mine Closure	Total
2021	7.27	1.81	0.40	9.47
2022	4.67	2.73	0.40	7.80
2023	6.46	2.12	0.50	9.08
2024	4.17	2.18	0.50	6.84
2025	2.41	1.86	0.50	4.78
2026	2.92	1.89	0.50	5.31
2027	3.36	2.21	0.48	6.04
2028	6.33	1.68	0.45	8.46
2029	5.54	2.07	0.43	8.03
2030	1.30	1.40	0.40	3.10
2031	1.57	0.96	0.37	2.91
2032	–	1.09	0.28	1.37
2033	–	0.28	0.02	0.30
Total	**46.01**	**22.26**	**5.23**	**73.50**

Source: CPR

For Zhalpak uranium project, CAPEX includes expansions of the current hydraulic smelter plant to meet the forecast productions and construction of a yellow cake facility with smaller capacity of that of the Central Mynkuduk's. According to RPM, the total CAPEX of such plant US$20 million, plus a 20% contingency, to be constructed over a 2-year period from 2022.

In addition, all production drilling and well construction is capitalized as a standard treatment consistent with that of Central Mynkuduk, which also becomes a CAPEX item. Sustainable capital cost is also included in the CAPEX estimations. The forecast for these aspects is based on the 2018 and 2019 Central Mynkuduk costs, resulting in the following unit costs to be applied.

- Well construction – US$8,500 per hole. This includes installation of the casing, screening and pumping system.

- Sustaining Capital – US$0.0822 per PLS m^3. This includes both the plant and pumping system maintenance.

- Liquidation Fund / Closure – US$0.25 per t recovered U.

iv) Basis of Operating Expenditures

Operating Expenditures ("OPEX") of mining projects are typically categorised into exploration costs, mining costs, processing costs, sales & marketing cost, and general & administrative costs. However, an ISL operation does not employ conventional mining practices and mining is not identified as a cost centre.

The mining costs associated with extracting the uranium from the deposit, which includes drilling of the wells, the power costs associated with pumping the solutions down and out of the wells and transport of the solutions to the processing facility as well as the sulphuric acid costs. The processing costs relate to the recovery of the uranium from PLS, following receipt at the plant and production to yellow cake, with subsequent purification costs at a toll refining facility. G&A reflects the standard General and Administration costs, while MET is the Mineral Extraction Tax that is applied by the government.

The table below summarises the forecast OPEX of the Central Mynkuduk uranium project for the life of the mine. These forecasts are prepared by the Competent Person who has based the forecasts on the following assumptions:

- The LOM schedule and volumes for drilling, initial acidification and ongoing leaching

- Drilling costs are based on units per meter of the 2017 and 2018 actual cost (provided by the management of the Target Company)

- Leaching and Acidification Sulphur acid consumption and power costs were estimated based on average price of acid per tonne and PSL volume in 2017 and 2018

- All other costs estimated based on 2018 costs as provided by the management of the Target Company and estimated back of 2018 production outcomes.

For Zhalpak uranium project, the majority of the current operational costs are not indicative of the likely cost base of a project in commercial production. As such to forecast potential operating costs, As such, the following assumptions have been made for forecasts of the OPEX of Zhalpak:

- The same process as that in the Central Mynkuduk project will be in place.

- The unit costs for drilling and sulfuric acid were assumed as Central Mynkuduk, as the same contractor is in place for both operations.

- The power cost was kept in-line with the 2020 forecast applicable to Zhalpak, as power will be supplied from the main grid rather than the solar power generators.

Table VII – 3. Operating Expenditures Forecast

Cost Centre / Items	Unit	Unit Rate		Remarks
		Central Mynkuduk	Zhalpak*	
Mining Costs				
Well Drilling				
Injection	per m	23.8	23.8	
Extraction	per m	23.8	23.8	
Sulfuric Acid	per t of Acid	73	73	
Power	per m^3 of PSL	0.06	0.008	
Processing Costs				
Sulphuric acid (92.5%)	per t recovered U	133		
Ammonium nitrate	per t recovered U	570		
Sodium hydroxide	per t recovered U	347		
Ion exchange resin	per t recovered U	148		
Power	per t recovered U	250		
Processing (Zhalpak)	per t recovered U		24,472	
Other Costs				
Site Cost	per t recovered U	12,229	100	
Mineral Resource Tax	per t recovered U	5,198	7,096	
G&A	per t recovered U	1,838	928	
Sales	per t recovered U	74	4,017	
Transport & Refining	per t recovered U	3,367		

*Note:** applicable to Zhalpak during commercial production stage from 2022 to 2036 only
Source: CPR

The operating costs are estimated based on the scale of the Mineral Asset's well development plan, past actual costs, and public market information. The CE is of the opinion that these cost estimations are in line with international standard and industry norm.

v) Basis of Taxes and Levies

The production of the Mineral Asset is subject to taxes and levies to the government for operating uranium mines.

Mineral extraction tax (MET) applies to the monetary value of extracted volume of crude oil, gas condensate, natural gas, minerals, and groundwater.

MET is calculated based on the value of the extracted content, which is computed by applying average global prices to the extracted volume (adjusted for content). However, based on our discussion with the management of the Target Company and the Company's tax advisor, Ernst & Young, the MET on uranium is calculated based on 120% of the actual production cost of contractual activities in accordance with IFRS and the requirements of the legislation of the Re-public of Kazakhstan.

Currently, MET rates for minerals that have undergone initial processing (except for widespread minerals) and for coal vary between 0% and 18.5%. For uranium mining, MET is a fix rate of 18.5%.

Value-added tax (VAT) is prevailing in Kazakhstan for uranium production. However, exports of goods and international transportation services are taxed at 0% VAT. Therefore, the valuation is conducted on an ex-VAT basis.

The statutory corporate income tax rate in Kazakhstan is 20%. There is no special exemption for uranium exploration and exploitation industry.

vi) Basis of Depreciation and Amortization

The fixed asset, properties, plant and equipment of the Target Company subject to depreciation includes wells, drillings, pipelines, surface construction, infrastructures, equipment and machinery. We follow the depreciation and amortisation policy stated in the annual financial report and adopt the same depreciation and amortisation schedule in the projection period.

vii) Working Capital Requirement

Account receivables, inventories, deposits, prepayments, other receivables, account payables and other current liabilities, are the components of the working capital. Working capital movement is projected with reference to its historical level and proposed production level and scale of operation. Amongst the working capital items, deposits, prepayments, other receivables and other current liabilities are assumed to remain the current level in the projection period, whereas remaining items are projected in proportion to the production levels based on actually working capital items balance in 2020.

viii) Head office corporate expenses

Apart from the Central Mynkuduk and Zhalpak uranium projects, the Target Company also operates its head office in Shymkent. Head office corporate expenses incurred include office rental, administrative and managerial stuff salaries, and other administrative expenses. Such costs are forecasted based on historical actual expenses.

For the summary of the financial projection, please refer to the Appendix C.

b) Discount Rate Calculation

Discount rate is a single rate to be used to discount all future cash flows of the company/project to arrive at the fair market value. Appropriate and accurate estimation of this rate will significantly improve the reliability of the DCF result.

In selecting the appropriate discount rate to be applied, we have taken into account a number of factors including the risk considered inherent in the operation; our knowledge of discount rates commonly applied valuing operating uranium projects using the DCF methodology and consideration of the current cost of finance.

We developed the cost of equity ("Re") and the cost of debt ("Rd") for the valuation of the Mineral Asset based on data and factors relevant to the economy, the industry, the operation of the Target Company and the Mineral Assets as at the Valuation Date. These costs were then weighted in terms of a typical or market participant industry capital structure to arrive at the estimated weighted average cost of capital ("WACC"). The WACC is then used as the discount rate to derive the present value of all future cash flows derived above.

i) Development of Weighted Average Cost of Capital ("WACC")

The WACC (being the discount rate for this valuation) is determined by the weighted average, at market value, of the cost of all financing sources in the business enterprise's capital structure. We considered market and industry data to develop the WACC for the Target Company. We have "levered" the Target Company as if it mirrored the average percentage of debt as the comparable companies on the assumption that over time, as well as the likely capital structure that the management targets to achieve. The Target Company would need to approach the average of debt of the guideline public companies (the "Guideline Public Companies"), which is the less expensive form of capital than equity, to remain competitive.

The widely accepted and used formula for calculating the WACC was:

$$WACC = [(\%D) \times (R_d) \times (1 - T)] + [(\%E) \times (R_e)]$$

Where:

WACC:	Weighted Average Cost of Capital
%D:	Weight of Interest Bearing Debt
Rd:	Cost of Debt
%E:	Weight of Equity
Re:	Cost of Equity
T:	Corporate Income Tax Rate

Using the leverage ratio, corporate income tax, cost of debt and cost of equity developed below, the WACC calculated using the WACC formula above is 10.6% for Central Mynkuduk uranium project and 11.3% for Zhalpak uranium

project. We have selected these rates as the nominal discount rate for the DCF valuation. In our opinion, it is appropriate for the risks involved in undertaking the current and future operation of the Mineral Assets.

ii) Development of Cost of Equity ("R_e")

We considered the Modified Capital Asset Pricing Model ("MCAPM") to calculate Re for this valuation. MCAPM, as applied to this valuation, could be summarized as follows:

$$R_e = R_f + Beta \times ERP + RP_s + RP_u$$

Where:

R_e:	Cost of Equity;
R_f:	Risk Free Rate;
Beta:	A measure of systematic risk;
ERP:	Equity Risk Premium;
RP_s:	Size Premium; and
RP_u:	Specific Company Adjustment

Risk Free Return ("Rf")

R_f was found by looking at the yields of the local government bonds. Ideally, the duration of the security used as an indication of Rf should match the horizon of the projected cash flows that were being discounted, which should match the life of mine of the Mineral Assets in this case. We relied on the long-term local government bond yields as at the Valuation Date as a proxy of the risk-free rate. The 30-year Kazakhstan government bond yield as at the Valuation Date is set at 3.72%.

Equity Risk Premium ("ERP")

We adopted the equity risk premium of the market where the subject companies are located as contained in the "Country Default Spreads and Risk Premiums" research published by Prof. Aswath Damodaran of New York University. The total equity risk premium for Kazakhstan is 68.85%[5].

Selection of Guideline Public Companies

The Guideline Public Companies were selected to compute beta in our determination of R_e. One would start with a description of the subject companies, in terms of lines of business, markets served, size and other criteria. For this valuation, we select publicly traded companies that are engaged in uranium exploration and production as their main business to derive at the R_e.

[5] Prof. Aswath Damodaran, Country Default Spreads and Risk Premiums, last updated: July 2020

Suitable comparable companies in the uranium exploration and mining industry and have similar operation as the Target Company are show in the table below.

Beta

In the MCAPM formula, beta is a measure of the systematic risk of a particular investment relative to the market for all investment assets. We obtained betas from the Guideline Public Companies in this case. The identified betas were unlevered to remove the effects of financial leverage on the indication of relative risk provided by the beta, and re-levered at the applicable capital structure.

Table VII – 4. Guideline Public Companies

No.	Company Name	Stock Code	Description
1	NexGen Energy Ltd	NXE CN	NexGen Energy Ltd. operates as a special purpose uranium exploration company. It acquires, explores and develops properties for uranium resources in Canada.
2	Denison Mines Corp	DML CN	Denison Mines Corp. is a uranium exploration and development company with interests in the Athabasca Basin Region of Northern Canada. In addition to its 90% owned Wheeler River Project, the company's portfolio consists of projects covering 310,000 hectares. The projects include a 22.5% interest in the McClean Lake Joint Venture and other deposits near McClean Lake mill.
3	Uranium Energy Corp	UEC US	Uranium Energy Corporation is a uranium production, development and exploration company. The Company's fully licensed and permitted Hobson processing facility is central to all of its projects in South Texas, including the Palangana in-situ recovery project, which has ramped up to full production, and the Goliad in-situ recovery project.

No.	Company Name	Stock Code	Description
4	Energy Fuels Inc	EFR CN	Energy Fuels, Inc. is a uranium mining, production and development company with assets located in the western U.S. It also owns and operates the only uranium mill in the U.S.
5	Cameco Corp	CCJ US	Cameco Corporation explores, develops, mines, refines, converts, and fabricates uranium. The Company offers uranium for sale as fuel for generating electricity in nuclear power reactors. Cameco operates worldwide.
6	CGN Mining Co Ltd	1164 HK	CGN Mining Company Ltd. operates businesses related to nuclear energy. It supplies nuclear fuel, produces nuclear energy, and constructs plants for renewable energy.
7	CNNC International Ltd	2302 HK	CNNC International Limited participates in uranium products trading and other nuclear power generation projects.
8	NAC Kazatomprom JSC	KAP LI	NAC Kazatomprom JSC produces and markets minerals. It specializes in natural uranium production. NAC Kazatomprom also imports and exports uranium compounds, nuclear power plant fuel, and uranium components. NAC Kazatomprom serves customers worldwide.

Source: Bloomberg

Size Premium (RP_s)

We adopted the Size Premium – Cost of Capital Navigator 2019 research published by Duff & Phelps in December 2019 to arrive at the size premium. The size premium for small cap companies with market capitalisation below US$993.85 million is 1.59%.

Specific Company Adjustment (RP_u)

After assessment of the Target Company and the operation of the Central Mynkuduk project, we believe no company specific risk premium (RP_u) is required, as the project in in ordinary operation as production has started and ramp up is expected backed up by long life of mine.

A company specific risk premium (RP_u) of 1% is applied to reflect the unique set of risks factors that the Target Company is facing in relation to the Zhalpak project, with additional risks associated with its trial production only, lack of detailed feasibility study, and without being able to obtain a current valid approvals and license to bring Zhalpak into production after previous subsoil use agreement is expired.

Conclusion of Cost of Equity Capital R_e

Therefore, cost of equity capital or the R_e determined using the MCAPM model with the above equation and parameters for the Central Mynkuduk project is 11.86%, while the cost of equity capital for the Zhalpak project is 12.86%.

iii) Development of Cost of Debt ("R_d")

We develop the R_d for this valuation by making reference to the base interest rate of Kazakhstan. According to National Bank of Kazakhstan, the base interest rate is 9% as of 31 December 2020, on Kazakhstan Tenge and the prevailing Kazakhstan bank lending rate is 9.5%. Therefore, based on prudence principle and the likelihood of co-existence of both US$ and Tenge denominated loans, we assume the R_d for the calculation of discount rate in this valuation is 9.5%.

iv) Corporate Income Tax (T) and Leverage (%D and %E)

According to PwC's World Tax Summaries[6], the statutory corporate income tax in Kazakhstan for uranium mining and production companies is 20%.

Based on our analysis of the Guideline Public Companies, the average capital structure of the Target Company in the past 3 years ending 31 December 2020, we assume the leverage ratio of 30% debt for the Target Company. We further assume there will be no material change in such leverage ratio post-acquisition.

c) Valuation Scenarios

In establishing the valuation range, we constructed two scenarios to reflect difference in uranium price forecast. Scenario One is based on spot uranium price published by UxC, LLC (UxC) and TradeTech, LLC (TradeTech), two independent nuclear industry leading market research and analysis companies as of the Valuation Date, with an inflation adjustment based on the world's average inflation rate of 3.18% published by Statista as of the Valuation Date. Scenario Two is based on an algorithm average uranium price forecasts published by UxC and TradeTech as of the Valuation Date.

[6] PwC, World Tax Summaries – Kazakhstan, 27 December 2019

d) DCF Calculation Results DCF

By applying the above assumptions and discount rate, the table below presents the results of the DCF calculation.

Table VII – 5. DCF Valuation Result of Central Mynkuduk and Zhalpak Projects (100% basis)

Factors	Central Mynkuduk	Zhalpak
Discount Rate (%)	10.6%	11.3%
DCF Result (US$ Million) – Scenario One	587	166
DCF Result (US$ Million) – Scenario Two	778	255

2. Comparable Transaction method

We have considered and accepted the market approach (comparable transaction method) for the valuation of the Mineral Assets. The comparable transaction method under the market approach was selected as the primary valuation methodology because sufficient amount of comparable transactions with adequate information can be found and such method adequately reflects the market opinion of the Mineral Assets. This is a primary method under the Market Approach and must be considered in preference to other methods within the Market Approach whenever applicable.

Comparable Transaction Method (CTM) is based on the premise that transaction prices of acquisitions of uranium projects similar to that of the Mineral Asset provide objective evidence as to values at which purchasers are willing to buy and asset owners are willing to sell the interest of the mineral asset at current market conditions. As similar assets trade for similar prices, it is possible to establish a value based on known transaction prices for comparable assets.

As discussed above, Comparable Transaction Method aims to determine the value of a mineral asset on a per unit basis. Differences in the mineral and property characteristics are reflected in the unit value of the mineral. In the context of this valuation, we determine the value per pound of yellowcake as the valuation metric.

General steps of applying comparable transaction method is outlined below:

– **Step 1**. Screening and identifying comparable transactions;

– **Step 2**. Obtaining information of the selected transactions, including Measured & Indicated (M&I) Resources (in terms of quantity of U_3O_8), development status, and mining method of the subject mineral asset, as well as consideration paid, percentage of interest acquired, and uranium price at the time of each transaction;

- **Step 3**. After adjusted for percentage of interest acquired (% adjustment) and difference in uranium prices at the time of each transaction comparing to that as at the valuation date (U_3O_8 P $_{transaction\ date}$ / U_3O_8 P $_{valuation\ date}$), considerations of each transaction are then divided by the total amount of M&I Resources to calculate the unit price of consideration per pound of U_3O_8 of each transaction;

- **Step 4**. Determine the median of the above-mentioned unit price of each transaction as the valuation metric to value the subject asset;

- **Step 5**. Calculate value of the Mineral Asset by applying the valuation metric to the qualified resources of the Mineral Asset;

- **Step 6**. Draw conclusion after considering and applying other necessary adjustments.

Due care was exercised in the selection of completed market transactions by using reasonable criteria in deciding whether a particular market transaction can be used to arrive at the Market Value of the Mineral Asset on the Valuation Date.

To enable searching for sufficient amount of comparable transactions, we applied certain criteria and searched public and proprietary transaction database to identify potential comparable transactions. These criteria include transactions that are completed within the last 10 years from the Valuation Date (as older transactions the economic environment, industry circumstances and investment considerations are likely changed materially) and transactions involving uranium assets in the global domain.

We were able to identify 30 transactions in the past 10 years involving uranium assets globally. After analysis, we have eliminated transactions that have been announced but yet to be completed as of the Valuation Date or those with insufficient information to complete an analysis on. We have also eliminated transactions that have material differences (significantly difference in size, material difference in development stage, difference in mining methods etc.) compare to the Mineral Asset to ensure a comparable analysis is meaningful.

After screening, we have hence adopted 4 transactions to be considered comparable to the Mineral Asset and our valuation analysis is primarily based on these 4 transactions. The table below includes key information of these 4 selected transactions.

Table VII – 6. Summary of Comparable Transactions

Deal No.	Date	Target Name	Acquirer Name	Location	Mining Method	Consideration (US$ m)
1	15-Dec-10	Mkuju River	ARMZ	Tanzania	Open pit	1,150
2	1-Jun-10	Akbastau and Zarechnoye	Uranium One	Kazakhstan	ISL	774
3	1-May-14	Semizbay-U.	CGN Mining	Kazakhstan	ISL	122.3
4	1-Oct-11	Roughrider	Rio Tinto	Canada	Open pit	623

Source: Bloomberg

Of these 4 transactions, 2 of them are in-situ leaching (ISL) operations and the other 2 are open-pit operations. We assume all the market participants are rational and past transaction prices already fully reflect effect of different price factors such as those adjustments will be discussed below.

Estimation Adjustments

One of the most important rationales in the Market Approach is to ensure that we compare like to like. Therefore, we must make our comparison between transactions of identical assets. However, one will not find two exactly identical mineral deposits in terms of the amount of resource/reserves available, as well as other geological and economical characteristics; and the same holds true even for two mineral deposits that are located side by side. It is for this very unique feature of mineral assets that we must apply a number of "estimation of value adjustments" to the selected precedent market transactions in order to ensure relevance and comparability and facilitate the comparison of different mineral deposits with many differences, both geologically and economically. In this valuation, there are two adjustments that are particularly relevant: a. time and price adjustment, b. development stage adjustment.

a) Time and Price Adjustment

Since transactions occur at different times when the uranium price can different greatly from that on the Valuation Date, an adjustment is needed. To compare any project transaction to the Mineral Asset as at the Valuation Date, it is necessary to establish what the likely transaction value could have been if it had occurred on the date of that transaction. Therefore, uranium price adjustment is used to reflect the difference in valuation due to difference in uranium price at the time of each transaction. This is accomplished by applying a quantitative adjustment 'Price Adjustment Factor' to the in the calculation of a normalised valuation metrics (US$/lb of U_3O_8). The Price Adjustment Factor is calculated using the following formula.

$$\textit{Price Adjustment Factor} = \frac{\text{Uranium price on the Valuation Date}}{\text{Uranium price on the date of the comparable transaction}}$$

Since uranium does not trade on an open market like other commodities, no open market price index is available. Instead, buyers and sellers negotiate contracts privately. Prices are published by independent market consultants such as UxC, LLC (UxC) and TradeTech. Reference uranium price used in this analysis is based on the widely accepted Industry Average Uranium Price[7], published monthly Cameco Corp, which is calculated from the month-end prices published by UxC and TradeTech.

b) Development Stage

The Central Mynkuduk project has completed exploration with defined reserves and economic viability is proven. Past production is evidenced, and mining permit has been obtained. Central Mynkuduk project is an ISL operation. The Zhalpak project, on the other hand, has completed exploration with defined resources only but yet to define reserves or prove economic viability. Some pilot mining production has been carried out, and permit renewal has been submitted but yet to be approved.

All the comparable transactions selected are in production, and therefore are considered to be in similar development stage as the Central Mynkuduk project. Therefore, we decided that no development stage adjustment is needed for Central Mynkuduk project in this valuation.

Details of the comparable transactions, including considerations paid, percentage of interest acquired, amount of resources, uranium price at the time of the transaction and the normalised price metric are presented in the table below.

Table VII – 7. Details of Comparable Transactions

Deal No.	Target Name	Resources (tU)	Uranium Price (US$/lb U_3O_8)	Percentage Interest Acquired (%)	Valuation Metrics (US$/lb U_3O_8)
1	Mkuju River	17,150	62.25	100%	12.5
2	Akba. & Zarech.	68,400	41.75	50%	6.3
3	Semizbay-U.	43,000	28.25	49%	3.4
4	Roughrider	22,250	51.88	70.21%	9.3

Source: Bloomberg, company website

Based on the above analysis, the average normalised unit valuation metric of all comparable transactions is **7.9**.

[7] https://www.cameco.com/invest/markets/uranium price

To utilize the comparable transactions above in valuing the Mineral Assets, it is necessary to establish the in-ground uranium resources of both the Central Mynkuduk and the Zhalpak uranium projects.

Given unique nature of Inferred Resources and the fact that according to the requirements of the Chapter 18 Listing Rules 18.30 (3), valuations for Inferred Resources are not permitted, and therefore, we exclude the use of Inferred Resources in our valuation.

Table VII – 8. Uranium Resources Statement of the Central Mynkuduk and Zhalpak Project

Resources	Tonnes (Mt)	U Grade (%)	Contained U (kt)	Adopted Factor (%)	Factorised U_3O_8 Pounds (million lb)
Central Mynkuduk					
Measured	21.3	0.025	5.3	100%	13.8
Indicated	81.8	0.027	22.1	100%	57.5
Inferred	1.5	0.036	0.5	0%	–
Zhalpak					
Measured	–	–	–	–	–
Indicated	31.0	0.032	9.8	100%	25.5
Inferred	15.7	0.029	4.5	0%	–
Total					**96.8**

Source: CPR

Therefore, the new resources of the Mineral Asset that will be used in the Comparable Transaction Method calculation will be **96.8 million pounds of U_3O_8**, including 13.8 million pounds of Measured Resources, 83 million pounds of Indicated Resources and nil Inferred Resources.

We further understand that the Target Company is a holding company, other than operating the Central Mynkuduk and Zhalpak uranium projects, it has no other businesses nor any other economic benefits. It does not have significant outstanding liabilities. Based on the latest management accounts and verified by the financial due diligence report as of 30 September 2020, the Company has US$4.7 million of cash and cash equivalent and US$7.3 million of net debts.

Spot uranium price as of the valuation date is US$30.2/lb of U3O8, as published by Cameco.

Using an attributable uranium of 96.8 million pounds of U_3O_8, and the comparable transaction price of US$7.9/lb U_3O_8, and adjusting for these cash items and net debts, the indicative valuation of the Mineral Asset is calculated and results are presented in the table below.

Table VII – 9. Indicative Value Calculation and Result

Parameter	Unit	Value	Remarks
Qualified resources of the Mineral Assets	Million lb	96.7	
US$/lb U_3O_8 value metric	US$/lb	7.9	Mean
Value Conclusion	US$ million	**765**	

This value is considered to be inclusive of all commercial discounts or premiums as all the comparable transactions studied are considered to include all these discounts or premiums.

VIII. CONCLUSION OF VALUES

Synthesis and Reconciliation

The following comparative data summarises the various methods that we have applied based on the unique facts and circumstances of the Mineral Asset, along with their respective final values.

Based on the proposed acquisition structure, the Company will acquire 49% of the issued share capital of the Target Company. Therefore, the Company effectively owns 49% of the Mineral Asset.

We therefore derive the 49% equity value of the Mineral Asset from the enterprise value by applying certain adjustments.

Table VIII-1. Summary of Valuation Methods and Results

Approach	Methodologies	Result	Remarks
Income	DCF	US$ 367 – 504 million	49%
Market	Comparable Transactions	US$ 373 million	49%

The Company will potentially acquire a 49% interest of the Target Company and effectively the Mineral Asset. However, we understand from the Company that it has a great degree of influence over the Target Company and the Mineral Assets, for the following reasons:

- The Company will acquire board representation allowing the Company to have a significant degree of influence over certain key decisions of the Target Company;
- The Company also entitles to all the productions proportional to its shareholdings with minimum quantity to guarantee its economic benefits;
- The Company and the other shareholder of the Target Company, KAP, has a series of strategic and economic cooperation, including but not limited to that with the Target Company. The Company has significant bargaining power with KAP.

Therefore, we deem the Company has a significant degree of influence over certain key decision on Target Company and the Mineral Assets, and hence our valuation is performed without a controlling premium / discount. In addition, the Target Company used to be a wholly owned subsidiary of KAP and after the proposed acquisition, both shareholders of the Target Company, the Company and KAP are listed companies with reasonable liquidity, we believe no marketability premium / discount is required.

Valuation Range and Preferred Value

In conclusion, based on the analysis, the facts and circumstances stated above, and the valuation methods methodologies and procedures applied, it is our opinion that the Market Values of the 49% Equity Interest in Mining Company Ortalyk LLP as of the Valuation Date of 31 December 2020 is **US$ 367 – 504 million**, with a preferred value of **US$ 435 million**, being the midpoint of the valuation range.

To ensure our conclusion of value in this valuation is within a reasonable range, we also perform a reasonableness test before we conclude the value. We then use the result derived from the Comparable Transaction Method to serve as a reasonableness check of the value of the Mineral Assets. The valuation result of the 49% Equity Interest in Mining Company Ortalyk LLP from the Comparable Transaction Method is US$ 373 million, which is within the above valuation range and relatively close to the midpoint of the above valuation range (15.5% difference).

The opinion of values was based on generally accepted valuation procedures and practices that rely extensively on the use of numerous assumptions and consideration of many uncertainties, not all of which can be easily quantified or ascertained.

We hereby certify that we have neither present nor prospective interests in the subject under valuation. Moreover, we have neither personal interests nor bias with respect to the parties involved.

This CER is issued subject to our general service conditions.

Yours faithfully,
For and on behalf of
CHINA ENTERPRISE APPRAISALS COMPANY LIMITED

John S. Dunlop
BE, MEngSc, PCertArb, FAusIMM (CP), FIMMM. MCIMMM, MSME, MAIMVA (CPV)

Expert, Competent Evaluator

Charlie Z. Yang
PhD (Mineral Economics), MFIN MAusIMM, MAIMVA (CMV), CFA

Securities Expert

LIMITING CONDITIONS

We have made no investigation of and assumed no responsibility for the title to or any liabilities against the Company, the Target Company and the Mineral Assets.

The opinions expressed in this report have been based on the information supplied to us by the Company and its staff, as well as from various institutes and government bureaus without verification. All information and advice related to this valuation are provided by the management of the Company or other third-party advisors engaged by the Company. Readers of this report may perform due diligence themselves. We have exercised all due care in reviewing the supplied information. Although we have compared key supplied data with expected values, the accuracy of the results and conclusions from the review are reliant on the accuracy of the supplied data. We have relied on this information and have no reason to believe that any material facts have been withheld, or that a more detailed analysis may reveal additional information. We do not accept responsibility for any errors or omissions in the supplied information and do not accept any consequential liability arising from commercial decision or actions resulting from them.

This valuation reflected facts and conditions existing at the Valuation Date. Subsequent events have not been considered, and we have no obligation to update our report for such events and conditions.

STATEMENT OF DECLARATION

John S. F. Dunlop
BE (Mining), M EngSc (Mining), P Cert Arb, FAusIMM(CP), FIMMM, MCIMM, MSME, MAIMVA (CPV)

I, John S. F. Dunlop, hereby certify:

1. I do not have, nor do I expect to receive, any direct or indirect interest in the securities of CGN Mining or its affiliated companies, nor any interest in the subject property.

2. I have not received a fee dependent on the findings outlined in the CER.

3. I am not an officer, employee or proposed officer for CGN Mining or any group, holding or associate company of CGN Mining.

4. I hold a Bachelor of Engineering Degree in Mining and a Master's of Engineering Science Degree, and I have in excess of 50 years' boarder experience in the mining industry and have greater than 10 years' of experience in the valuation of uranium mineral assets. I have sufficient experience relevant to the Technical Assessment and Valuation of the Mineral Assets under consideration and to the activity which they are undertaking to qualify as a Practitioner as defined in the 2015 edition of the 'Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets'.

5. I carried out a personal field inspection of the properties between October 16 and October 23, 2019.

6. I agree to be the Competent Evaluator of this valuation as defined by the Chapter 18 Listing Rules and the Expert as defined by the VALMIN Code and take overall responsibility of this valuation.

John S. F. Dunlop
Competent Evaluator

Dr. Charlie Z. YANG
PhD (Mineral Economics), MFin, MAusIMM, MAIMVA (CMV), CFA

I, Charlie Z. Yang, hereby certify:

1. I do not have, nor do I expect to receive, any direct or indirect interest in the securities of CGN Mining or its affiliated companies, nor any interest in the subject property.

2. I have not received a fee dependent on the findings outlined in the CER.

3. I am not an officer, employee or proposed officer for CGN Mining or any group, holding or associate company of CGN Mining.

4. I attended the University of New South Wales and I graduated with a Bachelor of Commerce Degree and a Master of Finance Degree. I also hold a Doctoral degree in Mineral Economics. I am a CFA charterholder and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) as well as a Member of Australasian Institute of Minerals Valuers & Appraisers (AIMVA) and a Certified Mineral Valuer (CMV). I have greater than 10 years' experience in conducting financial modelling, analysis, and evaluation of mineral assets. I have sufficient experience relevant to the Technical Assessment and Valuation of the Mineral Assets under consideration and to the activity which they are undertaking to qualify as a Practitioner as defined in the 2015 edition of the 'Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets'.

5. I carried out a personal field inspection of the properties between October 16 and October 23, 2019.

6. I agree to be the Securities Expert of this valuation as defined by the VALMIN Code.

Charlie Z. Yang
Securities Expert

GENERAL SERVICE CONDITIONS

The service(s) provided by China Enterprise Appraisal Company Limited would be performed in accordance with professional appraisal standard. Our compensation is not contingent in any way upon our conclusions of value. We assume, without independent verification, the accuracy of all data provided to us. We would act as an independent contractor and reserve the right to use subcontractors. All files, working papers or documents developed by us during the course of the engagement would be our property. We would retain this data for at least seven years after completion of the engagement.

Our report is to be used only for the specific purpose stated herein and any other use is invalid. No reliance may be made by any third party without our prior written consent. You may show our report in its entirety to those third parties who need to review the information contained herein. No one should rely on our report as a substitute for their own due diligence. No reference to our name or our report, in whole or in part, in any document you prepare and/or distribute to third parties may be made without our written consent.

You agree to indemnify and hold us harmless against and from any and all losses, claims, actions, damages, expenses, or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement. You would not be liable for our negligence. Your obligation for indemnification and reimbursement shall extend to any controlling person of China Enterprise Appraisal Company Limited, including any director, officer, employee, subcontractor, affiliate or agent. In the event we are subject to any liability in connection with this engagement, regardless of legal theory advanced, such liability would be limited to the amount of fees we received for this engagement.

We reserve the right to include your company/firm name in our client list, but we would maintain the confidentiality of all conversations, documents provided to us, and the contents of our reports, subject to legal or administrative process or proceedings. These conditions can only be modified by written documents executed by both parties.

APPENDIX A – COMMISSIONING ENTITY LETTER

Our Ref: VAL20202020
Your Ref: [ ]

29 January 2021

China Enterprise Appraisals Company Limited

ATTEN: JOHN DUNLOP & CHARLIE YANG (the Practitioner)

Dear Sir,

RE: Commissioning Entity Letter

CGN Mining Company Limited (the "Commissioning Entity") engaged China Enterprise Appraisals Company Limited ("CEA") to prepare the valuation of the fair value of 49% of equity interest in Mining Company Ortalyk LLP ("Ortalyk") as at 30 September 2020 (the "Valuation Date") in compliance with the VALMIN Code (2015) for transaction purposes.

In compliance with the Valmin Code, this commissioning letter is submitted as required by clause 6.1 and clause 12.5 of the Valmin Code, as follows to confirm:-

a) The purpose of the report is to provide valuation opinion in the form of an Competent Evaluator's report for transaction purposes and disclosure to the Stock Exchange of Hong Kong;

b) The Expert to be responsible for the preparation of the report will be John S Dunlop, whose qualifications and relevant experience fulfills the requirement of the Valmin Code;

c) The Commissioning Entity acknowledges that the practitioners involved in this valuation declared to be both Independent and Competent (as defined in the VALMIN Code) to undertake this valuation;

d) The valuation date, as instructed, is 30 September 2020;

e) The Mineral Asset to be valued is the 49% of equity interest in Ortalyk which consists of the Central Mynkuduk and Zhalpak Uranium projects in the Republic of Kazakhstan;

f) The Commissioning Entity acknowledges that the basis of the cost of the report will be dictated by its complexity and time taken to prepare it and is in no way

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whatsoever contingent on the success of the transaction or of your opinion or result of the valuation;

g) The Commissioning Entity further acknowledges that, should the Expert find it to be impossible or impractical to provide a valuation as a result of insufficient accurate or reliable data, then that right to abort the valuation rests with the Expert alone;

h) Mr John S Dunlop and Mr Charlie Z Yang will be the Experts and in the preparation of this report;

i) The practitioner will be required to retain copies of all material source documents, due diligence notes, notes of discussions with us as Commissioning Entity, and a list of all documents referred to in the Report;

j) The Commissioning Entity acknowledges that:
   i. full, accurate and true disclosure of all Material information has been made to the Practitioner;
   ii. all necessary access to the Commissioning Entity's personnel and records has been assured;
   iii. whether any information from the Commissioning Entity is confidential; and
   iv. the integrity of the Practitioner and the conclusion of the Public Report has not been compromised.

k) The Commissioning Entity agrees to indemnify the practitioners and CEA any liability whatsoever which may arise associated with the completion of the scope of work and any subsequent events directly related to it. The indemnity is intended to cover liability:

   - Resulting from your reliance on information provided by ourselves as the Commissioning Entity that is materially inaccurate or incomplete; or
   - Relating to any consequential extension of the workload as a result of queries, questions or public hearings arising from the report.

Yours faithfully

CGN Mining Company Limited

Name: 谭祖开

Title: Manager of Finance Department

APPENDIX B – INVOLVED STAFF BIOGRAPHY

John S. Dunlop
BE, MEngSc, PCertArb, FAusIMM (CP), FIMMM. MCIMMM, MSME, MAIMVA (CPV)
Competent Evaluator, Certified Mineral Evaluator

John S. Dunlop hold a Bachelor degree in Mining Engineering (BE Mining) with Honours and a Master of Engineering Science (MEngSc Mining) from the University of Melbourne and is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM) and the Institution of Mining and Metallurgy and Materials in the UK. He is also a Member of the equivalent institutions in Canada and the USA.

John is a Chartered Professional mining engineer (CPMin), a former director of the AusIMM, a former director of its national CP registration board, and former Chairman of the Mineral Industry Consultant's Association (MICA). John is also an accredited mineral asset valuer, registered with the Australasian Institute of Mineral valuers and Appraisers (AIMVA). John also holds a current First Class Mine Manager's certificates of competency in Western Australia and Victoria, together with the associated necessary blasting permits.

John has extensive minerals related operational, management, and consulting experience, both surface and underground, covering a wide range of quarrying, mining, and civil construction, spanning a period of over 50 years. John's experience has been gained in Australia, Southeast Asia, North, East and West Africa, North and South America, the People's Republic of China, and the countries of the former Soviet Republic.

John's initial operational experience spans approximately 20 years, occupied a number of senior mine management roles with BHP Ltd (now BHP Billiton) and Aztec Mining as mine manager and general manager. The following 20 years John's experience is in management, university teaching and consulting, with significant involvement in over 100 feasibility studies, technical audits and mineral project evaluations.

John has had experience in mine operations similar to the type and size of the operations of the Mineral Asset, sufficient for assessing the operation and perform valuation. John had significant experience in numerous uranium mines around the world[8] and was chairman of a listed entity which operated its own uranium mine under joint venture in Australia[9].

[8] Azelik (Niger), Semizbay and Irkol (Kazakhstan), Patterson Lake South (Canada) and Roxby Downs and Mary Kathleen in Australia.

[9] Ex-chairman of Alliance Resources; the project was the 4 Mile project in South Australia.

Charlie Z. Yang
PhD (Mineral Economics), MAusIMM, MAIMVA (CMV), CFA
Securities Expert, Certified Mineral Valuer

Dr. Charlie Z. YANG holds a Masters (Finance) degree from the University of New South Wales and a Doctoral degree in Mineral Economics. Charlie is also a CFA charterholder and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Charlie is also an accredited International Certified Valuation Specialist (Mineral Valuation) and a certified mineral valuer, registered with the Australasian Institute of Mineral Valuers and Appraisers (AIMVA).

Charlie is active in independent mineral valuation practice and academic research of mineral valuation. Charlie publishes mineral valuation research thesis on international journals and conferences and was a member of the special committee for global mineral rights valuation guideline of the Royal Institution of Chartered Surveyors (RICS).

Charlie has greater than 10 years' of experience in conducting mineral valuations, focusing on independent financial modelling, economic evaluation and public disclosure valuations of mineral projects for multiple stock exchanges in the world. Charlie gained experiences in Australia, Canada, China, Indonesia, Madagascar, Malaysia, Mongolia, Niger, Turkey and many other countries worldwide, many of them for public disclosure purposes. Charlie has involved in multiple uranium valuation projects including the financial reporting valuation of the Azelik uranium mine in Niger, Chapter 18 valuation of the Fission Uranium Corp (operator of the Patterson Lake South uranium project) in Canada for a major acquisition and evaluation of the Orkney gold and uranium project in South Africa for transaction purpose.

Charlie has sufficient and relevant experience for conducting financial modelling analysis and performing mineral valuation of the Mineral Asset.

APPENDIX C – FINANCIAL PROJECTION

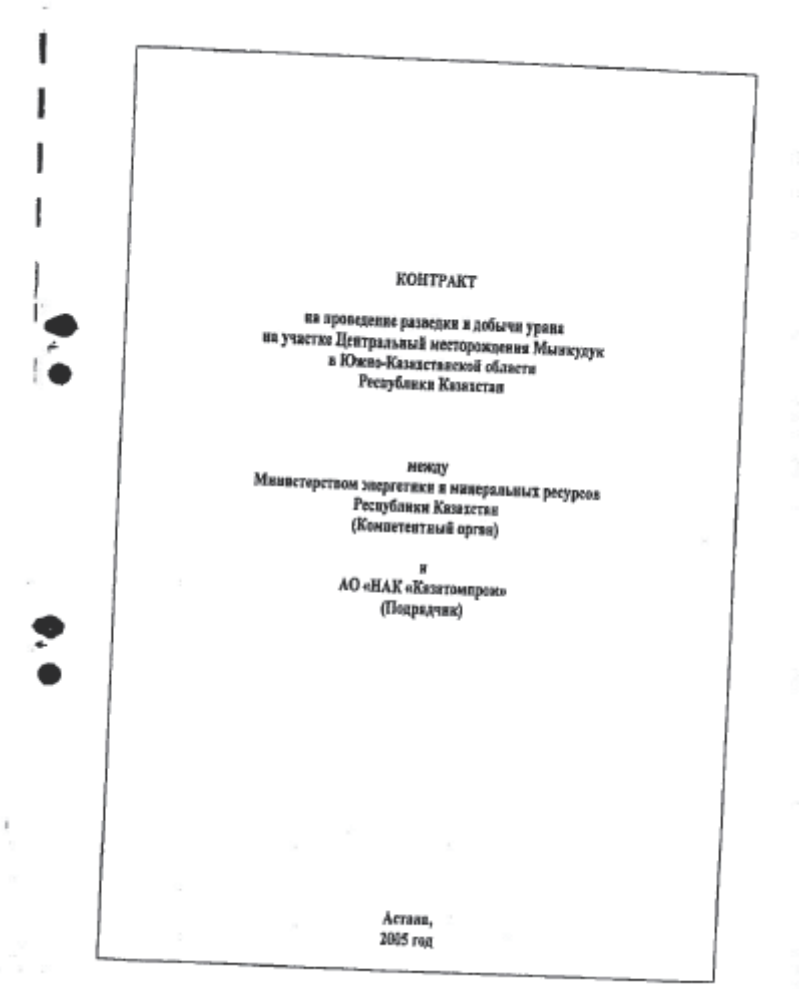
Table C – 1 Summary of Financial Projection of the Mineral Asset

			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2.	Production Schedule	Unit													
	Injection wells	km	118	76	105	67	39	47	54	102	90	34	41	0	0
	Extraction wells	km	70	45	62	40	23	28	32	61	53	20	24	0	0
	PLS Recovered Uranium		1582	1600	2000	2000	2000	2000	1900	1804	1700	1600	1500	1107	92
	U3O8 production	lb	4113553	4159600	5200779	5200779	5200779	5200779	4939845	4691702	4420534	4159600	3898666	2877952	240469
	Contained Uranium	t	1582	1600	2000	2000	2000	2000	1900	1805	1700	1600	1500	1107	92
	Acid consumption	t	130070	131590	167145	155245	153495	156295	144765	145810	132270	115140	107110	74525	6110
3.	Revenue	Unit													
	Price Forecast (U3O8)	US$/lb	34	35	36	37	38	40	41	42	44	45	46	48	49
	Net Sales Price	US$/lb	33	34	35	36	38	39	40	41	43	44	45	47	48
	Gross Revenue	US$'000	136620	142543	183890	189737	195771	201996	197963	193998	188598	183109	177080	134875	11628
4.	OPEX	Unit													
	Mining Cost														
	Cost of injection	US$'000	2799	1799	2489	1604	930	1125	1294	2439	2134	800	965	0	0
	Cost of extraction	US$'000	1666	1071	1482	955	553	669	771	1452	1270	476	574	0	0
	Cost of Sulfuric Acid for Leaching	US$'000	9495	9606	12202	11333	11205	11410	10568	10644	9656	8405	7819	5440	446
	Cost of Power	US$'000	1232	1860	1445	1484	1271	1286	1504	1145	1409	954	656	744	188
	Processing & Refinery Cost														
	Cost of Sulfuric acid (92.5%)	US$'000	210	213	266	266	266	266	253	240	226	213	199	135	11
	Cost of Nitrade Ammonia	US$'000	902	912	1140	1140	1140	1140	1083	1029	969	912	855	577	48
	Cost of Sodium hydroxide	US$'000	549	555	694	694	694	694	659	626	590	555	520	351	29
	Cost of Ion Exchange Resin	US$'000	234	237	296	296	296	296	281	267	252	237	222	150	13
	Other treatment plant cost - Power	US$'000	396	400	500	500	500	500	475	451	425	400	375	253	21

			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	Other Costs														
	Site Cost	US$'000	19350	19566	24464	24464	24464	24464	23236	22069	20794	19566	18339	12389	1035
	General & Admin Costs	US$'000	2908	2941	3677	3677	3677	3677	3492	3317	3125	2941	2756	1861	155
	Sales costs	US$'000	117	118	148	148	148	148	141	134	126	118	111	75	6
	Transportation & Refinery	US$'000	5328	5387	6736	6736	6736	6736	6398	6076	5725	5387	5049	3409	285
5.	Other Corporate Expenses (Ortalyk)	Unit													
	Head office corporate expenses	US$'000	139	144	149	154	160	165	171	177	183	190	197	203	211
	mit	US$'000	8225	8317	10398	10398	10398	10398	9877	9381	8838	8317	7795	5263	440
7.	CAPEX	Unit													
	– New construction for expansion & wellfield development	US$'000	6463	4166	2414	2920	3361	6333	5542	1302	1573	0	0	0	0
	– Sustainable	US$'000	2119	2176	1864	1886	2206	1679	2066	1398	962	1091	276	0	0
	– Mine Closure Reserve	US$'000	500	500	500	500	475	451	425	400	375	280	23	0	0
	Total CAPEX	US$'000	9083	6843	4778	5306	6042	8464	8033	3100	2909	1371	299	0	0
8.	Other Items	Unit													
	Change in net working capital required		8205	524	11851	0	0	0	-2970	-2825	-3087	-2970	-2970	-11619	-30022
	Depreciation	US$'000	5910	6623	9307	10178	10876	11783	12374	13710	15194	15451	16098	13149	1398
	Gross Profit	US$'000	80903	86202	112460	119419	125714	129960	127749	123243	121029	122140	118729	95451	8055
	Net Income	US$'000	59883	63548	82403	87269	91743	94409	92163	87485	84521	85199	81947	65679	5158
	DCF	US$'000	45758	53186	55042	63721	62226	58024	52774	44945	40310	38666	34127	28021	10320
	NPV	US$'000	587120												

APPENDIX D – LICENSES AND PERMITS

Subsoil Use Agreement of Central Mynkuduk (No. 1796)



КОНТРАКТ

на проведение разведки и добычи урана
на участке Центральный месторождения Мынкудук
в Южно-Казахстанской области
Республики Казахстан

между
Министерством энергетики и минеральных ресурсов
Республики Казахстан
(Компетентный орган)

и
АО «НАК «Казатомпром»
(Подрядчик)

Астана,
2005 год

Subsoil Use Agreement of Zhalpak (No. 3610-TPI)

КОНТРАКТ

на Разведку урана на месторождении Жалпак расположенном в Созакском районе Южно-Казахстанской области Республики Казахстан

между

Министерством индустрии и новых технологий Республики Казахстан (Компетентный орган)

и

Акционерным обществом «Национальная атомная компания «Казатомпром» (Подрядчик)

Астана, 2010 год

APPENDIX E – GLOSSARY

AusIMM	Australasian Institute of Mining and Metallurgy
CAPEX	capital expenditures
CE	Competent Evaluator
CER	Competent Evaluator's Report
Chapter 18 Listing Rules	Chapter 18 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
Company (the)	CGN Mining Company Limited (1164.HK)
DCF	Discounted Cash Flow Method
EHSS	environmental, health, social and safety
ERP	Equity Risk Premium
EV	enterprise value
Expert	Either: "an Independent Individual who prepares and accepts responsibility for a Report" Or: "a Representative Expert who is the nominated representative of a legally constituted body. He or she supervises the preparation of a report and accepts responsibility for it on behalf of that body"
Indicated Resource	That portion of a Mineral Resource for which quantity and quality are estimated with a lower degree of certainty than for a Measured Mineral Resource. The sites used for inspection, sampling, and measurement are too widely or inappropriately spaced to enable the material or its continuity to be defined or its grade throughout to be established.
Inferred Resource	That part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited, or of uncertain quality and reliability.

In-situ	Generally used with reference to the reporting of coal resources to indicate a volume or tonnage of coal present undisturbed in the ground.
ISL	in situ leach
JORC	Joint Ore Reserve Committee
JORC Code	The Australasian Code for reporting of Mineral Resources and Mineral Reserves: "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code, 2012 Edition"
KAP	NAC Kazatomprom JSC
km	kilometres
lb	pound, a unit of weight equal to 0.4536 kg
LOM	life of mine
MCAPM	Modified Capital Asset Pricing Model
Measured Resource	That portion of a Mineral Resource for which the tonnage or volume is calculated from dimensions revealed in outcrops, pits, trenches, drill-holes, or mine workings, supported where appropriate by other exploration techniques. The sites used for inspection, sampling and measurement are so spaced that the geological character, continuity, grades and nature of the material are so well defines that the physical character, size, shape, quality and mineral content are established with a high degree of certainty.
m^3/hr	cubic metre per hour
m	metres
MET	mineral extraction tax

Mineral Asset	All property including but not limited to real property, intellectual property, mining and exploration tenements held or acquired in connection with the exploration of, the development of and the production from those tenements together with all plant, equipment and infrastructure owned or acquired for the development, extraction and processing of minerals in connection with those tenements.
Mineral Resource	A concentration or occurrence of solid mineral of economic interest in or on the Earth's crust in such a form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
Mt	million tonnes
NPV	net present value
OPEX	operating expenditures
Ore Reserve	The economically mineable material derived from a Measured and/or Indicated Mineral Resource. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, including 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 is reasonably justified.
p.a.	per annum
PLS	pregnant leach solution
Rd	cost of debt
Re	cost of equity
Rf	Risk Free Rate of Return

RoK	Republic of Kazakhstan
sq.km	square kilometre
t	Tonnes
Target Company	Mining Company Ortalyk LLP
U	Uranium
U_3O_8	Triuranium octoxide, a compound of uranium present as an olive green to black, odorless solid. It is one of the more popular forms of yellowcake and is shipped between mills and refineries in this form
US$	United States Dollar
VALMIN Code	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets
VAT	value-added tax
WACC	weighted average cost of capital
yellowcake	Yellowcake is a type of uranium concentrate powder obtained from leach solutions, in an intermediate step in the processing of uranium ores

APPENDIX F – SITE IMAGES

1. RESPONSIBILITY STATEMENT

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

2. DISCLOSURE OF INTERESTS

(a) Interests of Directors and chief executives of the Company

As at the Latest Practicable Date, there were no interests and short positions of the Directors and chief executive of the Company in the Shares, underlying Shares and debentures of the Company and its associated corporations (within the meaning of Part XV of the SFO) which (i) were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions in which the Directors and chief executive of the Company were taken or deemed to have under such provisions of the SFO); or (ii) were required to be entered in the register kept by the Company pursuant to section 352 of the SFO; or (iii) were required to be notified to the Company and the Stock Exchange pursuant to the *Model Code for Securities Transactions by Directors of Listed Issuers* in the Listing Rules.

As at the Latest Practicable Date, none of the Directors or chief executives of the Company or their spouses or children under 18 years of age were granted or had exercised any right to subscribe for any equity or debt securities of the Company or any of its associated corporations (within the meaning of Part XV of the SFO).

(b) Substantial Shareholders' and other Shareholders' interests

As at the Latest Practicable Date, save as disclosed below, so far as is known to the Directors or chief executive of the Company, no other person has an interest or short position in the Shares and underlying Shares which would fall to be disclosed to the Company under Divisions 2 and 3 of Part XV of the SFO, or, who were, directly or indirectly, interested in 10 per cent (10%) or more of the issued voting shares of any other member of the Group or any option in respect of such securities:

Name of Shareholder	Capacity	Number of Shares *(Notes 1)*	Approximate percentage of shareholding
CGNPC *(Notes 2, 3, 4 & 5)*	Interest in a controlled corporation	4,443,352,558 (L)	67.32%
CGNPC-URC *(Notes 2, 4 & 6)*	Interest in a controlled corporation	4,288,695,652 (L)	64.97%
China Uranium Development *(Note 4 & 7)*	Beneficial owner	4,288,695,652 (L)	64.97%

Name of Shareholder	Capacity	Number of Shares *(Notes 1)*	Approximate percentage of shareholding
Hong Kong Xinmao Investment Co., Limited	Beneficial owner	659,400,000 (L)	9.99%
Hainan Mining Co., Limited *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
Shanghai Fosun Industrial Investment Co., Ltd. *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
Shanghai Fosun High Technology (Group) Co., Ltd. *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
Fosun International Limited *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
Fosun Holdings Limited *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
Fosun International Holdings Ltd. *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
Guo Guangchang *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
Hainan Haigang Group Co., Ltd. *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%
State-owned Assets Supervision and Administration Commission of Hainan Province *(Note 8)*	Interest in a controlled corporation	659,400,000 (L)	9.99%

Notes:

1. (L) denotes long position

2. CGNPC holds the entire equity interests of CGNPC-URC which in turn holds the entire issued share capital of China Uranium Development. Accordingly, each of CGNPC and CGNPC-URC is deemed to be interested in the interest held by China Uranium Development.

3. CGNPC is also interested in 154,656,906 Shares held by its other wholly-owned subsidiaries.

4. The long position includes (i) the 4,278,695,652 Shares held by China Uranium Development; and (ii) the security interest in 10,000,000 Shares charged by a third party.

5. Mr. Yu Zhiping, Mr. Sun Xu and Mr. Yin Xiong, our non-executive Directors, are also employees of CGNPC.

6. Mr. Yu Zhiping and Mr. Yin Xiong, our non-executive Directors, are also directors of CGNPC-URC. Mr. An Junjing and Mr. Chen Deshao, our executive Directors, and Mr. Sun Xu, our non-executive Director are also employees of CGNPC-URC.

7. Mr. Chen Deshao, our executive Director, is also a director of China Uranium Development.

8. According to the information provided by Guo Gangchang and the State-owned Assets Supervision and Administration Commission of Hainan Province ("**Hainan SASAC**"), Hainan Mining Co., Limited ("**Hainan Mining**") is the sole shareholder of Hong Kong Xinmao Investment Co., Limited ("**Hong Kong Xinmao**") which is the beneficial owner of 659,400,000 Shares. Hainan Mining is held as to 35% by Hainan Haigang Group Co., Ltd. ("**Hainan Haigang**") and 54% by Shanghai Fosun High Technology (Group) Co., Ltd. ("**Fosun High Technology**") (including 18% held directly by Fosun High Technology and 36% held by its wholly-owned subsidiary Shanghai Fosun Industrial Investment Co., Ltd. ("**Fosun Industrial**")). Hainan Haigang is wholly owned by Hainan SASAC. Fosun High Technology is wholly owned by Fosun International Limited which in turn is wholly owned as to 72.02% by Fosun Holdings Limited, a wholly owned subsidiary of Fosun International Holdings Ltd. which in turn is owned as to 85.29% by Guo Guangchang.

   Accordingly, each of Hainan Mining, Hainan Haigang, Hainan SASAC, Fosun Industrial, Fosun High Technology, Fosun International Limited, Fosun Holdings Limited, Fosun International Holdings Ltd. and Guo Guangchang is deemed to be interested in the Shares held by Hong Kong Xinmao.

3. DIRECTORS' INTEREST IN CONTRACTS AND ASSETS

There was no contract or arrangement in which any Director was materially interested and which was significant in relation to the business of the Group subsisting as at the Latest Practicable Date.

As at the Latest Practicable Date, none of the Directors had any direct or indirect interest in any assets which have been, since 31 December 2020 (the date of which the latest published audited consolidated accounts of the Company were made up), acquired or disposed of by or leased to any member of the Group, or are proposed to be acquired or disposed of by or leased to any member of the Group.

4. LITIGATION

As at the Latest Practicable Date, none of the members of the Group was engaged in any litigation or arbitration of material importance and no litigation or claim of material importance was known to the Directors to be pending or threatened by or against any member of the Group.

5. DIRECTORS' SERVICE CONTRACTS

As at the Latest Practicable Date, none of the Directors had any existing service contract or proposed service contract with any member of the Group which will not expire or is not determinable by the employer within one year without payment of compensation (other than statutory compensation).

6. COMPETING INTERESTS

As at the Latest Practicable Date, none of the Directors and their respective close associates (as defined in the Listing Rules) had an interest in a business which competes or may compete with the business of the Group.

7. EXPERT AND CONSENT

The following is the qualification(s) of the expert who has been named in this circular or has given opinion or advice contained in this circular:

Name	Qualification
BDO Limited	Certified public accountants
China Enterprise Appraisals Company Limited	Competent valuer under Chapter 18 of the Listing Rules
Gram Capital Limited	A corporation licensed to carry on Type 6 (advising on corporate finance) regulated activity under the SFO
PricewaterhouseCoopers	Certified Public Accountants Under Professional Accountants Ordinance (Cap.50) Registered Public Interest Entity Auditor Under Financial Reporting Count Ordinance (Cap.588)
RPMGlobal Asia Limited	Competent person under Chapter 18 of the Listing Rules

As at the Latest Practicable Date, each of the experts set out above did not have any interest, either direct or indirect, in any assets which have been, since 31 December 2020, the date to which the latest audited consolidated financial statements of the Company were published, acquired or disposed of by or leased to or were proposed to be acquired or disposed of by or leased to any member of the Group nor had any shareholding in any member of the Group nor the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of the Group.

Each of the experts has given and has not withdrawn its written consent to the issue of this circular with the inclusion of its statement letter, report or opinion and references to its name in the form and context in which they are included.

8. MATERIAL ADVERSE CHANGE

The Directors are not aware of any material adverse change in the financial or trading position of the Group since 31 December 2020, the date to which the latest published audited accounts of the Company were made up, up to and including the Latest Practicable Date.

9. MISCELLANEOUS

(a) The secretary of the Company is Zheng Xiaowei, holder of intermediate accountant qualification of the PRC (中國中級會計師資格) and enterprise legal adviser qualification of the PRC (中國企業法律顧問執業資格).

(b) The registered office of the Company is at Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman KY1-1111, Cayman Islands, and the principal place of business of the Company in Hong Kong is Room 1903, 19/F, China Resources Building, No. 26 Harbour Road, Wanchai, Hong Kong.

(c) The Hong Kong branch share registrar and transfer office of the Company is Union Registrars Limited at Suites 3301-04, 33/F, Two Chinachem Exchange Square, 338 King's Road, North Point, Hong Kong.

(d) The English texts of this circular shall prevail over the Chinese texts in case of inconsistency.

10. MATERIAL CONTRACTS

The following contracts (not being contracts in the ordinary course of business) have been entered into by members of the Group within the two years immediately preceding the Latest Practicable Date which are or may be material to the operations of the Group:

(a) the Further Cooperation Agreement

(b) the Sale and Purchase Agreement

11. DOCUMENTS FOR INSPECTION

Copies of the following documents are available for inspection at the office of the Company at Room 1903, 19/F., China Resources Building, 26 Harbour Road, Wanchai, Hong Kong during normal business hours from 9:00 a.m. to 5:00 p.m. on any business day for a period of 14 days from the date hereof:

(a) the Cooperation Agreement;

(b) the Mining Principles Agreement;

(c) the amendment agreement to the Mining Principles Agreement;

(d) the Shareholders' Agreement;

(e) the Constitutional Document;

(f) the Further Cooperation Agreement;

(g) the Sale and Purchase Agreement;

(h) the draft Off-take Agreement;

(i) the letter of advice from the Independent Board Committee, the text of which is set out on pages 55 to 56 of this circular;

(j) the letter from Gram Capital, the text of which is set out on pages 57 to 79 of this circular;

(k) the accountant's report from PricewaterhouseCoopers on Ortalyk, the text of which is set out in Appendix II to this circular;

(l) the report on unaudited pro forma financial information of the enlarged Group by BDO Limited, the text of which is set out in Appendix III to this circular;

(m) the competent person report prepared by RPMGlobal Asia Limited, the text of which is set out in Appendix IV to this circular;

(n) the valuation report prepared by China Enterprise Appraisals Company Limited, the text of which is set out in Appendix V to this circular;

(o) the consent letter from BDO Limited referred to in the paragraph headed "Expert and Consent" in this appendix;

(p) the consent letter from China Enterprise Appraisals Company Limited referred to in the paragraph headed "Expert and Consent" in this appendix;

(q) the consent letter from Gram Capital referred to in the paragraph headed "Expert and Consent" in this appendix;

(r) the consent letter from PricewaterhouseCoopers referred to in the paragraph headed "Expert and Consent" in this appendix;

(s) the consent letter from RPMGlobal Asia Limited referred to in the paragraph headed "Expert and Consent" in this appendix;

(t) the material contracts of the Company set out in the sub-paragraph headed "Material Contracts" in this appendix;

(u) the memorandum and articles of association of the Company;

(v) this circular; and

(w) the annual reports of the Company for the financial years ended 31 December 2019 and 31 December 2020.

中广核矿业有限公司*
CGN Mining Company Limited

(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 01164)

NOTICE OF EXTRAORDINARY GENERAL MEETING

NOTICE IS HEREBY GIVEN that the extraordinary general meeting (the "**EGM**") of CGN Mining Company Limited (the "**Company**") will be held at Conference Room 1402, 14th Floor, North Building, CGN Tower, 2002 Shennan Boulevard, Futian District, Shenzhen, Guangdong Province, PRC on 10 June 2021 (Thursday) at 11:00 a.m. for the purposes of considering and, if thought fit, passing, with or without modifications, the following resolution as ordinary resolution of the Company:

ORDINARY RESOLUTION

1. "**THAT**

   (a) the *Sale and Purchase Agreement in relation to the Participatory Interest in the charter capital of Mining Company "ORTALYK" LLP* dated 22 April 2021 (the "**Sale and Purchase Agreement**") entered into between Joint Stock Company "National Atomic Company "Kazatomprom" ("**Kazatomprom**") and CGNM UK Limited ("**CGNM UK**") in relation to the sale and purchase of 49% participatory interest (the "**Target Interest**") in the charter capital of Mining Company "ORTALYK" LLP ("**Ortalyk**"), a copy of which has been produced to the EGM marked "A" and signed by the chairman of the EGM for the purpose of identification, the terms and conditions therein and the transactions contemplated thereunder be and are hereby approved, ratified and confirmed;

   (b) granting of the right to Kazatomprom, Kazatomprom mining participant and Joint Stock Company "Ulba Metallurgical Plant" ("**UMP**") to require both (but not one of) (i) CGNPC Uranium Resources Co., Ltd* (中廣核鈾業發展有限公司) ("**CGNPC-URC**") to sell 100% of its participatory interest (if any) in Ulba-FA Limited Liability Partnership ("**Ulba-FA**") to UMP (or its nominee); and (ii) CGNM UK to sell 100% (in whole and not in part) of its participatory interest in Ortalyk (if any) to Kazatomprom following the occurrence of the events set forth in the *Agreement on Commercial Terms in relation to the Design and Construction of a Fuel Assembly Fabrication Plant in Kazakhstan and the Joint Development of Kazakhstan Uranium Deposits* entered by, among other parties, the Company, dated 14 December 2015 (a copy of which has been produced to the EGM marked "B" and signed by the chairman of the EGM for the purpose of identification) (the "**Cooperation Agreement**") at the exercise price prescribed in the *Agreement for Further Expanding and Deepening Mutually Beneficial Cooperation in*

* *For identification purpose only*

Nuclear Energy Field entered into between, among other parties, the Company and CGNM UK, dated 22 April 2021 (a copy of which has been produced to the EGM marked "C" and signed by the chairman of the EGM for the purpose of identification) (the "**Further Cooperation Agreement**"), as referred to in the Sale and Purchase Agreement (the "**Call-Option**") be and is hereby approved, ratified and confirmed;

(c) the granting of the right to Kazatomprom to request CGNM UK to sell the Target Interest to Kazatomprom following occurrence of any of the events set forth in the Further Cooperation Agreement as referred to in the Sale and Purchase Agreement (the "**Buy-back Right**") be and is hereby approved, ratified and confirmed;

(d) the acceptance of the right to require both (but not one of) (i) UMP to acquire from CGNPC-URC 100% of its participatory interest in Ulba-FA (in whole and not in part) and (ii) Kazatomprom to acquire from CGNM UK 100% of its participatory interest in Ortalyk (in whole and not in part) following occurrence of the events prescribed in the Cooperation Agreement at the exercise price prescribed in the Further Cooperation Agreement as referred to in the Sale and Purchase Agreement (the "**Put Option**") be and is hereby approved, ratified and confirmed;

(e) the acceptance of the right to request Kazatomprom to buy-back the Target Interest if Ortalyk fails to obtain the new subsoil use agreement for the Zhalpak Deposit by 31 December 2021 at the exercise price prescribed in the Further Cooperation Agreement as set forth to in the Sale and Purchase Agreement (the "**Sell-back Right**") be and is hereby approved, ratified and confirmed;

(f) the *Agreement on the basic principles of marketing (sale) policy with respect to the products of Mining Company "ORTALYK" LLP* to be entered into between Kazatomprom, the Company and CGNM UK, a copy of which has been produced to the EGM marked "D" and signed by the chairman of the EGM for the purpose of identification (the "**Off-take Agreement**"), the terms and conditions therein, the transactions contemplated thereunder and its proposed annual transaction cap amounts as set forth in the circular of the Company dated 25 May 2021 be and are hereby approved, ratified and confirmed;

(g) the entering into of each of the Cooperation Agreement, the Further Cooperation Agreement and the *Mining Principles Agreement on the joint development of Kazakhstan Uranium Deposit* entered into between the Company and Kazatomprom dated 4 October 2016 (a copy of which has been produced to the EGM marked "E" and signed by the chairman of the EGM for the purpose of identification) (the "**Mining Principles Agreement**") by the Company and its subsidiaries be and are hereby approved, ratified and confirmed; and

(h) any one of the directors be authorised for and on behalf of the Company, among other matters, to sign, seal, execute, perfect, deliver or to authorise signing, executing, perfecting and delivering all such documents and deeds, to do or authorise doing all such acts, matters and things as he/she may in his/her discretion consider necessary, expedient or desirable to give effect to and implement the Cooperation Agreement, the Mining Principles Agreement, the Further Cooperation Agreement, the Sale and Purchase Agreement and the Off-take Agreement and to waive compliance with or make and agree such variations of a non-material nature to any of the terms of the Sale and Purchase Agreement, the Further Cooperation Agreement and the Off-take Agreement as he/she may in his/her discretion consider to be desirable and in the interests of the Company and all the director's acts as aforesaid be hereby approved, ratified and confirmed."

By Order of the Board of
CGN Mining Company Limited
Mr. An Junjing
Chief Executive Officer

Hong Kong, 25 May 2021

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

Principal place of business in Hong Kong:
Room 1903, 19/F
China Resources Building
26 Harbour Road
Wanchai, Hong Kong

Notes:

1. Alternate arrangement for attending the EGM

To facilitate shareholders attending the EGM, electronic facilities will be set up at Room 1903, 19/F, China Resources Building, 26 Harbour Road, Wanchai, Hong Kong (the "**Hong Kong Venue**") where shareholders or his/her/its proxies may participate in the EGM and communicate with other participants of the EGM simultaneously and instantaneously through such electronic facilities. Pursuant to the articles of association of the Company, such participation shall constitute presence in person at the EGM. Shareholders and/or his/her/its proxies attending the Hong Kong Venue may also cast their votes in person in the Hong Kong Venue.

Pursuant to section 3 of the Prevention and Control of Disease (Prohibition on Group Gathering) Regulation (Chapter 599G of the laws of Hong Kong) (the "**Regulation**") which is effective up to 26 May 2021 (subject to extension), group gatherings of more than 20 persons for a shareholders' meeting are required to be accommodated in separate partitioned rooms or areas of not more than 20 persons each. As such, if the effective period of the Regulation is extended to cover the date of the EGM, shareholders may be denied entry to the Hong Kong Venue and to cast their votes if there are more than 20 attendees (or such other number or requirements as prescribed by the Regulation or other applicable laws then in force on the date of the EGM) to ensure compliance with the Regulation and any other applicable laws. As such, whether shareholders intend to attend the Hong Kong Venue or not, shareholders are advised to appoint the chairman of the EGM as his/her/its proxy to vote according to his/her/its indicated voting instructions to ensure that he/she/it is able to cast his/her/its votes in relation to the resolution set out in this notice.

2. Precautionary measures in relation to COVID-19

In view of the ongoing coronavirus disease (COVID-19) pandemic, the Company will implement the following precautionary measures at the EGM to protect attending shareholders, staff and stakeholders from the risk of infection including, without limitation:

(1) Compulsory temperature checks

(2) Compulsory wearing of surgical face mask

(3) No refreshment will be served

(4) Provision of Communication Big Data Itinerary Card（通信大數據行程卡）and Health Code（健康碼）as required by the property management (in respect of the EGM venue only)

Any person who does not wear a surgical face mask, not accept temperature checks, with a body temperature above 37.2 degree Celsius or subject to any Hong Kong government prescribed quarantine (in the case of attending the Hong Kong Venue) may be denied entry into the EGM venue and the Hong Kong Venue. The Company strongly encourages shareholders **NOT to attend the EGM in person**, and advises shareholders to appoint the chairman of the EGM as their proxy to vote according to their indicated voting instructions as an alternative to attending the EGM in person. In any event, should shareholders intend to attend the EGM in person, shareholders and/or their proxies are advised to arrive the venue early to allow sufficient time to go through the precautionary procedures. Subject to the development of COVID-19, the Company may implement further changes and precautionary measures and may issue further announcement on such measures as appropriate.

3. In order to be eligible to attend and vote at the EGM, all transfers of shares, accompanied by the relevant share certificates, must be lodged with the Hong Kong branch share registrar and transfer office of the Company, Union Registrars Limited, at Suites 3301-04, 33/F, Two Chinachem Exchange Square, 338 King's Road, North Point, Hong Kong for registration no later than 4:00 p.m. on Friday, 4 June 2021.

4. A shareholder entitled to attend and vote at the EGM is entitled to appoint proxy to attend and, subject to the provisions of the articles of association of the Company to vote in his/her/its place. A proxy need not be a shareholder of the Company, but must attend the EGM in person to represent the shareholder. A shareholder who is the holder of two or more shares may appoint more than one proxy to attend and vote on his/her/its behalf. If more than one proxy is so appointed, a photocopy of the form of proxy may be used and the appointment shall specify the number of shares in respect of which each such proxy is so appointed.

5. In order to be valid, the form of proxy together with a power of attorney or other authority, if applicable, under which it is signed (or a notarially certified copy of that power of attorney or authority) must be deposited at the Hong Kong branch share registrar and transfer office of the Company, Union Registrars Limited at Suites 3301-04, 33/F, Two Chinachem Exchange Square, 338 King's Road, North Point, Hong Kong not less than 48 hours before the appointed time for holding the EGM or any adjournment thereof.

6. Delivery of an instrument appointing a proxy will not preclude a shareholder from attending and voting in person at the EGM or any adjournment thereof and, in such event, the instrument appointing a proxy shall be deemed to be revoked.

7. In the case of joint holders of share(s), any one of such joint holders may vote, either in person or by proxy, in respect of such share(s) as if he/she/its was solely entitled thereto; but if more than one of such joint holders (whether in person or by proxy) are present at the EGM, the vote of the senior who tenders a vote (whether in person or by proxy) shall be accepted to the exclusion of the votes of the other joint holder(s). For this purpose, seniority shall be determined by the order in which the names stand in the register of members of the Company in respect of the joint holding.

8. If Typhoon Signal No. 8 or above or a "black" rainstorm warning is in effect or extreme conditions caused by typhoons persists in Hong Kong any time between 7:30 a.m. and the time of the EGM (being 11:00 a.m.) on the date of the EGM, the EGM will be postponed. The Company will publish an announcement on the website of the Company at www.cgnmc.com and on the HKExnews website of the Stock Exchange at www.hkexnews.hk to notify shareholders of the date, time and venue of the rescheduled meeting.

As at the date of this notice, the Board comprises two executive Directors: Mr. An Junjing (chief executive officer) and Mr. Chen Deshao; three non-executive Directors: Mr. Yu Zhiping (chairman), Mr. Sun Xu and Mr. Yin Xiong; and three independent non-executive Directors: Mr. Qiu Xianhong, Mr. Gao Pei Ji and Mr. Lee Kwok Tung Louis.