

The Directors,
Joint Stock Company National Atomic Company Kazatomprom,
17/12, E-10 Street,
Yessil District,
Astana,
010000,
Republic of Kazakhstan.

12/01/2020

Dear Sirs,

Ref: **“Mineral Resource and Ore Reserve Statements for the Mineral Assets of Joint Stock Company National Atomic Company Kazatomprom, Republic of Kazakhstan with effective date of 31 December 2019”**.

1 INTRODUCTION

1.1 Background

SRK Consulting (UK) Limited (“**SRK**”) has been appointed by Joint Stock Company National Atomic Company Kazatomprom (“**Kazatomprom**”, “**KAP**”, or the “**Company**”) to prepare Mineral Resource and Ore Reserve statements valid as at 31 December 2019 (the “**2019 Statements**”) reported in accordance with the terms and definitions of the JORC Code on its uranium mineral mining and exploration assets (the “**Mineral Assets**”) located in the Republic of Kazakhstan (“**Kazakhstan**”). The 2019 Statements as presented herein are an update of the Mineral Resource and Ore Reserve statements, with effective date of 31 December 2018 (the “**2018 Statements**”).

Kazatomprom is a joint stock company incorporated under the laws of Kazakhstan on 21 February 1997 which operates as Kazakhstan’s national operator for the production, export and import of uranium and its compounds, nuclear power plant fuel, special equipment and technologies, as well as rare metals. The Company by measure of attributable production is the largest producer of natural uranium globally as well the second lowest cost producer as reported by Ux Consulting Company (“**UxC**”). For the 12-month period ended 31 December 2019 the Company together with its subsidiaries (the “**Group**”) represented approximately 20% of total global uranium primary production and approximately 40% of global in-situ leach recovery (“**ISR**”) uranium production.

The Group operates through a complex structure of subsidiaries, Joint Venture and Associate companies comprising three key segments: the “**Uranium Segment**”; the “**UMP Segment**”; and the “**Other Segment**”. The Uranium Segment includes uranium mining and processing operations from the Group’s mines, the Group’s purchases of uranium from the Group’s joint ventures and associates engaged in uranium production, and external sales and marketing of uranium products, in each case other than production and sales of UO₂ powder and fuel pellets.

The Company’s status as a national company in Kazakhstan allows the Group to benefit from certain privileges, including, among other things, obtaining subsoil use agreements through direct negotiation with the Government of Kazakhstan (“**GoK**”) rather than through a tender process which would otherwise be required. This effectively grants the Group priority access

to such opportunities, including exploration, development and production of all natural uranium in Kazakhstan.

The scope of this “**Audit Letter**” is limited to the 2019 Statements pertaining to the mining and processing operations of the Uranium Segment, specifically all key activities relating to the extraction of uranium and production of the final saleable product in the form of U₃O₈. The Mineral Assets are located in three (Shu-Sarysu; Syrdarya; and North Kazakhstan) of the six uranium geological provinces of Kazakhstan covering a total licence area of 2,059.27km² which includes 30 deposits/blocks categorised as: 26 Producing Properties (“**PPs**”); one Development Property (“**DP**”) and four Advanced Exploration Properties (“**AEPs**”) based on the classifications as reported in Section (1.2.2). In addition, the Company’s “**Exploration Programme**” covers several Exploration Properties (“**EPs**”) located in three regions in which the Company is active. The Mineral Assets are largely held through 14 subsidiaries, Joint Venture and Associate companies (the “**Mining Subsidiaries**” - Table 1-1) which in conjunction with the Company are directly responsible for uranium mining and downstream processing activities. Thirteen of the Mining Subsidiaries include PPs while one Mining Subsidiary only includes AEPs (Budenovskoye LLP). In addition, the Company holds 100% two AEPs in its own name.

Table 1-1: Mineral Assets salient statistics

Mining Subsidiary	Equity Interest (%)	Geological Region	Deposits /Prdn Units (No)	Contracts (No)	Licence Area (km ²)	Discovery (year)	Prdn Start (year)	LoMp ⁽¹⁾ Depletion (year)	Prdn (tU)
Operating Properties									
Kazatomprom-SaUran LLP ⁽³⁾	100.00	Shu-Sarysu	5 ⁽³⁾	5	252.90	1963	1997	2040	2,050
Ortalyk LLP	100.00	Shu-Sarysu	2	2	186.40	1964	2007	2032	2,100
RU-6 LLP	100.00	Syrdarya	2	1	59.58	1979	1997	2035	1,000
Appak LLP	65.00	Shu-Sarysu	1	1	133.46	1976	2008	2036	1,000
JV Inkai LLP ⁽²⁾	60.00	Shu-Sarysu	3	1	139.00	1976	2008	2052	4,000
Semizbai-U LLP	51.00	Syrdarya; Northern Kazakhstan	2	2	71.20	1973	2008	2041	1,219
JV Akbastau JSC	50.00	Shu-Sarysu	3	2	2.71	1976	2009	2039	1,931
Karatau LLP	50.00	Shu-Sarysu	1	1	17.28	1979	2007	2033	3,200
JV Zarechnoye JSC	49.98	Syrdarya	1	1	38.00	1977	2007	2024	850
JV Katco LLP	49.00	Shu-Sarysu	2	1	45.73	1976	2001	2033	4,000
JV Khorassan-U LLP	50.00	Syrdarya	1	1	70.80	1972	2008	2039	2,000
JV SMCC LLP	30.00	Shu-Sarysu	2	2	116.91	1976	2004	2036	3,080
Baikent-U LLP	52.50	Shu-Sarysu	1	1	350.00	1972	2009	2032	2,030
Subtotal			26	21	1,483.97	1963	1997	2052	28,410
Advanced Exploration Properties									
Kazatomprom	100.00	Shu-Sarysu	2	2	424.00	1976	n/a	n/a	n/a
Budenovskoye LLP	51.00	Shu-Sarysu	2	1	151.30	1976	n/a	n/a	n/a
Subtotal			4	3	575.30	1976	n/a	n/a	n/a
Grand Total			30	24	2,059.27	1963	1997	2052	28,410

(1) LoMp: date of depletion of Ore Reserves; maximum production in the current Life of Mine plans for the Mineral Assets.

(2) For JV Inkai LLP, the Company's equity participation is determined based on a prescribed formula based on uranium production within the following bands: 0tU to 1,500tU (40.00%); 1,500tU to 2,000tU (50.00%); 2,000tU to 4,000tU (77.50%); 4,000tU (60%) for 2020 onwards.

(3) At Kazatomprom-SaUran LLP, two deposits have limited production and no further Ore Reserves and Mineral Resources are reported in the 2019 Statements.

This Audit Letter presents the following key technical information as at 12 January 2020, this being the “**Effective Date**” of the opinion as expressed herein. The 2019 Statements for the Mineral Assets are reported as at 31 December 2019 and in accordance with the terms and definitions of the JORC Code (defined below). Certain units of measurements and technical terms defined in the JORC Code (defined below under Section 1.2.2) are defined in the glossaries, abbreviations and units included at the end of this “**Audit Letter**”.

As at 31 December 2019, the 2019 Statement reports:

- Aggregated Ore Reserves (Table 1-2) of 822.2Mt grading 0.061%U and containing 498.4ktU and comprising:
 - Proved Ore Reserves of 444.5Mt grading 0.062%U and containing 274.5ktU,
 - Probable Ore Reserves of 377.7Mt grading 0.059%U and containing 223.9ktU; and
- Aggregated Mineral Resources of 1,332.4Mt grading 0.054%U and containing 716.2ktU and comprising:

- Measured Mineral Resources of 570.2Mt grading 0.058%U and containing 331.6ktU,
- Indicated Mineral Resources of 755.6Mt grading 0.050%U and containing 381.5ktU,
- Inferred Mineral Resources of 6.7Mt grading 0.045%U and containing 3.0ktU.

SRK's audited Mineral Resource statements are reported inclusive of those Mineral Resources converted to Ore Reserves. The audited Ore Reserve is therefore a subset of the Mineral Resource and should not therefore be considered as additional to this.

Table 1-2: Aggregated Mineral Resources and Ore Reserves as at 31 December 2019 for the Mineral Assets

Mining Subsidiary	Deposits		Ore Reserves		Mineral Resources		
	(No)	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)
Operating Properties							
Kazatomprom-SaUran LLP	5	67.8	0.042	28.4	67.8	0.042	28.4
Ortalyk LLP	2	59.2	0.045	26.4	102.9	0.039	40.4
RU-6 LLP	2	19.5	0.076	14.8	19.5	0.076	14.8
Appak LLP	1	50.9	0.035	17.9	50.9	0.035	17.9
JV Inkai LLP	3	255.1	0.054	138.1	255.1	0.054	138.1
Semizbai-U LLP	2	56.4	0.046	26.2	56.4	0.046	26.2
JV Akbastau JSC	3	47.0	0.088	41.2	47.0	0.088	41.2
Karatau LLP	1	55.1	0.080	44.1	55.1	0.080	44.1
JV Zarechnoye JSC	1	7.7	0.060	4.6	9.4	0.058	5.4
JV Katco LLP	2	54.5	0.105	57.0	54.5	0.105	57.0
JV Khorassan-U LLP	1	37.5	0.107	40.0	37.5	0.107	40.0
JV SMCC LLP	2	93.9	0.043	40.0	207.2	0.041	85.1
Baiken-U LLP	1	17.7	0.112	19.7	17.7	0.112	19.7
Subtotal	26	822.2	0.061	498.4	981.0	0.057	558.3
Advanced Exploration Properties							
Kazatomprom	2	n/a	n/a	n/a	306.1	0.041	125.1
Budenovskoye LLP	2	n/a	n/a	n/a	45.3	0.072	32.7
Subtotal	4	n/a	n/a	n/a	351.4	0.045	157.8
Grand Total	30	822.2	0.061	498.4	1,332.4	0.054	716.2

1.2 Requirement, Reporting Standard, Reliance and Responsibility Statement

The Audit Letter is addressed to the Company and SRK has been informed by the Company, that the Audit Letter will be made available to certain advisors to the Company, for information purposes only, specifically the financial auditors appointed for reporting, inter alia the financial statements for the Company as at 31 December 2019.

1.2.1 Requirement

Other than to support the Company's ongoing reporting requirements and distribution to certain of the Company's advisors, as noted above, this Audit letter will not be distributed to any third parties nor included in any of the Company's public domain reporting. As such other than to support the Company's reporting of Mineral Resources and Ore Reserve statements as at 31 December 2019, SRK is unaware of any further requirements regarding the authoring of this Audit Letter.

1.2.2 Reporting Standard

The reporting standard adopted for the reporting of the Mineral Resource and Ore Reserve statements included in the CPR is the *"The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published 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"). The JORC Code is a reporting code which has been aligned with the Committee for Mineral Reserves International Reporting Standards ("CRIRSCO") reporting template. Accordingly, SRK considers the JORC Code to be an internationally recognised reporting standard that is adopted worldwide for market-related reporting and financial investments.

The Mineral Assets as reported are classified into various groupings reflecting the development stage at the Effective Date of this CPR. The development stage groupings comprise:

- **Producing Property ("PP"):** mineral assets for which Ore Reserves are declared and mining and processing operations have been commissioned and are in full scale production.

- **Development Property (“DP”):** mineral assets for which Ore Reserves have been declared and are essentially supported by a minimum of a pre-feasibility study which on a multi-disciplinary basis demonstrates that the consideration is technically feasible and economically viable, but which are not yet in full scale production;
- **Advanced Exploration Property (“AEP”):** mineral assets for which only Mineral Resources have been declared; and
- **Exploration Property (“EP”):** mineral assets for which no Mineral Resources have been declared.

1.2.3 Reliance

This Audit Letter is addressed to and may be relied on by the Directors of the Company, specifically in respect of reporting the 2019 Statements for the Mineral Assets in accordance with the terms and definitions of the JORC Code.

SRK believes that its opinion must be considered as a whole and that selecting portions of the analysis or factors considered by it, without considering all factors and analyses together, could create a misleading view of the process underlying the opinions presented in this Audit Letter. The preparation of the Audit Letter is a complex process and does not lend itself to partial analysis or summary.

SRK has no obligation or undertaking to advise any person of any development in relation to Mineral Assets or the 2019 Statements which comes to its attention after the date of this Audit Letter or to review, revise or update the Audit Letter or opinion in respect of any such development occurring after the date of this Audit Letter.

1.3 Effective Date, Base Technical Information Date and Publication Date

The effective date of the Audit Letter is 12 January 2020 (the “**Effective Date**”). The 2019 Statements reflect SRK’s review and modification of the Company’s 31 December 2019 estimates reported in accordance with the State Commission of Kazakhstan on Mineral Reserves (the “**GKZ System**”) to derive audited Mineral Resource and Ore Reserve statements for the Mineral Assets and reported in accordance with the terms and definitions of the JORC Code.

The Base Technical Information Date is defined as 1 January 2020 which is co-incident with the reporting date for the 2019 Statements. The Publication Date of the Audit Letter is 12 January 2020 and is coincident with the Effective Date.

As advised by the Company, as at the Publication Date of the Audit Letter no material change has occurred as of the Base Technical Information Date which would warrant further updating of the Mineral Resource and Ore Reserve statements as presented herein.

1.4 Verification, Validation and Reliance

This Audit Letter is dependent upon technical, financial and legal input from the Company. SRK has conducted a review and assessment of all material technical issues likely to influence: the 2019 Statements. The review comprised:

- Enquiry of technical, financial and legal representatives of the Company both by telephone and email and during head office discussions held at various times from 20 December 2019 through 12 January 2020;
- Assessment of the Technico Economicheskoye Obosnovaniye (“**TEO**”) and other supporting technical, environmental, mineral tenure, mining contracts and other documents relating to the Mineral Assets, specifically where these were updated subsequent to publication of the 2019 CPR;

- Review of historical information for the 12-month financial periods ending 31 December 2019;
- Reliance on the Company for: macro-economic parameters including consumer price inflation and exchange rates of local currencies reported against the United States Dollar (“US\$”); and input-commodity price forecasts for key consumables, notably acid and other mining and processing related consumables; and
- Reliance on UXc for the annual real terms (1 January 2020) commodity price forecasts as reported in Section 3 of this Audit Letter and utilised to assess the economic viability of the Ore Reserves as reported in the 2019 Statements.

SRK confirms that it has performed all necessary validation and verification procedures deemed necessary and/or appropriate by SRK in order to place an appropriate level of reliance on such technical information.

The Mineral Resource statements included in this Audit Letter are reported in accordance with JORC Code. SRK considers that with respect to all material technical-economic matters, it has undertaken all necessary investigations to ensure compliance with the JORC Code.

In consideration of all legal aspects relating to the Mineral Assets, SRK has placed reliance on the representations by the Company that the following are correct as at the Effective Date of the Audit Letter:

- That the Company is not aware of any legal proceedings that may have an influence on the rights to explore for minerals in respect of the Mineral Assets;
- That the Group is the legal owner of all relevant mineral and surface rights pertaining to the Mineral Assets; and
- That no significant legal issue exists which would affect the likely viability of the Mineral Assets and/or the estimation and classification of the Mineral Resources and Ore Reserves as reported herein.

1.5 Limitations, Responsibility Statement, Reliance on Information, Declarations and Copyright

1.5.1 Limitations

To the fullest extent permitted by law SRK does not assume any responsibility and will not accept any liability to any other person for any loss suffered by any such other person as a result of, arising out of, or in connection with this Audit Letter or statements contained therein, required by and given solely for the purpose of presenting the 2019 Statements.

The Company has confirmed in writing to SRK that, to its knowledge, the information provided by the Company (when provided) was complete and not incorrect or misleading in any material respect. SRK has no reason to believe that any material facts have been withheld and the Company has confirmed to SRK that it believes it has provided all material information.

Unless otherwise expressly stated all the opinions and conclusions expressed in this Audit letter are those of SRK. It should also be noted that this Audit Letter reflects SRK’s review of information generated, and/or technical work completed, by others. This Audit Letter specifically excludes all aspects of legal issues, marketing, commercial and financing matters, insurance, land titles and usage agreements, and any other agreements and/or contracts that the Company may have entered into.

1.5.2 Responsibility Statement

SRK accepts responsibility for the 2019 Statements as reported herein. The 2019 Statements have been derived by SRK and reported in accordance with the terms and definitions of the

JORC Code. Having taken all reasonable care to ensure that such is the case, SRK declares that the information contained in the Audit Letter is, to the best of the knowledge of SRK, in accordance with the facts and contains no omission likely to affect its import. The scope of the Audit Letter is limited to the uranium mining assets as reported therein, and specifically excludes all other assets of the Group.

1.5.3 Reliance on Information

SRK believes that its opinion must be considered as a whole and that selecting portions of the analysis or factors considered by it, without considering all factors and analyses together, could create a misleading view of the process underlying the opinions presented in this Audit Letter.

SRK's opinions given in this document with respect to the 2019 Statements are effective at 12 January 2020 and are based on information provided by the Company throughout the course of SRK's investigations, which in turn reflects various technical-economic conditions prevailing at the date of this report and the Company's expectations regarding the uranium market, uranium prices and exchange rates as at the date of this report. Should these change materially the 2019 Statements could be materially different in these changed circumstances.

Whilst SRK has exercised all due care in reviewing the supplied information, SRK does not accept responsibility for finding any errors or omissions contained therein and disclaims liability for any consequences of such errors or omissions.

This Audit Letter includes technical information, which requires subsequent calculations to derive subtotals, totals and weighted averages. Such calculations may involve a degree of rounding and consequently introduce an error. Where such errors occur, SRK does not consider them to be material.

1.5.4 Declarations

SRK will receive a fee for the preparation of this Audit Letter in accordance with normal professional consulting practice. This fee is not contingent on the outcome of any transaction and SRK will receive no other benefit for the preparation of this report. SRK does not have any pecuniary or other interests that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the 2019 Statements for the Mineral Assets:

Neither SRK, the Competent Persons (as identified under Section 1.7, below) who are responsible for authoring this Audit Letter, nor any Directors of SRK have at the date of this report, nor have had within the previous two years, any shareholding in the Company, the Mineral Assets or the Advisors of the Company, or any other economic or beneficial interest (present or contingent) in any of the assets being reported on. SRK is not a group, holding or associated company of the Company. None of SRK's partners or officers are officers or proposed officers of any group, holding or associated company of the Company. Further, no Competent Person involved in the preparation of this Audit Letter is an officer, employee or proposed officer of the Company or any group, holding or associated company of the Company. Consequently, SRK, the Competent Persons and the Directors of SRK consider themselves to be independent of the Company, its directors, senior management and Advisors.

In this Audit Letter, SRK provides assurances to the Board of Directors of the Company, that the Mineral Resources and Ore Reserves are reasonable, given the information currently available and reported in compliance with the terms and definitions of the JORC Code.

1.5.5 Copyright

Except where SRK has agreed otherwise (including pursuant to an agreement between SRK and the Company dated 28 December 2019 or any subsequent agreement (each, the "**KAP Agreement**")):

- neither the whole nor any part of this Audit Letter nor any reference thereto may be included by any party other than the Company, any of its direct and indirect subsidiaries, the Company's shareholder JSC Sovereign Wealth Fund Samruk-Kazyna or a competent state authority in Kazakhstan or any other relevant jurisdiction, as may be applicable (together, the "**Recipients**"), in any other document without the prior written consent of SRK save that in the case that the Audit Letter is not included in full in any other document, the Recipient shall present a draft of any document produced by it that may incorporate a part of this Audit Letter to SRK for review so that SRK may ensure that this is presented in a manner which accurately and reasonably reflects any results or conclusions contained in this Audit letter; and
- copyright of all text and other matters in this document, including the manner of presentation, is the exclusive property of SRK. It is an offence to publish this document or any part of the document under a different cover, or to reproduce and/or use, without written consent (whether granted by virtue of a KAP Agreement or otherwise), any technical procedure and/or technique contained in this document. The intellectual property reflected in the contents resides with SRK and shall not be used for any activity that does not involve SRK, without the written consent of SRK.

Neither the whole nor any part of this Audit Letter nor any reference thereto may be included in any other document without the prior written consent of SRK regarding the form and context in which it appears.

1.6 Indemnities Provided by the Company

The Company has provided the following indemnities to SRK:

- The Company has agreed that, to the extent permitted by law, it will indemnify SRK and its employees and officers in respect of any liability suffered or incurred as a result of or in connection with the preparation of this Audit Letter albeit that this indemnity will not apply in respect of any material negligence, wilful misconduct or breach of law. The Company has also agreed to indemnify SRK and its employees and officers for time incurred and any costs in relation to any inquiry or proceeding initiated by any person except to the extent SRK or its employees and officers have been materially negligent or acted with wilful misconduct or in breach of law in which case SRK shall bear such costs; and
- In order to assist SRK in the preparation of this Audit Letter the Company may be required to receive and process information or documents containing personal information in relation to SRK's project personnel. The Company has agreed to comply strictly with the provisions of the Data Protection Act 1998 of the United Kingdom ("**DPA 1998**") and all regulations and statutory instruments arising from the DPA 1998, and the Company will indemnify and keep indemnified SRK in respect of all and any claims and costs caused by breaches of the DPA 1998.

1.7 Statement of Qualification

SRK is an associate company of the international group holding company SRK Consulting (Global) Limited (the "**SRK Group**"). The SRK Group comprises some 1,400 professional staff offering expertise in a wide range of resource and engineering disciplines with 45 offices located in 20 countries.

The SRK Group's independence is ensured by the fact that it holds no equity in any project. This permits the SRK Group to provide its clients with conflict-free and objective recommendations on crucial judgment issues. The SRK Group has a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations

and audits, Mineral Resource and Ore Reserve audits and independent feasibility studies on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs.

This Audit Letter has been prepared by a team of consultants sourced from the SRK Group's office in the United Kingdom of Great Britain and Northern Ireland (“UK”), the Russian Federation (“Russia”) and Kazakhstan over a three-month period. These consultants are specialists in the fields of geology, resource and reserve estimation and reporting, ISR Uranium operations, hydrogeology and hydrology, infrastructure, environmental management and life of mine planning.

The individuals listed in Table 1-3 have provided the material input to the 2019 CPR and this Audit Letter, have extensive experience in the mining industry and are members in good standing of appropriate professional institutions.

Table 1-3: SRK Project Team

Responsible Discipline	Consultant	Designation	Registration, Membership, Qualification	Years' Experience
Mineral Resources	Dr Mike Armitage	Corporate	C.Eng, C. Geol, FGS, MIMMM	37
Mineral Resources	Liubov Egorova	Principal	MAusIMM, BSc	16
Ore Reserves	Dr Iestyn Humphreys	Corporate	FIMMM, AIME, PhD	30
LoMp and Financial Modelling	Nick Fox	Principal	FGS, Prof Grad MIMMM, MICA EW, ACA, MSc	24
Geochemistry	Dr Rob Bowell	Corporate	Eur. Geol, C. Chem MRSC, C.Geol., FGS, FIMMM, PhD	33
Hydrogeology	Dr Vladimir Ugorets	Principal	NGWA, MSHA, PhD	42
Environment	Jane Joughin	Corporate	PNS, IAIA, MSc	35

The Competent Person who has overall responsibility for the CPR, Mineral Resources as reported herein is Dr Mike Armitage, C.Eng, C. Geol, FGS, MIMM, PhD. He is a Chartered Geologist which is a Recognised Professional Organisation (“RPO”) included in a list promulgated by the Australian Securities Exchange (“ASX”) from time to time. He is a full time employee of SRK, a corporate consultant and has over 35 years' experience in the mining and metals industry and also has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mike Armitage has been responsible for the reporting of Mineral Resources and Ore Reserves on various properties internationally during the past 30 years.

The Competent Person who has responsibility for the Ore Reserves as reported herein is Dr Iestyn Humphreys, FMIMM, AIME, PhD who is a Corporate Consultant, and Practice Leader with SRK. He is a Fellow of the IMMM which is a RPO included in a list promulgated by the ASX from time to time. Iestyn Humphreys has 30 years' experience in the mining and metals industry and also has been involved in the preparation of Competent Persons' Reports comprising technical evaluations of various mineral assets internationally during the past five years which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

2 THE MINERAL ASSETS

2.1 Introduction

The following section includes contextual background to the Mineral Assets with specific focus on geographic location, mineral tenure, historical production statistics and summary technical details pertaining to the Group's Mineral Resources and Ore Reserves statements as at 31 December 2019.

2.2 Background

The Mineral Assets are located in three of the six uranium geological provinces of Kazakhstan, have a combined total licence area of 2,059.27km² (Shu-Sarysu at 1,469.69km²; Syrdarya at 545.58km²; and North Kazakhstan at 44.00km²) and includes 30 deposits/blocks categorised as: 26 PP; one DP; and four AEPs. In addition, the Company's Exploration Programme covers a several EPs located in three regions in which the Company is active. The Mineral Assets are largely held through 14 Mining Subsidiaries (Table 2-3) which in conjunction with the Company are directly responsible for uranium mining and downstream processing activities.

Historical development of the Mineral Assets dates from initial discovery in 1963 with the most recent discovery being in 1982. Initial production commenced at Kazatomprom-SaUran LLP and RU-6 LLP in 1997.

Table 2-1: Mineral Assets development stage, equity interest and tenure key dates and area

Mining Subsidiary/Deposit	Uranium Province	Stage	Equity Interest	Tenure key dates and area						
				Expiry (year)	(years)	Discovery (year)	Op. Start (year)	LoMp Depletion ⁽¹⁾ (date)	(years)	Area (km ²)
Production										
Kazatomprom-SaUran LLP⁽³⁾			100.00							
Uvanas	Shu-Sarysu	PP		2022	3.0	1963	1997	2019	1.0	84.48
Eastern Mynkuduk	Shu-Sarysu	PP		2022	3.0	1973	1997	2027	9.0	28.97
Kanzhugan	Shu-Sarysu	PP		2022	3.0	1972	1997	2040	22.0	60.83
South Moinkum (Southern part)	Shu-Sarysu	PP		2019	0.0	1976	2001	2019	1.0	17.40
Central Moinkum	Shu-Sarysu	PP		2039	20.0	1974	2014	2040	22.0	61.22
Total					20.0	1963	1997	2040	22.0	252.90
Ortalyk LLP			100.00							
Zhalpak	Shu-Sarysu	DP		2022	3.0	1964	2018	2022	4.0	145.80
Central Mynkuduk	Shu-Sarysu	PP		2033	14.0	1976	2007	2032	14.0	40.60
Total					14.0	1964	2007	2032	14.0	186.40
RU-6 LLP⁽²⁾			100.00							
Northern Karamurun	Syrdarya	PP		2022	3.0	1979	1997	2035	17.0	59.58
Southern Karamurun	Syrdarya	PP								
Total					3.0	1979	1997	2035	17.0	59.58
Appak LLP			65.00							
Western Mynkuduk	Shu-Sarysu	PP		2035	16.0	1976	2008	2036	18.0	133.46
JV Inkai LLP⁽²⁾			60.00							
Blocks 1, Inkai (a)	Shu-Sarysu	PP		2045	26.0	1976	2008	2048	30.0	139.00
Blocks 1, Inkai (b)	Shu-Sarysu	PP		2045	26.0	1976	2008	2046	28.0	
Blocks 1, Inkai (c)	Shu-Sarysu	PP		2045	26.0	1976	2015	2052	34.0	
Total					26.0	1976	2008	2052	34.0	139.00
Semizbai-U LLP			51.00							
Semizbai	Northern Kazakhstan	PP		2031	12.0	1973	2009	2040	22.0	27.20
Irkol	Syrdarya	PP		2030	11.0	1976	2008	2041	23.0	44.00
Total					12.0	1973	2008	2041	23.0	71.20
JV Akbastau JSC			50.00							
Block 1 Budenovskoye	Shu-Sarysu	PP		2037	18.0	1976	2009	2037	19.0	1.586
Block 3 Budenovskoye	Shu-Sarysu	PP		2038	19.0	1976	2009	2039	21.0	1.123
Block 4 Budenovskoye	Shu-Sarysu	PP			19.0	1976	2009	2039	21.0	
Total					19.0	1976	2009	2039	21.0	2.71
Karatau LLP			50.00							
Block 2, Budenovskoye	Shu-Sarysu	PP		2040	21.0	1979	2007	2033	15.0	17.28
JV Zarechnoye JSC			49.98							
Zarechnoye	Syrdarya	PP		2025	6.0	1977	2007	2024	6.0	38.00
JV Katco LLP			49.00							
Southern Moinkum (Northern part)	Shu-Sarysu	PP		2039	20.0	1976	2001	2027	9.0	15.92
Tortkuduk	Shu-Sarysu	PP		2039	20.0	1976	2007	2033	15.0	29.81
Total					20.0	1976	2001	2033	15.0	45.73
JV Khorassan-U LLP⁽⁴⁾			50.00							
Block Kharassan 1, North Kharassan	Syrdarya	PP		2058	39.0	1972	2008	2039	21.0	70.80
JV SMCC LLP			30.00							
Akdala	Shu-Sarysu	PP		2026	7.0	1982	2004	2025	7.0	37.54
Block 4, Inkai	Shu-Sarysu	PP		2029	10.0	1976	2007	2036	18.0	79.37
Total					10.0	1976	2004	2036	18.0	116.91
Baiken-U LLP⁽⁴⁾			52.50							
Block Kharassan 2, North Kharassan	Syrdarya	PP		2055	36.0	1972	2009	2032	14.0	350.00
Exploration										
Kazatomprom			100.00							
Block 2 Inkai	Shu-Sarysu	AEP		2022	3.0	1976	2008	n/a	n/a	183.2
Block 3 Inkai	Shu-Sarysu	AEP		2022	3.0	1976	2015	n/a	n/a	240.8
Total						1976	2008			424.00
Budenovskoye LLP			51.00							
Block 6 Budenovskoye	Shu-Sarysu	AEP		2022	4.5	1976	2017	n/a	n/a	151.30
Block 7 Budenovskoye	Shu-Sarysu	AEP		2022	4.5	1976	2017			
Total					4.5	1976	2017			151.30
Grand Total										2,059.27

⁽¹⁾ LoMp: date of depletion of Ore Reserves in the current Life of Mine plans for the Mineral Assets.

⁽²⁾ For JV Inkai LLP, the Company's equity participation is determined based on a prescribed formula based on uranium production within the following bands: 0tU to 1,500tU (40.00%); 1,500tU to 2,000tU (50.00%); 2,000tU to 4,000tU (60.00%).

⁽³⁾ At Kazatomprom-SaUran LLP, two deposits have limited production and no further Ore Reserves and Mineral Resources are reported in the 2019 Statements.

The Company either directly or through other subsidiaries also holds contracts with the GoK to undertake exploration at several other assets the most advanced being:

- Togusken and East Uvanas which are all located in the Shu-Sarysu Basin and have been explored since 2013 and 2017 respectively;
- Akkum which is located in the Syrdarya Basin where exploration started in 2017; and
- Inkai 2 and Inkai 3 which were formally part of JV Inkai LLP, and are located in the Shu-Sarysu Basin, but which were given up by JV Inkai LLP in H1 2018 and which the Company now has contracts in place to explore in its own right.

2.3 Location

The Company's Mineral Assets are located in four (Figure 2-1) of the principal administrative provinces of Kazakhstan: Kyzylorda Province (Shieli and Zhanakorgan districts); Turkestan Province (Sozak district); and North-Kazakhstan Province (Ualikhanovsky district); and Amkola Province (Enbekshilder district).

Uranium deposits in Kazakhstan are grouped into six uranium provinces (Figure 2-2) but with the exception of the Semizbai deposit located in Northern Kazakhstan, which straddles the North-Kazakhstan Province and the Amkola Province, the Company's deposits are all located in the south of Kazakhstan within the Shu-Sarysu (23) and Syrdarya (6) uranium provinces. In administrative terms these southern provinces belong to the Turkestan Province and Kyzylorda Province and the deposits themselves are confined to the northern or southern limb of the Karatau Rise (Figure 2-3).

The Mineral Assets are generally accessible via a well-developed railway and tarred road network with the last sections of access normally comprise as dirt roads. The transportation of goods to and from the ISR operations is mostly undertaken by Trade and Transport Company LLP, a subsidiary of the Company. This company assists with both rail and road transport and also maintains 500km of private roads used for transportation.

On-site infrastructure is extensive and well maintained with the majority having become operational after 2005 with modern installations. Certain of the older installations were commissioned 30 to 40 years ago and appear weathered, notably: Uvanas and Eastern Mynkuduk (dating to 1978), Kanzhugan (1982) and North Karamurun and South Karamurun (dating to 1981). Key installations at the Group's operations comprise:

- External power supply connected to the national grid via 110kV and 220kV transmission lines and local substations;
- Wellfields standard infrastructure at all operations comprise: power distribution lines; pregnant leach solution ("PLS") pipelines; portable cabins; access roads; mobile drill rigs; and drill slimes settling ponds;
- Wellfields supporting infrastructure comprising acid tanks; PLS setting ponds; and drill slimes storage facilities; and
- Processing and Refining plants comprising fencing and security; process plant and product storage; acid storage tanks; hydrogen peroxide tanks; potable and technical water supply; settling ponds (PLS, barren solution, process slimes, sewage, effluent); office and staff facilities; and other ancillary infrastructure.

Figure 2-1: Kazakhstan Country Map and location of the Mineral Assets mining and processing operations



Figure 2-2: Kazakhstan Uranium Provinces indicating distribution of GKZ System 'reserve' uranium content distribution

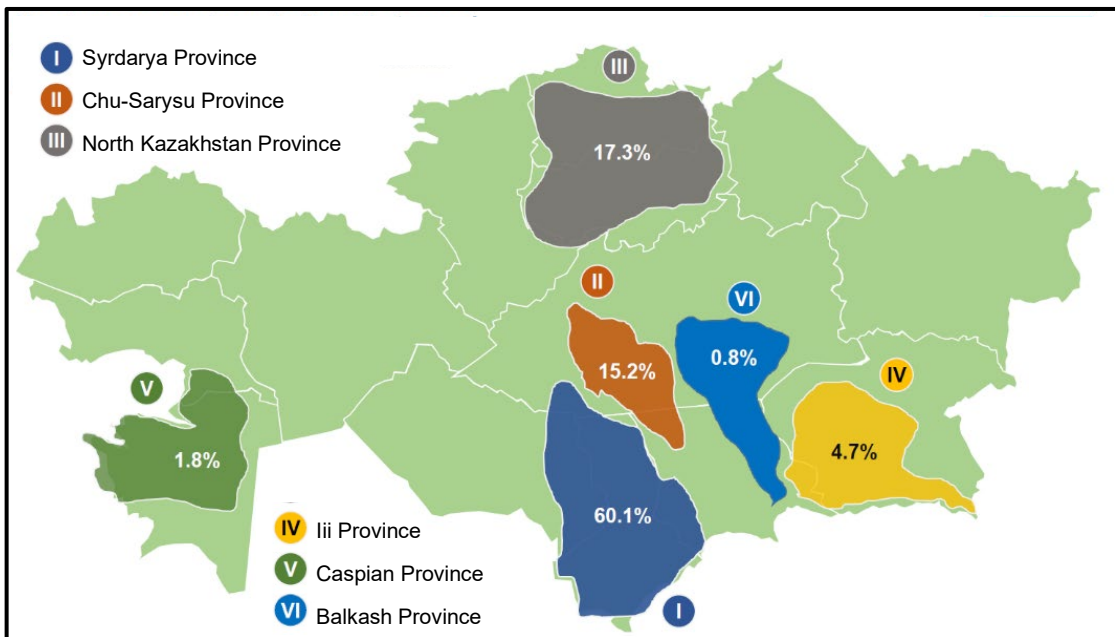
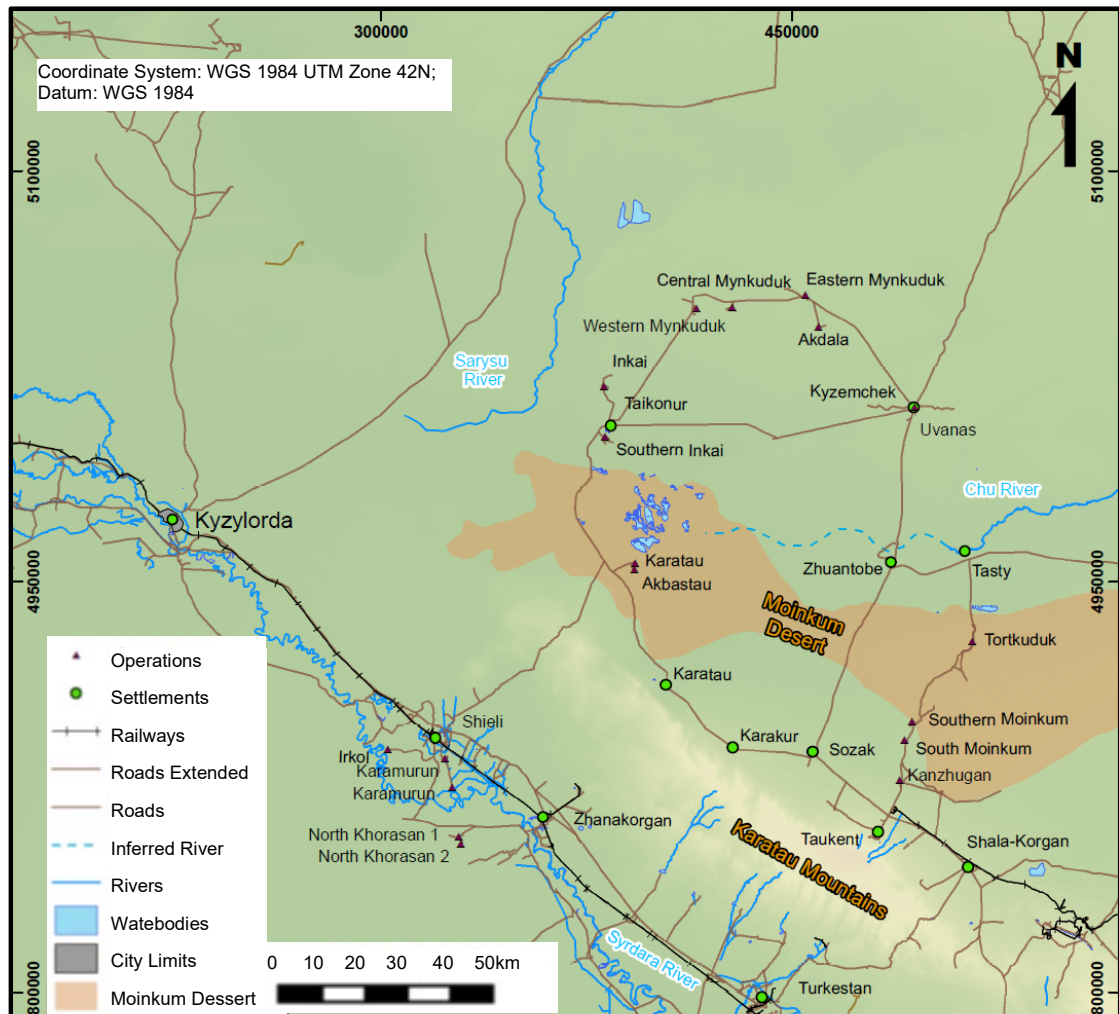


Figure 2-3: Regional location of Mineral Assets in the Shu-Sarysu Province and the Syrdarya Province



3 COMMODITY PRICES AND MACRO ECONOMICS

3.1 Introduction

The following section includes discussion and comment on the commodity prices and macro-economic assumptions as relied on for the purpose of reporting the Mineral Resources and Ore Reserves statements as reported herein.

3.2 Commodity Prices

The Company has mandated a commodity market specialist, UxC, to provide an overview and analysis of the uranium market and specifically to provide to SRK annual schedules of the benchmark spot market price for U₃O₈, which is reproduced and expressly relied upon herein for the purpose of supporting the economic viability of the Ore Reserves and to ensure that the Mineral Resources are appropriately assessed with regards to economic potential.

Uranium is not traded in meaningful quantities on a commodity exchange and electric power generation companies purchase the majority of their uranium products under long-term contracts with suppliers and meet the rest of their requirements on the spot market. Furthermore, the market structure is typified by:

- Demand which is directly linked to the level of electricity generated by nuclear power plants. For 2019 global uranium demand was forecasted at 169.3MlbsU₃O₈ (excluding uranium

build-up) and 189.3MlbsU₃O₈ (including uranium build-up);

- Supply is constrained by two primary sources namely: primary production from operating mines; and secondary supply which includes other sources including, excess inventories, uranium sourced from defence stockpiles, decommissioning of nuclear weapons, re-enriched uranium tails and reprocessing of used reactor fuel. Mine production is dominated by a limited number of companies and in 2019 was estimated at 140.1MlbsU₃O₈ compared with 2018 at 137.5MlbsU₃O₈: four regions supply some 84% of estimated world production, Kazakhstan (42%), Canada (13%), Australia (12%) and Africa (17%); and over 58% of global mine production is attributed to five key producers with the Company representing 24.0% in 2018; and
- During 2019 the spot market price for U₃O₈ ranged from a low of US\$24.00/lbU₃O₈ to a high of US\$28.90/lbU₃O₈ with an annual average of US\$25.92/lbU₃O₈ and a year-end close of US\$25.15/lbU₃O₈.

The pricing forecasts (spot price forecast) as developed by UxC is derived using UxC's U-PRICETM econometric model which accounts for key factors influencing the uranium market, including UxC Requirements Model ("URM") Base Case Demand, Market Outlook & Perception, Primary Production (Base Case), Secondary Supplies, Separative Work Units ("SWU" – Enrichment Services) Market Developments and Exchange Rates. During periods of oversupply, the spot price has a history of trending lower as available inventories are offered at a discount to the market. Likewise, in periods of projected undersupply, the spot price has a history of strengthening to incentivize bringing more primary production online to meet higher demand levels.

The real terms (1 January 2020) US\$ price is forecast to increase from US\$31.32/lbU₃O₈ in 2020 to US\$41.62/lbU₃O₈ in 2025. For the 2026 through 2035 period, the spot price is forecast to increase to US\$53.39/lbU₃O₈ reflecting an overall increase in the constant U.S. dollar midpoint by 28% and remain at this level thereafter. The general approach adopted by commodity market specialists is to establish demand-supply-price (nominal) relationships and based on demand and supply forecasts determine pricing assumptions accordingly. The key outcomes from the market outlook assessment provided by UxC are:

- An assumed consumer price inflation rate of 2.00% per annum for the United States dollar (US\$); and
- In real (1 January 2020) terms mid-point prices of US\$31.32/lbU₃O₈, US\$34.49/lbU₃O₈ and US\$51.56/lbU₃O₈ for 2020, 2021 and 2030 respectively.

Table 3-1 and Table 3-2 present the annual pricing assumptions in 1 January 2020 real terms for the UxC pricing and the Consensus Market Forecast ("CMF") pricing where the assumed unit conversions comprise: 2,204.62262 lbs in one metric tonne; and U to U₃O₈ mass conversion of 1.17925. The exchange rate between the US\$ and KZT is 380 which is assumed to remain constant in real terms. In summary the short-term CMF pricing through to 2023 is not dissimilar to that forecasted by UxC with the exception of the higher CMF in 2022 at US\$42.60/lbU₃O₈. The CMF LTP in 2024 at US\$35.50/lbU₃O₈ is lower than that forecasted by UxC, however SRK note that there is no CMF forecast beyond this period to provide a direct comparison. Historical pricing for the uranium spot market is included in Table 3-4 and Figure 3-1.

Table 3-1: Commodity Pricing Assumptions (1 January 2020 real terms): 2019 through 2028

Price Assumption	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
UxC										
High	(US\$/lbU ₃ O ₈)	38.20	40.42	41.38	44.12	47.78	51.38	53.19	53.67	57.00
Mid	(US\$/lbU ₃ O ₈)	31.32	34.49	36.51	38.79	39.25	41.62	42.86	43.15	46.29
Low	(US\$/lbU ₃ O ₈)	24.22	23.52	23.32	23.82	24.66	27.49	30.45	32.99	36.30

Price Assumption	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
CMF										
High	(US\$/lbU ₃ O ₈)	39.29	43.33	56.69	56.87	45.51	45.51	45.51	45.51	45.51
Median	(US\$/lbU ₃ O ₈)	31.18	33.70	42.60	39.65	35.50	35.50	35.50	35.50	35.50
Low	(US\$/lbU ₃ O ₈)	27.50	29.85	31.18	31.62	29.92	29.92	29.92	29.92	29.92
Reporting Assumptions										
Base Case	(US\$/lbU ₃ O ₈)	31.32	34.49	36.51	38.79	39.25	41.62	42.86	43.15	46.29
	(US\$/lbU)	36.93	40.67	43.05	45.74	46.29	49.08	50.54	50.88	54.59
	(US\$/kg)	81.43	89.67	94.92	100.85	102.04	108.20	111.43	112.18	120.34
Exchange Rate	(KZT to 1 US\$)	380	380	380	380	380	380	380	380	380
	(KZT/lbU)	14,035	15,455	16,361	17,382	17,589	18,651	19,206	19,336	20,743
	(KZT/kgU)	30,942	34,073	36,069	38,322	38,776	41,117	42,342	42,629	45,731

Table 3-2: Commodity Pricing Assumptions (1 January 2019 real terms): 2029 through 2037

Price Assumption	Units	2029	2030	2031	2032	2033	2034	2035	2036	2037
UxC										
High	(US\$/lbU ₃ O ₈)	60.96	64.48	65.54	65.53	65.77	66.31	67.63	68.99	68.99
Mid	(US\$/lbU ₃ O ₈)	51.56	52.07	53.02	53.47	53.96	53.39	54.46	55.54	55.54
Low	(US\$/lbU ₃ O ₈)	39.91	41.24	41.74	41.61	42.17	41.85	42.69	43.54	43.54
CMF										
High	(US\$/lbU ₃ O ₈)	45.51	45.51	45.51	45.51	45.51	45.51	45.51	45.51	45.51
Median	(US\$/lbU ₃ O ₈)	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50
Low	(US\$/lbU ₃ O ₈)	29.92	29.92	29.92	29.92	29.92	29.92	29.92	29.92	29.92
Reporting Assumptions										
Base Case	(US\$/lbU ₃ O ₈)	51.56	52.07	53.02	53.47	53.96	53.39	54.46	55.54	55.54
	(US\$/lbU)	60.80	61.40	62.52	63.05	63.63	62.96	64.22	65.50	65.50
	(US\$/kg)	134.05	135.37	137.84	139.01	140.29	138.80	141.58	144.41	144.41
Exchange Rate	(KZT to 1 US\$)	380	380	380	380	380	380	380	380	380
	(KZT/lbU)	23,105	23,333	23,759	23,961	24,180	23,925	24,403	24,890	24,890
	(KZT/kgU)	50,937	51,441	52,380	52,824	53,308	52,745	53,799	54,874	54,874

Table 3-3: Consensus Market Forecast analysis (1 January 2020 real terms): 2020 through 2025

Statistic	Units	2020	2021	2022	2023	2024	2025
High	(US\$/lb)	39.29	43.33	56.69	56.87	45.51	45.51
Median	(US\$/lb)	31.18	33.70	42.60	39.65	35.50	35.50
Average	(US\$/lb)	32.38	35.37	43.22	42.00	36.61	36.61
Low	(US\$/lb)	27.50	29.85	31.18	31.62	29.92	29.92
STDEV	(US\$/lb)	3.90	4.63	8.40	9.00	7.46	7.46
Analysts	(No)	10	7	10	7	4	4

Table 3-4: Historical uranium price statistics for annual periods commencing 2000 through 2019 inclusive⁽¹⁾

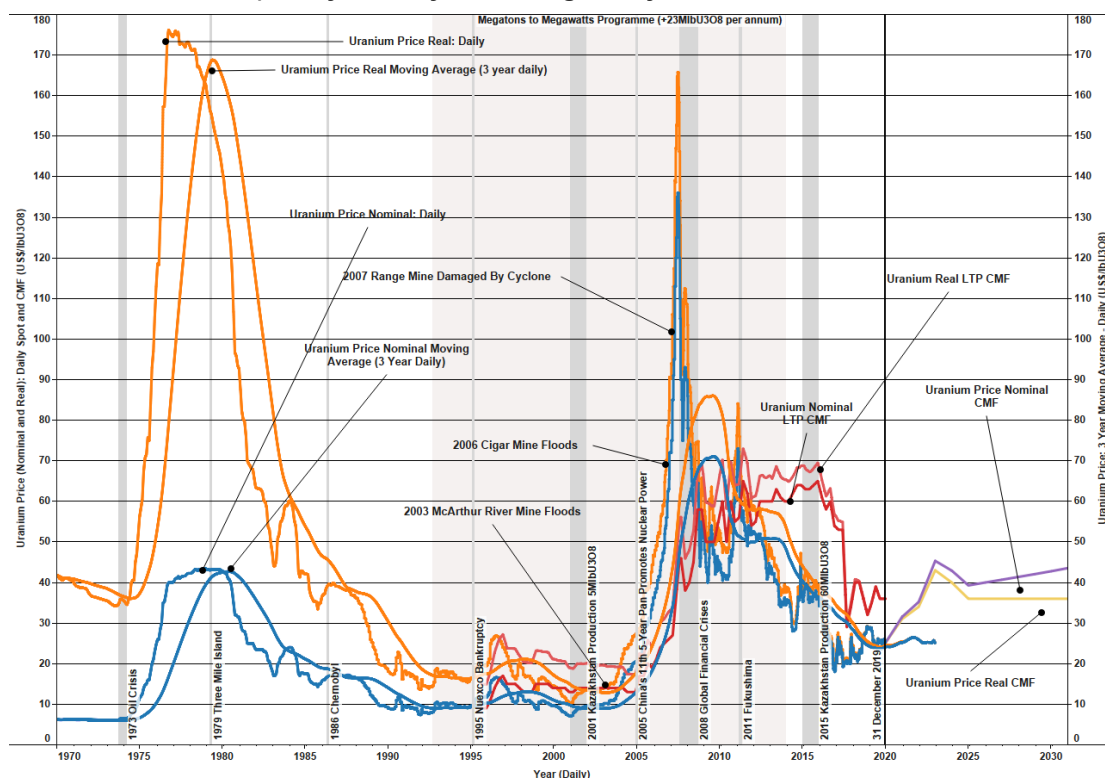
Period	Spot Market Uranium Price						
	Min (US\$/lbU ₃ O ₈)	Max (US\$/lbU ₃ O ₈)	Average (US\$/lbU ₃ O ₈)	3YDMAV (US\$/lbU ₃ O ₈)	Nominal Close (US\$/lbU ₃ O ₈)	Real Close (US\$/lbU ₃ O ₈)	LTP Real (US\$/lbU ₃ O ₈)
2000	7.10	9.60	8.38	8.38	7.10	10.36	18.83
2001	7.10	9.60	8.62	8.50	9.60	10.52	19.97
2002	9.60	10.20	9.84	8.95	10.20	10.77	19.50
2003	10.10	14.50	11.25	9.52	14.50	10.97	19.14
2004	14.50	20.70	18.12	11.96	20.70	12.34	18.98
2005	20.70	36.25	27.39	16.65	36.25	17.44	25.19
2006	36.25	72.00	47.55	26.08	72.00	36.84	32.88
2007	72.00	136.00	98.19	47.81	90.00	62.51	46.39
2008	44.00	90.00	63.68	59.20	53.00	65.35	66.33
2009	40.00	54.00	46.47	63.97	44.50	64.27	66.12
2010	40.50	62.50	46.30	63.66	62.50	56.25	63.62
2011	49.00	73.00	57.10	53.39	52.50	60.60	60.67
2012	40.75	52.50	48.88	49.69	43.75	67.73	65.85
2013	34.00	44.00	38.60	47.72	34.50	70.60	64.88
2014	28.00	44.00	33.45	44.51	35.50	71.75	68.32
2015	34.25	39.50	36.87	39.45	34.25	72.27	67.83
2016	18.00	34.85	26.58	33.88	20.25	62.28	56.01
2017	19.25	26.50	21.98	29.72	23.75	49.57	36.80
2018	20.50	29.15	24.49	27.48	26.00	25.92	31.77
2019	24.00	28.90	25.92	24.74	25.15	25.15	36.00

⁽¹⁾ Real terms defined as 1 January 2020 money terms.

⁽²⁾ Historical data to 31 December 2019.

⁽³⁾ Historical Long-Term Price derived from median of Consensus Market Forecasts.

Figure 3-1: Historical Uranium Spot Market Prices (nominal and real 31 December 2019), daily, three year average daily



3.3 Macro-Economic Assumptions

Historical data for the exchange rate between the KZT and the US\$ and consumer price inflation (“CPI”) is provided in Table 3-4, Figure 3-2, Figure 3-3 and Figure 3-4.

For the 12-month period ended 31 December 2019 the historical exchange rate of the KZT against the US\$ has ranged from a low of 374KZT to a high of 390KZT with an average of 383KZT and a year-end close of 383KZT.

For the 12-month period ended 31 December 2019 the year on year CPI for Kazakhstan and the United States was noted as 5.32% and 2.29% respectively.

Table 3-5: Historical Macro-Economics

Year	End of Year (KZ to 1 US\$)	Average (KZ to 1 US\$)	CPI (YoY%) KZ	US
2000	146	142	9.78	3.39
2001	151	147	6.42	1.55
2002	156	153	6.58	2.38
2003	143	149	6.74	1.88
2004	130	136	6.92	3.26
2005	134	133	7.63	3.42
2006	127	126	8.40	2.54
2007	121	123	18.77	4.08
2008	121	120	9.48	0.09
2009	148	148	6.38	2.72
2010	147	147	7.97	1.50
2011	148	147	7.43	2.96
2012	150	149	6.06	1.74
2013	154	152	4.90	1.50
2014	183	179	7.54	0.76
2015	341	223	13.53	0.73
2016	334	342	8.29	2.07
2017	333	326	7.22	2.11
2018	384	345	4.86	1.91
2019 ⁽¹⁾	383	383	5.32	2.29

⁽¹⁾ Historical data through to 31 December 2019.

Figure 3-2: Historical Exchange Rates against the US\$ (daily close) to 31 December 2019

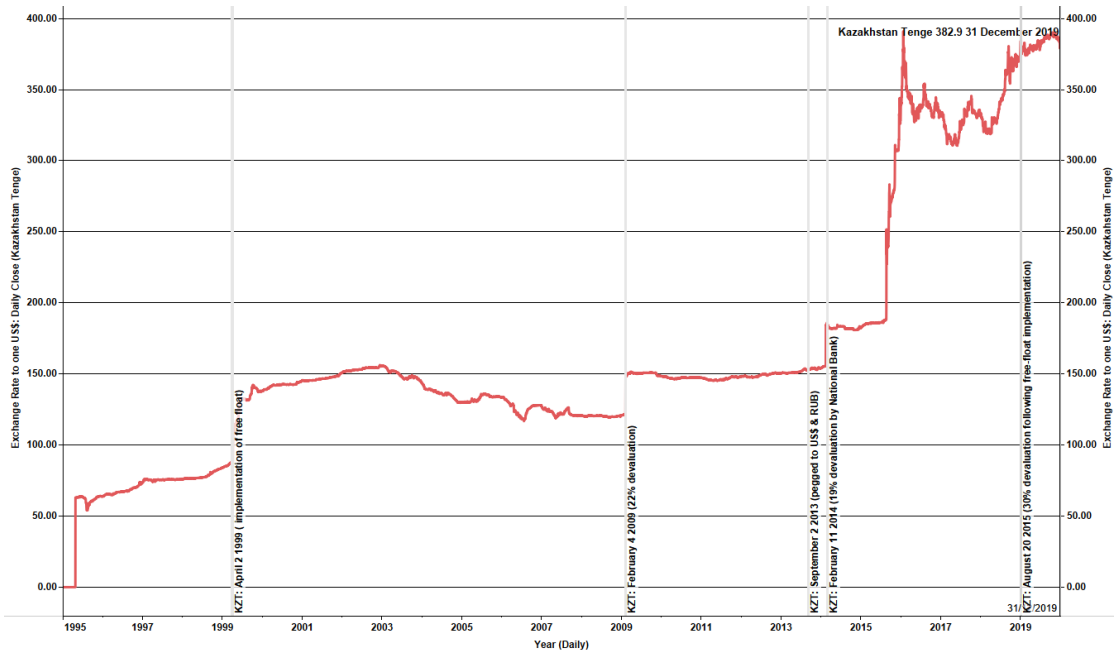


Figure 3-3: Historical Consumer Price Index and Inflation for Kazakhstan to 31 December 2019

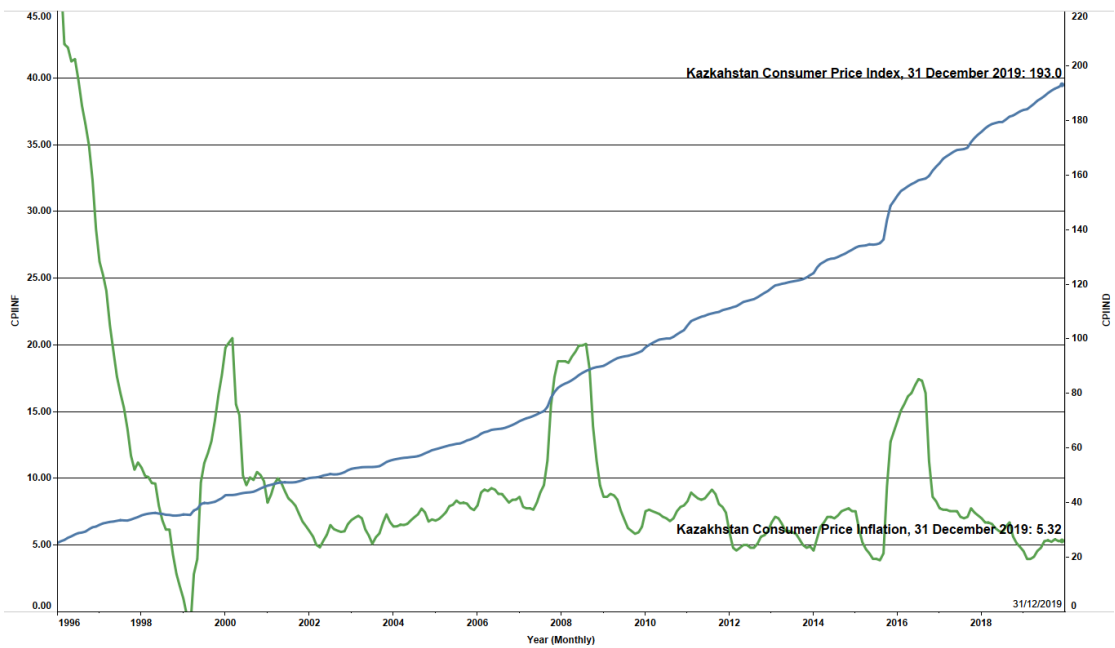
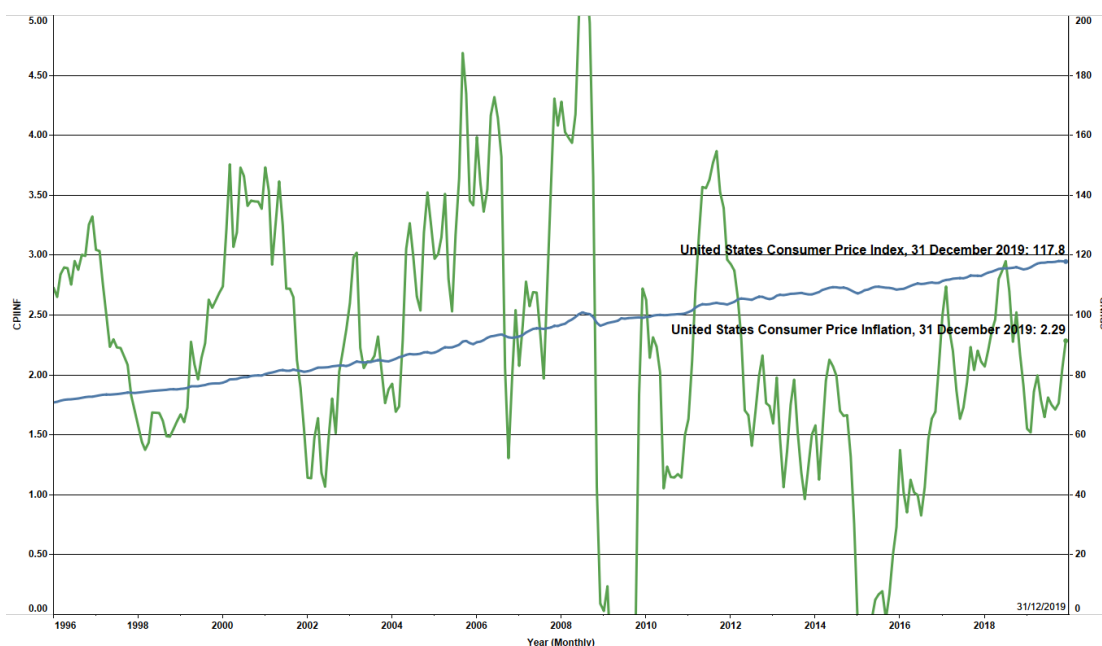


Figure 3-4: Historical Consumer Price Index and Inflation for the United States to 31 December 2019



4 MINERAL RESOURCE AND ORE RESERVE STATEMENTS

4.1 Introduction

The following section presents the basis for derivation of the Mineral Resource and Ore Reserve Statements for the period ending 31 December 2019. Detailed technical information in respect of the 2019 Statements is not re-reported herein and accordingly the reader is referred to the 2019 CPR for all aspects relating to the following: geology; quantity and quality of data; resource estimation; hydrogeology and chemistry; in-situ uranium extraction and recovery; supporting infrastructure; environmental and social management; Life-of-Mine plans; and risks and opportunities.

Furthermore, it is important to note that other than depletion for 2019 as reported by the Company there have been no other significant adjustments to the Mineral Resources and Ore Reserves as reported in the 2019 Statements, save for:

- Uvanas operations have ceased and as such no Mineral Resources nor Ore Reserves are reported;
- South Monikum operations are now fully depleted and as such no Mineral Resources nor Ore Reserves are reported;
- Following a further review of historical estimates reclassification of GKZ 'reserves' resulting in a reduction in GKZ C1 of 803tU and an increase in GKZ C2 of 1,068tU;
- Southern Moinkum added to the GKZ C1 classification a total of 398tU following revaluation completed in 2019;
- Tortkuduk added to the GKZ C1 classification a total of 552tU following re-evaluation completed in 2019; and
- Block 4 Inkai adjusted the GKZ (C1+C2) by a total of negative 508tU comprising negative 1,762 for C1 and positive 1,253 for C2. This is a direct result of a revision to historical estimates which has now been corrected in the latest GKZ statements which accounts for production and losses (508tU) incurred during a period of trial mining which had not been

not accounted for in the prior GKZ estimate as well as a degree of downgrading of the classification.

4.2 The Company's GKZ System Statements

4.2.1 Quality and Quantity of Data

The uranium mineralisation being exploited by the Company has been explored by drilling only. The drilling was typically undertaken during several stages of exploration and comprised both core and conventional mud rotary drilling. The mud drilling was used in most cases to drill to the hangingwall of the mineralisation horizon which was then cored. The mud drilling diameter varied between 118mm and 132mm, and the core drilling diameter between 93mm and 112mm. In general, for all deposits (which are categorised in the second complexity according to the Kazakh guidelines), the exploration drilling grid was 200m to 400 by 50m for the C2 category and 100m to 200m by 50m for the C1 category.

The targeted core recovery was not less than 70% for mineralisation intervals and 50% for the host rock.

All core samples were systematically logged primarily for grain size, clay content, texture, structure and mineralisation. The drillholes are geophysically and radiometrically logged with various down-hole instruments to determine indirectly the uranium content in the rocks and other parameters. The geophysical parameters measured include gamma radioactivity (measured as $\mu\text{R/hr}$), resistivity, self-potential ("SP"), prompt-fission neutron logging (control holes only), caliper log, thermal log and deviation survey.

The uranium grade is predominantly estimated from downhole gamma-logging which is an internationally accepted standard procedure for the determination of uranium grade. Correction factors are then applied to reflect the following: thorium and potassium correction; moisture; radon release; disequilibrium; and ore density.

The thorium and potassium content are determined from core assay at the first stage of exploration. Radon release is determined from specific tests. Disequilibrium between radium and uranium is determined from the core sampling data based on the representative selection of the samples. The ore density is determined from standard measurements carried out on the core.

Resistivity and self-potential logging is used to help determine the lithology of the host rocks. The three main lithologies that can be determined in this way being clays/siltstones, fine-medium grained sandstones and coarse sandstones/gravels. The quality of the resistivity and self-potential logging is determined from re-logging of the same holes and the control holes.

Sampling of the core is performed only for those intervals where the core recovery is above 70% and the gamma intensity based on downhole logging is above 40MkRh/h. The core is split in half and sampled using 0.1m to 1.0m intervals. The sampling intervals are selected based on lithology and the results of hand spectral logging.

For assaying the core is usually split in two halves. The first half is used for uranium and radium determination. All samples are analysed for uranium content using X-ray spectral fluorescent analyses. A selection of samples are analysed for radium using gamma-ray in complex with X-ray spectral analyses of uranium and thorium. The remaining half core is used to help interpret the gamma-logs, for density measurements, moisture determination, for chemical control analyses, selenium grade determination, and to measure the physical properties of the host rocks (density, granulometry), and for geotechnical information.

The quality of gamma logging data is determined based on the systematic re-logging of the

holes and the results of logging based on control holes which are set up at each deposit. The quality of the uranium grade determination from gamma data can only be measured by comparing to assay results or to prompt-fission neutron logging data. The results of comparison are analysed for potential systematic and random error. The systematic error is calculated using the following criteria: average squared error for the thickness and grade determinations should be within 25cm for thickness 25% for the uranium grade.

The quality of the uranium and radium grade obtained using X-ray spectral fluorescent analyses is determined using control re-assay of the samples in the same laboratory (internal control), analyses of the samples using wet chemistry techniques in an external laboratory (between-method control) and analyses of the sample using same analytical method in the arbitrage laboratory (external control). The control analyses are undertaken using industry standards which determine the number of samples (not less than 30 samples for each grade class).

The quality of determination of filtration coefficient from electric logging data is determined by comparing to hydrogeological pumping results.

4.2.2 Estimation Methodology

Resource estimation is undertaken using the accepted standard in-country polygonal approach based on sections and plans. The practice of 3D modelling is not currently widely used in Kazakhstan. The mine planning and reconciliation performed is also undertaken using these polygon estimates.

The key parameters that are estimated for each polygon are:

- **Filtration:** Unique filtration parameters are typically developed for each lithology within each deposit based on resistivity and self-potential logging;
- **Clay content:** The clay content is also determined based on resistivity and self-potential logging;
- **Uranium grade:** The uranium grade is determined from the gamma logging data. The correction factors which are used to convert gamma logging data into uranium grade, and to account for equilibrium effects, radon content etc are determined via correlation with actual assay data. Unique factors are developed for each host rock and each deposit; and
- **Density:** The host rock density is determined from determinations undertaken on core material. In general, during the exploration stage some several hundred samples are collected from different lithological intervals and a different density is calculated for each lithology.

In general, the resource polygons/blocks are delineated as hard boundaries using the following criteria:

- **For the Shu-Sarysu Basin:**
 - The blocks are delineated within the same water-bearing horizon considering the local confining layer,
 - The thickness of any diluting interval should not exceed 6m for C1 but is not limited for C2,
 - The minimum grade should be 0.01%U,
 - The minimum grade*thickness accumulation value is 0.04%Um to 0.08%Um (deposit specific),
 - The minimum Filtration Ratio is 1m/day,
 - The minimum ore/waste factor is 0.75
 - The maximum clay content is 30%; and

- **For the Syrdarya Basin:**

- The blocks are delineated within the same water-bearing horizon taking into account the local confining layer,
- The thickness of the diluting interval should not exceed 8m,
- The minimum grade should be 0.01%U,
- The minimum grade*thickness value is 0.06%Um,
- The minimum Filtration Ratio is 1m/day,
- The minimum ore/waste factor is 0.8,
- The maximum clay content is 20%.

For both basins, the individual blocks/polygons are derived based on uranium grade, filtration parameter and clay content, the minimum size for a C1 category polygon being 30,000m³. Intersections which do not meet the above criteria are included to ensure continuity but are limited such that the minimum ore/waste factor is honoured. In addition, all of the intersections included in an individual block/polygon should:

- Have similar structural and morphological characteristics;
- Correspondence to the same part of the geological structure (fold limb for example);
- Have similar filtration characteristics; and
- Be on a regular intersection grid.

The extent of each polygon is then limited to:

- one quarter of the drilling grid in case where the neighbouring intersection is barren; and
- one half of the drilling grid in case where the neighbouring intersection is low grade.

After delineation of the polygons/blocks, each is allocated a thickness and uranium grade calculated as an arithmetical mean of all of the intersections within the polygon that honour the criteria. The area of the polygons is then in most cases estimated using GIS software (Mapinfo, ArcGIS). After that, the specific productivity of each area is calculated by multiplying the average grade, average thickness and density. The metal content of each block is then estimated by multiplying the specific productivity of an area by an ore/waste factor.

4.2.3 GKZ System Statements

The Company reports its estimates using the GKZ System and the most up to date complete statements (the “**GKZ System Statements**”) available as at the date of this report are those derived for the annual 8GR reports which give the status as of 31 December 2019. The 8GR reports are also supported by TO-25 production reports and Balanced Movement reports with the 8GR reports being a statutory requirement filed with the GoK. These estimates were produced using classical Kazakh techniques and are essentially based on calculations made in previous years adjusted for mining during 2019. This section therefore comments primarily on the GKZ System Statements.

The A and B categories are the highest confidence in the GKZ System categories and are only used where the stated tonnage and grade estimates are considered to be known to a very high degree of accuracy. The C1 and C2 categories are lower confidence categories, with C2 denoting the least level of confidence of the four categories. All of these categories are considered by the Company to be appropriate for use in supporting mining plans and feasibility studies.

The actual resource classification assigned to each resource block considers the exploration grid and the complexity of the deposit. The complexity is determined using the characteristics of the deposits which reflects the ore/waste factor, the grade variability and the thickness

variability.

According to the industry standard the complexity can vary from 1 to 4 (4 being most complex). All of the deposits of the Syrdarya and Shu-Sarysu basins, except for Zarechnoye have been classified as complexity 2 while the Zarechnoye deposit after the start of production was downgraded to a complexity of 3.

In the case of the Company, blocks are rarely assigned to the A or B category and so the vast majority of the resources reported by the Company are in the C1 and C2 categories, the typical drilling grid used to support a C2 classification being 400m to 800m by 50m to 100m and that for C1 being 200m by 50m.

Table 4-1 below summarises SRK's understanding of the resource statements prepared by the Company to reflect the status of its assets as of 31 December 2019. The information used to derive this was sourced from the 8GR reports which the Company is required to submit to the GoK on an annual basis. Typically, the Company reports the contained U (not U₃O₈ as is typically used in Europe and the United States for example) and not tonnes and grade. SRK notes that all of the estimates given below reflect the resource remaining at each asset on an aggregated basis and not just the portion attributable to the Company.

SRK has reviewed the estimation methodology used by the Company to derive the above estimates and the geological assumptions made and considers these to be reasonable given the information available. SRK has also undertaken various re-calculations of the remaining resource using actual mining statistics from TO-25 reports, 8GR reports and resource depletion reports and has in all cases found no material errors or omissions. Given this, SRK considers the resource estimates reported by the Company to be a reasonable reflection of the total quantity and quality of material demonstrated to be present at the assets as of 31 December 2018 and to have been reported appropriately using the GKZ System.

Table 4-1: Company's GKZ System Statement (Aggregated basis) as at 31 December 2019 (tonnes contained U)

Entity/Deposit	GKZ System Statement						
	A (tU)	B (tU)	C1 (tU)	C2 (tU)	Subtotal (tU)	P1 (tU)	Total (tU)
Kazatomprom-SaUran LLP							
Uvanas	-	-	-	-	-	-	-
Eastern Mynkuduk	-	-	4,132	2,360	6,491	-	6,491
Kanzhugan	-	-	10,263	5,686	15,949	-	15,949
South Moinkum (Southern part)	-	-	-	351	351	-	351
Central Moinkum	-	-	4,235	7,191	11,426	-	11,426
Total	-	-	18,630	15,588	34,218	-	34,218
Ortalyk LLP							
Zhalpak	-	-	8,058	6,249	14,307	-	14,307
Central Mynkuduk	-	-	20,638	5,469	26,106	-	26,106
Total	-	-	28,696	11,718	40,413	-	40,413
RU-6 LLP							
Northern Karamurun	-	-	5,886	1,191	7,077	-	7,077
Southern Karamurun	-	-	5,799	4,556	10,356	-	10,356
Total	-	-	11,685	5,747	17,433	-	17,433
Appak LLP							
Western Mynkuduk	-	-	3,296	14,601	17,898	-	17,898
JV Inkai LLP							
Block 1 Inkai (a)	-	741	26,418	5,661	32,820	-	32,820
Block 1 Inkai (b)	-	-	18,252	41,909	60,162	-	60,162
Block 1 Inkai (c)	-	-	36,619	8,496	45,115	-	45,115
Total	-	-	81,290	56,066	138,097	-	138,097
Semizbai-U LLP							
Semizbai	-	-	9,194	2,862	12,056	-	12,056
Irkol	-	-	8,138	12,753	20,891	-	20,891
Total	-	-	17,332	15,615	32,947	-	32,947
JV Akbastau JSC							
Block 1 Budenovskoye	-	-	9,569	4,636	14,205	-	14,205
Block 3 Budenovskoye	-	-	14,871	5,355	20,226	-	20,226
Block 4 Budenovskoye	-	-	3,250	3,554	6,804	-	6,804
Total	-	-	27,690	13,545	41,235	-	41,235
Karatau LLP							
Block 2 Budenovskoye	-	-	26,587	17,475	44,063	-	44,063
JV Zarechnoye JSC							
Zarechnoye	-	88	6,177	2,319	8,584	-	8,584
JV Katco LLP							

Entity/Deposit			GKZ System Statement		Subtotal (tU)	P1 (tU)	Total (tU)
	A (tU)	B (tU)	C1 (tU)	C2 (tU)			
Southern Moinkum (Northern part)	-	-	5,868	2,755	8,623	-	8,623
Tortkuduk	-	-	23,221	25,162	48,382	-	48,382
Total	-	-	29,088	27,917	57,005	-	57,005
JV Khorassan-U LLP							
Block Kharassan 1, North Kharassan	-	-	11,921	28,039	39,960	-	39,960
JV SMCC LLP							
Akdala	-	-	3,197	1,343	4,539	-	4,539
Block 4, Inkai	-	-	43,434	34,963	78,398	2,158	80,556
Total	-	-	46,631	36,306	82,937	2,158	85,095
Baiken-U LLP							
Block Kharassan 2, North Kharassan	-	-	11,045	8,698	19,744	-	19,744
Kazatomprom							
Block 2 Inkai	-	-	-	42,004	42,004	-	42,004
Block 3 Inkai	-	-	40,402	42,734	83,137	-	83,137
Total	-	-	40,402	84,739	125,141	-	125,141
Budenovskoye LLP							
Block 6 Budenovskoye	-	-	-	-	-	7,558	7,558
Block 7 Budenovskoye	-	-	-	32,665	32,665	11,938	44,603
Total	-	-	-	32,665	32,665	19,495	52,160
Grand Total	-	88	360,471	371,040	732,340	21,653	753,994
Regional							
Shu-Sarysu	-	741	302,311	310,621	613,673	21,653	635,326
Syrdarya	-	88	50,022	47,667	97,776	-	97,776
Northern Kazakhstan	-	-	8,138	12,753	20,891	-	20,891
Total	-	829	360,471	371,040	732,340	21,653	753,994

4.3 Audit Methodology and Approach

SRK has reviewed the reports which provide the details of exploration process for each of the deposits, the exploration process being in general the same for all of these and considers that the selected method of exploration is effective and sufficient for all of the deposits at the Mineral Assets as reported herein.

While the technique of estimating the uranium grade from gamma logging data has been well developed and applied, the challenge when using this technique is the derivation of the various correction factors required to be applied when calculating the uranium grade from gamma data. For most of the parameters, such as thorium and potassium content and density, such approach is quite acceptable as these parameters have a low variability. On the other hand, radon release and disequilibrium have a high variability, notably in this case within the deposits of Syrdarya and Shu-Sarysu provinces (between 0.4 and 1.55), and the behaviour of these coefficients is therefore quite complex. While work to determine the relationship between the disequilibrium rate and lithology and mineralisation has been carried out, the Company has typically used an average correction factor for radon release and disequilibrium either for the whole deposit or for areas of the deposit.

In SRK's opinion, the use of an average in this manner can result in the underestimation (more common) or overestimation of the uranium grade in certain areas of the deposit and so while on average the assumed uranium grades will be reliable it does mean that variations exist which have not been modelled and this results in some blocks experiencing lower extraction factors than envisaged and some higher (sometimes exceeding 100%).

Notwithstanding the above comment on variations within individual deposits, overall SRK considers that the exploration approach followed by the Company has been appropriate and specifically aimed at collecting the data appropriate to the estimation of uranium resources and that sufficient data of sufficient quality has been collected to support the resource estimates as derived by the Company and as presented here.

SRK has re-classified the resource estimates in accordance with the terms and definitions proposed in the JORC Code. Definitions for the different categories used by this reporting code are given in the glossary provided in the 2019 CPR. In doing this, SRK has typically reported those blocks classified as B or C1 by the Company as Measured and those blocks classified as C2 by the Company as Indicated.

Notwithstanding the above SRK has, in specific instances adjusted the above approach to account for:

- Cases where the production blocks delineated by production drilling have been consistently different ($\pm 20\%$) to the original resource, even where there was not a systematic bias. In these cases, SRK has classified the C1 mineralisation as Indicated and only that part of the C1 which has been delineated by production drilling as Measured.
- Cases where the drilling undertaken as part of the production process has consistently delineated less resource than originally estimated (notably at Zarechnoye). In these cases, SRK has reduced the estimated resource by a factor reflecting this and where the reconciliation has been poor or variable SRK has re-reported blocks classed as C1 by the Company as Indicated and C2 by the Company as Inferred. In the case of Zarechnoye, SRK applied a factor of 0.7. For the 31 December 2019 statements the adjustment to Zarechnoye reflects a deduction of 3,157tU;
- Cases where the current GKZ statements comprise elements which SRK consider should be excluded due to infrastructural constraints or historically mined areas comprising remnant blocks, the potential extraction of which is considered technically challenging and/or not economic at currently assumed commodity prices. In these cases, SRK has made certain adjustments which collectively represent a negative adjustment of 14,838tU comprising: Semizbai (1,584tU); Irkol (5,174tU); Eastern Mynkuduk (1,065tU); Kanzhugan (4,426tU); South Karamurun (424tU); and North Karamurun (2,165tU); and
- Cases where 'Prognostic' P1 Mineral Resources have been defined: These have either been:
 - Considered sufficiently defined to support reporting as Inferred Mineral Resources, specifically Block 4, Inkai, or
 - Considered insufficiently defined to consider inclusion as Inferred Mineral Resources, notably Budenovskoye Block 6 which reports 7,558tU and Budenovskoye Block 7 which reports 11,938tU in accordance with the GKZ System.

SRK's audited Mineral Resource statements are reported inclusive of those Mineral Resources converted to Ore Reserves. The audited Ore Reserve is therefore a subset of the Mineral Resource and should not therefore be considered as additional to this.

SRK has not attempted to optimise the Company's LoMps. Consequently, SRK's audited Mineral Resource statements are confined to those areas that both have the potential to be mined economically and which are currently being considered for mining only. They also reflect the quantity of in-situ uranium planned to be extracted and do not take account of metallurgical recovery both as part of the in-situ leaching process and within the plant itself which typically varies between 80% and 90%.

4.4 Mineral Resources and Ore Reserve Statements

The Mineral Resource and Ore Reserve statements reported in this Audit Letter result from a review of all available information provided by the Company to support the updating of the Mineral Resource and Ore Reserve statements as previously reported in the 2019 CPR.

4.4.1 Mineral Resources

As at 31 December 2019 the aggregated Mineral Resources for the Mineral Assets (Table 4-2; Table 4-3) total 1,332.4Mt grading 0.054%U and containing 716.2ktU and comprising:

- Measured Mineral Resources of 570.2Mt grading 0.058%U and containing 331.6ktU;
- Indicated Mineral Resources of 755.6Mt grading 0.050%U and containing 381.5ktU; and

- Inferred Mineral Resources of 6.7Mt grading 0.045%U and containing 3.0ktU.

As at 31 December 2019 the attributable Mineral Resources for the Mineral Assets (Table 4-4) total 907.0Mt grading 0.051%U and containing 462.4ktU comprising Measured and Indicated Mineral Resources of 904.6Mt grading 0.051%U and containing 461.4ktU.

Figure 4-1 provides a graphical representation of the contribution of the Mining Subsidiaries and the reporting categories within each of the Mining Subsidiaries to the aggregated Mineral Resources reported in the 2019 Statements.

Table 4-2: SRK Audited Mineral Resource Statement (Measured and Indicated) as at 31 December 2019 by Mining Subsidiary and Regional sub-division

Entity/Deposit	Measured Mineral Resources			Indicated Mineral Resources			Measured + Indicated Mineral Resources		
	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)
Kazatomprom-SaUran LLP									
Uvanas	-	-	-	-	-	-	-	-	-
Eastern Mynkuduk	11.4	0.030	3.4	6.7	0.030	2.0	18.1	0.030	5.4
Kanzhugan	3.1	0.042	1.3	26.9	0.038	10.2	30.0	0.038	11.5
South Moinkum (Southern part)	-	-	-	-	-	-	-	-	-
Central Moinkum	0.5	0.056	0.3	19.2	0.058	11.1	19.7	0.058	11.4
Total	15.0	0.033	5.0	52.8	0.044	23.4	67.8	0.042	28.4
Ortalyk LLP									
Zhalpak	0.3	0.045	0.1	44.3	0.032	14.2	44.6	0.032	14.3
Central Mynkuduk	43.9	0.047	20.6	14.4	0.038	5.5	58.3	0.045	26.1
Total	44.2	0.047	20.8	58.7	0.033	19.6	102.9	0.039	40.4
RU-6 LLP									
Northern Karamurun	5.5	0.069	3.8	2.2	0.050	1.1	7.7	0.064	4.9
Southern Karamurun	6.9	0.081	5.6	4.9	0.089	4.3	11.8	0.084	9.9
Total	12.4	0.076	9.4	7.1	0.077	5.4	19.5	0.076	14.8
Appak LLP									
Western Mynkuduk	10.3	0.032	3.3	40.6	0.036	14.6	50.9	0.035	17.9
JV Inkai LLP									
Block 1 Inkai (a)	35.4	0.076	26.9	9.7	0.061	5.9	45.1	0.073	32.8
Block 1 Inkai (b)	32.1	0.051	16.3	82.7	0.053	43.8	114.7	0.052	60.2
Block 1 Inkai (c)	77.9	0.047	36.6	17.3	0.049	8.5	95.3	0.047	45.1
Total	145.4	0.055	79.9	109.7	0.053	58.2	255.1	0.054	138.1
Semizbai-U LLP									
Semizbai	16.1	0.057	9.2	2.4	0.053	1.3	18.5	0.056	10.5
Irkol	19.8	0.041	8.1	18.0	0.042	7.6	37.9	0.041	15.7
Total	36.0	0.048	17.3	20.5	0.043	8.9	56.4	0.046	26.2
JV Akbastau JSC									
Block 1 Budenovskoye	8.9	0.107	9.6	5.3	0.088	4.6	14.2	0.100	14.2
Block 3 Budenovskoye	20.9	0.071	14.9	5.4	0.100	5.4	26.3	0.077	20.2
Block 4 Budenovskoye	2.3	0.141	3.3	4.2	0.084	3.6	6.5	0.104	6.8
Total	32.2	0.086	27.7	14.9	0.091	13.5	47.0	0.088	41.2
Karatau LLP									
Block 2 Budenovskoye	27.4	0.097	26.6	27.7	0.063	17.5	55.1	0.080	44.1
JV Zarechnoye JSC									
Zarechnoye	4.3	0.060	2.6	3.4	0.060	2.0	7.7	0.060	4.6
JV Katco LLP									
Southern Moinkum (Northern part)	9.3	0.063	5.9	4.8	0.057	2.8	14.1	0.061	8.6
Tortkuduk	19.0	0.122	23.2	21.3	0.118	25.2	40.4	0.120	48.4
Total	28.3	0.103	29.1	26.2	0.107	27.9	54.5	0.105	57.0
JV Khorassan-U LLP									
Block Kharassan 1, North Kharassan	11.2	0.106	11.9	26.2	0.107	28.0	37.5	0.107	40.0
JV SMCC LLP									
Akdala	5.6	0.057	3.2	2.4	0.057	1.3	8.0	0.057	4.5
Block 4, Inkai	107.8	0.040	43.4	86.5	0.040	35.0	194.3	0.040	78.4
Total	113.4	0.041	46.6	88.8	0.041	36.3	202.3	0.041	82.9
Baiken-U LLP									
Block Kharassan 2, North Kharassan	9.7	0.114	11.0	8.0	0.109	8.7	17.7	0.112	19.7
Kazatomprom									
Block 2 Inkai	-	-	-	133.8	0.031	42.0	133.8	0.031	42.0
Block 3 Inkai	80.3	0.050	40.4	92.1	0.046	42.7	172.3	0.048	83.1
Total	80.3	0.050	40.4	225.9	0.038	84.7	306.1	0.041	125.1
Budenovskoye LLP									
Block 6 Budenovskoye	-	-	-	-	-	-	-	-	-
Block 7 Budenovskoye	-	-	-	45.3	0.072	32.7	45.3	0.072	32.7
Total	-	-	-	45.3	0.072	32.7	45.3	0.072	32.7
Grand Total	570.2	0.058	331.6	755.6	0.050	381.5	1,325.7	0.054	713.2
Regional									
Shu-Sarysu	496.5	0.056	279.3	690.5	0.048	328.5	1,187.0	0.051	607.8
Syrdarya	57.5	0.075	43.1	62.6	0.083	51.8	120.2	0.079	94.9
Northern Kazakhstan	16.1	0.057	9.2	2.4	0.053	1.3	18.5	0.056	10.5
Total	570.2	0.058	331.6	755.6	0.050	381.5	1,325.7	0.054	713.2

Table 4-3: SRK Audited Mineral Resource Statement (Inferred and Total) as at 31 December 2019 by Mining Subsidiary

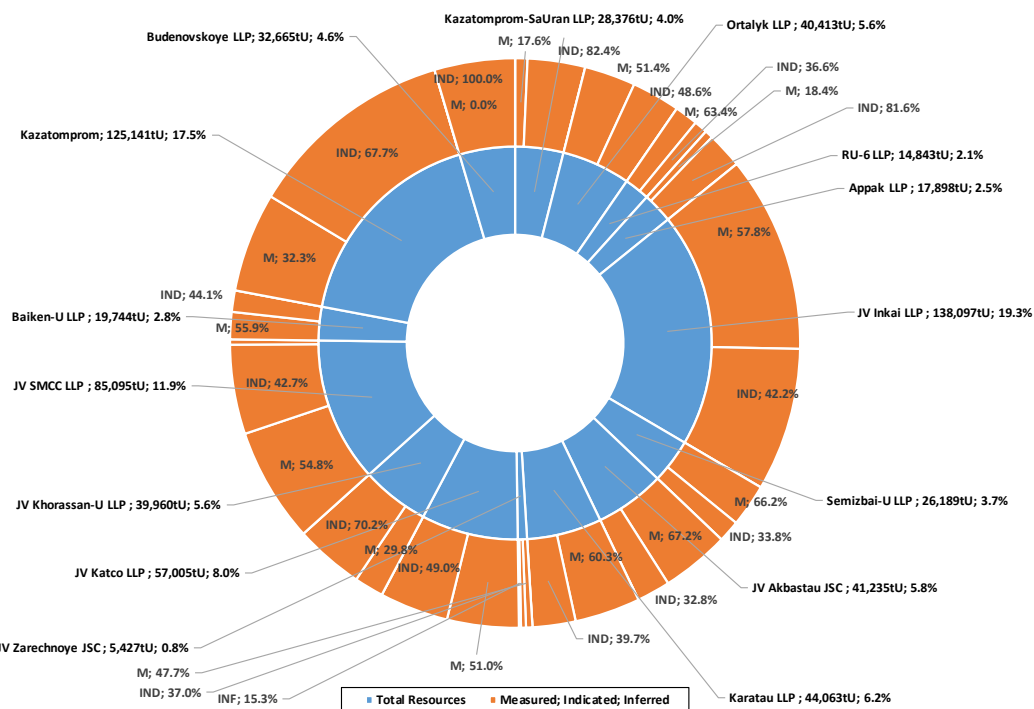
Mining Subsidiary /Deposit	Inferred Mineral resources			Total Mineral Resources		
	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)
Kazatomprom-SaUran LLP						
Uvanas	-	-	-	-	-	-
Eastern Mynkuduk	-	-	-	18.1	0.030	5.4
Kanzhugan	-	-	-	30.0	0.038	11.5
South Moinkum (Southern part)	-	-	-	-	-	-
Central Moinkum	-	-	-	19.7	0.058	11.4
Total	-	-	-	67.8	0.042	28.4
Ortalyk LLP						
Zhalpak	-	-	-	44.6	0.032	14.3
Central Mynkuduk	-	-	-	58.3	0.045	26.1
Total	-	-	-	102.9	0.039	40.4
RU-6 LLP						
Northern Karamurun	-	-	-	7.7	0.064	4.9
Southern Karamurun	-	-	-	11.8	0.084	9.9
Total	-	-	-	19.5	0.076	14.8
Appak LLP						
Western Mynkuduk	-	-	-	50.9	0.035	17.9
JV Inkai LLP						
Blocks 1, Inkai (a)	-	-	-	45.1	0.073	32.8
Blocks 1, Inkai (b)	-	-	-	114.7	0.052	60.2
Blocks 1, Inkai (c)	-	-	-	95.3	0.047	45.1
Total	-	-	-	255.1	0.054	138.1
Semizbai-U LLP						
Semizbai	-	-	-	18.5	0.056	10.5
Irkol	-	-	-	37.9	0.041	15.7
Total	-	-	-	56.4	0.046	26.2
JV Akbastau JSC						
Block 1 Budenovskoye	-	-	-	14.2	0.100	14.2
Block 3 Budenovskoye	-	-	-	26.3	0.077	20.2
Block 4 Budenovskoye	-	-	-	6.5	0.104	6.8
Total	-	-	-	47.0	0.088	41.2
Karatau LLP						
Block 2, Budenovskoye	-	-	-	55.1	0.080	44.1
JV Zarechnoye JSC						
Zarechnoye	1.7	0.049	0.8	9.4	0.058	5.4
JV Katco LLP						
Southern Moinkum (Northern part)	-	-	-	14.1	0.061	8.6
Tortkuduk	-	-	-	40.4	0.120	48.4
Total	-	-	-	54.5	0.105	57.0
JV Khorassan-U LLP						
Block Kharassan 1, North Kharassan	-	-	-	37.5	0.107	40.0
JV SMCC LLP						
Akdala	-	-	-	8.0	0.057	4.5
Block 4, Inkai	5.0	0.043	2.2	199.3	0.040	80.6
Total	5.0	0.043	2.2	207.2	0.041	85.1
Baiken-U LLP						
Block Kharassan 2, North Kharassan	-	-	-	17.7	0.112	19.7
Kazatomprom						
Block 2 Inkai	-	-	-	133.8	0.031	42.0
Block 3 Inkai	-	-	-	172.3	0.048	83.1
Total	-	-	-	306.1	0.041	125.1
Budenovskoye LLP						
Block 6 Budenovskoye	-	-	-	-	-	-
Block 7 Budenovskoye	-	-	-	45.3	0.072	32.7
Total	-	-	-	45.3	0.072	32.7
Grand Total	6.7	0.045	3.0	1,332.4	0.054	716.2
Regional						
Shu-Sarysu	5.0	0.043	2.2	1,192.0	0.051	610.0
Syrdarya	1.7	0.049	0.8	121.9	0.079	95.7
Northern Kazakhstan	-	-	-	18.5	0.056	10.5
Total	6.7	0.045	3.0	1,332.4	0.054	716.2

Table 4-4: SRK Audited Mineral Resource Statement (Attributable) as at 31 December 2019 by Mining Subsidiary

Mining Subsidiary /Deposit	Equity Interest (%)	Uranium Mining Province	Attributable Measured + Indicated			Attributable Total Mineral Resources		
			(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)
Kazatomprom-SaUran LLP								
Uvanas	100.00	Shu-Sarysu	-	-	-	-	-	-
Eastern Mynkuduk		Shu-Sarysu	18.1	0.030	5.4	18.1	0.030	5.4
Kanzhugan		Shu-Sarysu	30.0	0.038	11.5	30.0	0.038	11.5
South Moinkum (Southern part)		Shu-Sarysu	-	-	-	-	-	-
Central Moinkum		Shu-Sarysu	19.7	0.058	11.4	19.7	0.058	11.4
Total			67.8	0.042	28.4	67.8	0.042	28.4
Ortalyk LLP								
Zhalpak	100.00	Shu-Sarysu	44.6	0.032	14.3	44.6	0.032	14.3
Central Mynkuduk		Shu-Sarysu	58.3	0.045	26.1	58.3	0.045	26.1
Total			102.9	0.039	40.4	102.9	0.039	40.4
RU-6 LLP								
Northern Karamurun	100.00	Syrdarya	7.7	0.064	4.9	7.7	0.064	4.9
Southern Karamurun		Syrdarya	11.8	0.084	9.9	11.8	0.084	9.9

Mining Subsidiary /Deposit	Equity Interest (%)	Uranium Mining Province	Attributable Measured + Indicated			Attributable Total Mineral Resources		
			(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)
Total			19.5	0.076	14.8	19.5	0.076	14.8
Appak LLP	65.00							
Western Mynkuduk		Shu-Sarysu	33.1	0.035	11.6	33.1	0.035	11.6
JV Inkai LLP	60.00							
Blocks 1, Inkai (a)		Shu-Sarysu	27.1	0.073	19.7	27.1	0.073	19.7
Blocks 1, Inkai (b)		Shu-Sarysu	68.8	0.052	36.1	68.8	0.052	36.1
Blocks 1, Inkai (c)		Shu-Sarysu	57.2	0.047	27.1	57.2	0.047	27.1
Total			153.0	0.054	82.9	153.0	0.054	82.9
Semizbai-U LLP	51.00							
Semizbai		Northern Kazakhstan	9.5	0.056	5.3	9.5	0.056	5.3
Irkol		Syrdarya	19.3	0.041	8.0	19.3	0.041	8.0
Total			28.8	0.046	13.4	28.8	0.046	13.4
JV Akbastau JSC	50.00							
Block 1 Budenovskoye		Shu-Sarysu	7.1	0.100	7.1	7.1	0.100	7.1
Block 3 Budenovskoye		Shu-Sarysu	13.2	0.077	10.1	13.2	0.077	10.1
Block 4 Budenovskoye		Shu-Sarysu	3.3	0.104	3.4	3.3	0.104	3.4
Total			23.5	0.088	20.6	23.5	0.088	20.6
Karatau LLP	50.00							
Block 2, Budenovskoye		Shu-Sarysu	27.6	0.080	22.0	27.6	0.080	22.0
JV Zarechnoye JSC	49.98							
Zarechnoye ⁽⁹⁾		Syrdarya	3.8	0.060	2.3	4.7	0.058	2.7
JV Katco LLP	49.00							
Southern Moinkum (Northern part)		Shu-Sarysu	6.9	0.061	4.2	6.9	0.061	4.2
Tortkuduk		Shu-Sarysu	19.8	0.120	23.7	19.8	0.120	23.7
Total			26.7	0.105	27.9	26.7	0.105	27.9
JV Khorassan-U LLP	50.00							
Block Kharassan 1, North Kharassan		Syrdarya	18.7	0.107	20.0	18.7	0.107	20.0
JV SMCC LLP	30.00							
Akdala		Shu-Sarysu	2.4	0.057	1.4	2.4	0.057	1.4
Block 4, Inkai		Shu-Sarysu	58.3	0.040	23.5	59.8	0.040	24.2
Total			60.7	0.041	24.9	62.2	0.041	25.5
Baiken-U LLP	52.50							
Block Kharassan 2, North Kharassan		Syrdarya	9.3	0.112	10.4	9.3	0.112	10.4
Kazatomprom	100.00							
Block 2 Inkai		Shu-Sarysu	133.8	0.031	42.0	133.8	0.031	42.0
Block 3 Inkai		Shu-Sarysu	172.3	0.048	83.1	172.3	0.048	83.1
Total			306.1	0.041	125.1	306.1	0.041	125.1
Budenovskoye LLP	51.00							
Block 6 Budenovskoye		Shu-Sarysu	-	-	-	-	-	-
Block 7 Budenovskoye		Shu-Sarysu	23.1	0.072	16.7	23.1	0.072	16.7
Total			23.1	0.072	16.7	23.1	0.072	16.7
Grand Total			904.6	0.051	461.4	907.0	0.051	462.4
Regional								
Shu-Sarysu			824.5	0.049	400.5	826.0	0.049	401.2
Syrdarya			60.8	0.087	52.8	61.6	0.086	53.2
Northern Kazakhstan			19.3	0.041	8.0	19.3	0.041	8.0
Total			904.6	0.051	461.4	907.0	0.051	462.4

Figure 4-1: Mineral Resource distribution by Mining Subsidiary and classification category as at 31 December 2019



4.4.2 Ore Reserves

The tables below present SRK's audited Ore Reserve statements which are reported in accordance with the terms and definitions of the JORC Code. It should be noted that these statements cover the operating Mineral Assets only as none of the exploration projects (inclusive of part of Block 4 Inkai, Block 2 Inkai, Block 3 Inkai, Block 6 Budenovskoye and Block 7 Budenovskoye) are sufficiently advanced in terms of drilling and technical assessment to enable the reporting of Ore Reserves.

These statements reflect the audited Mineral Resource Statements above but have been restricted to mineralisation planned to be exploited according to the LoMps developed by the Company and are supported by the mine project documents which are in turn based on its licence/contract agreements.

Notwithstanding this, in some cases these statements assume mining will continue subsequent to the expiry of the current contract in place with GoK reflecting SRK's understanding that it would be highly unlikely that these would not be extended ahead of the expiry date assuming that the Company has fulfilled all of its contractual requirements to that point.

The Ore Reserve statements reflect the total quantity of in-situ uranium planned to be mined and do not take account of metallurgical recovery both as part of the in-situ leaching process and within the surface processing plants themselves which typically varies between 80% and 90%.

As part of its review process, SRK has compared the planned contractual recovery figures with actual recoveries achieved for each deposit for the depleted blocks which were presented by the Company in its TO-25 reports (these documents give a detailed analysis of the blocks which were extracted during last few years therefore do not represent the whole mining statistics for the deposit). For the deposits where mining had recently been started or have not started yet the recovery statistic is not representative and was not considered (Table 4-5). In general, the recovery into solution is close to the predicted figures and most often higher. Actual recoveries higher than 85% to 90% are usually typical for the deposits with long extraction history and could be explained by acid spreading or disequilibrium issues.

Table 4-5: Planned contractual recovery and historical recovery

Company	Reporting Region	Deposit	Extraction	
			Historical (%)	Contractual (%)
JV SMCC LLP	Shu-Sarysu Basin	Akdala	102.00	90.00
JV SMCC LLP	Shu-Sarysu Basin	Block 4, 4	91.00	90.00
Semizbai-U LLP	Syrdarya Basin	Irkol	93.00	90.00
Semizbai-U LLP	Northern Kazakhstan	Semizbai	85.00	85.00
Appak LLP	Shu-Sarysu Basin	Western Mynkuduk	86.00	90.00
JV Inkai LLP	Shu-Sarysu Basin	Inkai 1 (a)	88.00	85.00
JV Inkai LLP	Shu-Sarysu Basin	Inkai 1 (b)	101.00	85.00
JV Inkai LLP	Shu-Sarysu Basin	Inkai 1 (c)	85.00	85.00
JV Khorassan LLP	Syrdarya Basin	Block 1 Kharassan, North Kharassan	117.00	90.00
Baiken-U LLP	Syrdarya Basin	Block 2 Kharassan, North Kharassan	93.00	90.00
JV Zarechnoye JSC	Syrdarya Basin	Zarechnoye	86.00	80.00
JV Katco LLP	Shu-Sarysu Basin	Southern Moinkum (Northern Part)	81.00	90.00
JV Katco LLP	Shu-Sarysu Basin	Tortkuduk	87.00	90.00
Karatau LLP	Shu-Sarysu Basin	Block 2, Budenovskoye	90.00	90.00
JV Akbastau JSC	Shu-Sarysu Basin	Block 1, Budenovskoye	95.00	90.00
JV Akbastau JSC	Shu-Sarysu Basin	Block 3, Budenovskoye	89.00	85.00
JV Akbastau JSC	Shu-Sarysu Basin	Block 4, Budenovskoye	86.60	85.00
Kazatomprom-SaUran LLP	Shu-Sarysu Basin	Uvanas	n/a	100.00
Kazatomprom-SaUran LLP	Shu-Sarysu Basin	Eastern Mynkuduk	91.00	90.00
Kazatomprom-SaUran LLP	Shu-Sarysu Basin	Kanzhugan	100.00	90.00
Kazatomprom-SaUran LLP	Shu-Sarysu Basin	South Moinkum (Southern Part)	79.00	85.00
Kazatomprom-SaUran LLP	Shu-Sarysu Basin	Central Moinkum	85.00	85.00
Ortalyk LLP	Shu-Sarysu Basin	Zhalpak	n/a	90.00
Ortalyk LLP	Shu-Sarysu Basin	Central Mynkuduk	85.00	90.00
RU-6 LLP	Syrdarya Basin	Southern Karamurun	98.00	93.00
RU-6 LLP	Syrdarya Basin	Northern Karamurun	99.00	90.00

Table 4-6 provide details relating to the determination of relative cut-off grades for each Mining

Subsidiary including operating expenditure, sales price assumptions, price discounts, realised prices, overall recovery factors, Ore Reserve (2P) cut-off grades, Mineral Resource (3R: assuming a 30% price premium) which are juxtaposed against the average grade mined in each of the Mining Subsidiaries over the LoMp. This indicates that the margin expressed by the Ore Reserve average grade over the Ore Reserve cut-off-grade ranges from a low of 20% to a high of 75% at currently assumed average LoMp assumptions.

Table 4-6: Cut-off Grade analysis for the Mineral Assets as reported in the 2019 CPR but adjusted for current Long Term Price CMF assumptions

Entity/Deposit	Opex (US\$/t)	Sales Price (US\$/lbU ₃ O ₈)	Price Discount (%)	Realised Price (US\$/lbU ₃ O ₈)	MRF	2P-OCOG (%U)	3R-OCOG (%U)	2PGrade (%U)
Kazatomprom-SaUran LLP	18.65	35.50	-	35.10	88.09	0.032	0.025	0.042
Ortalyk LLP	11.62	35.50	-	32.80	88.82	0.020	0.015	0.045
RU-6 LLP	30.91	35.50	-	34.24	89.85	0.052	0.040	0.076
Appak LLP	12.77	35.50	3.50	34.22	90.00	0.022	0.017	0.035
JV Inkai LLP	10.87	35.50	3.50	37.54	85.00	0.020	0.015	0.054
Semizbai-U LLP	16.68	35.50	3.50	35.14	86.78	0.030	0.023	0.046
JV Akbastau JSC	13.27	35.50	3.50	35.11	86.73	0.024	0.018	0.088
Karatau LLP	11.04	35.50	3.50	32.29	90.00	0.019	0.015	0.080
JV Zarechnoye JSC	19.10	35.50	3.50	27.39	78.80	0.038	0.029	0.060
JV Katco LLP	21.70	35.50	3.50	31.91	90.00	0.038	0.029	0.105
JV Khorassan-U LLP	26.60	35.50	3.50	32.93	89.48	0.046	0.036	0.107
JV SMCC LLP	8.44	35.50	3.50	33.12	90.00	0.015	0.011	0.043
Baiken-U LLP	26.00	35.50	3.50	29.98	90.00	0.045	0.035	0.112

The current sales contracts between the Company, its Joint Venture partners and the Mining Subsidiary companies are subject to various sales contracts whereby the attributable sales price assumptions are subject to various adjustments. These adjustments are incorporated into the various governing agreements and are defined in accordance with the GoK uranium concentrate pricing regulations (effective 3 February 2011), whereby the saleable product is purchased by the JV partners at a commercial price equal to the uranium spot price, less a subsidiary specific price discount (maximum allowable). The Company has informed SRK that the specific price discounts as incorporated into each JV agreement is both confidential and as such may not be publicly disclosed. Accordingly, in conjunction with the Company SRK has determined the weighted average price discount based on a combination of the LoMp sales forecasts and the UxC price forecast. This analysis indicates that the weighted average price discount for all Mining Subsidiaries (excluding the wholly owned mining subsidiaries of Kazatomprom-SaUran LLP, Ortalyk LLP and RU-6 LLP) is approximately 3.50%. SRK has therefore been requested by the Company to incorporate the following into the forecast data as reported herein with respect to the price discount assumptions:

- For Kazatomprom-SaUran LLP, Ortalyk LLP and RU-6 LLP a price discount factor of 0.00%; and
- For all other mining subsidiaries (JV SMCC LLP; Semizbai-U LLP; Appak LLP; JV Inkai LLP; JV Khorassan-U LLP; Baiken-U LLP; JV Zarechnoye JSC; JV Katco LLP; Karatau LLP; JV Akbastau JSC: hereinafter the “**JV Companies**”) a price discount factor of 3.50%.

The determination of operating expenditures at the Mining Subsidiaries are largely based on a combination of historical and planned statistics with modifications for changed circumstances, suppliers etc as considered appropriate. In summary the process incorporates:

- Establishing labour compliments for mining, processing and G&A activities;
- Establishing unit physical consumables for mining and processing which is either related to Uranium content or PLS volumes;
- Application of unit cost rates (including transportation costs) to the determined consumable volumes for both mining and processing activities;
- Determination of additional expenditures and recovery of these expenditures in relation to services provided by one Mining Subsidiary to another, specifically processing to final product;

- Determination of refining charges for conversion of site-products to U₃O₈ (where the final site product is not U₃O₈);
- Determination of terminal benefits liabilities or retrenchment costs based on the current minimum legal requirements in Kazakhstan being 1-month salary assumed as 1/12th of the annual labour bill relating to the labour movement determination on closure.
- Determination of both other cash and non-cash costs required to establish the Mineral Extraction Tax, Exploration Depreciation, Property Tax;
- Determination of mining contract related expenditures/provisions specifically:
 - Social Commitments included within the G&A costs and based on annual costs per deposit,
 - Liquidation provisions (cash cost which is included as a capital item, is not directly tax deductible and not included in any depreciation determinations) which is based on a percentage of mining related expenditures inclusive of: direct mining costs; Mineral Extraction Tax (“MET” or royalty); mining depreciation, wellfield development depreciation (“PGR”), mining exploration depreciation. These expenditures are then accumulated and compared with the LoMp closure costs whereby any shortfall or excess is then incorporated on the last period of operations; and
- The Company has assessed its exposure of key activity cost centres to currency fluctuations and given the high local content for labour, key consumables such as acid and power the average currency exposure distributions amongst the following key site activities are considered to be appropriate: mining (95% KZT and 5% US\$); processing (80% KZT and 20% US\$); and on-site G&A (95% KZT and 5% US\$).

As at 31 December 2019, the 2019 Statements reports:

- Aggregated Ore Reserves (Table 4-7) as at 31 December 2019 of 822.2Mt grading 0.061%U and containing 498.4ktU and comprising:
 - Proved Ore Reserves of 444.5Mt grading 0.062%U and containing 274.5ktU,
 - Probable Ore Reserves of 377.7Mt grading 0.059%U and containing 223.9ktU; and
- Attributable Ore Reserves (Table 4-8) as at 31 December 2019 of 499.2Mt grading 0.059%U and containing 292.7ktU.

Figure 4-2 provides a graphical representation of the contribution of the Mining Subsidiaries and the reporting categories within each of the Mining Subsidiaries to the aggregated Ore Reserves reported in the 2019 Statements.

Table 4-7: SRK Audited Ore Reserve Statement (Proved and Probable) as at 31 December 2019 by Mining Subsidiary and Regional sub-division (Aggregated 100% basis)

Entity/Deposit	Proved Ore Reserve			Probable Ore Reserve			Total Ore Reserves		
	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)
Kazatomprom-SaUran LLP									
Uvanas	-	-	-	-	-	-	-	-	-
Eastern Mynkuduk	11.4	0.030	3.4	6.7	0.030	2.0	18.1	0.030	5.4
Kanzhugan	3.1	0.042	1.3	26.9	0.038	10.2	30.0	0.038	11.5
South Moinkum (Southern part)	-	-	-	-	-	-	-	-	-
Central Moinkum	0.5	0.056	0.3	19.2	0.058	11.1	19.7	0.058	11.4
Total	15.0	0.033	5.0	52.8	0.044	23.4	67.8	0.042	28.4
Ortalyk LLP									
Zhalpak	0.3	0.045	0.1	0.6	0.032	0.2	0.9	0.036	0.3
Central Mynkuduk	43.9	0.047	20.6	14.4	0.038	5.5	58.3	0.045	26.1
Total	44.2	0.047	20.8	15.0	0.038	5.7	59.2	0.045	26.4
RU-6 LLP									
Northern Karamurun	5.5	0.069	3.8	2.2	0.050	1.1	7.7	0.064	4.9
Southern Karamurun	6.9	0.081	5.6	4.9	0.089	4.3	11.8	0.084	9.9
Total	12.4	0.076	9.4	7.1	0.077	5.4	19.5	0.076	14.8
Appak LLP									
Western Mynkuduk	10.3	0.032	3.3	40.6	0.036	14.6	50.9	0.035	17.9

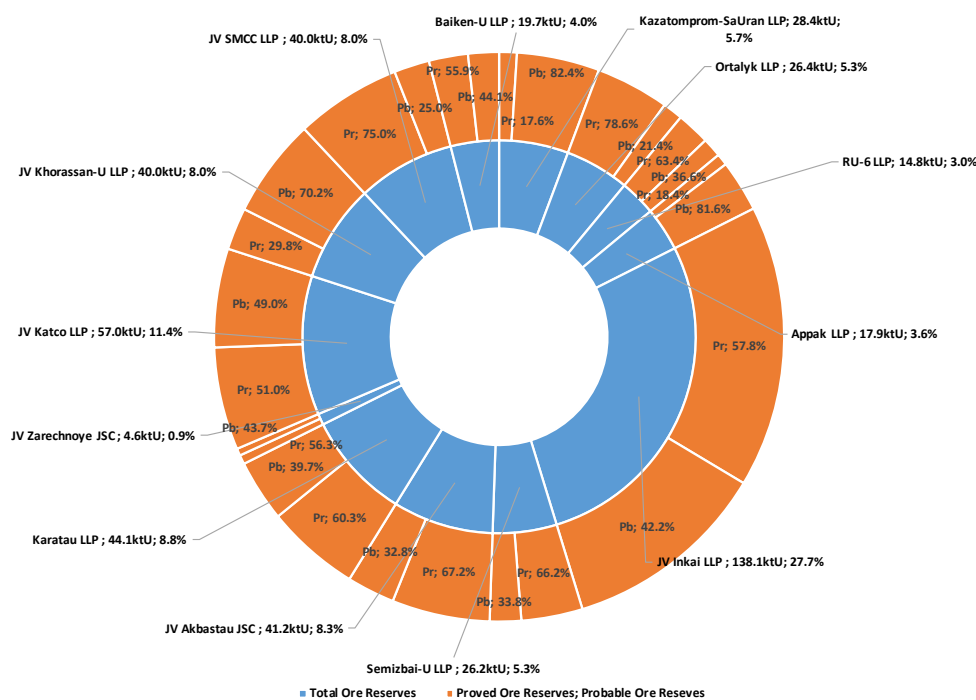
Entity/Deposit	Proved Ore Reserve			Probable Ore Reserve			Total Ore Reserves		
	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)	(Mt)	(%U)	(ktU)
JV Inkai LLP									
Block 1 Inkai (a)	35.4	0.076	26.9	9.7	0.061	5.9	45.1	0.073	32.8
Block 1 Inkai (b)	32.1	0.051	16.3	82.7	0.053	43.8	114.7	0.052	60.2
Block 1 Inkai (c)	77.9	0.047	36.6	17.3	0.049	8.5	95.3	0.047	45.1
Total	145.4	0.055	79.9	109.7	0.053	58.2	255.1	0.054	138.1
Semizbai-U LLP									
Semizbai	16.1	0.057	9.2	2.4	0.053	1.3	18.5	0.056	10.5
Irkol	19.8	0.041	8.1	18.0	0.042	7.6	37.9	0.041	15.7
Total	36.0	0.048	17.3	20.5	0.043	8.9	56.4	0.046	26.2
JV Akbastau JSC									
Block 1 Budenovskoye	8.9	0.107	9.6	5.3	0.088	4.6	14.2	0.100	14.2
Block 3 Budenovskoye	20.9	0.071	14.9	5.4	0.100	5.4	26.3	0.077	20.2
Block 4 Budenovskoye	2.3	0.141	3.3	4.2	0.084	3.6	6.5	0.104	6.8
Total	32.2	0.086	27.7	14.9	0.091	13.5	47.0	0.088	41.2
Karatau LLP									
Block 2 Budenovskoye	27.4	0.097	26.6	27.7	0.063	17.5	55.1	0.080	44.1
JV Zarechnoye JSC									
Zarechnoye	4.3	0.060	2.6	3.4	0.060	2.0	7.7	0.060	4.6
JV Katco LLP									
Southern Moinkum (Northern part)	9.3	0.063	5.9	4.8	0.057	2.8	14.1	0.061	8.6
Tortkuduk	19.0	0.122	23.2	21.3	0.118	25.2	40.4	0.120	48.4
Total	28.3	0.103	29.1	26.2	0.107	27.9	54.5	0.105	57.0
JV Khorassan-U LLP									
Block Kharassan 1, North Kharassan	11.2	0.106	11.9	26.2	0.107	28.0	37.5	0.107	40.0
JV SMCC LLP									
Akdala	5.6	0.057	3.2	2.4	0.057	1.3	8.0	0.057	4.5
Block 4, Inkai	62.5	0.043	26.8	23.4	0.037	8.7	85.9	0.041	35.4
Total	68.1	0.044	29.9	25.8	0.039	10.0	93.9	0.043	40.0
Baiken-U LLP									
Block Kharassan 2, North Kharassan	9.7	0.114	11.0	8.0	0.109	8.7	17.7	0.112	19.7
Kazatomprom									
Block 2 Inkai	-	-	-	-	-	-	-	-	-
Block 3 Inkai	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-
Budenovskoye LLP									
Block 6 Budenovskoye	-	-	-	-	-	-	-	-	-
Block 7 Budenovskoye	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-
Grand Total	444.5	0.062	274.5	377.7	0.059	223.9	822.2	0.061	498.4
Regional									
Shu-Sarysu	370.9	0.060	222.2	312.6	0.055	170.8	683.5	0.058	393.1
Syrdarya	53.8	0.082	44.2	47.0	0.097	45.5	100.8	0.089	89.6
Northern Kazakhstan	19.8	0.041	8.1	18.0	0.042	7.6	37.9	0.041	15.7
Total	444.5	0.062	274.5	377.7	0.059	223.9	822.2	0.061	498.4

Table 4-8: SRK Audited Ore Reserve Statement (Attributable) as at 31 December 2019 by Mining Subsidiary

Mining Subsidiary /Deposit	Equity Interest (%)	Uranium Mining Province	Attributable Ore Reserves	
			(Mt)	(%U) (ktU)
Kazatomprom-SaUran LLP	100.00			
Uvanas		Shu-Sarysu	-	-
Eastern Mynkuduk		Shu-Sarysu	18.1	0.030 5.4
Kanzhugan		Shu-Sarysu	30.0	0.038 11.5
South Moinkum (Southern part)		Shu-Sarysu	-	-
Central Moinkum		Shu-Sarysu	19.7	0.058 11.4
Total			67.8	0.042 28.4
Ortalyk LLP	100.00			
Zhalpak		Shu-Sarysu	0.9	0.036 0.3
Central Mynkuduk		Shu-Sarysu	58.3	0.045 26.1
Total			59.2	0.045 26.4
RU-6 LLP	100.00			
Northern Karamurun		Syrdarya	7.7	0.064 4.9
Southern Karamurun		Syrdarya	11.8	0.084 9.9
Total			19.5	0.076 14.8
Appak LLP	65.00			
Western Mynkuduk		Shu-Sarysu	33.1	0.035 11.6
JV Inkai LLP	60.00			
Blocks 1, Inkai (a)		Shu-Sarysu	27.1	0.073 19.7
Blocks 1, Inkai (b)		Shu-Sarysu	68.8	0.052 36.1
Blocks 1, Inkai (c)		Shu-Sarysu	57.2	0.047 27.1
Total			153.0	0.054 82.9
Semizbai-U LLP	51.00			
Semizbai		Northern Kazakhstan	9.5	0.056 5.3
Irkol		Syrdarya	19.3	0.041 8.0
Total			28.8	0.046 13.4
JV Akbastau JSC	50.00			
Block 1 Budenovskoye		Shu-Sarysu	7.1	0.100 7.1
Block 3 Budenovskoye		Shu-Sarysu	13.2	0.077 10.1
Block 4 Budenovskoye		Shu-Sarysu	3.3	0.104 3.4
Total			23.5	0.088 20.6
Karatau LLP	50.00			
Block 2, Budenovskoye		Shu-Sarysu	27.6	0.080 22.0
JV Zarechnoye JSC	49.98			
Zarechnoye		Syrdarya	3.8	0.060 2.3

Mining Subsidiary /Deposit	Equity Interest (%)	Uranium Mining Province	Attributable Ore Reserves		(ktU)
			(Mt)	(%U)	
JV Katco LLP	49.00				
Southern Moinkum (Northern part)		Shu-Sarysu	6.9	0.061	4.2
Tortkuduk		Shu-Sarysu	19.8	0.120	23.7
Total			26.7	0.105	27.9
JV Khorassan-U LLP	50.00				
Block Kharassan 1, North Kharassan		Syrdarya	18.7	0.107	20.0
JV SMCC LLP	30.00				
Akdala		Shu-Sarysu	2.4	0.057	1.4
Block 4, Inkai		Shu-Sarysu	25.8	0.041	10.6
Total			28.2	0.043	12.0
Baiken-U LLP	52.50				
Block Kharassan 2, North Kharassan		Syrdarya	9.3	0.112	10.4
Kazatomprom	100.00				
Block 2 Inkai		Shu-Sarysu	-	-	-
Block 3 Inkai		Shu-Sarysu	-	-	-
Total			-	-	-
Budenovskoye LLP	51.00				
Block 6 Budenovskoye		Shu-Sarysu	-	-	-
Block 7 Budenovskoye		Shu-Sarysu	-	-	-
Total			-	-	-
Grand Total Regional			499.2	0.059	292.7
Shu-Sarysu			419.1	0.055	231.9
Syrdarya			70.7	0.079	55.5
Northern Kazakhstan			9.5	0.056	5.3
Total			499.2	0.059	292.7

Figure 4-2: Ore Reserve distribution by Mining Subsidiary and classification category as at 31 December 2019



4.5 SRK Summary Comments

In SRK’s opinion the Mineral Resource and Ore Reserve statements as included herein are reported in accordance with the terms and definitions of the JORC Code and are valid as at 31 December 2019.

The differences between these estimates and those reported by the Company in accordance with the GKZ System as at 31 December 2019 are a result of:

- The removal of material, which is sterilised by surface infrastructure or which, following the design process, are no longer planned to be exploited by the Company;
- The exclusion of some of the ‘reserves’ classified as P1 in accordance with the GKZ system;

- Additional quantitative and classification adjustments made by SRK at those deposits where the production drilling has yielded results that differ materially from the exploration drilling;
- The limiting of the Ore Reserves to material supported by a LoMp; and
- Technical work undertaken by the Company during the 2019.

It should, however, be noted work is ongoing by the Company and so, in addition to normal changes in Mineral Resources and Ore Reserves as a result of production, these may also change during 2020 as this work is completed. Notably:

- The Company continues to undertake exploration at several of its operations which may enable the reporting of additional Mineral Resources to those presented in this Audit Letter;
- The Company plans to undertake further technical work on several of its operations which may enable it to convert more of its currently reported Mineral Resources as Ore Reserves; and
- The Company may negotiate changes to its contracts with the GoK and so the stated Ore Reserves may change to reflect these.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The following sections provide a summary SRK's principal findings in respect of the review of the Company's Mineral Assets as reported upon herein with specific focus on the Mineral Resource and Ore Reserves reported as at 31 December 2019.

5.2 Mineral Resources

As at the Effective Date of this Audit Letter, the total Mineral Resources (Table 5-1) reported by SRK for the Mining Subsidiaries, as at 31 December 2019, total 1,332.4Mt grading 0.054%U and containing 716.2ktU and comprising:

- Measured Mineral Resources of 570.2Mt grading 0.058%U and containing 331.6ktU;
- Indicated Mineral Resources of 755.6Mt grading 0.050%U and containing 381.5ktU; and
- Inferred Mineral Resources of 6.7Mt grading 0.045%U and containing 3.0ktU.

As at 31 December 2019 the attributable Mineral Resources for the Mineral Assets total 907.0Mt grading 0.051%U and containing 462.4ktU comprising Measured and Indicated Mineral Resources of 929.8Mt grading 0.051%U and containing 461.4ktU.

In all instances SRK concludes that:

- The Mineral Resource statements have an effective date of 31 December 2019;
- The Mineral Resources statements as reported herein are reported in accordance with the terms and definitions of the JORC Code;
- The Mineral Resources have been assessed with regards to economic potential assuming appropriate modifying factors and cut-off-grade determinations as reported in Table 4-6 and assuming a 30% premium in respect of the Long Term Prices utilised to support the reporting of Ore Reserves; and
- The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

The Competent Person who has overall responsibility for the Mineral Resources as reported herein is Dr Mike Armitage, C.Eng, C. Geol, FGS, MIMM, PhD. He is a full time employee of SRK, a corporate consultant and has over 35 years' experience in the mining and metals

industry and also has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mike Armitage has been responsible for the reporting of Mineral Resources and Ore Reserves on various properties internationally during the past 30 years.

Table 5-1: Mining Subsidiary Mineral Resources: 100% and Attributable

Classification/Mining Subsidiary	Aggregated (100%)			Equity (%)	Attributable		
	Tonnage (Mt)	Grade (%U)	Content (ktU)		Tonnage (Mt)	Grade (%U)	Content (ktU)
Measured							
Kazatomprom-SaUran LLP	15.0	0.033	5.0	100.00	15.0	0.033	5.0
Ortalyk LLP	44.2	0.047	20.8	100.00	44.2	0.047	20.8
RU-6 LLP	12.4	0.076	9.4	100.00	12.4	0.076	9.4
Appak LLP	10.3	0.032	3.3	65.00	6.7	0.032	2.1
JV Inkai LLP	145.4	0.055	79.9	60.00	87.2	0.055	47.9
Semizbai-U LLP	36.0	0.048	17.3	51.00	18.3	0.048	8.8
JV Akbastau JSC	32.2	0.086	27.7	50.00	16.1	0.086	13.8
Karatau LLP	27.4	0.097	26.6	50.00	13.7	0.097	13.3
JV Zarechnoye JSC	4.3	0.060	2.6	49.98	2.2	0.060	1.3
JV Katco LLP	28.3	0.103	29.1	49.00	13.9	0.103	14.3
JV Khorassan-U LLP	11.2	0.106	11.9	50.00	5.6	0.106	6.0
JV SMCC LLP	113.4	0.041	46.6	30.00	34.0	0.041	14.0
Baiken-U LLP	9.7	0.114	11.0	52.50	5.1	0.114	5.8
Kazatomprom	80.3	0.050	40.4	100.00	80.3	0.050	40.4
Budenovskoye LLP	-	-	-	51.00	-	-	-
Subtotal	570.2	0.058	331.6		354.8	0.057	202.9
Indicated							
Kazatomprom-SaUran LLP	52.8	0.044	23.4	100.00	52.8	0.044	23.4
Ortalyk LLP	58.7	0.033	19.6	100.00	58.7	0.033	19.6
RU-6 LLP	7.1	0.077	5.4	100.00	7.1	0.077	5.4
Appak LLP	40.6	0.036	14.6	65.00	26.4	0.036	9.5
JV Inkai LLP	109.7	0.053	58.2	60.00	65.8	0.053	34.9
Semizbai-U LLP	20.5	0.043	8.9	51.00	10.4	0.043	4.5
JV Akbastau JSC	14.9	0.091	13.5	50.00	7.4	0.091	6.8
Karatau LLP	27.7	0.063	17.5	50.00	13.9	0.063	8.7
JV Zarechnoye JSC	3.4	0.060	2.0	49.98	1.7	0.060	1.0
JV Katco LLP	26.2	0.107	27.9	49.00	12.8	0.107	13.7
JV Khorassan-U LLP	26.2	0.107	28.0	50.00	13.1	0.107	14.0
JV SMCC LLP	88.8	0.041	36.3	30.00	26.6	0.041	10.9
Baiken-U LLP	8.0	0.109	8.7	52.50	4.2	0.109	4.6
Kazatomprom	225.9	0.038	84.7	100.00	225.9	0.038	84.7
Budenovskoye LLP	45.3	0.072	32.7	51.00	23.1	0.072	16.7
Subtotal	755.6	0.050	381.5		549.9	0.047	258.5
Measured + Indicated							
Kazatomprom-SaUran LLP	67.8	0.042	28.4	100.00	67.8	0.042	28.4
Ortalyk LLP	102.9	0.039	40.4	100.00	102.9	0.039	40.4
RU-6 LLP	19.5	0.076	14.8	100.00	19.5	0.076	14.8
Appak LLP	50.9	0.035	17.9	65.00	33.1	0.035	11.6
JV Inkai LLP	255.1	0.054	138.1	60.00	153.0	0.054	82.9
Semizbai-U LLP	56.4	0.046	26.2	51.00	28.8	0.046	13.4
JV Akbastau JSC	47.0	0.088	41.2	50.00	23.5	0.088	20.6
Karatau LLP	55.1	0.080	44.1	50.00	27.6	0.080	22.0
JV Zarechnoye JSC	7.7	0.060	4.6	49.98	3.8	0.060	2.3
JV Katco LLP	54.5	0.105	57.0	49.00	26.7	0.105	27.9
JV Khorassan-U LLP	37.5	0.107	40.0	50.00	18.7	0.107	20.0
JV SMCC LLP	202.3	0.041	82.9	30.00	60.7	0.041	24.9
Baiken-U LLP	17.7	0.112	19.7	52.50	9.3	0.112	10.4
Kazatomprom	306.1	0.041	125.1	100.00	306.1	0.041	125.1
Budenovskoye LLP	45.3	0.072	32.7	51.00	23.1	0.072	16.7
Total	1,325.7	0.054	713.2		904.6	0.051	461.4
Inferred							
Kazatomprom-SaUran LLP	-	-	-	100.00	-	-	-
Ortalyk LLP	-	-	-	100.00	-	-	-
RU-6 LLP	-	-	-	100.00	-	-	-
Appak LLP	-	-	-	65.00	-	-	-
JV Inkai LLP	-	-	-	60.00	-	-	-
Semizbai-U LLP	-	-	-	51.00	-	-	-
JV Akbastau JSC	-	-	-	50.00	-	-	-
Karatau LLP	-	-	-	50.00	-	-	-
JV Zarechnoye JSC	1.7	0.049	0.8	49.98	0.8	0.049	0.4
JV Katco LLP	-	-	-	49.00	-	-	-
JV Khorassan-U LLP	-	-	-	50.00	-	-	-
JV SMCC LLP	5.0	0.043	2.2	30.00	1.5	0.043	0.6
Baiken-U LLP	-	-	-	52.50	-	-	-
Kazatomprom	-	-	-	100.00	-	-	-
Budenovskoye LLP	-	-	-	51.00	-	-	-
Subtotal	6.7	0.045	3.0		2.3	0.045	1.1
Mineral Resources							
Kazatomprom-SaUran LLP	67.8	0.042	28.4	100.00	67.8	0.042	28.4
Ortalyk LLP	102.9	0.039	40.4	100.00	102.9	0.039	40.4
RU-6 LLP	19.5	0.076	14.8	100.00	19.5	0.076	14.8
Appak LLP	50.9	0.035	17.9	65.00	33.1	0.035	11.6
JV Inkai LLP	255.1	0.054	138.1	60.00	153.0	0.054	82.9
Semizbai-U LLP	56.4	0.046	26.2	51.00	28.8	0.046	13.4

Classification/Mining Subsidiary	Aggregated (100%)			Equity (%)	Attributable		
	Tonnage (Mt)	Grade (%U)	Content (ktU)		Tonnage (Mt)	Grade (%U)	Content (ktU)
JV Akbastau JSC	47.0	0.088	41.2	50.00	23.5	0.088	20.6
Karatau LLP	55.1	0.080	44.1	50.00	27.6	0.080	22.0
JV Zarechnoye JSC	9.4	0.058	5.4	49.98	4.7	0.058	2.7
JV Katco LLP	54.5	0.105	57.0	49.00	26.7	0.105	27.9
JV Khorassan-U LLP	37.5	0.107	40.0	50.00	18.7	0.107	20.0
JV SMCC LLP	207.2	0.041	85.1	30.00	62.2	0.041	25.5
Baikent-U LLP	17.7	0.112	19.7	52.50	9.3	0.112	10.4
Kazatomprom	306.1	0.041	125.1	52.50	306.1	0.041	125.1
Budenovskoye LLP	45.3	0.072	32.7	52.50	23.1	0.072	16.7
Total	1,332.4	0.054	716.2		907.0	0.051	462.4

5.3 Ore Reserves

As at the Effective Date of this Audit Letter, the total Ore Reserves (Table 5-2) reported by SRK for the Mining Subsidiaries as at 31 December 2019, totalled 822.2Mt grading 0.061%U and containing 498.4ktU comprising:

- Proved Ore Reserves totalling 444.5Mt grading 0.062%U and containing 274.5ktU; and
- Probable Ore Reserves totalling 377.7Mt grading 0.059%U and containing 223.9ktU.

On an attributable basis (Table 5-2) the total Ore Reserves reported by SRK in this CPR for the Mining Subsidiaries totalled 499.2Mt grading 0.059%U and containing 292.7ktU comprising:

- Proved Ore Reserves totalling 260.9Mt grading 0.060%U and containing 157.5ktU; and
- Probable Ore Reserves totalling 238.3Mt grading 0.057%U and containing 135.2ktU.

In all instances SRK concludes that:

- The Ore Reserve statements have an effective date of 31 December 2019;
- The Ore Reserve statements as reported herein are reported in accordance with the terms and definitions of the JORC Code; and
- The principal technical and economic inputs relied on for reporting the Ore Reserves have been assessed for each of the Mining Subsidiaries and are reported in Table 4-6 where SRK has assumed the LTP as reflected by the latest Consensus Market Forecast which assumes US\$35.50/lbU₃O₈.

The Competent Person who has responsibility for the Ore Reserves as reported herein is Dr Iestyn Humphreys, FMIMM, AIME, PhD who is a Corporate Consultant, and Practice Leader with SRK. He is a Fellow of the IMMM which is a RPO included in a list promulgated by the ASX from time to time. Iestyn Humphreys has 30 years' experience in the mining and metals industry and also has been involved in the preparation of Competent Persons' Reports comprising technical evaluations of various mineral assets internationally during the past five years which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

Table 5-2: Mining Subsidiary Ore Reserves: Aggregated and Attributable

Classification/Mining Subsidiary	Aggregated (100%)			Equity (%)	Attributable		
	Tonnage (Mt)	Grade (%U)	Content (ktU)		Tonnage (Mt)	Grade (%U)	Content (ktU)
Proved							
Kazatomprom-SaUran LLP	15.0	0.033	5.0	100.00	15.0	0.033	5.0
Ortalyk LLP	44.2	0.047	20.8	100.00	44.2	0.047	20.8
RU-6 LLP	12.4	0.076	9.4	100.00	12.4	0.076	9.4
Appak LLP	10.3	0.032	3.3	65.00	6.7	0.032	2.1
JV Inkai LLP	145.4	0.055	79.9	60.00	87.2	0.055	47.9
Semizbai-U LLP	36.0	0.048	17.3	51.00	18.3	0.048	8.8
JV Akbastau JSC	32.2	0.086	27.7	50.00	16.1	0.086	13.8
Karatau LLP	27.4	0.097	26.6	50.00	13.7	0.097	13.3
JV Zarechnoye JSC	4.3	0.060	2.6	49.98	2.2	0.060	1.3
JV Katco LLP	28.3	0.103	29.1	49.00	13.9	0.103	14.3
JV Khorassan-U LLP	11.2	0.106	11.9	50.00	5.6	0.106	6.0
JV SMCC LLP	68.1	0.044	29.9	30.00	20.4	0.044	9.0
Baikent-U LLP	9.7	0.114	11.0	52.50	5.1	0.114	5.8
Subtotal	444.5	0.062	274.5		260.9	0.060	157.5

Classification/Mining Subsidiary	Aggregated (100%)			Equity (%)	Attributable		
	Tonnage (Mt)	Grade (%U)	Content (ktU)		Tonnage (Mt)	Grade (%U)	Content (ktU)
Probable							
Kazatomprom-SaUran LLP	52.8	0.044	23.4	100.00	52.8	0.044	23.4
Ortalyk LLP	15.0	0.038	5.7	100.00	15.0	0.038	5.7
RU-6 LLP	7.1	0.077	5.4	100.00	7.1	0.077	5.4
Appak LLP	40.6	0.036	14.6	65.00	26.4	0.036	9.5
JV Inkai LLP	109.7	0.053	58.2	60.00	65.8	0.053	34.9
Semizbai-U LLP	20.5	0.043	8.9	51.00	10.4	0.043	4.5
JV Akbastau JSC	14.9	0.091	13.5	50.00	7.4	0.091	6.8
Karatau LLP	27.7	0.063	17.5	50.00	13.9	0.063	8.7
JV Zarechnoye JSC	3.4	0.060	2.0	49.98	1.7	0.060	1.0
JV Katco LLP	26.2	0.107	27.9	49.00	12.8	0.107	13.7
JV Khorassan-U LLP	26.2	0.107	28.0	50.00	13.1	0.107	14.0
JV SMCC LLP	25.8	0.039	10.0	30.00	7.7	0.039	3.0
Baikenu-U LLP	8.0	0.109	8.7	52.50	4.2	0.109	4.6
Subtotal	377.7	0.059	223.9		238.3	0.057	135.2
Ore Reserves							
Kazatomprom-SaUran LLP	67.8	0.042	28.4	100.00	67.8	0.042	28.4
Ortalyk LLP	59.2	0.045	26.4	100.00	59.2	0.045	26.4
RU-6 LLP	19.5	0.076	14.8	100.00	19.5	0.076	14.8
Appak LLP	50.9	0.035	17.9	65.00	33.1	0.035	11.6
JV Inkai LLP	255.1	0.054	138.1	60.00	153.0	0.054	82.9
Semizbai-U LLP	56.4	0.046	26.2	51.00	28.8	0.046	13.4
JV Akbastau JSC	47.0	0.088	41.2	50.00	23.5	0.088	20.6
Karatau LLP	55.1	0.080	44.1	50.00	27.6	0.080	22.0
JV Zarechnoye JSC	7.7	0.060	4.6	49.98	3.8	0.060	2.3
JV Katco LLP	54.5	0.105	57.0	49.00	26.7	0.105	27.9
JV Khorassan-U LLP	37.5	0.107	40.0	50.00	18.7	0.107	20.0
JV SMCC LLP	93.9	0.043	40.0	30.00	28.2	0.043	12.0
Baikenu-U LLP	17.7	0.112	19.7	52.50	9.3	0.112	10.4
Total	822.2	0.061	498.4		499.2	0.059	292.7

5.4 Summary Conclusions

This Audit Letter is addressed to and may be relied upon by the Company, the Directors of the Company and its advisors in support of the declaration of Mineral Resource and Ore Reserve statements for the Mineral Assets reported in accordance with the terms and definitions of the JORC Code and reported as at 31 December 2019.

Accordingly, SRK has confirms that it:

- Accepts reliance as regards the Audit Letter for any benefit of the Company and its Advisors; and
- Takes responsibility for the Audit Letter and declares that it has taken all reasonable care to ensure that the information contained in the Audit Letter is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

SRK believes that its opinion must be considered as a whole and that selecting portions of the analysis or factors considered by it, without considering all factors and analyses together, could create a misleading view of the process underlying the opinions presented in this Audit Letter. SRK has no obligation or undertaking to advise any person of any development in relation to Mineral Assets which comes to its attention after the date of this Audit Letter or to review, revise or update the Audit Letter or opinion in respect of any such development occurring after the date of this Audit Letter.

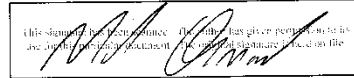
The work completed by SRK in preparing this report has enabled it to present Mineral Resource and Ore Reserve estimates for all of the Company's operating mines, Development Projects and Advanced Exploration Properties as at 31 December 2019.

The observations, comments and conclusions presented in this report represent SRK's opinion as of 12 January 2020 and are based on a review of documentation provided by the Company, site visits to all operations conducted in the authoring of the 2019 CPR, follow up site visits to review the basis of determination for the revised Mineral Resources and discussions with the Company's management and representatives. SRK cannot accept any liability, either direct or consequential for the validity of information that has been accepted in good faith.

For and behalf of SRK Consulting (UK) Limited



Dr Iestyn Humphreys,
Corporate Consultant (Due Diligence),
SRK Consulting (UK) Limited.



This signature has been produced electronically using a secure digital signature process. The original signature is available on file.

Dr Mike Armitage,
Corporate Consultant (Geology),
SRK Consulting (UK) Limited.