



ALTYN PUBLIC LIMITED COMPANY

US\$10,000,000 9.0% Bonds due 2022

The US\$10,000,000 aggregate principal amount of 9.00% Bonds due 2022 (the "Securities" or the "Bonds", and each a "Bond") of Altyin Plc (the "Company" or the "Issuer") will be issued in accordance with the Acting law of the Astana International Financial Center (the "AIFC") in the denomination of US\$100 each.

This document constitutes the Prospectus of the Bonds (the "Prospectus") described herein and is prepared for the purposes of AIFC rules. Full information on the Issuer and the offer of the Bonds is only available on the basis of this Prospectus. The Prospectus has been published on the website of the Astana International Exchange Ltd. (the "AIX") at <https://www.aix.kz>.

Application has been made for the Bonds to be admitted to the Official List of AIX and to be admitted to trading on the AIX. The AIX does not guarantee that the Bonds will be admitted to the Official List of AIX. The AIX reserves the right to grant admission of the Bonds to the Official List of AIX only where it is satisfied that such admission is in accordance with AIX Markets Listing Rules.

The Issuer did not seek independent legal advice with respect to listing the Bonds on AIX in accordance with the Bonds Prospectus.

The AIX does not accept responsibility for the content of the information included in this Prospectus including the accuracy or completeness of such information. Liability for the Prospectus lies with the Issuer and other persons such as Experts whose opinions are included in the Prospectus with their consent. Nor has the AIX assessed the suitability of the securities to which the Prospectus relates for any particular investor or type of investor. If you do not understand the content of this Prospectus or are unsure whether the securities are suitable for your individual circumstances, you should consult an authorized financial advisor.

No representation or warranty, express or implied, is made by the Lead Manager as to the accuracy or completeness of the information set forth in this Prospectus, and nothing contained in this Prospectus is, or shall be relied upon as a promise or representation, whether as to the past or the future. The Lead Manager does not assume any responsibility for the accuracy or completeness of the information contained in this Prospectus.

No action has been or will be taken in any jurisdiction by the Lead Manager or the Issuer that would permit a public offering of the Bonds in any country or jurisdiction where action for that purpose is required. Accordingly, the Bonds may not be offered or sold, directly or indirectly, and neither this Prospectus (in preliminary, proof or final form) or any amendment or supplement thereto or any other offering or publicity material relating to the Bonds, may be distributed in or from, or published in any country or jurisdiction, except under circumstances that will result to the best of the Lead Manager's knowledge and belief in compliance with any applicable securities laws or regulations.

Under no circumstances shall this Prospectus constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any jurisdiction or under any circumstances in which such offer, solicitation or sale is not authorized or would be unlawful. Recipients of this Prospectus who intend to subscribe for or purchase the Bonds are reminded that any subscription or purchase may only be made on the basis of the information contained in the final Prospectus.

These Bonds constitute debt instruments. An investment in the Bonds involves risks. By subscribing to the Bonds, investors lend money to the Issuer who undertakes to pay interest on a semi-annual basis and to reimburse the principal on the Maturity Date. In case of bankruptcy or default by the Issuer, the investors may not recover the amounts they are entitled to and risk losing all or part of their investment. The Bonds are intended for investors who are capable of evaluating the interest rates in light of their knowledge and financial experience. An investment decision must solely be based on the information contained in the present Prospectus. Before making any investment decision, the investors must read the Prospectus in its entirety (and, in particular, "Risk factors" section in the Prospectus). Each potential investor must investigate carefully whether it is appropriate for this type of investor to invest in the Bonds, taking into account his or her knowledge and experience and must, if needed, obtain professional advice.

Lead Manager

Freedom Finance JSC

The date of this Prospectus is 21 November 2019

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PROSPECTUS SUMMARY

1. Introduction

The Prospectus Summary should be read as an introduction to the Prospectus. Any decision to invest in the Securities should be based on a consideration of the Prospectus as a whole by the investor. These Securities (Bonds) constitute debt instruments. An investment in the Bonds involves risks. By subscribing to the Bonds, investors lend money to the Issuer who undertakes to pay interest on a semi-annual basis and to reimburse the principal on the Maturity Date. In case of bankruptcy or default by the Issuer, the investors may not recover the amounts they are entitled to and risk losing all or part of their investment. Civil liability attaches only to those Persons who have tabled the summary including any translation thereof, but only where the summary is misleading, inaccurate or inconsistent, when read together with the other parts of the Prospectus, or where it does not provide, when read together with the other parts of the Prospectus, key information in order to aid investors when considering whether to invest in such Securities.

Issue	USD 10,000,000 9.0% Bonds due in 2022, ISIN KZX000000286
Issuer	Public Limited Company “Altyn” The legal entity identifier of the Issuer is 213800MELPBPHIR1PO04 The contact details of the Issuer are: 28 Eccleston Square, London, United Kingdom, SW1V 1NZ, and its telephone number is +44 020 7932 2455.
Prospectus	This Prospectus was approved by the AIX on 21 November 2019 The contact details of the AIX are: 55/19 Mangilik El st., block C 3.4. Nur-Sultan, Republic of Kazakhstan, Z05T3C4 and its telephone number is +7(717) 223 53 66.

2. Key Information on the Issuer

2.1. Who is the Issuer of the Bonds?

Issuer	Public Limited Company “Altyn” incorporated and registered in the United Kingdom of Great Britain and Northern Ireland, which operates under the laws of England and Wales. The legal entity identifier of the Issuer is 213800MELPBPHIR1PO04.
Principal activities	Incorporated in 2004, the Company is a gold mining, exploration and development company with assets in Kazakhstan. Main asset of the Company is a 100% stake in the Sekisovskoye gold mine in East Kazakhstan, with gold reserves (measured and indicated) estimated in 2019 at 3.85 million ounces according to JORC 2012 edition (including measured 3.51 million ounces), resources (inferred) – 2.83 million ounces (according to JORC 2012 edition). In May 2016, the Company received subsoil use rights for the Karasuyskoye ore area (through ownership of 100 per cent of participating interests in “Altyn MM” LLP).
Major shareholders	African Resources Limited (69.76%) – ultimate beneficiary owners are the Assaubayev family
Members of the Board of Directors	<ul style="list-style-type: none">• Kanat Assaubayev – Chairman of the Board of Directors• Aidar Assaubayev – Member of the Board of Directors• Sanzhar Assaubayev – Member of the Board of Directors• Vladimir Shkolnik – Member of the Board of Directors• Ashar Qureshi – Member of the Board of Directors
Members of the Management Board	<ul style="list-style-type: none">• Aidar Assaubayev – Chief Executive Officer• Sanzhar Assaubayev – Executive Director• Rajinder Basra – Chief Financial Officer
Auditors	The independent auditors of the Company is BDO LLP, 55 Baker Street, London.

2.2. What is the key financial information regarding the Issuer?

The principal source of the Company’s revenue is proceeds from selling gold. For the year ended 31 December 2018, total revenue was US\$19,366 thousand, as compared to US\$21,649 thousand in 2017, reflecting a decrease of US\$2,283 thousand, or 10.5%. For the year ended 31 December 2017, total revenue was US\$21,649 thousand, as compared to US\$15,867 thousand in 2016, reflecting an increase of US\$5,780 thousand, or 36.5%. These changes were due to multiple factors like gold grade, ore production and market prices for gold.

The independent auditor of the Company, BDO, LLP, issued unqualified independent auditor’s reports in respect of

the Company's audited financial statements as at and for the year ended 31 December 2018, which include comparative data as at and for the year ended 31 December 2017 and the Company's audited consolidated financial statements as at and for the year ended 31 December 2017, which include comparative data as at and for the year ended 31 December 2016. Audited financial statements for years ending 31 December 2018, 31 December 2017, 31 December 2016 and unaudited financial statements for six months ending 30 June 2019 are included in the Prospectus.

2.3. What are the key risks that are specific to the Issuer?

1. The profitability of the Company's operations and the cash flows generated by these operations are significantly affected by changes in the market price for gold.
2. The Group's business could be adversely affected if it fails to maintain or renew existing necessary permits and subsoil use contracts or fails to comply with the terms of its existing or future permits and subsoil use contracts.
3. The Group faces many risks related to the development of mining projects, in particular with respect to the development of underground shafts in the Sekisovskoye deposit, which may adversely affect its results of operations and profitability.
4. Failure by the Group to develop additional reserves will cause its reserves and production to decline materially from their current levels over time.
5. Key Concerns in the Mining Industry in Kazakhstan.
6. Mining sector enterprises face many operating risks.
7. Mining, processing, development and exploration activities depend on adequate infrastructure.
8. Ageing infrastructure at some of operations could adversely impact our business.
9. The Group may not achieve its production estimates.
10. The precious metals industry in Kazakhstan is highly regulated by the State. Such control by the State may limit the operations of the Group in the future in an unpredictable manner.
11. The figures for the Group's ore reserves and mineral resources are estimates based on interpretation and assumptions and may yield less mineral production under actual conditions than is currently estimated.
12. The Group's operations may involve greater risks, including political, economic, social, financial, regulatory and legal risks, not associated with more developed markets.
13. All of the Group's operations are conducted, and all of its assets are located, in Kazakhstan. Accordingly, the Group is affected to a significant degree by legal, economic and political conditions prevailing in Kazakhstan.
14. In February 2009 and February 2014, the National Bank of Republic of Kazakhstan devalued the Tenge by 18% and 18.6%, respectively. In August 2015, the NBK announced the adoption of a free-floating exchange rate and medium-term inflation targeting policy, which resulted in a 26.2% depreciation of the Tenge against the U.S. Dollar. Any further devaluation of the Tenge could have an adverse impact on the Group and Kazakhstan's public finances and economy.
15. Kazakhstan's economy is highly dependent on commodity exports and may be affected by commodity price volatility and delays in the completion of infrastructure projects.

3. Key Information on the Securities

3.1. What are the main features of the Securities?

The Issue	US\$10,000,000 9.0% Bonds due in 2022, 100,000 bonds with nominal value of US\$100 per Bond.
ISIN	KZX000000286
Issue price range	The Issue price of the Bonds is expected to be between 101.3% and 100.00% of the nominal value of the Bonds.
Issue date	10 December 2019
Rights attached to the Securities	The Bondholders have the right to: <ul style="list-style-type: none"> • receive coupon payments • receive nominal value upon redemption and at maturity date

- freely transfer the Bonds
- receive information concerning the Issuer's operations
- attend, participate in and vote at meetings of Bondholders in accordance with the terms and conditions of the Bond
- If any of the events mentioned in "Events of default" section of the Prospectus occurs, and if any Bondholder gives a written notice to the Issuer that the Bonds are, and they shall immediately become, due and payable at their nominal value together with accrued interest to the date of such notice.

Ranking The Bonds shall constitute direct, general and unconditional obligations of the Issuer which will rank pari passu among themselves and rank pari passu, in terms of payment rights, with all other current or future unsubordinated obligations of the Issuer, except for liabilities mandatorily preferred by law.

Restrictions on the free transferability The Bonds are freely transferable and, once admitted to the Official List of AIX, shall be transferable only in whole in accordance with the rules and regulations of the AIX applicable from time to time.

3.2. Where will the Securities be traded?

The Bonds will be admitted to trading on AIX.

3.3. What are the key risks that are specific to the Securities?

1. The Bonds are subject to modification, waivers and substitution.
2. Delisting of the Bonds from the official list of AIX may subject gains and coupon payments on the Bonds to tax in the Republic of Kazakhstan.
3. The Bonds will be listed on the AIX and benefit from an exemption on withholding tax which is untested in practice.
4. The AIX has very short history of operations.
5. The Bondholders may be subject to exchange rate risks and currency controls.
6. The market price of the Bonds may be volatile.

4. Key information on the admission to trading

4.1. Under which conditions and timetable can I invest in this Security?

Admission to trading Application has been made for the Bonds to be admitted to the official list of AIX and the Bonds are expected to be admitted on 10 December 2019.

Plan for distribution The Bonds will be offered in Kazakhstan to a wide range of investors (subject to applicable laws and regulations).

Offering method Offering of the Bonds will be made through subscription using the book-building platform of the trading system of the AIX in accordance with the AIX Market Rules and relevant AIX market notice.

Offer period 4 December 2019.

Allotment of the Bonds The Lead Manager may, at its sole discretion, allot any Bonds to itself or any of its related persons or related persons of the Issuer, without any restriction. The allotment of the Bonds to subscribers shall be at the absolute discretion of the Lead Manager. The Lead Manager may refuse to allot the Bonds subscribed by any subscribers at its sole discretion. The allotment date of the Bonds will be disclosed in the market notice issued by the AIX prior to the book-building process.

Selling restrictions The offering and sale of the Bonds is subject to applicable laws and regulations and the Bonds may not be sold in other jurisdictions, including without limitation the United Kingdom, the European Economic Area, other than in compliance with applicable laws and regulations. The Bonds have not and will not be registered under the U.S. Securities Act of 1933 or the securities laws of any state of the United States and may not be offered, sold or delivered within the United States or to, or for the account or benefit of, U.S. persons.

Notification process for Prior to the start of the book-building process the AIX will issue a market notice setting

investors	<p>out, among other things, the main terms and conditions of the book-building and settlement procedures in connection with the offering through AIX, the yield range and the related responsibilities of the AIX trading members.</p> <p>Dealings in the Bonds shall not commence prior to admission to trading of the Bonds by the AIX or prior to the said notification.</p>
Estimated Expenses	Fees associated with admission of the Bonds to the Official List of AIX and to trading on the AIX are expected to be US\$30 000.

4.2. Why is this Prospectus being produced?

This Prospectus has been produced in connection with the application for the Bonds to be admitted to Official List of AIX.

Reasons for the Issuance /Use of Proceeds	The issuance is being made, and the net proceeds of the issue of the Bonds will be used by the Issuer to finance the development of Sekisovskoye and Karasuyskoye gold mines.
Estimated net amount of proceeds	The net proceeds from the issuance are expected to amount to approximately US\$9,100,000 after deduction of fees and expenses related to the Issue.
Lead manager	“Freedom Finance” JSC, 77/7, Al-Farabi ave., Esentai Tower BC, 3rd floor, Almaty, A15E3H4 (050040), the Republic of Kazakhstan.
Conflict of interest	No person involved in the offering of the Bonds has any interest in the offering, which is material to the offering.

REGISTRATION DOCUMENT

1. Information about the Issuer

1.1. General information

The full legal and commercial name of the Issuer Altyn Public Limited Company.

Legal form of the Issuer Public Limited Company.

The country of incorporation of the Issuer

- The Company was incorporated and registered in the United Kingdom and Northern Ireland on 18 February 2004 under the Companies Act 1985 and the regulations made thereunder as a public company limited with registered number 5048549 and remains incorporated and registered for 15 years.
- The Company was originally known as Hambledon Mining Company plc. Hambledon ("Hambledon") which was renamed to Goldbridges Global Resources PLC ("Goldbridges") in January 2014. Goldbridges changed name to Altyn in December 2016.
- The Company is domiciled in England. The registered office of the Company and business address for all the Directors and Senior Managers, as at the date of this Prospectus, is at 28 Eccleston Square, London SW1V 1NZ (telephone number +44 (0) 207 932 2400).
- The principal legislation under which the Company operates is the Companies Act 2006 (the "Companies Act"). The liability of the shareholders of the Company is limited.

1.2. Investments

Investments made in the six months ended 30 June 2019

In six months ended 30 June 2019, total investment exceeded US\$2.29 m. Investments included the development of the underground mine and improvements to the mineral processing plant. In particular, US\$1.45m was allocated to the mining property, US\$0.57m included vehicles and remaining US\$0.27m was allocated to equipment, vehicles and assets under construction.

Investments made in the year ended 31 December 2018

In 2019, total investment exceeded US\$6.06m Investments included the development of the underground mine and improvements to the mineral processing plant. To be specific US\$5.19m was allocated to the assets under construction, US\$0.72m included vehicles. Remaining US\$0.15m was allocated to equipment and other investments.

Investments made in the year ended 31 December 2017

In 2017, total investment exceeded US\$4.6m Investments included the development of the underground mine and improvements to the mineral processing plant. To be specific US\$3.18m was allocated to the mining property, US\$0.69m assets under construction. Remaining US\$0.73m was allocated to equipment, vehicles and other investments.

Investments made in the year ended 31 December 2016

In 2016, total investment exceeded US\$5.78m Investments included the development of the underground mine and improvements to the mineral processing plant. To be specific US\$3.18m was allocated to the mining property, US\$0.69m assets under construction. Remaining US\$0.73m was allocated to equipment, vehicles and other investments.

2. Operational financial overview

2.1. Actual and proposed business activities:

The history and description of the principal activities and business of the Issuer

Altyn Plc is a gold mining, exploration and development company with assets in Kazakhstan. Main asset of the Company is indirect ownership of 100 per cent of participating interests in the charter capital of "GRP BaurGold" LLP, which owns subsoil use rights in respect of in the Sekisovskoye gold mine in East Kazakhstan.

The Group produced 11,822 oz of gold and 17,543 oz of silver in the year ended 31 December 2016, 19,243 oz of

gold and 25,909 oz of silver in the year ended 31 December 2017, 17,482 oz of gold and 26,110 oz of silver in the year ended 31 December 2018 and 6,642 oz of gold and 5 632 oz of silver in the six months ended 30 June 2019.

Sekisovskoye project

History

The Sekisovskoye deposit was discovered by prospectors in the 19th century and prospected by the Soviet Union in the 20th century.

Small scale prospectors mined the deposit between its discovery in 1833 until 1956. Official geological prospecting commenced in 1952 and led to the development and mining of an open pit mine as well as numerous adits and a shaft. Open pit mining, by a workers cooperative named Altayzoloto, commenced at the North Pit in 1978. In 1991, Kazakhstan gained independence from the Soviet Union and consequently the deposit was acquired by the Poisk miners' cooperative. Poisk was acquired by Hambledon Mining Company Limited in 1998 and a small underground gold recovery plant was installed. The Sekisovskoye mining licence was transferred to DGPB, a 100% owned subsidiary of Hambledon Mining Company Limited, in 2000.

The Company, formerly known as Hambledon Mining Plc, was incorporated in February 2004 as a UK company. Hambledon Mining Company Limited is a subsidiary of the Company. In June 2004 the Company was admitted to trading on the Alternative Investment Market (AIM) of the London Stock Exchange.

In 2007, the Group built the ALTYN MM plant that was capable of treating 850,000 tonnes of ore per annum. Mining operations began in 2007; the processing of ore and pouring of gold began in 2008.

In 2011, the Group began mining the underground deposit of Sekisovskoye.

In October 2012, African Resources Limited, a company ultimately controlled by the Assaubayev family, made an offer to purchase 50.9% of the Company's shares listed on AIM. The offer was accepted in January 2013, and new management was put in charge of the Group.

In late 2013, the Group introduced a new plan for the development of the underground part of the Sekisovskoye deposit, in order to increase the volume of gold production from the field.

On 13 January 2014, the Company changed its name from Hambledon Mining Plc to Goldbridges Global Resources Plc and then was renamed to Altyn Plc.

In August 2014, the Sekisovskoye mine development project was approved by the Ministry of Industry and New Technologies for inclusion in the State Program on Forced Industrial Innovative Development.

Property Description and Location

The Sekisovskoye Mine is an operating gold and silver mine located in eastern Kazakhstan. The Sekisovskoye Mine is located in the East Kazakhstan Oblast adjacent to the Sekisovka village and approximately 40km northeast of the Ust-Kamenogorsk (also known as Oskemen) and 800km east of the capital city of Nur-Sultan. This area is the easternmost part of Kazakhstan and is bordered to the north, east and south by Russia and China. The Sekisovskoye Mine is located approximately 50km south of the border with Russia.

Ust-Kamenogorsk houses a large hydroelectric power station located in the Irtysh River. Ust-Kamenogorsk is connected by rail and road with Russia and various major cities of Kazakhstan. The Ust-Kamenogorsk Airport is situated approximately 11km north-west of the city and is the main airport gateway for East Kazakhstan.

The East Kazakhstan Oblast borders on the Pavlodar Oblast, the Karaganda Oblast, and the Almaty Oblast. East Kazakhstan occupies an area of 283,300km². Major settlements of the oblast include Ust-Kamenogorsk (also known as Oskemen), Semey (formerly known as Semipalatinsk) and Ridder (formerly known as Leninogorsk).

The mine is accessed through a tarred road connecting Ust-Kamenogorsk to Shemonaikha and passing through the Sekisovka village. This road is generally in a good condition. The mine roads are gravel roads that are maintained by the Sekisovskoye Mine and are generally in good condition.

Local resources are typically sourced from the nearby town of Ust-Kamenogorsk, which has facilities such as hospitals, schools and suitable accommodation. The company provides transportation for employees from Ust-Kamenogorsk by bus.

An office is located at the Sekisovskoye Mine, from which the mine is managed. A small mining community is also located at the Sekisovka village. The mine has access to services such as power and water.

Infrastructure

The administrative buildings include a building situated in the southern part of the village. The head office and

company offices including finance, HR, operations and environmental departments are based in this building

Processing plant's current design production capacity is 850,000RoMt per annum, producing a final product called doré. The plant occupies an area of 30,500m² and includes the following:

- mills;
- chemical treatment site and equipment;
- administrative office;
- main warehouse;
- reagent warehouse;
- screening and crushing unit; and
- laboratory.

Power supply systems: in Sekisovka village is the main source of power, which is served by a 6kV transmission line connected to a 110 kW line. Power supply is through double chain power lines of 110kV from the Altaiergo system, using a 12.5km extension of the overhead powerline.

Heat supply system: a central boiler house with 60Gcal/hour productivity currently supplies Sekisovskoye Mine with heat. This boiler house is operated by three boilers using coal from Karazhyra deposit. Steam is used to supply heat to the mine, workshops and headframes to allow operations to continue throughout the winter months.

Tailings Storage Facility: tailings are currently sent to the TSF where 30% of the water is returned to the processing plant. This TSF consists of 4 sections (TD1, TD2, TD3 and TD4) and a start-up complex. The quantity of incoming tailings (solids) was permitted for 2018 at 354ktpa and this is according to the Draft Standards for Waste Disposal, 2016 -2018 of the East Kazakhstan Ecology Dept.

Waste Rock Dumps to store process waste and waste rock from underground mining has been provided for. The northern zone of the open pit has been backfilled with the waste rock. Backfilling of mined out areas with waste rock is planned to continue where possible.

Water supply system: the Sekisovka River, which is a tributary of the Ulba River, crosses the mine area and is the main water source for the mining operations. An additional water supply source for up to 50% of the required water is provided from an existing borehole, located 300m toward south-east of the processing plant. The remaining water supply is provided from the TSF, where water is accumulated over a period of five years.

There is no mine water discharge from Sekisovskoye Mine as water recycling is carried out where possible. Mine water is recycled at the processing plant and then re-used

Railway access: Sekisovskoye is connected by rail and road with Russia and various major cities of Kazakhstan.

Legal Tenure

The Sekisovskoye Mine is managed through two 100% held subsidiaries of Altyn, namely BaurGold LLP and MMC Altyn MM LLP ("Altyn MM"). BaurGold LLP owns and operates the mine, exploration work and laboratory, while Altyn MM owns and operates the processing plant.

Teren-Sai project

Property Description and Location

The Teren- Sai Project is a gold exploration project that is made up of 15 targets based on historical exploration. Of these targets, The Issuer is currently focused on exploration and development of Area No.2, which consists of four breccia bodies. However, Altyn is only targeting two of these breccias for development at this stage.

The Teren- Sai Project is located in the East Kazakhstan Oblast and is adjacent to Altyn's operating Sekisovskoye Mine and approximately 40km northeast of the town of Ust-Kamenogorsk (also referred to as Oskemen) and 800km east of the capital city of Nur-Sultan.

History

The deposit was discovered in 1943 and was mined artisanally as a quartz vein deposit by Altai-Zoloto Multicorporate Enterprise of the Ministry of Non-Ferrous industry of KazSSR ("Altai- Zoloto"), a co-operative until 1947. Adits were used to access the orebody from the base of the outcrop that manifests as small hills.

Exploration has taken place intermittently since discovery of the deposit in 1943. Official exploration only commenced in 1951, after small scale mining had already taken place by Altai-Zoloto, a co-operative, from 1943 to 1947. Exploration continued intermittently from 1951 to 1994.

Historical exploration includes geophysical surveys, geological mapping, trenching, pitting, geochemistry, percussion

and diamond drilling. Early exploration was completed with the intention of identifying anomalies that could potentially host mineralisation and then to further ascertain the potential of each target. Historical exploration led to the identification of a number of targets.

Legal Tenure

The Subsoil Use Contract for the Teren- Sai Project is held by Altai Ken Baiytu, a wholly owned subsidiary of Altyn. Altai Ken Baiytu was renamed to MMC Altyn MM LLP in October 2016.

The Teren- Sai Project was granted Subsoil Use Contract No. 48-40-TPI, effective from 27 May 2016. The Subsoil Use Contract is an Exploration Contract, valid for gold ore, covers an area of 221.25km² but excludes an area of 0.56km², resulting in a total area of 220.69km². The excluded area forms the boundary for the Subsoil Use Contract for the Sekisovskoye Mine.

Major customers and suppliers

On 24 August 2012, the Republic of Kazakhstan introduced legislation which gave the State a priority right to purchase refined gold from Kazakh gold producers (the "State's Pre-emptive Right"). On 27 December 2013, the Company entered into an agreement with the State-owned refining company Tau-Ken Altyn Ltd in Kazakhstan, an entity under the control of the Kazakhstan Government, for substantially all of its revenues going forward. The Company now delivers all of the gold doré that it produces to this entity.

Major Suppliers of the company are "IP Borusan Makina Kazakhstan" LLP – spare parts, "INBI" LLP – activated carbon, "MKA Engineering" LLP – sodium cyanide, "Trans Oil Vostok" LLP – diesel, "Epirok Central Asia" LLP – drilling rigs.

Licenses

The mining license (No. 374 D) with respect to the Sekisovskoye deposit was granted on 20 May 1999 in accordance with the Decree of the President of the Republic of Kazakhstan, January 27, 1996 No. 2828 On Subsoil and Subsoil Use. The license was granted on the basis that a subsoil use agreement would subsequently be entered into and a subsurface use agreement (No. 555) was entered into on 20 October 2000. The license expires in July 2020 and is expected to be extended by at least 10 years. The company is currently in negotiations with a respective regulatory body regarding the license extension.

The Teren- Sai Project was granted Subsoil Use Contract No. 48-40-TPI, effective from 27 May 2016. The Subsoil Use Contract is an Exploration Contract, valid for gold ore, covers an area of 221.25km² but excludes an area of 0.56km², resulting in a total area of 220.69km². The excluded area forms the boundary for the Subsoil Use Contract for the Sekisovskoye Mine.

Competition

The Group experiences competition in identifying and acquiring exploration and development rights to attractive mining properties in Kazakhstan. As ore reserves are depleted over time in established gold and silver producing areas, demand for gold and silver mining properties in Kazakhstan is increasing. The Group also faces competition for the skilled mining employees and geologists who work at its properties, and competition for such employees will increase as mining activity in Kazakhstan increases.

2.2. Risk factors

The profitability of the Company's operations and the cash flows generated by these operations are significantly affected by changes in the market price for gold

Our revenues are almost entirely derived from the sale of gold. Our current policy is to sell our gold at prevailing U.S. Dollar spot market prices and not to enter into price hedging arrangements. Accordingly, our financial results largely depend on the price of gold, which can fluctuate significantly. These fluctuations are difficult to predict and are caused by numerous factors beyond our control, including:

- global or regional political or economic events;
- monetary policies announced or implemented by central banks, including the US Federal Reserve;
- changes in the demand for gold used in jewelry and for other industrial uses, including as a result of prevailing economic conditions;
- changes in interest rates;
- actual or anticipated sales or purchases of gold by central banks and the International Monetary Fund;
- changes in the demand for gold as an investment;
- the cost of gold production in major gold-producing countries;

- changes in the supply of gold from production, divestment, scrap and hedging;
- financial market expectations regarding the rate of inflation;
- the strength of the U.S. Dollar (the currency in which the gold price trades internationally) relative to other currencies;
- speculative positions taken by investors or traders in gold;
- gold hedging and de-hedging by gold producers;
- the overall supply of, and demand for, gold, although the considerable size of historical mined (i.e., above ground) stocks of the metal means that these factors typically do not affect the gold price in the same manner or degree as for other commodities; and
- the shift in demand from physical gold to investment and speculative demand.

A sustained period of significant gold price volatility may adversely affect our ability to evaluate the feasibility of undertaking new capital projects or continuing existing operations or making other long-term strategic decisions. The use of lower gold prices in reserve calculations and life-of-mine plans could result in material write-downs of our investment in mining properties and increased amortization, reclamation and closure charges.

If revenue from gold sales falls below the cost of production for an extended period, the Company may experience losses and be forced to curtail or suspend some or all of its capital projects and/or operations and change its dividend payment policies. Moreover, the Company has historically sold its gold at market prices and has only entered into very limited forward sales, derivative or other hedging arrangements to establish a price in advance for the sale of its future production. In general, hedging in this manner reduces the risk of exposure to a fall in the gold price. As the Company does not currently enter into transactions to hedge against the future price at which its gold is sold and does not expect to change this policy in the near future, the Company is not protected against decreases in prices, and if prices decrease significantly, the Company's business, results of operations and financial condition may be materially adversely affected.

The Group's business could be adversely affected if it fails to maintain or renew existing necessary permits and subsoil use contracts or fails to comply with the terms of its existing or future permits and subsoil use contracts

There can be no guarantee as to the terms of any such permits, licenses and subsoil use contracts or assurance that current or future permits, licenses and subsoil use contracts will be renewed or, if so, on what terms when they come up for renewal. It is possible that, in the event of any material non-compliance with the terms of any such permits (including in relation to the payment of moneys concerning their maintenance in good standing on an ongoing basis), the Group may risk its interest in those permits being forfeited. Although the directors believe that the Group's exploration activities are currently carried out in accordance with all material applicable rules and regulations, no assurance can be given that new rules, laws and regulations will not be enacted or that existing or future rules and regulations will not be applied in a manner which could serve to limit or curtail exploration, production or development of the Group's business or have an otherwise negative impact on its activities. Amendments to existing rules, laws and regulations governing its operations and activities of exploration and extraction, or increases in or more stringent enforcement, implementation or interpretation thereof, could have a material adverse impact on the Group's business, results of operations and financial condition and its industry in general in terms of additional compliance costs.

The process of entering into new subsurface use contracts or extending existing subsurface use contracts in Kazakhstan is time-consuming and is complicated by the fact that several Kazakh government ministries are involved in the contract review and approval. The relevant laws and regulations are often unclear and sometimes are not consistently applied by the authorities.

The Group's subsurface use contracts and related working programmes contain a range of obligations on the Group, and there may be adverse consequences of breach of these obligations ranging from penalties to, in extreme cases, suspension or termination of the Group's subsurface use contracts. When, in the past, changing circumstances have made it necessary for the Group to vary its obligations under its subsurface use contracts or related working programmes, the Group has entered into discussions and negotiations with the relevant regulators and, when necessary, agreed amendments to the relevant terms of the subsurface use contracts or related working programmes concerned. In its past dealings with the Kazakh regulators responsible for monitoring the Group's compliance with the terms of its subsurface use contracts and related working programmes, the Group has found such regulators to be receptive to the solutions proposed by the Group and has accordingly secured satisfactory waivers and/or amendments to the terms of its subsurface use contracts or related working programmes. However, it cannot be guaranteed that the Kazakh regulators responsible for monitoring the Group's compliance with the terms of its subsurface use contracts and related working programmes will continue to be as receptive in respect of any future negotiations in relation to varying the Group's obligations under the terms of its existing subsurface use contracts or related working programmes or that the Group will be able to avoid any adverse consequences if it were held to be in breach of the obligations under its subsurface use contracts or related working programmes in the future.

Although the Group currently has all permits in place in relation to its material assets, should the Group identify future operations at its exploration sites, there is a risk that the necessary permits, consents, titles, authorisations and agreements to implement planned exploration, project development or mining may not be obtained or renewed under conditions or within time frames that make such plans economic, that applicable laws, regulations or the governing authorities will change or that such changes will result in additional material expenditures or time delays.

The Group faces many risks related to the development of mining projects, in particular with respect to the development of underground shafts in the Sekisovskoye deposit, which may adversely affect its results of operations and profitability

The profitability of the Group is significantly affected by the actual costs of developing and operating mines, which may differ significantly from estimates determined at the time the relevant project was approved following completion of its feasibility study. The development of the underground part of this deposit is a complex project which could be subject to unexpected problems and significant delays that could increase the development and operating costs of the project.

Our decision to develop a mineral property is typically based on the results of a feasibility study. Feasibility studies estimate the expected or anticipated economic returns from the project. These estimates are based on assumptions regarding:

- future prices of gold, silver and other metals;
- future currency exchange rates;
- volume, grades and metallurgical characteristics of ore to be mined and processed from relatively small samples of ore;
- geological and geotechnical characteristics of the ore and surrounding waste rock to suit the mining method;
- anticipated recovery rates of gold, silver and other metals extracted from the ore;
- anticipated capital expenditure and cash operating costs;
- required return on investment.

Actual cash operating costs, production and economic returns may differ significantly from those anticipated by such studies and estimates. Operating costs and capital expenditure are to a significant extent driven by the cost of commodity inputs consumed in mining, including fuel, chemical reagents, explosives, tyres and steel, and also by credits from by-products. They could also fluctuate considerably as a result of changes in the prices of mining equipment used in the construction and operation of mining projects. There are a number of uncertainties inherent in the development and construction of a new mine or the extension to an existing mine. In addition to those discussed above, these uncertainties include the:

- timing and cost of construction of mining and processing facilities, which can be considerable;
- availability and cost of mining and processing equipment;
- undetected geological structures and hydrological impacts that are unfavorable to mining
- availability and cost of skilled labor, power, water and transportation;
- availability and cost of appropriate smelting and refining arrangements;
- applicable requirements and time needed to obtain the necessary environmental and other governmental permits;
- availability of funds to finance construction and development activities.

The remote location of many mining properties, permitting requirements and/or delays, third-party legal challenges to individual mining projects and broader social or political opposition to mining may increase the cost, timing and complexity of mine development and construction. New mining operations could experience unexpected problems and delays during the development, construction, commissioning and commencement of production.

Accordingly, our future development activities may not result in the expansion or replacement of current production, or one or more new production sites or facilities may be less profitable than anticipated or may be loss-making. Our operating results and financial condition are directly related to the success of our project developments.

Failure by the Group to develop additional reserves will cause its reserves and production to decline materially from their current levels over time

To realise future production growth, extend the lives of its mines and ensure the continued operation of the business, the Group must continue to realise its existing identified reserves, convert resources into reserves, develop its resource base through the realisation of identified mineral potential and undertake successful exploration.

The Group's reserves decline as production increases. Reserves are increased when the Group discovers new deposits or operations or increases reserves of operating mines via additional exploration. Once mineralisation is discovered,

it may take a number of years to complete the geological and metallurgical assessments to assess whether production is possible and, even if production is possible, the economic feasibility of production may change during that time. Substantial capital expenditure is required to identify and delineate ore reserves through geological modelling, drilling and sampling to determine metallurgical processes to extract the metals from the ore and, in the case of new properties, to construct mining and processing facilities. Any acquisition that the Group may choose to complete may change the scale of the Group's business and operations and may expose the Group to geographic, political, operating, financial and geological risks. The Group's success in its acquisition activities depends on its ability to identify suitable acquisition candidates, negotiate acceptable terms and integrate the acquired entity successfully.

The volume of production from properties generally declines as reserves are depleted. The Group's future production growth is dependent upon its success in finding or acquiring and developing additional reserves. There can be no assurance that the Group will be able to identify future reserves or continue to extend the mine life of its existing operations. If the Group is unsuccessful in securing new reserves, the Group's total reserves and production will decline, which could materially adversely affect the Group's business, results of operations and financial condition.

Key Concerns in the Mining Industry in Kazakhstan

As a rich mineral province, the international community is concerned with legislative, accounting, and transparency issues in Kazakhstan. Of the total geography of the country only 21% has been explored in detail. Apart from Almaty, the country is mainly flat having been extensively glaciated leaving either bare rock exposures or extensive cover of glacial tills and moraines.

Whilst adhering to Committee for Mineral Reserves International Reporting Standards ("CRIRSCO") mineral resource reporting standards where possible there are currently only 53 qualified professionals in the country who are registered Competent Persons.

The following are key concerns that Kazakhstan's mining industry faces today:

- soviet era exploration data is generally not digital. Therefore, it is stored as hard copies and sometimes lost in the archives. Soviet engineers did not include low-grade ores in the resource statements. This suggests opportunities to re-discover lower-grade ores that could be commercially viable using new technologies;
- there is a need to explore at depth. As the global mining industry explores the depth extensions of orebodies Kazakhstan is shifting in the same direction. The inevitable increase in operating expenses may lead to consolidation;
- the shortage of skilled workers and professionals is a constraint;
- there is a shortage of investment capital;
- there is a negative environmental perception of mining;
- despite low cost electricity there is limited downstream beneficiation in the country. The gold industry is one of the exceptions with gold bullion refined in country and sold to the National Bank of the Republic of Kazakhstan. There are copper smelters in Kazakhstan;
- a number of small and medium mining companies have to use old and outdated equipment, since they cannot afford new equipment;
- inefficient government procurement procedures open the way for new procurement structuring; and
- renewed interest is seeing a revival of activity albeit slowly.

Mining sector enterprises face many operating risks

In common with other enterprises undertaking business in the mining sector, the Group's mineral exploration, project development, mining and related activities are subject to conditions beyond the Group's control that can reduce, halt or limit production or increase the costs of production.

The success of the Group's mining operations is dependent on many factors, including: the discovery and/ or acquisition of ore reserves and mineral resources; the successful conclusions to feasibility and other mining studies; access to adequate capital for project development and sustaining capital; design and construction of efficient mining and processing facilities within capital expenditure budgets; the securing and maintaining of title to tenements; obtaining permits, consents and approvals necessary for the conduct of exploration and mining; complying with the terms and conditions of all permits, consents and approvals during the course of mining activities; access to competent operational management and prudent financial administration, including the availability and reliability of appropriately qualified employees, contractors and consultants; the ability to procure major equipment items and key consumables in a timely and cost-effective manner; the ability to access full power supply; and the ability to access road and airport networks for the shipment of equipment, spare parts and consumables into the operation and the shipment of gold ore out of the operation.

Costs can also be affected by factors such as changes in market conditions, government policies and exchange rates,

all of which are unpredictable and outside the control of the Group. The operations are also exposed to industrial and community disruption, which can be beyond the Group's control.

Mining, processing, development and exploration activities depend on adequate infrastructure

Mining, processing, development and exploration activities depend on adequate infrastructure. Reliable rail, ports, roads, bridges, power sources, power transmission facilities and water supply are critical to our business operations and affect capital and operating costs. This infrastructure and these services are often provided by third parties whose operational activities are outside our control.

Interferences in the maintenance or provision of infrastructure, including unusual weather phenomena, sabotage and social unrest, could impede our ability to deliver our products on time and adversely affect our business, financial condition and results of operations.

Ageing infrastructure at some of operations could adversely impact our business

Deep-level gold mining shafts are usually designed with a lifespan of 25 to 30 years. Vertical shafts consist of large quantities of infrastructure steelwork for guiding conveyances and accommodating services, such as high and low tension electric cables and air and water pipe columns. Rising temperatures in the deeper mining areas can also lead to increased cooling requirements in the form of upgraded and expanded ice plants. Maintaining our infrastructure requires skilled human resources, capital allocation, management and planned maintenance.

The Group may not achieve its production estimates

The Group prepares estimates of future gold production for its existing and future mines. The Group cannot give any assurance that it will achieve its production estimates. The failure of the Group to achieve its production estimates could have a material adverse effect on any or all of its future revenues and profitability. The realisation of production estimates are dependent on, among other things, the accuracy of ore reserve and mineral resource estimates, the accuracy of assumptions regarding ore grades and recovery rates, ground conditions (including hydrology), physical characteristics of ores, the presence or absence of particular metallurgical characteristics, and the accuracy of estimated rates and costs of mining, ore haulage and processing.

Actual production may vary from estimates for a variety of reasons, including: the availability of certain types of ores; actual ore mined varying from estimates of grade or volume; mining dilution, ore losses and metallurgical and other characteristics (whether based on representative samples of ore or not); short-term operating factors such as the need for sequential development of ore bodies and the processing of new or adjacent ore bodies from those planned; mine failures, slope failures, ground falls or equipment failures; industrial accidents; natural phenomena such as inclement weather conditions, floods, droughts, rock slides and earthquakes; encountering unusual or unexpected geological conditions changing mining conditions; changes in power costs and potential power shortages; shortages of principal supplies needed for mining operations, including explosives, fuels, chemical reagents, water, equipment parts and lubricants; plant and equipment failure; the inability to process certain types of ores; labour shortages or strikes; lack of required labour; civil disobedience and protests; and restrictions or regulations imposed by government agencies or other changes in the legal and regulatory environment. Such occurrences could also result in damage to mineral properties or mines, interruptions in production, injury or death to persons, damage to property of the Group or others, monetary losses and legal liabilities in addition to adversely affecting mineral production. These factors may cause a mineral deposit to become unprofitable, forcing the Group to cease production.

The precious metals industry in Kazakhstan is highly regulated by the State. Such control by the State may limit the operations of the Group in the future in an unpredictable manner

The precious metals industry in Kazakhstan is highly controlled by the State. Such State control over the precious metals industry is implemented by the priority right of the State to purchase refined gold; licensing of export of certain types of precious metals; conduct of State control procedures prior to export of precious metals outside of Kazakhstan; and introduction of non-tariff regulation measures (e.g., introduction of ban for export).

For example, since August 2012, the Republic of Kazakhstan has had a priority right to purchase refined gold from Kazakh producers, and the waiver that the Company had negotiated with respect to this legislation expired at the end of 2013.

There can be no assurance that the Kazakhstan Government will not initiate any new actions for control of precious metals industries. If the Kazakhstan Government implements new measures for control of precious metals industries in an unpredictable manner, which will be unacceptable for the Group's operations, the Group's operations, business and financial condition could be materially adversely affected.

The figures for the Group's ore reserves and mineral resources are estimates based on interpretation and assumptions and may yield less mineral production under actual conditions than is currently estimated

The resource and reserve estimates presented in the competent person's report incorporated by reference into this Prospectus have been prepared in accordance with definitions adopted by the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC") by Ernst & Young. No assurance can be given that the anticipated volumes and grades will be achieved, that the indicated level of recovery will be realised or that mineral reserves or resources can be mined or processed profitably. Actual reserves, resources or mineral potential may not conform to geological, metallurgical or other expectations, and the volume and grade of ore recovered may be below the estimated levels.

Ore reserve and mineral resources estimates are expressions of professional judgment based on knowledge, experience and industry practice, but are subject to considerable uncertainties. The Group cannot be certain that its estimated reserves and resources are completely accurate. Moreover, future volumes of mining, which may not occur for many years, and rates of recovery of metals could differ materially from such estimates. Should the Group discover, in the course of mining its deposits, that those deposits differ from those predicted by drilling, sampling and similar examinations, the Group may have to adjust its reserve and resource estimates and alter its mining plans in a way that might adversely affect the results of operations.

An extended period of operational underperformance, including increased production costs or reduced recovery rates, may render ore reserves uneconomic to recover and may ultimately result in the restatement of ore reserves and/or mineral resources. Any material reductions in estimates of ore reserves and mineral resources, or of the Group's ability to extract these ore reserves, could have a material adverse effect on the Group's results of operations and financial condition. In addition, a reduction in estimated ore reserves could require material write-downs in investment in the affected mining property and increased amortisation, reclamation and closure changes.

The inclusion of mineral resource estimates should not be regarded as a representation that these amounts can be economically exploited, and no assurances can be given that such resource estimates will be converted into ore reserves.

The Group's operations may involve greater risks, including political, economic, social, financial, regulatory and legal risks, not associated with more developed markets

The Group's operations are conducted entirely in Kazakhstan, which is considered to be an emerging market. Investments in emerging markets are often subject to greater risks than investments in more developed markets. Economies in emerging markets such as Kazakhstan are in various stages of development or structural reform, and some are subject to rapid fluctuations in their foreign exchange rates, gross domestic product ("GDP"), consumer prices and interest rates. The Group's operations may be subject to the risk of sudden changes in regulatory and taxation regimes, political or labour unrest, acts of terrorism or other violence, corruption, inflation or recession. In addition, financial instability in other markets adjacent to Kazakhstan, such as other Central Asian countries, may adversely affect the markets in which the Group operates. All of these factors may affect the economic and trading conditions in which the Group operates, including the ability of the Group to sell its products. These factors could also increase the costs of operating in Kazakhstan. Any of the foregoing could have a material adverse effect on the Group's business, financial condition and results of operations.

All of the Group's operations are conducted, and all of its assets are located, in Kazakhstan. Accordingly, the Group is affected to a significant degree by legal, economic and political conditions prevailing in Kazakhstan

Kazakhstan became an independent sovereign state in 1991 as a result of the dissolution of the Soviet Union. Since then, Kazakhstan has undergone significant changes as it has emerged from a single party political system and a centrally-controlled command economy to a market-oriented economy. The transition was initially marked by political uncertainty and tension, a recessionary economy accompanied by high inflation, instability of the local currency and rapid, but incomplete, changes in the legal environment. Since 1992, Kazakhstan has actively pursued a programme of economic reform designed to establish a free-market economy through privatisation of state enterprises. However, as with any transition economy, there can be no assurance that these reforms will continue or that they will achieve any or all of their intended aims.

Kazakhstan's financial sector as a whole continues to experience instability and remains under stress. It is not clear what impact this will have on Kazakhstan's mineral resources market. Small and medium-sized enterprises have been particularly affected while larger companies and state-owned entities have generally continued to have access to offshore funding albeit on a more limited basis and on less favourable terms. Any liquidity problems in Kazakhstan's economy could adversely affect its economic development, which could, in turn, materially and adversely affect the Group's prospects, business, financial condition and results of operations.

In addition, although the Government currently supports the development of Mineral Resources, there is no

assurance that the Government will not adopt different policies in respect of foreign development and ownership of Mineral Resources due to future political and economic conditions in Kazakhstan. Any such change in policy may result in changes in laws affecting ownership of assets, land tenure and mineral concessions; taxation; royalties; exchange rates; environmental protection; labour relations; repatriation of income; and return of capital. These changes may affect both the Group's ability to undertake exploration, development and operational activities in respect of future Mineral Resources as well as its ability to continue to explore, develop and operate those Mineral Resources in respect of which it has already obtained mineral exploration and exploitation rights.

In February 2009 and February 2014, the National Bank of Republic of Kazakhstan (NBK) devalued the Tenge by 18% and 18.6%, respectively. In August 2015, the NBK announced the adoption of a free-floating exchange rate and medium-term inflation targeting policy, which resulted in a 26.2% depreciation of the Tenge against the U.S. Dollar. Any further devaluation of the Tenge could have an adverse impact on the Group and Kazakhstan's public finances and economy

Revenue of the Group is linked to the U.S. Dollar since gold is generally sold throughout the world in U.S. Dollars but, historically, most of the Group's operating costs have been incurred in Tenge. If a large portion of the Group's operating costs continues to be incurred in Tenge, the Group's accounts will remain sensitive to currency exchange rate fluctuations. Although the Tenge has recently weakened against the U.S. Dollar, any appreciation of the Tenge against the U.S. Dollar could have an adverse effect on the Group's financial condition and results of operations. In addition, there can be no assurance that the NBK will maintain its managed exchange rate policy and that another significant devaluation of the Tenge will not happen in the future. Any change in the NBK's exchange rate policy could have an adverse effect on Kazakhstan's public finances and economy, which could, in turn, have a material adverse effect on the Group's business, financial condition, results of operations and prospects.

Kazakhstan's economy is highly dependent on commodity exports and may be affected by commodity price volatility and delays in the completion of infrastructure projects

Countries in the Central Asia region, such as Kazakhstan, whose economies and state budgets rely in part on the export of oil, oil products, metals and other commodities, could be adversely affected by volatility in oil and other commodity prices and by any sustained fall in prices. Kazakhstan's economy could be adversely affected by delays in any infrastructure projects related to the commodities industry or by a lack of foreign investment in the commodities industry. In addition, any fluctuations in the value of the U.S. Dollar relative to other currencies may cause volatility in earnings from U.S. Dollar-denominated exports of commodities. An oversupply of commodities in world markets or a general downturn in the economies of any significant markets for commodities or a weakening of the U.S. Dollar relative to other currencies would have a material adverse effect on the Kazakhstan economy, which could, in turn, have a material adverse effect on the business, financial condition and results of operations of the Group.

2.3. Production and sales trends

Production results in 1H 2019 were below budgeted expectations, primarily as a result of some equipment breakdowns and the associated time-lag in receiving the necessary spare parts. As such in 1Q 2019 the monthly run rate of ore extraction averaged 13,300 tons a month compared to 20,000 tons in the same period in 2018. Following the delivery of the new equipment in July 2019 production has increased achieving 29 000 tons in July 2019. The overall grade of ore was higher at 2.06g/t, compared to 1.96 g/t obtained in 1H 2018.

The milled ore was 114,000 tons (1H 2018 – 182,000 tons), included lower grade stockpiled ore at 0.5g/t as in the previous period. As a number of ore bodies are ready for production the additional equipment purchased recently will result in increasing production in 2H 2019 and thereafter.

Gold recovery averaged 81.53% during the 6-month period (1H 2018 – 83.65%). The decline in average gold recovery was due to a larger share of low-grade stockpiles being utilized principally in 2-month period. In July 2019 recovery has returned to its normal value at above 83%. Gold production was 5,561oz, compared with 1H 2018 of 8,461oz.

The variables that are likely to have the most material effect on the Issuer's financial performance are market price for gold and production volume.

3. Constitution and organizational structure

3.1. Constitution

Issuer's objectives and purpose and where they can be found in the constitution

Issuer's objectives and purpose are not reflected in the constitution.

The rights, preferences and restrictions attaching to each class of the existing Securities

The holders of stock may transfer it or any part of it in the same manner provided by, and to the same provisions of these Articles, which shall, for the time being, apply to transfers of shares of the same class of shares as the shares from which the stock arose (or as near as circumstances admit).

The holders of stock shall, according to the amount of stock held by them, have the same rights as regards dividends, voting at General Meetings and other matters as if they held the shares from which the stock arose, but no such right (except as to participation in dividends and in assets on a reduction of capital or winding up) shall be conferred by and amount of stock which would not, if existing in shares, have conferred such right.

What action is necessary to change the rights of holders of the Securities, indicating where the conditions are more significant than is required by any law applicable to the Issuer

Subject to provisions of the Companies Act, all or any of the rights for the time being attached to any class of shares for the time being issued may from time to time (whether the Company is being wound up) be varied or abrogated with the consent in writing of the holders of not less than three-quarters in nominal value of the issued shares of that class or with the special resolution passed at a separate General Meeting of the holders of the shares of the class.

The conditions governing the manner in which annual general meetings and extraordinary general meetings of holders of Securities are called including the conditions of admission to the meeting

An annual general meeting shall be held in each period of six months beginning with the day following the Company's accounting reference date. The Board may, whenever it thinks fit, and in accordance with the Companies Acts, convene a General Meeting. If sufficient Directors are not within the United Kingdom to call a General Meeting, any Director or Member may call a General Meeting.

An Annual General Meeting shall be called by not less than 21 calendar days' notice in writing. Any other General Meeting shall be called by not less than 14 calendar days' notice in writing.

Any provision of the constitution that would have an effect of delaying, deferring or preventing a change in control of the Issuer

The Board may at any time after the allotment of any share but before any person has been entered in the Register as the holder:

- recognize a renunciation of any such allotment by the allotted in favor of some other person and accord to any allottee of a share a right to effect such renunciation; and/or
- allow the rights represented by such allotment to be one or more participating securities,

in each case upon and subject to such terms and conditions as the Board may think fit to impose.

Any provisions in the constitution, governing the ownership threshold above which shareholder ownership must be disclosed

There are no provisions in the constitution, governing the ownership threshold above which shareholder ownership must be disclosed

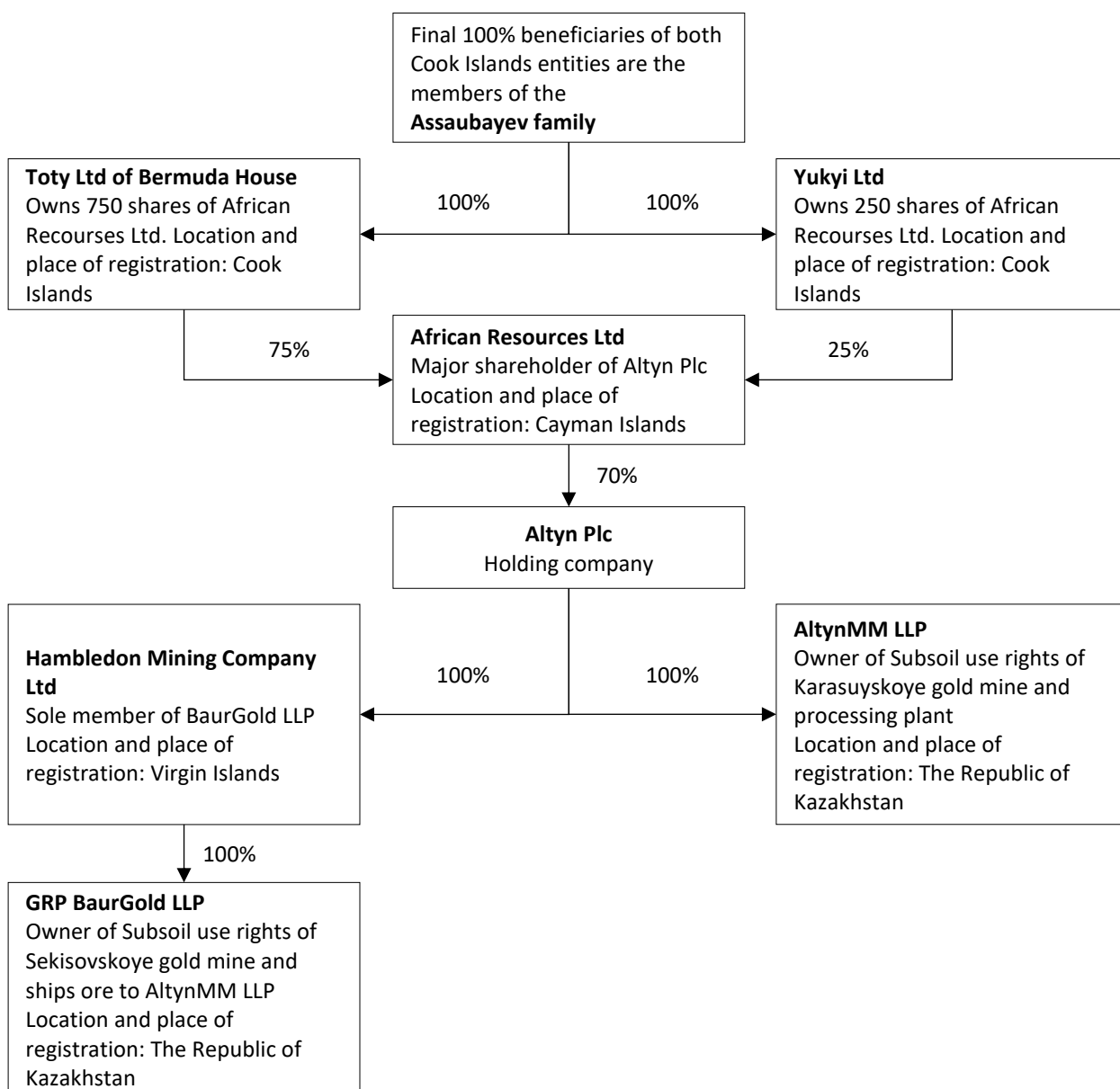
The conditions imposed by the constitution governing changes in the capital, where such conditions are more stringent than is required by law applicable to the Issuer

Subject to provisions of the Companies Act and these Articles, the Board may offer, allot, grant options over or otherwise dispose of shares in the Company to such persons, at such times and for such consideration and upon such terms and conditions as the Board may determine.

Any arrangements by which a single investor or group of investors may exercise significant influence over the Issuer

Subject to provisions of the Companies Act, all or any of the rights for the time being attached to any class of shares for the time being issued may from time to time (whether the Company is being wound up) be varied or abrogated with the consent in writing of the holders of not less than three-quarters in nominal value of the issued shares of that class or with the special resolution passed at a separate General Meeting of the holders of the shares of the class.

3.2. Group structure



4. Assets

4.1. Material contracts

The following is a summary of each contract (not being a contract entered into in the ordinary course of business) which has been entered into by any member of the Group: (i) within the two years immediately preceding the date of this document and which is, or may be, material; or (ii) which contains any provision under which any member of the Group has any obligation or entitlement which is material to the Company as of the date hereof.

Relationship Agreement

African Resources Limited entered into a relationship agreement with the Company on 2 November 2012, which was subsequently amended on or around the date hereof (the "**Relationship Agreement**"). Under the terms of the Relationship Agreement, African Resources Limited has agreed, *inter alia*:

- (a) not to take any action which precludes or inhibits the Company from carrying on its business independently of African Resources Limited and its affiliates for the benefit of the Company's shareholders as a whole;
- (b) to use its voting rights as shareholder of the Company, and to procure that any director appointed by it to the Board uses his or her voting rights as director (subject to his or her statutory, fiduciary and other duties as a director and their obligations under general law) to ensure that all transactions, agreements or arrangements entered into between African Resources Limited or its affiliates and the Company will be at arm's length and on normal commercial terms;

- (c) not to exercise any of its voting rights as shareholder of the Company, and to ensure that any director appointed by it to the Board does not vote, to effect variations to the Company's articles of association which would be contrary to the maintenance of the Company's independence from African Resources Limited, or which would be inconsistent with the provisions of the Relationship Agreement, or which would remove the pre-emption rights in favor of the shareholders of the Company;
- (d) to abstain from taking any action that would have the effect of preventing the Company from complying with its obligations under the Listing Rules; and
- (e) to abstain from proposing any shareholders resolution which is intended, or appears to be intended, to circumvent the proper application of the Listing Rules.

Off-take Agreements/ Key Customers

The Company sells its doré gold bars to Tau-Ken Altyn LTD. On 27 December 2013, ALTYN MM entered into an off-take contract with Tau-Ken Altyn LTD. The Company renews an off-take contract with Tau-Ken Altyn LTD on an annual basis. The Company has no other off-take arrangements in place.

Subsoil Use Contract

On 20 October 2000, Altyn entered into a Subsoil Use Contract with the Investment Agency of Kazakhstan. This contract regulates its rights to explore and extract gold and silver ore at the Sekisovskoye deposit. Under the terms of the contract, the Republic of Kazakhstan has a 'priority right to purchase' the gold and silver ore produced at prices not exceeding global market price.

5. Capital

5.1. Share capital

The number of Shares authorized

2,567,875,463 ordinary shares authorized by the Company.

The par value and number of Shares, issued and fully paid

2,567,875,463 ordinary shares with par value of 0.1 pence have been issued and fully paid.

If there are Shares not representing capital, the number and main characteristics of such Shares

The Company does not have any Shares that do not represent capital.

The number, book value and face value of Shares in the Issuer held by or on behalf of the Issuer itself or by Subsidiaries of the Issuer

There are no Shares in the Issuer held by or on behalf of the Issuer itself or by Subsidiaries of the Issuer.

The amount of any convertible securities, exchangeable securities or securities with warrants, with an indication of the conditions governing and the procedures for conversion, exchange or subscription

In 2016 the Company secured a total of US\$10m proceeds from a convertible loan with the major shareholder, African Resources Limited. In January 2018 the holders of the bond elected to convert US\$9.72m of the Bond into ordinary shares of the Company at the conversion price of 3 pence per share, resulting in the issue of 233,333,333 new ordinary shares being issued to African Resources Limited.

Information about and terms of any acquisition rights and or obligations over authorized but unissued capital or an undertaking to increase the capital

The Company does not have any Shares that do not represent capital.

Historical information about the share capital highlighting any changes for the period covered by the historical financial information

Since 1 January 2016 (being the period from which historical financial information is provided in this Prospectus), the issued share capital of the Company, has changed as follows:

- In 2016, the Company secured a total of US\$10m proceeds from a convertible loan with the major shareholder, African Resources Limited. In January 2018 the Bondholders elected to convert US\$9.7m of the Bond into

ordinary shares of the Company at the conversion price of 3p per share, resulting in the issue of 233,333,333 new ordinary shares being issued to African Resources Limited.

- On 28 October 2019 the Company announced that it will issue 1,158,937 new ordinary shares in settlement of fees to a service provider who expressed preference to receive payment in shares. The shares will be issued at a price of 0.5780 pence. As a result, this will lead to an increase in the total number of outstanding ordinary shares of the Company to 2,568,834,400.

6. Management of the Issuer

6.1. Details relating to directors and senior managers (“Key Persons”)

Name, position and business address	Functions and principal activities
Kanat Assaubayev – Chairman of the Board of Altyn Plc 28 Eccleston Square, London SW1V 1NZ	<ul style="list-style-type: none"> • Provide independent advice. • Keep abreast generally of the activities of the Company and its management. • Ensure that the Directors are properly informed, and that sufficient information is provided to enable the Directors to form appropriate judgments. • Act as Chair at meetings of the Board. • Review and sign minutes of Board meetings. • Call special meetings of the Board where appropriate. • Act as Chair at meetings of shareholders.
Aidar Assaubayev – CEO and member of the board of Altyn Plc 28 Eccleston Square, London SW1V 1NZ	<ul style="list-style-type: none"> • Take the chair at general meetings and board meetings. With regard to the latter this will involve: the determination of the order of the agenda; ensuring that the board receives accurate, timely and clear information; keeping track of the contribution of individual directors and ensuring that they are all involved in discussions and decision-making. At all meetings the chairman should direct discussions towards the emergence of a consensus view and sum up discussions so that everyone understands what has been agreed. • Take a leading role in determining the composition and structure of the board. This will involve regular reviews of the overall size of the board, the balance between executive and non-executive directors and the balance of age, experience and personality of the directors. • Ensure effective communication with shareholders and, where appropriate, the stakeholders.
Sanzhar Assaubayev – Executive Director of Altyn Plc 28 Eccleston Square, London SW1V 1NZ	<ul style="list-style-type: none"> • Ensure effective communication with shareholders and, where appropriate, the stakeholders. • Manage all day-to-day responsibilities of the organization, including managing staff
Vladimir Shkolnik – Non-executive director of Altyn Plc 28 Eccleston Square, London SW1V 1NZ	<ul style="list-style-type: none"> • Provide entrepreneurial leadership of the Company within a framework of prudent and effective controls which enable risk to be assessed and managed. • Set the Company's strategic aims, ensure that the necessary financial and human resources are in place for the company to meet its objectives, and review management performance. • Set the Company's values and standards and ensure that its obligations to its Association Members and others are understood and met.
Ashar Qureshi – Non-executive director of Altyn Plc 28 Eccleston Square, London SW1V 1NZ	<ul style="list-style-type: none"> • Provide entrepreneurial leadership of the Company within a framework of prudent and effective controls which enable risk to be assessed and managed.

- Set the Company's strategic aims, ensure that the necessary financial and human resources are in place for the company to meet its objectives, and review management performance.
- Set the Company's values and standards and ensure that its obligations to its Association Members and others are understood and met.

<p>Rajinder Basra – Chief Financial Officer of Altyn Plc 28 Eccleston Square, London SW1V 1NZ</p>	<ul style="list-style-type: none"> • Provide leadership, direction and management of the finance and accounting team • Provide strategic recommendations to the CEO/president and members of the executive management team • Manage the processes for financial forecasting and budgets, and overseeing the preparation of all financial reporting • Advise on long-term business and financial planning • Establish and developing relations with senior management and external partners and stakeholders • Review all formal finance, HR and IT related procedures
<p>Kuat Toiganbekov – Director of African Recourses 4th floor, Harbour Place, 103 South Church Street, Grand Cayman KY1-1002, Cayman Islands</p>	<ul style="list-style-type: none"> • Manage the business and all affairs of the company and exercise all powers of the company • Appoint and remove personnel, including top management • Appoint any person or entity to be the attorney or attorneys of the company • Establish and delegate his powers to committees, local boards, managers or agents

Conflict of interest

There is no conflict of interests between the personal interests of any Key Person mentioned above and that of the duties such persons owed to the Issuer or interests of the Issuer.

6.2. Other information relating to key Persons

Audit committee

The audit committee currently comprises the Non-Executive Directors, Ashar Qureshi and Vladimir Shkolnik. The board shall appoint the committee chairman, who will be an independent director as defined by The Code.

Terms of Reference

The duties of the audit committee as follows:

To ensure:

- that due consideration is given to laws and regulations, the provisions of the Code (as amended from time to time) and the requirements of the UK Listing Authority's Listing Rules as appropriate, including the requirement for explanation in the event of any permitted non-compliance;
- that the external auditors' comply with relevant ethical and professional guidance on the rotation of audit partners, the level of fees paid by the Company compared to the overall fee income of the firm, office and partner and other related requirements;
- that there are no relationships (such as family, employment, investment, financial or business) between the external auditors and the Company (other than in the ordinary course of business);
- that a tendering process in respect of the external auditor contract is conducted at least every 5 years;
- the maintenance of a sound system of internal control and risk management;
- that the committee reports annually to the Board on how it has discharged its' responsibilities; and
- that the committee's terms of reference are made publicly available.

Remuneration Committee

The Remuneration Committee comprises the Executive Director and two non-executive Directors. The committee, which meets at least once per year, is responsible for determining the contract terms, remuneration and other

benefits of the Executive Director. The remuneration of the non-executive Directors is determined by the Board within the limits set out in the articles of association. See "Additional Information—Articles of association of the Company—Directors—Remuneration". None of the committee members has any personal financial interest in the matters to be decided (other than as shareholders), potential conflicts of interest arising from cross-directorships, or any day-to-day involvement in running the business. The committee has access to professional advice from inside and outside the Company at the Company's expense.

The Remuneration Committee currently comprises Ashar Qureshi and Vladimir Shkolnik

Policy on Executive Directors' remuneration

The Company operates within a competitive environment and its performance depends on the individual contributions of the Directors and employees.

Executive remuneration packages are designed to attract, motivate and retain Directors of the calibre necessary to manage the Company's operations and to reward them for enhancing shareholder value. The performance review of the Executive Director and the determination of his annual remuneration package is undertaken by the Remuneration Committee.

The Executive Director's remuneration package may include:

- basic annual salary;
- health insurance for the Executive Director and his family;
- share options; and
- bonuses.

The Executive Director's remuneration is reviewed once per year. In deciding upon appropriate levels of remuneration, the Remuneration Committee considers rates of pay for similar jobs in comparable companies as well as internal factors such as performance.

The Remuneration Committee establishes the performance levels required for a bonus to be paid or share options to be exercisable. The Remuneration Committee believes that the award of any bonuses should be tied to the interests of the Company's shareholders.

The Executive Director may participate in share incentive schemes recommended by the Remuneration Committee.

7. Financial information about the Issuer

7.1. Historical financial information about the Issuer

Consolidated Statement of Profit or Loss	1H 2019 US\$000 (unaudited)	1H 2018 US\$000 (unaudited)	2018 US\$000 (audited)	2017 US\$000 (audited)	2016 US\$000 (audited)
Revenue	7,184	10,894	19,366	21,649	15,867
Cost of sales	(5,914)	(8,240)	(16,871)	(17,470)	(13,554)
Gross profit	1,270	2,654	2,495	4,179	2,313
Administrative expenses	(1,459)	(1,248)	(5,543)	(5,037)	(5,352)
Impairments – reversed	81	176	562	374	(1,107)
Operating loss	(108)	1,582	(2,486)	(484)	(4,146)
Foreign exchange	12	(383)	(196)	(52)	283
Finance expense	(507)	(596)	(1,283)	(1,381)	(2,215)
Loss before taxation	(603)	603	(3,965)	(1,917)	(6,078)
Taxation charge	-	-	(323)	(12)	(278)
Loss attributable to equity holders of the parent	(603)	603	(4,288)	(1,929)	(6,356)
Currency translation differences arising on translations of foreign operations items that may be reclassified to profit or loss	411	(2,027)	(5,712)	98	747
Currency translation differences arising on translations of foreign operations relating to taxation	-	-	2,560	1,088	866
Total comprehensive loss attributable to equity holders of the parent	(192)	(1,424)	(7,440)	(743)	(4,743)

Consolidated Statement of Financial Position	1H 2019 US\$000 (unaudited)	2018 US\$000 (audited)	2017 US\$000 (audited)	2016 US\$000 (audited)
Non-current assets				
Intangible assets	12,481	12,338	11,881	10,264
Property plant and equipment	29,037	28,391	35,163	37,316
Trade and other receivables	1,315	1,303	1,476	1,100
Deferred tax asset	8,078	7,999	6,928	5,855
Restricted cash	-	28	14	139
	50,911	50,059	55,462	54,674
Current assets				
Inventories	2,017	1,297	1,713	1,366
Trade and other receivables	3,829	3,081	2,531	3,096
Cash and cash equivalents	50	105	704	2,236
	5,896	4,483	4,948	6,698
Total assets	56,807	54,542	60,410	61,372
Current liabilities				
Trade and other payables	(8,645)	(7,846)	(7,822)	(5,877)
Other financial liabilities	-	(122)	(399)	(461)
Current tax payable	-	-	-	(11)
Provisions	(152)	(94)	(112)	(190)
Borrowings	(2,947)	(1,218)	(724)	(4,439)
	(11,744)	(9,280)	(9,057)	(10,978)
Net current liabilities	(5,848)	(4,797)	(4,109)	(4,280)
Non-current liabilities				
VAT payable	(885)	(1,383)	-	(254)
Other payables	(636)	(644)	(160)	(190)
Provisions	(4,745)	(4,412)	(4,512)	(3,978)
Convertible Bonds	-	(3,963)	(12,496)	(11,281)
Borrowings	(4,129)	-	(937)	(700)
	(10,395)	(10,402)	(18,105)	(16,403)
Total liabilities	(22,140)	(19,682)	(27,162)	(27,381)
Net assets	34,668	34,860	33,248	33,991
Equity				
Called-up share capital	4,054	4,054	3,886	3,886
Share premium	151,470	151,470	141,918	141,918
Merger reserve	(282)	(282)	(282)	(282)
Other reserve	333	333	333	333
Currency translation reserve	(47,359)	(47,770)	(44,618)	(45,804)
Accumulated losses	(73,548)	(72,945)	(67,989)	(66,060)
Total equity	34,668	34,860	33,248	33,991

Consolidated Statement of Changes in Equity	Share capital	Share premium	Merger reserve	Currency translation reserve	Other reserve	Accumulated losses	Total
	US\$000	US\$000	US\$000	US\$000	US\$000	US\$000	US\$000
1 January 2016	3,886	141,918	(282)	(47,417)	–	(59,704)	38,401
Loss for the year						(6,356)	(6,356)
Other comprehensive loss	–	–	–	1,613	–	–	1,613
Total comprehensive profit	–	–	–	1,613	–	(6,356)	(4,743)
Equity comp-t of loans received	–	–	–	–	333	–	333
31 December 2016	3,886	141,918	(282)	(45,804)	333	(66,060)	33,991
1 January 2016	3,886	141,918	(282)	(45,804)	333	(66,060)	33,991
Loss for the year						-1,929	-1,929
Other comprehensive income	–	–	–	1,186	–	–	1,186
Total comprehensive loss	–	–	–	1,186	–	-1,929	-743
31 December 2017	3,886	141,918	(282)	(44,618)	333	(67,989)	33,248
1 January 2017	3,886	141,918	(282)	(44,618)	333	(67,989)	33,248
Loss for the year	–	–	–	–	–	(4,288)	(4,288)
Other comprehensive loss	–	–	–	(3,152)	–	–	(3,152)
Total comprehensive loss	–	–	–	(3,152)	–	(4,288)	(7,440)
Conversion of Bonds into shares	168	9,552	–	–	–	(668)	9,052
31 December 2018	4,054	151,470	(282)	(47,770)	333	(72,945)	34,868
1 January 2018	3,886	141,918	(282)	(44,618)	333	(67,989)	33,248
Loss for the period	–	–	–	–	–	(603)	(603)
Exchange differences on translating foreign operations	–	–	–	411	–	–	–
Total comprehensive profit	–	–	–	411	–	(603)	(603)
30 June 2019	4,054	151,470	(282)	(47,359)	333	(73,548)	34,868

Consolidated Statement of Cashflows	1H 2019	1H 2018	2018	2017	2016
	US\$000	US\$000	US\$000	US\$000	US\$000
	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
Net cash inflow from operating activities	352	2,504	940	5,107	(2,918)
Investing activities					
Purchase of property plant and equipment	(2,291)	(2,397)	(1,108)	(2,252)	(4,898)
Disposals of property plant and machinery	–	–	264	–	–
Exploration costs	–	–	–	(439)	(396)
Net cash used in investing activities	(2,291)	(2,397)	(844)	(2,691)	(5,294)
Financing activities					
Loans received	2,023	–	151	724	13,661
Loans repaid	(139)	(610)	(550)	(4,331)	(3,434)
Interest repaid	–	–	(160)	(341)	(759)
Net cash outflow from financing activities	1,884	(610)	(559)	(3,948)	9,468
Decrease in cash and cash equivalents	(55)	(503)	(463)	(1,532)	1,256
Foreign currency translation	–	–	(136)	–	(104)
Cash and cash equivalents at beginning of the year	105	704	704	2,236	1,084
Cash and cash equivalents at end of the year	50	201	105	704	2,236

8. Other information relating to the Issuer

8.1. Information about auditors

The independent auditors of the Company is BDO LLP, registered office – 55 Baker Street, London W1U 7EU. BDO LLP is authorized and regulated by the Institute of Chartered Accountants in England and Wales ("ICAEW") under registration number C001055835.

8.2. Connected Persons

If a Connected Person is a controller, information about that Person

- African Resources Ltd is the major shareholder of Altyn Plc, holding 69.76% of the Company's total outstanding common Shares.
- Ultimate beneficiary owners of African Resources Ltd are the Assaubayev family and members of the Assaubayev family are members of the Board of Directors of the Issuer (as described in the "Management of the Issuer" section of this Prospectus).
- There are no arrangements known to the Issuer, the operation of which may at a subsequent date result in a change in control of the Issuer.

8.3. Legal and other proceedings against the Issuer

There are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened and of which the Company is aware) which may have, or have had during the 12 months prior to the date of this Prospectus, a significant effect on the Company's financial position or profitability.

8.4. Other significant matters

As of the date of this Prospectus there are no other significant matters that investors would reasonably require in relation to the Issuer and the Issuer's jurisdiction.

9. Responsibility for The Content of Prospectus

9.1. Responsibility Statement

A Responsibility Statement is included in Schedule 1 of this Prospectus

9.2. Signing of the Prospectus by directors of the Issuer

The Prospectus was signed by Mr. Aidar Assaubayev, Chief Executive Officer of the Issuer, on 21 November 2019.

9.3. Expert opinions included in a Prospectus

- The Issuer extracted most of the information contained in this Prospectus, in particular gold reserves of the Sekisovskoye gold mine, from an Independent Competent Persons' Report (CPR), dated 31 July 2019 and prepared by Ernst and Young Advisory Services (Pty) Ltd.
- CPR has been produced at the Issuer's request and the Issuer confirms that such information has been accurately reproduced and is able to ascertain from the information published by such third parties that no facts have been omitted which would render the reproduced information inaccurate or misleading.
- Experts responsible for the CPR:

Name	Qualifications	Business address
A.N. Clay	M.Sc. (Geol.), M.Sc. (Min. Eng.) Dip. Bus. M., Pr.Sci.Nat., MSAIMM, FAusIMM, FGSSA, MAIMA, MAAPG	102 Rivonia Road, Sandton, Gauteng, South Africa

10. Documents on Display

Copies of the following documents may be inspected at, and are available from, the office of the Issuer at 28 Eccleston Square, London, United Kingdom, SW1V 1NZ, phone: +44 020 7932 2455, during normal business hours on any weekday (Saturdays, Sundays and public holidays excepted) and on the Issuer's website <https://altyn.uk>, so long as the Bonds are listed on the AIX:

- this Prospectus and any supplements thereto
- the Constitution of the Issuer
- the annual reports and 2018 Financial Statements, 2017 Financial Statements and 2016 Financial Statements, including in each case, the audit report relating to such financial statements

- the Interim Financial Statements for six months ended 30 June 2019, including the review report relating to such accounts
- the Competent Person's Report dated 31 July 2019 for the 100% owned Sekisovskoye Mine located in Kazakhstan.

SECURITIES NOTES

1. Key information

1.1. Risk factors material to the Securities

The Bonds are subject to modification, waivers and substitution.

The terms and conditions of the Bonds contain provisions for calling meetings of Bondholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Bondholders

Delisting of the Bonds from the official list of AIX may subject gains and coupon payments on the Bonds to tax in the Republic of Kazakhstan.

In order for coupon payments due on the Bonds and gains realized by the Bondholders in relation to disposal, sale, exchange or transfer of the Bonds to be exempt from Kazakhstan withholding tax, it will be necessary for the Bonds to be admitted to the Official List of AIX as at the Coupon Payment Date or the date of such disposal, sale, exchange or transfer of the Bonds. No assurance can be given that the Bonds will remain admitted to the Official List of AIX as at each Coupon Payment Date or during the term of the Bonds, or that there will be no material change in tax and securities laws in Kazakhstan.

The Bonds will be listed on the AIX and benefit from an exemption on withholding tax which is untested in practice.

The Issuer believes that coupon payments on the Bonds will be exempt from withholding and income taxes due to the favorable treatment available for securities admitted to the Official List of AIX under the Constitutional Law on "International Financial Center "Astana" in effect as of the date of this Prospectus. However, practice is not yet fully developed.

The AIX has very short history of operations.

The AIX was launched in July 2018. There can be no assurance that the AIX will attract a sufficient number of market participants and issuers to ensure acceptable trading volumes in the foreseeable future or at all.

The Bondholders may be subject to exchange rate risks and currency controls.

The Issuer will pay principal and interest on Bonds in U.S. Dollars. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit other than U.S. Dollars. These include the risk that exchange rates may significantly change (including changes due to devaluation of the U.S. Dollar or revaluation of the investor's currency) and the risk that authorities with jurisdiction over the investor's currency may impose or modify exchange controls. As a result, investors may receive less interest or principal than expected, or no interest or principal.

The market price of the Bonds may be volatile.

The market price of the Bonds could be subject to significant fluctuations in response to actual or anticipated variations in the Issuer's operating results and those of its competitors, adverse business developments, changes to the regulatory environment in which the Issuer operates, changes in financial estimates by analysts and the actual or expected sale of a large number of Bonds.

The profitability of the Company's operations and the cash flows generated by these operations are significantly affected by changes in the market price for gold

Our revenues are almost entirely derived from the sale of gold. Our current policy is to sell our gold at prevailing U.S. Dollar spot market prices and not to enter into price hedging arrangements. Accordingly, our financial results largely depend on the price of gold, which can fluctuate significantly. These fluctuations are difficult to predict and are caused by numerous factors beyond our control, including:

- global or regional political or economic events;
- monetary policies announced or implemented by central banks, including the US Federal Reserve;
- changes in the demand for gold used in jewelry and for other industrial uses, including as a result of prevailing economic conditions;
- changes in interest rates;
- actual or anticipated sales or purchases of gold by central banks and the International Monetary Fund;
- changes in the demand for gold as an investment;
- the cost of gold production in major gold-producing countries;

- changes in the supply of gold from production, divestment, scrap and hedging;
- financial market expectations regarding the rate of inflation;
- the strength of the U.S. Dollar (the currency in which the gold price trades internationally) relative to other currencies;
- speculative positions taken by investors or traders in gold;
- gold hedging and de-hedging by gold producers;
- the overall supply of, and demand for, gold, although the considerable size of historical mined (i.e., above ground) stocks of the metal means that these factors typically do not affect the gold price in the same manner or degree as for other commodities; and
- the shift in demand from physical gold to investment and speculative demand.

A sustained period of significant gold price volatility may adversely affect our ability to evaluate the feasibility of undertaking new capital projects or continuing existing operations or making other long-term strategic decisions. The use of lower gold prices in reserve calculations and life-of-mine plans could result in material write-downs of our investment in mining properties and increased amortization, reclamation and closure charges.

If revenue from gold sales falls below the cost of production for an extended period, the Company may experience losses and be forced to curtail or suspend some or all of its capital projects and/or operations and change its dividend payment policies. Moreover, the Company has historically sold its gold at market prices and has only entered into very limited forward sales, derivative or other hedging arrangements to establish a price in advance for the sale of its future production. In general, hedging in this manner reduces the risk of exposure to a fall in the gold price. As the Company does not currently enter into transactions to hedge against the future price at which its gold is sold and does not expect to change this policy in the near future, the Company is not protected against decreases in prices, and if prices decrease significantly, the Company's business, results of operations and financial condition may be materially adversely affected.

The Group's business could be adversely affected if it fails to maintain or renew existing necessary permits and subsoil use contracts or fails to comply with the terms of its existing or future permits and subsoil use contracts

There can be no guarantee as to the terms of any such permits, licenses and subsoil use contracts or assurance that current or future permits, licenses and subsoil use contracts will be renewed or, if so, on what terms when they come up for renewal. It is possible that, in the event of any material non-compliance with the terms of any such permits (including in relation to the payment of moneys concerning their maintenance in good standing on an ongoing basis), the Group may risk its interest in those permits being forfeited. Although the directors believe that the Group's exploration activities are currently carried out in accordance with all material applicable rules and regulations, no assurance can be given that new rules, laws and regulations will not be enacted or that existing or future rules and regulations will not be applied in a manner which could serve to limit or curtail exploration, production or development of the Group's business or have an otherwise negative impact on its activities. Amendments to existing rules, laws and regulations governing its operations and activities of exploration and extraction, or increases in or more stringent enforcement, implementation or interpretation thereof, could have a material adverse impact on the Group's business, results of operations and financial condition and its industry in general in terms of additional compliance costs.

The process of entering into new subsurface use contracts or extending existing subsurface use contracts in Kazakhstan is time-consuming and is complicated by the fact that several Kazakh government ministries are involved in the contract review and approval. The relevant laws and regulations are often unclear and sometimes are not consistently applied by the authorities.

The Group's subsurface use contracts and related working programmes contain a range of obligations on the Group, and there may be adverse consequences of breach of these obligations ranging from penalties to, in extreme cases, suspension or termination of the Group's subsurface use contracts. When, in the past, changing circumstances have made it necessary for the Group to vary its obligations under its subsurface use contracts or related working programmes, the Group has entered into discussions and negotiations with the relevant regulators and, when necessary, agreed amendments to the relevant terms of the subsurface use contracts or related working programmes concerned. In its past dealings with the Kazakh regulators responsible for monitoring the Group's compliance with the terms of its subsurface use contracts and related working programmes, the Group has found such regulators to be receptive to the solutions proposed by the Group and has accordingly secured satisfactory waivers and/or amendments to the terms of its subsurface use contracts or related working programmes. However, it cannot be guaranteed that the Kazakh regulators responsible for monitoring the Group's compliance with the terms of its subsurface use contracts and related working programmes will continue to be as receptive in respect of any future negotiations in relation to varying the Group's obligations under the terms of its existing subsurface use contracts or related working programmes or that the Group will be able to avoid any adverse consequences if it were held to be in breach of the obligations under its subsurface use contracts or related working programmes in the future.

Although the Group currently has all permits in place in relation to its material assets, should the Group identify future operations at its exploration sites, there is a risk that the necessary permits, consents, titles, authorisations and agreements to implement planned exploration, project development or mining may not be obtained or renewed under conditions or within time frames that make such plans economic, that applicable laws, regulations or the governing authorities will change or that such changes will result in additional material expenditures or time delays.

The Group faces many risks related to the development of mining projects, in particular with respect to the development of underground shafts in the Sekisovskoye deposit, which may adversely affect its results of operations and profitability

The profitability of the Group is significantly affected by the actual costs of developing and operating mines, which may differ significantly from estimates determined at the time the relevant project was approved following completion of its feasibility study. The development of the underground part of this deposit is a complex project which could be subject to unexpected problems and significant delays that could increase the development and operating costs of the project.

Our decision to develop a mineral property is typically based on the results of a feasibility study. Feasibility studies estimate the expected or anticipated economic returns from the project. These estimates are based on assumptions regarding:

- future prices of gold, silver and other metals;
- future currency exchange rates;
- volume, grades and metallurgical characteristics of ore to be mined and processed from relatively small samples of ore;
- geological and geotechnical characteristics of the ore and surrounding waste rock to suit the mining method;
- anticipated recovery rates of gold, silver and other metals extracted from the ore;
- anticipated capital expenditure and cash operating costs;
- required return on investment.

Actual cash operating costs, production and economic returns may differ significantly from those anticipated by such studies and estimates. Operating costs and capital expenditure are to a significant extent driven by the cost of commodity inputs consumed in mining, including fuel, chemical reagents, explosives, tyres and steel, and also by credits from by-products. They could also fluctuate considerably as a result of changes in the prices of mining equipment used in the construction and operation of mining projects. There are a number of uncertainties inherent in the development and construction of a new mine or the extension to an existing mine. In addition to those discussed above, these uncertainties include the:

- timing and cost of construction of mining and processing facilities, which can be considerable;
- availability and cost of mining and processing equipment;
- undetected geological structures and hydrological impacts that are unfavorable to mining
- availability and cost of skilled labor, power, water and transportation;
- availability and cost of appropriate smelting and refining arrangements;
- applicable requirements and time needed to obtain the necessary environmental and other governmental permits;
- availability of funds to finance construction and development activities.

The remote location of many mining properties, permitting requirements and/or delays, third-party legal challenges to individual mining projects and broader social or political opposition to mining may increase the cost, timing and complexity of mine development and construction. New mining operations could experience unexpected problems and delays during the development, construction, commissioning and commencement of production.

Accordingly, our future development activities may not result in the expansion or replacement of current production, or one or more new production sites or facilities may be less profitable than anticipated or may be loss-making. Our operating results and financial condition are directly related to the success of our project developments.

Failure by the Group to develop additional reserves will cause its reserves and production to decline materially from their current levels over time

To realise future production growth, extend the lives of its mines and ensure the continued operation of the business, the Group must continue to realise its existing identified reserves, convert resources into reserves, develop its resource base through the realisation of identified mineral potential and undertake successful exploration.

The Group's reserves decline as production increases. Reserves are increased when the Group discovers new deposits or operations or increases reserves of operating mines via additional exploration. Once mineralisation is discovered,

it may take a number of years to complete the geological and metallurgical assessments to assess whether production is possible and, even if production is possible, the economic feasibility of production may change during that time. Substantial capital expenditure is required to identify and delineate ore reserves through geological modelling, drilling and sampling to determine metallurgical processes to extract the metals from the ore and, in the case of new properties, to construct mining and processing facilities. Any acquisition that the Group may choose to complete may change the scale of the Group's business and operations and may expose the Group to geographic, political, operating, financial and geological risks. The Group's success in its acquisition activities depends on its ability to identify suitable acquisition candidates, negotiate acceptable terms and integrate the acquired entity successfully.

The volume of production from properties generally declines as reserves are depleted. The Group's future production growth is dependent upon its success in finding or acquiring and developing additional reserves. There can be no assurance that the Group will be able to identify future reserves or continue to extend the mine life of its existing operations. If the Group is unsuccessful in securing new reserves, the Group's total reserves and production will decline, which could materially adversely affect the Group's business, results of operations and financial condition.

Ageing infrastructure at some of operations could adversely impact our business

Deep-level gold mining shafts are usually designed with a lifespan of 25 to 30 years. Vertical shafts consist of large quantities of infrastructure steelwork for guiding conveyances and accommodating services, such as high and low tension electric cables and air and water pipe columns. Rising temperatures in the deeper mining areas can also lead to increased cooling requirements in the form of upgraded and expanded ice plants. Maintaining our infrastructure requires skilled human resources, capital allocation, management and planned maintenance.

The Group may not achieve its production estimates

The Group prepares estimates of future gold production for its existing and future mines. The Group cannot give any assurance that it will achieve its production estimates. The failure of the Group to achieve its production estimates could have a material adverse effect on any or all of its future revenues and profitability. The realisation of production estimates are dependent on, among other things, the accuracy of ore reserve and mineral resource estimates, the accuracy of assumptions regarding ore grades and recovery rates, ground conditions (including hydrology), physical characteristics of ores, the presence or absence of particular metallurgical characteristics, and the accuracy of estimated rates and costs of mining, ore haulage and processing.

Actual production may vary from estimates for a variety of reasons, including: the availability of certain types of ores; actual ore mined varying from estimates of grade or volume; mining dilution, ore losses and metallurgical and other characteristics (whether based on representative samples of ore or not); short-term operating factors such as the need for sequential development of ore bodies and the processing of new or adjacent ore bodies from those planned; mine failures, slope failures, ground falls or equipment failures; industrial accidents; natural phenomena such as inclement weather conditions, floods, droughts, rock slides and earthquakes; encountering unusual or unexpected geological conditions changing mining conditions; changes in power costs and potential power shortages; shortages of principal supplies needed for mining operations, including explosives, fuels, chemical reagents, water, equipment parts and lubricants; plant and equipment failure; the inability to process certain types of ores; labour shortages or strikes; lack of required labour; civil disobedience and protests; and restrictions or regulations imposed by government agencies or other changes in the legal and regulatory environment. Such occurrences could also result in damage to mineral properties or mines, interruptions in production, injury or death to persons, damage to property of the Group or others, monetary losses and legal liabilities in addition to adversely affecting mineral production. These factors may cause a mineral deposit to become unprofitable, forcing the Group to cease production.

The figures for the Group's ore reserves and mineral resources are estimates based on interpretation and assumptions and may yield less mineral production under actual conditions than is currently estimated

The resource and reserve estimates presented in the competent person's report incorporated by reference into this Prospectus have been prepared in accordance with definitions adopted by the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC") by Ernst & Young. No assurance can be given that the anticipated volumes and grades will be achieved, that the indicated level of recovery will be realised or that mineral reserves or resources can be mined or processed profitably. Actual reserves, resources or mineral potential may not conform to geological, metallurgical or other expectations, and the volume and grade of ore recovered may be below the estimated levels.

Ore reserve and mineral resources estimates are expressions of professional judgment based on knowledge, experience and industry practice, but are subject to considerable uncertainties. The Group cannot be certain that

its estimated reserves and resources are completely accurate. Moreover, future volumes of mining, which may not occur for many years, and rates of recovery of metals could differ materially from such estimates. Should the Group discover, in the course of mining its deposits, that those deposits differ from those predicted by drilling, sampling and similar examinations, the Group may have to adjust its reserve and resource estimates and alter its mining plans in a way that might adversely affect the results of operations.

An extended period of operational underperformance, including increased production costs or reduced recovery rates, may render ore reserves uneconomic to recover and may ultimately result in the restatement of ore reserves and/or mineral resources. Any material reductions in estimates of ore reserves and mineral resources, or of the Group's ability to extract these ore reserves, could have a material adverse effect on the Group's results of operations and financial condition. In addition, a reduction in estimated ore reserves could require material write-downs in investment in the affected mining property and increased amortisation, reclamation and closure changes.

The inclusion of mineral resource estimates should not be regarded as a representation that these amounts can be economically exploited, and no assurances can be given that such resource estimates will be converted into ore reserves.

Key Concerns in the Mining Industry in Kazakhstan

As a rich mineral province, the international community is concerned with legislative, accounting, and transparency issues in Kazakhstan. Of the total geography of the country only 21% has been explored in detail. Apart from Almaty, the country is mainly flat having been extensively glaciated leaving either bare rock exposures or extensive cover of glacial tills and moraines.

Whilst adhering to Committee for Mineral Reserves International Reporting Standards ("CRIRSCO") mineral resource reporting standards where possible there are currently only 53 qualified professionals in the country who are registered Competent Persons.

The following are key concerns that Kazakhstan's mining industry faces today:

- soviet era exploration data is generally not digital. Therefore, it is stored as hard copies and sometimes lost in the archives. Soviet engineers did not include low-grade ores in the resource statements. This suggests opportunities to re-discover lower-grade ores that could be commercially viable using new technologies;
- there is a need to explore at depth. As the global mining industry explores the depth extensions of orebodies Kazakhstan is shifting in the same direction. The inevitable increase in operating expenses may lead to consolidation;
- the shortage of skilled workers and professionals is a constraint;
- there is a shortage of investment capital;
- there is a negative environmental perception of mining;
- despite low cost electricity there is limited downstream beneficiation in the country. The gold industry is one of the exceptions with gold bullion refined in country and sold to the National Bank of the Republic of Kazakhstan. There are copper smelters in Kazakhstan;
- a number of small and medium mining companies have to use old and outdated equipment, since they cannot afford new equipment;
- inefficient government procurement procedures open the way for new procurement structuring; and
- renewed interest is seeing a revival of activity albeit slowly.

Mining sector enterprises face many operating risks

In common with other enterprises undertaking business in the mining sector, the Group's mineral exploration, project development, mining and related activities are subject to conditions beyond the Group's control that can reduce, halt or limit production or increase the costs of production.

The success of the Group's mining operations is dependent on many factors, including: the discovery and/ or acquisition of ore reserves and mineral resources; the successful conclusions to feasibility and other mining studies; access to adequate capital for project development and sustaining capital; design and construction of efficient mining and processing facilities within capital expenditure budgets; the securing and maintaining of title to tenements; obtaining permits, consents and approvals necessary for the conduct of exploration and mining; complying with the terms and conditions of all permits, consents and approvals during the course of mining activities; access to competent operational management and prudent financial administration, including the availability and reliability of appropriately qualified employees, contractors and consultants; the ability to procure major equipment items and key consumables in a timely and cost-effective manner; the ability to access full power supply; and the ability to access road and airport networks for the shipment of equipment, spare parts and consumables into the operation and the shipment of gold ore out of the operation.

Costs can also be affected by factors such as changes in market conditions, government policies and exchange rates, all of which are unpredictable and outside the control of the Group. The operations are also exposed to industrial

and community disruption, which can be beyond the Group's control.

Mining, processing, development and exploration activities depend on adequate infrastructure

Mining, processing, development and exploration activities depend on adequate infrastructure. Reliable rail, ports, roads, bridges, power sources, power transmission facilities and water supply are critical to our business operations and affect capital and operating costs. This infrastructure and these services are often provided by third parties whose operational activities are outside our control.

Interferences in the maintenance or provision of infrastructure, including unusual weather phenomena, sabotage and social unrest, could impede our ability to deliver our products on time and adversely affect our business, financial condition and results of operations.

The precious metals industry in Kazakhstan is highly regulated by the State. Such control by the State may limit the operations of the Group in the future in an unpredictable manner

The precious metals industry in Kazakhstan is highly controlled by the State. Such State control over the precious metals industry is implemented by the priority right of the State to purchase refined gold; licensing of export of certain types of precious metals; conduct of State control procedures prior to export of precious metals outside of Kazakhstan; and introduction of non-tariff regulation measures (e.g., introduction of ban for export).

For example, since August 2012, the Republic of Kazakhstan has had a priority right to purchase refined gold from Kazakh producers, and the waiver that the Company had negotiated with respect to this legislation expired at the end of 2013.

There can be no assurance that the Kazakhstan Government will not initiate any new actions for control of precious metals industries. If the Kazakhstan Government implements new measures for control of precious metals industries in an unpredictable manner, which will be unacceptable for the Group's operations, the Group's operations, business and financial condition could be materially adversely affected.

The Group's operations may involve greater risks, including political, economic, social, financial, regulatory and legal risks, not associated with more developed markets

The Group's operations are conducted entirely in Kazakhstan, which is considered to be an emerging market. Investments in emerging markets are often subject to greater risks than investments in more developed markets. Economies in emerging markets such as Kazakhstan are in various stages of development or structural reform, and some are subject to rapid fluctuations in their foreign exchange rates, gross domestic product ("GDP"), consumer prices and interest rates. The Group's operations may be subject to the risk of sudden changes in regulatory and taxation regimes, political or labour unrest, acts of terrorism or other violence, corruption, inflation or recession. In addition, financial instability in other markets adjacent to Kazakhstan, such as other Central Asian countries, may adversely affect the markets in which the Group operates. All of these factors may affect the economic and trading conditions in which the Group operates, including the ability of the Group to sell its products. These factors could also increase the costs of operating in Kazakhstan. Any of the foregoing could have a material adverse effect on the Group's business, financial condition and results of operations.

All of the Group's operations are conducted, and all of its assets are located, in Kazakhstan. Accordingly, the Group is affected to a significant degree by legal, economic and political conditions prevailing in Kazakhstan

Kazakhstan became an independent sovereign state in 1991 as a result of the dissolution of the Soviet Union. Since then, Kazakhstan has undergone significant changes as it has emerged from a single party political system and a centrally-controlled command economy to a market-oriented economy. The transition was initially marked by political uncertainty and tension, a recessionary economy accompanied by high inflation, instability of the local currency and rapid, but incomplete, changes in the legal environment. Since 1992, Kazakhstan has actively pursued a programme of economic reform designed to establish a free-market economy through privatisation of state enterprises. However, as with any transition economy, there can be no assurance that these reforms will continue or that they will achieve any or all of their intended aims.

Kazakhstan's financial sector as a whole continues to experience instability and remains under stress. It is not clear what impact this will have on Kazakhstan's mineral resources market. Small and medium-sized enterprises have been particularly affected while larger companies and state-owned entities have generally continued to have access to offshore funding albeit on a more limited basis and on less favourable terms. Any liquidity problems in Kazakhstan's economy could adversely affect its economic development, which could, in turn, materially and adversely affect the Group's prospects, business, financial condition and results of operations.

In addition, although the Government currently supports the development of Mineral Resources, there is no

assurance that the Government will not adopt different policies in respect of foreign development and ownership of Mineral Resources due to future political and economic conditions in Kazakhstan. Any such change in policy may result in changes in laws affecting ownership of assets, land tenure and mineral concessions; taxation; royalties; exchange rates; environmental protection; labour relations; repatriation of income; and return of capital. These changes may affect both the Group's ability to undertake exploration, development and operational activities in respect of future Mineral Resources as well as its ability to continue to explore, develop and operate those Mineral Resources in respect of which it has already obtained mineral exploration and exploitation rights.

In February 2009 and February 2014, the National Bank of Republic of Kazakhstan (NBK) devalued the Tenge by 18% and 18.6%, respectively. In August 2015, the NBK announced the adoption of a free-floating exchange rate and medium-term inflation targeting policy, which resulted in a 26.2% depreciation of the Tenge against the U.S. Dollar. Any further devaluation of the Tenge could have an adverse impact on the Group and Kazakhstan's public finances and economy

Revenue of the Group is linked to the U.S. Dollar since gold is generally sold throughout the world in U.S. Dollars but, historically, most of the Group's operating costs have been incurred in Tenge. If a large portion of the Group's operating costs continues to be incurred in Tenge, the Group's accounts will remain sensitive to currency exchange rate fluctuations. Although the Tenge has recently weakened against the U.S. Dollar, any appreciation of the Tenge against the U.S. Dollar could have an adverse effect on the Group's financial condition and results of operations. In addition, there can be no assurance that the NBK will maintain its managed exchange rate policy and that another significant devaluation of the Tenge will not happen in the future. Any change in the NBK's exchange rate policy could have an adverse effect on Kazakhstan's public finances and economy, which could, in turn, have a material adverse effect on the Group's business, financial condition, results of operations and prospects.

Kazakhstan's economy is highly dependent on commodity exports and may be affected by commodity price volatility and delays in the completion of infrastructure projects

Countries in the Central Asia region, such as Kazakhstan, whose economies and state budgets rely in part on the export of oil, oil products, metals and other commodities, could be adversely affected by volatility in oil and other commodity prices and by any sustained fall in prices. Kazakhstan's economy could be adversely affected by delays in any infrastructure projects related to the commodities industry or by a lack of foreign investment in the commodities industry. In addition, any fluctuations in the value of the U.S. Dollar relative to other currencies may cause volatility in earnings from U.S. Dollar-denominated exports of commodities. An oversupply of commodities in world markets or a general downturn in the economies of any significant markets for commodities or a weakening of the U.S. Dollar relative to other currencies would have a material adverse effect on the Kazakhstan economy, which could, in turn, have a material adverse effect on the business, financial condition and results of operations of the Group.

1.2. Reasons for the offer

Estimated net amount of proceedings The net proceeds from the issuance are expected to amount to approximately US\$9,100,000 after deduction of fees and expenses related to the issue.

Use of proceeds The issuance is being made, and the net proceeds of the issue of the Bonds will be used by the Issuer to finance the development of Sekisovskoye and Karasuyskoye gold mines

1.3. Creditworthiness of the Issuer

Earnings coverage ratio

According to the Issuer's audited financials, earnings coverage ratio for 2018 is equal to -4.5.

Relevant credit ratings

The Issuer and the Bonds do not have any credit ratings.

Risk factors that may affect the Issuer's ability to fulfil its obligations under the Securities to investors

All relevant risk factors are described in the "Risk factors" section of the Registration Document.

2. Information relating to the securities offered/admitted to trading

2.1. General information relating to Securities

Form of the Bonds The Bonds will be issued in fully registered and dematerialised form under the Acting law of AIFC, including AIX Markets Listing Rules (section 16-1).

Aggregate principal amount	US\$10,000,000
Nominal value	US\$100 per one Bond
Type of securities	Senior, unsecured coupon Bonds (book-entry form)
ISIN	KZX000000286
Admission to listing and trading	Application has been made for the Bonds to be admitted to the Official List of AIX and to be admitted to trading on the AIX.
Registrar	AIX Registrar
Depository	AIX CSD
Legislation	The Bonds and any non-contractual obligations arising out of, or in connection with, the Bonds shall be governed by, and construed in accordance with, the laws of the AIFC. The Issuer has agreed herein the conditions in favor of the Bondholders that any claim, dispute or discrepancy of any nature arising out of, or in connection with, the Bonds (including claims, disputes or discrepancies regarding the existence, termination thereof, or any non-contractual obligations arising out of, or in connection with, the Bonds) shall be brought to, and finally resolved by, the Court of the AIFC in accordance with the rules thereof, or the International Arbitration Center of the AIFC in accordance with the rules thereof, currently in effect, such rules shall be deemed incorporated herein.
Currency	U.S. Dollar
Ranking	The Bonds shall constitute direct, general and unconditional obligations of the Issuer which will rank pari passu among themselves and rank pari passu, in terms of payment rights, with all other current or future unsubordinated obligations of the Issuer, except for liabilities mandatorily preferred by law.
Issue date	10 December 2019
Maturity date	10 December 2022
Redemption and purchase	<p>Unless previously purchased and cancelled, the Issuer hereby irrevocably covenants in favor of each Bondholder that the Bonds will be redeemed at their nominal value concurrently with the final coupon payment on the relevant Maturity Date. In such a case the Issuer shall be discharged of any and all payment obligations under the Bonds upon payment made net of any withholding or other taxes due or which may be due under the law of the Republic of Kazakhstan and which is payable by the Bondholders.</p> <p>The Issuer may at any time purchase the Bonds in the open market or otherwise at any price. Any purchase by tender shall be made available to all Bondholders alike.</p> <p>All Bonds so redeemed or purchased will be cancelled forthwith and may not be re-issued or re-sold.</p>
Coupon interest	<p>The Bonds bear coupon interest on its outstanding principal amount from (and including) the relevant Issue Date to (but excluding) the Maturity Date at the fixed coupon rate of 9.00% per annum (the "Coupon Interest Rate"), payable semi-annually in arrear on each Coupon Payment Date. Coupon interest amount per one Bond shall be calculated using the following formula:</p> $\text{Nominal value} \times \text{Coupon Interest Rate} \times \text{Day Count Fraction}$
Coupon payment dates	10 June and 10 December in each year, commencing 10 June 2020
Coupon period	Each period beginning on (and including) the Issue Date or any Coupon Payment Date and ending on (but excluding) the next Coupon Payment Date.
Day count fraction	30/360; Coupon payments on the Bonds shall be calculated on the basis of a year of 360 days consisting of 12 months of 30 days each.
Yield	The yield range of the Bonds is expected to be between 8.50% and 9.00%. It is not an indication of future yield.
Rights attaching to the	Bondholders have the right to:

Bonds	<ul style="list-style-type: none"> • receive coupon payments; • receive nominal value upon redemption; • freely transfer the Bonds; • receive information concerning the Issuer’s operations; • attend, participate in and vote at meetings of Bondholders in accordance with the terms and conditions of the Bond; • If any of the events mentioned in “Events of default” section of the Prospectus occurs, and if any Bondholder gives a written notice to the Issuer that the Bonds are, and they shall immediately become, due and payable at their par value together with accrued interest to the date of such notice.
Issue restrictions	No amendment shall be made by the Issuer to the Prospectus unless the Issuer has secured prior written consent(s) of the Bondholders of at least three-fourth in principal amount of the Bonds then outstanding.
Selling restrictions	The offering and sale of the Bonds is subject to applicable laws and regulations and the Bonds may not be sold in other jurisdictions, including without limitation the United Kingdom, the European Economic Area, other than in compliance with applicable laws and regulations. The Bonds have not and will not be registered under the U.S. Securities Act of 1933 or the securities laws of any state of the United States and may not be offered, sold or delivered within the United States or to, or for the account or benefit of, U.S. persons.
Restrictions on the free transferability	The Bonds are freely transferable and, once admitted to the Official List of AIX, shall be transferable only in whole in accordance with the rules and regulations of the AIX applicable from time to time.
Time limit for claims	Any claim against the Issuer in respect of the Bonds shall become invalid, unless it is filed within 3 years (in the case of principal and coupon payments), from the date of the relevant payment in respect of the Bonds.
Miscellaneous	For purposes of any calculation specified herein, a value shall be accurate to two decimal places.

3. Terms and conditions of the offer

Number of Bonds offered	100,000 Bonds
Offer price range	The offer price range of the Bonds is expected to be between 101.3% and 100.00% of the nominal value of the Bonds.
Categories of potential investors	The Bonds will be publicly offered in Kazakhstan to a wide range of investors (subject to applicable laws and regulations).
Conflict of interest	No person involved in the offering has any interest in the offering, which is material to the offering.
Offering method	Offering of the Bonds will be made through subscription using the book-building platform of the trading system of the AIX in accordance with the AIX Market Rules and relevant AIX market notice.
Offer period	4 December 2019.
Allotment of the Bonds	The Lead Manager may, at its sole discretion, allot any Bonds to itself or any of its related persons or related persons of the Issuer, without any restriction. The allotment of the Bonds to subscribers shall be at the absolute discretion of the Lead Manager. The Lead Manager may refuse to allot the Bonds subscribed by any subscribers at its sole discretion. The allotment date of the Bonds will be disclosed in the market notice issued by the AIX prior to the book-building process. It is expected that an allotment advice will be dispatched to investors by 5 December 2019.
Lead manager	The Lead Manager, “Freedom Finance” JSC, has, pursuant to the Underwriting Agreement dated 27 September 2019 (the “Underwriting Agreement”), agreed with

the Issuer to place the Bonds on a best efforts basis. The Issuer has agreed to pay to the Lead Manager an underwriting commission.

The Issuer also appointed “Freedom Finance” JSC as a book-runner in connection with the Offering.

Authorisations	The issue of the Bonds was approved by a resolution of the Board of Directors of the Issuer dated 1 November 2019
Clearing and settlement	<p>The payment and settlement will be made through the settlement system of the AIX CSD in accordance with the rules and regulations of the AIX CSD (the “AIX CSD Rules”), in particular delivery of the Bonds through the system of the AIX CSD.</p> <p>In order to participate in the offering of the Bonds, take delivery of the Bonds and trade the Bonds on the AIX, investors are required to have an account opened with a brokerage company admitted as an AIX Trading Member and an AIX CSD Participant. The Bonds will be held on behalf of investors in the relevant AIX Trading Member’s custodial account at AIX CSD.</p>
Notification process for investors	<p>Prior to the start of the book-building process the AIX will issue a market notice setting out, among other things, the main terms and conditions of the book-building and settlement procedures in connection with the offering through AIX, the yield range and the related responsibilities of the AIX trading members.</p> <p>Dealings in the Bonds shall not commence prior to admission to trading of the Bonds by the AIX or prior to the said notification.</p>
Paying agent	AIX CSD, 55/19 Mangilik El st., block C 3.4. Nur-Sultan, Republic of Kazakhstan, Z05T3C4

3.1 Payment

Coupon interest payments on the Bonds shall be paid to the Person shown on the register that the Issuer shall procure to be kept by AIX Registrar in accordance with AIX Registrar’s regulations at the close of business on the fifth day before the due date for payment thereof (the “Record Date”). Coupon interest payments on Bonds shall be paid on the relevant Coupon Payment Dates by money transfer (in USD only) to current bank accounts of the holders of the Bonds specified in the register of Bondholders as at the Record Date. The final coupon interest payment shall be made concurrently with payment of the principal of the Bonds on the relevant Maturity Date. All Payments in respect of the Bonds shall be made in USD.

If any date for payment in respect of the Bonds is not a Business day, the holder shall not be entitled to payment until the next following Business day nor to any coupon interest or other sum in respect of such postponed payment.

3.2 Penalty

The Issuer shall pay a penalty to the Bondholders for each day, on which any amount payable under the Bonds remains due and unpaid (the “Unpaid Amount”), at the rate equal to the Coupon Interest Rate. The amount of penalty payable per any Unpaid Amount in respect of any Bonds shall be equal to the product of the Coupon Interest Rate, the Unpaid Amount and the number of calendar days on which any such Unpaid Amount remains due and unpaid divided by 360, rounding the resultant figure to the nearest cent, half of any such cent being rounded upwards.

3.3 Events of Default

If any one or more of the below events (each an “Event of Default”) shall occur, the Bondholder may give written notice to the Issuer at its registered office that such Bond is immediately due and repayable, at its principal amount together with accrued interest (if any) to the date of payment.

- **Nonpayment:** the Issuer fails to pay the principal of any of the Bonds when the same becomes due and payable either at maturity, by declaration or otherwise or the Issuer is in default with respect to the coupon interest payment or additional amounts on any of the Bonds and such default in respect of interest or additional amounts continues for a period of five calendar days
- **Breach of other obligations:** the Issuer is in default in the performance, or is otherwise in breach, of any covenant, obligation, undertaking or other agreement under the Bonds and such default or breach is not remedied within 30 calendar days after notice thereof has been given to the Issuer, as the case may be, by the Bondholders. So long as the Bonds remain outstanding, other obligations include:

- the Issuer will not, and will not permit any subsidiary to enter into a single transaction or in a series of transactions (whether related or not) with a view to sell, lease with transfer of ownership rights, transfer or otherwise dispose of its assets involving aggregate disposition exceeding US\$1,000,000;
 - the Issuer will not undertake or introduce any amendments into its constitutional documents, including the Issuer's Articles, that would alter the Issuer's principal business activities unless such amendments aim at expansion of such activities;
 - the Issuer will not undertake any reorganization as a legal entity without prior written consent of holders of at least three-fourth in principal amount of the Bonds outstanding;
 - the Issuer will not amend the Prospectus unless agreed upon in writing with the holders of at least three-fourth in principal amount of the Bonds outstanding;
 - the Issuer will maintain the listing of the Bonds in the Official List of AIX;
 - the Issuer will not amend or substitute any entity in place of the Issuer as the principal debtor in respect of the Bonds, without prior written consent of the Bondholders of at least three-fourth in principal amount of the Bonds then outstanding;
 - the Issuer will not initiate a termination of the activity;
 - the Issuer shall pay any penalty due to any Bondholder in accordance with Condition "Penalty" above.
- **Cross default:** (i) any Indebtedness for Borrowed Money of the Issuer (a) becomes due and payable prior to the due date for payment thereof by reason of default by the Issuer or (b) is not repaid at maturity as extended by the period of grace, if any, applicable thereto or (ii) any Indebtedness Guarantee given by the Issuer or any Material Subsidiary in respect of Indebtedness for Borrowed Money of any other Person is not honored when due and called, provided that the aggregate principal amount of such Indebtedness for Borrowed Money exceeds \$500,000 (or its equivalent in other currencies)
 - **Bankruptcy:** (i) any Person shall have instituted a proceeding or entered a decree or order for the appointment of a receiver, administrator or liquidator in any insolvency, rehabilitation, readjustment of debt, marshalling of assets and liabilities, moratorium of payments or similar arrangements involving the Issuer or any Material Subsidiary or all or substantially all of their respective properties and such proceeding, decree or order shall not have been vacated or shall have remained in force undischarged or unstayed for a period of 45 days; or (ii) the Issuer or any Material Subsidiary shall institute proceedings under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect to be adjudicated a bankrupt or shall consent to the filing of a bankruptcy, insolvency or similar proceeding against it or shall file a petition or answer or consent seeking reorganization under any such law or shall consent to the filing of any such petition, or shall consent to the appointment of a receiver, administrator or liquidator or trustee or assignee in bankruptcy or liquidation of the Issuer or any Material Subsidiary, as the case may be, or in respect of its property, or shall make an assignment for the benefit of its creditors or shall otherwise be unable or admit its inability to pay its debts generally as they become due or the Issuer or any Material Subsidiary commences proceedings with a view to the general adjustment of its Indebtedness which event is, in the case of the Material Subsidiary, materially prejudicial to the interests of the Bondholders
 - **Judgements:** The failure by the Issuer or any subsidiary to pay any final judgment in excess of \$500,000 (or its equivalent in other currencies) which final judgment remains unpaid, and undischarged, and unwaived and unstayed for a period of more than 30 consecutive days after such judgement becomes final and non-appealable, and, in the event such judgment is covered by insurance, an enforcement proceeding has been commenced by any creditor upon such judgment that is not promptly stayed
 - **Material compliance with applicable laws:** the Issuer fails to comply in any respect with any applicable laws or regulations (including any foreign exchange rules or regulations) of any governmental or other regulatory authority for any purpose to enable the Issuer lawfully to exercise its rights or perform or comply with its obligations under the Bonds or to ensure that those obligations are legally binding and enforceable or to ensure that all necessary agreements or other documents are entered into and that all necessary consents and approvals of, and registrations and filings with, any such authority in connection therewith are obtained and maintained in full force
 - **Invalidity or Unenforceability:** (i) the validity of the Bonds is contested by the Issuer or the Issuer shall deny any of its obligations under the Bonds (whether by a general suspension of payments or a moratorium on the payment of debt or otherwise) or (ii) it is or becomes unlawful for the Issuer to perform or comply with all or any of its obligations set out in the Bonds or (iii) all or any of the Issuer's obligations set out in the Bonds, shall be or become unenforceable or invalid
 - **Government Intervention:** (i) all or any substantial part of the undertaking, assets and revenue of the Issuer or any Material Subsidiary is condemned, seized or otherwise appropriated by any Person acting under the authority

of any national, regional or local government or (ii) the Issuer or any Material Subsidiary is prevented by any such Person from exercising normal control over all or any substantial part of its undertaking, assets, revenue

3.4 Meetings of Bondholders

- The Issuer may from time to time call meetings of Bondholders for the purpose of consultation with Bondholders or for the purpose of obtaining the consent of Bondholders on matters which in terms of this Prospectus require the approval of a Bondholders' meeting.
- A meeting of Bondholders shall be called by the Directors by giving all Bondholders listed on the register of Bondholders as at a date being not more than 30 days preceding the date scheduled for the meeting, not less than 14 days' notice in writing. Such notice shall set out the time, place and date set for the meeting and the matters to be discussed or decided thereat, including, if applicable, sufficient information on any amendment of the Prospectus that is proposed to be voted upon at the meeting and seeking the approval of the Bondholders. Following a meeting of Bondholders held in accordance with the provisions contained hereunder, the Issuer shall, acting in accordance with the resolution(s) taken at the meeting, communicate to the Bondholders whether the necessary consent to the proposal made by the Issuer has been granted or withheld. Subject to having obtained the necessary approval by the Bondholders in accordance with the provisions of this Section at a meeting called for that purpose as aforesaid, any such decision shall subsequently be given effect to by the Issuer.
- The amendment or waiver of any of the provisions of and/or conditions contained in this Securities Note, or in any other part of the Prospectus, may only be made with the approval of the Issuer and of the Bondholders at a meeting called and held for that purpose in accordance with the terms hereof.
- A meeting of Bondholders shall only validly and properly proceed to business if there is a quorum present at the commencement of the meeting. For this purpose, at least two Bondholders present, in person or by proxy, representing not less than 50% in nominal value of the Bonds then outstanding, shall constitute a quorum. If a quorum is not present within 30 minutes from the time scheduled for the commencement of the meeting as indicated on the notice convening same, the meeting shall stand adjourned to a place, date and time as shall be communicated by the Directors to the Bondholders present at that meeting. The Issuer shall within 2 days from the date of the original meeting publish by way of a company announcement the date, time and place where the adjourned meeting is to be held. An adjourned meeting shall be held not earlier than 7 days, and not later than 15 days, following the original meeting. At an adjourned meeting: the number of Bondholders present, in person or by proxy, shall constitute a quorum; and only the matters specified in the notice calling the original meeting shall be placed on the agenda of, and shall be discussed at, the adjourned meeting.
- Any person who in accordance with the Articles of the Issuer is to chair the annual general meetings of shareholders shall also chair meetings of Bondholders.
- Once a quorum is declared present by the chairman of the meeting, the meeting may then proceed to business and address the matters set out in the notice convening the meeting. In the event of decisions being required at the meeting the directors or their representative shall present to the Bondholders the reasons why it is deemed necessary or desirable and appropriate that a particular decision is taken. The meeting shall allow reasonable and adequate time to Bondholders to present their views to the Issuer and the other Bondholders present at the meeting. The meeting shall then put the matter as proposed by the Issuer to a vote of the Bondholders present at the time at which the vote is being taken, and any Bondholders taken into account for the purpose of constituting a quorum who are no longer present for the taking of the vote shall not be taken into account for the purpose of such vote.
- The voting process shall be managed by the Company Secretary.
- The proposal placed before a meeting of Bondholders shall only be considered approved if at least 75% in nominal value of the Bondholders present at the meeting at the time when the vote is being taken, in person or by proxy, shall have voted in favor of the proposal.
- Save for the above, the rules generally applicable to proceedings at general meetings of shareholders of the Issuer shall apply to meetings of Bondholders.

3.5 Notices

To the Bondholders

All notices to the Bondholders shall be deemed to have been duly given if, so long as the Bonds are listed on the AIX and so long as the rules of the AIX so require, by publication (i) on the internet website of the AIX at www.aix.kz or (ii) otherwise in accordance with the regulations of the AIX. If the Bonds cease to be listed on the AIX, any notice shall be sent to the Bondholders by first class mail (or its equivalent) or (if posted to an overseas address) by airmail

at their respective addresses on the register, and any such notice shall be deemed to have been given on the fourth day after the date of mailing.

To the Issuer

Notices to the Issuer will be deemed to be validly given if delivered to the Issuer at 28 Eccleston Square, London SW1V 1NZ, United Kingdom for the attention of the Chief Executive Officer and will be deemed to have been validly given when delivered.

3.6 Early redemption

Early redemption at the option of the Issuer

The Bonds may be redeemed in whole at nominal amount before their stated maturity at the option of the Issuer only if the Issuer has secured prior written consent(s) of the Bondholders of at least three-fourth in nominal amount of the Bonds then outstanding.

Early redemption at the option of holders of the Bonds

If at any time while any of the Bonds remains outstanding an Event of Default (as defined in the Prospectus) occurs, the Issuer shall, at the option of the holder of the Bonds, upon the holder of the Bonds giving not less than 15 days nor more than 30 days notice to the Issuer, redeem such Bonds on the day specified in such notice at 100% of its nominal amount together with coupon interest accrued to (but excluding) the date specified for redemption.

Following the occurrence of any Event of Default the Issuer may arrange negotiations with the holders of the Bonds in respect of the early redemption at the option of the holders of the Bonds.

3.7 Taxation

Under the Constitutional Law on “International Financial Centre “Astana” any interest or capital gain on the securities listed on the AIX are tax exempt until 1 January 2066. Accordingly, following the admission of the Bonds to the Official List of AIX, any income derived from owning or selling such Bonds will be tax exempt as long as the Bonds are listed on the AIX.

No stamp, registration or other tax arising out of the transfer of the Bonds exist in the Republic of Kazakhstan.

3.8 Further issues and further indebtedness

The Issuer may, from time to time, without the consent of the Bondholders, create and issue further debentures, debenture stock, bonds, loan notes, or any other debt securities, either having the same terms and conditions as any outstanding debt securities of any series (including the Bonds) so that such further issue shall be consolidated and form a single series with the outstanding debt securities of the relevant series (including the Bonds), or upon such terms as the Issuer may determine at the time of their issue.

4. Other information

4.1. Audit and source of information including use of expert reports

Audited financials prepared by the Company’s auditors – BDO LLP and Competent Person’s Report prepared by Ernst and Young Advisory Services (Pty) Ltd are included in Schedule 2 and Schedule 3 of this Prospectus.

5. Admission to trading

Admission to:	Proposed date	Actual date
-an Official List of Securities	10 December 2019	10 December 2019
-trading on an Authorized Market Institution	10 December 2019	10 December 2019
-listing or trading by a Financial Service Regulator or Authorized Investment Exchange	10 December 2019	10 December 2019

An estimate of the total expenses related to the admission to trading

Fees associated with admission of Bonds to the Official List of AIX and to trading on the AIX are expected to be US\$30 000.

DEFINITIONS AND GLOSSARY

“AIFC”	Astana International Financial Center.
“AIX”	Astana International Exchange.
“AIX CSD”	Astana International Exchange Central Depository.
“AIX Registrar”	Astana International Exchange Registrar.
“ALTYN MM”	DTOO Altai Ken Bayitu LLP.
“Articles”	Articles of association of Altyn Plc.
“Board”	The Board of Directors of Altyn Plc.
“Bondholder”	A holder of the Bond.
“Breccia”	Rock composed of angular fragments, commonly coarse grained (grains over 5 mm across), may be sedimentary, igneous, tectonic, or supergene.
“Business day”	Means a day on which banks and exchange markets are open for business in the Republic of Kazakhstan.
“Companies Act”	An Act of the Parliament of the United Kingdom which forms the primary source of UK company law.
“Company”	Altyn Plc.
“Competent Persons Report”	The independent competent persons report on the Sekisovskoye gold project prepared by Ernst and Young Advisory Services (Pty) Ltd included in Schedule 3 to this Prospectus.
“Constitution”	Articles of association of Altyn Plc.
“cyanide”	Sodium cyanide (NaCN).
“DGPB”	DTOO Gornorudnoe Predpriatie Sekisovskoye.
“Diamond drill”	The machine for drilling holes in rocks to get cylindrical cores of rock for examination and chemical analyses, the cutting face of the drill bit is impregnated with diamonds which cut the rock when the bit is rotated, the core of rock is caught in a core barrel behind the bit, ground rock is flushed from the hole by water pumped down the drill rods, the water also cools the bit which heats up during drilling.
“Earnings coverage ratio”	Equal to consolidated net income applicable to common shareholders plus income taxes, interest on long-term and short-term debt, divided by interest on long-term and short-term debt.
“EBITDA”	For purposes hereof shall consist of Parent’s and the Companies’ consolidated operating earnings before interest expense, depreciation and amortization expense, taxes on income, costs and expenses (including without limitation, legal and accounting) or write-downs directly related to the Transactions or subsequent acquisition or other business combination by Parent or the Companies (except as provided below), foreign exchange gains and losses and extraordinary items of Parent and/or the Companies. The term EBITDA shall include all EBITDA generated by Parent, the Companies or any subsidiary thereof from any businesses or assets acquired by any of them after the Effective Time.
“Feasibility study”	A comprehensive study of a deposit in which all geological, engineering, operating, economic and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production.
“Gold doré”	An alloy that is produced after the first stage of the purification process, containing approximately 90 per cent. Gold as well as metals such as silver or copper. It must be refined in order to achieve the levels of purity required to be traded on gold markets.
“Government”	The Government of the Republic of Kazakhstan.
“Grade”	The amount of mineral in each tonne of ore.
“Group”	The Company, ALTYN MM, DGPB and Hambledon Mining Company Limited.
“Indebtedness”	Means, with respect to any Person on any date of determination (without duplication): <ul style="list-style-type: none">• the principal of and premium (if any) in respect of indebtedness of such Person for borrowed money• the principal of and premium (if any) in respect of obligations of such Person evidenced by Bonds, debentures, notes or other similar instruments• the principal component of all obligations of such Person in respect of letters of credit,

bankers' acceptances or other similar instruments (including reimbursement obligations with respect thereto except to the extent such reimbursement obligation relates to a trade payable and such obligation is satisfied within 30 days of Incurrence)

- the principal component of all obligations of such Person to pay the deferred and unpaid purchase price of property (except trade payables), which purchase price is due more than six months after the date of placing such property in service or taking delivery and title thereto
- Capitalised Lease Obligations and all Attributable Indebtedness of such Person
- the principal component or liquidation preference of all obligations of such Person with respect to the redemption, repayment or other repurchase of any Disqualified Stock or, with respect to any Subsidiary, any Preferred Stock (but excluding, in each case, any accrued dividends)
- the principal component of all Indebtedness of other Persons secured by a Lien on any asset of such Person, whether or not such Indebtedness is assumed by such Person, *provided, however*, that the amount of such Indebtedness will be the lesser of (a) the fair market value of such asset at such date of determination and (b) the amount of such Indebtedness of such other Persons
- the principal component of Indebtedness of other Persons to the extent guaranteed by such Person
- to the extent not otherwise included in this definition, net obligations of such Person under Hedging Obligations (the amount of any such obligations to be equal at any time to the termination value of such agreement or arrangement giving rise to such obligation that would be payable by such Person at such time)

The amount of Indebtedness of any Person at any date will be the outstanding balance at such date of all unconditional obligations as described above and the maximum liability, upon the occurrence of the contingency giving rise to the obligation, of any contingent obligations at such date.

In addition, "Indebtedness" of any Person shall include Indebtedness described in the preceding paragraph that would not appear as a liability on the balance sheet of such Person if:

- such Indebtedness is the obligation of a partnership or Joint Venture that is not a **Material Subsidiary**,
- such Person or a Material Subsidiary of such Person is a general partner of the Joint Venture (a "General Partner"), and
- there is recourse, by contract or operation of law, with respect to the payment of such Indebtedness to property or assets of such Person or a Material Subsidiary of such Person, and then such Indebtedness shall be included in an amount not to exceed:
 - the lesser of (i) the net assets of the General Partner and (ii) the amount of such obligations to the extent that there is recourse, by contract or operation of law, to the property or assets of such Person or a Material Subsidiary of such Person, or

if less than the amount determined pursuant to clause (A) immediately above, the actual amount of such Indebtedness that is recourse to such Person or a Material Subsidiary of such Person, if the Indebtedness is evidenced in writing and is for a determinable amount and the related interest expense shall be included in Consolidated Interest Expense to the extent actually paid by Altyn Plc or its Material Subsidiaries.

"Indebtedness for Borrowed Money"

Means any Indebtedness of any Person for or in respect of (i) moneys borrowed, (ii) amounts raised by acceptance under any acceptance credit facility, (iii) amounts raised pursuant to any Bond purchase facility or the issue of Bonds, notes, debentures, loan stock or similar instruments, (iv) the amount of any liability in respect of leases or hire purchase contracts which would, in accordance with generally accepted accounting standards in the jurisdiction of incorporation of the lessee, be treated as finance or capital leases, (v) the amount of any liability in respect of any purchase price for assets or services the payment of which is deferred primarily as a means of raising finance or financing the acquisition of the relevant asset or service and (vi) amounts raised under any other transaction (including any forward sale or purchase agreement and the sale of receivables or other assets on a with recourse basis) having the commercial effect of a borrowing.

"Indebtedness Guarantee"

Means in relation to any Indebtedness of any Person, any obligation of another Person to pay such Indebtedness including (without limitation) (i) any obligation to purchase such Indebtedness, (ii) any obligation to lend money, to purchase or subscribe shares or other

securities or to purchase assets or services in order to provide funds for the payment of such Indebtedness, (iii) any indemnity against the consequences of a default in the payment of such Indebtedness and (iv) any other agreement to be responsible for repayment of such Indebtedness.

“Indicated”	Is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
“Inferred”	Is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified, geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, and workings and drill holes which may be limited or of uncertain quality and reliability.
“Issuer”	Altyn Plc.
“Lead manager”	Underwriter – Freedom Finance JSC.
“JORC”	The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.
“M”	Means million.
“Material Subsidiary”	Means any Subsidiary of Altyn Plc that (a) becomes a directly held Subsidiary of either Altyn Plc or a Material Subsidiary and is designated as a Material Subsidiary by the Board of Directors of Altyn Plc , (b) has either (i) assets which constitute 10% or greater of the total assets of Altyn Plc and its Subsidiaries on a consolidated basis or (ii) EBITDA which accounts for 10% or greater of EBITDA of Altyn Plc and its Subsidiaries on a consolidated basis as of the date of the most recent financial statements or (c) is the direct or indirect parent company of any Subsidiary required to be designated a Material Subsidiary or Minority Company . The Board of Directors of Altyn Plc may designate any Subsidiary of Altyn Plc (including any newly acquired or newly formed Subsidiary) to be a Material Subsidiary. Any Subsidiary of Altyn Plc designated by the Board of Directors of Altyn Plc as a Material Subsidiary shall not be capable of subsequently being undesignated as a Material Subsidiary.
“Measured”	Is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.
“Mineral resource”	A concentration or occurrence of material of intrinsic economic interest in or on the Earth’s crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories.
“Mineralisation”	Refers to the presence of a mineral of economic interest in a rock.
“Minority Company”	Means any Company of Altyn Plc that (a) becomes a directly held Company of either Altyn Plc or a Material Subsidiary and is designated as a Minority Company by the Board of Directors of Altyn Plc , (b) has either (i) assets which constitute 10% or greater of the total assets of Altyn Plc C and its Subsidiaries on a consolidated basis or (ii) EBITDA which accounts for 10% or greater of EBITDA of Altyn Plc and its Subsidiaries on a consolidated basis as of the date of the most recent financial statements or (c) is the direct or indirect parent company of any Subsidiary required to be designated a Material Subsidiary or Minority Company. The Board of Directors of Altyn Plc may designate any Company of Altyn Plc (including any newly acquired or newly formed Company) to be a Minority Company. Any Company of Altyn Plc designated by the Board of Directors of Altyn Plc as a Minority Company shall not be capable of subsequently being undesignated a Minority Company.
“NBK”	National Bank of the Republic of Kazakhstan.
“Open pit”	Mine workings for ores open to the surface, a pit, like a quarry for stone.

“Ore reserve”	Is the economically mineable part of a measured and/or indicated mineral resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore reserves are sub-divided in order of increasing confidence into probable ore reserves and proved ore reserves.
“Oz”	Troy ounce (used for precious metals).
“Person”	Any individual, company, corporation, firm, partnership, joint venture, association, organization, state or agency of a state or other legal entity, whether or not having separate legal personality.
“Quartz”	Commonly referred to as SiO ₂ , silicon dioxide, and is very common mineral in rocks, occurs also as veins, and stockworks.
“Relationship Agreement”	The relationship agreement entered into by and between African Resources Limited and the Company on 2 November 2012, as amended on or around the date hereof.
“Shares”	Ordinary shares with a par value £0.01 each in the share capital of the Company.
“Silver doré”	Crude silver containing a small amount of gold, obtained after removing lead in a cupelling furnace.
“State”	The Republic of Kazakhstan
“Tailings”	Refers to finely ground effluent rock waste from ore treatment plant, in aqueous suspension as it leaves the plant, pumped to large containments where treatment water is recovered, and the tailings dry out.
“Tenge”	Lawful currency of the Republic of Kazakhstan

SCHEDULE 1

RESPONSIBILITY STATEMENT

The Issuer, having made all the reasonable enquiries, accept responsibility for this Prospectus (in accordance with Section 69 of the AIFC Framework Regulations №18 of 2018 and Part 1 of the AIFC Market Rules №FR0003 of 2017) and confirm that this Prospectus complies with the requirements set out in Section 69 of the AIFC Framework Regulations №18 of 2018 and Part 1 of the AIFC Market Rules №FR0003 of 2017 and contains all information which is material in the context of the issue and offering of the Bonds, that the information contained in this Prospectus is correct to the best of their knowledge and that no material facts or circumstances have been omitted.

The Issuer extracted most of the information contained in this Prospectus, in particular gold reserves of the Sekisovskoye gold mine, from an Independent Competent Persons' Report (CPR), dated 31 July 2019 and prepared by Ernst and Young Advisory Services (Pty) Ltd. The Issuer confirms that such information has been accurately reproduced and is able to ascertain from the information published by such third parties that no facts have been omitted which would render the reproduced information inaccurate or misleading. The source of third-party information is identified where used. The Issuer accepts responsibility for correctly extracting such information from its sources and confirms that such information has been correctly extracted from its sources.

Neither the delivery of this Prospectus nor the offering, sale or delivery of any Bonds shall in any circumstances create any implications that there has been no adverse change, or any event reasonably likely to involve an adverse change, in the condition (financial or otherwise) of the Issuer since the date of this Prospectus.

Altyn Public limited company, as Issuer

By: Aidar Assaubayev

Title: Chief Executive Officer

Address: 28 Eccleston Square, London, United Kingdom, SW1V 1NZ

Date: ²⁵ [●] November 2019



ALTYN PLC
Consolidated income statement

	Six months ended 30 June 2019	Six months ended 30 June 2018	Year ended 31 December 2018
	(unaudited) US\$'000	(unaudited) US\$'000	(audited) US\$'000
Revenue	7,184	10,894	19,366
Cost of sales	(5,914)	(8,240)	(16,871)
Gross profit	1,270	2,654	2,495
Administrative expenses	(1,459)	(1,248)	(5,543)
Impairments	81	176	562
Operating (loss)/profit	(108)	1,582	(2,486)
Foreign exchange	12	(383)	(196)
Finance Expense	(507)	(596)	(1,283)
(Loss)/profit before taxation	(603)	603	(3,965)
Taxation	-	-	(323)
(Loss)/profit attributable to equity shareholders	(603)	603	(4,288)
(Loss)/profit per ordinary share			
Basic & diluted (US cent)	(0.02c)	0.02c	(0.17c)

ALTYN PLC
Consolidated statement of profit or loss and other comprehensive income

	Six months ended 30 June 2019	Six months ended 30 June 2018	Year ended 31 December 2018
	(unaudited) US\$'000	(unaudited) US\$'000	(audited) US\$'000
(Loss)/profit for the period/year	(603)	603	(1,929)
Currency translation differences arising on translations of foreign operations items which will or may be reclassified to profit or loss	411	(2,027)	(5,712)
Currency translation differences arising on translations of foreign operations relating to taxation	-	-	2,560
Total comprehensive loss for the period/year attributable to equity shareholders	(192)	(1,424)	(7,440)

ALTYN PLC
Consolidated statement of financial position

	Notes	Six months ended 30 June 2019 (unaudited) US\$'000	Six months ended 30 June 2018 (unaudited) US\$'000	Year ended 31 December 2018 (audited) US\$'000
Non-current assets				
Intangible asset	3	12,481	11,641	12,338
Property, plant and equipment	4	29,037	34,135	28,391
Other receivables		1,315	-	1,303
Deferred tax asset		8,078	6,750	7,999
Restricted cash		-	16	28
		<u>50,911</u>	<u>52,542</u>	<u>50,059</u>
Current assets				
Inventories		2,017	3,096	1,297
Trade and other receivables		3,829	3,964	3,081
Cash and cash equivalents		50	201	105
		<u>5,896</u>	<u>7,261</u>	<u>4,483</u>
Total assets		<u>56,807</u>	<u>59,803</u>	<u>55,542</u>
Current liabilities				
Trade and other payables		(8,645)	(8,501)	(7,846)
Other financial liabilities		-	(407)	(122)
Provisions		(152)	(85)	(94)
Borrowings		(2,947)	(1,557)	(1,218)
		<u>(11,744)</u>	<u>(10,550)</u>	<u>(9,280)</u>
Net current liabilities		<u>(5,848)</u>	<u>(3,289)</u>	<u>(4,797)</u>
Non-current liabilities				
VAT payable		(885)	-	(1,383)
Other financial liabilities & payables		(636)	(120)	(644)
Provisions		(4,745)	(4,684)	(4,412)
Borrowings		(4,129)	(2,905)	(3,963)
		<u>(10,395)</u>	<u>(7,709)</u>	<u>(10,402)</u>
Total liabilities		<u>(22,140)</u>	<u>(18,259)</u>	<u>(19,682)</u>
Net assets		<u>34,668</u>	<u>41,544</u>	<u>34,860</u>
Equity				
Called-up share capital		4,054	4,210	4,054
Share premium		151,470	151,314	151,470
Merger reserve		(282)	(282)	(282)
Other reserve		333	333	333
Currency translation reserve		(47,359)	(46,645)	(47,770)
Accumulated loss		(73,548)	(67,386)	(72,945)
Total equity		<u>34,668</u>	<u>41,544</u>	<u>34,860</u>

The financial information was approved and authorised for issue by the Board of Directors on 30 August 2019 and were signed on its behalf by:

Aidar Assaubayev – **Chief Executive Officer**

ALTYN PLC
Consolidated statement of changes of equity

	Share capital	Share premium	Merger reserve	Currency translation reserve	Other reserves	Accumulated losses	Total
Unaudited	US\$'000	US\$'000	US'000	US\$'000	US\$'000	US\$'000	US\$'000
At 1 January 2019	4,054	151,470	(282)	(47,770)	333	(72,945)	34,860
Loss for the period	-	-	-	-	-	(603)	(603)
Exchange differences on translating foreign operations	-	-	-	411	-	-	411
Total comprehensive profit for the period	-	-	-	411	-	(603)	(192)
At 30 June 2019	4,054	151,470	(282)	(47,359)	333	(73,548)	34,668

Unaudited	US\$'000	US\$'000	US'000	US\$'000	US\$'000	US\$'000	US\$'000
At 1 January 2018	3,886	141,918	(282)	(44,618)	333	(67,989)	33,248
Profit for the period	-	-	-	-	-	603	603
Exchange differences on translating foreign operations	-	-	-	(2,027)	-	-	(2,027)
Total comprehensive loss for the period	-	-	-	(2,027)	-	603	(1,424)
Equity shares issued	324	9,396	-	-	-	-	9,720
At 30 June 2018	4,210	151,314	(282)	(46,645)	333	(67,386)	41,544

Audited	US\$'000	US\$'000	US'000	US\$'000	US\$'000	US\$'000	US\$'000
At 1 January 2018	3,886	141,918	(282)	(44,618)	333	(67,989)	33,248
Loss for the year	-	-	-	-	-	(4,288)	(4,288)
Other comprehensive loss	-	-	-	(3,152)	-	-	(3,152)
Total comprehensive loss for the year	-	-	-	(3,152)	-	(4,288)	(7,440)
Conversion of bonds into shares	168	9,552	-	-	-	(668)	9,052
At 31 December 2018	4,054	151,470	(282)	(47,770)	333	(72,945)	34,860

ALTYN PLC
Notes to the consolidated financial information

		Six months ended 30 June 2019	Six months ended 30 June 2018	Year ended 31 December 2018
	Note	(unaudited) US\$'000	unaudited US\$'000	(audited) US\$'000
Net cash inflow from operating activities	7	352	2,504	940
Investing activities				
Purchase of property, plant and equipment		(2,291)	(2,397)	(1,108)
Disposal of property, plant and equipment		-	-	264
Net cash used in investing activities		(2,291)	(2,397)	(844)
Financing activities				
Loans received		2,023	-	151
Loans and Interest paid		(139)	(610)	(710)
Net cash flow from/(used in) financing activities		1,884	(610)	(559)
Decrease in cash and cash equivalents		(55)	(503)	(463)
Foreign currency translation		-	-	(136)
Cash and cash equivalents at the beginning of the period/year		105	704	704
Cash and cash equivalents at end of the period/year		50	201	105

ALTYN PLC

Notes to the consolidated financial information

1. Basis of preparation

General

Altyn Plc is registered and domiciled in England and Wales, whose shares are publicly traded on the London Stock Exchange.

The interim financial results for the period ended 30 June 2019 are unaudited. The financial information contained within this report does not constitute statutory accounts as defined by Section 434(3) of the Companies Act 2006.

This interim financial information of the Company and its subsidiaries ("the Group") for the six months ended 30 June 2019 have been prepared, in accordance with IAS34 (interim financial statements) and on a basis consistent with the accounting policies set out in the Group's consolidated annual financial statements for the year ended 31 December 2018. It has not been audited, does not include all of the information required for full annual financial statements, and should be read in conjunction with the Group's consolidated annual financial statements for the year ended 31 December 2018. The 2018 annual report and accounts, as filed with the Registrar of Companies, received an unqualified opinion from the auditors.

The financial information is presented in US Dollars and has been prepared under the historical cost convention.

The same accounting policies, presentation and method of computation are followed in this consolidated financial information as were applied in the Group's latest annual financial statements except that in the current financial year, the Group has adopted a number of revised Standards and Interpretations. However, none of these have had a material impact on the Group.

In addition, the IASB has issued a number of IFRS and IFRIC amendments or interpretations since the last annual report was published. It is not expected that any of these will have a material impact on the Group.

Going concern

The current cash position is sufficient to cover ongoing operating and administrative expenditure for the next 12 months from the date these accounts were released.

The Directors consider that the cash generated from its operations from the Company's producing assets to be sufficient to cover the expenses of running the Company's business for the foreseeable future.

In terms of financing the underground development, the Company will not be incurring any substantial capital expenditure until further capital funds are raised under terms acceptable to the Company. The Company is currently in advanced discussions with a Kazakh bank in order to obtain the necessary finance.

The Company has therefore adopted the going concern basis in the preparation of these financial statements.

ALTYN PLC
Notes to the consolidated financial information (continued)

Directors Responsibility Statement and Report on Principal Risks and Uncertainties

Responsibility statement

The Board confirms to the best of their knowledge:

The condensed set of financial statements have been prepared in accordance with IAS 34 Interim Financial Reporting as adopted by the EU;

The interim management report includes a fair review of the information required by:

DTR 4.2.7R of the Disclosure and Transparency Rules, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of financial statements; and a description of the principal risks and uncertainties for the remaining six months of the year; and

DTR 4.2.8R of the Disclosures and Transparency Rules, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the entity during the period; and any changes in the related party transactions described in the last annual report that could do so.

The Company's management has analysed the risks and uncertainties and has in place control systems that monitor daily the performance of the business via key performance indicators. Certain factors are beyond the control of the Company such as the fluctuations in the price of gold and possible political upheaval. However, the Company is aware of these factors and tries to mitigate these as far as possible. In relation to the gold price the Company is pushing to achieve a lower cost base in order to minimise possible downward pressure of gold prices on profitability. In addition, it maintains close relationships with the Kazakhstan authorities in order to minimise bureaucratic delays and problems.

Risks and uncertainties identified by the Company are set out on page 8 and 9 of the 2018 Annual Report and Accounts and are reviewed on an ongoing basis. There have been no significant changes in the first half of 2019 to the principal risks and uncertainties as set out in the 2018 Annual Report and Accounts and these are as follows:

- Fiscal changes in Kazakhstan
- No access to capital / funding for Sekisovskoye or Karasuyskoye
- Commodity price risk
- Currency risk
- Changes to mining code in Kazakhstan
- Reliance on operating in one country
- Reliant on one operating mine
- Technical difficulties associated with developing the underground mine at Sekisovskoye
- Failure to achieve production estimates

2. (Loss)/profit per ordinary share

Basic loss per share is calculated by dividing the loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. The weighted average number of ordinary shares and retained (loss)/profit for the financial period for calculating the basic loss per share for the period are as follows:

	Six months ended 30 June 2019 (unaudited)	Six months ended 30 June 2018 (unaudited)	Year ended 31 December 2018 (audited)
The basic weighted average number of ordinary shares in issue during the period	2,567,875,463	2,528,508,797	2,567,875,463

ALTYN PLC
Notes to the consolidated financial information (continued)

2. (Loss)/profit per ordinary share

The (loss)/profit for the period attributable to equity shareholders (US\$'000s)	(603)	603	4,054
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The potential number of shares which could be issued following the conversion of the bonds currently outstanding amounts to approximately 198m shares being issued on conversion.

3. Intangible assets

	Teren-Sai Geological data	Exploration and evaluation costs	US\$'000
Cost			
1 January 2018	11,424	3,326	14,750
Additions	-	-	-
Amortisation capitalised	-	581	581
Currency translation adjustment	(338)	-	(338)
30 June 2018	11,086	3,907	14,993
Additions	-	1,605	1,605
Amortisation capitalised	-	520	520
Currency translation adjustment	(1,197)	(113)	(1,310)
December 2018	9,889	5,919	15,808
Amortisation capitalised	-	501	501
Currency translation adjustment	112	62	174
30 June 2019	10,001	6,482	16,483
Accumulated amortisation			
1 January 2018	2,869	-	2,869
Charge for the period	581	-	581
Currency translation adjustment	(98)	-	(98)
30 June 2018	3,352	-	3,352
Charge for the period	520	-	520
Currency translation adjustment	(402)	-	(402)
31 December 2018	3,470	-	3,470
Charge for the period	501	-	501
Currency translation adjustment	31	-	31
30 June 2019	4,002	-	4,002
Net books values			
30 June 2018	7,734	3,907	11,641
31 December 2018	6,419	5,919	12,338
30 June 2019	5,999	6,482	12,481

The intangible assets relate to the historic geological information pertaining to the Teren-Sai (formerly Karasuyskoye) ore fields. The ore fields are located in close proximity to the current open pit and underground mining operations of Sekisovskoye. In May 2016 the Company was awarded an exploration and evaluation contract, which is valid for six years, with a right to extend for a further 4 years. Ongoing costs in relation to exploration and evaluation are capitalised. The Company is in the process of carrying out a detailed Competent Persons Report on the site, the results of which are expected shortly.

ALTYN PLC
Notes to the consolidated financial information *(continued)*

4. Property, plant and equipment

	Mining properties and leases	Freehold land and buildings	Plant, Equipment fixtures and fittings	Assets under construction	Total
	US\$000	US\$000	US\$000	US\$000	US\$000
Cost					
1 January 2018	10,843	26,751	20,074	2,106	59,774
Additions	1,837	2	141	417	2,397
Disposals	-	-	(262)	-	(262)
Transfers	389	7	8	(404)	-
Currency translation adjustment	(488)	(686)	(679)	-	(1,853)
30 June 2018	12,581	26,074	19,282	2,119	60,056
Additions	1,103	-	7	304	1,414
Disposals	-	(1)	(2,921)	-	(2,922)
Transfers	(389)	1,487	33	(1,257)	(126)
Currency translation adjustment	(1,565)	(3,079)	(1,653)	(188)	(6,485)
31 December 2018	11,730	24,481	14,748	978	51,937
Additions	1,451	-	652	189	2,292
Disposals	-	(4)	(27)	-	(31)
Transfers	-	-	-	(221)	(221)
Currency translation adjustment	136	236	135	11	518
30 June 2019	13,317	24,713	15,508	957	54,495
Accumulated depreciation					
1 January 2018	2,306	7,260	15,045	-	24,611
Charge for the period	124	1,254	839	-	2,217
Disposals	-	-	(147)	-	(147)
Currency translation adjustment	(65)	(240)	(455)	-	(760)
30 June 2018	2,365	8,274	15,282	-	25,921
Charge for the period	127	988	569	-	1,684
Disposals	-	(1)	(1,294)	-	(1,295)
Transfers	-	-	-	-	-
Currency translation adjustment	(272)	(970)	(1,522)	-	(2,764)
31 December 2018	2,220	8,291	13,035	-	23,546
Charge for the period	122	1,050	440	-	1,612
Disposals	-	(3)	(23)	-	(26)
Currency translation adjustment	21	184	121	-	326
30 June 2019	2,363	9,522	13,573	-	25,458
Net Book Values					
1 January 2018	8,537	19,491	5,029	2,106	35,163
30 June 2018	10,216	17,800	4,000	2,119	34,135
31 December 2018	9,510	16,190	1,713	978	28,391
30 June 2019	10,954	15,191	1,935	957	29,037

The additions in the period relate to the continuing works associated with the underground mine.

ALTYN PLC
Notes to the consolidated financial information (continued)

5. Reserves

A description and purpose of reserves is given below:

Reserve	Description and purpose
Share capital	Amount of the contributions made by shareholders in return for the issue of shares.
Share premium	Amount subscribed for share capital in excess of nominal value.
Share based payment	Amount accrued in relation to the share based payment charge relating to the share options issued.
Merger Reserve	Reserve created on application of merger accounting under a previous GAAP.
Currency translation reserve	Gains/losses arising on re-translating the net assets of overseas operations into US Dollars.
Accumulated losses	Cumulative net gains and losses recognised in the consolidated statement of financial position.

ALTYN PLC
Notes to the consolidated financial information (continued)

6. Related party transactions

Remuneration of key management personnel

The remuneration of the Directors, who are the key management personnel of the Group, is set out below in aggregate for each of the categories specified in IAS 24 - "Related Party Disclosures". The total amount remaining unpaid with respect to remuneration of key management personnel amounted to US\$148,000 (December 2017 US\$127,000).

	Six months ended 30 June 2019	Six months ended 30 June 2018	Year to December 2018
	US\$	US\$	US\$
Short term employee benefits	54,600	73,500	189,956
	54,600	73,500	189,956
Social security costs	3,450	7,132	13,469
	58,050	80,632	203,425

During the period, the Company entered into the following transactions in which the Assaubayev family have an interest:

- An amount is owing to Asia Mining Group of US\$458,000, (H1 30 June 2018: US\$522,000) and is included within trade payables.
- Loans at an average in interest rate of 7% were made to the subsidiaries by Amrita Investments Limited. The total amount currently outstanding including accrued interest amounts to US\$1,078,000 (31 December 2018 US\$850,000), the loans are repayable on demand or by 31 December 2019, however the management of Amrita have confirmed that the repayments will only be repaid if cash resources permit.
- During the period a member of the Assaubayev family loaned a subsidiary of the parent Company an amount of US\$1,050,000 on an interest free basis on demand basis, but only to be repaid if cash resources permit.
- The Company has in issue a convertible bond issued to African Resources Limited which carries a coupon rate of 10% per annum payable semi-annually in arrears on 29 February and 29 July each year. Unless the bonds are re-purchased and cancelled redeemed or converted prior to the scheduled maturity date, they will be repaid in February 2021 at their principal amount. At 30 June 2019 an amount of US\$2.2m, including accrued interest was payable on the remaining bonds.

The transactions incurred by the Company were on normal commercial terms.

ALTYN PLC
Notes to the consolidated financial information (continued)

7. Notes to the cash flow statement

	Six months ended 30 June 2019 (unaudited) US\$000's	Six months ended 30 June 2018 (unaudited) US\$000's	Year ended 31 December 2018 (audited) US \$000's
(Loss)/profit before taxation	(603)	603	(3,965)
Adjusted for			
Finance expense	507	596	1,055
Depreciation of tangible fixed assets	1,612	2,217	3,901
(Increase)/decrease in inventories	(720)	(1,383)	332
Decrease in other financial liabilities	(122)	(92)	(277)
(Increase)/decrease in trade receivables	(733)	41	1,432
Decrease/(increase) in trade and other payables	418	4	(1,701)
Loss on disposal of property, plant and equipment	5	135	301
Fair value adjustment	-	-	228
Foreign currency translation	(12)	383	196
Cash inflow from operations		2,504	940
Income taxes	-	-	-
	352	2,504	940

8. Events after the balance sheet date

There were no significant post balance sheet events to report.

This report will be available on our website at www.altyn.uk

ALTYN PLC
Company information

Directors	Kanat Assaubayev Aidar Assaubayev Sanzhar Assaubayev Ashar Qureshi Victor Shkolnik	Chairman Chief executive officer Executive director Non-executive director Non-executive director
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Secretary	Rajinder Basra
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Registered office and number	Company number: 05048549 28 Eccleston Square London SW1V 1NZ Telephone: +44 208 932 2455
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Company website	www.altyn.uk
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Kazakhstan office	10 Novostroyevskaya Sekisovskoye Village Kazakhstan Telephone: +7 (0) 72331 27927 Fax: +7 (0) 72331 27933
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Auditor	BDO LLP, 55 Baker Street, London W1U 7EU
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Registrars	Neville Registrars 18 Laurel Lane Halesowen West Midlands B63 3DA Telephone: +44 (0) 121 585 1131
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Bankers	NatWest Bank plc London City Commercial Business Centre 7th Floor, 280 Bishopsgate London EC2M 4RB LTG Bank AG Herrengasse 12 FL-9490, Vaduz Principal of Liechtenstein
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INDEPENDENT AUDITOR'S REPORT

to the members of Altyn Plc

Opinion

We have audited the financial statements of Altyn Plc (the 'Parent Company') and its subsidiaries (the 'Group') for the year ended 31 December 2018 which comprise consolidated statement of profit or loss, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of financial position, the parent company statement of financial position, the consolidated statement of changes in equity, the parent company statement of changes in equity, the consolidated statement of cash flows, the parent company statement of cash flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union and, as regards the Parent Company financial statements, as applied in accordance with the provisions of the Companies Act 2006.

In our opinion the financial statements:

- ▲ give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2018 and of the Group's loss for the year then ended;
- ▲ the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- ▲ the Parent Company financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union and as applied in accordance with the provisions of the Companies Act 2006; and
- ▲ the financial statements have been prepared in accordance with the requirements of the Companies Act 2006; and, as regards the Group financial statements, Article 4 of the IAS Regulation.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- ▲ the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- ▲ the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's or the Parent company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

INDEPENDENT AUDITOR'S REPORT continued

to the members of Alтын Plc

<p>Matter</p>	<p>Carrying value of intangible assets</p> <p>As detailed in note 13, the Group's intangible assets represent historical geological data of \$6.4m and exploration & evaluation costs of \$5.9m pertaining to the Karasuyskoye ore fields, adjacent to the Group's current mining licence area production facilities at Sekisovskoye, which are significant assets and total \$12.3m at 31 December 2018.</p> <p>For the year ended 31 December 2018 management was required to assess whether there was any indication that this asset may be impaired in accordance with accounting standards. Management have carried out an assessment of impairment indicators during the year and concluded that no adjustment is required for impairment.</p> <p>There are a large number of estimates and judgements used by the management in assessing the indicators of impairment including non-financial and financial data. Therefore given the subjectivity involved in determining whether an impairment provision is required and quantifying this, the carrying value of the intangible assets is considered to be a key audit matter.</p>
<p>Our Response</p>	<p>We reviewed management's assessment of the impairment indicators in accordance with accounting standards.</p> <p>We read the correspondence, contracts and other documents regarding the license to confirm that the Group has a contractual right for exploration in the Karasuyskoye area.</p> <p>We obtained the exploration results to date and discussed with management who confirmed that the area remains prospective;</p> <p>We reviewed management's plans and budgets which show that the Group is committed to the progressing the project; and</p> <p>We assessed the Group's amortisation policy and useful life assessment against the length of legal title to the project area.</p> <p>Our work did not indicate that management's assessment that there are no indicators of impairment in respect of the carrying value of intangible assets was unreasonable.</p>
<p>Matter</p>	<p>Carrying value of property, plant and equipment</p> <p>As detailed in note 14, the Group's property, plant and equipment represent its most significant assets and total \$28.4m at 31 December 2018.</p> <p>For the year ended 31 December 2018 management was required to assess whether there was any indication that the asset may be impaired in accordance with accounting standards. Management have carried out an assessment of impairment indicators during the year and concluded that no adjustment is required for impairment.</p> <p>Management's assessment of the impairment indicators contain a number of key assumptions that require significant estimation and judgements, including gold prices, gold reserves and production level, gold grade, exchange rates, cost assumptions and discount rates. Given the subjectivity involved, the carrying value of property, plant and equipment is considered to represent a key audit matter.</p>
<p>Our Response</p>	<p>We reviewed in detail the key assumptions and judgements exercised in management's assessment of the indicators of impairment, challenged the management's judgements by reference to the results from the operations and those that would be expected given the stage of development.</p> <p>We compared the actual performance with the economic model provided previously and investigated material deviations and considered whether these represented an indicator of impairment. The main deviations were noted in gold grade and levels of production.</p> <p>We discussed the operations, operational results and mining processes with the mine management and the chief geologist. We discussed the mine plan with the chief geologist and confirmed the main reason of underperformance in 2018 was lack of funds available for investments in mining equipment, which affected the volume and grade mined.</p> <p>We assessed the reasonableness of factors explained above and confirmed that in the ore bodies where there was sufficient targeting and drilling equipment in place, the operational results met the expectations and supported the model in place. Additionally, we considered if the operational results in the period would invalidate the latest independent technical report issued by Venmyn Deloitte and noted that, despite the operational difficulties mentioned above, the assumption regarding mineable reserves appear to remain valid.</p> <p>Our work did not indicate that management's assessment that there are no indicators of impairment in respect of the carrying value of property, plant and equipment was unreasonable.</p>

Our application of materiality

We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements. We consider materiality to be the magnitude by which misstatements, including omissions, could influence the economic decisions of reasonable users that are taken on the basis of the financial statements. Importantly, misstatements below this level will not necessarily be evaluated as immaterial as we also take account of the nature of identified misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements as a whole.

	Group	Parent company
Materiality	\$750,000 (2017: \$800,000)	\$560,000 (2017: \$600,000)
Basis for determining materiality	1.4% of total assets (2017: 1.3% of total assets)	1.3% of total assets, capped at 75% of group materiality (2017: 1.3% of total assets, capped at 75% of group materiality)
Rationale for the benchmark applied	We have determined an assets based measure is appropriate as the Group is currently developing an underground mining project that requires significant capital expenditure. It is consistent with our approach adopted in previous years.	

Performance materiality is the application of materiality at the individual account or balance level set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole. Performance materiality was set at \$450,000 for the Group and at \$340,000 for the parent company (2017: \$480,000 for the Group and \$360,000 for the parent company) which represents 60% (2017: 60%) of the above materiality levels.

Whilst materiality for the financial statements as a whole was \$750,000, each significant component of the Group was audited to a lower level of materiality ranging from \$300,000 to \$560,000.

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of \$15,000 (2017: \$40,000), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

There were no misstatements identified during the course of our audit that individually, or in aggregate, were considered to be material in terms of their absolute monetary value or on qualitative grounds.

An overview of the scope of our audit

In setting the audit strategy we considered our approach in respect of the ability of the audit to detect irregularities, including fraud. We designed audit procedures to respond to the risk, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as a fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations or through collusion.

We considered the laws and regulations of the Kazakhstan and the UK to be of significance in the context of the Group audit. As part of our Group audit strategy direction was provided to the auditor of the significant components to ensure an assessment was performed on the extent of the components compliance with the relevant local and regulatory framework.

We focused on laws and regulations that could give rise to a material misstatement in the financial statements. Our tests included, but were not limited to:

- ▲ agreement of the financial statement disclosures to underlying supporting documentation;
- ▲ enquiries of management;
- ▲ review of minutes of board meetings throughout the period; and
- ▲ considering the effectiveness of obtaining an understanding of the control environment in monitoring compliance with laws and regulations

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. As in all of our audits we also addressed the risk of management override of internal controls, including testing journals and evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud.

Our group audit scope focused on DTOO Gornorudnoe Predpriatie Baurgold, which holds Sekisovskoye mine and TOO GMK Altyn MM, which holds Karasuyskoye exploration project and contracts the sale of the Group's gold, which were subject to a full scope audit with the audit work performed by overseas component auditors under our direction and supervision. Together with the Parent company and its group consolidation, which was also subject to a full scope audit, these represent the significant components of the Group.

These locations represent the principal business units and account for 100% of the Group's revenue (2017:100%) and 99% of the Group's total assets (2017:100%).

The remaining component of the Group, Hambledon Mining Company Limited, was considered non-significant and we completed analytical procedures for this intermediate holding company on an entity only basis to confirm there are no significant risks of material misstatements within this entity.

The audits of each of the components were principally performed in Kazakhstan and the United Kingdom. All of the audits were conducted by BDO LLP and the member firm in Kazakhstan.

The BDO member firm performed the full scope audit of the significant components in Kazakhstan, under the direction and supervision of BDO LLP as Group auditor.

INDEPENDENT AUDITOR'S REPORT continued

to the members of Altyn Plc

As part of our audit strategy, a senior member of the audit team visited Kazakhstan in the year and met with management and the component auditor in Kazakhstan during the execution phases of the audit and performed a review of the component audit files.

The Group audit team was actively involved in the direction of the audits performed by the component auditors along with the consideration of findings and determination of conclusions drawn. We performed additional procedures in respect of certain of the significant risk areas that represented Key Audit Matters in addition to the procedures performed by the component auditor.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- ▲ the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- ▲ the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Group and Parent Company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- ▲ adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- ▲ the Parent Company financial statements and the part of the directors' remuneration report to be audited are not in agreement with the accounting records and returns; or
- ▲ certain disclosures of directors' remuneration specified by law are not made; or
- ▲ we have not received all the information and explanations we require for our audit.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement set out on page 20, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Other matters which we are required to address

Following the recommendation of the audit committee, we were appointed by the Board of directors on 26 March 2013 to audit the financial statements for the year ending 31 December 2012 and subsequent financial periods. This is the 7th year of our engagement as auditor.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Parent Company and we remain independent of the Group and the Parent Company in conducting our audit.

Our audit opinion is consistent with the additional report to the audit committee.

Use of our report

This report is made solely to the Parent Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Parent Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Parent Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Scott McNaughton (Senior Statutory Auditor)

For and on behalf of BDO LLP, Statutory Auditor
London,
United Kingdom

30 April 2019

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

year ended 31 December 2018

	Notes	2018 US\$000	2017 US\$000
Revenue	5	19,366	21,649
Cost of sales		(16,871)	(17,470)
Gross profit		2,495	4,179
Administrative expenses		(5,543)	(5,037)
Impairments – reversed	8	562	374
Operating loss		(2,486)	(484)
Foreign exchange	9	(196)	(52)
Finance expense	9	(1,283)	(1,381)
Loss before taxation	10	(3,965)	(1,917)
Taxation charge	11	(323)	(12)
Loss attributable to equity holders of the parent		(4,288)	(1,929)
Loss per ordinary share			
Basic & diluted	12	(0.17c)	(0.08c)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

year ended 31 December 2018

	2018 US\$000	2017 US\$000
Loss for the year	(4,288)	(1,929)
Currency translation differences arising on translations of foreign operations items that may be reclassified to profit or loss	(5,712)	98
Currency translation differences arising on translations of foreign operations relating to taxation	2,560	1,088
Total comprehensive loss attributable to equity holders of the parent	(7,440)	(743)

The accompanying notes are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

31 December 2018

Company number 5048549	Notes	2018 US\$000	2017 US\$000
Non-current assets			
Intangible assets	13	12,338	11,881
Property, plant and equipment	14	28,391	35,163
Trade and other receivables	17	1,303	1,476
Deferred tax asset	23	7,999	6,928
Restricted cash	21	28	14
		50,059	55,462
Current assets			
Inventories	16	1,297	1,713
Trade and other receivables	17	3,081	2,531
Cash and cash equivalents		105	704
		4,483	4,948
Total assets		54,542	60,410
Current liabilities			
Trade and other payables	18	(7,846)	(7,822)
Other financial liabilities	19	(122)	(399)
Provisions	21	(94)	(112)
Borrowings	22	(1,218)	(724)
		(9,280)	(9,057)
Net current liabilities		(4,797)	(4,109)
Non-current liabilities			
VAT payable	18	(1,383)	–
Other payables		(644)	(160)
Provisions	21	(4,412)	(4,512)
Convertible bonds	22	(3,963)	(12,496)
Borrowings	22	–	(937)
		(10,402)	(18,105)
Total liabilities		(19,682)	(27,162)
Net assets		34,860	33,248
Equity			
Called-up share capital	24	4,054	3,886
Share premium		151,470	141,918
Merger reserve		(282)	(282)
Other reserve	22	333	333
Currency translation reserve		(47,770)	(44,618)
Accumulated losses		(72,945)	(67,989)
Total equity		34,860	33,248

The financial statements were approved by the Board of Directors on 30 April 2019 and signed on its behalf by

Aidar Assaubayev
Chief Executive

The accompanying notes are an integral part of these consolidated financial statements.

COMPANY STATEMENT OF FINANCIAL POSITION

31 December 2018

Company number 5048549	Notes	2018 US\$000	2017 US\$000
Non-current assets			
Property, plant & equipment	14	137	207
Investments	15	10,315	9,430
Loans to subsidiaries	15	61,407	90,425
		71,859	100,062
Current assets			
Other receivables	17	17	68
Cash and cash equivalents		65	264
		82	332
Total assets		71,941	100,394
Current liabilities			
Trade and other payables	18	(451)	(555)
Borrowings	22	(151)	–
		(602)	(555)
Net current (liabilities)/assets		(520)	(223)
Non-current liabilities			
Convertible bonds	22	(3,963)	(12,496)
		(3,963)	(12,496)
Total liabilities		(4,565)	(13,051)
Net assets		67,376	87,343
Equity			
Called up share capital	24	4,054	3,886
Share premium		151,470	141,918
Currency translation reserve		(16,338)	(16,338)
Other reserve	22	333	333
Accumulated losses		(72,143)	(42,456)
Total equity		67,376	87,343

The Company made a profit of US\$2.5m in the year (2017: US\$2.8m).

The financial statements were approved by the Board of Directors on 30 April 2019 and signed on its behalf by

Aidar Assaubayev
Chief Executive

The accompanying notes are an integral part of these company financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

year ended 31 December 2018

	Note	Share capital US\$000	Share premium US\$000	Merger reserve US\$000	Currency translation reserve US\$000	Other reserve US\$000	Accumulated losses US\$000	Total US\$000
1 January 2017		3,886	141,918	(282)	(45,804)	333	(66,060)	33,991
Loss for the year							(1,929)	(1,929)
Other comprehensive income					1,186			1,186
Total comprehensive loss					1,186		(1,929)	(743)
31 December 2017		3,886	141,918	(282)	(44,618)	333	(67,989)	33,248
Loss for the year							(4,288)	(4,288)
Other comprehensive loss					(3,152)			(3,152)
Total comprehensive loss					(3,152)		(4,288)	(7,440)
Conversion of bond into shares	22	168	9,552				(668)	9,052
31 December 2018		4,054	151,470	(282)	(47,770)	333	(72,945)	34,860

Group Reserves

Share capital
Share premium
Merger reserve
Currency translation reserve
Other reserve

Description

Amount of the contributions made by shareholders in return for the issue of shares.
Amount subscribed for share capital in excess of nominal value.
Reserve created on application of merger accounting under a previous GAAP.
Gains/losses arising on re-translating the net assets of overseas operations into US Dollars.
Amount of proceeds on issue of convertible debt relating to the equity component.

The accompanying notes are an integral part of these consolidated financial statements.

COMPANY STATEMENT OF CHANGES IN EQUITY

year ended 31 December 2018

	Notes	Share capital US\$000	Share premium US\$000	Currency translation reserve US\$000	Other reserve US\$000	Accumulated losses US\$000	Total US\$000
1 January 2017		3,886	141,918	(16,338)	333	(45,262)	84,537
Total comprehensive income		–	–	–	–	2,806	2,806
31 December 2017		3,886	141,918	(16,338)	333	(42,456)	87,343
Change in accounting policy – IFRS 9	3	–	–	–	–	(31,476)	(31,476)
1 January 2018 – as restated		3,886	141,918	(16,338)	333	(73,932)	55,867
Profit for the year		–	–	–	–	2,457	2,457
Total comprehensive income		–	–	–	–	2,457	2,457
Conversion of bonds into shares	22	168	9,552			(668)	9,052
31 December 2018		4,054	151,470	(16,338)	333	(72,143)	67,376

Company Reserves

	Description
Share capital	Amount of the contributions made by shareholders in return for the issue of shares.
Share premium	Amount subscribed for share capital in excess of nominal value.
Currency translation reserve	Gains/losses arising on re-translating the net assets of overseas operations into US Dollars.
Other reserve	Amount of proceeds on issue of convertible debt relating to the equity component.
Accumulated losses	Cumulative net gains and losses recognised in the Company statement of financial position.

The accompanying notes are an integral part of these company financial statements.

The Company has taken advantage of S408 of the Companies Act 2006 and not presented the individual Company profit and loss account.

CONSOLIDATED STATEMENT OF CASHFLOWS

year ended 31 December 2018

	Notes	2018 US\$000	2017 US\$000
Net cash inflow from operating activities	25	940	5,107
Investing activities			
Purchase of property, plant and equipment		(1,108)	(2,252)
Disposals of property, plant and machinery		264	–
Exploration costs		–	(439)
Net cash used in investing activities		(844)	(2,691)
Financing activities			
Loans received	25	151	724
Loans repaid	25	(550)	(4,331)
Interest repaid	25	(160)	(341)
Net cash outflow from financing activities		(559)	(3,948)
Decrease in cash and cash equivalents		(463)	(1,532)
Foreign currency translation		(136)	–
Cash and cash equivalents at beginning of the year		704	2,236
Cash and cash equivalents at end of the year		105	704

The accompanying notes are an integral part of these consolidated financial statements.

COMPANY STATEMENT OF CASHFLOWS

year ended 31 December 2018

	Notes	2018 US\$000	2017 US\$000
Net cash outflow from operating activities	25	(772)	(1,169)
Investing activities			
Loans to subsidiaries		–	(132)
Loans repaid by subsidiaries		582	–
Net cash used in investing activities		582	(132)
Financing activities			
Loans received		151	–
Interest repaid		(160)	(160)
Net cash (outflow)/inflow from financing activities		(9)	(160)
(Decrease)/increase in cash and cash equivalents		(199)	(1,461)
Cash and cash equivalents at beginning of the year		264	1,725
Cash and cash equivalents at the end of the year		65	264

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO THE FINANCIAL STATEMENTS

year ended 31 December 2018

1 General information

Altyn Plc (the "Company") is a Company incorporated in England and Wales under the Companies Act 2006. The address of its registered office, and place of business of the Company and its subsidiaries is set out within the Company information on page 67 of this annual report. The principal activities of the Company and subsidiaries are set out on page 16 and, the strategic review within this annual report.

2 Basis of preparation

The annual report is for the year ended 31 December 2018 and includes the consolidated and parent company's financial statements prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. The financial statements have been prepared using accounting policies set out in note 4 which are consistent with all applicable IFRSs and with those parts of the Companies Act 2006 applicable to companies reporting under IFRSs. For these purposes, IFRSs comprises the standards issued by the International Accounting Standards Board and interpretations issued by the International Financial Reporting Interpretations Committee that have been endorsed by the European Union. The financial statements have been prepared under the historical cost convention, except for the adjustment in relation to the fair value of the derivative element included in the bond raised with African Resources see note 4, and on a going concern basis.

Going concern

To progress the mine to the full projected capacity the Company requires further funding, which the Company is endeavoring to put in place. It has received preliminary indication of funding to be made available by a Kazakh based bank. In March 2019 as part of the process an initial US\$1m was advanced by the bank to purchase equipment and spares, The Company is in the process of finalising a larger loan with the bank. In addition the major shareholder has provided funds in April 2019 to purchase further equipment in order to increase production.

The Company is continuing to develop its underground mine, production is continuing at a steady pace with gold sold in the current year of 14,990 oz. The Group made a loss before tax in the current year of US\$4.0m (2017 loss: US\$1.9m) however it generated a positive EBITDA (see workings on page 7). Cash funding from operations has reduced due to limited capital expenditures during the year. This also contributed a lower production levels. Production and revenues are expected to increase as capital expenditure is made from the loans made into the Company in April 2019.

The Directors have reviewed the cash flows for 15 months from the date of approval of the financial statements based on the projected trading. The Directors are confident that should the fund raising as noted above, not be provided in the expected timeframe the Company will be able to adapt its operational plans such that it continues to operate.

Furthermore the major shareholder has confirmed their intention to provide further funding to enable the Company to continue its planned operations for at least twelve months from the date of approval of the financial statements.

On this basis the Directors have therefore concluded that it is appropriate to prepare the financial statements on a going concern basis.

3 Adoption of new and revised standards

The Group has adopted all of the new and revised Standards and Interpretations issued by the International Accounting Standards Board (IASB) that are relevant to its operations and effective for accounting periods beginning 1 January 2018. The adoption of these new and revised Standards and Interpretations had no material effect on the profit or loss or financial position of the Group.

The Group has not adopted any Standards or Interpretations in advance of the required implementation dates.

IFRS 15 – Revenue from Contracts with Customers

("IFRS 15") IFRS 15 provides a principles based five step model to be applied to all contracts with customers. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. Specifically, IFRS 15 introduces a five-step approach to revenue recognition with an entity recognising revenues when a performance obligation is satisfied, which is when "control" of the goods has transferred to the customer. The Group currently only has one base contract with a single customer, for which sales are made based on spot prices. Revenues are recognised when the control is transferred. Control of goods is transferred at the point of time, when gold dore is passed to the buyer at the refinery site. Payments terms allows 90% prepayment in advance and the remaining payment based on the prices and exchange rates ruling in the month of delivery. As of year-end there are no outstanding performance obligations under the current contract in place. The Group has no long term or complicated contracts which would involve recognising revenue based on stage of completion. The Group will closely monitor all future contracts and assess the treatment in accordance with the five-step model prescribed. At the year end the Company received a prepayment of US\$98,000, which is included in other payables, note 18 page 56 (2017: US\$ nil).

IFRS 9 – Financial Instruments

("IFRS 9") IFRS 9 classification and measurement of financial assets and replaces the multiple category and measurement models in IAS 39 for debt instruments with a new mixed measurement model having only two categories: amortized cost and fair value through profit or loss. IFRS 9 also addresses requirements for financial liabilities; these were largely carried forward from IAS 39, Financial Instruments – Recognition and Measurement, except that fair value changes due to credit risk for liabilities designated at fair value through profit and loss would generally be recorded in other comprehensive income. The Group has no material receivables, contract assets or other financial assets within scope of the new expected credit loss impairment approach. The adoption of IFRS 9 has not had any material impact on the Group's results, financial position or disclosures.

The adoption of IFRS has impacted the Company as a result of the existing incurred loss approach under IAS 39 being replaced by the forward looking expected credit loss approach of IFRS 9. The expected credit loss model is required to be applied to the intercompany loan receivables (Note 15), which are classified as held at amortised cost.

The transition method requires a retrospective application for the first time adoption of IFRS 9, however, the standard has allowed an exemption to not restate the comparative information with differences being recorded in opening retained earnings. These changes have been processed at the date of initial application (1 January 2018), and presented in the statement of changes in equity as a movement in the retained earnings reserve for the year ended 31 December 2018.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

3 Adoption of new and revised standards continued

As at 1 January 2018 \$31.5m ECL was recognised on receivable balance from subsidiaries and recognised as movement in retained earnings. As at 31 December 2018 further assessment of expected credit losses indicated further immaterial loss of \$1.4m recognised for the year in the income statement. Total ECL recognised as of 31 December 2018 was \$33.0m on the receivable balance from subsidiaries.

The increase in credit loss allowance resulted a reduction to opening reserves, at 1 January 2018, as follows:

Accounts affected – as at 1 January 2018	As previously reported, \$million	Adoption of IFRS 9, \$million	As restated \$million
Amounts due from subsidiaries	90,425	(31,476)	58,949
Retained earnings	42,456	31,476	73,932

The increase in the credit loss allowance is a result of the application of the expected credit loss model. This is a result of the existing incurred loss approach under IAS 39 being replaced by the forward-looking expected credit loss model approach of IFRS 9 which requires the aren't to make an allowance for lifetime expected credit losses. No loss allowance has previously been recognised, as no loss event had previously occurred.

The loans to the subsidiary companies, Altyn MM and Baurgold, are classified as repayable on demand. IFRS 9 requires consideration of the expected credit risk associated with the loans. As the subsidiary companies does not have sufficient liquid assets to repay, should it be recalled, the conclusion reached was that the loans should be categorised as credit impaired.

As part of the assessment of expected credit losses of the intercompany loan receivable, the Directors have assessed the cash flow associated with a number of recovery scenarios. This included consideration of include the availability and timing of potential funding to develop the project.

The credit loss allowance was assessed at the date of initial application of IFRS 9, being 1 January 2018, and then again at 31 December 2018.

IFRS 9 introduced new requirements for:

- 1) The classification and measurement of financial assets and financial liabilities,
- 2) Impairment of financial assets, and
- 3) General hedge accounting.

Details of these new requirements as well as their impact on the Group's consolidated financial statements are described below. The Group has applied IFRS 9 in accordance with the transition provisions set out in IFRS 9.

(a) Classification and measurement of financial assets

The date of initial application (i.e. the date on which the Group has assessed its existing financial assets and financial liabilities in terms of the requirements of IFRS 9) is 1 January 2018. Accordingly, the Group has applied the requirements of IFRS 9 to instruments that continue to be recognised as at 1 January 2018 and has not applied the requirements to instruments that have already been derecognised as at 1 January 2018. All recognised financial assets that are within the scope of IFRS 9 are required to be measured subsequently at amortised cost or fair value on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

The Group reviewed and assessed the Group's existing financial assets as at 1 January 2018 based on the facts and circumstances that existed at that date and concluded that the initial application of IFRS 9 has not had significant impact on the Group's financial assets as regards their classification and measurement and have not had material impact on the Group's financial position, profit or loss, other comprehensive income or total comprehensive income in either year. Company's financial position has been affected with recognition of \$31.5m expected credit loss on receivables from subsidiaries. The Group's financial assets are held at amortised cost.

(b) Impairment of financial assets

In relation to the impairment of financial assets, IFRS 9 requires an expected credit loss model as opposed to an incurred credit loss model under IAS 39. The expected credit loss model requires the Group to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition of the financial assets. In other words, it is no longer necessary for a credit event to have occurred before credit losses are recognised. Specifically, IFRS 9 requires the Group and the Company to recognise a loss allowance for expected credit losses on trade receivables and receivables from subsidiaries to which the impairment requirements of IFRS 9 apply.

In particular, IFRS 9 requires the Group to measure the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses (ECL) if the credit risk on that financial instrument has increased significantly since initial recognition, or if the financial instrument is a purchased or originated credit-impaired financial asset. However, if the credit risk on a financial instrument has not increased significantly since initial recognition (except for a purchased or originated credit-impaired financial asset), the Group is required to measure the loss allowance for that financial instrument at an amount equal to 12-months ECL. IFRS 9 also requires a simplified approach for measuring the loss allowance at an amount equal to lifetime ECL for trade receivables, contract assets and lease receivables in certain circumstances. The impact of ECL provisions on the Group was insignificant.

(c) Classification and measurement of financial liabilities

A significant change introduced by IFRS 9 in the classification and measurement of financial liabilities relates to the accounting for changes in the fair value of a financial liability designated as at FVTPL attributable to changes in the credit risk of the issuer. Specifically, IFRS 9 requires that the changes in the fair value of the financial liability that is attributable to changes in the credit risk of that liability be presented in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. Changes in fair value attributable to a financial liability's credit risk are not subsequently reclassified to profit or loss, but are instead transferred to retained earnings when the financial liability is derecognised.

3 Adoption of new and revised standards *continued*

(c) Classification and measurement of financial liabilities *continued*

Previously, under IAS 39, the entire amount of the change in the fair value of the financial liability designated as at FVTPL was presented in profit or loss.

The change to classification and measurement of financial liabilities had no impact on the Group.

(d) Disclosures in relation to the initial application of IFRS 9

There were no financial assets or financial liabilities which the Group had previously designated as at FVTPL under IAS 39 that were subject to reclassification or which the Group has elected to reclassify upon the application of IFRS 9. There were no financial assets or financial liabilities which the Group has elected to designate as at FVTPL at the date of initial application of IFRS 9.

The application of IFRS 9 has had no impact on the consolidated financial position, financial result and cash flows of the Group but led to changes to disclosures and accounting policies.

IFRS 16 'Leases' – was issued by the IASB in January 2018 and is effective for accounting periods beginning on or after 1 January 2019. The new standard will replace IAS 17 'Leases' and will eliminate the classification of leases as either operating leases or finance leases and, instead, introduce a single lease accounting model. The standard has yet to be endorsed by the EU. The Standard Provides a single lessee accounting model, specifying how leases are recognised, measured, presented and disclosed. The Directors have evaluated the financial and operational impact of this standard, and do not believe there will be any material impact in the Group.

The Directors do not anticipate that the adoption of the other standards and interpretations not listed above will have a material impact on the accounts. Certain of these standards and interpretations will, when adopted, require addition to or amendment of disclosures in the accounts.

We are committed to improving disclosure and transparency and will continue to work with our different stakeholders to ensure they understand the detail of these accounting changes. We continue to remain committed to a robust financial policy.

4 Accounting policies

Basis of consolidation

Where a company has control over an investee, the investee is classified as a subsidiary. A company controls an investee if all three of the following elements are present: power over the investee, exposure to variable returns from the investee, and the ability of the investor to use its power to affect those variable returns. Control is reassessed whenever facts and circumstances indicate that there may be a change in any of these elements of control.

The consolidated financial statements present the results of the company and its subsidiaries ("the Group") as if they formed a single entity. Intercompany transactions and balances between group companies are therefore eliminated in full.

The consolidated financial statements incorporate the results of business combinations using the acquisition method. In the statement of financial position, the acquiree's identifiable assets, liabilities and contingent liabilities are initially recognised at their fair values at the acquisition date. The results of acquired operations are included in the consolidated statement of comprehensive income from the date on which control is obtained. They are deconsolidated from the date on which control ceases.

Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable and represents amounts received for goods provided in the normal course of business, net of VAT and any other sales related taxes.

The Company's revenue is generated entirely from the sale of the gold and silver ("Precious Metal") content of gold doré. Gold doré was delivered to a precious metal refiner, based in Kazakhstan during 2018 and 2017, which also purchased all precious metal that was refined. Title of the precious metal passes upon acceptance of the delivery from the Company to the refiner. Sales of precious metal are only recognised when the delivery has been accepted and title for the precious metal has accordingly been passed to the refiner.

The Company does not hedge or otherwise enter into any derivatives in respect of its sales of gold doré. Sales are recorded at the actual selling price of the gold doré which is based on current market prices.

Foreign currencies

The Company has prepared its financial statements in United States Dollars (US\$). The functional currency of the companies in Kazakhstan is the Kazakhstan Tenge (KZT). The functional currency of the Company and Hambleton Mining Company Limited is the United States Dollars (US\$).

The rates used to convert Pound Sterling and Kazakhstan Tenge into United States Dollar in these financial statements are as follows:

	2018		2017	
	Closing	Average	Closing	Average
US\$ = £	1.33	1.27	1.35	1.29
US\$ = KZT	384.20	344.71	332.33	326.00

The year end and average rates used for the Kazakh Tenge have been obtained from the National Bank of Kazakhstan.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

4 Accounting policies continued

Foreign currencies continued

Transactions denominated in currencies other than the functional currency of each respective entity are recorded at the rate of exchange prevailing at the date of the transaction. Monetary assets and liabilities are translated into the relevant functional currency at the closing rates of exchange at the reporting date. Exchange differences arising from the restatement of monetary assets and liabilities at the closing rate of exchange at the reporting date or from the settlement of monetary transactions at a rate different from that at which the asset or liability was recorded are dealt with through the statement of profit or loss.

On consolidation, the results of overseas operations are translated into US dollars, the presentation currency, at rates approximating to those ruling when the transactions took place. All assets and liabilities of overseas operations are translated at the rate ruling at the balance sheet date. Exchange differences arising on translating the opening net assets at the opening rate and the results of overseas operations at the actual rate are recognised directly in the consolidated statement of other comprehensive income.

The intercompany loans form a part of the Company's investment in a foreign operation. The exchange difference arising on the intercompany loans is recognised in other comprehensive income and accumulated in a separate component of equity until disposal of the foreign operation.

Intangible assets

Externally acquired intangible assets are initially recognised at cost and subsequently amortised on a straight-line basis over their expected economic life. In the Directors' opinion of 10 years from May 2017, being the licenced period of the Karasuyskoye exploration project. There is no effect on the income statement as amortisation costs of the geological data are capitalised in line with the accounting policy on exploration and evaluation costs.

Exploration and evaluation costs

All costs incurred prior to obtaining the legal right to undertake exploration and evaluation activities on a project are written off as incurred. All costs associated with mineral exploration and investments are capitalised on a project by project basis, pending determination of the feasibility of the project. Costs incurred include appropriate technical and administrative expenses. If an exploration project is successful and the project is determined to be commercially viable, the related costs will be transferred to mining assets and amortised over the estimated life of the mineral reserves on a unit of production basis. Where a project is relinquished, abandoned, or is considered to be of no further commercial value to the Group, the related costs are written off. Impairment reviews performed under IFRS 6 'Exploration for and evaluation of mineral resources' are carried out on a project by project basis, with each project representing a potential single cash generating unit. An impairment review is undertaken when indicators of impairment arise; typically when one of the following circumstances applies:

- ▲ sufficient data exists that render the resource uneconomic and unlikely to be developed
- ▲ title to the asset is compromised
- ▲ budgeted or planned expenditure is not expected in the foreseeable future
- ▲ insufficient discovery of commercially viable resources leading to the discontinuation of activities.

Property, plant and equipment: mining properties and leases

Mining properties comprise previously capitalised exploration, evaluation and development expenditure incurred during the exploration and development stages of the Company's mining projects.

Other items of property, plant and equipment are initially recognised at cost. As well as the purchase price, cost include directly attributable costs and estimated present value of any future unavoidable costs of dismantling and removing items. The corresponding liability is recognised within provisions.

Assets under construction represent assets under development that are not at the stage that can be used commercially to generate revenues, no depreciation is applied to these assets.

Depreciation

Depreciation of property, plant and equipment is calculated on a straight line or units of production basis, as appropriate. Assets are fully depreciated over their economic lives, or over the remaining life of the mine if shorter.

Buildings	8-10 per cent. per annum
Equipment, fixtures and Fittings	10-40 per cent. per annum
Plant machinery and vehicles	7-30 per cent. per annum
Mining properties and leases	Unit of production based on the proven reserves

Assets under construction and freehold land are not depreciated.

Impairment of non-current assets

Property, plant and equipment and intangible assets are assessed for impairment at each reporting date when events or a change in circumstances suggest that the carrying amount of an asset may exceed the recoverable amount.

Where there has been an indication of a possible impairment, management assesses the recoverability of the carrying value of the asset by comparing it with the estimated discounted future net cash flows generated by the asset based on management's expectation of future production and selling prices. Any identified impairment is charged to the statement of profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount but such that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years.

A reversal of impairment loss is recognised in the profit or loss immediately.

4 Accounting policies continued

Inventories

Inventories are valued at the lower of cost or net realisable value. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

Costs incurred in bringing each product to its present location and condition are accounted for as follows:

- | | |
|--|---|
| Spare parts and consumables | – Purchase costs on a first in, first out basis |
| Ore stockpiles, work in progress and finished gold | – Dependent on the current stage in the production cycle, the cost will reflect cost of direct materials, power, labour and a proportion of overhead, to bring the product to its current state |

Taxation

The tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on the taxable profit for the year. Taxable profit differs from net profit as reported in the statement of profit or loss because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit and is accounted for by using the balance sheet liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries and associates, and interests in joint ventures except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised. Deferred tax is charged or credited in the income statement, except when it relates to items charged to other comprehensive income or credited directly to equity, in which case the deferred tax is also dealt within equity. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Financial instruments

Financial assets and financial liabilities are recognised in the consolidated statement of financial position when the Group becomes party to the contractual provisions of the instrument.

Trade and other receivables

Trade and other receivables are recognised initially at their transaction price in accordance with IFRS 9 and are subsequently measured at amortised cost. The Group applies the simplified approach to providing for expected credit losses (ECL) prescribed by IFRS 9, which permits the use of the lifetime expected loss provision for all trade receivables. Expected credit losses are assessed on a forward looking basis. The loss allowance is measured at initial recognition and throughout its life at an amount equal to lifetime ECL. Any impairment is recognised in the income statement.

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and demand deposits, and other short-term highly liquid investments with original maturities of less than three months and which are readily convertible to a known amount of cash and are subject to an insignificant risk of change in value; for the purposes of statement of cash flows, cash and cash equivalents also include bank overdrafts.

Investments

Investment in subsidiaries are included at cost less amounts written off.

Loans and receivables from subsidiaries

Loans to subsidiary undertakings are subject to IFRS 9's new expected credit loss model. As all intercompany loans are repayable on demand, the loan is considered to be in stage 3 of the IFRS 9 ECL model on the basis the subsidiary does not have enough liquid assets in order to repay the loans if demanded. Lifetime ECLs are determined using all relevant, reasonable and supportable historical, current and forward-looking information that provides evidence about the risk that the subsidiaries will default on the loan and the amount of losses that would arise as a result of that default. All recovery strategies indicated that the Company will fully recover the full balances of the loans so no ECL has been recognised in the current period.

Financial liabilities

The Group classifies its financial liabilities into one of two categories discussed below, depending on the purpose for which the liability was acquired.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss comprise only the conversion option related to \$10m loan note classified as derivative financial liability. They are carried in the consolidated statement of financial position at fair value with changes in fair value recognised in the consolidated income statement. Other than these derivative financial instruments, the Group does not have any liabilities held for trading nor has it designated any other financial liabilities as being at fair value through profit or loss.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

4 Accounting policies continued

Financial liabilities continued

Other financial liabilities

Other financial liabilities comprise borrowings, trade payables and other short-term monetary liabilities. These are initially measured at fair value and subsequently recognised at amortised cost using effective interest rate method.

Derecognition of financial liabilities

Financial liabilities are derecognised when, and only when, the Group's obligations are discharged, cancelled, or they expire.

Fair value measurement hierarchy

The Group classifies its financial assets and financial liabilities measured at fair value using a fair value hierarchy that reflects the significance of the inputs used in making the fair value measurement. The fair value hierarchy has the following levels:

- ▲ quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1);
- ▲ inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices) (level 2);
- ▲ inputs for the asset or liability that are not based on observable market data (unobservable inputs) (Level 3);
- ▲ the level in the fair value hierarchy within the financial asset or financial liability is determined on the basis of the lowest level input that is significant to the fair value measurement.

Compound instruments

The component parts of compound instruments (convertible notes and loans with detachable warrants) issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument. A conversion option that will be settled by the exchange of a fixed amount of cash for a fixed number of the Company's own equity instruments is an equity instrument.

At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for similar non convertible instruments. This amount is subsequently recorded as a liability on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date.

The conversion option or detachable warrant classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently re-measured. No gain or loss is recognised in profit or loss upon conversion or expiration of the conversion option.

Transaction costs that relate to the issue of the compound instruments are allocated to the liability and equity components in proportion to the fair value of the debt and equity components. Transaction costs relating to the equity component are recognised directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component and are amortised over the lives of the compound instruments using the effective interest method.

Share capital

Financial instruments used by the Group are classified as equity only to the extent that they do not meet the definition of a financial liability or financial asset. The Company's ordinary shares are classified as equity instruments and are recorded at proceeds received, net of direct issue costs.

Convertible bond – African Resources Ltd

As further discussed in the note 20 the Group entered into a \$10m loan arrangement with African Resources Ltd in 2016. In January 2018 US\$9.72 of this loan was converted into ordinary shares of the Company at a price of 3p per share. The conversion feature was classified as derivative given there is an obligation to issue a variable number of shares as the amount of liability to be settled depends on the foreign exchange rate at the date of settlement. The Company engaged Global View Limited as a third party expert to update the value of the embedded derivative liability, taking into account the conversion during the year.

Their fair value of derivative liability on the grant date, the reporting date was determined using a Monte-Carlo simulation. For each iteration of the simulation, the simulated share price was analysed to determine the value. The fair value was based on the following assumptions at the date the bond conversion and at the year end:

At the year end - 31 December 2018:

- ▲ share price - £0.0058 (2017: £0.0124);
- ▲ GBP/USD exchange rate – £0.784 (2017: £0.7407);
- ▲ volatility of share price – 46.2% (2017: 55.3%);
- ▲ volatility of the forex rate – 8.1% (2017: 7.0%); and
- ▲ time period at 31 December 2018 2.2 years (2017: 3.2 years).

At the date of conversion – 23 January 2018:

- ▲ share price £0.0160;
- ▲ GBP/USD exchange rate £0.716;
- ▲ volatility of share price – 51.5%;
- ▲ volatility of the forex rate – 10.7%; and
- ▲ time period at 23 January 2018 3.1 years.

4 Accounting policies continued

Level 3 fair value measurements

The derivative liability has been deemed to be Level 3 liability under the fair value hierarchy as fair value measures of these liabilities are not based on observable market data.

The movement in their fair values is shown in the table below:

	US\$000
As at 1 January 2017	1,880
Fair value movements recognised through profit or loss	(1,453)
Foreign exchange movements	112
As at 31 December 2017 and 1 January 2018	539
Fair value movements recognised through profit or loss	228
Foreign exchange movements	23
Amount related to conversion of the bond into shares – derivative portion	(790)
As at 31 December 2018	–

The amount of the derivative as at 31 December 2018 has been included in the value of Convertible bond in Note 22.

Provision for commitments and contingencies

Provisions are recognised when the Company has a present obligation at the reporting date, which occurred as a result of a past event, and it is probable that the Company will be required to settle that obligation and the amount of the obligation can be reliably estimated.

Possible obligations that are less than probable, and commitments to make purchases and incur expenditure in future periods, are not recognised as provisions but are disclosed as commitments and contingencies.

Provision for site rehabilitation and decommissioning costs and the associated asset is recorded at the present value of the expected expenditure required to settle the Company's future obligations. Actual outcomes may vary. Details regarding the provision for site rehabilitation and decommissioning costs are set out in note 21 to the financial statements.

Critical accounting judgements and key sources of estimation uncertainty

In the application of the Company's accounting policies, the Directors have made judgments and estimates that may have a significant effect on the amount recognised in the financial statements. These include:

- ▲ carrying value of property, plant and equipment, including estimates made in respect of reserves and resources, discount rate and future gold prices (note 14):
Costs capitalised as mining assets in property, plant and equipment, and intangible assets are assessed for impairment when circumstances suggest that the carrying value may exceed its recoverable value. As part of this assessment, management has carried out an impairment test, where indicators of impairment have been identified. This test compares the carrying value of the assets at the reporting date with the expected discounted cash flows. For the discounted cash flows to be calculated, management has used a production profile based on its best estimate of proven and probable reserves of the assets and a range of assumptions, including an estimated price of gold and a discount rate which, taking into account other assumptions used in the calculation, management considers to be reflective of the risks. This assessment involves judgement as to (i) the likely commerciality of the asset, (ii) proven, probable reserves which are estimated, (iii) future revenues and estimated development costs pertaining to the asset, (iv) the discount rate to be applied for the purposes of deriving a recoverable value;
- ▲ recoverability of inventories (note 16):
The recoverability of inventories is dependent upon the future production of the Company, and future prices achievable, which will determine if any provision is required against inventories. The directors have assessed the impairment indicators, and made judgements in reflection to future prices achievable and production and made impairments as appropriate;
- ▲ carrying value of provisions (note 21):
Estimates of the cost of future decommissioning and restoration of production facilities are based on current legal and constructive requirements, technology and price levels, while estimates of when decommissioning will occur depend on assumptions made regarding the economic life of fields which in turn depend on such factors as gold prices, decommissioning costs, discount rates and inflation rates. The management reviewed the estimation process and the basis for the principal assumptions underlying the cost estimates, noting in particular the reasons for any major changes in estimates as compared with the previous year. The Company was satisfied that the approach applied was fair and reasonable. The Company was also satisfied that the discount and inflation rates used to calculate the provision were appropriate.
- ▲ recognition of deferred taxation assets (note 23):
Tax provisions are recognised when it is considered probable that there will be a future outflow of funds to the tax authorities. In this case, provision is made for the amount that is expected to be settled. The provision is updated at each reporting date by management by interpretation and application of known local tax laws with the assistance of established legal, tax and accounting advisors. These interpretations can change over time depending on precedent set and circumstances in addition new laws can come into effect which can conflict with others and, therefore, are subject to varying interpretations and changes which may be applied retrospectively. A change in estimate of the likelihood of a future outflow or in the expected amount to be settled would result in a charge or credit to income in the period in which the change occurs.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

4 Accounting policies continued

Critical accounting judgements and key sources of estimation uncertainty continued

Tax provisions are based on enacted or substantively enacted laws. To the extent that these change there would be a charge or credit to income both in the period of charge, which would include any impact on cumulative provisions, and in future periods.

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the level of deferred tax assets recognised that can result in a charge or credit in the period in which the change occurs;

▲ carrying value of intangible assets (note 13):

The carrying value for intangible exploration and evaluation assets, represent the costs of active exploration projects the commerciality of which is unevaluated until reserves can be appraised. Where properties are appraised to have no commercial value, the associated costs are treated as an impairment loss in the period in which the determination is made. The recoverability of intangible exploration assets is assessed by comparing the carrying value to estimates of the present value of projects where indicators of impairment have been identified on an asset. The present values of intangible exploration assets are inherently judgemental. Exploration and evaluation costs will be written off to the income statement unless commercial reserves are established or the determination process is not completed and there are no indications of impairment. The outcome of ongoing exploration, and therefore whether the carrying value of exploration and evaluation assets will ultimately be recovered, is inherently uncertain; and

▲ recognition of derivatives (note 22):

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The objective of a fair value measurement is to estimate fair value of derivative elements of the convertible bond, the judgements and assumptions used as detailed in note 4 on page 43.

5 Revenue

An analysis of the Company's revenue is as follows:

	2018 US\$000	2017 US\$000
Sale of gold and silver	19,030	21,294
Other sales	336	355
	19,366	21,649

Included in revenues from sale of gold and silver are revenues of US\$19,030,000 (2017: US\$21,294,000) which arose from sales of precious metals to one customer based Kazakhstan. Other sales amounted to US\$336,000 (2017 US\$355,000) and related to sale of machinery and consumables.

6 Segmental information

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments and making strategic decision, has been identified as the Board of Directors.

The Board of Directors consider there to be only one operating segment, the exploration and development of mineral resources, and only one geographical segment, being Kazakhstan. The majority of sales were made in Kazakhstan and, therefore, no additional segmental information is presented.

7 Staff number and costs of the Group

The average monthly number of employees (including Directors) was:

	2018	2017
Production	352	523
Administration	70	106
	422	629

Their aggregate remuneration comprised:

	2018 US\$000	2017 US\$000
Directors' emoluments	190	371
Employee wages and salaries	3,037	3,603
Employer social tax and national insurance	387	544
	3,614	4,518

7 Staff number and costs of the Group continued

Staff number and costs of the Company

The average monthly number of employees (including Executive Directors) was:

	2018	2017
Administration	7	7

Their aggregate remuneration comprised:

	2018 US\$000	2017 US\$000
Directors' emoluments	176	371
Employee wages and salaries	64	70
Employer social tax and national insurance	21	34
	261	475

8 Impairments

	2018 US\$000	2017 US\$000
Impairments reversed – low grade ore	(383)	(374)
Impairments reversal – other	(179)	–
	(562)	(374)

The reversal of impairment for low grade ore in 2018 relates to ore that is less than 1g/t, and is being used in processing for operational reasons and was previously provided.

The reversal of other impairments relates to monies received against previously provided receivables.

9 Finance income and finance expense

	2018 US\$000	2017 US\$000
Finance expense		
Foreign exchange (loss)/gains other	(196)	(52)
	(196)	(52)
Interest paid	(357)	(1,510)
Fair value adjustment on convertible loan	(228)	1,453
Unwinding of discount other financial liabilities	(128)	(774)
Unwinding of discount on provisions	(570)	(550)
	(1,283)	(1,381)

10 Loss before taxation

The loss on ordinary activities before taxation is stated after (crediting)/ charging:

	2018 US\$000	2017 US\$000
Staff costs (note 7)	3,600	4,518
Depreciation of tangible assets	3,901	4,508
Amortisation of intangible (net of amortisation capitalised)	–	–
Loss on disposal on tangible assets	301	195
Cost of inventories recognised as expense	4,822	5,949
Reversal of Impairment of receivables	(179)	–
Reversal of impairment of inventory	(383)	(374)
Fees payable to the Company's auditors for the audit of the Company and Group financial statements	166	159
Fees payable to the auditors of the Company's subsidiaries pursuant to legislation	37	34

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

11 Taxation

	2018 US\$000	2017 US\$000
Current year tax charge	–	–
Adjustment in relation to prior years	–	–
Deferred taxation (note 23)	323	12
Total taxation charge	323	12

A reconciliation between the accounting profit and the total taxation benefit from continuing operations is as follows:

	2018 US\$000	2017 US\$000
Loss before taxation	(3,965)	(1,917)
Loss for the year multiplied by the standard rate of corporation tax of 19.00% (2017: 19.25%)	(753)	(369)
Expenses not deductible for tax purposes	926	409
Current year tax losses	401	(4)
Adjustments relating to different tax rates of subsidiaries	(252)	(24)
Total charge	323	12

The taxation rate used for taxation on loss on ordinary activities is the standard rate for United Kingdom corporation tax, currently 19.00% (2017: 19.25%). The rate applicable to the Company's subsidiaries in Kazakhstan is 20%.

12 Loss per ordinary share

The calculation of basic and diluted earnings per share from continuing operations is based upon the retained loss from continuing operations for the financial year of US\$4.3m (2017: loss of US\$1.9m).

The weighted average number of ordinary shares for calculating the basic loss in 2018 and 2017 is shown below. As the Company was loss making in 2018, the impact of the potential ordinary shares outstanding from the conversion of the Convertible loan notes would be anti-dilutive, and as such the basic and diluted earnings per share are the same. The total number of all non-dilutive potential shares related to the issue of the convertible loans is disclosed in Note 22.

	2018	2017
Basic and diluted	2,552,972,267	2,334,342,130

13 Intangible assets

	Karasuyskoye geological data	Exploration and evaluation costs	US\$000
Cost			
1 January 2017	11,345	718	12,063
Translation difference	79	–	79
Transfers	–	157	157
Additions	–	1,430	1,430
Amortisation capitalized	–	1,021	1,021
31 December 2017 & 1 January 2018	11,424	3,326	14,750
Translation difference	(1,535)	(113)	(1,648)
Additions	–	1,605	1,605
Amortisation capitalized	–	1,101	1,101
31 December 2018	9,889	5,919	15,808
Amortisation			
1 January 2017	1,799	–	1,799
Charge for the year	1,021	–	1,021
Translation difference	49	–	49
31 December 2017 & 1 January 2018	2,869	–	2,869
Charge for the year	1,101	–	1,101
Translation difference	(500)	–	(500)
31 December 2018	3,470	–	3,470
Net book value			
1 January 2017	9,546	718	10,264
31 December 2017	8,555	3,326	11,881
31 December 2018	6,419	5,919	12,338

The intangible assets relate to the historic geological information pertaining to the Karasuyskoye ore fields. The ore fields are located in close proximity to the current open pit and underground mining operations of Sekisovskoye. The Company obtained a contract for exploration and evaluation on the site in May 2017 from the Kazakh authorities. The contract is valid for a period of 6 years, with a right to extend over a further 4 years.

The value of the geological data purchased is in the opinion of the Directors the value that would have been incurred if the drilling had been undertaken by a third party (or internally). During the year there has been extensive exploratory drilling, a pre-feasibility study was carried out and samples taken from a test production site, which confirmed the expected grades. The directors consider that no impairment is required taking into account the exploration and planned production in the future. The write off of the geological data over the period of the licence to May 2026 is appropriate. The costs amortised are capitalised in line with the Company's accounting policy within the subsidiary TOO GMK Altyn MM LLP, there are no impairment indicators.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

14 Property, plant and equipment – Company

	Motor vehicle US\$000	Equipment US\$000	Total US\$000
Cost			
1 January 2017	70	467	537
31 December 2017	70	467	537
Disposal	(70)	–	(70)
31 December 2018	–	467	467
Accumulated depreciation			
1 January 2017	70	177	247
Charge for the year	–	83	83
31 December 2017	70	260	330
Charge for the year	–	70	70
Disposal	(70)	–	(70)
31 December 2018	–	330	330
Net book value			
1 January 2017	–	290	290
31 December 2017	–	207	207
31 December 2018	–	137	137

14 Property, plant and equipment – Company

	Mining properties and leases US\$000	Freehold, land and buildings US\$000	Equipment, fixtures and fittings US\$000	Plant, machinery and vehicles US\$000	Assets under construction US\$000	Total US\$000
Cost						
1 January 2017	11,351	24,241	12,189	5,825	4,155	57,761
Additions	1,196	38	399	283	686	2,602
Disposals	–	(15)	(257)	(53)	(133)	(458)
Transfers	(157)	–	–	–	–	(157)
Transfers to inventories	(1,513)	2,465	(829)	2,469	(2,651)	(59)
Currency translation adjustment	(34)	22	44	4	49	85
31 December 2017 & 1 January 2018	10,843	26,751	11,546	8,528	2,106	59,774
Additions	2,940	2	124	24	721	3,811
Disposals	–	(1)	(563)	(2,620)	–	(3,184)
Transfers	–	1,494	41	–	(1,661)	(126)
Currency translation adjustment	(2,053)	(3,765)	(1,447)	(885)	(188)	(8,338)
31 December 2018	11,730	24,481	9,701	5,047	978	51,937
Accumulated depreciation						
1 January 2017	2,262	5,100	9,584	3,499	–	20,445
Charge for the year	222	2,498	1,452	336	–	4,508
Disposals	–	(15)	(208)	(40)	–	(263)
Transfers	(180)	(290)	(1,871)	2,282	–	(59)
Currency translation adjustment	2	(33)	6	5	–	(20)
31 December 2017 & 1 January 2018	2,306	7,260	8,963	6,082	–	24,611
Charge for the year	251	2,242	1,133	275	–	3,901
Disposals	–	(1)	(356)	(1,085)	–	(1,442)
Currency translation adjustment	(337)	(1,210)	(1,239)	(738)	–	(3,524)
31 December 2018	2,220	8,291	8,501	4,534	–	23,546
Net book value						
1 January 2017	9,089	19,141	2,605	2,326	4,155	37,316
31 December 2017	8,537	19,491	2,583	2,446	2,106	35,163
31 December 2018	9,510	16,190	1,200	513	978	28,391

14 Property, plant and equipment – Group continued

Capitalised cost of mining property and leases are amortised over the life of the licence from commencement of production on a unit of production basis. This basis uses the ratio of production in the period compared to the mineral reserves at the end of the period. Mineral reserves estimates are based on a number of underlying assumptions, which are inherently uncertain. Mineral reserves estimates take into consideration estimates by independent geological consultants. However, the amount of mineral that will ultimately be recovered cannot be known until the end of the life of the mine.

Any changes in reserve estimates are, for amortisation purposes, treated on a prospective basis. The recovery of the capitalised cost of the Company's property, plant and equipment is dependent on the development of the underground mine.

The Directors are required to consider whether the non-current assets comprising, mineral properties leases, plant and equipment have suffered any impairment. The recoverable amount is determined based on value in use calculations. The use of this method requires the estimation of future cash flows and the choice of a discount rate in order to calculate the present value of the cash flows. The directors considered entity specific factors such as available finance, cost of production, grades achievable, and sales price. The directors have concluded that no adjustment is required for impairment.

15 Subsidiaries

Name	Percentage held	Country of registration and operation
Directly held		
Hambledon Mining Company Limited	100	British Virgin Islands
TOO GMK Altyn MM	100	Kazakhstan
Indirectly held		
DTOO Gornorudnoe Predpriatie Baurgold	100	Kazakhstan

The principal activity of all companies relates to gold mining and production with the exception of Hambledon Mining Company Limited which is an investment holding Company and is currently dormant, its registered address is Palm Grove House, P O Box 438, Road Town, Tortola, British Virgin Islands.

Both Companies trade from 10 Novostroyevsaya Street, Glubokovskoye district, Sekisovka village East Kazakhstan.

Investments and loans to subsidiaries – Company

	Note	Shares US\$000	Contribution to investment adjustment US\$000	Subsidiaries loans US\$000	Total US\$000
1 January 2017					
Net cash movements		–	–	132	132
Management charges and interest		–	–	4,892	4,892
31 December 2017					
Change in accounting policy – IFRS9 (see note 3)		–	–	(31,476)	(31,476)
1 January 2018 as restated					
Net cash movements		–	–	(582)	(582)
Management charges and interest		–	–	5,419	5,419
Impairment – IFRS9	3	–	–	(1,494)	(1,494)
Adjustment as a result of loan repayment terms		–	885	(885)	–
31 December 2018		225	10,090	61,407	71,722

The investments together with the loans which are denominated in US Dollars represent the investments into the subsidiaries and in the opinion of the directors the aggregate value of the investments in the subsidiaries is not less than the amount shown in these financial statements. The directors review the intercompany borrowings on a regular basis, together with the associated cash flows of each company, and assess under the Expected Credit Loss model as required by IFRS 9. As a result of this review they have concluded that an impairment is required of US\$33m against non-repayment of the loans, see note 3.

The recent loans to subsidiaries are charged at a fixed interest rate of 5% and are repayable in 2019 or on a three year rolling evergreen facility, repayment to be made three years from the date of any formal request for repayment from Altyn Plc. These are accounted as loans at amortised cost and discounted market interest rate. The Company has applied IFRS 9 in the current period and estimates that an expected credit loss calculated of US\$1.5m arises on the receivables from the subsidiaries, and US\$31.5m expected credit loss was recognised as a result of assessment as of 1 January 2018.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

16 Inventories

	2018 US\$000	2017 US\$000
Current		
Spare parts and consumables	452	1,644
Work in progress	122	55
Finished goods	723	14
	1,297	1,713

The value of inventories above is stated after a making a provision of US\$1.3m (2017: US\$1.9m) as an impairment for low grade ore. A provision was made against and spare parts and consumables of US\$ 384,000 (2017: US\$499,000), the low grade ore stockpiles are fully provided for as there is uncertainty as to their future use in production.

The total cost of inventory recognised as an expense is US\$4.8m (2017: US\$5.9m).

17 Trade and other receivables

Non-current

	Company 2018 US\$000	Company 2017 US\$000	Group 2018 US\$000	Group 2017 US\$000
Other receivables and prepayments	–	–	1,303	1,476
	–	–	1,303	1,476

Other receivables included within non-current assets for 2018 and 2017 relate to an amount recoverable in relation to Value Added Tax, this is expected to be recovered by offset against VAT payable in future periods.

Current

	Company 2018 US\$000	Company 2017 US\$000	Group 2018 US\$000	Group 2017 US\$000
Trade receivables	–	–	–	536
VAT	–	50	1,526	1,493
Other receivables – recoverable	–	–	1,427	93
– provision	–	–	(20)	–
Prepayments	17	18	148	409
	17	68	3,081	2,531

The trade receivables are stated at full carrying value and their ageing is less than 30 days old. The Directors consider that the carrying value of trade receivables approximates to their fair value.

US\$1.3m of other receivables relate to receivables from property, plant and equipment disposal to a Company registered in Kazakhstan.

ECL model to this debtor has been applied and immaterial credit loss US\$20,000 was recognised.

18 Trade and other payables

Non-current

	Company 2018 US\$000	Company 2017 US\$000	Group 2018 US\$000	Group 2017 US\$000
VAT payable	–	–	1,383	–
	–	–	1,383	–

VAT payable relates to amounts due and payable and scheduled for payment with the Kazakh tax authorities.

Current

	Company 2018 US\$000	Company 2017 US\$000	Group 2018 US\$000	Group 2017 US\$000
Trade creditors	149	215	4,978	4,645
Other payables and accruals	302	340	1,712	3,177
VAT payable	–	–	1,156	1,156
	451	555	7,846	7,822

18 Trade and other payables continued

Trade creditors and accruals principally comprise amounts outstanding for trade purchases of goods and services. The majority of the trade creditors relate to the Company's trading subsidiaries in Kazakhstan. It is not practical to calculate the average credit period taken in respect of trade purchases for these creditors due to current business practices in the former Soviet Union. For most suppliers, interest is not charged on these trade payables. The Company regularly reviews all outstanding payables to ensure they are paid within the appropriate timeframe.

The Directors consider that the carrying amount of trade payables approximates to their fair value.

19 Other financial liabilities

	2018 US\$000	2017 US\$000
Liability for historic cost	122	399

The subsoil use contract (the "Contract"), under which TOO Sekisovskoye holds the exploration and mining rights to the Sekisovskoye deposit stipulates that it must pay a total of US\$3,312,000 to the Kazakhstan Government for historic costs. From 1 January 2009, the balance of the historical costs is being paid on a quarterly basis. The final payment has been rescheduled with the authorities and will be paid in 2019.

The future historic costs have been discounted to their net present value. This discounted value has been capitalised as Property, plant and equipment (note 14) and will be amortised over the productive period. Any changes in estimated costs and discount rate are dealt with prospectively and result in a corresponding adjustment to property plant and equipment.

20 Related party transactions

Remuneration of key management personnel

The remuneration of the Directors, who are the key management personnel of the Company, is set out below in aggregate for each of the categories specified in IAS 24 – "Related Party Disclosures". The total amount remaining unpaid with respect to remuneration of key management personnel amounted to US\$118,000 in the current year (2017: US\$127,000). Further information about the remuneration of the individual directors is set out in the audited section of the report on directors' remuneration on page 23.

	2018 US\$	2017 US\$
Short term employee benefits	189,956	371,498
Social Security costs	13,469	23,005
	203,425	394,503

The transactions between the Company and the subsidiaries are disclosed in Note 15. These relate to management and interest charges on services/loans from the parent to the subsidiaries in Kazakhstan.

During the year the following transactions were connected with the Company's controlled by the Assaubayev family:

- ▲ Asia Mining Group (AMG), a company controlled by the Assaubayev family supplied equipment and spares to the Company in prior years. At the year end an amount of US\$454,000 (2017 US\$824,000) is due to AMG and is included within other trade payables;
- ▲ Of the amount due to Amrita Investments Limited US\$110,000 was repaid in 2018, and a further advance given of US\$151,000. Interest on the balance is being charged at rates between 0% and 20%. The total outstanding at 31 December 2018 of US\$1,012,000 (2017 US\$937,000) includes interest accruals of US\$34,000. The loans are repayable on demand or by 31 December 2019, however the management of Amrita have confirmed that repayment will only be made if cash resources permit, (see note 22);
- ▲ In 2016 the Company issued US\$10m of convertible bonds to African Resources Limited a company controlled by the Assaubayev family. The Bonds carry a coupon of 10% per annum, payable semi-annually in arrears on 29 July and 28 February each year. In January 2018 the bond holders elected to convert US\$9.7m of the bond into ordinary shares of the Company at the conversion price of 3p per share, resulting in the issue of 233,333,333 new ordinary shares being issued to African Resources Limited, (see note 28).
- ▲ The total balance including accrued interest payable to the bond holder at the year end was US\$1.5m (2017: US\$1.3m). It is the intention of African Resources Limited to convert the balance of the principal and interest outstanding into ordinary shares of the Company.
- ▲ During the year the Director Aidar Assaubayev acquired the Company vehicle at market value of US\$23,000, the vehicle was acquired in 2013 for a value of US\$70,000.

NOTES TO THE FINANCIAL STATEMENTS *continued*

year ended 31 December 2018

21 Provisions

	Abandonment and restoration US\$000	Holiday pay US\$000	Total US\$000
1 January 2017	3,978	190	4,168
Change in estimate of provision	–	234	234
Unwinding of discount	532	18	549
Paid during the year	–	(332)	(332)
Currency translation adjustment	2	2	4
31 December 2017 & 1 January 2018	4,512	112	4,624
Change in estimate of provision	–	367	367
Unwinding of discount	570	–	570
Paid during the year	–	(370)	(370)
Currency translation adjustment	(670)	(15)	(685)
31 December 2018	4,412	94	4,506
31 December 2018			
Current	–	94	94
Non-current	4,412	–	4,412
	4,412	94	4,506
31 December 2017			
Current	–	112	112
Non-current	4,512	–	4,512
	4,512	112	4,624

Abandonment and restoration costs

In accordance with the provisions of the subsoil use contract (the "Contract"), DTOO GRP Baurgold is liable for site restoration costs upon completion of production activities. It is not possible to predict accurately the amount which might ultimately be payable for site restoration as it includes assumptions such as inflation in Kazakhstan over the life of the Contract which are inherently uncertain. An estimate of the future cost of restoration has been discounted and a provision recognised. The discounted amount for cost of restoration has been capitalised as a tangible fixed asset (note 14) and will be amortised using the unit of production method over the life of the mine.

In accordance with the subsoil use agreement, DTOO GRP Baurgold has established a cash fund to pay for the cost of restoration. The cash fund is maintained in a separate bank account in the name of DTOO GRP Baurgold. DTOO GRP Baurgold is required to contribute each year an amount equal to 1% of its operating expenses to this fund. Any transfers from the bank account require the authorisation of the Government of Kazakhstan. This fund will be used to pay for the costs of restoration as and when they become due. If the funds in the account are insufficient to pay for the costs, DTOO GRP Baurgold will be required to pay any deficit. If there are funds surplus to those required for restoration these will be returned to DTOO GRP Baurgold. During the year an amount US\$14,000 was contributed to the fund, which at the year end totalled US\$28,000 (2017: US\$14,000). Other amounts that were due to be contributed were offset against taxes/royalties due to the government. The Company will restore amounts due to be contributed to the restricted cash fund in the future as cash flow permits.

22 Borrowings

Secured borrowings at amortised cost

Group

	2018 US\$000	2017 US\$000
Current liabilities		
Due within one year		
Related party loans Amrita (see note 20)	1,012	–
Other loans	206	724
	1,218	724

Non-current liabilities

Due within one – two years		
Related party loans – Amrita (see note 20)	–	937
Due two – five years		
Convertible bonds:	3,963	12,496
\$10m convertible loan (see note 20)	2,090	10,713
\$2m convertible loan	1,873	1,783
	3,963	12,496

Company

Non-current liabilities

Due two – five years		
Convertible bonds	3,963	12,496
	3,963	12,496

Convertible bonds

US\$10m convertible bond

In 2016 the Company secured a total of US\$10m proceeds from a convertible loan with the major shareholder, African Resources Limited. The loan bears a coupon of 10% per annum, payable semi-annually and was due for repayment in 2021. In January 2018 the bond holders elected to convert US\$9.72m of the bond into ordinary shares of the Company at the conversion price of 3p per share, resulting in the issue of 233,333,333 new ordinary shares being issued to African Resources Limited.

As further discussed in the note 4 the total value of the conversion option was determined at fair value on inception to be US\$1.9m, as at 31 December 2018 the fair value of the conversion option has fallen to nil. The part relating to the conversion of the bond into shares has been recognized in equity with the difference recognised in the profit and loss statement as a fair value adjustment. The residual value was assigned to the debt host liability and accounted for at amortised cost using the effecting interest rate of 17%, the total liability is US\$2.09m (2017: US\$10.7m) and includes accrued interest US\$1.5m (2017: US\$1.3m), net of withholding taxes.

It is the intention of African Resources Limited to convert the balance of the principal and interest due into ordinary shares of the Company, once the necessary administrative procedures have been completed.

US\$2m convertible bond

In 2017 the Company entered into US\$2m convertible loan with institutional investors. The loan bears a coupon of 10% per annum, payable semi-annually and is due for repayment in 2021. The Notes can be converted into Ordinary Shares of the Company at a price of 2.15p per share any time prior to maturity. The exchange rate of US\$1.466 for £1 shall be used to determine the number of conversion shares. The potential number of shares to be issued is 63,453,729.

The conversion option meets the fixed-for-fixed criteria and therefore has been classified as equity instrument in the other reserves. On initial recognition Management have assessed the value of the contractual cash flows discounted at the interest rate of 15% being the market interest rate for the similar instruments without a conversion feature. The value of liability component is US\$1.8m (2017 US\$1.8m). The remaining balance initially calculated of \$0.3m is allocated to the residual equity component. The balance includes US\$27,000 (2017: US\$27,000) accrued interest payable.

Other Loans

Other loans comprise amounts that were received from Amrita Investments Limited see details in note 20, and an amount received from a third party in the prior year, the current balance outstanding is US\$206,000, (2017: US\$724,000), this was obtained for short term financing requirements, no interest is payable on this amount.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

23 Deferred taxation

Deferred taxation asset/(liability)

	Taxation losses US\$000	Accelerated taxation depreciation US\$000	Other US\$000	Total US\$000
1 January 2017	5,066	(194)	983	5,855
Credit to income	507	(198)	(321)	(12)
Credit to other comprehensive income	1,088	–	–	1,088
Currency translation	(3)	–	–	(3)
31 December 2017 & 1 January 2018	6,646	(389)	671	6,928
Debit to income	156	24	(503)	(323)
Credit to other comprehensive income	2,560	–	–	2,560
Currency translation	(1,177)	50	(39)	(1,166)
31 December 2018	8,185	(315)	129	7,999

Deferred tax assets and liabilities are offset where they arise within the subsidiaries in Kazakhstan. The Group has recognised the deferred tax asset only to the extent that it is probable that the taxable profit will be available against which the deductible temporary difference can be utilised. The future tax profits are expected to derive from the gold mining operations in Kazakhstan.

The tax losses arising in the prior periods will reduce the Company's and its subsidiaries' future tax liabilities. Deferred tax assets are recognised as the Directors believe that sufficient taxable profits will be made against which the carried forward losses can be utilised.

Unutilised taxation losses arising in Kazakhstan of US\$66.6m (2017: US\$56.8m) are available to carry forward for a maximum of 10 years. It is estimated that the tax losses available to carry forward will be utilised by 2025. Unutilised tax losses arising in the UK amount to US\$5.8m (2017: US\$3.0m).

Unrecognised deferred taxation asset

The unrecognised deferred taxation asset is as follows:

	2018 US\$000	2017 US\$000
Taxation losses	6,247	5,301
	6,247	5,301

Included within the unrecognised taxable losses above is an amount of US\$1.1m (2017: US\$0.6m) in relation to the Company, and US\$5.1m (2017: US\$4.7m) in relation to the Kazakh subsidiaries. This amount has been carried forward as the Directors do not believe there will be sufficient taxable profits in the foreseeable future to offset the losses incurred.

24 Called-up equity share capital

Issued and fully paid

	Number	US\$000
At 31 December 2018 – Ordinary shares of £0.01 each	2,567,875,463	4,054
At 31 December 2017 – Ordinary shares of £0.01 each	2,334,342,130	3,886

In January 2018 233,333,333 new ordinary shares were issued at 3 pence a share to African Resources Limited, in connection with the partial conversion of the bond into shares, (see note 22).

25 Notes to the cash flow statement

Net cash outflow from operating activities

	Company 2018 US\$000	Company 2017 US\$000	Group 2018 US\$000	Group 2017 US\$000
Profit/(loss) before taxation	2,458	2,806	(3,965)	(1,917)
Adjusted for:				
Finance income	(5,331)	(4,989)	–	–
Finance expenses	327	1,200	690	1,510
Unwinding of discount	101	773	365	1,324
Fair value adjustment	228	(1,453)	228	(1,453)
Depreciation of tangible fixed assets	70	83	3,901	4,508
Impairment	–	–	(562)	(374)
Provisions	1,494	–	–	–
Increase in inventories	–	–	332	20
Decrease/(increase) in trade and other receivables	(39)	57	1,432	195
Decrease in other financial liabilities	–	–	(277)	(316)
Increase/(decrease) in trade and other payables	(105)	303	(1,701)	1,374
(Gain)/loss on disposal of property, plant and equipment	(22)	–	301	195
Foreign currency translation	47	53	196	52
Cash outflow from operations	(772)	(1,169)	940	5,118
Income taxes payable	–	–	–	(11)
Net cash outflow from operations	(772)	(1,169)	940	5,107

Reconciliation of financing cash flows

Group	Cash flows					Non-cash changes					31 December 2018 C/Fwd Less than 1 year US\$000	31 December 2018 C/Fwd More than 1 year US\$000
	1 January 2018 B/Fwd Less than 1 year US\$000	1 January 2018 B/Fwd More than 1 year US\$000	New loans US\$000	Loans repaid US\$000	Interest paid US\$000	Conver- ted to equity US\$000	Interest Profit and loss US\$000	Foreign exchange movement US\$000	Fair value changes US\$000	Unwinding of discount US\$000		
Loan element of US\$10m Convertible bonds	–	10,174	–	–	–	(8,262)	127	–	–	51	–	2,090
Derivative element of US\$10m convertible bond	–	539	–	–	–	(790)	–	23	228	–	–	–
Loan element of US\$2m Convertible bonds	–	1,783	–	–	(160)	–	200	–	–	50	–	1,873
Related party borrowings	–	937	151	(110)	–	–	34	–	–	–	1,012	–
Other borrowings	724	–	–	(440)	–	–	–	(78)	–	–	206	–
Total	724	13,433	151	(550)	(160)	(9,052)	361	(55)	228	101	1,218	3,963

Company	Cash flows					Non-cash changes					31 December 2018 C/Fwd Less than 1 year US\$000	31 December 2018 C/Fwd More than 1 year US\$000
	1 January 2018 B/Fwd Less than 1 year US\$000	1 January 2018 B/Fwd More than 1 year US\$000	New loans US\$000	Interest paid US\$000	Conver- ted to equity US\$000	Interest Profit and loss US\$000	Foreign exchange movement US\$000	Fair value changes US\$000	Unwinding of discount US\$000			
Loan element of US\$10m Convertible bonds	–	10,174	–	–	(8,262)	127	–	–	51	–	2,090	
Derivative element of US\$10m convertible bond	–	539	–	–	(790)	–	23	228	–	–	–	
Loan element of US\$2m Convertible bonds	–	1,783	–	(160)	–	200	–	–	50	–	1,873	
Related party borrowings	–	–	151	–	–	–	–	–	–	151	–	
Total	–	12,496	151	(160)	(9,052)	327	23	228	101	151	3,963	

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

26 Financial instruments

Policy on financial risk management

The Company's principal financial instruments comprise cash and cash equivalents, trade receivables, trade and other payables, provisions, other financial liabilities and borrowings. The Company's accounting policies and methods adopted, including the criteria for recognition, the basis on which income and expenses are recognised in respect of each class of financial asset, financial liability and equity instrument are set out in note 4 – "accounting policies". The Company does not use financial instruments for speculative purposes. The carrying value of all financial assets and liabilities approximates to their fair value.

Capital risk management

The Company's primary objective when managing risk is to ensure there is sufficient capital available to support the Company's funding requirements, including capital expenditure, in a way that optimises the cost of capital. Maximises shareholders' returns and ensures the Company's ability to continue as a going concern. There were no changes to the Company's capital management approach in the year.

The Company may make adjustments to the capital structure as opportunities arise, as and when borrowings mature or as and when funding is required. This may take the form of raising equity, debt finance, equipment supplier credit or a combination thereof.

The Company monitors capital on the basis of the gearing ratio, which is defined as net debt divided by total capital. Net debt is calculated as total borrowings (including current and non-current borrowings as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is calculated as equity as shown in the consolidated statement of financial position plus net debt. While the Company does not set absolute limits on the ratio, the Company believes that a ratio of 30%-40% was acceptable in the final stages of the construction and the commissioning phase of the Sekisovskoye mine, and that optimally this should reduce to and remain below 25% thereafter. The Company's policy in respect of capital risk management is the same as that of the Group.

	2018 US\$000	2017 US\$000
Group		
Total borrowings	5,181	14,157
Less cash and cash equivalents	105	704
Net debt	5,076	13,453
Total equity	34,860	33,248
Total capital	39,936	46,701
Gearing ratio	12.71%	28.81%
Company		
Total borrowings	4,114	12,496
Less cash and cash equivalents	65	264
Net debt	4,049	12,232
Total equity	67,736	55,867
Total capital	71,785	68,099
Gearing ratio	5.67%	17.96%

Derivatives, financial instruments and risk management

The Company does not use derivative instruments or other financial instruments to manage its exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices.

Foreign currency risk management

The Company and its subsidiaries have transactional currency exposures. Such exposures arise from sales or purchases by the Company's two subsidiaries in Kazakhstan, in currencies other than the Company's functional currency. The functional currency of TOO GMK Altyn MM and DTOO Gornorudnoe Predpriatie Baurgold is the Kazakh Tenge. The currency transactions giving rise to this foreign currency risk are primarily USD denominated revenues, USD denominated borrowings and other financial liabilities and certain USD denominated trade payables. The Company and its subsidiaries do not enter into hedging positions in respect of its exposure to foreign currency risk.

26 Financial instruments continued

The carrying amounts of the Company's and its subsidiaries' foreign currency denominated net monetary assets and monetary liabilities at 31 December, are as follows:

Currency of monetary asset/liability	2018 US\$000			2017 US\$000		
	USD	Functional currency KZT	Total	GBP	Functional currency KZT	Total
US Dollars	(4,114)	(861)	(4,975)	(12,496)	(1,337)	(13,833)
British Pounds	(368)	–	(368)	892	–	892
Kazakhstan Tenge	–	(3,987)	(3,987)	–	(1,928)	(1,928)
Net monetary position			(9,330)			(14,869)

Sensitivity analysis

A 20% (2017: 20%) strengthening, or weakening, of any one of the above currencies against the US Dollar which the Directors consider to be a reasonably possible change for the purpose of sensitivity analysis, is shown below:

The table below shows the impact of changes in exchange rates on the result and financial position of the Group:

	2018 US\$000	2017 US\$000
20% weakening of Kazakh Tenge against the US Dollar	(172)	(412)

Commodity price risk

The Company is exposed to the effect of fluctuations in the price of gold and silver which are quoted in US Dollars on the international markets. The Company prepares annual budgets and periodic forecasts including sensitivity analyses in respect of various levels of prices of these metals.

The Company's only significant sales during the years ended 31 December 2018 and 2017 were sales of gold doré containing gold and silver. The sales proceeds for gold doré is fixed by reference to the gold and silver prices on the day of sale. The Company does not plan in the future to hedge its exposure to the risk of fluctuations in the price of gold or silver and therefore it held no financial instruments that are sensitive to commodity price changes at either reporting date.

Credit risk

Credit risk refers to the risk that a counter-party will default on its contractual obligations resulting in a financial loss to the Company. The Group has adopted a policy of only dealing with creditworthy counter-parties. The Group's exposure and the credit ratings of its counter-parties are monitored by the Board of Directors to ensure that the aggregate value of transactions is spread amongst approved counter-parties.

The Group's principal financial assets are cash and cash equivalents, trade debtors and other accounts receivables. Cash equivalents include amounts held on deposit with financial institutions.

The Group is mainly exposed to credit risk on its cash equivalents and trade and other receivables as per the balance sheet. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the balance sheet which at the year end amounted to US\$1.04m (2017: US\$1.07m). Although the full scope tax audit which was completed in 2018 shows not material issues, there is always the possibility of fiscal change in the country. Kazakhstan is a relatively young country and there have been a number of fiscal changes in recent years, which in some cases related to the mining industry.

The credit risk on liquid funds held in current accounts and available on demand is limited because the Group's counter-parties are mainly banks with high credit ratings assigned by international credit-rating agencies.

It is often impractical in Kazakhstan to carry out a check of creditworthiness of suppliers before making the contracted prepayments. There were no significant balances at 31 December 2018 and 2017 in respect of which suppliers had defaulted on their obligations.

The Company's maximum exposure to credit risk is limited to the carrying amount of loans recorded in the financial statements. There are majority of the loans are on fixed repayment terms for the loans, however they are not considered overdue or impaired.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2018

26 Financial instruments continued

Liquidity risk

During the year ended 31 December 2018, the Company was financed by internally generated funds, and other borrowings. The Company manages its liquidity risk. The Directors monitor cash flow and cash flow forecasts on a regular basis and ensure that the loan commitments and working capital commitments are adequately funded.

The following tables detail the Company's and its subsidiaries remaining contractual maturity for its financial liabilities. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Company and its subsidiaries can be required to pay. The table includes both interest and principal cash flows.

Group	Borrowings US\$000	Trade and other payables US\$000	Provisions US\$000	Other financial liabilities US\$000	Total US\$000
31 December 2018					
From two to five years	3,809	–	–	–	3,809
For one to two years	228	644	–	–	872
Due after more than one year	4,037	644	–	–	4,681
Due within one year	1,447	7,401	94	122	9,064
	5,484	8,045	94	122	13,745
31 December 2017					
From two to five years	13,565	–	–	–	13,565
For one to two years	2,137	–	–	–	2,137
Due after more than one year	15,702	–	–	–	15,702
Due within one year	1,924	7,822	112	399	10,257
	17,626	7,822	112	399	25,959
Company					
31 December 2018					
From two to five years	3,809	–	–	–	3,809
For one to two years	228	–	–	–	228
Due after more than one year	4,037	–	–	–	4,037
Due within one year	377	450	–	–	827
	4,414	450	–	–	4,864
31 December 2017					
From two to five years	13,565	–	–	–	13,565
For one to two years	1,200	–	–	–	1,200
Due after more than one year	14,765	–	–	–	17,765
Due within one year	1,200	555	–	–	1,755
	15,965	555	–	–	16,526

Borrowings and interest rate risk

There is no exposure to interest rate risk as the current borrowings in the Company and its subsidiaries are at fixed rates. The bonds at a fixed coupon rate of 10%, and the other borrowings at an average interest rate of 7%, see note 22.

27 Commitments and contingencies

General conditions

In recent years, the Republic of Kazakhstan has undergone substantial political and economic change. As an emerging market, the Republic of Kazakhstan does not possess a well-developed business infrastructure such as generally exists in a more mature free market economy. As a result, operations carried out in the Republic of Kazakhstan can involve risks which are not typically associated with those in developed markets. Significant identified risks have been provided for, or disclosed in these financial statements as appropriate.

(a) Contractual liabilities

Subsoil use rights are not provided to the Company on an indefinite basis, and each renewal shall be approved before the current contract or license expires. These rights can be cancelled by the Government of the Republic of Kazakhstan (hereinafter referred to as "the Government") if the Company does not fulfil contractual liabilities.

27 Commitments and contingencies continued

General conditions continued

Deposit development costs

In accordance with the subsoil use contract, the Company has an approved working programme which may be reviewed and reconsidered depending on the economic viability and operational conditions of the deposit. The management of the Company believes it has fulfilled the requirements of the Contract.

Training for Kazakhstani specialists

In accordance with the terms of the contract the Company is liable for the annual costs incurred in respect of the professional training of the Kazakhstani personnel involved in the work. The costs are estimated to be at least 1% of the operational costs during the development and operational process.

As at 31 December 2018 the Company has met the conditions of the Contract.

Development of the social sphere of the region

According to the terms of the contract, the Company is liable for supporting the development and ensuring social support for the activity of the communities near the area of operations of the Company. As at 31 December 2018, the Company has met all the conditions of the Contract.

Liabilities on the restoration of the mine

Within eighty calendar days upon the expiration of the contract the Company is liable for the development of the mine restoration programme and its inspection by the competent authority of the Government of the Republic of Kazakhstan. The Company is liable for implementation of the programme upon its approval.

(b) Insurance

In accordance with the subsoil use contract the Company is liable for the development of the insurance programme and its submission for approval by the competent authority.

The Company has several contracts of obligatory insurance including insurance of the vehicle owners, the employer's liability and insurance of the subsoil users' liability where the activity of such subsoil users is connected to the damage to third parties.

(c) Court proceedings

The claims on the Company are periodically set out in the courts along with the Company's activities. As at the reporting date, there are no material claims against the Company.

As part of the settlement in relation to the tailings dam restoration programme, the Company has a memorandum signed with the local authorities, whereby the Company is liable for arranging the construction of the paste plant for US\$1,800,000 (US\$600m Tenge). It has been agreed that the Company will use its best endeavors to have this completed once all necessary permits are obtained.

Other than the paste plant as at the reporting date the Company has fulfilled all of its obligations in relation to the outstanding works which required in relation to the tailings dam restoration program.

(d) Taxation risks

The tax system of Kazakhstan, being relatively new, is characterised by frequent changes to the legal norms, official interpretations and court decisions, which are often not explicit and can be contradictory. This leads to differing interpretations by the tax authorities. The examination and investigations of the accounts to ensure that the tax payable is accurate are carried out by several regulatory bodies. These bodies have the power to impose heavy fines and penalties. The accuracy of the tax computation can be investigated five calendar years after the end of the accounting period. In certain circumstances this period can be increased.

These circumstances may lead to the taxation risks being much higher in Kazakhstan compared to other countries. The management of the Company, based on their understanding of the tax legislation, regulatory requirements and court decisions, considers the tax liabilities to be fully reflected in the accounts.

Nevertheless, the interpretation of these provisions by the corresponding authorities can be different and in that case should the authorities prove the lawfulness of their position, it may significantly affect these financial accounts.

28 Subsequent events

The subsidiary TOO GMK Altyn MM received a bank loan from a Kazakh based bank amounting to US\$1m. A similar amount was advanced by the Assaubayev family. The bank funding is repayable over 12 months at a fixed interest rate of 14% with 3 months repayment holiday. The loan from the Assaubayev family is interest free and repayable at the earliest on 31 December 2019 subject to sufficient cash resources.

The Company obtained in March 2019 a written undertaking from RoK Ministry of Industry and Infrastructural Development that it had the option to renew the licence on the same terms as the grant of the initial licence.

29 Ultimate Controlling Party

The controlling party and parent entity of the Company is African Resources Limited, by virtue of the fact that at the date of this report it owns 69.8% (2017: 61.69%) of the voting rights in the Company. There is no requirement to prepare consolidated accounts for African Resources Limited, which is registered in the British Virgin Islands.

The ultimate controlling party are the Assaubayev family, by virtue of the fact that they are the controlling party of African Resources Limited.

INDEPENDENT AUDITOR'S REPORT

to the members of Altyn Plc

Opinion

We have audited the financial statements of Altyn Plc (the 'parent company') and its subsidiaries (the 'Group') for the year ended 31 December 2017 which comprise the consolidated statement of profit or loss, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of financial position, the parent company statement of financial position, the consolidated statement of changes in equity, the parent company statement of changes in equity, the consolidated statement of cash flows, the parent company statement of cash flows and notes to the financial statements, including a summary of significant accounting policies.

The financial reporting framework that has been applied in the preparation of the Group and parent company financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union and, as regards the parent company financial statements, as applied in accordance with the provisions of the Companies Act 2006.

In our opinion:

- ▲ the financial statements give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 December 2017 and of the Group's loss for the year then ended;
- ▲ the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- ▲ the parent company financial statements have been properly prepared in accordance with IFRS as adopted by the European Union and as applied in accordance with the provisions of the Companies Act 2006; and
- ▲ the financial statements have been prepared in accordance with the requirements of the Companies Act 2006; and, as regards the Group financial statements, Article 4 of the IAS Regulation.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ('ISAs (UK)') and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Group and the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Use of our report

This report is made solely to the parent company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the parent company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the parent company and the parent company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- ▲ the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- ▲ the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's or the parent company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

INDEPENDENT AUDITOR'S REPORT continued

to the members of Albyn Plc

<p>Matter</p>	<p>Carrying value of intangible assets</p> <p>As detailed in note 13, the Group's intangible assets represent historical geological data of \$8.6m and exploration & evaluation costs of \$3.3m pertaining to the Karasuyskoye ore fields, adjacent to the Group's current mining licence area production facilities at Sekisovskoye, which are significant assets and total \$11.9m at 31 December 2017.</p> <p>For the year ended 31 December 2017 management was required to assess whether there was any indication that this asset may be impaired in accordance with accounting standards. Management have carried out an assessment of impairment indicators during the year and concluded that no adjustment is required for impairment.</p> <p>There are a large number of estimates and judgements used by the management in assessing the indicators of impairment including non-financial and financial data. Therefore given the subjectivity involved in determining whether an impairment provision is required and quantifying this, the carrying value of the intangible assets is considered to be a key audit matter.</p>
<p>Our Response</p>	<p>We reviewed management's assessment of the impairment indicators in accordance with accounting standards.</p> <p>We read the correspondence, contracts and other documents regarding the license to confirm that the Group has a contractual right for exploration in the Karasuyskoye area.</p> <p>We obtained the exploration results to date and discussed with management who confirmed that the area remains prospective;</p> <p>We reviewed management's plans and budgets which show that the Group is committed to the progressing the project; and</p> <p>We assessed the Group's amortisation policy and useful life assessment against the length of legal title to the project area.</p>
<p>Matter</p>	<p>Carrying value of property, plant and equipment</p> <p>As detailed in note 14, the Group's property, plant and equipment represent its most significant assets and total \$35.2m at 31 December 2017.</p> <p>For the year ended 31 December 2017 management was required to assess whether there was any indication that an asset may be impaired in accordance with accounting standards. Management have carried out an assessment of impairment indicators during the year and concluded that no adjustment is required for impairment.</p> <p>Management's assessment of the impairment indicators contain a number of key assumptions that require significant estimation and judgements, including gold prices, gold reserves and production level, gold grade, exchange rates, cost assumptions and discount rates. Given the subjectivity involved, the carrying value of property, plant and equipment is considered to represent a key audit matter.</p>
<p>Our Response</p>	<p>We reviewed in detail the key assumptions and judgements exercised in management's assessment of the indicators of impairment, challenged the management's judgements by reference to the results from the operations and those that would be expected given the stage of development.</p> <p>We compared the actual performance with the economic model provided previously and investigated any material deviations and considered whether these represent an indicator of impairment. The main deviations were noted in gold grade and levels of production.</p> <p>We visited the Sekisovskoye mine, observed and discussed the operations, operational results and mining processes with the mine management and the chief geologist. During the visit to the Sekisovskoye mine we discussed the mine plan with the chief geologist and confirmed the main reason of underperformance in 2017 was lack of funds available for investments in mining equipment, which affected the volume and grade mined.</p> <p>We assessed the reasonableness of factors explained above and confirmed that in the ore bodies where there was a sufficient targeting and drilling equipment in place, the operational results met the expectations and supported the model in place. Additionally, we considered if the operational results in the period would invalidate the latest independent technical report issued by Venmyn Deloitte and noted that, despite the operational difficulties mentioned above, the assumption regarding mineable reserves continued to be valid.</p> <p>Our work did not indicate that management's assessment that there are no indicators of impairment in respect of the carrying value of property, plant and equipment was unreasonable.</p>

Our application of materiality

We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements. We consider materiality to be the magnitude by which misstatements, including omissions, could influence the economic decisions of reasonable users that are taken on the basis of the financial statements. Importantly, misstatements below this level will not necessarily be evaluated as immaterial as we also take account of the nature of identified misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements as a whole.

	Group	Parent company
Group	\$800,000 (2016: \$850,000)	\$600,000 (2016: \$600,000)
Basis for determining materiality	1.3% of total assets (2016: 1.5% of total assets)	1.3% of total assets (2016: 1.5% of total assets, capped at 75% of group materiality (2016: 1.5% of total assets, capped at 75% of group materiality))
Rationale for the benchmark applied	We have determined an assets based measure is appropriate as the Group is currently developing an underground mining project that requires significant capital expenditure. It is consistent with our approach adopted in previous years.	

Performance materiality is the application of materiality at the individual account or balance level set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole. Performance materiality was set at \$480,000 for the Group and at \$360,000 for the parent company (2016: \$500,000 for the Group and \$360,000 for the parent company) which represents 60% (2016 60%) of the above materiality levels.

Whilst materiality for the financial statements as a whole was \$800,000, each significant component of the Group was audited to a lower level of materiality ranging from \$400,000 to \$600,000.

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of \$40,000 (2016: \$40,000), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

There were no misstatements identified during the course of our audit that individually, or in aggregate, were considered to be material in terms of their absolute monetary value or on qualitative grounds.

An overview of the scope of our audit

Our group audit was scoped by obtaining an understanding of the Group, its environment and assessing the risks of material misstatement at the Group level.

Our group audit scope focused on the Group's principal operating locations being the Sekisovskoye and Karasuyskoye exploration project held in DTOO Gornorudnoe Predpriatie Baurgold and revenue recognised in TOO GMK Altyn MM, which were subject to a full scope audit with the audit work performed by overseas component auditors under our direction and supervision. Together with the parent company and its group consolidation, which was also subject to a full scope audit, these represent the significant components of the Group.

These locations represent the principal business units and account for 100% of the Group's revenue (2016:100%) and 100% of the Group's total assets (2016:100%).

The remaining component of the Group, Hambledon Mining Company Limited, was considered non-significant and we completed analytical procedures for this intermediate holding company on an entity only basis to confirm there are no significant risks of material misstatements within this entity.

The audits of each of the components were principally performed in Kazakhstan and the United Kingdom. All of the audits were conducted by BDO LLP and BDO member firms.

As part of our audit strategy, the audit partner and a senior member of the audit team visited each of the principal operating locations in the year.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

INDEPENDENT AUDITOR'S REPORT continued

to the members of Altyn Plc

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- ▲ the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- ▲ the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- ▲ adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- ▲ the parent company financial statements are not in agreement with the accounting records and returns; or
- ▲ certain disclosures of directors' remuneration specified by law are not made; or
- ▲ we have not received all the information and explanations we require for our audit.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Other matters which we are required to address

Following the recommendation of the audit committee, we were appointed by the Board of directors on 26 March 2013 to audit the financial statements for the year ending 31 December 2012 and subsequent financial periods. This is the 6th year of our engagement as auditor.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Company and we remain independent of the Company and the Group in conducting our audit.

Our audit opinion is consistent with the additional report to the audit committee.

Scott McNaughton (Senior Statutory Auditor)

For and on behalf of BDO LLP, Statutory Auditor
London,
United Kingdom

30 April 2018

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

year ended 31 December 2017

	Notes	2017 US\$000	2016 US\$000
Revenue	5	21,649	15,867
Cost of sales		(17,470)	(13,554)
Gross profit		4,179	2,313
Administrative expenses		(5,037)	(5,352)
Impairments – reversed/(impairment)	8	374	(1,107)
Operating loss		(484)	(4,146)
Foreign exchange	9	(52)	283
Finance expense	9	(1,381)	(2,215)
Loss before taxation	10	(1,917)	(6,078)
Taxation (charge)/credit	11	(12)	(278)
Loss attributable to equity holders of the parent		(1,929)	(6,356)
Loss per ordinary share			
Basic & diluted	12	(0.08c)	(0.3c)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

year ended 31 December 2017

	2017 US\$000	2016 US\$000
Loss for the year	(1,929)	(6,356)
Currency translation differences arising on translations of foreign operations items that may be reclassified to profit or loss	98	747
Currency translation differences arising on translations of foreign operations relating to taxation	1,088	866
Total comprehensive loss attributable to equity holders of the parent	(743)	(4,743)

The accompanying notes are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

year ended 31 December 2017

Company number 5048549	Notes	2017 US\$000	2016 US\$000
Non-current assets			
Intangible assets	13	11,881	10,264
Property, plant and equipment	14	35,163	37,316
Trade and other receivables	17	1,476	1,100
Deferred tax asset	23	6,928	5,855
Restricted cash	21	14	139
		55,462	54,674
Current assets			
Inventories	16	1,713	1,366
Trade and other receivables	17	2,531	3,096
Cash and cash equivalents		704	2,236
		4,948	6,698
Total assets		60,410	61,372
Current liabilities			
Trade and other payables	18	(7,822)	(5,877)
Other financial liabilities	19	(399)	(461)
Current tax payable		–	(11)
Provisions	21	(112)	(190)
Borrowings	22	(724)	(4,439)
		(9,057)	(10,978)
Net current liabilities		(4,109)	(4,280)
Non-current liabilities			
Other financial liabilities	19	–	(254)
Other payables		(160)	(190)
Provisions	21	(4,512)	(3,978)
Convertible bonds	22	(12,496)	(11,281)
Borrowings	22	(937)	(700)
		(18,105)	(16,403)
Total liabilities		(27,162)	(27,381)
Net assets		33,248	33,991
Equity			
Called-up share capital	24	3,886	3,886
Share premium		141,918	141,918
Merger reserve		(282)	(282)
Other reserve	22	333	333
Currency translation reserve		(44,618)	(45,804)
Accumulated losses		(67,989)	(66,060)
Total equity		33,248	33,991

The financial statements were approved by the Board of Directors on 30 April 2018 and signed on its behalf by

Aidar Assaubayev
Chief Executive

The accompanying notes are an integral part of these consolidated financial statements.

COMPANY STATEMENT OF FINANCIAL POSITION

31 December 2017

	Notes	2017 US\$000	Restated 2016 US\$000
Company number 5048549			
Non-current assets			
Property, plant & equipment	14	207	290
Investments	15	9,430	9,430
Loans to subsidiaries	15	90,425	85,401
		100,062	95,121
Current assets			
Other receivables	17	68	165
Cash and cash equivalents		264	1,725
		332	1,890
Total assets		100,394	97,011
Current liabilities			
Trade and other payables	18	(555)	(1,193)
Net current (liabilities)/assets		(223)	697
Non-current liabilities			
Convertible bonds	22	(12,496)	(11,281)
		(12,496)	(11,281)
Total liabilities		(13,051)	(12,474)
Net assets		87,343	84,537
Equity			
Called up share capital	24	3,886	3,886
Share premium		141,918	141,918
Currency translation reserve		(16,338)	(16,338)
Other reserve	22	333	333
Accumulated losses		(42,456)	(45,262)
Total equity		87,343	84,537

The Company made a profit of US\$2.8m in the year (2016: restated US\$1.45m).

The financial statements were approved by the Board of Directors on 30 April 2018 and signed on its behalf by

Aidar Assaubayev
Chief Executive

The accompanying notes are an integral part of these company financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

year ended 31 December 2017

Note	Share capital US\$000	Share premium US\$000	Merger reserve US\$000	Currency translation reserve US\$000	Other reserve US\$000	Accumulated losses US\$000	Total US\$000
1 January 2016	3,886	141,918	(282)	(47,417)	–	(59,704)	38,401
Loss for the year						(6,356)	(6,356)
Other comprehensive loss	–	–	–	1,613	–		1,613
Total comprehensive profit	–	–	–	1,613	–	(6,356)	(4,743)
Equity component of loans received	–	–	–	–	333	–	333
31 December 2016	3,886	141,918	(282)	(45,804)	333	(66,060)	33,991
Loss for the year						(1,929)	(1,929)
Other comprehensive income	–	–	–	1,186	–	–	1,186
Total comprehensive loss	–	–	–	1,186	–	(1,929)	(743)
31 December 2017	3,886	141,918	(282)	(44,618)	333	(67,989)	33,248

Group Reserves

Share capital

Share premium

Merger reserve

Currency translation reserve

Other reserve

Description

Amount of the contributions made by shareholders in return for the issue of shares.

Amount subscribed for share capital in excess of nominal value.

Reserve created on application of merger accounting under a previous GAAP.

Gains/losses arising on re-translating the net assets of overseas operations into US Dollars

Amount of proceeds on issue of convertible debt relating to the equity component.

The accompanying notes are an integral part of these consolidated financial statements.

COMPANY STATEMENT OF CHANGES IN EQUITY

year ended 31 December 2017

	Share capital US\$000	Share premium US\$000	Currency translation reserve US\$000	Other reserve US\$000	Accumulated losses US\$000	Total US\$000
1 January 2016 (as previously reported)	3,886	141,918	(16,338)	–	(47,998)	81,468
Restatement (note 15)	–	–	–	–	1,287	1,287
1 January 2016 – restated	3,886	141,918	(16,338)	–	(46,711)	82,755
Profit for the year – restated	–	–	–	–	1,449	1,449
Total comprehensive profit – restated	–	–	–	–	1,449	1,449
Equity component of loans received	–	–	–	333	–	333
31 December 2016 – restated	3,886	141,918	(16,338)	333	(45,262)	84,537
Profit for the year	–	–	–	–	2,806	2,806
Total comprehensive profit	–	–	–	–	2,806	2,806
31 December 2017	3,886	141,918	(16,338)	333	(42,456)	87,343

Company Reserves

Share capital

Share premium

Currency translation reserve

Other reserve

Accumulated losses

Description

Amount of the contributions made by shareholders in return for the issue of shares.

Amount subscribed for share capital in excess of nominal value.

Gains/losses arising on re-translating the net assets of overseas operations into US Dollars.

Amount of proceeds on issue of convertible debt relating to the equity component.

Cumulative net gains and losses recognised in the Company statement of financial position.

The accompanying notes are an integral part of these company financial statements.

The Company has taken advantage of S408 of the Companies Act 2006 and not presented the individual Company profit and loss account.

CONSOLIDATED STATEMENT OF CASHFLOWS

year ended 31 December 2017

	Notes	2017 US\$000	2016 US\$000
Net cash inflow/(outflow) from operating activities	25	5,107	(2,918)
Investing activities			
Purchase of property, plant and equipment	14	(2,252)	(4,898)
Exploration costs	13	(439)	(396)
Net cash used in investing activities		(2,691)	(5,294)
Financing activities			
Loans received	25	724	13,661
Borrowings repaid	25	(4,331)	(3,434)
Interest repaid	25	(341)	(759)
Net cash (outflow)/inflow from financing activities		(3,948)	9,468
(Decrease)/increase in cash and cash equivalents		(1,532)	1,256
Foreign currency translation		-	(104)
Cash and cash equivalents at beginning of the year		2,236	1,084
Cash and cash equivalents at end of the year		704	2,236

The accompanying notes are an integral part of these consolidated financial statements.

COMPANY STATEMENT OF CASHFLOWS

year ended 31 December 2017

	Notes	2017 US\$000	2016 US\$000
Net cash outflow from operating activities	25	(1,169)	(3,075)
Investing activities			
Loans to subsidiaries		(132)	(7,856)
Net cash used in investing activities		(132)	(7,856)
Financing activities			
Borrowings		-	12,000
Finance expenses paid	25	(160)	(72)
Net cash (outflow)/inflow from financing activities		(160)	11,928
(Decrease)/increase in cash and cash equivalents		(1,461)	997
Cash and cash equivalents at beginning of the year		1,725	728
Cash and cash equivalents at the end of the year		264	1,725

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO THE FINANCIAL STATEMENTS

year ended 31 December 2017

1 General information

Altyn Plc (the "Company") is a Company incorporated in England and Wales under the Companies Act 2006. The address of its registered office, and place of business of the Company and its subsidiaries is set out within the Company information on page 65 of this annual report. The principal activities of the Company and subsidiaries are set out on page 16 and, the strategic review within this annual report.

2 Basis of preparation

The annual report is for the year ended 31 December 2017 and includes the consolidated and parent company's financial statements prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. The financial statements have been prepared using accounting policies set out in note 4 which are consistent with all applicable IFRSs and with those parts of the Companies Act 2006 applicable to companies reporting under IFRSs. For these purposes, IFRSs comprises the standards issued by the International Accounting Standards Board and interpretations issued by the International Financial Reporting Interpretations Committee that have been endorsed by the European Union. The financial statements have been prepared under the historical cost convention, except for the adjustment in relation to the fair value of the derivative element included in the US\$10m bond raised with African Resources, and on a going concern basis.

Going concern

To progress the mine to the full projected capacity the Company requires further funding, which the Company has made good progress in putting in place. It is currently in the advanced stages of finalising funding for new equipment from two parties. It is seeking bond finance from one party and direct equipment purchasing from another party, in order to secure the necessary investment.

The Company is continuing to develop its underground mine, production is continuing at a steady pace with gold sold in the current year of 16,747 oz. From the operating cash flows generated the Company paid the balance of the EBRD loan, which with interest amounted to US\$3.5m. In order to preserve cash flow, savings have been made in overhead costs at both head office and subsidiary level. In January 2018, African Resources Limited converted US\$9.7m of the US\$10m convertible loan debt into new ordinary shares. No interest was paid in relation to this loan in the year and it is expected that the balance of the bond to include accrued interest will be converted into new ordinary shares in Q3 2018.

The Directors have reviewed the cash flows for 15 months from the date of approval of the financial statements based on the projected trading. The Directors are confident that should the fund raising not be successful to provide the funds in the expected timeframe the Company will be able to adapt its operational plans such that it continues to operate.

Furthermore the major shareholder has confirmed their intention to provide further funding to enable the Company to continue its planned operations for at least twelve months from the date of approval of the financial statements.

On this basis the Directors have therefore concluded that it is appropriate to prepare the financial statements on a going concern basis.

3 Accounting standards issued but not adopted

At the date of authorisation of these financial statements, the following standards and relevant interpretations, which have not been applied in these financial statements, were in issue but not yet effective (and some of which were pending endorsement by the EU):

IFRS 9 Financial Instruments

IFRS 15 Revenue from Contracts

IFRS 16 Leases

The only standard that is anticipated to be significant or relevant to the Group is IFRS 9 "Financial Instruments". The new standard will replace existing accounting standards. It is applicable to financial assets and liabilities and will introduce changes to existing accounting concerning classification, measurement and impairment (introducing an expected loss method).

IFRS 15 'Revenue from Contracts with Customers' is not expected to have a material impact on the Group at this stage of the Group's operations. The revenue contracts held by the Group usually contain a single performance criteria that is satisfied at a point in time. The Group will adopt the above standards at the time stipulated by that standard. The Group does not at this time anticipate voluntary early adoption of any of the standards.

IFRS 16 will require the recognition of an asset and liability with respect to the material operating lease commitments that the group have. Management are currently considering the impact that this will have on the financial statements.

4 Accounting policies

Basis of consolidation

Where a company has control over an investee, the investee is classified as a subsidiary. A company controls an investee if all three of the following elements are present: power over the investee, exposure to variable returns from the investee, and the ability of the investor to use its power to affect those variable returns. Control is reassessed whenever facts and circumstances indicate that there may be a change in any of these elements of control.

The consolidated financial statements present the results of the company and its subsidiaries ("the Group") as if they formed a single entity. Intercompany transactions and balances between group companies are therefore eliminated in full.

The consolidated financial statements incorporate the results of business combinations using the acquisition method. In the statement of financial position, the acquiree's identifiable assets, liabilities and contingent liabilities are initially recognised at their fair values at the acquisition date. The results of acquired operations are included in the consolidated statement of comprehensive income from the date on which control is obtained. They are deconsolidated from the date on which control ceases.

Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable and represents amounts received for goods provided in the normal course of business, net of VAT and any other sales related taxes.

The Company's revenue is generated entirely from the sale of the gold and silver ("Precious Metal") content of gold doré. Gold doré was delivered to a precious metal refiner, based in Kazakhstan during 2017 and 2016, which also purchased all precious metal that was refined. Title of the Precious Metal passes upon acceptance of the delivery from the Company to the refiner. Sales of Precious Metal are only recognised when the delivery has been accepted and title for the Precious Metal has accordingly been passed to the refiner.

The Company does not hedge or otherwise enter into any derivatives in respect of its sales of gold doré. Sales are recorded at the actual selling price of the gold doré which is based on current market prices.

Foreign currencies

The Company has prepared its financial statements in United States Dollars (US\$). The functional currency of the companies in Kazakhstan is the Kazakhstan Tenge (KZT). The functional currency of the Company and Hambleton Mining Company Limited is the United States Dollars (US\$).

The rates used to convert Pound Sterling and Kazakhstan Tenge into United States Dollar in these financial statements are as follows:

	2017		2016	
	Closing	Average	Closing	Average
US\$ = £	1.35	1.29	1.23	1.35
US\$ = KZT	332.33	326.00	333.29	342.16

The year end and average rates used for the Kazakh Tenge have been obtained from the National Bank of Kazakhstan.

Transactions denominated in currencies other than the functional currency of each respective entity are recorded at the rate of exchange prevailing at the date of the transaction. Monetary assets and liabilities are translated into the relevant functional currency at the closing rates of exchange at the reporting date. Exchange differences arising from the restatement of monetary assets and liabilities at the closing rate of exchange at the reporting date or from the settlement of monetary transactions at a rate different from that at which the asset or liability was recorded are dealt with through the statement of profit or loss.

On consolidation, the results of overseas operations are translated into US dollars, the presentation currency, at rates approximating to those ruling when the transactions took place. All assets and liabilities of overseas operations are translated at the rate ruling at the balance sheet date. Exchange differences arising on translating the opening net assets at the opening rate and the results of overseas operations at the actual rate are recognised directly in the consolidated statement of other comprehensive income.

The intercompany loans form a part of the Company's investment in a foreign operation. The exchange difference arising on the intercompany loans is recognised in other comprehensive income and accumulated in a separate component of equity until disposal of the foreign operation.

Intangible assets

Externally acquired intangible assets are initially recognised at cost and subsequently amortised on a straight-line basis over their expected economic life. In the Directors' opinion this was initially estimated to be over the expected useful life of the data being 20 years, this has been revised down to 10 years from 10 May 2016 being the minimum period over which the exploration licenses have been awarded.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

4 Accounting policies continued

Exploration and evaluation costs

All costs incurred prior to obtaining the legal right to undertake exploration and evaluation activities on a project are written off as incurred. All costs associated with mineral exploration and investments are capitalised on a project by project basis, pending determination of the feasibility of the project. Costs incurred include appropriate technical and administrative expenses. If an exploration project is successful and the project is determined to be commercially viable, the related costs will be transferred to mining assets and amortised over the estimated life of the mineral reserves on a unit of production basis. Where a project is relinquished, abandoned, or is considered to be of no further commercial value to the Group, the related costs are written off. Impairment reviews performed under IFRS 6 'Exploration for and evaluation of mineral resources' are carried out on a project by project basis, with each project representing a potential single cash generating unit. An impairment review is undertaken when indicators of impairment arise; typically when one of the following circumstances applies:

- ▲ sufficient data exists that render the resource uneconomic and unlikely to be developed
- ▲ title to the asset is compromised
- ▲ budgeted or planned expenditure is not expected in the foreseeable future
- ▲ insufficient discovery of commercially viable resources leading to the discontinuation of activities.

Property, plant and equipment: mining properties and leases

Mining properties comprise previously capitalised exploration, evaluation and development expenditure incurred during the exploration and development stages of the Company's mining projects.

Other items of property, plant and equipment are initially recognised at cost. As well as the purchase price, cost include directly attributable costs and estimated present value of any future unavoidable costs of dismantling and removing items. The corresponding liability is recognised within provisions.

Assets under construction represent assets under development that are not at the stage that can be used commercially to generate revenues, no depreciation is applied to these assets.

Depreciation

Depreciation of property, plant and equipment is calculated on a straight line or units of production basis, as appropriate. Assets are fully depreciated over their economic lives, or over the remaining life of the mine if shorter.

Buildings	8-10 per cent. per annum
Equipment, fixtures and Fittings	10-40 per cent. per annum
Plant machinery and vehicles	7-30 per cent. per annum
Mining properties and leases	Unit of production based on the proven reserves

Assets under construction are not depreciated.

Impairment of non-current assets

Property, plant and equipment and intangible assets are assessed for impairment at each reporting date when events or a change in circumstances suggest that the carrying amount of an asset may exceed the recoverable amount.

Where there has been an indication of a possible impairment, management assesses the recoverability of the carrying value of the asset by comparing it with the estimated discounted future net cash flows generated by the asset based on management's expectation of future production and selling prices. Any identified impairment is charged to the statement of profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount but such that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years.

A reversal of impairment loss is recognised in the profit or loss immediately.

Inventories

Inventories are valued at the lower of cost or net realisable value. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

Costs incurred in bringing each product to its present location and condition are accounted for as follows:

Spare parts and consumables	– Purchase costs on a first in, first out basis
Ore stockpiles, work in progress and finished gold	– Dependent on the current stage in the production cycle, the cost will reflect cost of direct materials, power, labour and a proportion of overhead, to bring the product to its current state

4 Accounting policies continued

Taxation

The tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on the taxable profit for the year. Taxable profit differs from net profit as reported in the statement of profit or loss because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit and is accounted for by using the balance sheet liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries and associates, and interests in joint ventures except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised. Deferred tax is charged or credited in the income statement, except when it relates to items charged to other comprehensive income or credited directly to equity, in which case the deferred tax is also dealt within equity. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Indirect tax balances are not discounted.

Financial instruments

Financial assets

The Company classifies its financial assets only as loans and receivables. These are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise principally through the provision of goods and services to customers (trade receivables), but also incorporate other types of contractual monetary assets (other receivables). They are initially recognised at fair value plus transaction costs that are directly attributable to their acquisition or issue, and are subsequently carried at amortised costs using effective interest rate method, less provision for impairment.

Financial assets are assessed for indicators of impairment at each reporting date. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the asset have been impacted.

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and demand deposits, and other short-term highly liquid investments with original maturities of less than three months and which are readily convertible to a known amount of cash and are subject to an insignificant risk of change in value; for the purposes of statement of cash flows, cash and cash equivalents also include bank overdrafts.

Investments and loans to subsidiaries

Investment in subsidiaries are included at cost less amounts written off. Loans to subsidiaries are initially recognised at fair value and subsequently measured at amortised costs.

Financial liabilities

The Group classifies its financial liabilities into one of two categories discussed below, depending on the purpose for which the liability was acquired.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss comprise only the conversion option related to \$10m loan note classified as derivative financial liability. They are carried in the consolidated statement of financial position at fair value with changes in fair value recognised in the consolidated income statement. Other than these derivative financial instruments, the Group does not have any liabilities held for trading nor has it designated any other financial liabilities as being at fair value through profit or loss.

Other financial liabilities

Other financial liabilities comprise borrowings, trade payables and other short-term monetary liabilities. These are initially measured at fair value and subsequently recognised at amortised cost using effective interest rate method.

Derecognition of financial liabilities

Financial liabilities are derecognised when, and only when, the Group's obligations are discharged, cancelled, or they expire.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

4 Accounting policies continued

Financial liabilities continued

Fair value measurement hierarchy

The Group classifies its financial assets and financial liabilities measured at fair value using a fair value hierarchy that reflects the significance of the inputs used in making the fair value measurement (note x). The fair value hierarchy has the following levels:

- ▲ quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1);
- ▲ inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices) (level 2);
- ▲ inputs for the asset or liability that are not based on observable market data (unobservable inputs) (Level 3);
- ▲ the level in the fair value hierarchy within the financial asset or financial liability is determined on the basis of the lowest level input that is significant to the fair value measurement.

Compound instruments

The component parts of compound instruments (convertible notes and loans with detachable warrants) issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument. A conversion option that will be settled by the exchange of a fixed amount of cash for a fixed number of the Company's own equity instruments is an equity instrument.

At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for similar non convertible instruments. This amount is subsequently recorded as a liability on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date.

The conversion option or detachable warrant classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently re-measured. No gain or loss is recognised in profit or loss upon conversion or expiration of the conversion option.

Transaction costs that relate to the issue of the compound instruments are allocated to the liability and equity components in proportion to the fair value of the debt and equity components. Transaction costs relating to the equity component are recognised directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component and are amortised over the lives of the compound instruments using the effective interest method.

Share capital

Financial instruments used by the Group are classified as equity only to the extent that they do not meet the definition of a financial liability or financial asset.

The Company's ordinary shares are classified as equity instruments and are recorded at proceeds received, net of direct issue costs.

US\$10m Convertible bond

As further discussed in the note 20 the Group entered into a \$10m loan arrangement with African Resources PLC. The loan can be converted into ordinary shares of the Company at a price of 3p per share any time prior to maturity. The conversion feature has been classified as derivative given there is an obligation to issue a variable number of shares as the amount of liability to be settled depends on the foreign exchange rate at the date of settlement. The Company engaged Global View Limited as a third party expert to update the value of the embedded derivative liability.

Their fair value of derivative liability on the grant date and the reporting date was determined using a Monte-Carlo simulation. For each iteration of the simulation, the simulated share price was analysed to determine the value. The fair value was based on the following assumptions:

- ▲ share price at the 31 December 2017 £0.0124 (2016 : £0.0185);
- ▲ GBP/USD exchange rate at 31 December 2017 – £0.7407 (2016: £0.8109);
- ▲ volatility of share price at 31 December 2017 – 55.3% (2016: 63.8%);
- ▲ volatility of the forex rate at 31 December 2017 – 7.0% (2016: 13.5%); and
- ▲ time period at 31 December 2017 3.2 years (2016: 4.2 years).

4 Accounting policies continued

Level 3 fair value measurements

The derivative liability has been deemed to be Level 3 liability under the fair value hierarchy as fair value measures of these liabilities are not based on observable market data.

The movement in their fair values is shown in the table below:

	US\$000
As at 1 January 2016	–
Value at the date of the issue of the convertible	2,266
Fair value movements recognised through profit or loss	(143)
Foreign exchange movements	(243)
As at 31 December 2016 and 1 January 2017	1,880
Fair value movements recognised through profit or loss	(1,453)
Foreign exchange movements	112
As at 31 December 2017	539

The amount of derivative as at 31 December 2017 has been included in the value of Convertible bond in Note 22.

Provision for commitments and contingencies

Provisions are recognised when the Company has a present obligation at the reporting date, which occurred as a result of a past event, and it is probable that the Company will be required to settle that obligation and the amount of the obligation can be reliably estimated.

Possible obligations that are less than probable, and commitments to make purchases and incur expenditure in future periods, are not recognised as provisions but are disclosed as commitments and contingencies.

Provision for site rehabilitation and decommissioning costs and the associated asset is recorded at the present value of the expected expenditure required to settle the Company's future obligations. Actual outcomes may vary. Details regarding the provision for site rehabilitation and decommissioning costs are set out in note 21 to the financial statements.

Critical accounting judgements and key sources of estimation uncertainty

In the application of the Company's accounting policies, the Directors have made judgments and estimates that may have a significant effect on the amount recognised in the financial statements. These include:

- ▲ carrying value of property, plant and equipment, including estimates made in respect of reserves and resources, discount rate and future gold prices (note 14);
- ▲ recoverability of inventories (note 16);
- ▲ carrying value of provisions (note 21);
- ▲ recognition of deferred taxation assets (note 23);
- ▲ carrying value of intangible assets (note 13);
- ▲ recognition of derivatives (note 22); and
- ▲ carrying value of indirect taxes – the Directors consider that it is appropriate to carry these balances without the need for provision based on the legal right and the mechanism for recovery. The balances are not discounted in accordance with the accounting policy.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

5 Revenue

An analysis of the Company's revenue is as follows:

	2017 US\$000	2016 US\$000
Sale of gold and silver	21,649	15,867

Included in revenues from sale of gold and silver are revenues of US\$21,294,000 (2016: US\$15,862,000) which arose from sales of precious metals to one customer based in Kazakhstan. Other sales amounted to US\$355,000 (2016 US\$5,000), and related to sale of surplus materials and consumables.

6 Segmental information

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments and making strategic decision, has been identified as the Board of Directors.

The Board of Directors consider there to be only one operating segment, the exploration and development of mineral resources, and only one geographical segment, being Kazakhstan. The majority of sales were made in Kazakhstan and, therefore, no additional segmental information is presented.

7 Staff number and costs of the Group

The average monthly number of employees (including Executive Directors) was:

	2017	2016
Production	523	523
Administration	106	107
	629	630

Their aggregate remuneration comprised:

	2017 US\$000	2016 US\$000
Directors' emoluments	371	351
Employee wages and salaries	3,603	3,051
Employer social tax and national insurance	544	439
	4,518	3,841

Staff number and costs of the Company

The average monthly number of employees (including Executive Directors) was:

	2017	2016
Administration	7	7

Their aggregate remuneration comprised:

	2017 US\$000	2016 US\$000
Directors' emoluments	371	351
Employee wages and salaries	70	138
Employer social tax and national insurance	34	48
	475	537

8 Impairments

	2017 US\$000	2016 US\$000
Impairments (reversed)/provided – low grade ore	(374)	946
Impairments – other	–	161
	(374)	1,107

The reversal of impairment for low grade ore in 2017 relates to ore that is less than 1g/t, and is being used in processing for operational reasons and was previously provided.

The other impairment relates to a provision made against an advance payment where recovery of the monies/services is uncertain.

9 Finance income and finance expense

	2017 US\$000	2016 US\$000
Finance expense		
Foreign exchange gain on EBRD loan	–	27
Foreign exchange (loss)/gains other	(52)	256
	(52)	283
Interest paid	(1,510)	(1,883)
Fair value adjustment on convertible loan	1,453	143
Unwinding of discount other financial liabilities	(774)	(22)
Unwinding of discount on provisions	(550)	(453)
	(1,381)	(2,215)

10 Loss before taxation

The loss on ordinary activities before taxation is stated after charging:

	2017 US\$000	2016 US\$000
Staff costs (note 7)	4,518	3,841
Depreciation of tangible assets	4,508	3,067
Amortisation of intangible (net of amortisation capitalised)	–	231
Cost of inventories recognised as expense	5,949	5,127
Impairment of receivables	–	161
(Reversal of impairment)/impairment of inventory	(374)	946
Fees payable to the Company's auditors for the audit of the Company and Group financial statements	159	146
Fees payable to the auditors of the Company's subsidiaries pursuant to legislation	34	47

11 Taxation

	2017 US\$000	2016 US\$000
Current year tax charge	–	12
Adjustment in relation to prior years	–	–
Deferred taxation (note 23)	12	266
Total taxation charge	12	278

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

11 Taxation continued

A reconciliation between the accounting profit and the total taxation benefit from continuing operations is as follows:

	2017 US\$000	2016 US\$000
Loss before taxation	(1,917)	(6,078)
Loss for the year multiplied by the standard rate of corporation tax of 19.25% (2016: 20%)	(369)	(1,216)
Expenses not deductible for tax purposes	409	361
Current year tax losses	(28)	577
Adjustments relating to different tax rates of subsidiaries	(24)	–
Total charge	(12)	(278)

The taxation rate used for taxation on loss on ordinary activities is the standard rate for United Kingdom corporation tax, currently 19.25% (2016: 20%), being the average applicable rate for the Company in 2017. The rate applicable to the Company's subsidiaries in Kazakhstan is 20%.

12 Loss per ordinary share

The calculation of basic and diluted earnings per share from continuing operations is based upon the retained loss from continuing operations for the financial year of US\$1.9m (2016: loss of US\$6.4m).

The weighted average number of ordinary shares for calculating the basic loss in 2017 and 2016 is shown below. As the Company was loss making in 2017, the impact of the potential ordinary shares outstanding from the conversion of the Convertible loan notes would be anti-dilutive, and as such the basic and diluted earnings per share are the same. The total number of all non-dilutive potential shares related to the issue of the convertible loans is disclosed in Note 22.

	2017	2016
Basic and diluted	2,334,342,130	2,334,342,130

13 Intangible assets

	Karasuyskoye geological data	Exploration and evaluation costs	US\$000
Cost			
1 January 2016	11,139	–	11,139
Translation difference	206	–	206
Additions	–	396	396
Amortisation capitalized	–	322	322
31 December 2016 & 1 January 2017	11,345	718	12,063
Translation difference	79	–	79
Transfer	–	157	157
Additions	–	1,430	1,430
Amortisation capitalized	–	1,021	1,021
31 December 2017	11,424	3,326	14,750
Amortisation			
1 January 2016	1,252	–	1,252
Charge for the year	553	–	553
Translation difference	(6)	–	(6)
31 December 2016 & 1 January 2017	1,799	–	1,799
Charge for the year	1,021	–	1,021
Translation difference	49	–	49
31 December 2017	2,869	–	2,869
Net book value			
1 January 2016	9,887	–	9,887
31 December 2016	9,546	718	10,264
31 December 2017	8,555	3,326	11,881

The intangible assets relate to the historic geological information pertaining to the Karasuyskoye ore fields. The ore fields are located in close proximity to the current open pit and underground mining operations of Sekisovskoye. The Company obtained a contract for exploration and evaluation on the site in May 2016 from the Kazakh authorities. The contract is valid for a period of 6 years, which is a right to extend for a minimum period of 4 years.

13 Intangible assets continued

The directors took the view that initially a 20 year write off was appropriate in relation to the absorption of the costs given the current development of the site, this has been revised to write off the geological data over the period the licence expires being with the minimum extension to May 2026 a period of 10 years. The costs amortised are capitalised in line with the Company's accounting policy. The effect is to increase the amortisation charge from US\$522,000 to US\$1,021,000, there is no effect on the income statement as the amortisation costs are capitalised as part of exploration and evaluation costs. Based on results of further work performed during the year, the Directors do not consider there to be any indicators of impairment and consider the project to remain prospective.

14 Property, plant and equipment – Company

	Motor vehicle US\$000	Equipment US\$000	Total US\$000
Cost			
1 January 2016	70	467	537
31 December 2016 & 2017	70	467	537
Accumulated depreciation			
1 January 2016	58	110	168
Charge for the year	12	67	79
31 December 2016	70	177	247
Charge for the year	–	83	83
31 December 2017	70	260	330
Net book value			
1 January 2016	12	357	369
31 December 2016	–	290	290
31 December 2017	–	207	207

14 Property, plant and equipment – Group

	Mining properties and leases US\$000	Freehold, land and buildings US\$000	Equipment, fixtures and fittings US\$000	Plant, machinery and vehicles US\$000	Assets under construction US\$000	Total US\$000
Cost						
1 January 2016	8,390	9,080	11,101	4,374	19,419	52,364
Additions	–	217	1,056	1,376	2,891	5,540
Disposals	–	–	(663)	–	(1)	(664)
Transfers	–	14,788	505	–	(15,293)	–
Transfers to inventories	2,817	–	–	–	(3,194)	(377)
Currency translation adjustment	144	156	190	75	333	898
31 December 2016 & 1 January 2017	11,351	24,241	12,189	5,825	4,155	57,761
Additions	1,196	38	399	283	686	2,602
Disposals	–	(15)	(257)	(53)	(133)	(458)
Transfer to exploration & evaluation costs	(157)	–	–	–	–	(157)
Transfers	(1,513)	2,465	(829)	2,469	(2,651)	(59)
Currency translation adjustment	(34)	22	44	4	49	85
31 December 2017	10,843	26,751	11,546	8,528	2,106	59,774

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

14 Property, plant and equipment – Group continued

	Mining properties and leases US\$000	Freehold, land and buildings US\$000	Equipment, fixtures and fittings US\$000	Plant, machinery and vehicles US\$000	Assets under construction US\$000	Total US\$000
Accumulated depreciation						
1 January 2016	2,121	3,989	8,058	3,061	–	17,229
Charge for the year	102	1,016	1,573	376	–	3,067
Disposals	–	–	(216)	–	–	(216)
Currency translation adjustment	39	95	169	62	–	365
31 December 2016 & 1 January 2017	2,262	5,100	9,584	3,499	–	20,445
Charge for the year	222	2,498	1,452	336	–	4,508
Disposals	–	(15)	(208)	(40)	–	(263)
Transfers	(180)	(290)	(1,871)	2,282	–	(59)
Currency translation adjustment	2	(33)	6	5	–	(20)
31 December 2017	2,306	7,260	8,963	6,082	–	24,611
Net book value						
1 January 2016	6,269	5,091	3,043	1,313	19,419	35,135
31 December 2016	9,089	19,141	2,605	2,326	4,155	37,316
31 December 2017	8,537	19,491	2,583	2,446	2,106	35,163

Capitalised cost of mining property and leases are amortised over the life of the licence from commencement of production on a unit of production basis. This basis uses the ratio of production in the period compared to the mineral reserves at the end of the period. Mineral reserves estimates are based on a number of underlying assumptions, which are inherently uncertain. Mineral reserves estimates take into consideration estimates by independent geological consultants. However, the amount of mineral that will ultimately be recovered cannot be known until the end of the life of the mine.

Any changes in reserve estimates are, for amortisation purposes, treated on a prospective basis. The recovery of the capitalised cost of the Company's property, plant and equipment is dependent on the development of the underground mine.

The Directors are required to consider whether the non-current assets comprising, mineral properties leases, plant and equipment have suffered any impairment. In determining if there any indicators of impairment, the Directors have considered the operational performance in the period and do not consider that there is an indicator of impairment. Should an indicator of impairment have been identified, the recoverable amount would have been determined based on value in use calculations. The use of this method requires the estimation of future cash flows and the choice of a discount rate in order to calculate the present value of the cash flows. The directors have concluded that no adjustment is required for impairment.

15 Subsidiaries

Name	Percentage held	Country of registration and operation
Directly held		
Hambledon Mining Company Limited	100	British Virgin Islands
TOO GMK Altyn MM	100	Kazakhstan
Indirectly held		
DTOO Gornorudnoe Predpriatie Baurgold	100	Kazakhstan

The principal activity of all companies relates to gold mining and production with the exception of Hambledon Mining Company Limited which is an investment holding Company and is currently dormant, its registered address is Palm Grove House, P O Box 438, Road Town, Tortola, British Virgin Islands.

Both companies trade from 10 Novostroyevsaya Street, Glubokovskoye district, Sekisovka village East Kazakhstan.

Investments and loans to subsidiaries – Company

	Shares US\$000	Contribution for investment adjustment US\$000	Subsidiaries loans US\$000	Total US\$000
1 January 2016 – restated	225	7,631	74,747	82,603
Net cash movements	–	–	7,856	7,856
Contribution	–	1,574	(1,574)	–
Management charges and interest	–	–	4,372	4,372
31 December 2016 – restated	225	9,205	85,401	94,831
Net cash movements	–	–	132	132
Management charges and interest	–	–	4,892	4,892
31 December 2017	225	9,205	90,425	99,855

15 Subsidiaries continued

Investments and loans to subsidiaries – Company continued

The investments together with the loans which are denominated in US Dollars represent the investments into the subsidiaries and in the opinion of the directors the aggregate value of the investments in the subsidiaries is not less than the amount shown in these financial statements. The directors review the intercompany borrowings on a regular basis, together with the associated cash flows of each company, and consider that no impairment is required.

The historic loans are shown within fixed assets as quasi-equity investments and represent the initial funding to the subsidiaries. The recent loans to subsidiaries are charged at a fixed interest rate of 5% and are repayable in 2019 or on a three year rolling evergreen facility, repayment to be made three years from the date of any formal request for repayment from Altyn Plc, these are included within fixed assets. The Directors have reassessed the fair value market rate applicable to the loans advanced to the subsidiaries, which has resulted in an adjustment to the interest receivable in the prior periods.

Restatement

The Directors have re-considered the terms of the inter company loans in the context of the requirements of IAS 39 and do not consider that this is representative of the rate of interest that would be applied to such loans from a third party. As such they have discounted the contractual cash flows at a market rate of interest and restated the prior year reported figures. The impact of this has been to:

Company statement of financial position

	As previously reported		Adjustments		As restated	
	31 December 2016 US\$000	1 January 2016 US\$000	31 December 2016 US\$000	1 January 2016 US\$000	31 December 2016 US\$000	1 January 2016 US\$000
Investments	225	225	9,205	7,631	9,430	7,856
Loans to subsidiaries	91,738	81,091	(6,337)	(6,344)	85,401	74,747
Accumulated losses	(48,130)	(47,998)	2,868	1,287	(45,262)	(46,711)

The Company made an adjustment of US\$1,581,000 to increase previously reported profit for 2016 of US\$132,000 to restated profit of US\$1,449,000.

16 Inventories

	2017 US\$000	2016 US\$000
Current		
Spare parts and consumables	1,644	972
Work in progress	55	170
Finished goods	14	224
	1,713	1,366

The value of inventories above is stated after a reversal of an impairment for low grade ore of US\$(374,000). In 2016 a provision was made against and low grade ore and write downs in respect of spare parts of US\$1,091,000.

The total cost of inventory recognised as an expense is shown in note 10.

17 Trade and other receivables

Non-current

	Company 2017 US\$000	Company 2016 US\$000	Group 2017 US\$000	Group 2016 US\$000
Other receivables and prepayments	–	–	1,476	1,100
	–	–	1,476	1,100

Other receivables included within non-current assets for 2017 and 2016 relate to an amount recoverable in relation to Value Added Tax, this is expected to be recovered by offset against VAT payable in future periods.

Current

	Company 2017 US\$000	Company 2016 US\$000	Group 2017 US\$000	Group 2016 US\$000
Trade receivables	–	–	536	153
VAT	50	26	1,493	2,017
Other receivables – recoverable	–	123	93	313
– provision	–	–	–	(34)
Prepayments	18	16	409	647
	68	165	2,531	3,096

The trade receivables are stated at full carrying value and their ageing is less than 30 days old. The Directors consider that the carrying value of trade receivables approximates to their fair value.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

18 Trade and other payables

Current

	Company 2017 US\$000	Company 2016 US\$000	Group 2017 US\$000	Group 2016 US\$000
Trade creditors	215	115	4,645	2,721
Other payables and accruals	340	1,078	3,177	3,156
	555	1,193	7,822	5,877

Trade creditors and accruals principally comprise amounts outstanding for trade purchases of goods and services. The majority of the trade creditors relate to the Company's trading subsidiaries in Kazakhstan. It is not practical to calculate the average credit period taken in respect of trade purchases for these creditors due to current business practices in the former Soviet Union. For most suppliers, interest is not charged on these trade payables. The Company regularly reviews all outstanding payables to ensure they are paid within the appropriate timeframe.

The Directors consider that the carrying amount of trade payables approximates to their fair value.

19 Other financial liabilities

	2017 US\$000	2016 US\$000
Liability for historic cost	399	715
Current	399	461
Non-current	–	254
	399	715

The subsoil use contract (the "Contract"), under which TOO Sekisovskoye holds the exploration and mining rights to the Sekisovskoye deposit stipulates that it must pay a total of US\$3,312,000 to the Kazakhstan Government for historic costs. From 1 January 2009, the balance of the historical costs is being paid on a quarterly basis and the final payment is due to be paid on 21 December 2018.

The future historic costs have been discounted to their net present value. This discounted value has been capitalised as Property, plant and equipment (note 14) and will be amortised over the productive period. Any changes in estimated costs and discount rate are dealt with prospectively and result in a corresponding adjustment to property plant and equipment.

20 Related party transactions

Remuneration of key management personnel

The remuneration of the Directors, who are the key management personnel of the Company, is set out below in aggregate for each of the categories specified in IAS 24 – "Related Party Disclosures". The total amount remaining unpaid with respect to remuneration of key management personnel amounted to US\$127,000 in the current year (2016: US\$79,000). Further information about the remuneration of the individual directors is set out in the audited section of the report on directors' remuneration on page 23.

	2017 US\$	2016 US\$
Short term employee benefits	371,498	350,736
Social Security costs	23,005	33,813
	394,503	384,549

The transactions between the Company and the subsidiaries are disclosed in Note 15.

During the year the following transactions were connected with the companies controlled by the Assaubayev family:

- ▲ Purchases, rental payments and other payments amounting to US\$Nil (2016:US\$330,000) were made to Asia Mining Group (AMG), a company controlled by the Assaubayev family for the supply of equipment and spares. At the year end an amount of US\$824,000 (2016 US\$824,000) is due to AMG and is included within other trade payables;
- ▲ Of the amount due to Amrita Investments Limited of US\$1,739,000 from the prior year, an amount of US\$924,000 was repaid in 2017, interest on the balance is accruing at an average interest rate of 7%. The total outstanding at 31 December 2017 amounts to US \$937,000 and includes interest accruals of US\$303,000. The loans are repayable by 31 December 2019, see note 22;
- ▲ In 2016 the Company issued US\$10m of convertible bonds to African Resources Limited a company controlled by the Assaubayev family. The Bonds carry a coupon of 10% per annum, payable semi-annually in arrears on 29 July and 28 February each year. In January 2018 the bond holders elected to convert US\$9.7m of the bond into ordinary shares of the Company at the conversion price of 3p per share, resulting in the issue of 233,333,333 new ordinary shares being issued to African Resources Limited, (see note 28).

The balance includes accrued interest payable of US\$1,347,000 (2016: US\$561,000). It is the intention of African Resources Limited to convert the balance of the principal and interest outstanding into ordinary shares of the Company, once the necessary administrative procedures have been completed.

21 Provisions

	Abandonment and restoration US\$000	Holiday pay US\$000	Total US\$000
1 January 2016	3,553	247	3,800
Change in estimate of provision	–	153	153
Unwinding of discount	453	–	453
Paid during the year	(99)	(213)	(312)
Currency translation adjustment	71	3	74
31 December 2016 & 1 January 2017	3,978	190	4,168
Change in estimate of provision	–	234	234
Unwinding of discount	532	18	550
Paid during the year	–	(332)	(332)
Currency translation adjustment	2	2	4
31 December 2017	4,512	112	4,624
31 December 2017			
Current	–	112	112
Non-current	4,512	–	4,512
	4,512	112	4,624
31 December 2016			
Current	–	190	190
Non-current	3,978	–	3,978
	3,978	190	4,168

Abandonment and restoration costs

In accordance with the provisions of the subsoil use contract (the "Contract"), DTOO GRP Baurgold is liable for site restoration costs upon completion of production activities. It is not possible to predict accurately the amount which might ultimately be payable for site restoration as it includes assumptions such as inflation in Kazakhstan over the life of the Contract which are inherently uncertain. An estimate of the future cost of restoration has been discounted and a provision recognised. The discounted amount for cost of restoration has been capitalised as a tangible fixed asset (note 14) and will be amortised using the unit of production method over the life of the mine.

In accordance with the subsoil use agreement, DTOO GRP Baurgold has established a cash fund to pay for the cost of restoration. The cash fund is maintained in a separate bank account in the name of DTOO GRP Baurgold. DTOO GRP Baurgold is required to contribute each year an amount equal to 1% of its operating expenses to this fund. Any transfers from the bank account require the authorisation of the Government of Kazakhstan. This fund will be used to pay for the costs of restoration as and when they become due. If the funds in the account are insufficient to pay for the costs, DTOO GRP Baurgold will be required to pay any deficit. If there are funds surplus to those required for restoration these will be returned to DTOO GRP Baurgold. During 2017 it was agreed with the Kazakh authorities that the amount of US125,000 that had been accrued in the restricted deposit account would be used to settle outstanding tax liabilities, no contributions were made in the year. It is the intention of the Company to repay this amount in to the restricted cash fund. The Company is corresponding with the relevant authorities in Kazakhstan in relation to the timing and exact amount of funds to be transferred.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

22 Borrowings

Secured borrowings at amortised cost

Group	2017 US\$000	2016 US\$000
Current liabilities		
Due within one year		
Bank loan – EBRD	–	3,400
Related party loans Amrita (see note 20)	–	1,039
Other loans	724	–
	724	4,439
Non-current liabilities		
Due within one – two years		
Related party loans – Amrita (see note 20)	937	700
Due two – five years		
Convertible bonds:	12,496	11,281
\$10m convertible loan (see note 20)	10,713	9,614
\$2m convertible loan	1,783	1,667
	12,496	11,281
Company		
Non-current liabilities		
Due two – five years		
Convertible bonds	12,496	11,281
	12,496	11,281

EBRD Bank loan

In 2012, two of the Company's subsidiaries, TOO GMK Altyn MM ("GAM") and DTOO GRP Baurgold entered into a loan agreement with the European Bank for Reconstruction and Development (EBRD). The principal terms of the loan was as follows:

- ▲ The loan of US\$10m was, on a joint and several basis, and repayable in twelve quarterly instalments commencing on 10 January 2015. The final installment of the loan was repaid on the 10 October 2017, in total an amount including interest of US\$3.5m was repaid in the year;
- ▲ Interest was charged at a rate of three months London Inter Bank Rate (LIBOR) plus 7% per annum. The effective interest rate on the loan in the period was 7.5% (2016: 7.5%).

Convertible bonds

US\$10m convertible bond

In 2016 the Company secured a total of US\$10m proceeds from a convertible loan with the major shareholder, African Resources Limited. The loan bears a coupon of 10% per annum, payable semi-annually and was due for repayment in 2021. In January 2018 the bond holders elected to convert US\$9.7m of the bond into ordinary shares of the Company at the conversion price of 3p per share, resulting in the issue of 233,333,333 new ordinary shares being issued to African Resources Limited, (see note 28).

As further discussed in the note 4 the total value of the conversion option was determined at fair value as at 31 December 2016 to be US\$1.9m, as at 31 December 2017 the fair value of the conversion option has fallen to US\$0.5m, and the difference recognised in the profit and loss statement. The residual value was assigned to the debt host liability and accounted for at amortised cost using the effecting interest rate of 17%, the total liability is US\$10.7m and includes accrued interest, (2016 US\$9.6m).

The balance includes accrued interest payable of US\$1,347,000 (2016: US\$561,000), net of withholding taxes. It is the intention of African Resources Limited to convert the balance of the principal and interest due into ordinary shares of the Company, once the necessary administrative procedures have been completed.

US\$2m convertible bond

In 2016 the Company entered into US\$2m convertible loan with institutional investors. The loan bears a coupon of 10% per annum, payable semi-annually and is due for repayment in 2021. The Notes can be converted into Ordinary Shares of the Company at a price of 2.15p per share any time prior to maturity. The exchange rate of US\$1.466 for £1 shall be used to determine the number of conversion shares. The potential number of shares to be issued is 136,372,093.

The conversion option meets the fixed-for-fixed criteria and therefore has been classified as equity instrument in the other reserves. On initial recognition Management have assessed the value of the contractual cash flows discounted at the interest rate of 15% being the market interest rate for the similar instruments without a conversion feature. The value of liability component was determined to be US\$1.8m (2016 US\$1.7m), with the remaining balance of \$0.3m allocated to the residual equity component. The balance includes US\$27,000 (2016: US\$27,000) accrued interest payable.

Other Loans

Other loans comprise amounts that were received from Amrita Investments Limited see details in note 20, and an amount received from a third party amounting to US\$724,000, for short term financing requirements, no interest is payable on this amount.

23 Deferred taxation

Deferred taxation asset/(liability)

	Taxation losses US\$000	Accelerated taxation depreciation US\$000	Other US\$000	Total US\$000
1 January 2016	4,102	101	942	5,145
Credit to income	–	(289)	23	(266)
Credit to other comprehensive income	866	–	–	866
Currency translation	98	(6)	18	110
31 December 2016 & 1 January 2017	5,066	(194)	983	5,855
Credit to income	507	(198)	(321)	(12)
Credit to other comprehensive income	1,088	–	–	1,088
Currency translation	(15)	3	9	(3)
31 December 2017	6,646	(389)	671	6,928

Deferred tax assets and liabilities are offset where they arise within the subsidiaries in Kazakhstan. The Group has recognised the deferred tax asset only to the extent that it is probable that the taxable profit will be available against which the deductible temporary difference can be utilised. The future tax profits are expected to derive from the gold mining operations in Kazakhstan.

The tax losses arising in the prior periods will reduce the Company's and its subsidiaries' future tax liabilities. Deferred tax assets are recognised as the Directors believe that sufficient taxable profits will be made against which the carried forward losses can be utilised.

Unutilised taxation losses arising in Kazakhstan of US\$56.8m (2016: US\$60.2m) are available to carry forward for a maximum of 10 years. It is estimated that the tax losses available to carry forward will be utilised by 2025. Unutilised tax losses arising in the UK amount to US\$3m (2016: US\$3m).

Unrecognised deferred taxation asset

The unrecognised deferred taxation asset is as follows:

	2017 US\$000	Restated 2016 US\$000
Temporary differences	–	–
Taxation losses	5,301	7,589
	5,301	7,589

Included within the unrecognised taxable losses above is an amount of US\$0.6m (2016: US\$0.7m) in relation to the Company, and US\$4.7m (2016: US\$6.9m) in relation to the Kazakh subsidiaries. This amount has been carried forward as the Directors do not believe there will be sufficient taxable profits in the foreseeable future to offset the losses incurred.

24 Called-up equity share capital Issued and fully paid

	Number	US\$000
At 31 December 2016 and 31 December 2017 – Ordinary shares of £0.01 each	2,334,342,130	3,886

In January 2018 233,333,333 new ordinary shares were issued at 3 pence a share to African Resources Limited, in connection with the partial conversion of the bond, (see notes 22 and 28).

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

25 Notes to the cash flow statement

Net cash inflow/(outflow) from operating activities

	Company 2017 US\$000	Company 2016 US\$000	Group 2017 US\$000	Group 2016 US\$000
Profit/(loss) before taxation	2,806	1,449	(1,917)	(6,078)
Adjusted for:				
Finance income	(4,989)	(4,282)	-	-
Interest payable	1,200	800	1,510	1,883
Unwinding of discount	773	437	1,324	475
Fair value adjustment	(1,453)	(143)	(1,453)	(143)
Depreciation of tangible fixed assets	83	79	4,508	3,067
Amortisation of intangible asset	-	-	-	231
Impairment	-	-	(374)	1,107
Increase in inventories	-	-	20	1,898
Decrease/(increase) in trade and other receivables	57	(179)	195	(293)
Decrease in other financial liabilities	-	-	(316)	(140)
Increase/(decrease) in trade and other payables	303	(1,021)	1,374	(4,890)
Loss on disposal of property, plant and equipment	-	-	195	440
Foreign currency translation	51	(215)	52	(283)
Cash inflow/(outflow) from operations	(1,169)	(3,075)	5,118	(2,726)
Income taxes payable	-	-	(11)	(192)
Net cash inflow/(outflow) from operations	(1,169)	(3,075)	5,107	(2,918)

Reconciliation of financing cash flows

Group	Cash flows					Non-cash changes					31 December 2017 C/Fwd Less than 1 year US\$000	31 December 2017 C/Fwd More than 1 year US\$000
	1 January 2017 B/Fwd Less than 1 year US\$000	1 January 2017 B/Fwd More than 1 year US\$000	New loans US\$000	Loans repaid US\$000	Interest paid US\$000	Interest accruals B/Fwd* US\$000	Interest Profit and loss US\$000	Foreign exchange movement US\$000	Fair value changes US\$000	Unwinding of discount US\$000		
Loan element of US\$10m Convertible bonds	-	7,734	-	-	-	715	1,000	-	-	725	-	10,174
Derivative element of US\$10m convertible bond	-	1,880	-	-	-	-	-	112	(1,453)	-	-	539
US\$2m Convertible bonds	-	1,667	-	-	(160)	27	200	-	-	49	-	1,783
EBRD loan	3,400	-	-	(3,333)	(181)	-	114	-	-	-	-	-
Related party borrowings	1,039	700	-	(998)	-	-	196	-	-	-	-	937
Other borrowings	-	-	724	-	-	-	-	-	-	-	724	-
Total	4,439	11,981	724	(4,331)	(341)	742	1,510	112	(1,453)	774	724	13,433

Company

Company	Cash flows					Non-cash changes					31 December 2017 C/Fwd Less than 1 year US\$000	31 December 2017 C/Fwd More than 1 year US\$000
	1 January 2017 B/Fwd Less than 1 year US\$000	1 January 2017 B/Fwd More than 1 year US\$000	New loans US\$000	Loans repaid US\$000	Interest paid US\$000	Interest accruals B/Fwd* US\$000	Interest Profit and loss US\$000	Foreign exchange movement US\$000	Fair value changes US\$000	Unwinding of discount US\$000		
Loan element of US\$10m Convertible bonds	-	7,734	-	-	-	715	1,000	-	-	725	-	10,174
Derivative element of US\$10m convertible bond	-	1,880	-	-	-	-	-	112	(1,453)	-	-	539
US\$2m Convertible bonds	-	1,667	-	-	(160)	27	200	-	-	49	-	1,783
Total		11,281			(160)	742	1,200	112	(1,453)	774	-	12,496

*Interest included in accruals in 2016 now shown within net liability as above.

26 Financial instruments

Policy on financial risk management

The Company's principal financial instruments comprise cash and cash equivalents, trade receivables, trade and other payables, provisions, other financial liabilities and borrowings. The Company's accounting policies and methods adopted, including the criteria for recognition, the basis on which income and expenses are recognised in respect of each class of financial asset, financial liability and equity instrument are set out in note 4 – "accounting policies". The Company does not use financial instruments for speculative purposes. The carrying value of all financial assets and liabilities approximates to their fair value.

Capital risk management

The Company's primary objective when managing risk is to ensure there is sufficient capital available to support the Company's funding requirements, including capital expenditure, in a way that optimises the cost of capital. Maximises shareholders' returns and ensures the Company's ability to continue as a going concern. There were no changes to the Company's capital management approach in the year.

The Company may make adjustments to the capital structure as opportunities arise, as and when borrowings mature or as and when funding is required. This may take the form of raising equity, debt finance, equipment supplier credit or a combination thereof.

The Company monitors capital on the basis of the gearing ratio, which is defined as net debt divided by total capital. Net debt is calculated as total borrowings (including current and non-current borrowings as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is calculated as equity as shown in the consolidated statement of financial position plus net debt. While the Company does not set absolute limits on the ratio, the Company believes that a ratio of 30%-40% was acceptable in the final stages of the construction and the commissioning phase of the Sekisovskoye mine, and that optimally this should reduce to and remain below 25% thereafter. The Company's policy in respect of capital risk management is the same as that of the Group.

	2017 US\$000	2016 US\$000
Group		
Total borrowings	14,157	16,420
Less cash and cash equivalents	704	2,236
Net debt	13,453	14,184
Total equity	33,248	33,991
Total capital	46,701	48,175
Gearing ratio	28.81%	29.44%
Company		
Total borrowings	12,496	11,281
Less cash and cash equivalents	264	1,725
Net debt	12,232	9,556
Total equity – restated	87,343	84,537
Total capital	99,156	94,093
Gearing ratio	12.33%	10.15%

Derivatives, financial instruments and risk management

The Company does not use derivative instruments or other financial instruments to manage its exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices.

Foreign currency risk management

The Company and its subsidiaries have transactional currency exposures. Such exposures arise from sales or purchases by the Company's two subsidiaries in Kazakhstan, in currencies other than the Company's functional currency. The functional currency of TOO GMK Altyn MM and DTOO Gornorudnoe Predpriatie Baurgold is the Kazakh Tenge. The currency transactions giving rise to this foreign currency risk are primarily USD denominated revenues, USD denominated borrowings and other financial liabilities and certain USD denominated trade payables. The Company and its subsidiaries do not enter into hedging positions in respect of its exposure to foreign currency risk.

The carrying amounts of the Company's and its subsidiaries' foreign currency denominated net monetary assets and monetary liabilities at 31 December, are as follows:

Currency of monetary asset/liability	2017 US\$000			2016 US\$000		
	USD	Functional currency KZT	Total	USD	Functional currency KZT	Total
US Dollars	(12,496)	(1,337)	(13,833)	(11,687)	(5,855)	(17,542)
British Pounds	892	–	892	696	–	696
Kazakhstan Tenge	–	(1,928)	(1,928)	–	(281)	(281)
Net monetary position			(14,869)			(17,127)

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

26 Financial instruments continued

Sensitivity analysis

A 20% (2016: 20%) strengthening, or weakening, of any one of the above currencies against the US Dollar which the Directors consider to be a reasonably possible change for the purpose of sensitivity analysis, is shown below:

The table below shows the impact of changes in exchange rates on the result and financial position of the Group:

	2017 US\$000	2016 US\$000
20% weakening of Kazakh Tenge against the US Dollar	(412)	(1,171)

Commodity price risk

The Company is exposed to the effect of fluctuations in the price of gold and silver which are quoted in US Dollars on the international markets. The Company prepares annual budgets and periodic forecasts including sensitivity analyses in respect of various levels of prices of these metals.

The Company's only significant sales during the years ended 31 December 2017 and 2016 were sales of gold doré containing gold and silver. The sales proceeds for gold doré is fixed by reference to the gold and silver prices based on average gold and silver price in the month of sale. The Company does not plan in the future to hedge its exposure to the risk of fluctuations in the price of gold or silver and therefore it held no financial instruments that are sensitive to commodity price changes at either reporting date.

Credit risk

Credit risk refers to the risk that a counter-party will default on its contractual obligations resulting in a financial loss to the Company. The Group has adopted a policy of only dealing with creditworthy counter-parties. The Group's exposure and the credit ratings of its counter-parties are monitored by the Board of Directors to ensure that the aggregate value of transactions is spread amongst approved counter-parties.

The Group's principal financial assets are cash and cash equivalents, trade debtors and other accounts receivables. Cash equivalents include amounts held on deposit with financial institutions.

The Group is mainly exposed to credit risk on its cash equivalents and trade and other receivables as per the balance sheet. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the balance sheet which at the year end amounted to US\$1.2m (2016: US\$2.4m).

The credit risk on liquid funds held in current accounts and available on demand is limited because the Group's counter-parties are mainly banks with high credit ratings assigned by international credit-rating agencies.

Trade receivables comprise amounts receivable from a refinery in respect of sales of gold doré. On the sale of the gold doré, payment is received on shipment.

It is often impractical in Kazakhstan to carry out a check of creditworthiness of suppliers before making the contracted prepayments. There were no significant balances at 31 December 2017 and 2016 in respect of which suppliers had defaulted on their obligations.

The Company's maximum exposure to credit risk is limited to the carrying amount of loans recorded in the financial statements. There are majority of the loans are on fixed repayment terms for the loans, however they are not considered overdue or impaired.

Liquidity risk

During the year ended 31 December 2017, the Company was financed by internally generated funds, and other borrowings. The Company manages its liquidity risk. The Directors monitor cash flow and cash flow forecasts on a regular basis and ensure that the loan commitments and working capital commitments are adequately funded. The Directors obtain assurances from the major shareholders as required that funds will be made available to fund any shortfall as required.

The following tables detail the Company's and its subsidiaries remaining contractual maturity for its financial liabilities. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Company and its subsidiaries can be required to pay. The table includes both interest and principal cash flows.

Group	Borrowings US\$000	Trade and other payables US\$000	Provisions US\$000	Other financial liabilities US\$000	Total US\$000
31 December 2017					
From two to five years	13,565	–	–	–	13,565
For one to two years	2,137	–	–	–	2,137
Due after more than one year	15,702	–	–	–	15,702
Due within one year	1,924	7,822	112	399	10,257
	17,626	7,822	112	399	25,959

26 Financial instruments continued

Group (continued)	Borrowings US\$000	Trade and other payables US\$000	Provisions US\$000	Other financial liabilities US\$000	Total US\$000
31 December 2016					
From two to five years	14,767	–	–	207	14,974
For one to two years	1,991	–	–	254	2,245
Due after more than one year	16,758	–	–	461	17,219
Due within one year	7,093	5,877	190	254	13,414
	23,851	5,877	190	715	30,633
Company					
31 December 2017					
From two to five years	13,565	–	–	–	13,565
For one to two years	1,200	–	–	–	1,200
Due after more than one year	14,765	–	–	–	14,765
Due within one year	1,200	555	–	–	1,755
	15,965	555	–	–	16,520
31 December 2016					
From two to five years	14,767	–	–	–	14,767
For one to two years	1,200	–	–	–	1,200
Due after more than one year	15,967	–	–	–	15,967
Due within one year	2,349	1,193	–	–	3,542
	18,316	1,193	–	–	19,509

Borrowings and interest rate risk

The Company and its subsidiaries entered into a long term borrowing agreement with the European Bank for Reconstruction and Development (EBRD) on 21 February 2012 in order to fund capital commitments. Interest was payable at 7% per annum above Libor.

The bank loan was repaid in October 2017.

There is no exposure to interest rate risk as the current borrowings in the Company and its subsidiaries are at fixed rates. The bonds at a fixed coupon rate of 10%, and the other borrowings at an average interest rate of 7%, see note 22.

27 Commitments and contingencies

General conditions

In recent years, the Republic of Kazakhstan has undergone substantial political and economic change. As an emerging market, the Republic of Kazakhstan does not possess a well-developed business infrastructure such as generally exists in a more mature free market economy. As a result, operations carried out in the Republic of Kazakhstan can involve risks which are not typically associated with those in developed markets. Significant identified risks have been provided for, or disclosed in these financial statements as appropriate.

(a) Contractual liabilities

Subsoil use rights are not provided to the Company on an indefinite basis, and each renewal shall be approved before the current contract or license expires. These rights can be cancelled by the Government of the Republic of Kazakhstan (hereinafter referred to as "the Government") if the Company does not fulfil contractual liabilities.

Deposit development costs

In accordance with the subsoil use contract, the Company has an approved working programme which may be reviewed and reconsidered depending on the economic viability and operational conditions of the deposit. The management of the Company believes it has fulfilled the requirements of the Contract.

Training for Kazakhstani specialists

In accordance with the terms of the contract the Company is liable for the annual costs incurred in respect of the professional training of the Kazakhstani personnel involved in the work. The costs are estimated to be at least 1% of the operational costs during the development and operational process.

As at 31 December 2017 the Company has met the conditions of the Contract.

Development of the social sphere of the region

According to the terms of the contract, the Company is liable for supporting the development and ensuring social support for the activity of the communities near the area of operations of the Company. As at 31 December 2017, the Company has met all the conditions of the Contract.

NOTES TO THE FINANCIAL STATEMENTS continued

year ended 31 December 2017

27 Commitments and contingencies continued

General conditions continued

Liabilities on the restoration of the mine

Within eighty calendar days upon the expiration of the contract the Company is liable for the development of the mine restoration programme and its inspection by the competent authority of the Government of the Republic of Kazakhstan. The Company is liable for implementation of the programme upon its approval.

(b) Insurance

In accordance with the subsoil use contract the Company is liable for the development of the insurance programme and its submission for approval by the competent authority.

The Company has several contracts of obligatory insurance including insurance of the vehicle owners, the employer's liability and insurance of the subsoil users' liability where the activity of such subsoil users is connected to the damage to third parties.

(c) Court proceedings

The claims on the Company are periodically set out in the courts along with the Company's activities. As at the reporting date, there are no material claims against the Company.

As part of the settlement in relation to the tailings dam restoration programme, the Company has a memorandum signed with the local authorities, whereby the Company is liable for arranging the construction of the paste plant for US\$1,800,000 (600m Tenge). It has been agreed that the Company will use its best endeavors to have this completed once all necessary permits are obtained.

Other than the paste plant as at the reporting date the Company has fulfilled all of its obligations in relation to the outstanding works which required in relation to the tailings dam restoration program.

(d) Taxation risks

The tax system of Kazakhstan, being relatively new, is characterised by frequent changes to the legal norms, official interpretations and court decisions, which are often not explicit and can be contradictory. This leads to differing interpretations by the tax authorities. The examination and investigations of the accounts to ensure that the tax payable is accurate are carried out by several regulatory bodies. These bodies have the power to impose heavy fines and penalties. The accuracy of the tax computation can be investigated five calendar years after the end of the accounting period. In certain circumstances this period can be increased.

These circumstances may lead to the taxation risks being much higher in Kazakhstan compared to other countries. The management of the Company, based on their understanding of the tax legislation, regulatory requirements and court decisions, considers the tax liabilities to be fully reflected in the accounts.

Nevertheless, the interpretation of these provisions by the corresponding authorities can be different and in that case should the authorities prove the lawfulness of their position, it may significantly affect these financial accounts.

28 Subsequent events

On the 17 January 2018 African Resources Limited acquired 117,730,632 shares at a consideration price of 3p per share. It subsequently acquired on the 23 January 2018 an additional 233,333,333 shares when US\$9.7m of the existing convertible bond of US\$10m was converted in ordinary shares at a conversion price of 3p per share. This increased the shareholding of African Resources Limited from 61.69% to 69.8% of the total shares in issue.

The subsidiary DTOO GRP Baurgold has entered into an agreement with JSC Freedom Finance, a subsidiary of Freedom Holding Corp. to assist in raising c. US\$15m, through the issue of five-year non-convertible Tenge denominated bonds secured by the assets of the subsidiary Company.

29 Ultimate Controlling Party

The controlling party and parent entity of the Company is African Resources Limited, by virtue of the fact that at the date of this report it owns 69.8% (2016: 61.69%) of the voting rights in the Company. There is no requirement to prepare consolidated accounts for African Resources Limited, which is registered in the British Virgin Islands.

The ultimate controlling party are the Assaubayev family, by virtue of the fact that they are the controlling party of African Resources Limited.

Independent Competent Persons' Report

of the Sekisovskoye Mine
Prepared for Altyn PLC



Independent Competent Persons' Report

of the Sekisovskoye Mine

Prepared for Altyn PLC

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Reference No: 106

Independent Competent Persons' Report

of the Sekisovskoye Mine

Executive Summary

Introduction

Ernst and Young Advisory Services (Pty) Ltd ("EY") was commissioned by the directors of Altyn PLC ("Altyn") to prepare this Independent Competent Persons' Report ("CPR") on the Sekisovskoye Gold Mine ("the Sekisovskoye Mine"). The Sekisovskoye Mine is an operating mine targeting gold and silver, that is owned and operated by Altyn and is located in eastern Kazakhstan, adjacent to the Sekisovka village.

EY understands that the CPR is required as part of the requirements for listing on the London Stock Exchange ("LSE") and as such, EY has compiled this CPR in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition ("the JORC Code"). This CPR is an update of the CPR completed in 2014, entitled "Independent Competent Persons' Report on the Sekisovskoye Gold Project prepared for Goldbridges Global Resources Plc" as at 31 May 2014 by Venmyn Deloitte (Pty) Ltd ("Venmyn Deloitte") referred to as "the 2014 CPR".

It is the intention of Altyn Management to ramp up production to 2 million tonnes per annum ("Mtpa"). The updated Mineral Resources and Ore Reserves to support this have been estimated after conducting additional exploration activities aimed at increasing the geological confidence and which was used to complete a technical study entitled "Feasibility Study of the Underground Mine at the Sekisovskoye Deposit and Area no.2 of the Sekisovskoye Orefield" completed by SRPI Qaztauken LLP in June 2018 ("the 2018 Feasibility Study").

This CPR describes, reviews and documents the technical and economic parameters of the Sekisovskoye Mine provided by Altyn, in order to identify all factors of a technical and economic nature that would influence the future viability of the operation. This CPR has been compiled in order to incorporate all currently available and material information that will enable potential investors to make an informed and reasoned judgement regarding the economic merits of the underground operation.

Property Description and Location

The Sekisovskoye Mine is an operating gold and silver mine located in eastern Kazakhstan. The Sekisovskoye Mine is located in the East Kazakhstan Oblast adjacent to the Sekisovka village and approximately 40km northeast of Ust-Kamenogorsk (also known as Oskemen) and 800km east of the capital city of Nur-Sultan. This area is the easternmost part of Kazakhstan and is bordered to the north, east and south by Russia and China. The Sekisovskoye Mine is located approximately 50km south of the border with Russia.

The Sekisovskoye Mine was mined by Altyn as two open pits from 2008 to 2016. Underground mining commenced in 2013 and the Sekisovskoye is currently mining underground at approximately 278ktpa. The Sekisovskoye Mine is currently ramping up to a planned production of 2Mtpa over six years. Achievement of the ramp up plan is dependent on Altyn raising the required capital. Current underground development has been completed to approximately +150masl and the Sekisovskoye Mine will be mining from approximately +250 metres above mean sea level ("masl") to approximately +150masl during 2019.

History

The Sekisovskoye was discovered in 1833 and was mined through open pit mining from 1833 to 1847, from 1932 to 1935 and from 1943 to 1946. During 1975 to 1986, the Soviet Union carried out a detailed exploration project at the deposit. Altai- Zoloto Multicorporate Enterprise of the Ministry of Non-Ferrous industry of KazSSR ("Altai-Zoloto"), a co-operative, mined the oxide zone of the deposit from 1978 to 1982.

The Sekisovskoye Mine has been mined by Altyn since 2008. Development of the mine commenced in mid- 2006 following which, the mine and plant were commissioned, and production commenced during 2008. The open pit was mined between 2008 until it was depleted and decommissioned in 2016. Trial underground mining commenced in November 2011 and was halted in October 2012 to raise financing for full development of the underground mine. Underground operations re-commenced in June 2013 and are continuing to ramp up the planned production rate of 2Mtpa.

Legal Tenure

Ownership of the deposit was transferred to the Cooperative of Prospectors (“Poisk”) in 1991. In 1998, Hambledon Mining plc (“Hambledon”) acquired the Poisk co-operative. In 2000, the mineral rights were transferred to DTOO Gornorudnoe Predpriatie Sekisovskoye (“DGPS”), a newly formed and wholly owned subsidiary of Hambledon. Hambledon subsequently changed name to Goldbridges Global Resources PLC (“Goldbridges”) in January 2014. Goldbridges changed name to Altyn in December 2016. DGPS subsequently changed name to BaurGold Mining Enterprises LLP (“BaurGold”).

The Sekisovskoye Mine was granted Subsoil Use Contract No. 555, effective from 20 October 2000. This was a transfer of Subsoil Use Contract No. 374D that was granted to Hambledon Mining on 20 March 1999, prior to the change in subsoil system of Kazakhstan. Subsoil Use Contract No.555 covers an area of 0.56km² and the mining allotment is valid for gold ore up to a depth of -340masl. It is understood that additional addendums to increase the mining depth maybe applied for.

The Sekisovskoye Mine is managed through two 100% held subsidiaries of Altyn, namely BaurGold and MMC Altyn MM LLP (“MMC Altyn”). BaurGold owns and operates the mine and laboratory and conducts exploration work, while MMC Altyn owns and operates the processing plant.

Geological Setting

The Sekisovskoye Mine is hosted in a complex geological setting that has been subject to much alteration and metamorphism. The Sekisovskoye Mine is exploiting gold that is hosted in a number of pipe-like breccia bodies that have intruded into the Rudny Altai poly-metallic belt, which is part of the larger Central Asian Orogenic Belt.

Ten breccias have been mapped in and around the Sekisovskoye Mine. Of these, seven breccias fall within the Sekisovskoye Mine licence boundary. The Sekisovskoye Mine is currently targeting breccia bodies 2, 3 and 4.

Mineralisation is hosted in the breccia bodies and includes free gold and gold sulphides. Gold is embedded in the cement of the explosive hydrothermal breccias and is smeared across the lithology. The breccias are cut by barren igneous dykes that are typically planar and dip steeply to the northeast.

Exploration

Recent exploration refers to all exploration carried out since the project was acquired by Altyn (then known as Hambledon). The Sekisovskoye Mine has undergone numerous exploration programmes including geophysics, trenching and diamond drilling.

Recent exploration has consisted of several drilling campaigns and a total of 1,490 drillholes have been completed. These drillholes include both surface and underground drilling but exclude all drilling prior to acquisition of the Sekisovskoye Mine by Hambledon. Of these drillholes, a total of 982 holes have been drilled between 2011 and 2019 and these form the basis of the orebody modelling and underground resource estimation used in this CPR.

Exploration and orebody modelling has focussed increasingly on delineation of the orebody at depth and on infill drilling to improve geological confidence in the underground Mineral Resources since closure of the open pit. More recent exploration campaigns have consisted of almost exclusively underground drilling.

Mineral Resource Estimate

The Mineral Resources for the Sekisovskoye Mine have been estimated by Mr V. Redozubov-Gorskiy. It is important to understand that the Sekisovskoye Mine primarily bases their orebody modelling and estimation procedures on the Russian State Commission on Mineral Resources system for classification of reserves, commonly referred to "GKZ". The estimation parameters are then reviewed with respect to the JORC Code guidelines and Mineral Resources are reported in accordance with the JORC Code.

Mineral Resources are estimated using the Ordinary Kriging method. This estimation methodology is based on completed by populating and extrapolating gold grade into blocks within closed wireframes. The block sizes are based on the spacing of drillholes, sample support and mine configuration. In this case, drillholes spacing is approximately 20m by 40m and underground blocks were modelled at 10m x 10m x 10m sizing in the X; Y; Z; directions respectively, and the modeller allowed for sub-celling down to a 1.25m x 1.25m x 0.5m block. Silver grade is estimated using regression based on the gold estimate.

The volume of each block is determined based on the block dimensions. The density is then used to calculate the tonnage of each block. The density used is 2.83. Gold and silver content is then interpolated into each block using Ordinary Kriging. The search ellipse that is calculated from the variogram is 50m x 75m x 10m with a strike azimuth of 312° and a dip angle of 80° northeast. The block model is used to estimate the tonnage and grade of the orebody from surface (approximately +430masl) and then surveyed mined out blocks are depleted on a level by level basis. The block model continues from surface to -800masl.

Mineral Resource classification is based on the level of geoscientific confidence and primarily, drilling density. Due to the nature of the deposit, which is generally narrow and extending in a pipe-like deposit at depth, drilling and the resultant number of samples is denser near surface and becomes less dense with depth. Based on these factors, Measured and Indicated Resources are estimated from the current working depth of -185masl to a depth of -400masl. Inferred Mineral Resources have been estimated from -400masl to -800masl. An Exploration Result has been estimated from -800masl to -1,500masl.

The Mineral Resources are outlined in the table below. EY has reviewed the data used in the orebody modelling and estimation procedure and the approach is considered reasonable to the style of mineralisation and considers the items and guidelines outlined in the JORC Code. EY has not re-estimated the Mineral Resources but has conducted checks to confirm that the estimate is a reasonable representation of the deposit.

Mineral Resource Estimate for the Sekisovskoye Mine as at 31 May 2019

Resource Classification	Level	Tonnage (Mt)	Cut-off Grade (Gold g/t)	Average Gold Grade (g/t)	Contained Gold (Moz)	Average Silver Grade (g/t)	Contained Silver (Moz)
Measured	+250masl to -400masl	29.03	1.50	3.76	3.51	6.20	5.79
Indicated		3.48	1.50	3.03	0.34	5.08	0.57
Measured and Indicated Resources		32.51	1.50	3.68	3.85	6.08	6.35
Inferred	-400masl to -800masl	37.15	1.50	2.37	2.83	3.99	4.77
Inferred Resources		37.15	1.50	2.37	2.83	3.99	4.77
TOTAL MINERAL RESOURCE		69.66	1.50	2.98	6.68	4.97	11.12

Source: Altyn Management

Mineral Resources are reported inclusive of Ore Reserves and as in-situ estimates.

All figures are rounded to reflect the accuracy of estimates, apparent computational errors due to rounding.

Mineral Resources are reported on a 100% basis.

No geological losses applied, density = 2.83.

Previous Mineral Resource Estimate

In 2014 Venmyn Deloitte estimated Mineral Resources for the underground operations at the Sekisovskoye Mine. The estimation was based on the C1, C2 and P2 of the GKZ classification system, which were then re-classified in accordance with the JORC Code. The 2014 Ore Reserves were also estimated to a depth of -800masl. The Sekisovskoye 2014 Mineral Resources estimated by Venmyn Deloitte are shown in the table below.

Previous Mineral Resources: Sekisovskoye Mine Mineral Resources as at 31 May 2014 (Venmyn Deloitte)

Resource Classification	Level	Tonnage (Mt)	Cut-off Grade (Gold g/t)	Average Gold Grade (g/t)	Contained Gold (Moz)	Average Silver Grade (g/t)	Contained Silver (Moz)
Indicated	Surface to -400masl	15.70	3.00	5.32	2.69	6.99	3.53
Indicated Resources		15.70	3.00	5.32	2.69	6.99	3.53
Inferred	Surface to -400masl	3.50	2.00	4.21	0.47	No estimate	
	-400masl to -800masl	14.70	2.00	4.21	1.99		
Inferred Resources		18.20	2.00	4.21	2.46		
TOTAL MINERAL RESOURCES		33.90	2.46	4.72	5.15		

Source: The 2014 CPR by Venmyn Deloitte

Mineral Resources are reported inclusive of Ore Reserves and as in-situ estimates.

All figures are rounded to reflect the accuracy of estimates, apparent computational errors due to rounding.

Mineral Resources are reported on a 100% basis.

No geological losses applied, density = 2.83.

The difference between the 2014 and the 2018 Mineral Resource estimates is primarily due to the lowering of the cut-off grades used. The increased tonnage is also based on additional drilling completed since 2014, which also resulted in the upgrading of a portion of the Indicated Mineral Resources into the Measured Resources category.

The change in cut-off grade led to an increase in Mineral Resource tonnages of 35.75 million tonnes ("Mt") and a lowering of the average gold grade from 4.72g/t to 2.97g/t.

Increasing geoscientific confidence based on the results of additional drilling that was completed to a maximum depth of -400masl has allowed for Indicated Resources to be converted to Measured Resources. There has been no change to Mineral Resources below -400masl, which have remained Inferred Resources as no additional drilling or exploration has been completed below -400masl.

Exploration Target Estimate

In addition to the Mineral Resources, an Exploration Target has been estimated for the Sekisovskoye Mine. The Exploration Target has been estimated by Mr V. Redozubov-Gorskiy of Altyn as at 31 May 2019. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain whether further exploration will result in the conversion to a Mineral Resource.

The Exploration Target was estimated using a basic wireframe to calculate volume and a selected average grade without taking the ore zones into account, however they are estimated for the depth extension of the orebody. The Exploration Target is estimated for the depths -800masl to -1,500masl, an extension of 700m below the deepest drillhole intersection. The depth extension is based on the results of a geophysical study.

Exploration Target estimate for the Sekisovskoye Mine as at 31 May 2019

Resource Classification	Level	Tonnage (Mt)	Cut-off Grade (Gold g/t)	Average Gold Grade (g/t)	Contained Gold (Moz)	Average Silver Grade (g/t)	Contained Silver (Moz)
Exploration Target	-800masl to -1,500masl	22.79	1.50	2.37	1.74		
Total Exploration Target		22.79	1.50	2.37	1.74		No estimate

Source: Altyn Management

Exploration Targets are reported exclusive of Mineral Resources and Ore Reserves.

All figures are rounded to reflect the accuracy of estimates, apparent computational errors due to rounding.

The Exploration Target is reported on a 100% basis.

No geological losses applied, density = 2.83.

The Exploration Target has not been reported as a range due to the conversion from GKZ, which does not require a range to be reported. Creating an artificial range around the results of the estimation could be misleading.

The Exploration Target for the Sekisovskoye Mine has been updated from 2014 to reflect a cut-off grade of 1.5g/t and an average grade of 2.37g/t based on the Inferred Mineral Resources. No further exploration has been completed or planned for this estimate and the cut-off grade has also remained unchanged.

Ore Reserve Estimate

The Ore Reserves have been estimated by Mr V. Redozubov-Gorskiy based on the Measured and Indicated Mineral Resources from surface (approximately +430masl) to a depth of -400masl. All the Mineral Resource blocks that are above the Mineral Resource cut-off grade were included in the Ore Reserve, as no selective mining has been assumed for the Ore Reserve estimation.

The Ore Reserve calculation includes a 5% dilution factor, 2% mining loss and 100% extraction factor. Based on the estimated Ore Reserves, a detailed Life of Mine ("LoM") plan is developed based on the modifying factors and these factors are incorporated into a financial model. The Ore Reserves are summarised in the table below.

Sekisovskoye Mine Ore Reserve Statement as at 31 May 2019

JORC Reserve Category	Tonnage (Mt)	Gold grade (g/t)	Contained Gold (Moz)	Silver Grade (g/t)	Contained Silver (Moz)
Proved	29.87	3.61	3.47	5.88	5.65
Probable	3.58	2.91	0.33	4.81	0.55
Total Ore Reserves	33.45	3.53	3.80	5.77	6.20

Source: Altyn Management.

Apparent computational errors due to rounding.

Ore Reserves are reported as Run of Mine tonnes.

Mineral Resources are reported inclusive of Ore Reserves.

No Inferred Mineral Resources have been converted to Ore Reserves.

The assumption of no selective mining was informed by both the mining method and by guidance included in the Kazakhstan mining legislation, which does not allow for the selective mining of blocks above the cut-off grade approved by the Committee of Geology of Kazakhstan. Therefore, no pay limit was used for mining selectivity and the definition of Ore Reserves.

The key modifying factors used are as follows: -

- ▶ long term prices for gold and silver of USD1,280/oz and USD17/oz, respectively;
- ▶ a processing recovery of 83% for gold and 73% for silver;
- ▶ an average underground mining cost of USD425/oz.

The grade is a key outcome of the Ore Reserve estimation process and will be a driver in terms of the mine achieving the target gold and silver production in the Run of Mine (“RoM”) plan. Should the mine not be able to keep dilution to the 5% assumption, grades lower than planned in the RoM will be achieved, which will have a negative impact on gold and silver output. The planned 5% mining dilution is on the low side of what is typically achievable using the sub-level stoping mining method, therefore there is downside risk to achieving the target dilution and subsequently a lower head grade will be achieved.

Previous Ore Reserve Estimate

In 2014 Venmyn Deloitte estimated Ore Reserves for the underground operations at Sekisovskoye. The estimation was based on the C1 and C2 reserves of the GKZ classification system, which were then re-classified in accordance with the JORC Code. The 2014 Ore Reserves were also estimated to a depth of -400masl. The Sekisovskoye 2014 Ore Reserves estimated by Venmyn Deloitte are shown the table below.

Previous Ore Reserves: Sekisovskoye Mine Ore Reserves as at 31 May 2014 (Venmyn Deloitte)

JORC Reserve Category	Tonnage (Mt)	Pay limit (g/t)	Gold grade (g/t)	Contained gold (Moz)	Silver grade (g/t)	Contained silver (Moz)
Probable	17.25	2.60	4.09	2.27	5.37	2.98
Total Ore Reserves	17.25	2.60	4.09	2.27	5.37	2.98

Source: The 2014 CPR by Venmyn Deloitte

Mining

During 2008 production commenced from the open pit and continued until depletion of the open pit in 2016. Underground mining commenced in 2013 and reached 278ktpa production in 2017 and 2018. The Sekisovskoye Mine is ramping up to a planned steady state of 2Mtpa. The Sekisovskoye Mine makes use of the sub-level stoping mining method, which is a mining method for vertical and near-vertical deposits with regular orebodies boundaries.

Sub-level stoping involves the excavation of drilling drifts on main development levels and sub-levels between the main development levels, from which longhole drilling is conducted and the ore is blasted to create the stope. The blasted ore is then loaded out at the bottom of the stope and the stope is then backfilled.

A capital expenditure (“Capex”) of USD204m is planned for the LoM underground development including a new vertical skip, cage and ventilation shafts and associated infrastructure. A further USD83.1m is planned for the new underground mining and haulage equipment fleet.

Further, it is the intention of Altyn Management to ramp up production to 2Mtpa over a six-year period. This plan involves an increase in the capacity of the existing processing plant from 0.85Mtpa to 1Mtpa for USD8.4m and the construction of a new 1Mtpa metallurgical plant and tailings dumps for USD45.7m.

The Sekisovskoye LoM plan extends from 2019 to 2039 and involves ramping up RoM production from the 287kt achieved in 2018 to a steady state production of 2Mtpa over six years. The 2018 Feasibility Study provided for a ramp up commencing in 2018 and being achieved by 2023; however, delays in raising the required capital has delayed implementation. Based on discussions with management, EY understands that Altyn plans to ramp up to 500kt production during 2019 based on the current infrastructure and will continue to ramp up to 2Mtpa as soon as the required capital has been raised. The ramp up will require approximately six years to achieve.

The 2Mtpa production level is planned to be achieved with the development of vertical skip, cage and ventilation shafts down to the -430masl level. The sinking of the vertical shafts will be followed by commissioning of the skip shaft to allow the achievement of 2Mtpa production target. The ramp-up of production over the first three years is set to be achieved with the two transport declines. While this is achievable, there is downside risk associated with the production levels in this period. The delay in sinking of the vertical shafts will result in a delay in achieving steady state production.

Processing

The Sekisovskoye process plant is a conventional carbon-in-leach (“CIL”) gold recovery plant. The nameplate capacity of the current processing plant is 0.85Mtpa with the plan to increase capacity to 1Mtpa by 2020. The 2018 Feasibility Study details the plan to extend the plant capacity to 2Mtpa by the installation of an additional plant line (milling, CIL and refining), over a period of two to three years.

Environmental, Social and Governance Compliance Status

The necessary environmental permits and approvals from the state have been received for the Sekisovskoye Mine. Based on the environmental audit work conducted, no significant non-compliances in terms of environmental legislation were recorded.

The Environmental Impact Assessment studies, approved in 2007, found that activities at Sekisovskoye Mine will not result in significant environmental degradation and will have evident social economic effect such as employment for the local community. It was further recommended by the appointed consultants that the proposed environmental mitigation measures and requirements be implemented to prevent environmental degradation.

In terms of the liquidation costs, Altyn makes an allowance for 1% of operating costs towards a Liquidation Fund on an annual basis in accordance with Clause 19.5 of the Mining Contract. A liquidation fund has been created, which transfers funds intended for the liquidation of the mine. The contractual payments to the fund are scheduled to carry on until the completion of mining activities. The 2019 estimated liquidation cost is KZT46.4m.

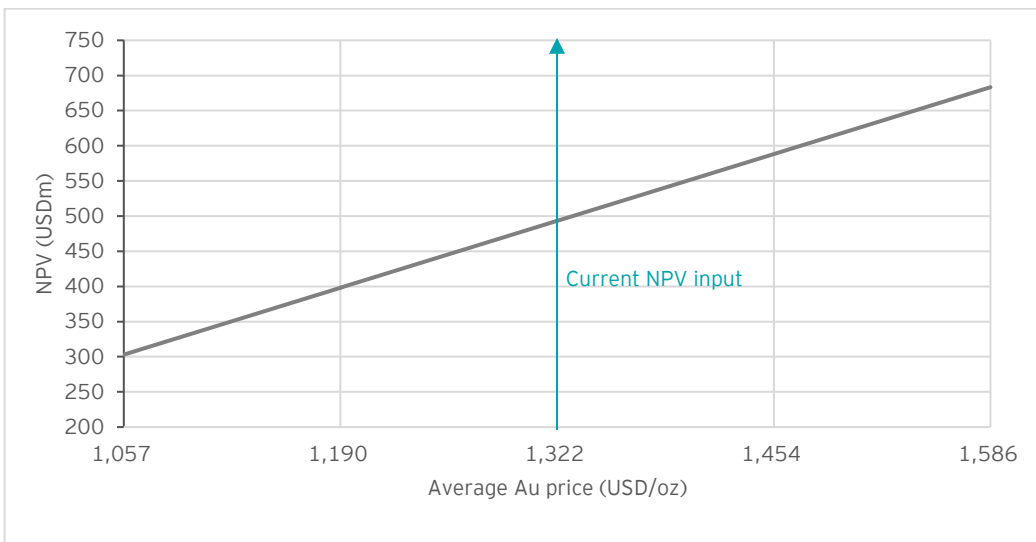
Mineral Asset Valuation

An economic assessment was completed on the Sekisovskoye Mine to identify the attributable value of the asset as at the effective date of this report. The asset was valued according to its development stage by applying the Market and Income Approach valuation methodologies. The mineral asset valuations have been based on the updated Mineral Resources and Ore Reserves and includes the plan to ramp up to production of 2Mtpa and the results are provided in the table below.

EY performed a sensitivity analysis on the Net Present Value (“NPV”) generated. The results indicate that the NPV is most sensitive to metal price and grade and least sensitive to a change in exchange rate. The NPV is least sensitive to a change in exchange rate as both the gold and silver commodity prices are USD denominated and therefore unaffected by a change in exchange rate. Results of the key sensitivities are illustrated in the figures below.

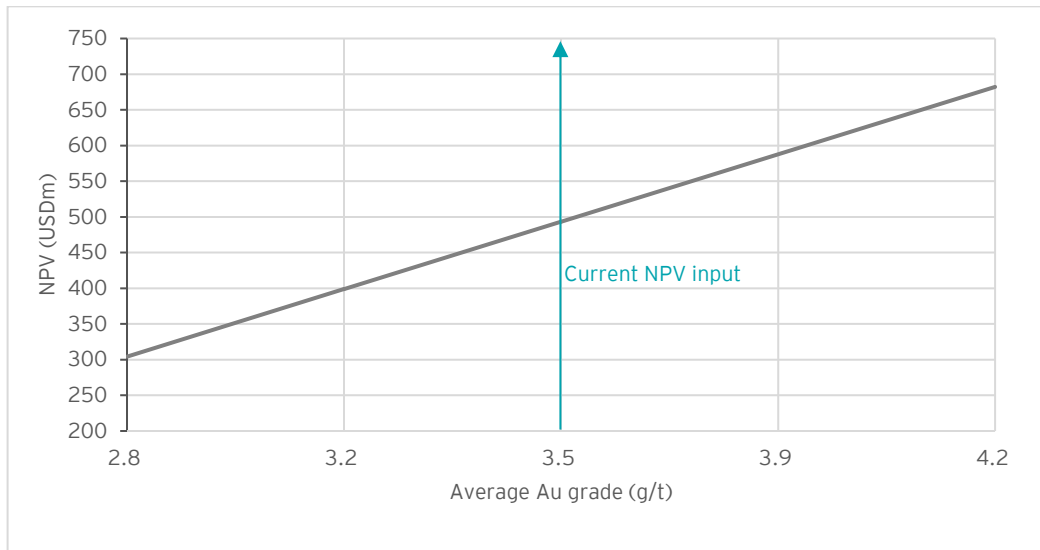
Description	Units	Low value	High value	Mean
Scenario 1: Forecast				
NPV	USDm	237.26	1,050.83	493.35
Long term Au price	USD/oz	938.96	2,124.60	1,321.05
Discount rate	%	13.30	12.37	12.83
IRR	%	41.23	105.78	63.06
Unit value	USD/oz in situ	63.86	282.84	132.79
Scenario 2: Spot				
NPV	USDm	409.05	447.32	427.70
Long term Au price	USD/oz	1,300.11	1,300.11	1,300.11
Discount rate	%	13.30	12.37	12.83
IRR	%	54.74	54.74	54.74
Unit value	USD/oz in situ	110.10	120.40	115.12

Sensitivity analysis Gold Price (USD/oz) (real)



Source: EY analysis

Sensitivity Analysis: Gold Grade (g/oz)



Source: EY analysis

EY estimated the preferred value of Sekisovskoye Mine as the average value between the Income-based approach and the Market-based approach. Therefore, the preferred value for Sekisovskoye Mine under Scenario 1 is estimated as USD415m, and the preferred value for Sekisovskoye Mine under Scenario 2 is estimated as USD383m as summarised in the table below.

Mineral Asset Valuation Summary of Sekisovskoye Mine, 31 May 2019

Scenario	Units	Income-Based Approach - Mean value*	Market-Based Approach - Mean value*	Preferred Value
Scenario 1: Forecast	USDm	493.35	337.49	415.42
Scenario 2: Spot	USDm	427.70	337.49	382.59

Source: EY analysis

*Mean values derived from high and low value ranges for respective valuation approaches

Independent Competent Persons' Report

Of the Sekisovskoye Mine

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1. Introduction

In accordance with instructions received from Altyn PLC (“Altyn” or “the Client”), Ernst and Young Advisory Services (Pty) Ltd (“EY”) have prepared an Independent Competent Persons’ Report (“CPR”) on the Sekisovskoye Gold Mine (“the Sekisovskoye Mine” or “the Project”), located in Kazakhstan.

EY understands that the CPR is required as part of the documentation for the London Stock Exchange (“LSE”) to be prepared in accordance with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition (“the JORC Code”) in order to update the previously reported Mineral Resources and Ore Reserves reported in the previous CPR, entitled “Independent Competent Persons’ Report on the Sekisovskoye Gold Project prepared for GoldBridges Global Resources Plc” as at 31 May 2014 by Venmyn Deloitte (“the 2014 CPR”).

EY has compiled this CPR in accordance with the JORC Code, summarising the technical aspects of the project including the location, infrastructure, environmental, geology, mining and exploration to-date and Mineral Resources and Ore Reserves.

The updated Mineral Resources and Ore Reserves have been estimated by Altyn after conducting additional exploration activities intended to increase the geological confidence and which was used to complete a technical study entitled “Feasibility Study of the Underground Mine at the Sekisovskoye Deposit and Area no.2 of the Sekisovskoye Orefield” completed by SRPI Qaztauken LLP in June 2018 (“the 2018 Feasibility Study”).

Altyn is a London-listed Main Board company with various assets in Kazakhstan. Altyn’s main asset is a gold and silver producing mine, the Sekisovskoye Mine, located in East Kazakhstan. Altyn holds a 100% interest in the Sekisovskoye Mine and in the adjacent Teren- Sai Project, an early stage exploration project. The subject of this CPR is the Sekisovskoye Mine. The Teren- Sai Project will be subject to a separate CPR.

It should be noted that during preparation of the CPR, EY relied upon information provided by Altyn Management. EY has been made to understand that the information provided is correct and accurate and that the Management was duly authorized to provide EY the same.

1.1 Nature and Scope of the Services

The nature and scope of the services, including the basis and limitations, are detailed in the Engagement Letter. The purpose of our work is to review and consolidate all relevant information in a CPR for the Sekisovskoye Mine in Kazakhstan. EY’s primary obligation in preparing mineral asset reports for the public domain is to describe mineral projects in compliance with the reporting codes applicable under the jurisdiction in which the company operates, in this case, the JORC Code.

In the execution of its mandate, EY and the contributing consultants undertook a review of the Mineral Resource estimation completed by Altyn and a review of the technical and economic data to identify the factors that may impact the future viability of the Sekisovskoye Mine. In doing so, EY considered the strategic merits of the assets utilising the best practice due diligence methodologies.

Subject to our obligation to conduct our work with reasonable skill and care, we shall have no liability for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by the directors, employees, or agents of Altyn or any other person of whom we make enquiries except to the extent that such loss or damage arises as a result of our bad faith or wilful default or where the withholding, concealment or misrepresentation should have been apparent to us without further enquiry of the information provided to us and required to be considered by us under the terms of our assignment.

The authors of this report are not qualified to provide extensive commentary on the legal issues associated with Altyn's and/or its subsidiaries' rights to the mineral properties. EY has reviewed the mineral right documentation as far as possible. No warranty or guarantee, be it express or implied, is made by the authors with respect to the completeness or accuracy of the legal aspects of this document.

In completing this scope of work, EY has undertaken a review of the following items:

- ▶ Mineral Resource and Ore Reserve estimates by Altyn, including a review of the 3D geological model to satisfy itself of the soundness of the resources and reserves declared by Altyn;
- ▶ historical and recent production performance, particularly with respect to the planned production levels;
- ▶ the mine plan and Life of Mine ("LoM") schedule;
- ▶ the modifying factors applied;
- ▶ the suitability of the plant design and expansion plan; and
- ▶ EY has carried out a valuation exercise as part of the CPR, primarily using the income approach, based on a cash flow model already prepared by Altyn.

The review has been based on relevant technical reports, supporting documentation, plans and recent and historical activities as well as any additional results, documentation or commentaries provided by Altyn. EY has considered information from publicly available information and through consultation with technical experts.

1.2 Purpose of Report and Restrictions on its use

The purpose of our work will be to support Altyn in meeting the requirements of the Main Board Listing on the LSE. It is understood that results of our work will be used as supporting documentation required for the London Main Board. The Scope of Work is review and consolidate the relevant information in order to prepare a CPR for the Sekisovskoye Mine in accordance with the JORC Code. EY utilised a standard checklist of all technical and financial issues that need to be addressed in the CPR to meet the requirements of a compliant report.

EY does not accept responsibility or liability to any person other than to Altyn, or to such party to whom EY has agreed in writing to accept a duty of care in respect of this report, and accordingly if such other persons choose to rely upon any of the contents of this report they do so at their own risk.

1.3 Competent Persons' Declaration

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr V. Redozubov-Gorskiy and other technical experts at the Sekisovskoye Mine. Mr V. Redozubov-Gorskiy, the chief geologist for the Sekisovskoye Mine, is responsible for estimation of Mineral Resources and Ore Reserves. Mr V. Redozubov-Gorskiy has more than 20 years' relevant experience in the assessment of the types of gold exploration and mining properties discussed in this report. Mr V. Redozubov-Gorskiy is a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy.

Mr A. Clay, Principal Consultant employed by EY, is the Competent Person that supervised preparation of this CPR. Mr A. Clay has more than 40 years' relevant experience in the evaluation of the types of gold exploration and mining properties discussed in this report. Mr A. Clay is a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Clay is also the Competent Valuator. Competent Person and Competent Valuator Certificates are presented in Appendix D.

Key technical staff that assisted with compilation of this CPR are Ms T. Orford, Mr V. Maseko, Mr R. Khan, Ms N. Moeketsi, Mrs C. Jacobs and Mrs S. Joubert, who have relevant and appropriate experience and independence to appraise the asset under consideration. The EY team involved in compilation of this report are members in good standing with their relevant professional institutions. The signatories to this report are qualified to express their professional opinions on the values of the mineral assets described.

EY has compiled this CPR in accordance with the JORC Code, summarising the technical aspects of the project including the location, infrastructure, environmental, geology, mining and exploration to-date and Mineral Resources and Ore Reserves.

1.4 Statement of Independence

This CPR has been authored by a number of professional technical experts. These technical experts are independent of Altyn. Neither EY nor its staff have, or have had, any interest in Altyn or the Sekisovskoye Mine that is capable of affecting their ability to give an unbiased opinion and, have not received, and will not receive, any pecuniary or other benefits in connection with this assignment, other than normal consulting fees. Neither EY nor any of its personnel or co-authors involved in the preparation of this CPR have any material interest in either Altyn or in any of the properties described herein.

1.5 Sources of Information and Reliance on Other Experts

EY has based its review of the Sekisovskoye Mine on information provided by Altyn and its subsidiary and related companies, as well technical reports by contractors, associates and other relevant published technical data. A full list of source data is provided in Appendix C.

1.6 Site Visits

A site visit was carried out to the Sekisovskoye Mine and Teren- Sai Project from 11 to 14 September 2018 by various authors of this report. During the site visit, the authors interviewed various project personnel to gain an understanding of the operations. The authors inspected the site infrastructure, workings and operations including the geological models and general facilities in the general area and within the site itself.

2. Property Description and Location

The Sekisovskoye Mine is an operating gold and silver mine located in eastern Kazakhstan, as illustrated in Figure 1. The Sekisovskoye Mine is located adjacent to the Sekisovka village and consists of a Subsoil Use Contract that covers an area of 0.56km².

The Sekisovskoye deposit was discovered in 1833 and was mined through open pit mining from 1833 to 1847, from 1932 to 1935 and from 1943 to 1946. During 1975 to 1986, the Soviet Union carried out an exploration and developed small scale mining operations at the deposit through various co-operatives. Altai Zoloto Multicorporate Enterprise of the Ministry of Non-Ferrous industry of KazSSR ("Altai- Zoloto") mined the oxide zone of the deposit from 1978 to 1982. The open pit reached a depth of 35m.

After Kazakhstan gained independence from the Soviet Union in 1991, ownership of the deposit was transferred to the Cooperative of Prospectors ("Poisk"). In 1998, Hambleton Mining plc ("Hambleton") acquired the Poisk co-operative. In 2000, the mineral rights were transferred to DTOO Gornorudnoe Predpriatie Sekisovskoye ("DGPS"), a newly formed and wholly owned subsidiary of Hambleton. Hambleton subsequently changed name to Goldbridges Global Resources PLC ("Goldbridges") in January 2014. Goldbridges changed name to Altyn in December 2016. DGPS subsequently changed name to BaurGold Mining Enterprises LLP ("BaurGold").

The Sekisovskoye Mine is managed through two 100% held subsidiaries of Altyn, namely BaurGold and MMC Altyn MM LLP ("MMC Altyn"). BaurGold owns and operates the mine and laboratory and conducts exploration work, while MMC Altyn owns and operates the processing plant.

Altyn (then known as Hambleton), commenced exploration work in 2004. Recent exploration completed has consisted of several drilling campaigns and a total of 1,490 surface and underground diamond drillholes have been completed. Of these drillholes, a total of 982 holes have been drilled between 2011 and 2019 and have been used for orebody modelling.

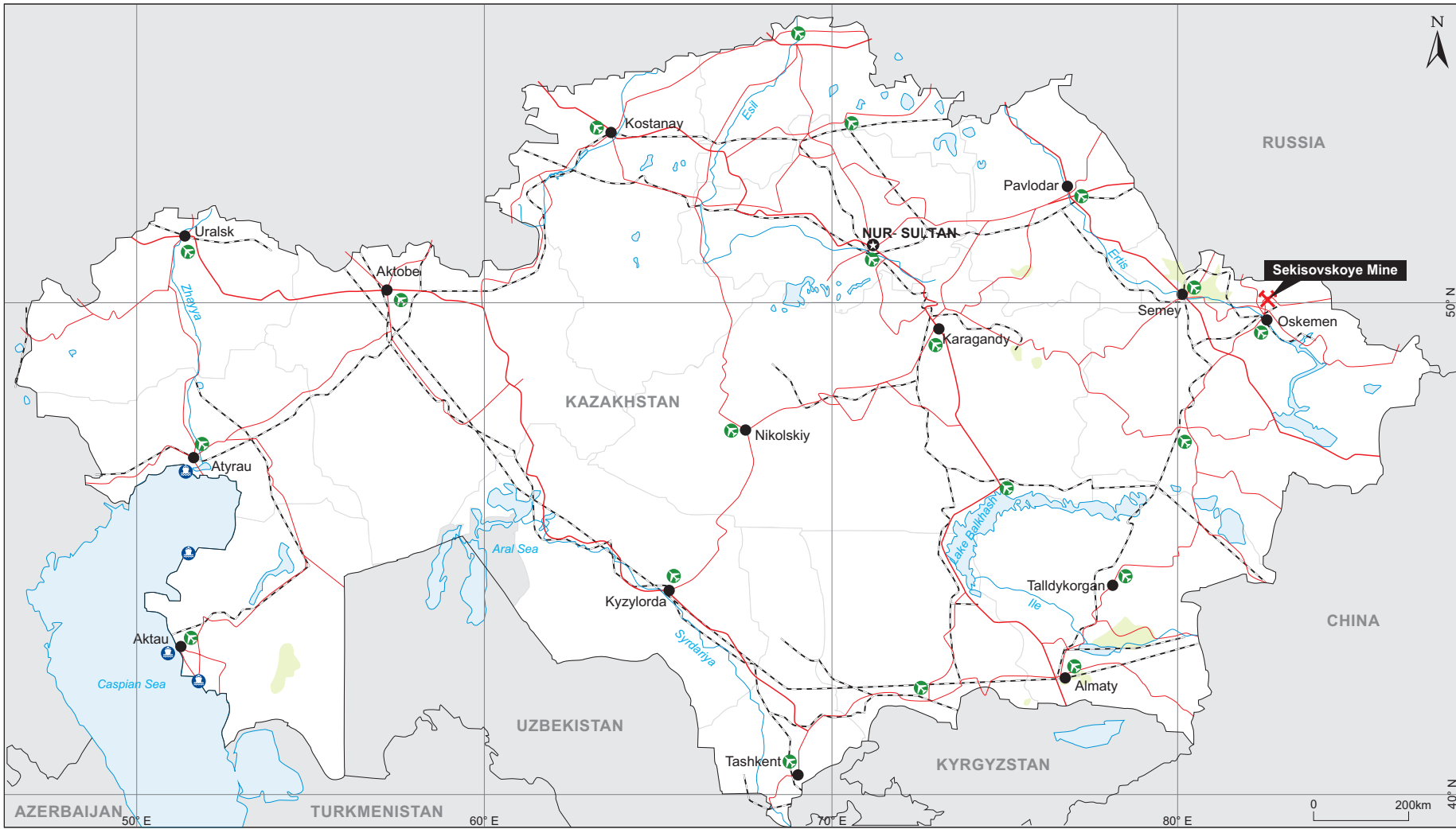
Production commenced from the open pit in 2008 and continued until depletion of the two open pits in 2016. Underground mining commenced in 2013 and the mine is currently ramping up to a planned production of 2 million tons per annum ("Mtpa"). The expansion will be made possible by sinking a rock hoisting shaft and an associated ventilation shaft down to a depth of -430 metres above sea level ("masl"), and through the completion of an additional processing plant, effectively doubling the current processing capacity.

Ten breccias have been mapped in and around the Sekisovskoye Mine. Of these, seven breccias fall within the Sekisovskoye Mine licence boundary. The Sekisovskoye Mine is currently targeting breccia bodies 2, 3 and 4. The Sekisovskoye Mine and Teren- Sai Project are both targeting gold mineralisation hosted in pipes-like breccia intrusions that are considered part of the Zmeinogorsky Complex.

2.1 Locality

The Sekisovskoye Mine is located in the East Kazakhstan Oblast adjacent to the Sekisovka village, approximately 40km northeast of Ust-Kamenogorsk (also known as Oskemen) and approximately 800km east of the capital city of Nur- Sultan, as illustrated in Figure 2. This area is the easternmost part of Kazakhstan and is bordered to the north, east and south by Russia and China. The Sekisovskoye Mine is located approximately 50km south of the border with Russia.

Ust-Kamenogorsk houses a large hydroelectric power station located in the Irtysh River. Ust-Kamenogorsk is connected by rail and road with Russia and various major cities of Kazakhstan. The Ust-Kamenogorsk Airport is situated approximately 11km north-west of the city and is the main airport gateway for East Kazakhstan.



- Capital City
- City/Town
- Major Road
- Secondary Road
- Rail
- Airport
- Port
- River
- Provincial Border
- Country Border
- Nature Reserves

Figure 1

Locality of the Sekisovskoye Mine in Relation to Infrastructure of East Kazakhstan

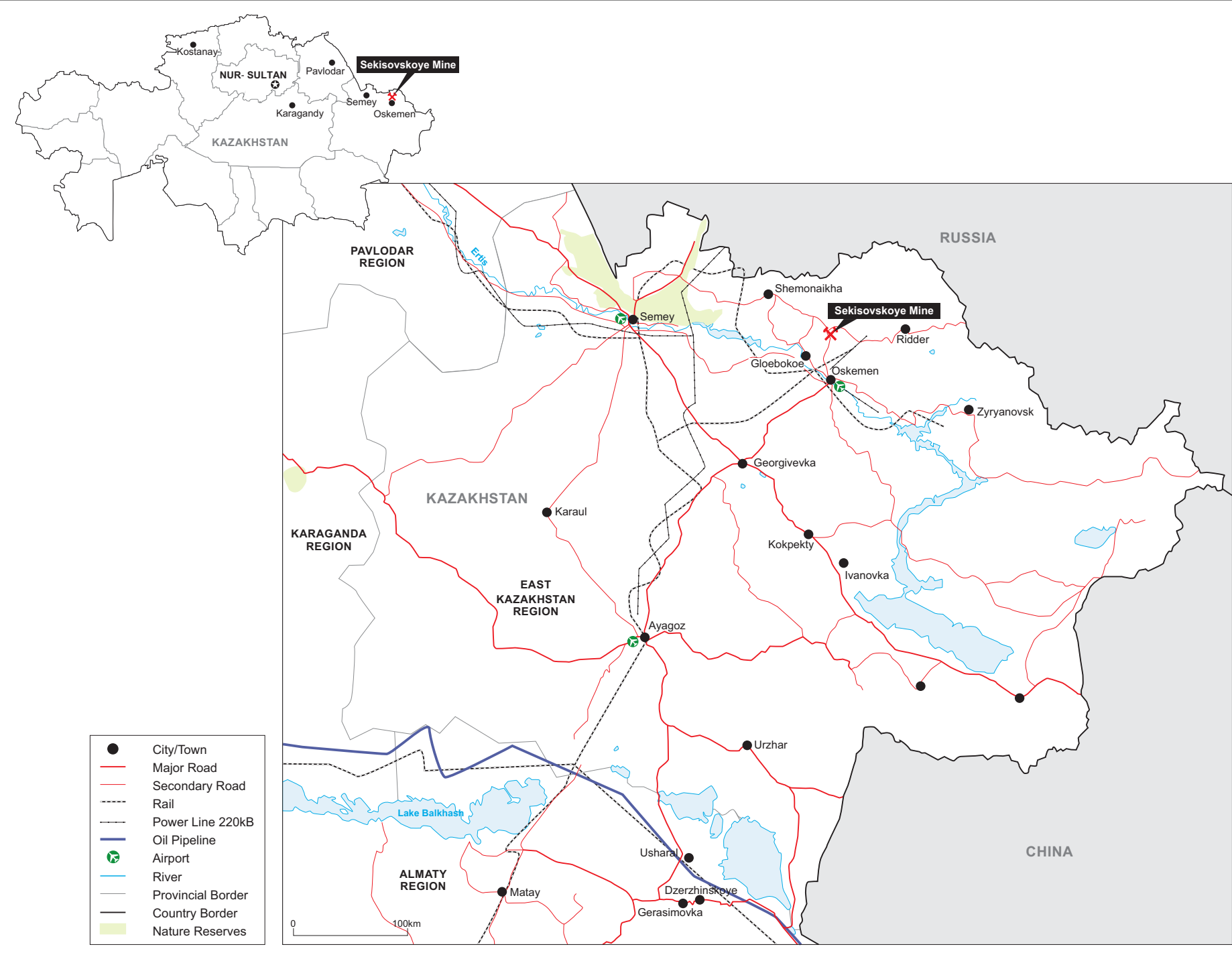


Figure 2

The East Kazakhstan Oblast borders on the Pavlodar Oblast, the Karaganda Oblast, and the Almaty Oblast. East Kazakhstan occupies an area of 283,300km². Major settlements in the oblast include Ust-Kamenogorsk (also known as Oskemen), Semey (formerly known as Semipalatinks) and Ridder (formerly known as Leninogorsk).

2.2 Accessibility and Local Resources

The mine is accessed through a tarred road connecting Ust-Kamenogorsk to Shemonaikha and passing through the Sekisovka village. This road is generally in a good condition. The mine roads are gravel roads that are maintained by the Sekisovskoye Mine and are generally in good condition.

Local resources are typically sourced from the nearby town of Ust-Kamenogorsk, which has maintained facilities such as hospitals, schools and suitable accommodation. The Sekisovskoye Mine is managed from the Sekisovskoye Mine offices, located in the Sekisovka village. A small mining community is also located at the Sekisovka village.

An office is located at the Sekisovskoye Mine, from which the mine is managed. The mine has access to services such as power and water. The site layout plan in Figure 3 illustrates the accessibility, resources and site layout.

2.3 Climate and Topography

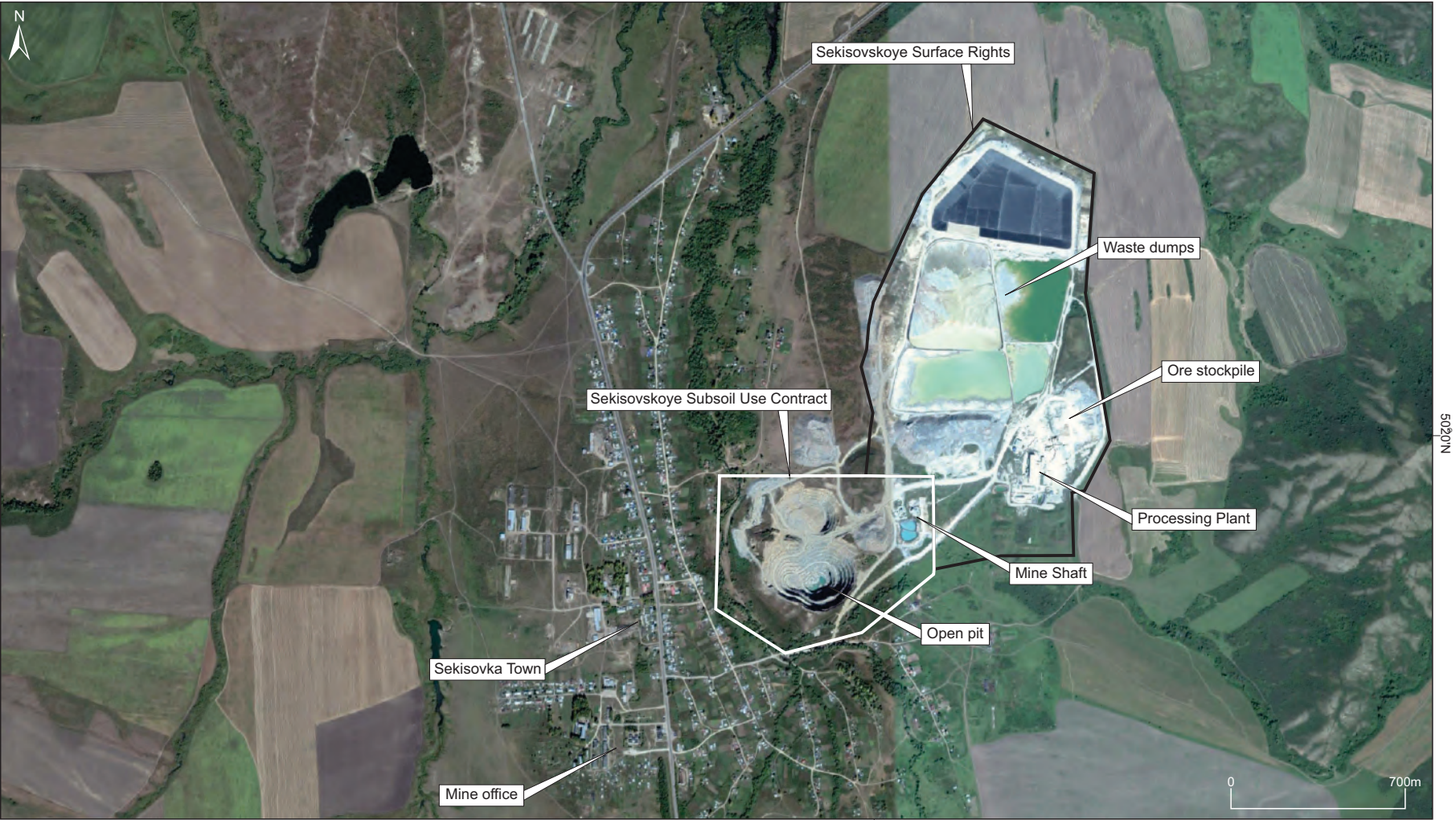
The climate of East Kazakhstan is continental with temperatures reaching maximums and minimums of 42°C to -52°C, respectively. The summer months occur between May and September and are typically warm to hot with temperatures that are typically between 15°C to 30°C. Winters are cold and temperatures typically vary between -10°C to -20°C. The area experiences abundant snowfall that covers up to 2.5m.

Annual precipitation is approximately 450mm per year. Rainfall occurs all year round, but the rainy seasons occur between May to August and October to December. The wind direction is from southeast to the northwest, with the strongest winds observed in spring and autumn. The wind speed ranges from 2.7 metres per second ("m/s") to 7.0 m/s.

Winters are cold, and the area receives snowfall throughout the winter months of November to March with snow of up to 3cm per month but with an average of 1.3cm per month. The depth of freezing during winter reaches up to 210cm. Ice, snow and extremely cold temperatures may halt operations temporarily.

The area surrounding the Sekisovskoye Mine is made up of undulating and hilly topography. The mining area also forms part of the foothills of the westernmost extremity of the Altai Mountains. Elevation ranges from approximately 430masl to 495masl.

The area is drained by the Sekisovka River, which crosses the deposit and flows into the Uba River. The region is dominated by agricultural land use. Agriculture is the main economic activity and source of employment and includes livestock, beekeeping, fish and crops. Natural vegetation is dominated by grassland on the plains to forest in the foothills of the Altai Mountains.



Source: Google Earth

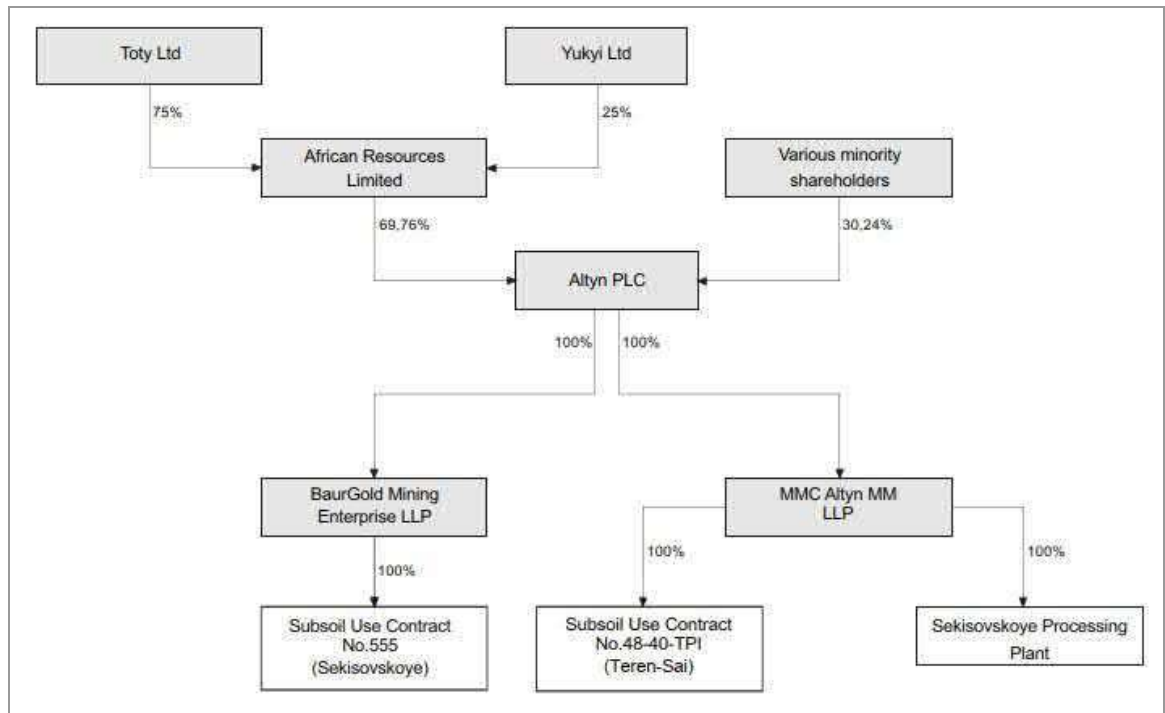
3. Legal Tenure

3.1 Corporate Structure

The Subsoil Use Contract for the Sekisovskoye Mine is held by Altai Ken Baiytu, a wholly-owned subsidiary of Altyn. Altai Ken Baiytu was renamed to MMC Altyn in October 2016.

The Sekisovskoye Mine is managed through two 100% held subsidiaries of Altyn, namely BaurGold MMC Altyn. BaurGold owns and operates the mine, exploration work and laboratory, while MMC Altyn owns and operates the processing plant. The corporate structure for Altyn is illustrated in Figure 4.

Figure 4: Corporate Structure



3.2 Mineral Tenure

In Kazakhstan, mineral rights are the State’s property and the State grants subsoil use rights based on the grounds and conditions envisaged by the recently enacted Subsoil and Subsoil Use Code of Kazakhstan (“SSU Code”).

The Sekisovskoye Mine was granted Subsoil Use Contract No. 555, effective from 20 October 2000. This is a transfer of the Subsoil Use Contract No. 374D that was granted to Hambleton Mining on 20 March 1999, prior to the change in subsoil system of Kazakhstan. The contract covers an area of 0.56km² and the mining allotment is valid for gold ore up to a depth of -340masl. It is understood that additional addendums to increase the mining depth maybe applied for. The mineral tenure for Sekisovskoye Mine is summarised in Table 1.

Table 1: Summary of the Tenure for Sekisovskoye Mine

Project	Holder	Licence No	Licence Type	Area (km ²)	Minerals	Date Granted	Expiry Date
Sekisovskoye	Hambledon*	No. 555	Subsoil Use Contract	0.56	Gold and silver	20 October 2000	18 July 2020

* Altn was previously known as Goldbridges and as Hambledon prior to that. Hambledon remains a subsidiary of Altn for licencing purposes.

The Subsoil Use Contract specifies a depth limitation of -340masl. Altn has estimated Mineral Resources and Ore Reserves below the level of -340masl, however it is understood that Altn may apply for additional addendums to increase the mining depth. It is also understood that Altn have reported Mineral Resources and Ore Reserves below this depth to government. Altn have confirmed that in Kazakhstan, another company may not apply for the depth extension.

MMC Altn also holds licences for the operation of the following:

- ▶ processing plant;
- ▶ tailings dam;
- ▶ fuel depot;
- ▶ warehouse;
- ▶ offices; and
- ▶ repair rooms for the maintenance of mining equipment.

MMC Altn has also been granted a subsoil use contract for exploration of the adjacent Teren- Sai Project (where Altn is targeting Area No.2). The Teren- Sai Project is not incorporated in this report and will be reported separately.

Pursuant to the SSU Code, rights for exploration and production of solid Mineral Resources are subject to license-based subsoil use regime. Under the license for production of solid mineral resources, its owner has the exclusive right to use a subsoil block for the following operations:

- ▶ extraction of solid Mineral Resources;
- ▶ use of subsoil space for conducting mining operations, placement of mining and/or mining and processing facilities in it, waste dumps; and
- ▶ exploration of the production site (operational exploration).

Licenses for exploration/production of solid mineral resources are issued based on the “first come - first served principle”, based on which applications for issuing licenses are considered in the order of their receipt by the Ministry for Investment and Development (“MID”). Subsequent application is considered only after a refusal to issue a license for the previous application.

The authors of this report are not qualified to provide extensive commentary on legal issues associated with Altn's rights to the mineral properties. Altn and its subsidiaries, parent companies and subcontractors have provided certain information, reports and data to EY in preparing this report which, to the best of Altn's knowledge and understanding, is complete, accurate and true and Altn acknowledges that EY has relied on such information, reports and data in preparing this report. No warranty or guarantee, be it express or implied, is made by the authors with respect to the completeness or accuracy of the legal aspects of this document.

3.3 Surface Rights

Altyn and its various subsidiaries hold title deeds for various temporary land use for mining and related activities assigned by the State Research and Production Centre for Land Resources and Land Management of the Republic of Kazakhstan. Table 2 provides a summary of these Land Use Permits.

Table 2: Summary of Land Use Permits

Cadastré Number	Land Plot Purpose	Date Granted	Licence Expiry	Total Licence Area (km ²)
05-068-017-361	Tailings dam	01 November 2011	01 July 2020	0.024
05-068-017-353	Tailings dam and stockpiling of waste rock			0.307
05-068-008-356	Tailings dam and production facilities			0.139
05-068-008-362	Tailings dam			0.273
05-068-017-274	Tailings dam and production facilities			0.120
05-068-008-355	Tailings dam and production facilities			0.149
			Total Area	1.013

Source: Altyn management

3.4 Royalties

Various taxes and payments may be applicable to the subsurface user, in addition to the taxes and payments that all legal entities need to pay to the State budget. The mineral extraction tax is a volume-based royalty type tax applicable to Mineral Resources. Rates vary between 0% and 18.5%, depending on the type of Mineral Resource.

A rate of 5% is applied for gold and silver. The royalties and taxes applicable to the Sekisovskoye Mine are detailed in Section 18.5.4.

3.5 Material Contracts

A contract exists between the MMC Altyn and the Tau-Ken-Samruk Refinery in Nur-Sultan for the purchase of the doré bars. The doré bars are produced at the Sekisovskoye Mine, packaged and then sent to the state refinery, Tau-Ken-Samruk Refinery. This contract is valid until 31 December 2019 and is renewed on an annual basis.

In February 2018, BaurGold secured an underwriting agreement with JSC Freedom Finance, a subsidiary of Freedom Holding Corporation, to raise approximately USD15m through the issue of five-year non-convertible Kazakhstan Tenge ("KZT")-denominated bonds secured by the assets of BaurGold, with a coupon rate of 8% payable semi-annually in arrears. The proceeds of the bond will be used to finance the purchase of underground equipment in line with the plans to significantly ramp up production.

In February 2018 Altyn converted USD9.7m of the USD10m bond issued to African Resources into 233,333,333 new ordinary shares. It is the intention to convert the remaining bonds and accrued interest into ordinary shares.

In March 2019 the Company obtained a loan from a Kazakh based bank of USD1m and is in continuing talks with the bank to raise further funds for capital development.

Principal financing commitments are payment of interest on the USD2m convertible loan and repayment of short-term borrowings from the bank, in total these are expected to amount to approximately USD1m. In 2018, as in 2017, the principal shareholders have agreed to defer any loan repayments, until funds allow.

3.6 Other Legal Issues

Based on communications held with Altyn, EY TAS understands that there are currently no claims, appeal processes or pending administrative enforcement actions against the Sekisovskoye Mine.

4. History

The deposit was discovered in 1833 and was named the Zubarevsky-Sekisovskoye placer. Quartz veins at the deposit were mined by various co-operatives from surface between 1833 and 1847, between 1932 and 1935, and between 1943 and 1946.

In 1952, the Soviet Union commenced an official exploration programme and various official geological and exploration reports were completed. Drilling, trenching and underground workings took place during 1976. A number of adits and a shaft were developed and two underground levels were prepared.

Altai-Zoloto, a co-operative, mined the oxide zone of the deposit in an open pit from 1978 to 1983. The open pit reached a depth of 35m. In 1984 the first Russian State Commission on Mineral Reserves ("GKZ") Reserves were estimated for the deposit, however the Soviet Union considered mineral assets to be strategic and the results were not published. Exploration and research continued, through the Soviet Union, until 1987.

Ownership of the deposit was transferred to the Poisk in 1991 as a result of independence gained from the Soviet Union. In 1998, Hambledon Mining Plc ("Hambledon") acquired the Poisk co-operative and a small gravity recovery plant was installed in an adit. The plant was used for three months before operations ceased.

In 2000, the mineral rights were transferred to DGPS, a newly formed and wholly owned subsidiary of Hambledon. Hambledon subsequently changed name to Goldbridges in January 2014. Goldbridges changed name to Altyn in December 2016. DGPS subsequently changed name to BaurGold.

Nelson Resources Limited ("Nelson") entered into an agreement to acquire 50% of the Sekisovskoye Mine in 2001. The agreement was relinquished in 2002 when Nelson was re-organised as part of an oil company.

Hambledon commenced exploration through a diamond drilling programme in 2004. Production commenced from an open pit in 2008 and from underground in 2013. The open pit was depleted and decommissioned in 2016. All production is now sourced from the underground workings.

Hambledon subsequently changed name to Goldbridges in January 2014. Goldbridges changed name to Altyn in December 2016.

4.1 Historical Exploration

Exploration and mining has been undertaken intermittently since discovery of the deposit in 1833. Official exploration commenced in 1952 and was undertaken by the Soviet Union. Major drilling and trenching by the Soviet Union commenced in 1976 and resulted in the declaration of Reserves in compliance with GKZ. Based on results, open pit mining commenced in 1978 and open pit and underground mining continued intermittently until Kazakhstan gained independence from the Soviet Union in 1991.

Early exploration included geophysical surveys, which were first carried out in the 1950s and included magnetic, gravity, reflection seismology and Induced Polarisation survey methods. These methods were used in conjunction with geological mapping and drilling to identify anomalies and map structural geology.

Diamond drilling was completed during several drilling campaigns. Two drilling campaigns were completed prior to acquisition by Altyn (then Hambledon). These drilling campaigns took place between 1976- 1984 and between 1984- 1986 when 153 and 75 cored holes were drilled, respectively by the Soviet Union.

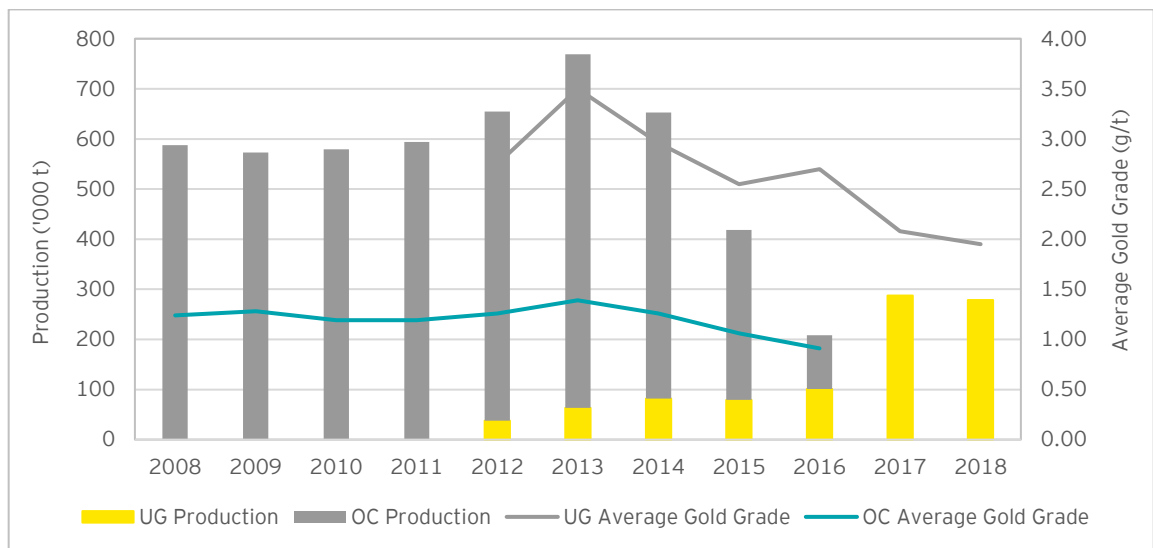
Recent exploration by Altyn (then Hambledon) at Sekisovskoye began in 2000 when ownership of the mining rights was transferred to Hambledon through its wholly owned subsidiary, DGPS. Diamond drilling commenced in 2004 and is discussed in further detail in Section 6.1. No surface geological mapping or soil sampling is available for the Sekisovskoye Mine.

4.2 Historical Production

The Sekisovskoye Mine has been mined by Altyn since 2008 (then Hambledon). Development commenced in mid- 2006 when the mine and plant were commissioned. Production from the open pit commenced during 2008. The open pit was mined until it was depleted and decommissioned in 2016. Total saleable ore produced by 2018, taking into account ancillary works, totals 0.94Mt at an average grade of 2.36g/t.

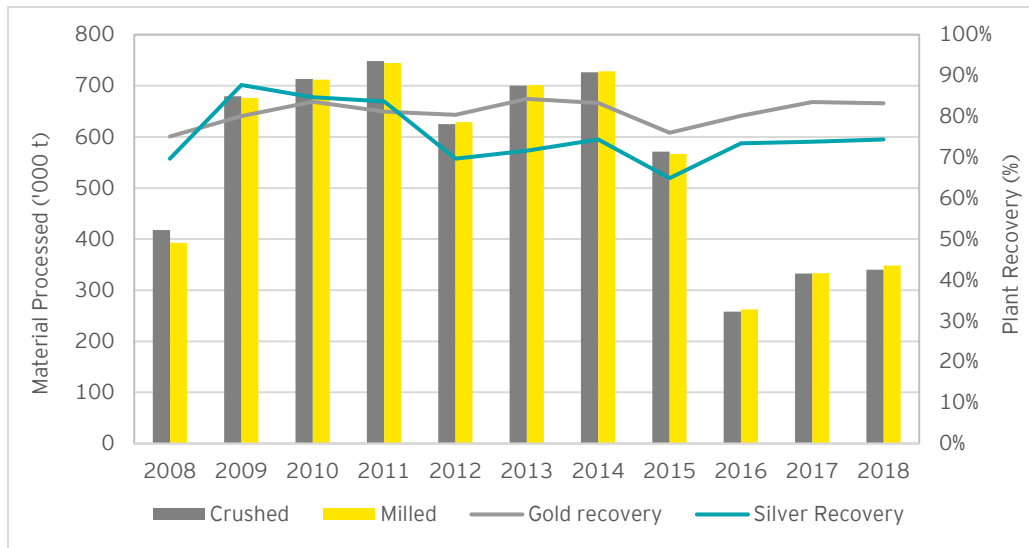
Trial underground mining commenced in November 2011 but was halted in October 2012. Underground operations re-commenced in June 2013 and are continuing to ramp up the planned production rate of 2Mtpa. The annual production and processing achieved are summarised in Figure 5 and Figure 6.

Figure 5: Production History at the Sekisovskoye Mine



Source: Altyn Management

Figure 6: Processing History at the Sekisovskoye Processing Plant



Source: Altyn Management

5. Geology

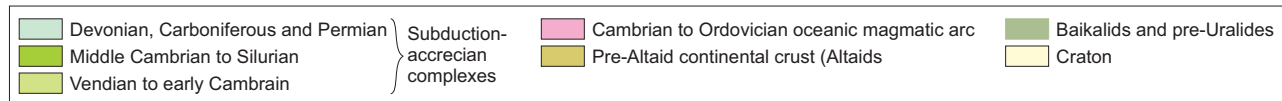
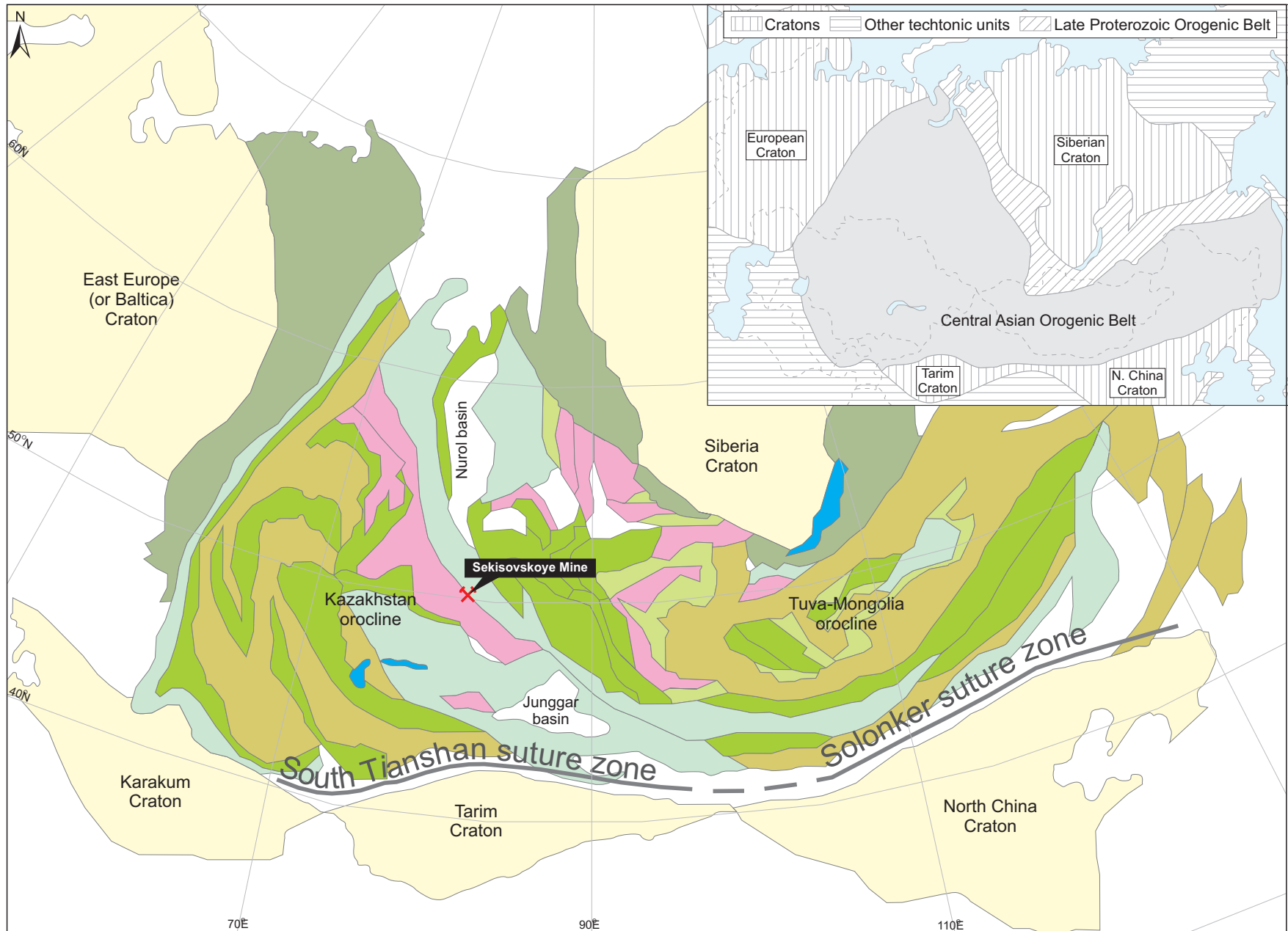
5.1 Regional Geological Setting

The geology of Kazakhstan consists primarily of an extensive Precambrian basement overlain by widespread Palaeozoic stratigraphy and widely covered by Mesozoic sediments within rift basins. Much of the geology is affected by orogenic events such as the Altai orogeny that occurred during the Hercynian collision period.

The Sekisovskoye Mine is located within the Russian- Kazakh Altai, the north-western portion of the larger Central Asian Orogenic Belt (“CAOB”). The CAOB is a fold belt that is located between the East European, Siberian, North China and Tarim cratons. The Russian- Kazakh Altai formed at the southern margin of the Siberian Craton and represents the first stage of CAOB evolution. The CAOB has a complex and extended geological history and its evolution is still subject to much debate. The relationship of the CAOB and the various cratons is illustrated in Figure 7.

The Russian- Kazakh Altai Orogen is a Pacific-type orogen, made up of a combination of oceanic, accretionary, fore-arc, island-arc and continental margin terranes of different ages separated by strike-slip faults and thrusts. This extensive orogeny evolved over a period of over 800Ma. Its evolution took part in five major stages, namely:

- ▶ the Late Neoproterozoic to early Palaeozoic subduction-accretion in the Paleo-Asian Ocean;
- ▶ the Ordovician to Silurian passive margin;
- ▶ the Devonian to Carboniferous active margin and collision of Altai Mongolian terrane with the Siberian continent;
- ▶ the late Palaeozoic closure of the Paleo-Asian Ocean and coeval collisional magmatism; and
- ▶ the Mesozoic post-collisional deformation and anorogenic magmatism, which created the modern structural makeup of the Russian-Kazakh Altai orogen.



Source: Han and Zhao (2017)

Figure 7

The Russian- Kazakh Altai is subdivided into three tectonic domains, namely the Altai Mongolian terrane, the subduction-accretionary terrane (including the Rudny Altai and Gorny Altai) and the Kalba- Narym collisional terrane. The major terranes of the Russian- Kazakh Altai are illustrated in Figure 8.

The Sekisovskoye Mine is located within the Rudny Altai terrane. The Rudny Altai belt consists of Devonian to Carboniferous aged mafic volcanic, volcano-sedimentary and intrusive rocks overlying a metamorphosed Lower Palaeozoic basement. The Rudny Altai belt extends approximately 100km northwest-southeast and is bounded by two major structures, the Irtysch Fault and the North-East Fault (sometimes referred to a shear zone). The Rudny Altai terrane was subsequently amalgamated into the CAO B.

The Rudny Altai terrane is separated from the Gorny Altai terrane by the middle Carboniferous to early Permian collision of the Siberian and Kazakhstan continents along the sinistral, strike slip North-East Fault, which reactivated the dextral Charysh- Terekta suture shear zone.

Development of the terrane is not confirmed and considered to be either a younger active continental margin of the Siberian Craton or a back-arc basin. The name Rudny is derived from the Russian term for ore as this terrane is a known host of a number of orebodies. The terrane consists of the following main units:

- ▶ pre-Esmian metamorphic sediments consisting of metamorphic schists and metasediments;
- ▶ mid- Palaeozoic oceanic units;
- ▶ Emsian- Fammenian island-arc or active margin.

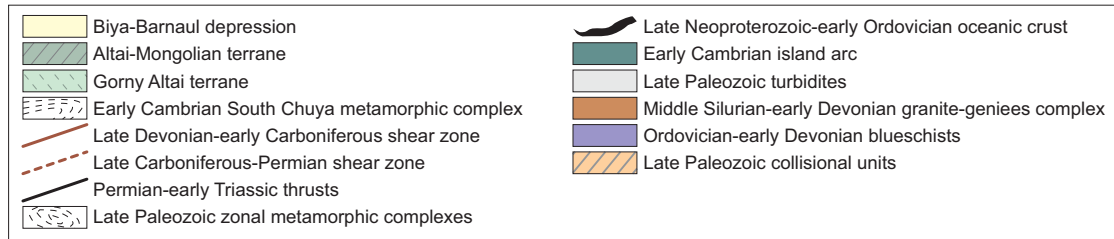
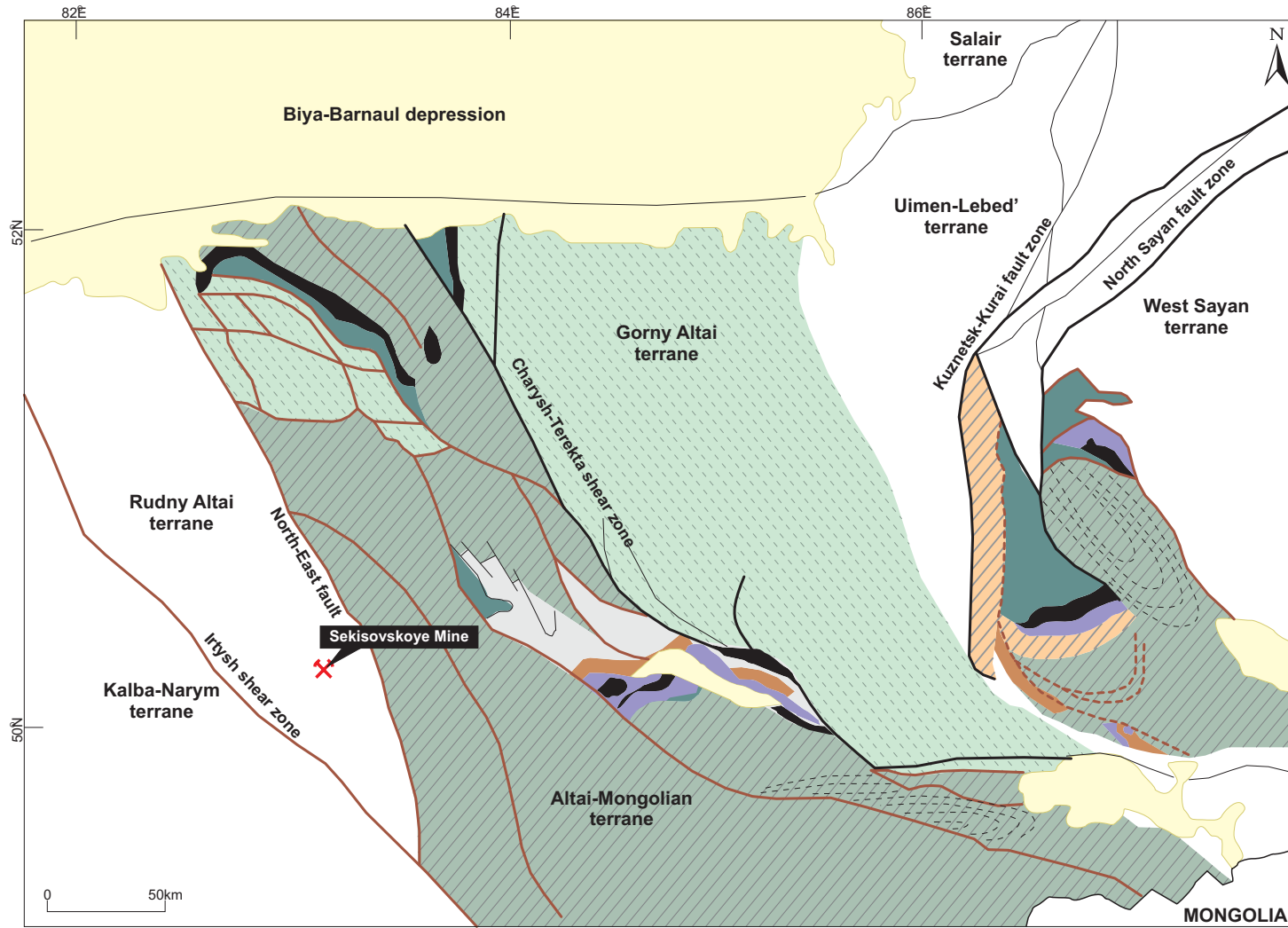
The Esmian- Fammenian hosts iron ore, manganese, copper, zinc, lead, gold and silver in volcano-sedimentary and hydrothermal- metasomatic deposits. Mineralisation is hosted in complex multi-stage deposits in zones, cluster and fields at depths of 1km to 1.5km below surface.

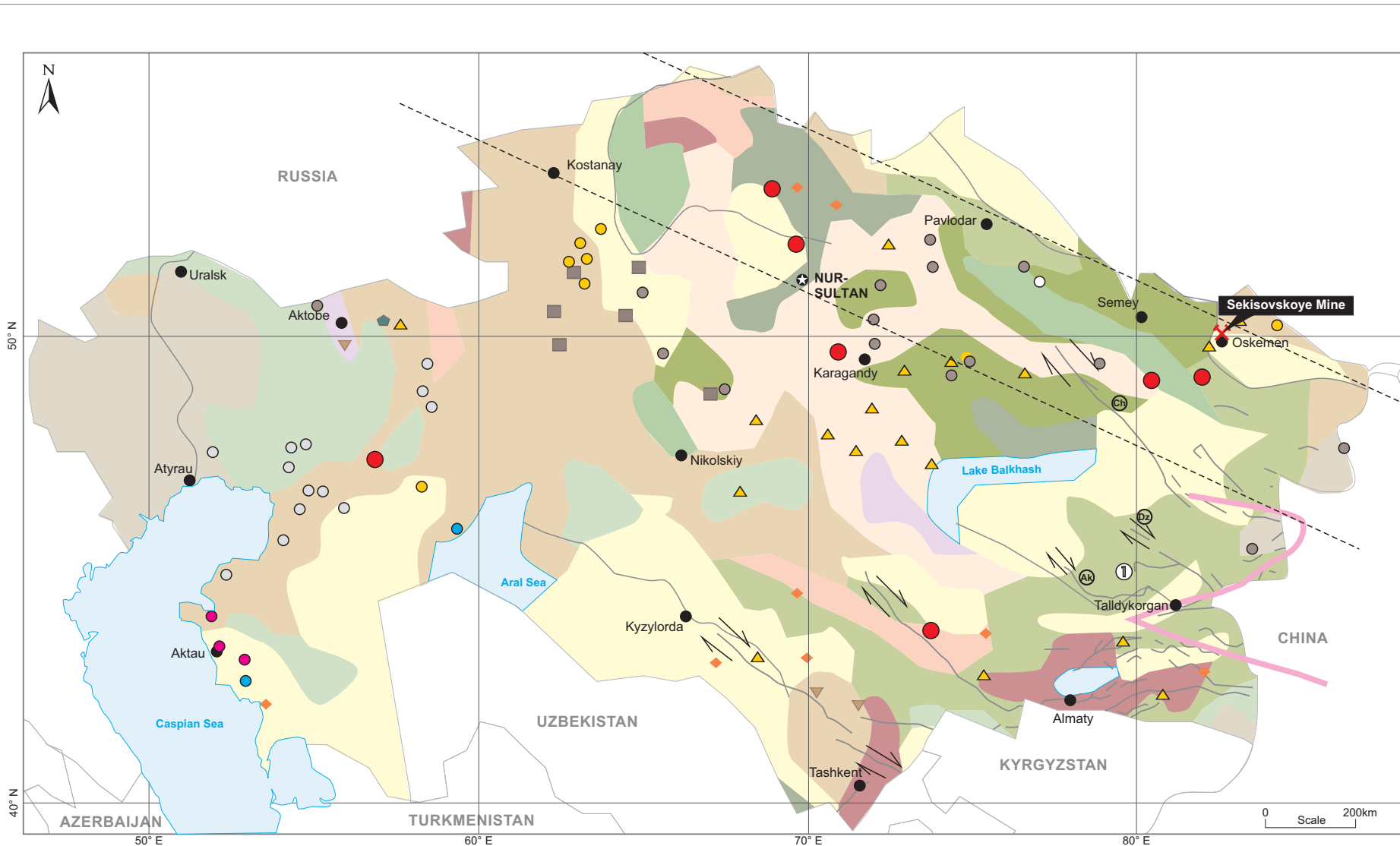
The Rudny Altai terrane is overlain by Devonian to Carboniferous sediments and intruded by collisional and post-collisional granitoids. These collisional granitoids include gabbros, granodiorites and granites and are often referred to as either the Zmeinogorsky Complex or the Sekisovsky Complex. Breccias that have intruded into the Zmeinogorsky Complex have been identified as hosting gold, silver and telluride mineralisation.

A number of sources refer to the Charsk Gold Belt; however, the Charsk Gold Belt is not well defined or delineated in literature but is often referred to as covering an extensive region of the Russian-Kazakh Altai and host to numerous deposits of gold, copper and other minerals. The region is described as hundreds of kilometres long and striking northwest-southeast. This belt is thought to loosely encompass the following mineralised zones:

- ▶ Rudny Altai poly-metallic belt including iron, manganese, copper, lead, zinc, gold and silver mineralisation;
- ▶ Kalba-Narym rare earth element belt including tantalum, niobium, beryllium, lithium, tin, caesium and tungsten;
- ▶ West-Kalba gold belt including gold, silver, arsenic and antimony; and
- ▶ Zharma-Saur polymetallic belt including chromium, nickel, cobalt, copper, gold, molybdenum and tungsten.

The geology of Kazakhstan illustrating the Charsk Gold Belt as well as other mineral deposits of Kazakhstan is illustrated in Figure 9.





<ul style="list-style-type: none"> ★ Capital City ● City/Town OIL & GAS ○ Oil ● Gas ● Oil and Gas 	FAULTS <ul style="list-style-type: none"> ↔ Strike-slip Faults — Paleozoic Mnt. Spine Ⓛ Fault AOI ⓐ Chingiz Fault ⓓ Dzungarian Fault ⓐ Aktas Fault 	<ul style="list-style-type: none"> --- Charkov Gold Belt GEOLOGY Cainozoic □ Quaternary □ Neogene system □ Palaeogene system 	<ul style="list-style-type: none"> Mesozoic □ Cretaceous system □ Jurassic and Cretaceous systems □ Triassic system Palaeozoic □ Non-differentiated Palaeozoic □ Carboniferous system 	<ul style="list-style-type: none"> □ Devonian system □ Silurian system Pre-Cambrian □ Proterozoic Magmatic rocks □ Intrusive rocks of all types 	DEPOSITS Energy Materials <ul style="list-style-type: none"> ● Coal ○ Brown Coal ◇ Uranium Industrial Minerals <ul style="list-style-type: none"> ▽ Phosphorite 	Ferrous Metals <ul style="list-style-type: none"> ◆ Chromium ● Iron Nonferrous Metals <ul style="list-style-type: none"> ■ Aluminum ▲ Copper, Lead, Zinc ● Gold
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0 Scale 200km

Figure 9

5.2 Local Geological Setting

The Zmeinogorsky Complex granodiorites have been influenced by regional scale tectonic structures that typically display a northwest-southeast strike. These structures have resulted in numerous hypabyssal intrusions as well as explosive hydrothermal breccias. The breccias are pipe-like to lenticular in shape and dip steeply to the northeast and many of them contain gold and silver mineralisation. The breccia bodies vary in size from 10m by 40m to 160m by 700m and reach depths of over 2km below surface.

Ten breccias have been mapped in and around the Sekisovskoye Mine. Of these, six breccias fall within the Sekisovskoye Mine licence boundary and a further four have been mapped to the west and south of the licence area. The Sekisovskoye Mine is currently targeting breccia bodies 2, 3 and 4, which continue to a depth of 2km based on geophysical survey results. The local geology of the Sekisovskoye Mine is illustrated in Figure 10 and the location of the breccia bodies is illustrated in Figure 11.

The Sekisovskoye Mine is characterized by:

- ▶ gold-sulphides hosted in brecciated zones and stockworks within the Zmeinogorsky complex;
- ▶ gold-sulphides typically hosted in the cement matrix of the brecciated zones (diorite, gabbro and plagiogranite debris);
- ▶ northwest striking faults relating to the Irtysh Fault and the North-East Fault that display control on the orebody; and
- ▶ the breccias are frequently cross cut by barren dykes.

The GKZ system classifies each targeted orebody based on its relative complexity. The Sekisovskoye Mine has been classified as a Category 3 deposit.

5.3 Mineralisation

Gold is typically hosted in sulphides i.e. pyrite and quartz within hydrothermal veins and within the breccia cement matrix. Several styles of mineralisation are found in the breccias at Sekisovskoye Mine. These include the following:

- ▶ large tabular orebodies;
- ▶ stockworks;
- ▶ medium size vein and lens hosted;
- ▶ small veins, pipes and dykes; and
- ▶ isolated lenses or veins.

Mineralisation is hosted in pipe-like breccia intrusions containing free gold and gold sulphides. The breccias are cut by barren igneous dykes that are typically planar and dip steeply to the northeast. Gold is embedded in the cement of the explosive hydrothermal breccias and is smeared across the lithology. The local geology of the Sekisovskoye Mine is illustrated in Figure 10 and a schematic cross section through the orebody is shown in Figure 12.

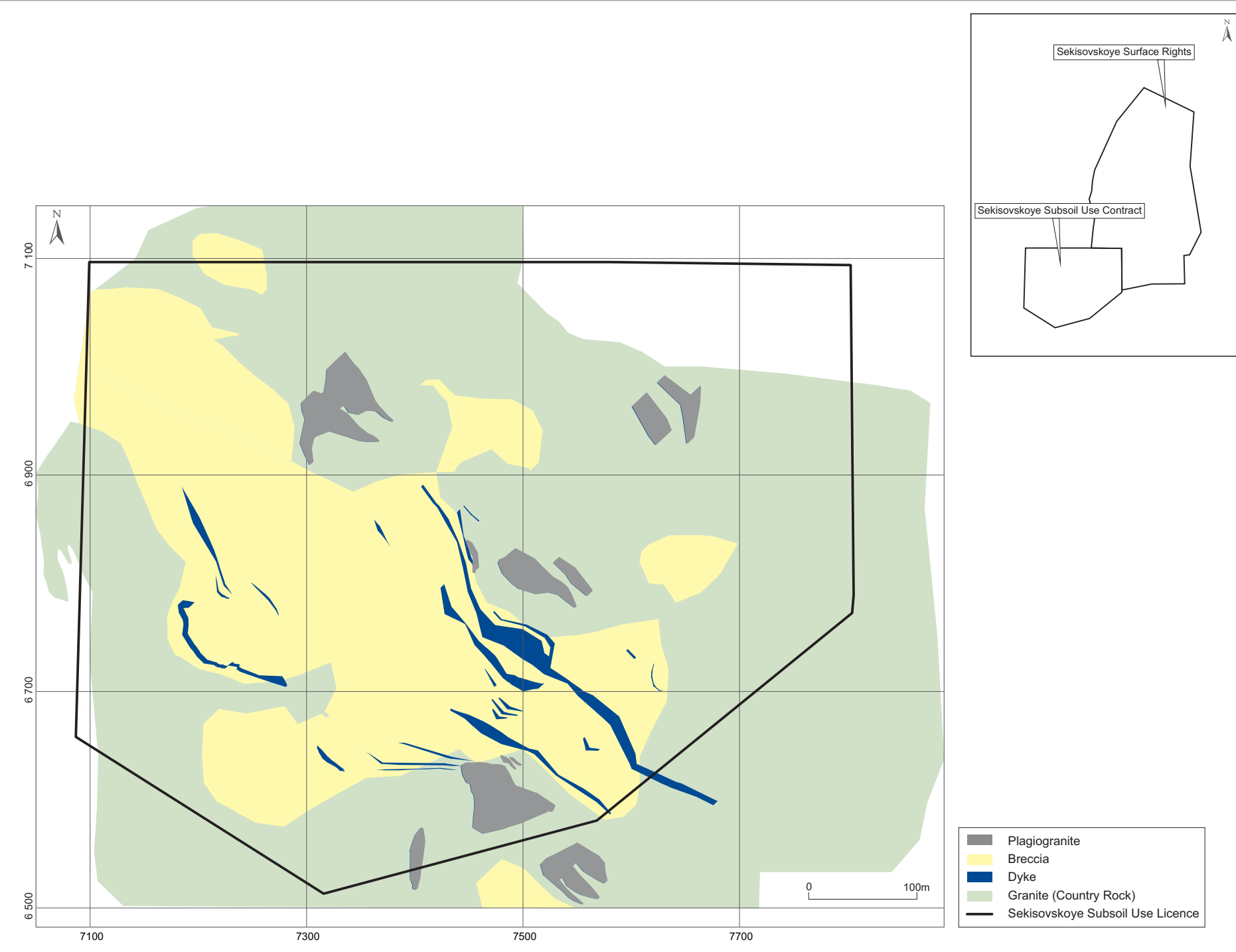


Figure 10

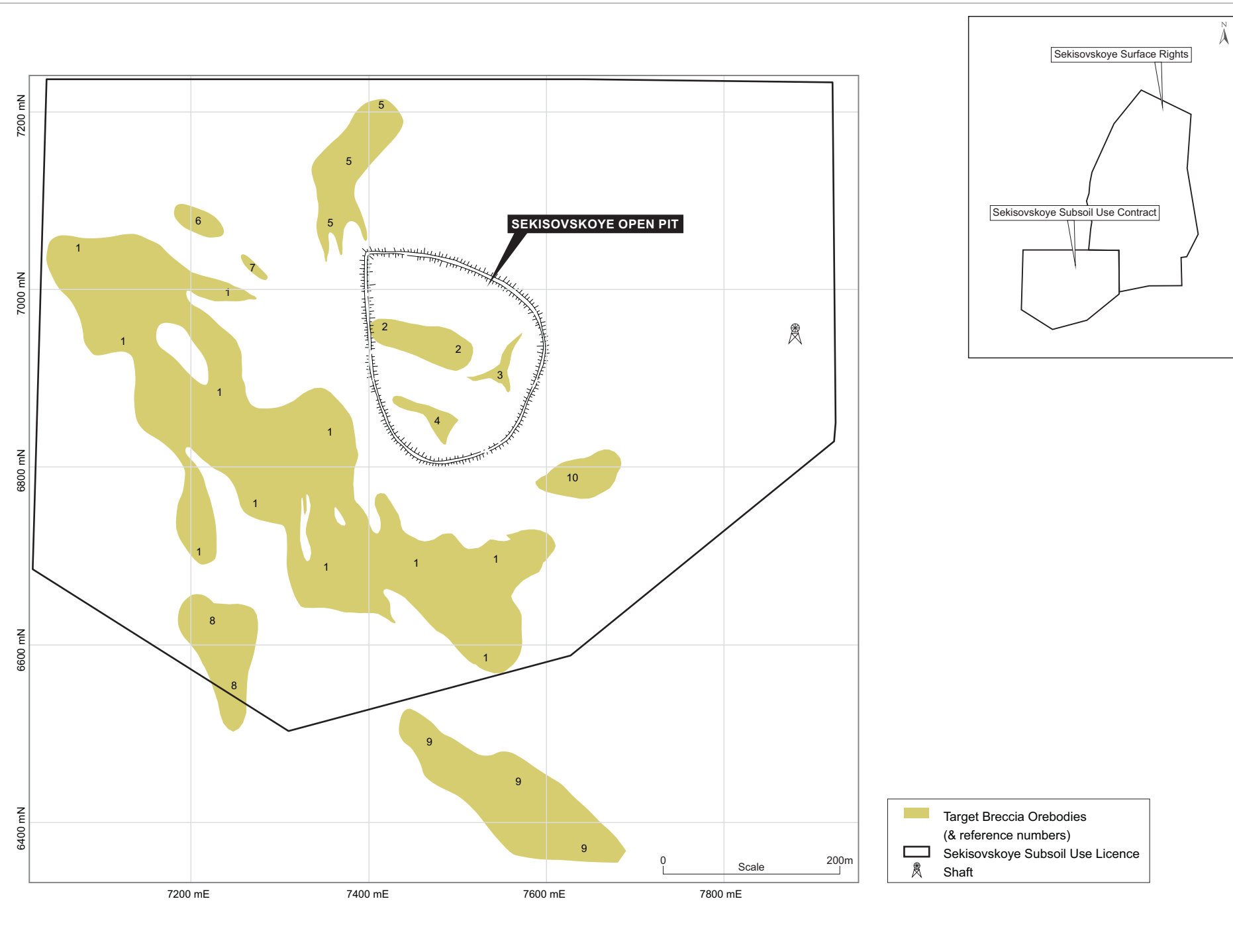


Figure 11

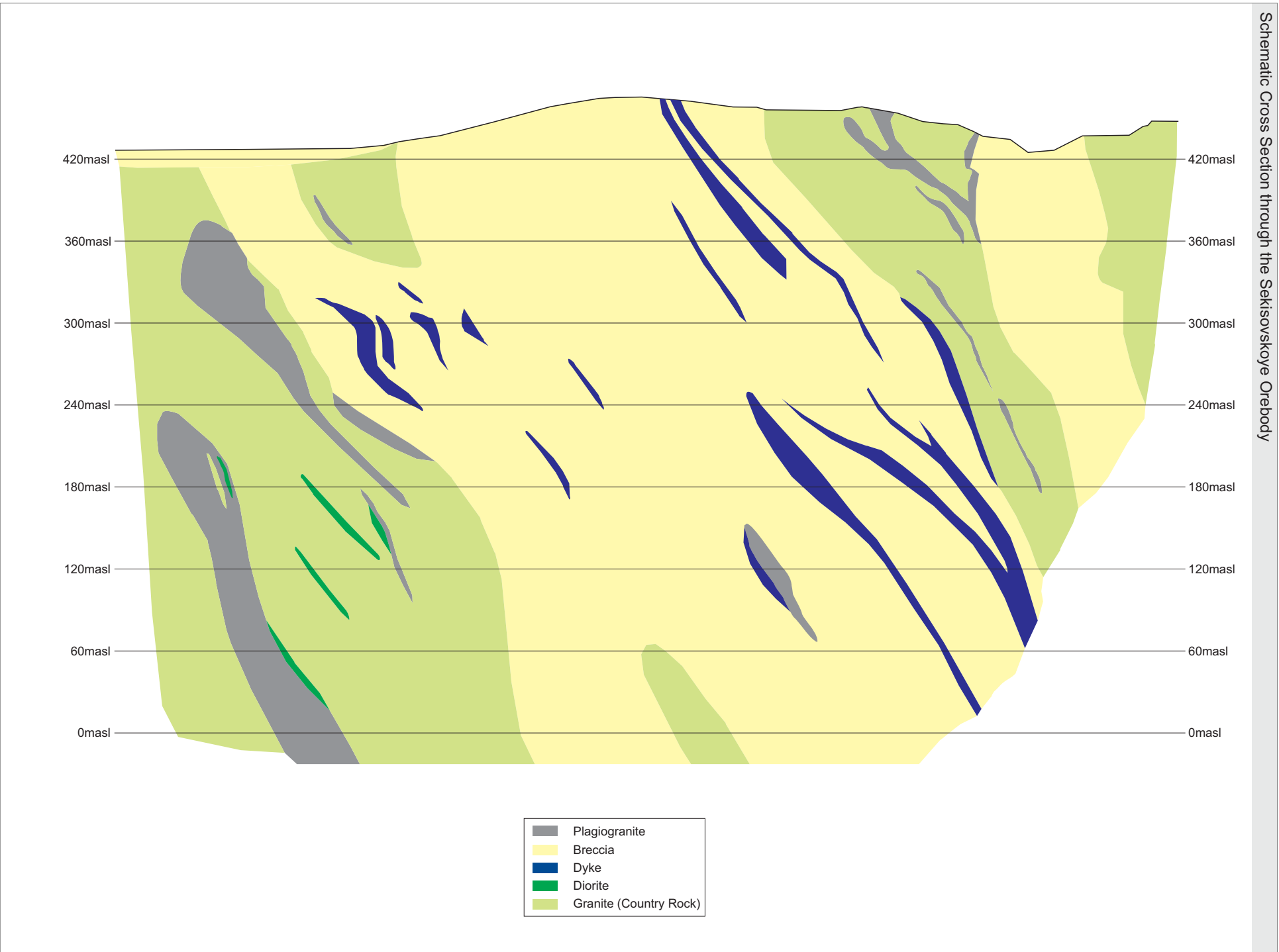


Figure 12

The gold is hypothesised to have been deposited during the final stages of the multi-phased intrusion of the Zmeinogorsky Complex and adjacent to continental scale shears and faults such as the Charysh- Terekta shear zone and the Irtysh Fault and the North-East Fault. Low-temperature, near fracture metasomatism (“beretisation”) formed in the hydrothermal breccia zones. Beresitisation is characterised by quartz, sericite, carbonate and pyrite assemblages resulting from the replacement of granitoid and sedimentary protoliths resulting in the formation of beresites and listvenites. Beresitisation is associated with the gold, gold-silver, silver-lead and uranium mineralisation. At the Sekisovskoye Mine, gold sulphide mineralization is typically hosted in the cementing mass, beresites and listvenites, of the explosive hydrothermal breccias.

Post breccia formation, dykes of quartz albite-porphyry intruded into the breccia and country rock. These dykes are typically barren, and the gold bearing sulphide mineralization is related to the cemented breccia and is not discernible in the younger dykes. Finally, hydrothermal process formed quartz and quartz-carbonate layers and veinlets throughout the orebody, partially redistributing gold-sulphide mineralization and free gold.

6. Exploration

Recent exploration refers to all exploration carried out since the project was acquired by Altyn (then Hambleton) in 2000. The Sekisovskoye Mine has undergone numerous exploration programmes including geophysics, trenching and diamond drilling. Recent exploration carried out by Altyn has focussed on infill diamond drilling. The sections to follow focus on recent exploration unless otherwise specified.

The Sekisovskoye Mine was mined by Altyn (then Hambleton) since 2008 and the open pit was mined until depletion and closure of the pit in 2016. Therefore, exploration and orebody modelling has focussed increasingly on infill drilling to improve geological confidence in the underground Mineral Resources as well as delineation of the orebody to depth. More recent exploration campaigns (since 2011) have consisted of almost exclusively underground drilling.

Exploration and mine workings are referred to based on their depth above or below sea level. The Sekisovskoye Mine outcropped at surface with an elevation of approximately +430masl. The deepest drillholes have reached depths of up to -800masl, confirming continuity of the orebody for 1.2km from surface. A vertical projection, illustrating the current development is shown in Figure 13.

6.1 Diamond Drilling

Diamond drilling by Altyn commenced in 2004 and has consisted of several drilling campaigns. A summary of the drilling that has been completed is summarised in Table 3.

Table 3: Summary of Drilling conducted at the Sekisovskoye Mine

Year	Completed by	Type	Sample Type	No. completed	Used in model
Pre-2000	Soviet Union	Surface diamond drilling	Core	320	Used in original model for open pit
2004-2009	Altyn*	Surface diamond drilling	Core	133	
		Underground diamond drilling		55	
2011-2014		Underground diamond drilling		634	Yes
2015-2019		Underground diamond drilling		348	
Total Diamond Drillholes				1,490	

* Altyn was previously known as Goldbridges and as Hambleton prior to that.

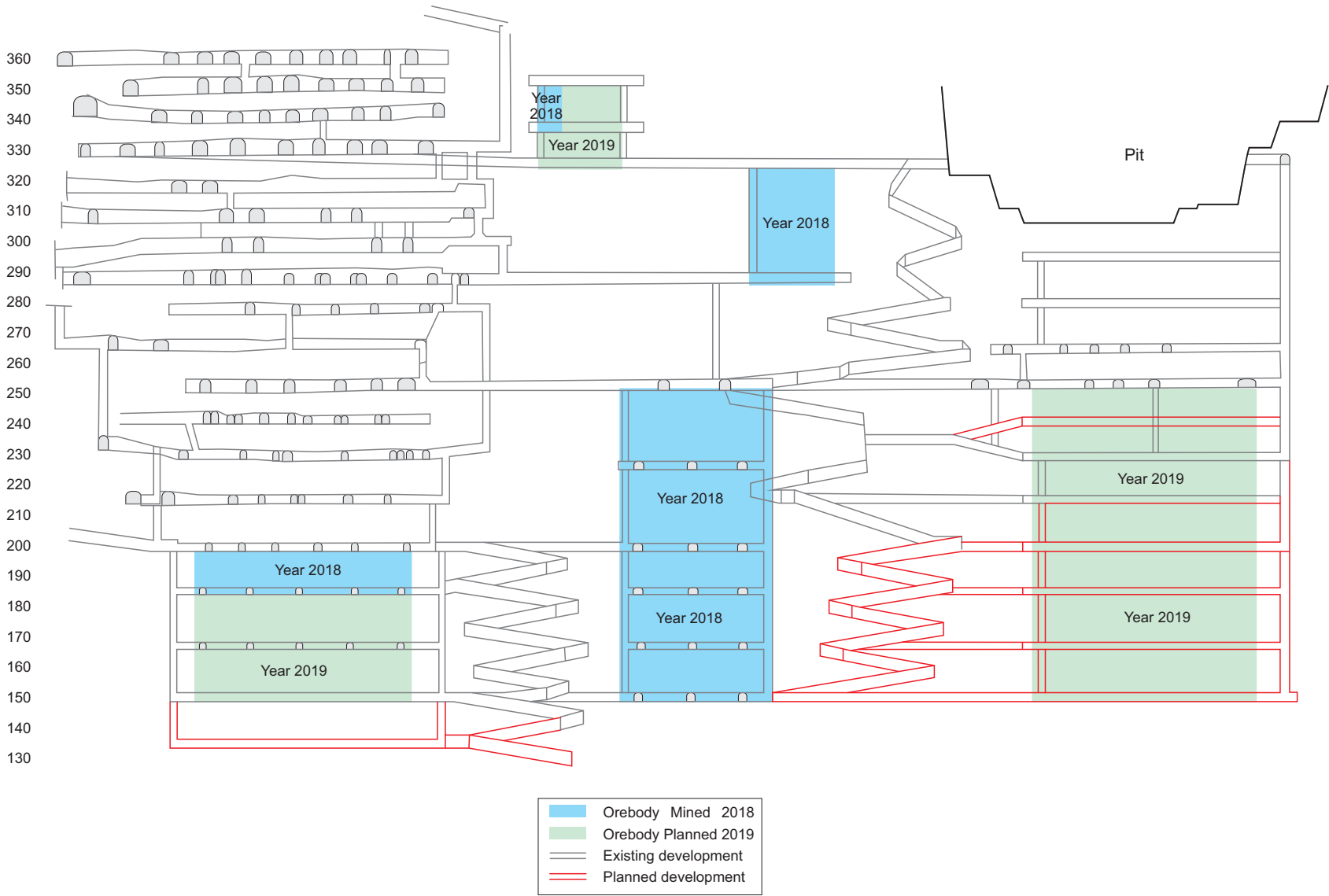


Figure 13

The 2004- 2009 drilling campaign included 188 diamond drillholes from both surface and underground and was undertaken with a number of intentions. Drilling was completed in order to determine continuity and extent of the orebody, and in particular to identify potential extensions of the orebody outside of the Soviet Union ore envelope, and to provide geotechnical and metallurgical information for mine and plant design. In addition, this campaign included three twinned holes, namely DD1, DD2 and DD3, which were logged and sampled in order to verify Soviet data from the first drilling campaign between 1976- 1984.

Results from this 2004-2009 drilling campaign were able to improve definition of the breccia contact zones within the defined orebody, to identify extensions to the defined orebody and provide improved geological confidence with regard to Karasuyskoye (also known as Area #2) north of the main deposit.

During the 2011- 2014 drilling campaign, a total of 634 drillholes were completed from the underground workings. Of these, 561 drillholes were completed before 31 May 2014 and were used for a Resource estimate in the 2014 CPR. The remaining 73 were drilled during June to December 2014 and were therefore not used for Resource estimation. The purpose of these 2011- 2014 drillholes included infill drilling, subsurface drilling to extend the orebody limits to depth and sterilization drilling. This included six special purpose holes that were used to define an Exploration Target down to a depth of -800masl, the depth of the deepest intersection.

During the period from 2015 to May 2019, a further 348 diamond drillholes were completed. Drilling was carried out underground with the intention of improving geological confidence.

Drilling results from 2011 to May 2019 form the basis of the orebody modelling and resource estimation. This includes a total of 982 diamond drillholes. The drilling layout and drillhole orientations are planned by the project geologists and are drilled in a fan configuration from an underground access point and drilling density is approximately 40m by 20m spacing.

The GKZ system classifies each targeted orebody based on its relative complexity. The Sekisovskoye Mine has been classified as a Category 3 deposit. This complexity rating influences the required drill spacing. The drill spacing at the Sekisovskoye Mine is denser than the 20m by 40m required by the State Reserves Committee to estimate C1 Reserves for a Category 3 deposit.

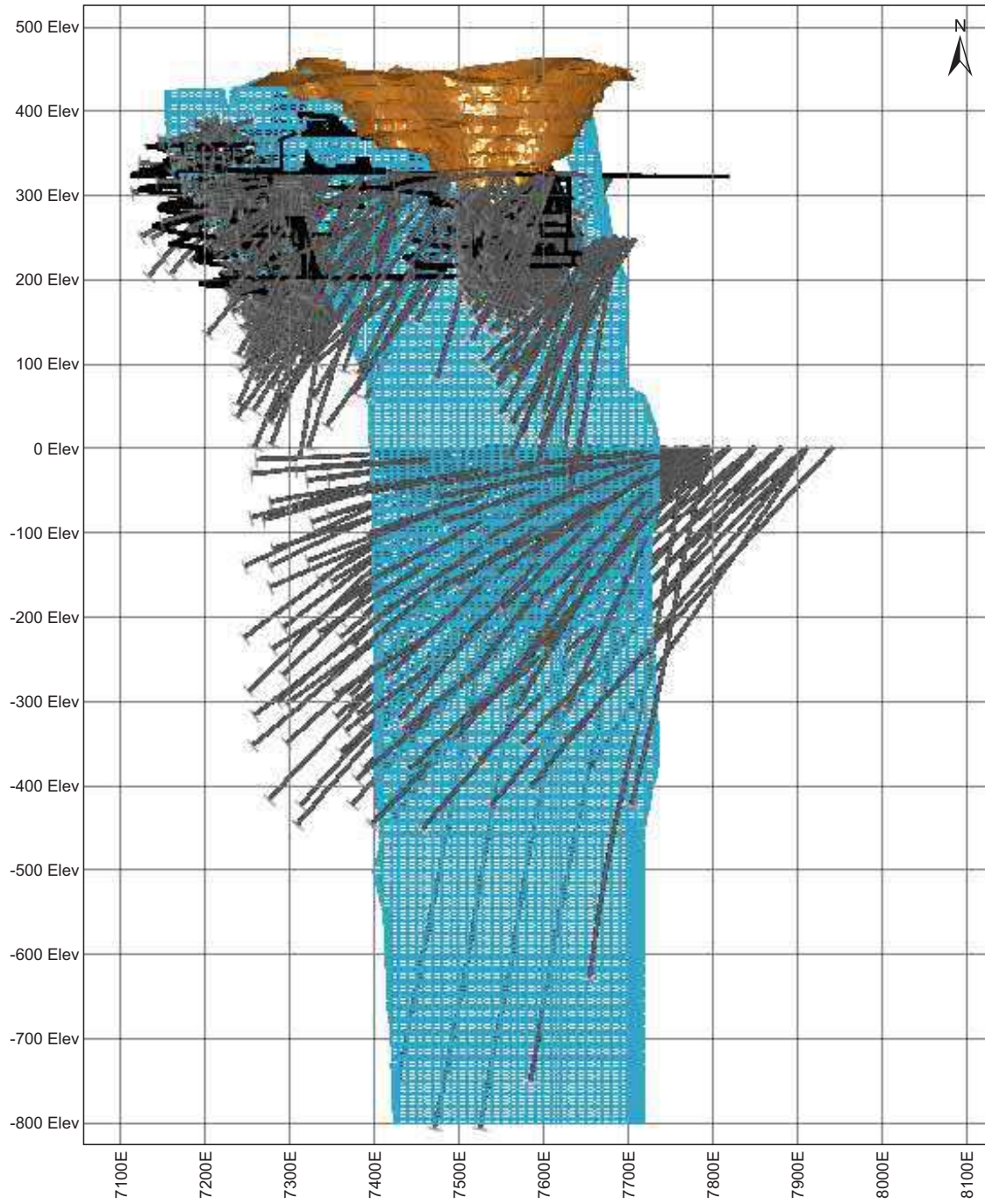
The layout of the underground drilling is illustrated in Figure 14. Exploration Results were estimated by extrapolating drillhole samples and no samples intersected the orebody to this depth.

6.1.1 Drilling and Sampling Protocols

Drilling and sampling are carried out according to Altyn's standard operating procedures. EY was not able to see a copy of the standard operating procedures during the compilation of this report. The procedures outlined below are based on discussions with the technical team on site.

Diamond drilling is carried out using an Atlas Copco DIAMEC-252 drill rig owned and operated by BaurGold. The majority of drillholes were drilled at 60° from the vertical but fan drilling configurations were also used at various angles. Overall core recovery was >95% in mineralised intersections. Core is typically 42mm in diameter but larger and smaller diameter core sizes are used where required or for special purpose drilling. Drilling positions and orientations are checked by a geologist and a surveyor using a LeicaTS-09 theodolite prior to drilling.

Location of drillholes



- Drillholes
- Underground workings
- Open Pit
- Sekisovskoye Block Model

Core is laid out into wooden core boxes, which are labelled with the drillhole ID, box number, drillhole location, drillhole orientation, core recovery and start and end of the drilling interval. Cardboard inserts inside each core box duplicate this information. Core boxes are stored at a core storage facility in the basement of the onsite laboratory. It is understood that some of the core boxes in the storage facility are in poor condition.

Core is logged by the project geologists under supervision of the chief geologist. Logs are handwritten underground at the drill site and each log includes the drillhole ID, drilling date, drillhole position, lithology, start and end of sampling intervals, sample numbers, sample lengths and sample weights.

Core logging and initial sample preparation is completed underground. Each core box is then photographed prior to splitting of core and sampling. Core boxes and remaining core are then transported to the core yard at the core storage facility. Between 2008 and 2017, core was split into halves before sampling; however, after 2017 the full core has been sampled.

Samples are then taken from and to the contacts of mineralisation, often along the entire core length. Samples are typically 1m in length except in cases where changes in lithology, hydrothermal alteration or mineralisation are evident. In these cases, sample lengths may be reduced based on the geologist's discretion up to a minimum length of 0.25m.

Where core is halved, the remaining half of the core is returned to the core boxes and stored at the core storage yard. Samples are bagged, labelled and sealed individually with a cable tie and then grouped in large boxes holding up to 30kg of sample that are sent to the MMC Altyn laboratory ("the Altyn laboratory"), renamed from Altai Ken-Baiytu in 2017.

6.1.2 Surveying Methods

Upon completion of drilling each drillhole, the surveyor verifies the results against the plan. Furthermore, the drillhole orientation and downhole deviations are surveyed using an Ez-Shot 100075. The survey is carried out at 20m intervals and measures azimuth and dip after completion of the drillhole.

The Soviet Union considered mineral assets to be strategic and locations were often not published or reported in local datums that are related to a particular year. The requirements are set out in the "Instruction for geodesic support of geological exploration works" published in 1984. The Sekisovskoye Mine carried out surveying based on this system using the 1942 system of co-ordinates.

No downhole geophysics or wireline logging has been completed.

6.2 Underground Channel Sampling

Altyn routinely takes underground channel samples. While these are analysed, the results have not been included in the geological model.

7. Laboratory Analysis

7.1 Sample Preparation and Analysis

Sample preparation and analysis are carried out according to Altyn's standard operating procedures. EY was not able to see a copy of the standard operating procedures during the compilation of this report. The procedures outlined below are based on discussions with the technical team on site.

Altyn runs its own laboratory, the Altyn laboratory, a subsidiary of Altyn that has been operating at the Sekisovskoye Mine since 2010. All samples taken since the 2010 exploration drilling campaign commenced have been sent to the Altyn laboratory. The Altyn laboratory has been certified by the Kazakhstan Institute of Metrology to undertake analytical sampling. Certificate No 2 was issued to MMC Altyn and is valid from 7 November 2016 to 4 April 2021. The Competent Person visited the Altyn laboratory in 2014 during a previous assignment.

Historically, samples taken between 1976 and 1986 were treated at Predgornenskaya, Ust-Kamenogorskaya, Priirtyshskaya, Semipalatinskaya exploration companies, and in the central laboratory of Vstkazgeologiya Production Geological Association. Samples taken between 2004 and 2006 were treated at the crushing department of the Geochem Exploration Company. These samples are not included in the database.

Samples are received at the Altyn laboratory at their sample receiving site where the samples are checked, weighed and then dried prior to being prepared for sampling. Samples undergo two stages of crushing during which samples are reduced and duplicates are taken. The duplicate samples are labelled and stored. Figure 15 provides a flow sheet illustrating the sample preparation methodology used.

Samples are then assayed to determine the gold content. Gold analysis was completed using fire assay on 30g aliquots of rock pulp with an Atomic Absorption finish. The oversize fraction and two 30g aliquots of undersize were fire assayed. The gold grade representing the original rock sample was determined as a weighted average of the oversize and two undersize fire assay results. Silver was analysed using aqua regia digestion and an Atomic Absorption finish.

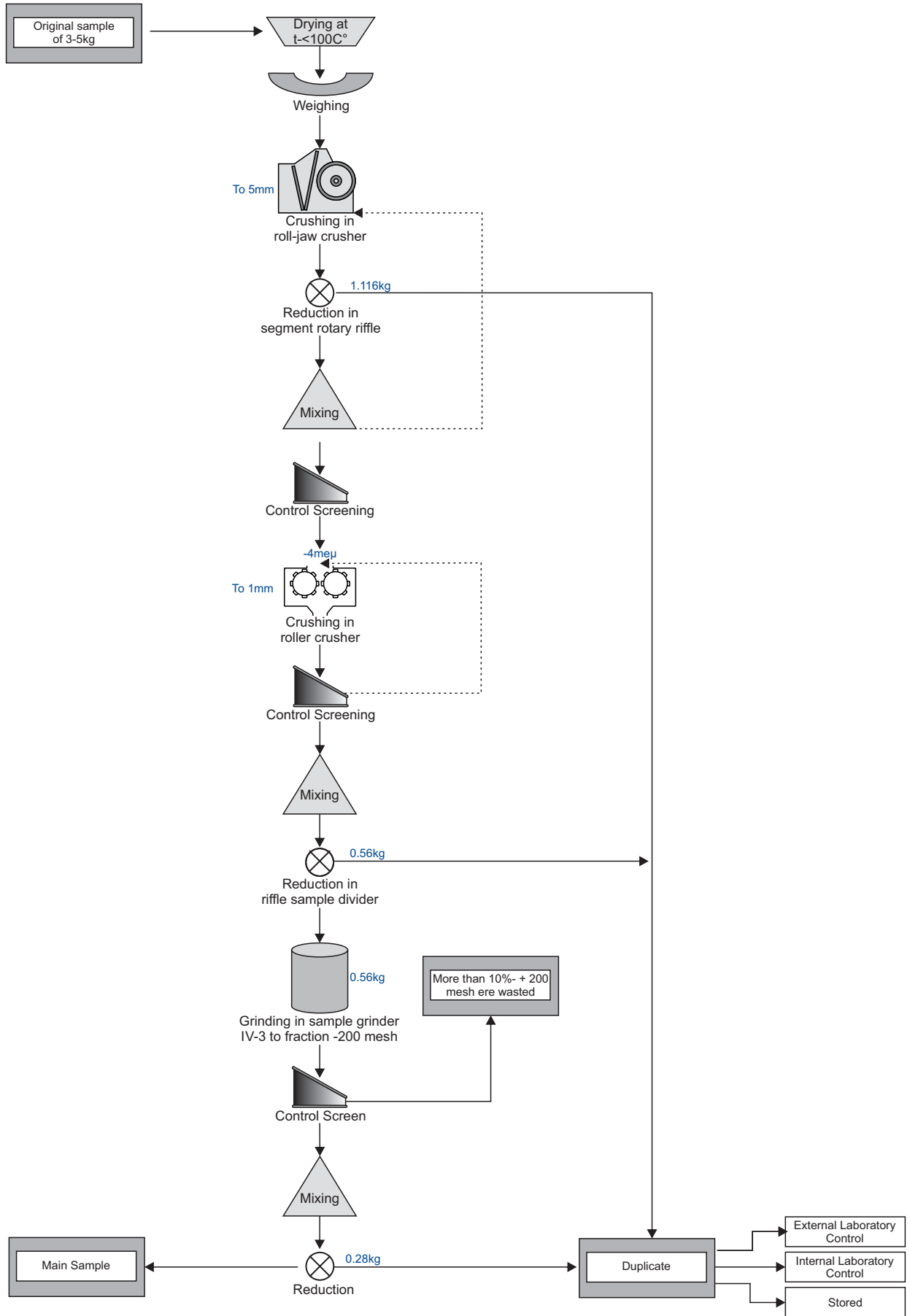
All historical samples were analysed for silver content using aqua regia digestion with an Atomic Absorption finish. A study that was carried out by the mine using a total of 800 samples identified a relationship between gold and silver. Silver content is now estimated using regression based on the gold content and is no longer assayed on a regular basis.

Altyn includes duplicates, blanks and certified reference material into each sample batch as per their quality control procedure that is outlined in Section 7.4. During the period between 2011 and June 2018, Altyn has sent a total of 6,634 duplicate samples to the referee laboratory, the Topaz laboratory, located in Ust- Kamenogorsk.

The Topaz laboratory is an independent laboratory that is ISO 17025:2007 and ISO 9001:2000 accredited.

An external audit of the duplicates, blanks and certified reference material was completed in June 2018 and the results are summarised in Section 7.4.1.

Sample Preparation Flow Sheet



7.2 Density

Relative density was measured for each sample at the adjacent Sekisovskoye Mine using the Archimedes principle until 1996. Using a total of 2,483 sample results, the chief geologist at the time completed an assessment of the sample density results. Samples were reviewed based on density with respect to lithology type. The study found that the average density of waste rock, including diorite and granites, is 2.82 and that the average density of mineralised zones, such as breccias, is 2.83. This assessment was repeated in 2004 using eight samples per lithology type. The 2004 data did not have significantly different density results and a standard density of 2.83 is applied to all mineralised zones. It is recommended that the density of all DD samples is measured before analysis to ensure that the density used at Teren- Sai is representative.

7.3 Security

Core boxes are transported by truck to the laboratory where the project geologists finalise the logging and sampling procedures. Samples are bagged and sealed individually with a cable tie and then grouped in large boxes holding up to 30kg of sample that are sent to the Altyn laboratory. The samples are checked by the laboratory upon receipt. Duplicate slurries and samples remaining after sample reduction are stored, bagged and in boxes, in the basement of the laboratory along with the core samples.

7.4 QA/QC

QA/QC is undertaken during the various stages of sample preparation. These include cleaning of the crushing equipment with compressed air and a vacuum cleaner between each sample. After every 10 samples, a blank sample is passed through.

After the samples have been crushed, control samples are added to each batch of samples. Control samples include the following:

- ▶ one certified reference sample per 100 samples. Three types of reference material were used;
- ▶ each batch contains 5% duplicate samples; and
- ▶ one blank sample is inserted per batch of samples.

Material from reduced samples and duplicate slurry samples are stored in the basement of the laboratory with the core boxes.

7.4.1 Audits

An external audit of the laboratory results was undertaken in June 2018 by consultant SRPI Qaztauken LLP ("SQL"). SQL undertook a statistical review of the quality control samples in order to identify and quantify possible errors. The review included data from 2011 to June 2018 and consisted of analysis results of duplicates (internal and external), certified reference material and blanks.

In order to determine the repeatability of analyses, SQL undertook a statistical review of the internal and external duplicate assay results. Internal duplicates include samples that were split and the duplicate sample analysed at the Altyn laboratory. External duplicates are samples that were analysed at the referee laboratory, Topaz.

The data included a total of 6,634 duplicate samples from each laboratory. Each dataset was compared using statistics such as minimum, maximum, mean, standard error, median, mode, mean square deviation, sampling variance, etc. SQL concludes that repeatability at both laboratories is considered satisfactory.

In order to determine the accuracy of analyses, SQL undertook a statistical review of the certified reference materials assay results. The data included a total of 332 certified reference sample results. The results of the analyses were compared to the standard results expected. The limit was considered ± 3 standard deviations around the mean. SQL found no samples to be outside the limits and concluded that the accuracy was considered satisfactory.

In order to determine if there is background bias or contamination present at the laboratory, SQL undertook a review of the blank assay results. SQL found that the results of the blank samples have a deviation of less than 1% and concluded that the bias is considered satisfactory.

8. Database Management

8.1 Data Acquisition and Validation

The database includes both historic and recent samples from surface diamond drillholes, underground drillholes, trenching and underground channel sampling; however, the data used for orebody modelling consists of recent diamond drillhole data only as this is most relevant to the orebody at this stage of development.

Hard copy logs are captured into a Microsoft Excel database. Assay results from the laboratory are incorporated into an Excel database upon satisfactory performance of QA/QC samples. Altyn does not use any commercial database management software, however it is understood that senior geological staff verify the captured fields. The orebody modelling software, Datamine Studio3 ("Datamine") will automatically flag duplicate records, record overlaps and illogical records such as negative assay values or text in numerical fields upon importation into the package.

The data used for orebody modelling includes a total of 982 drillholes completed between 2011 and May 2019. This data is relevant to the underground depth extensions that are being targeted.

8.2 Database Management

Apart from the hard copy data stored at the Altyn offices, the exploration database is managed primarily by the group geologist through the software programme Datamine.

All geological data, including drillhole logs, photos of core, analytical data and Datamine data, is stored weekly on the server of the company. All geological data is also transferred to the separately stored hard disk on a monthly basis. The disk is stored in Ust-Kamenogorsk.

9. Orebody Modelling and Results

EY has reviewed the data used in the orebody modelling and estimation procedure and the approach is considered reasonable to the style of mineralisation and considers the items and guidelines outlined in the JORC Code. EY has not re-estimated the Mineral Resources but has conducted checks to confirm that the estimate is a reasonable representation of the deposit. EY has relied upon data provided by Altyn for determination of the Mineral Resource.

9.1 Database and Data Validation

A drillhole database, dated 31 May 2019, consisting of 982 drillholes was used for the Mineral Resource estimation, which consisted of the following tables provided in Excel format:

- ▶ collar;
- ▶ survey;
- ▶ assay; and
- ▶ lithology.

The database of exploration information is a combination of data collected over the life of the operations and during the original Soviet exploration phases. Exploration and orebody modelling has focussed increasingly on delineation of the orebody at depth and on infill drilling to improve geological confidence in the underground Mineral Resources since closure of the open pit. More recent exploration campaigns have consisted of almost exclusively underground drilling. Based on these factors, drilling prior to 2011 is no longer included in the database used for orebody modelling.

The underground diamond drillholes are captured into the database and are the basis for estimation. Other samples are not included in the database for resource estimation.

On importing the Excel database into Datamine, the typical database validation checks that were completed include flagging of duplicate records, overlaps and illogical records such as negative assay values or text in numerical fields. The data was further checked for outlier values and spatial errors through univariate statistics, histograms and cumulative frequency plots. On inspection, the collar positions of the drillholes plotted in the expected locations. Analytical outlier values were capped in the database before the estimation process. As a result of the validation processes carried out, the database is considered an accurate representation of the original data provided.

9.2 Orebody Modelling and Domain Interpretation

Orebody modelling was conducted by Mr V. Redozubov-Gorskiy using Datamine modelling software. Mr V. Redozubov-Gorskiy is a full-time employee of Altyn with 30 years' experience as a geologist and 20 years relevant gold and copper experience. Mr V. Redozubov-Gorskiy has been employed as the chief geologist at the Sekisovskoye Mine since 2011 and is the chief geologist for Altyn's other projects, including the Teren-Sai Project. Mr V. Redozubov-Gorskiy is supported by Mrs Z. Orazayeva, who is responsible for the estimation of Mineral Resources at the Sekisovskoye Mine.

The Sekisovskoye Mine is targeting a brecciated intrusive pipe as illustrated in Figure 10. The pipe is sub-vertical in nature and has a diameter of approximately 650m. Drilling has been completed on an approximately 20m by 40m spacing. Drill spacing becomes less dense at depth and is dependent on access through underground areas, where it is typically completed in fan configuration. Drilling has confirmed the deposit to continue to a depth of approximately - 800masl (approximately 1.2km below surface) through sampled intersections.

The gold content, while limited to the pipe in extent, is highly variable in nature with a lack of identified correlation between gold content and lithology. Gold mineralisation is hosted primarily in hydrothermal veins and tends to be smeared across the lithology (see Section 5.3).

The pipe has been subdivided into eleven sub vertical ore zones within the breccia pipe. While there are eleven ore zones identified, orebody modelling has been completed using one domain. The domain is based on the boundaries of the breccia body due to the lack of correlation between lithology and grade. The breccia pipe is modelled as one domain that extends from surface (approximately +430masl) to the -800masl.

The orebody model extends from surface (approximately +430msl) to a depth of -800masl, based on the deepest drillhole intersections. The breccia is then extrapolated to -1,500masl, which is 700m past the deepest intersection. The depth extension is supported by early geophysical data that suggests that the breccia orebody continues to a depth of 2km. The block model is then created from surface to a depth of -800masl, where it is supported by drilling data. An overview of the orebody and block model is illustrated in Figure 16.

The domain boundary is a hard boundary and therefore only data from within the domain is used to estimate blocks within the domain. The sample data has been clipped to the breccia orebody and topography wireframes, and modelling and estimation are limited to the boundaries of the breccia orebody. Separate wireframes are constructed based on the surveyed mined out open pit and underground areas and mined out blocks are removed from the orebody model manually. There are no major changes to the domains used in previous estimates. An overview of the geological model and various sections through the block model are illustrated in Figure 16, Figure 17 and Figure 18.

Data from 2011 onwards is used for orebody modelling and mined out blocks are excluded from the Mineral Resource estimate manually using a schedule of depletions per level. All remaining unmined levels and blocks are exported from the block model for the reporting of Mineral Resources. An export out of the block model for the remaining total unmined levels was completed by EY for comparison with the Altyn estimated Mineral Resource and the difference is not considered material.

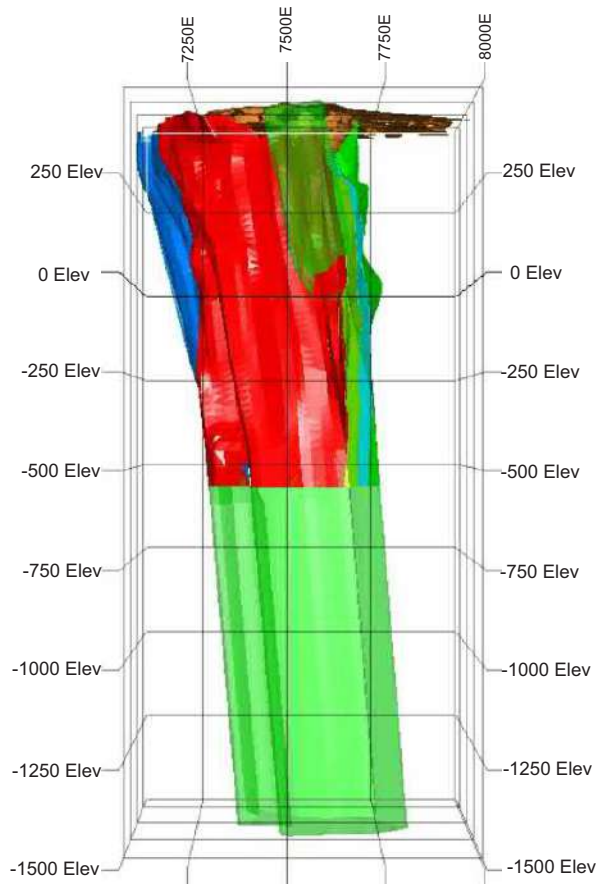
The Sekisovskoye Mine has been operating for a number of years and has a history of estimation and production figures. Monthly reconciliation of production versus the resource estimation is completed by Altyn to validate the geological model. EY has not been able to review the reconciliations completed by Altyn.

After the mining block has been extracted, a certificate showing the comparison of the mined block with the estimated ones is prepared for reporting to the State. For the period of 2011 to June 2018, Altyn reports that the differences in individual mining units for the gold content did not exceed 12.0% and is on average, 9.8%. EY has not been able to review the reconciliations completed by Altyn.

9.3 Estimation Methodology

A block model was constructed in Datamine that best fits the orientation of the mineralisation for the Sekisovskoye Mine. The block sizes are based on the spacing of drillholes, sample support and mine configuration. In this case, underground blocks were modelled at 10m x 10m x 10m sizing in the X; Y; Z; directions respectively, and the modeller allowed for sub-celling down to a 1.25m x 1.25m x 0.5m sub blocks.

The volume of each block is determined based on the block dimensions. The density is then used to calculate the tonnage of each block. The density used is 2.83 as outlined in Section 7.2.



Block Model	
Blue	Orezone 1
Light Blue	Orezone 2
Green	Orezone 3
Light Green	Orezone 4
Yellow	Orezone 5
Orange	Orezones 6-8
Red	Orezone 10
Dark Red	Orezone 11
Orebody Model	
Green	Breccia

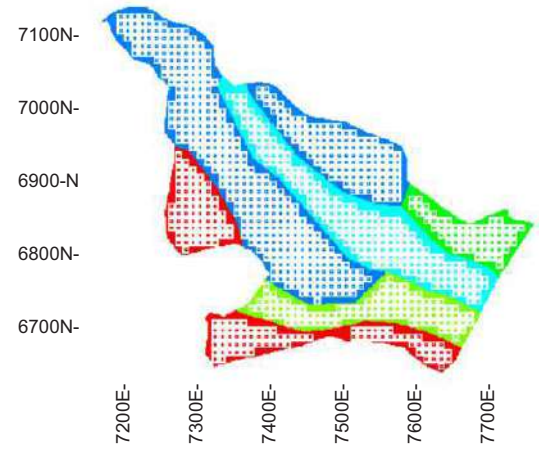
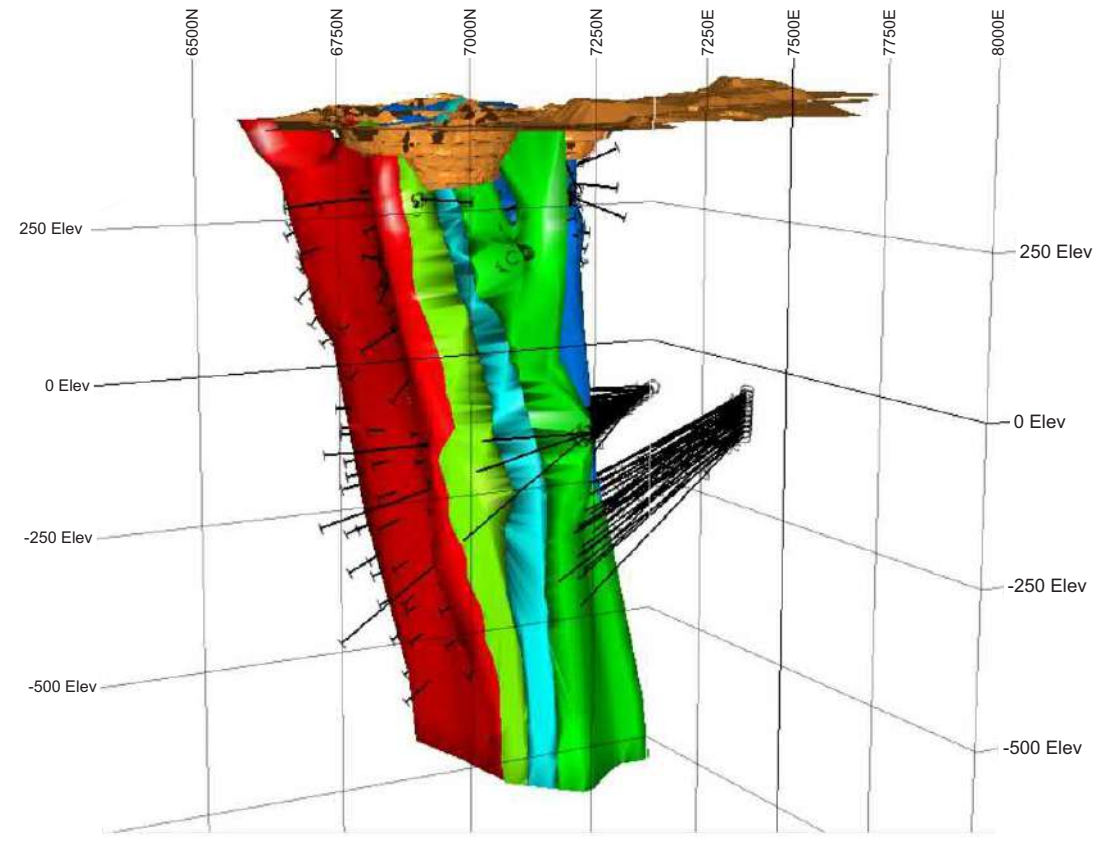
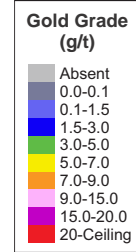
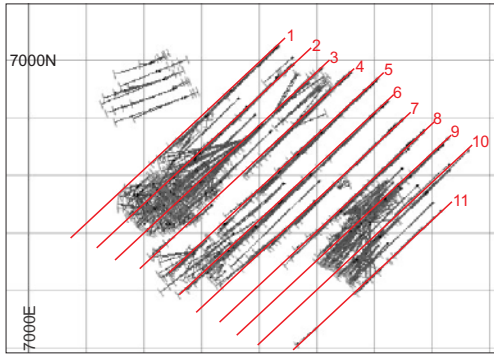
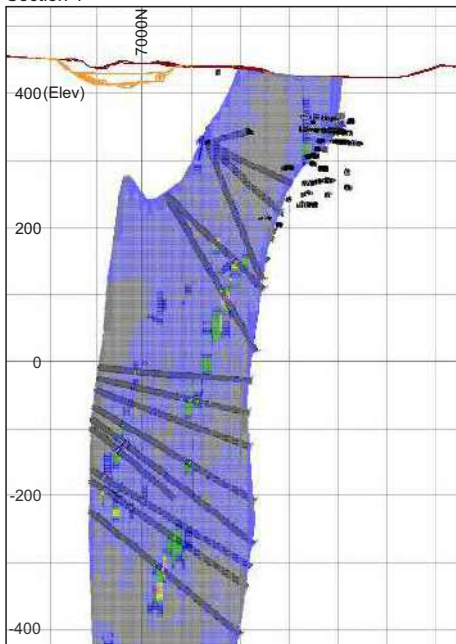


Figure 16

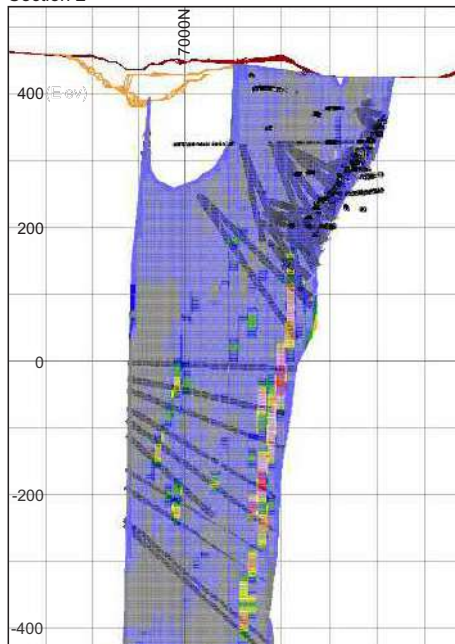
Sections through the Sekisovskoye Block Model



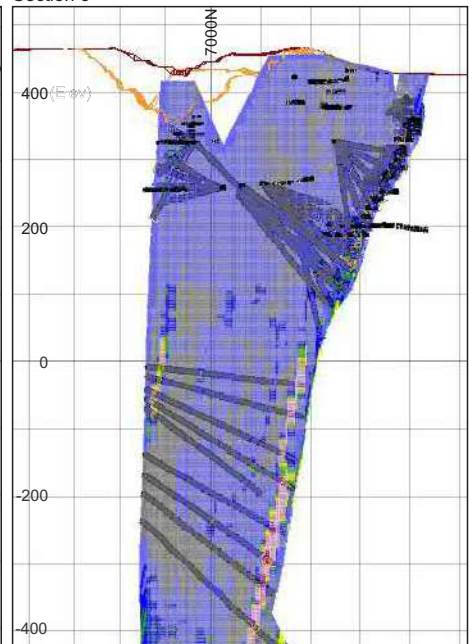
Section 1



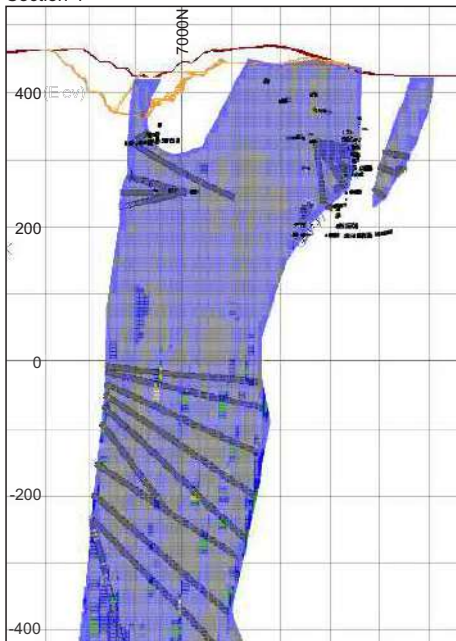
Section 2



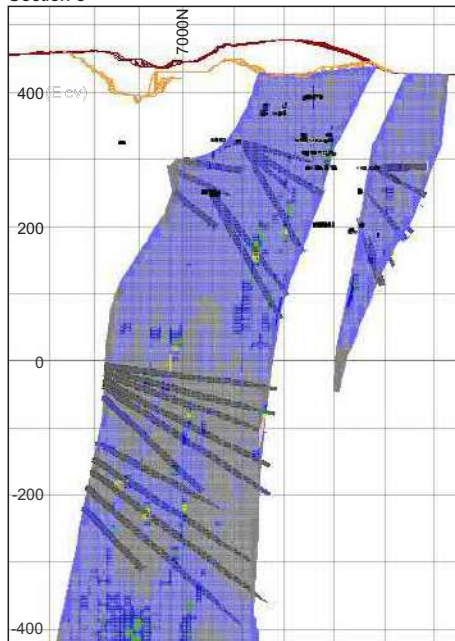
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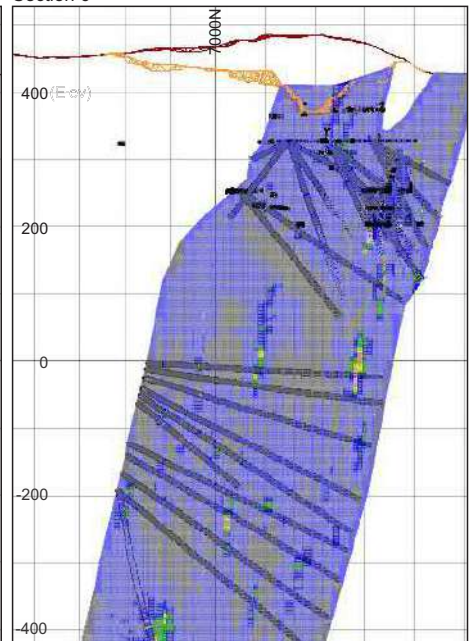
Section 4



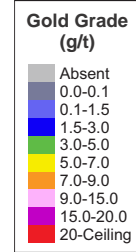
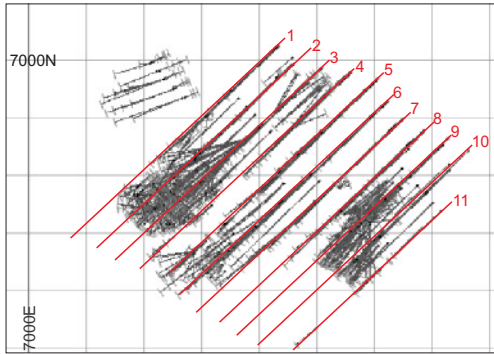
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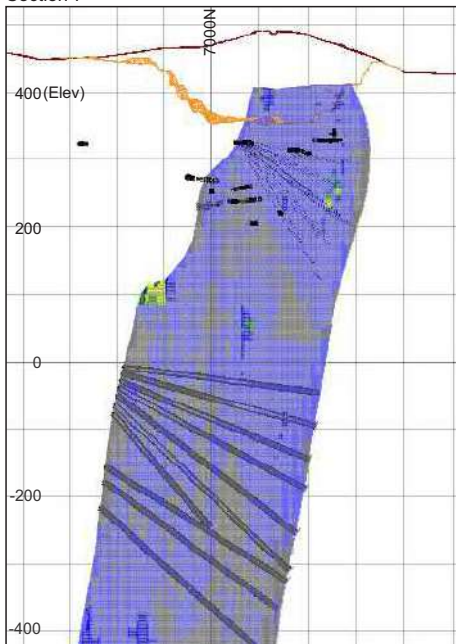
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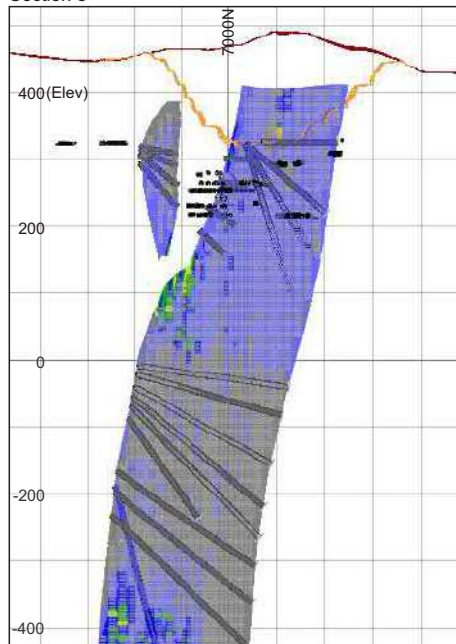
Sections through the Sekisovskoye Block Model



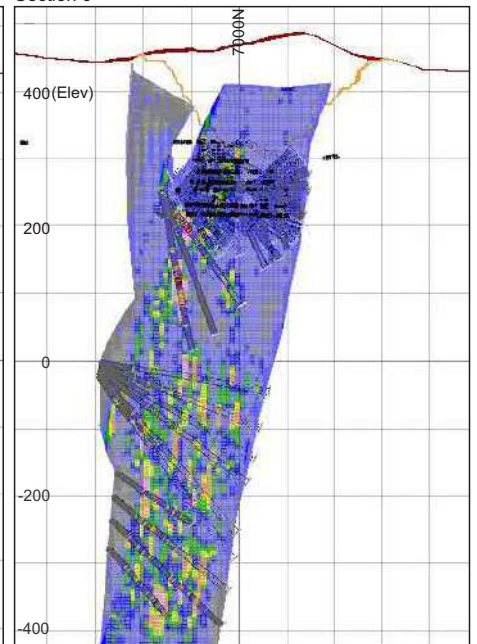
Section 7



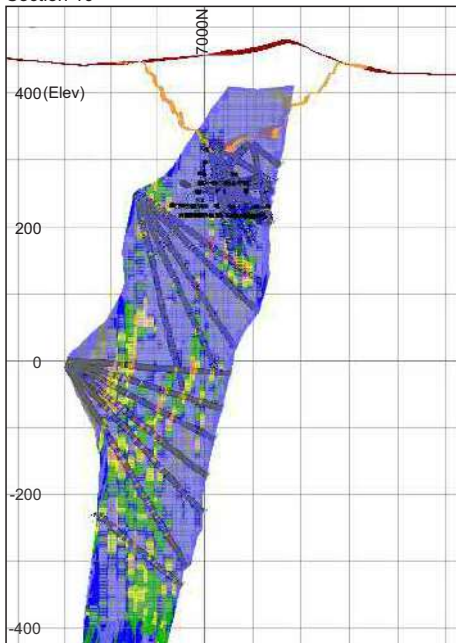
Section 8



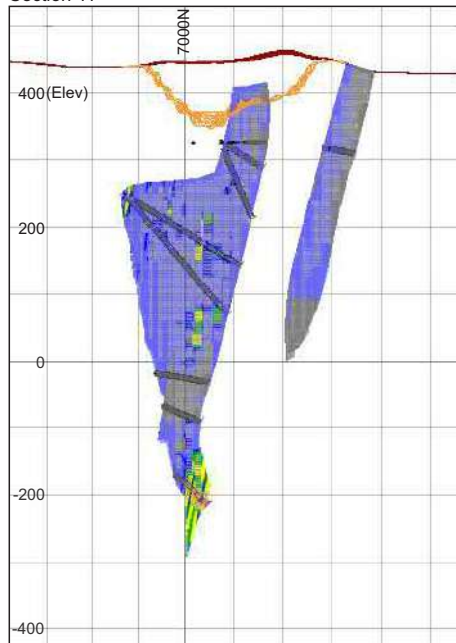
Section 9



Section 10



Section 11



Gold content is then interpolated into each block using Ordinary Kriging. This estimation method is completed by populating and interpolating into blocks within closed wireframes. Silver grade is estimated using regression based on the gold estimate.

Search ellipses, based on the variogram, were used in order to collect data for the block interpolation in the perceived directions of longest continuity. The search ellipse for the Sekisovskoye Mine is 50m x 10m x 75m with a strike azimuth of 312° and a dip angle of 80° northeast. A minimum of three and a maximum of 30 samples were required to estimate a block in the first search volume. Should enough samples not be sourced by the first search, the search was expanded to a minimum of two samples and then to three samples.

9.3.1 Validation of Estimates

The block models were validated by:

- ▶ visual examination of the input data against the block model estimates; and
- ▶ swath plot validations; and
- ▶ comparison of the input data statistics against the model statistics.

The block model was examined visually in sections to ensure that the drillholes grades were locally well represented by the model. This is illustrated in Figure 17 and Figure 18.

EY has compared the statistics of the raw data with that of the estimated data from the block model. EY has used swath analyses to compare the spatial correlations of the estimates to the composite data. Swath plots in the X, Y and Z directions are illustrated in Figure 19, Figure 20 and Figure 21, respectively. These show that the estimates are smoothed in comparison to the composite data but represent the overall grade trends well.

Figure 19: Swath Plot in the X Direction (20m slices)

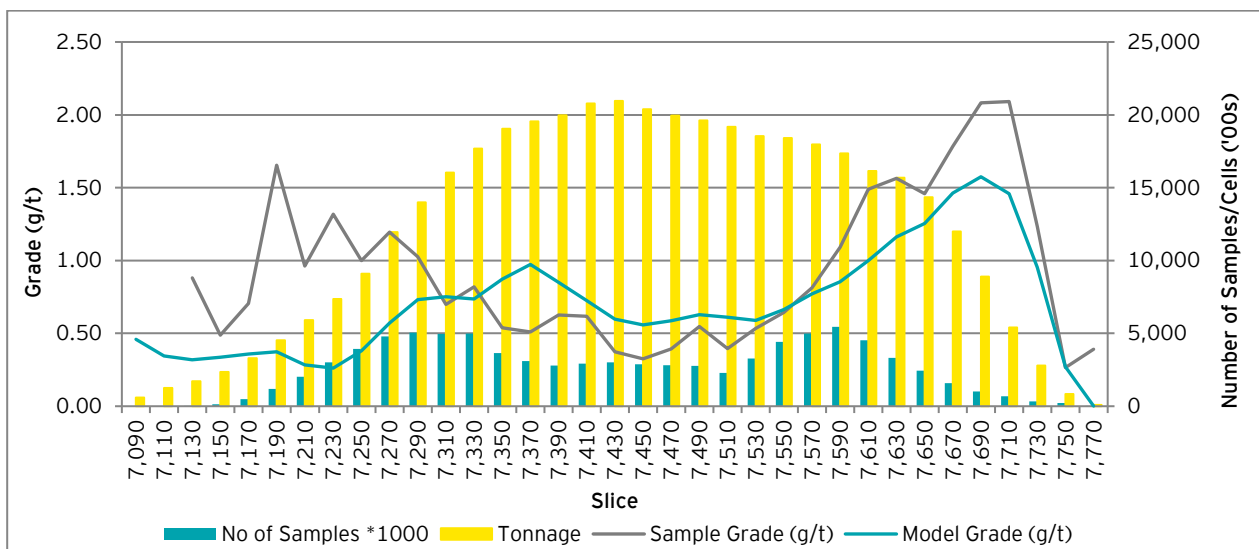


Figure 20: Swath Plot in the Y Direction (20m slices)

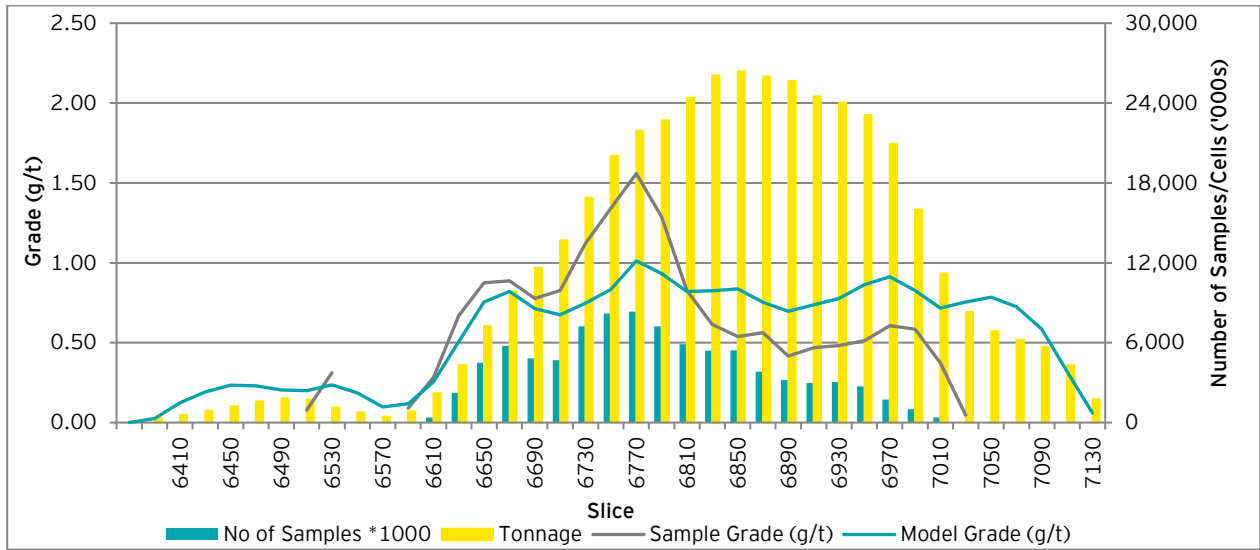
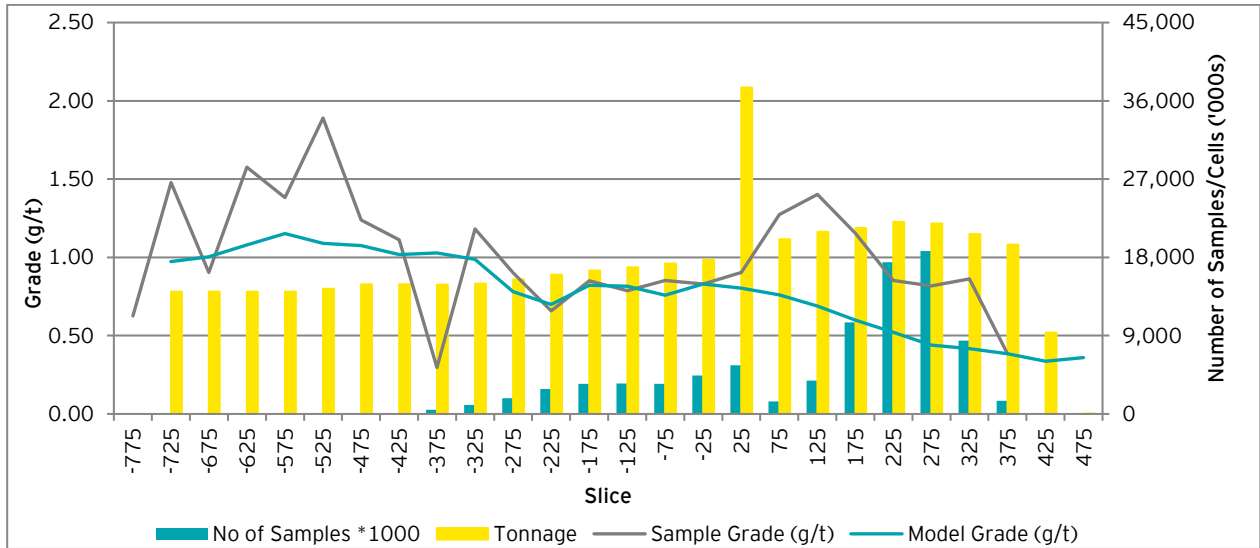


Figure 21: Swath Plot in the Z Direction (50m slices)



The grade estimate in the geological model increases with depth based on a limited number of samples, therefore it should be noted that there is risk associated with the achievability of grade targets, particularly at depth.

Comparisons between the 1m composite data and the model grades are shown in Table 4. The model grade is lower than the data mean, there being possible under-estimation in the model. Gold grade estimates in the block model increase with depth based on a limited number of samples.

Table 4: Drillhole Data and Model Grades Comparison

Variable	Data Mean	Model Mean
Gold Grade (g/t)	0.90	0.67

9.4 Compositing and Capping Extreme Values

Samples have not been composited. Approximately 95% of the samples in the database were originally 1m in length. EY recommends that compositing of samples be considered to ensure consistency of data in the database and to eliminate systematic bias due to differences in the length of samples.

All extreme values have been capped. The basis for the cap was based on the decile method. This involves a frequency distribution analysis of the assay results in the database. Based on the analysis, a maximum of 60 grams per tonne (“g/t”) has been selected and all samples higher than this are replaced with 60g/t. Capping of extreme values is carried out on the full dataset of all samples within the modelled ore bodies.

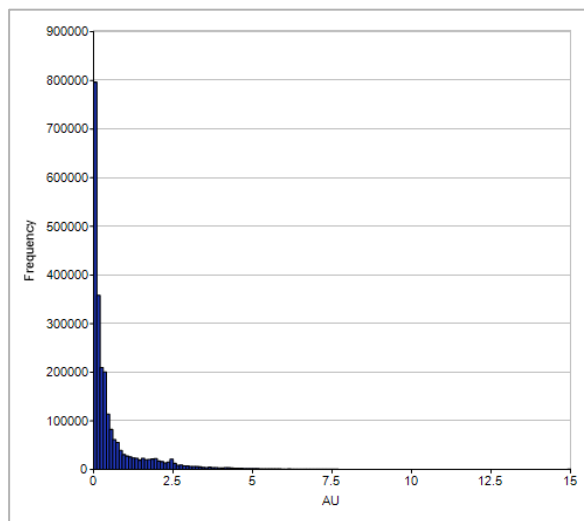
The choice of a capping value is subjective but EY considers the selected value to be reasonable based on the small proportion of data affected. Less than 1% of the samples returned a value greater than 60g/t and therefore the impact on the estimate is not expected to be material. The distribution of gold grade is illustrated in Figure 22.

The summary statistics show that the coefficient of variation (“CoV”) is high as summarised in Table 5. The high CoV of the data indicates that the grade is unevenly distributed.

Table 5: Summary of Drillhole Statistics for the Estimation Data

Variable	No of Samples	Minimum Value	Maximum Value	Mean	Variance	Std Deviation	CoV
Gold Grade (g/t)	89,089	0.0	159.0	0.90	12.83	3.58	397.20

Figure 22: Gold Grade Histogram



Cut to 15g/t for illustrative purposes.

9.5 Variograms

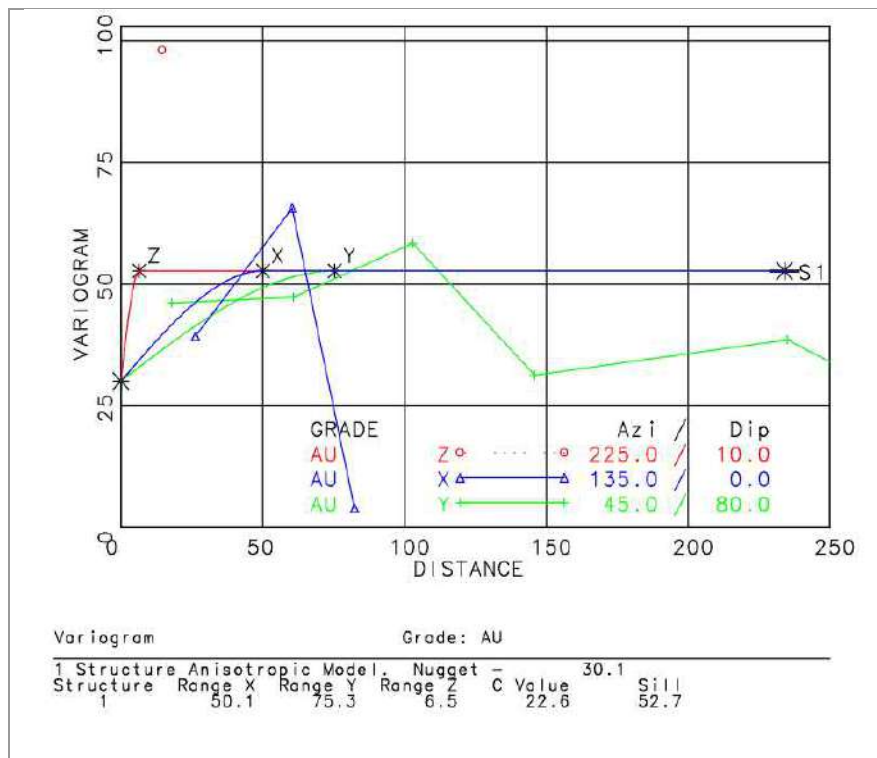
The objectives of variography are to establish the major directions of continuity and to provide the variogram parameters required for geostatistical grade interpolation. The experimental semi-variogram is the basic diagnostic tool of geostatistics. It is a mathematical function used to quantify the spatial variation and correlation of sample grades in various directions in a deposit.

Variography was undertaken to model spatial continuity of gold grade and was carried out using the sample data. The nugget modelled from the downhole experimental variogram.

A number of experimental variograms were run in 10° increments to determine the major directions. The variogram was used to estimate the grade of each block in the block model using Ordinary Kriging and formed the basis of the dimensions of the search ellipsoid.

The variogram has a nugget effect of 30.1, a sill of 52.7 and ranges of 50.1 in the semi-major, 75.3 in the major and 6.5 in the minor direction. The variogram is used to create the search ellipsoid. The search ellipsoid for the Sekisovskoye Mine is 50m by 75m by 10m in the X, Y and Z directions, respectively. The strike azimuth of the ellipsoid is 315°. The variogram used in the estimate and used to generate the parameters for the search ellipsoid is illustrated in Figure 23.

Figure 23: The Resultant Directional Variogram Models for Gold Grade at the Sekisovskoye Mine



10. Mineral Resources

Mineral Resources have been estimated and signed off by Mr V. Redozubov-Gorskiy, the chief geologist at the Sekisovskoye Mine. Mr V. Redozubov-Gorskiy is supported by Mrs Z. Orazayeva, who is responsible for the estimation of Mineral Resources at the Sekisovskoye Mine. The estimates were generated using Datamine software. These have been reviewed by Mr V. Redozubov-Gorskiy as the Competent Person.

EY has reviewed the data used in the orebody modelling and estimation procedure and the approach is considered reasonable to the style of mineralisation and considers the items and guidelines outlined in the JORC Code. EY has not re-estimated the Mineral Resources but has conducted checks to confirm that the estimate is a reasonable representation of the deposit. EY has relied upon data provided by Altyn for determination of the Mineral Resource.

It is important to understand that the Sekisovskoye Mine primarily bases their orebody modelling and estimation procedures on the Soviet system for classification of reserves, commonly referred to as "GKZ". The estimation parameters are then reviewed and reported in accordance with the JORC Code. The comparison of GKZ to the JORC Code is outlined in Section 10.2.

In addition, Mineral Resource classification is based on State Reserves Committee guidelines. These guidelines state that a drilling density of 50m by 50m is dense enough to allow the classification of C1 and C2 reserves. The drilling density is determined by the relative complexity that the orebody has been classified into. The Sekisovskoye Mine has been classified as a Category 3 deposit. Lower density drilling is used to classify C2 reserves to -800masl, which is the depth of the deepest intersection and the limit of the Inferred Mineral Resources.

In additional, further regulations are imposed by the State on resource estimation and mining in Kazakhstan. State requirements include certain prescribed items such as pre-determined cut-off grades and classification based on drilling density. Any changes need to be approved prior to reporting by operating entities.

Based on this understanding, it should be noted that the primary estimation method is Ordinary Kriging, and that resource classification is based on the drilling density. The results are discussed in the sections to follow.

Furthermore, every person putting his/her signature on a report presented to the State Authorities is legally responsible for correct and valid figures. Distortion of such figures is a criminal offence; thus, every signatory is compelled to thoroughly check every table for possible errors. The most recent estimate reported to the State was 01 August 2018.

10.1 Mineral Resource Classification Criteria

Mineral Resource classification is based on the level of geoscientific confidence in the data available. Due to the nature of the deposit, which is generally narrow and extending in a pipe-like deposit at depth, drilling and the resultant number of samples is denser near surface and becomes less dense with depth.

Resource classification is based on State Reserves Committee guidelines. These guidelines state that a drilling density of 50m by 50m results in the classification of C1 and C2 reserves. At a high level, these are considered equivalent to Measured and Indicated Resources based on the drillhole density, data quality and geological confidence as outline in Section 10.2. Silver grade is estimated using regression based on the gold estimate. Silver grade is only estimated for the Measured and Indicated Mineral Resource categories.

Based on the State Reserves Committee recommendations for drilling density and on the decreasing number of samples with depth, the Mineral Resource classification has resulted in Measured and Indicated Resources from surface to a depth of -400masl and Inferred Resources from -400masl to -800masl.

Geophysical study results indicate that the breccia extends to 2km below the surface, resulting in a depth of approximately -1,500masl. This is supported by the known pipe-like nature of the deposit. There is insufficient exploration (no drillholes have been drilled to this depth) to estimate a Mineral Resource at this depth. Therefore, an Exploration Result has been estimated from -800masl to -1,500masl. This is an extension of 700m below the deepest intersection, equivalent to 1.6x the depth of known intersections. This is considered reasonable for this category of estimation.

10.2 GKZ vs JORC Classification

When considering Resources and Reserves estimated in CIS countries, it is important to understand the difference between GKZ and JORC classification. GKZ classification is still extensively used in the Commonwealth of Independent States and is typically the primary reporting guideline, which is modified to meet the JORC Code requirements.

The GKZ reporting system consists of seven categories that are subdivided into three groups, Explored Reserves, namely A, B and C1, Evaluated Reserves, namely C2 and Prognostic Reserves, namely P1, P2 and P3. Resources and reserves are not distinguished in the GKZ system.

The overall intention of both GKZ and JORC is similar. In principal, both follow a succession of estimates that are applied at various stages of exploration. Broadly, the classification of each category is based on increasing degrees of reliability or confidence in the data. A comparison of the various definitions for each category is outlined in Figure 24. Whilst the definitions for the various categories are similar and comparable, there is overlap between the categories as illustrated in Figure 24.

The GKZ system is more specific in that geological confidence is guided by the coefficient of variation, which is considered in conjunction with drilling density, whereas JORC relies on the Competent Person's judgement in applying reasonable prospects for eventual economic extraction. Based on the definitions, a similarity between the two reporting systems can be identified. It should be noted that there is no direct relationship between the GKZ and the JORC Codes and that the comparisons provided are only an approximate guide.

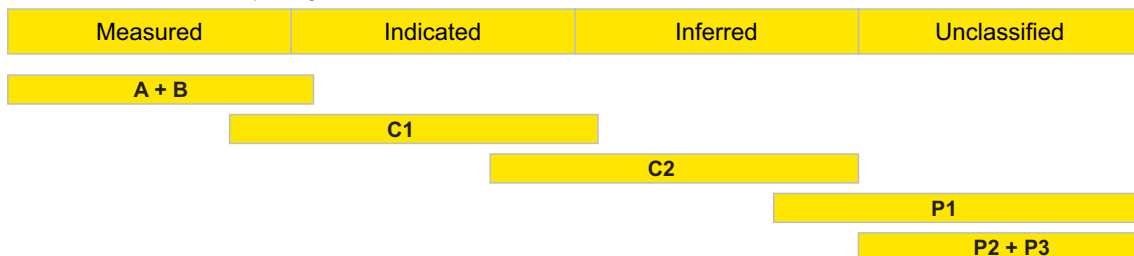
Further to the classification categories in the GKZ System, reserves are reported as On Balance or Off Balance. On Balance reserves may broadly parallel some of the JORC requirements for an Ore Reserve since On Balance Reserves require additional technical and economic studies to demonstrate economic viability. On Balance Reserves are reported to and approved by the State Commission for Reserves. These On Balance reserves take into account mineral rent taxations and may include an adjustment for overall mining recovery, however, other technical factors such as mining dilution and mining losses may or may not be considered.

The lack of distinction between resources and reserves in the GKZ system means that the "Competent Expert" takes responsibility for the overall estimation. The requirement is for the Competent Expert to have eight years of relevant experience and all estimates are registered with the State Reserves Committee.

GKZ vs JORC Resource Classification

GKZ		JORC	
Category	Definition	Category	Definition
A	Reserves of category A are identified in areas of detailed knowledge of explored and exploited deposits. The size, form, and formation conditions of the mineral body must be established, the character and nature of variability of their morphology and internal structure studied, any waste or marginal areas within the mineral body identified and outlined, with location and amplitude of fault displacements defined. The outline of the mineral reserves is defined in accordance with the requirements of conditions by drill hole and mine workings (e.g. trenches, pilot-scale pits) according to the results of detailed sampling.	Measured Resource	A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.
B	Reserves of category B are identified in areas of detailed knowledge of explored and exploited deposits. The size, basic particularities and variability of form and internal structure, formation conditions of the mineral body, spatial distribution of internal waste or marginal areas are established, with location and amplitude of major fault displacements defined. The outline of the mineral reserves is defined in accordance with the requirements of conditions according to the results of detailed sampling of drill holes and mine workings.		
C1	Reserves of category C1 constitute the main part of reserves of explored and mined deposits of geological structural complexity groups 1, 2, and 3, and also can be identified in areas of detailed study of deposits of complexity group 4. The size and characteristic form of the mineral body, and main particularities of the conditions of formation and internal structure are explained; variability and possible discontinuity of the mineral body are estimated. The outline of the mineral reserves is defined in accordance with the requirements of conditions according to the results of sampling of drill holes and mine workings with consideration of data from geophysical and geochemical studies.	Indicated	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.
C2	Reserves of category C2 are identified from exploration of deposits of all complexity groups, and in deposits of geological structural complexity group 4 constitute the main part of reserves to be included in mining. The size, form, and internal structure of the mineral body, and conditions of formation are estimated from geological, geophysical and geochemical data and confirmed by intersection of the mineral by a limited number of drill holes and mine workings. The outline of the mineral reserves is defined in accordance with the requirements of conditions according to the results of sampling of a limited number of drill holes, mine workings (e.g. trenches, pilot-scale pits), natural outcrops or by their biota (indicator plants), with consideration of data from geophysical and geochemical studies and geological structures	Inferred	An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
P1	P1 provides for the possible extension of the mineralisation beyond the boundary of C2 or for the possibility of new deposits in the area being explored. Resource estimates are based on the geological and structural characteristics of known bodies in the area being explored with only limited direct geological evidence.	Exploration Results	Exploration Results include data and information generated by mineral exploration programmes that might be of use to investors but which do not form part of a declaration of Mineral Resources or Ore Reserves. The reporting of such information is common in the early stages of exploration when the quantity of data available is generally not sufficient to allow any reasonable estimates of Mineral Resources.
P2	P2 provides for the possibility of discovery in a basin, or ore region, a site or field of new mineral deposits, the proposed existence of which is based upon favourable estimation of occurrence from large-scale (or in some cases medium-scale) geological survey and exploration work on the mineral occurrences, and also geophysical and geochemical anomalies. Prognostic resources are obtained from large-scale geological survey, prospecting. Prognostic resources expressed quantitatively associated with a local area form the basis for formulation of a detailed exploration work programme.		
P3	P3 provide for merely the potential possibility of discovery of deposits of one or other kind of mineral on the basis of favourable geological and palaeogeographic pre-conditions, discovered in the region being estimated, from medium-small scale geological/geophysical and geological survey work interpretation of satellite imagery, and also with analysis of results of geophysical and geochemical studies. Their quantitative estimation is done without connection with any concrete locations.		
		Unclassified	This would typically not be reported based on the JORC classification system. This is the earliest stage of target generation and would not be quantified, but rather used as guidance for a company to identify targets for exploration to commence.

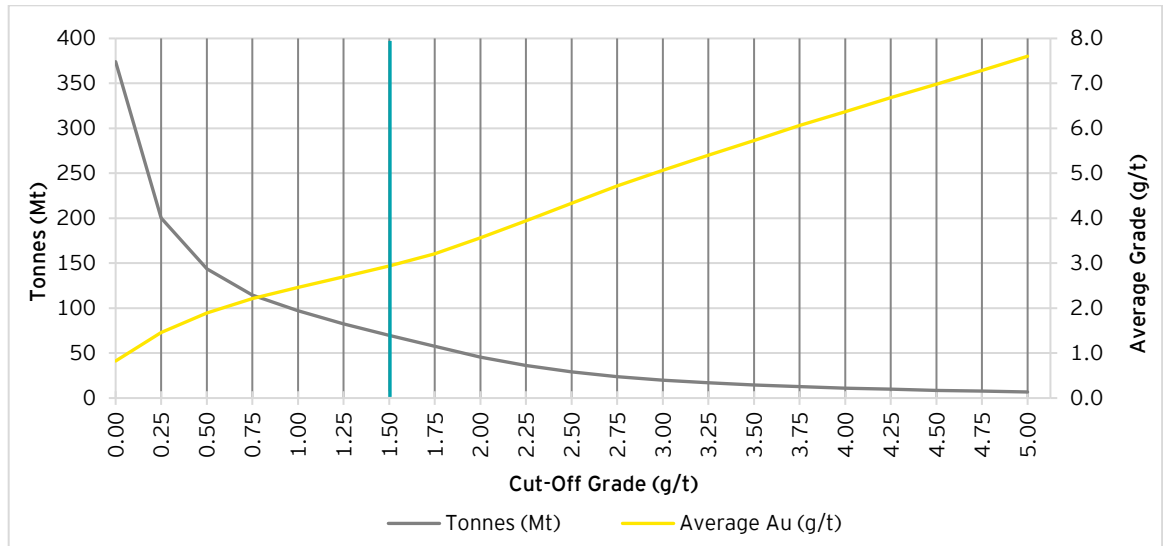
GKZ Balance Reserve Reporting



10.3 Grade Tonnage Curve

The global tonnages and grades for the Sekisovskoye Mine are illustrated in the grade-tonnage curve provided in Figure 25.

Figure 25: Grade Tonnage Curve for the Mineral Resources at the Sekisovskoye Mine



Source: Altyn Management

An optimal cut-off grade of 1.25g/t was calculated based on the Altyn gold price assumption of 1,280 United States Dollars per ounce ("USD/oz") and a total cash cost of 42.67 United States Dollars per Run of Mine tonne ("USD/RoMt"). The Sekisovskoye Mine is using a cut-off grade of 1.5g/t.

The choice of cut-off grade is driven by the requirements prescribed by the State, but allowance has been made to adjust these based on what is practically mineable. Based on the gradient of the grade-tonnage curve and the mining practicalities, the cut-off grade of 1.5g/t is considered reasonable.

The cut-off grade has been lowered from 2014, where cut-off grades of 3.0g/t and 2.0g/t were used for Indicated and Inferred Mineral Resources, respectively.

Due to the nature of the mining method, which does not allow for selective mining, EY considers that a low cut-off grade is reasonable. The shallow slope of the average grade means that a change in cut-off grade will not significantly change the tonnage and the average grade. This should be considered in conjunction with economic considerations such as the gold price and the total cash cost.

10.4 Previous Mineral Resource Estimate

In 2014 Venmyn Deloitte estimated Mineral Resources for the underground operations at Sekisovskoye. The estimation was based on the C1, C2 and P2 of the GKZ classification system, which were then re-estimated in accordance with the JORC Code. The 2014 Mineral Resources were estimated to a depth of -800masl and totalled approximately 33.9 million tonnes ("Mt") at 2.46g/t and containing 5.15 million ounces ("Moz") of gold. The Sekisovskoye 2014 Mineral Resources estimated by Venmyn Deloitte are shown in Table 6.

Table 6: Sekisovskoye Mine Mineral Resources as at 31 May 2014 (Venmyn Deloitte)

Resource Classification	Level	Tonnage (Mt)	Cut-off Grade (Gold g/t)	Average Gold Grade (g/t)	Contained Gold (Moz)	Average Silver Grade (g/t)	Contained Silver (Moz)
Indicated	Surface to -400masl	15.70	3.00	5.32	2.69	6.99	3.53
Indicated Resources		15.70	3.00	5.32	2.69	6.99	3.53
Inferred	Surface to -400masl	3.50	2.00	4.21	0.47	No estimate	
	-400masl to -800masl	14.70	2.00	4.21	1.99		
Inferred Resources		18.20	2.00	4.21	2.46		
TOTAL MINERAL RESOURCES		33.90	2.46	4.72	5.15		

Source: The 2014 CPR by Venmyn Deloitte

Mineral Resources are reported inclusive of Ore Reserves and as in-situ estimates.

All figures are rounded to reflect the accuracy of estimates, apparent computational errors due to rounding.

Mineral Resources are reported on a 100% basis.

No geological losses applied, density = 2.83.

10.5 Current Mineral Resource Estimate

The Mineral Resources for the Sekisovskoye Mine have been estimated by Mr V. Redozubov-Gorskiy of Altyn have been estimated by Mr V. Redozubov-Gorskiy of Altyn as at 31 May 2019, based on drilling up to 31 May 2019. It is important to understand that the Sekisovskoye Mine primarily bases their geological modelling and estimation procedures on the Soviet system for classification of reserves.

The Mineral Resource classification has resulted in Measured and Indicated Resources from the most recent mined out level of +250masl to a depth of -400masl. Mined out blocks are excluded from the Mineral Resource estimate. Inferred Mineral Resources have been estimated from -400masl to -800masl. An Exploration Result has been estimated from -800masl to -1,500masl. The estimation parameters are then reviewed with respect to the JORC Code guidelines and Mineral Resources are reported in accordance with the JORC Code. The Mineral Resource estimate for the Sekisovskoye Mine is provided in Table 7 and the classification is illustrated in Figure 26.

Table 7: Mineral Resource estimated by Altyn for the Sekisovskoye Mine as at 31 May 2019

Resource Classification	Level	Tonnage (Mt)	Cut-off Grade (Gold g/t)	Average Gold Grade (g/t)	Contained Gold (Moz)	Average Silver Grade (g/t)	Contained Silver (Moz)
Measured	+250masl to -400masl	29.03	1.50	3.76	3.51	6.20	5.79
Indicated		3.48	1.50	3.03	0.34	5.08	0.57
Measured and Indicated Resources		32.51	1.50	3.68	3.85	6.08	6.35
Inferred	-400masl to -800masl	37.15	1.50	2.37	2.83	3.99	4.77
Inferred Resources		37.15	1.50	2.37	2.83	3.99	4.77
TOTAL MINERAL RESOURCE		69.66	1.50	2.98	6.68	4.97	11.12

Source: Altyn Management

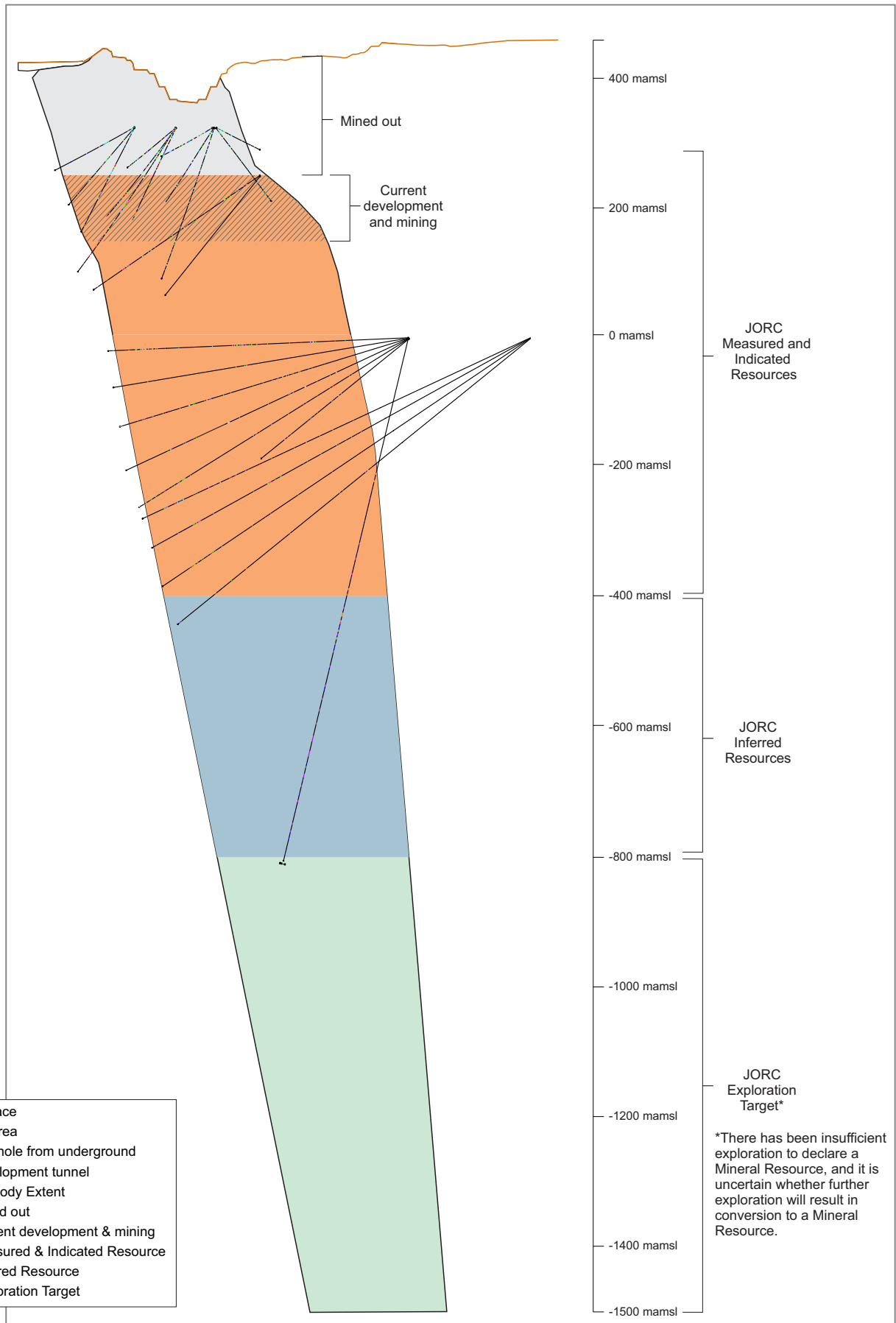
Mineral Resources are reported inclusive of Ore Reserves and as in-situ estimates.

All figures are rounded to reflect the accuracy of estimates, apparent computational errors due to rounding.

Mineral Resources are reported on a 100% basis.

No geological losses applied, density = 2.83.

Simplified JORC Resource Classification of the Orebody in Cross Section



A common problem that can emerge during resource estimation is to over-estimate grade and underestimate tonnage. This may be aggravated by using a cut-off grade that is too high. The Sekisovskoye Mine has lowered the cut-off grade since 2014 as detailed in Section 10.3. The choice of cut-off grade is driven by the requirements prescribed by the State, but allowance has been made to adjust these based on what is practically mineable. Based on the gradient of the grade-tonnage curve and the mining practicalities, the cut-off grade of 1.5g/t is considered reasonable.

EY has reviewed the data used in the geological modelling and estimation procedure and is satisfied that the approach is consistent with the guidelines of the JORC Code. EY has not re-estimated the Mineral Resources but has conducted checks to determine if the estimate is a reasonable representation of the deposit.

10.6 Reconciliation of Mineral Resources

The Mineral Resource estimate in the 2014 CPR included a total of 15.70Mt of Indicated Mineral Resources at an average gold grade of 5.32g/t at a cut-off grade of 3.0g/t and 18.20Mt of Inferred Mineral Resources at an average gold grade of 4.21g/t at a cut-off grade of 2.0g/t.

The difference between the 2014 and the 2019 Mineral Resource estimates is primarily due to the lowering of the cut-off grades, which resulted in an increase in the tonnages and a lower average grade. In addition, infill drilling completed since 2014 resulted in the upgrading of a portion of the Indicated Resources into the Measured Resource category.

The change in Mineral Resource cut-off grade led to an increase in Mineral Resource tonnages of 35.76Mt and a lowering of the average gold grade from 4.72g/t to 2.98g/t.

Increasing geoscientific confidence due to the results of additional drilling completed to a maximum depth of -400masl has allowed for Indicated Resources to be converted to Measured Resources. Mineral Resources below -400masl have remained Inferred Resources as no additional drilling or production has been completed below -400masl.

The Exploration Target for the Sekisovskoye Mine has been estimated based on the average grade of the Inferred Mineral Resources estimated into the breccia wireframe from -800masl to -1,500masl. No further exploration has been completed or planned for this estimate and the cut-off grade has also remained unchanged.

Depletions are manually removed from the Mineral Resource estimated after estimation. Depletions between January 2015 and May 2019 included 1.24Mt from the underground including ore below the cut-off grade.

10.7 Exploration Target Estimate

In addition to the Mineral Resource estimate, an Exploration Target has been estimated for the Sekisovskoye Mine based on the Exploration Results. The Exploration Target has been estimated by Mr V. Redozubov-Gorskiy of Altyn as at 31 May 2019. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain whether further exploration will allow for portions of the Exploration Target to be converted to a Mineral Resource.

The Exploration Target was estimated using the same estimation methodology as the Mineral Resources, however they are estimated for the depth extension of the orebody. The Exploration Target is estimated for the depths -800masl to -1,500masl, an extension of 700m below the deepest drillhole intersection. The Exploration Target estimate has been updated from 2014 to reflect an updated cut-off grade of 1.5g/t.

The Exploration Target for the Sekisovskoye Mine have been estimated by Altyn as at 31 May 2019. The Exploration Target is summarised in Table 8.

Table 8: Exploration Target estimate by Altyn for the Sekisovskoye Mine as at 31 May 2019

Resource Classification	Level	Tonnage (Mt)	Cut-off Grade (Gold g/t)	Average Gold Grade (g/t)	Contained Gold (Moz)	Average Silver Grade (g/t)	Contained Silver (Moz)
Exploration Target	-800masl to -1,500masl	22.79	1.50	2.37	1.74	No estimate	
Total Exploration Target		22.79	1.50	2.37	1.74		

Source: Altyn Management

The Exploration Target are reported exclusive of Mineral Resources and Ore Reserves.

All figures are rounded to reflect the accuracy of estimates, apparent computational errors due to rounding.

Exploration Targets are reported on a 100% basis.

No geological losses applied, density = 2.83.

Exploration Results have not been reported as a range due to the conversion from GKZ, which does not require a range to be reported. Creating an artificial range around the results of the estimation could be misleading.

11. Ore Reserve Statement

The Sekisovskoye Mine Ore Reserves were based on the 3D Datamine geological model. The Ore Reserves were estimated per level to a depth of -400masl as this is the area of the deposit for which the Mineral Resources are in the Measured and Indicated categories, as shown in Table 9. It should be noted that the estimate per level includes depletions, which are subtracted manually from the Ore Reserve estimate. Depletions total 1.24Mt from the underground including ore below the cut-off grade.

Table 9: Sekisovskoye Mine Ore Reserves per level

Level (masl)	Ore Tonnage (Mt)	Gold grade (g/t)	Contained gold (Moz)
300 to 350	0.86	2.77	0.08
250 to 300	0.96	2.69	0.08
200 to 250	1.45	2.90	0.14
150 to 200	1.78	3.36	0.19
100 to 150	2.10	3.47	0.23
50 to 100	3.06	3.28	0.32
0 to 50	2.50	3.27	0.26
-50 to 0	2.87	3.99	0.37
-100 to -50	2.72	4.02	0.35
-150 to -100	2.34	3.83	0.29
-200 to -150	2.41	3.97	0.31
-250 to -200	2.51	3.81	0.31
-300 to -250	2.15	3.55	0.25

Level (masl)	Ore Tonnage (Mt)	Gold grade (g/t)	Contained gold (Moz)
-350 to -300	2.39	3.59	0.28
-400 to -350	3.38	3.32	0.36
Total	33.47	3.54	3.81

Source: Altyn Management

11.1 Previous Ore Reserve Statement

In 2014 Venmyn Deloitte estimated Ore Reserves for the underground operations at the Sekisovskoye Mine. The estimation was based on the C1 and C2 reserves of the GKZ classification system, which were then re-estimated by Venmyn Deloitte in accordance with the JORC Code. The 2014 Ore Reserves were also estimated to a depth of -400masl. The Sekisovskoye 2014 Ore Reserves estimated by Venmyn Deloitte are shown in Table 10.

Table 10: Sekisovskoye Mine Ore Reserves as at 31 May 2014 (Venmyn Deloitte)

JORC Reserve Category	Tonnage (Mt)	Pay limit (g/t)	Gold grade (g/t)	Silver grade (g/t)	Contained gold (Moz)	Contained silver (Moz)
Probable	17.25	2.60	4.09	5.37	2.27	2.98
Total Ore Reserves	17.25	2.60	4.09	5.37	2.27	2.98

Source: 2014 CPR by Venmyn Deloitte

11.2 Current Ore Reserve Statement

The Sekisovskoye Mine Ore Reserves were based on the 3D Datamine geological model. The Ore Reserves were estimated per level to a depth of -400masl as this is the area of the deposit for which the Mineral Resources are in the Measured and Indicated categories.

All the Mineral Resource blocks that are above the Mineral Resource cut-off grade of 1.5g/t were included in the Ore Reserve, as no selective mining has been assumed for the Ore Reserve estimation. The Ore Reserves are calculated using a dilution factor, mining loss and extraction factors. Based on the estimated Ore Reserves, a detailed Life of Mine ("LoM") plan is developed based on the modifying factors as described in Section 11.2.1 and a financial model is developed.

The fact that no selective mining will be employed in the underground operations other than primary block selections was informed by guidance included in the Kazakhstan mining legislation, which does not allow for the selective mining of blocks above the cut-off grade approved by the State Reserves Committee of Kazakhstan.

Notwithstanding this requirement for non-selective mining, the block model is sufficiently well informed that significantly lower grade areas can be excluded from the mine plan. Detailed sampling during development further guides some selectivity in the mining process.

The Ore Reserves for the Sekisovskoye Mine were signed off by Mr V. Redozubov-Gorskiy as at 31 May 2019. As per the GKZ system, the geologist is responsible for the estimation of reserves. Mr V. Redozubov-Gorskiy relies on a team of technical and mining experts to provide the various inputs for Ore Reserve estimation.

The summary Ore Reserve Statement for Sekisovskoye Mine is presented in Table 11. During the review process, the mining schedule was checked for consistency, tallying with the Mineral Resources from which the Ore Reserves had been converted and the practical achievability on the mining rates. The Ore Reserves reported in Table 11 have been reported on the basis of a fully diluted delivered to the mill, i.e. the material is fully diluted.

Table 11: Sekisovskoye Mine Ore Reserve Statement as at 31 May 2019

JORC Reserve Category	Tonnage (Mt)	Gold grade (g/t)	Contained gold (Moz)	Silver Grade (g/t)	Contained Silver (Moz)
Proved	29.87	3.61	3.47	5.88	5.65
Probable	3.58	2.91	0.33	4.81	0.55
Total	33.45	3.53	3.80	5.77	6.20

Source: Altyn Management.
 Apparent computational errors due to rounding.
 Ore Reserves are reported as RoM tonnes.
 Mineral Resources are reported inclusive of Ore Reserves.
 No Inferred Mineral Resources have been converted to Ore Reserves.

11.2.1 Modifying Factors

The Ore Reserves at the Sekisovskoye Mine are estimated based on all the Measured and Indicated Mineral Resource blocks that are above the Mineral Resource cut-off grade, to which dilution, mining losses and an extraction factor are applied. The modifying factors are then applied during LoM planning and valuation.

The average estimated losses and dilution for the deposit included in Ore Reserve estimate are mining losses of 2% and mining dilution of 5%. The losses and the dilution are a function of the size of the ore bodies that are being mined and the mining methods that will be applied.

The planned 5% mining dilution is on the lower end of what is typically achievable using the sub-level stoping mining method and can typically be achieved with orebodies with very consistent geometries and clear contacts with the country rock. Dilution over the RoM may surpass the 5% target due to irregularities in orebody geometry, which would result in lower than expected grades.

An average mining extraction factor of 100% has been utilised for the Ore Reserve estimation. This is on the upper limit of what is usually planned for the sub-level stoping operations and is subject to downside risk due to potential orebody geometry irregularity.

Once the Ore reserve has been estimated, the following input parameters or Modifying Factors, calculations and limits were used in estimating the life of mine plan. The mining and economic related Modifying Factors that were applied are summarised as follows:

- ▶ long term prices for gold and silver of USD1,280/oz and USD17/oz, respectively, based on Altyn's assumptions. Commodity prices and exchange rates used to estimate the economic viability of gold and silver Ore Reserves were based on broker forecasts, however spot rates as at the valuation date were also considered;
- ▶ a processing recovery of 83% was used for gold and 73% for silver, based on historical processing performance;

- ▶ an average LOM cash operating cost of USD38/RoMt (at an exchange rate of 330KZT/USD) has been utilised, while current cash cost are approximately USD46/ROMt. It should be noted that if the mine can sustainably achieve the estimated total operating cost of USD38/RoMt, this would put the mine in the lowest cost quartile on the global cost curve. The average RoM mining and processing costs are estimated at USD22/RoMt and USD12/RoMt, respectively;
- ▶ there is currently mining and processing infrastructure on the mine to extract the Ore Reserves, and the Capex for the additional equipment and infrastructure required to achieve the higher RoM production levels have been accounted for;
- ▶ the Ore Reserves gold grades were estimated using sampling data and the ordinary kriging estimation method and were reported on a fully diluted grade. Silver grades are based on a regression equation based on sample results of gold content analyses; and
- ▶ in the estimation of Ore Reserves, it was assumed that all regulatory applications will be approved, and that the current approvals will continue to be valid.

The modifying factors and LoM plan detailed in this report has been based on the development plan which includes ramping up RoM to 2Mtpa. However, this LoM plan is dependent on Altyn raising the required funding. If the funding is not raised, the ramp up will be pushed out beyond the target date.

11.3 Ore Reserve Reconciliation

The Ore Reserve estimate in the 2014 CPR comprised a total of 17.25Mt of Probable Reserves at an average gold grade of 4.09g/t at a pay limit of 2.6g/t.

The difference between the 2014 and the 2018 Ore Reserves estimates is primarily due to the lowering of the Mineral Resource cut-off grades, which increased the Mineral Resource tonnages, as well as due to the additional drilling completed since 2014, which resulted in the upgrading of tonnages into the Measured Resource category. The 2014 Ore Reserves were estimated at a 2.0g/t and 3.0g/t cut-off grade, while the 2018 Ore Reserves include the entire Measured and Indicated Resources, which were estimated at cut-off grade of 1.5g/t. The change in Mineral Resource cut-off grade and the reclassification of the Mineral Resources led to an increase in Ore Reserve tonnages of 15.69Mt and the lowering of the average gold grade from 4.09g/t to 3.54g/t.

12. Mining Methods and Life of Mine

Altyn began underground operations in late 2011, with development being conducted on six levels using a spiral one-way traffic decline sunk to a depth of 320masl on the north-western flank of the deposit. The decline is currently the main means of access to the underground operations and is used to transport men, material and blasted rock between surface and underground. The underground operations produced 45kt of ore between November 2011 and October 2012, before being placed on care and maintenance. Underground operations resumed in 2013, producing 63.6kt of ore in that year. A secondary transport decline was also developed at the bottom of one of the two mined out open pits. The underground operations have continued to ramp up since 2013, reaching ore production 287kt in 2017. The main decline was developed to a depth of 150masl in 2017 and ore production in 2018 reached 278kt.

Altyn plans to further ramp up the underground operations to reach 2Mtpa of ore production over a six-year ramp up period, by sinking a rock hoisting shaft and associated cage and ventilation shafts down to a depth of -430masl. The main transport decline will also be developed down to the -430masl depth, while the secondary decline will only be developed to the 150masl depth and will be used in conjunction with the vertical shafts for the transportation of blasted rock and material, the decline shaft will also serve as a secondary emergency exit for the mine.

The LoM plan detailed in this report has been based on the development plan of ramping up to 2Mtpa as outlined in the 2018 Feasibility Study. The 2018 Feasibility Study planned for ramp up to commence in 2018 and the target 2Mtpa to be reached in 2023, however Altyn is still in the process of raising the required capital. Based on discussions with Altyn management, EY understands that Altyn plans to ramp up to 500kt production during 2019 based on the current infrastructure and will continue to ramp up to 2Mtpa as soon as the required capital has been raised. The ramp up will require approximately six years to achieve.

This LoM plan is dependent on Altyn raising the required funding. If the funding is not raised, commencement of the ramp up will be pushed out beyond the target date.

12.1 Mining Methods

The Sekisovskoye Mine uses the sub-level stoping mining method, which is a mining method suitable for vertical and near-vertical deposits with well-defined boundaries. Sub-level stoping involves the excavation of drilling drifts on main development levels and sub-levels between the main development levels, from which longhole drilling is carried out and the ore is blasted to create the stope. The blasted ore is then loaded out at the bottom of the stope and the stope is then backfilled.

Sub-level open stoping is ideal for orebodies with dips ranging between 60° to 90°, with regular orebody thicknesses within the range of 6m to 30m and competent host rock. This mining method can be employed at depths of up to 1.2km. Mining dilution typically ranges from 5% to 20% for sub-level stoping operations.

The Sekisovskoye Mine uses main development level spacing of 50m with sub-levels spaced at approximately 16m to 17m within the stopes. Typical parameters consist of mining blocks of lengths ranging from 100m to 160m, widths ranging from 60 to 100m and a height of 50m. The mining blocks are then further divided into sub-blocks of lengths of 25m to 40m, widths of 12m to 20m and heights of 16m to 17m. The 16-17m sub-level spacing was selected after trials of different sub-level spacing combinations over a six-year period and was designed to better adhere to the contours of the orebody and minimise dilution. Currently uncemented waste rock is used as backfill, however cemented backfill will be used from 2020 for levels 200masl to -400masl.

Mining of the different ore zones on each of the main development levels is split between a number of stopes, with the height of each stope split by the sub-levels. On average three to six stopes will be mined simultaneously throughout to maintain the 2Mtpa Run of Mine ("RoM") production. With 1.67kt expected to be produced from each stope per shift. A vertical slot is blasted in each stope to serve as a free face for the blast holes of each stope. The long holes drilled into the orebody have a diameter of 68-89mm with a maximum length of 25m. Currently the blasted rock from stopes is loaded out using load-haul dumpers ("LHDs") into 30t dump trucks, which transport the ore to surface through the main haulage decline. However, to allow the mine to ramp up to 2Mtpa a rock hoisting shaft will be sunk, which will be used to transport the greater production volumes to surface, as the transport decline alone is unlikely to allow the mine to reach the planned production levels.

The location and geometry of the mineable blocks for Sekisovskoye Mine were estimated using Datamine's Mineable Shape Optimizer ("MSO"). MSO generates optimised stope designs and then estimates the maximum recoverable ore based on orebody geometry and design constraints. Adjustments are then made by the mine planner to the MSO stope designs based on practical consideration, experience and professional judgement.

The stope designs for the Sekisovskoye Mine were generated in MSO taking into account the selected cut-off grade, excavation dimensions and slope angles and distances between stopes. The contours of the stopes are modelled using a four-point approach, with two points in the hanging wall and two in the footwall. From the generated stope designs in MSO, the associated development was also designed, and the RoM plan was scheduled based on the required physical resources (e.g. mining equipment) in Datamine's Studio 5D and EPS software packages. The underground stope design for Sekisovskoye is shown in Figure 27.

12.2 Life of Mine Plan

The Sekisovskoye LoM shows a considerable ramp up from current production levels to the anticipated target of 2Mtpa RoM production. RoM production is planned to be ramped up to 1Mtpa using the upgraded processing plant, with a further ramp up to 2Mtpa RoM requiring an additional processing plant.

The ramp up will require commissioning of a rock hoisting shaft and associated cage and ventilation shafts and skip and ventilation shafts planned to follow. Initial ramp up production will be achieved using the two transport declines. Production in these years will be from two levels above +100masl, with planned hauling distance for the ore through the two transport declines being 2.0-2.2km. Ten trips per truck per shift have been scheduled for each of the seven trucks dedicated to the two production levels, to achieve a daily production of 3.36ktpa.

The ramp-up to the commissioning of the vertical shafts and the planning parameters used in the ramp-up plan are on the upper end of what is achievable, therefore there is some downside risk associated with achieving the planned production volumes, especially considering that 2018 production did not achieve the targeted 500kt RoM production. The targeted 500kt RoM production has been postponed to 2019.

The LoM plan detailed in this report has been based on the optimal development plan of ramping up to 2Mtpa. However, this LoM plan is dependent on Altyn raising the required funding. If the funding is not raised, commencement of the ramp up will be pushed out beyond the target date.

The sinking of the vertical shafts was planned for early 2019. The delay in securing the capital expenditure ("Capex") and subsequent delay in sinking operations will result in the achievement of the planned steady state production of 2Mt of ore being pushed out beyond the 2023 target date.

Between 2018 and 2020 production will be between +400masl and +150masl, with production below +150masl occurring from 2021 onwards. The LoM plan also shows considerably higher gold and silver grade targets relative to historical achievements. The average head grade achieved between 2014 and 2018 was 2.35g/t for gold and 3.33g/t for silver, while the LoM average head grades are 3.51g/t for gold and 5.74g/t for silver.

Management has indicated the reasons for the lower historical head grade achievements included the mining of lower grade Ore Reserves above +150masl (grades below +150masl are higher than 3g/t) and the higher anticipated proportions of development relative to stoping that has been achieved historically.

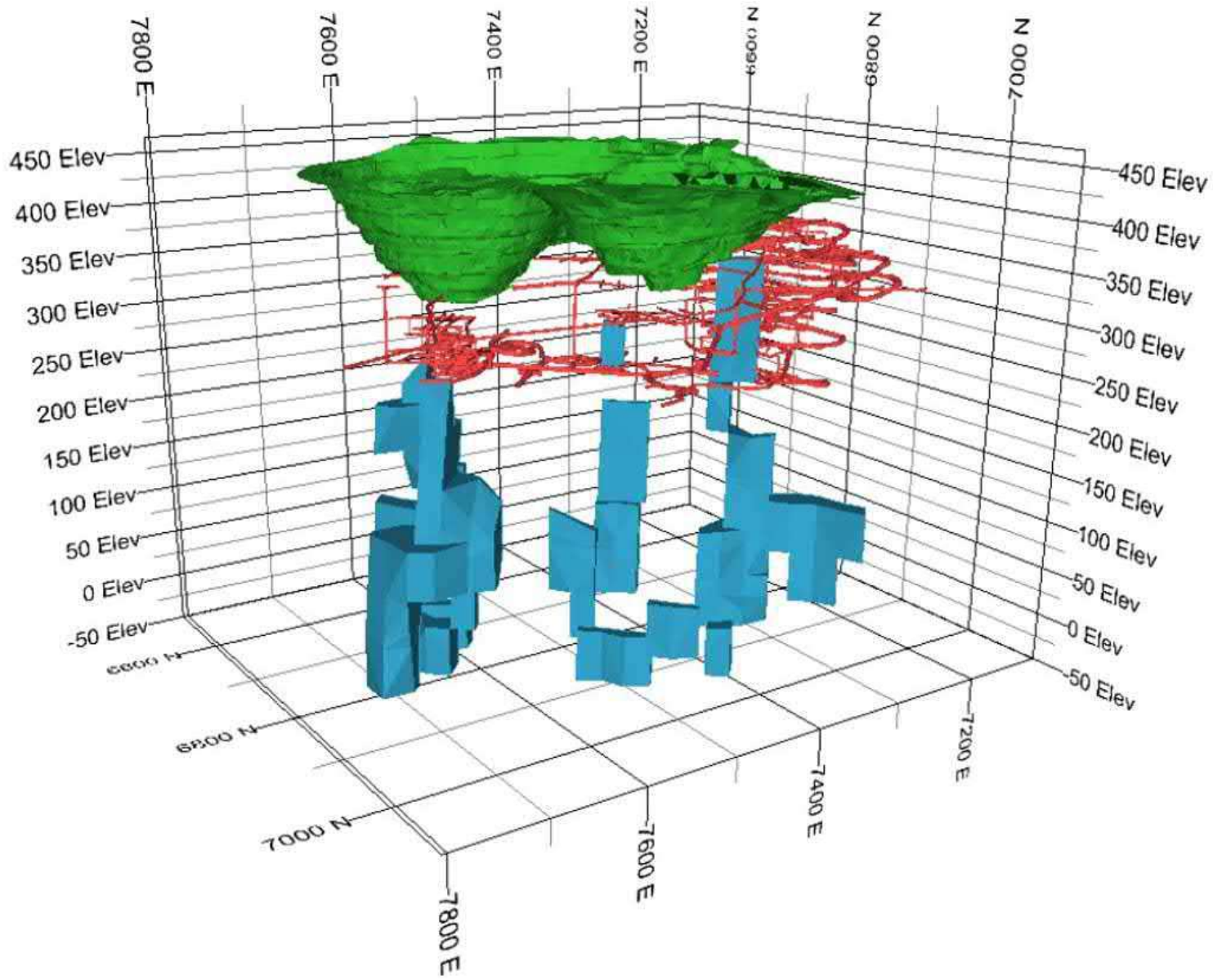


Figure 27

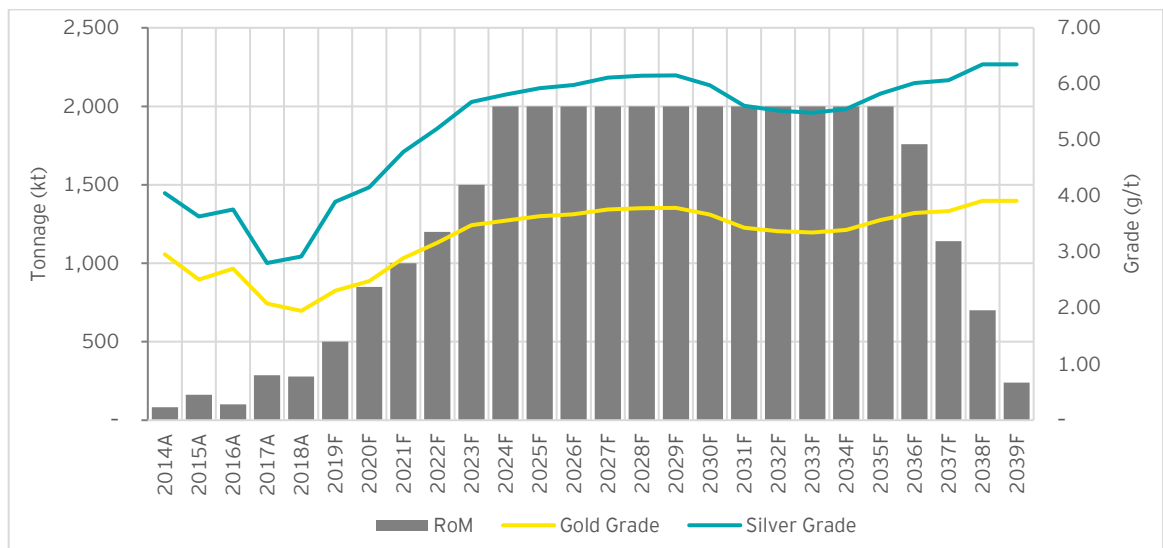
Management believes that as mining progresses deeper and the ratio of stoping to development increases that the higher grades in the LoM plan should be achieved. EY TAS does not consider the higher head grades unreasonable, however emphasis on grade control for the defined ore reserve blocks will be required, albeit that there will be limited ability to sort waste whilst mining higher production tonnages. Therefore, it should be noted that there is risk associated with the achievability of the grade targets in conjunction with the steep LoM production. The Sekisovskoye LoM is shown in Figure 28.

12.3 Mining Equipment

The Sekisovskoye Mine employs an owner operated philosophy for the mining operations, with all mining equipment owned by the company. The mine makes use of boomer-type drill rigs for development drilling, while long hole drill rigs are used to drill the long hole ring blast pattern in the production stopes, and LHDs are used to load out the blasted ore from the production stopes into underground dump trucks which currently transport the ore to surface via the spiral haulage but later this rock will be transferred into ore passes connected to the skip shaft.

The mining equipment currently on the operation has been used in achieving production to date, however to ramp-up production to 2Mtpa the underground mining fleet will have to be increased considerably. Table 12 and Table 13 show the current equipment fleet and the future underground equipment for the Sekisovskoye Mine, respectively.

Figure 28: Sekisovskoye Mine LoM Plan



Source: Altyn Management

Table 12: Current Sekisovskoye Underground Mining Equipment

Equipment	Manufacturer/model	Unit size	Quantity
Load-Haul-Dump	CAT R1300	3m ³	2
Load-Haul-Dump	Sandvik LH-203	2m ³	1
Load-Haul-Dump	Fambition FL06A	3m ³	1
Dump truck	Sandvik TH-430	30t	2
Dump truck	Sandvik TH-320	20t	1
Dump truck	Paus PMKT-8000	15t	3

Equipment	Manufacturer/model	Unit size	Quantity
Drill Rig	Atlas Copco Boomer T1D	-	1
Drill Rig	Atlas Copco Diamek 282	-	1
Drill Rig	CSK Sondaj-C400	-	1

Table 13: Future Sekisovskoye Underground Mining Equipment Requirements

Equipment	Quantity for LoM	Quantity for Ramp up to 2Mtpa
UG Truck CAT AD30	26	11
Load-haul-dumper CAT R1300	49	18
Underground Jumbo Boomer Drill Boomer T1D	9	3
Electro-hydraulic, long-hole production drill Boomer T1D LHD	15	5
Exploration drill rig Atlas Copco Diamek 4PHC	9	3
Workers shipping vehicle Utimec SF205 PER (20 people)	10	4
Explosives delivery vehicle Utimec SF060 Explosive	5	2
Fuel Charging Vehicle Utimec SF 350 Fuel	6	2
Utimec 6000 Workshop	5	2
Explosives charging vehicle Paus	5	2
Mobile cement-throwing jet (NORMET)	3	1
UG mixer 4m ³ (NORMET)	3	1
Hydrohammer (FURUKAWA)	5	1
Equipment for underground repair station	3	1
Underground loader with telescopic arm (lifting height up to 8 m)	3	1
Underground vehicle for operational personnel (5 seats)	5	1
Wheel Loader CAT 972L	4	2
Bulldozer CAT D8R	4	2

12.4 Mining Operating and Capital Costs

The underground mining unit operations costs for the Sekisovskoye Mine have shown improvement in recent years as production has been ramping up. The unit stoping costs for the LoM are planned to be in line with historical achievements while the development unit costs in the LoM are set to reduce considerably relative to historical levels as the ratio of stoping to development improves over the LoM. Backfill costs will be added to the unit mining costs over the LoM, however this is a relatively minimal component of the mining costs. Laboratory costs for the routine sampling that is conducted as part of grade control have also been included in the mining costs. EY considers the mining costs included in the Sekisovskoye LoM to be reasonable as they are in line with historical cost achievement. There is upside potential for the unit mining costs to reduce later in the LoM as a result of the economies of scale associated with the higher LoM production levels. The comparison between the Sekisovskoye LoM mining costs and historical cost levels is shown in Table 14. The LoM capital costs for Sekisovskoye are shown in Table 15 in USD/RoMt and in Kazakhstani Tenge (“KZT”) per RoMt.

Table 14: Sekisovskoye LoM Unit Mining Operating Costs Relative to Historical Achievements

Description	Units	2015	2016	2017	2018F	RoM Average
Underground Mining Cost Analysis						
Stoping	KZT/RoMt	2,834	5,121	6,208	6,023	5,900
	USD/RoMt	13	15	19	18	18
Development	KZT/RoMt	2,465	3,317	715	752	1,309
	USD/RoMt	11	10	2	2	0.04
Backfill	KZT/RoMt	-	-	-	-	194
	USD/RoMt	-	-	-	-	0.01
Laboratory	KZT/RoMt	5	133	81	123	0.33
	USD/RoMt	0.02	0.39	0.25	0.38	0.00
Total Mining Costs	KZT/RoMt	5,304	8,571	7,005	6,898	7,403
	USD/RoMt	24	25	21	21	22

Table 15: Sekisovskoye LoM Capital Costs

Description	Value (USDm)
Prospect drilling	52
Underground capital and horizontal development	145
Shafts equipment	28
Underground infrastructure	10
Mining and ancillary equipment	83
Total Mining Capex	319

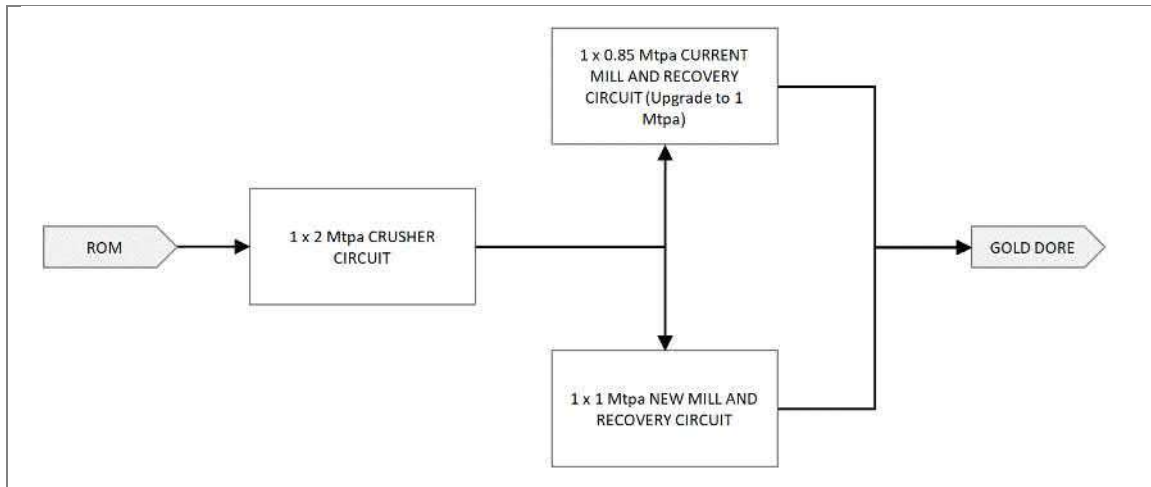
13. Mineral Processing

The Sekisovskoye process plant is a conventional carbon-in-leach (“CIL”) gold recovery plant. The opencast pit was the only source of mined ore treated through the processing plant from 2008 to 2012. During the period 2013 to 2017, the proportion of underground ore feed increased progressively to constitute up to 50% of the total mined ore sent to the plant for processing. By 2017, the open pit ceased to operate and ore from the underground working is the only source of ore from the mine.

The nameplate capacity of the current process plant is 0.85Mtpa but the plan is to increase production to 1Mtpa through maintenance and debottlenecking. The 2018 Feasibility Study has been completed to extend the plant capacity to 2Mtpa through the installation of an additional plant line (milling, CIL and refining), ramping up production over a two to three-year period. The ramp up plan detailed in this report has been based on the optimal development plan as outlined in the 2018 Feasibility Study. However, this LoM plan is dependent on Altyn raising the required funding. If the funding is not raised, commencement of the ramp up will be pushed out beyond the target date.

The process flow diagram (“PFD”) for the Sekisovskoye process capacities are illustrated in Figure 29 and the process plant is shown in Figure 30.

Figure 29: Schematic Process Capacity



Source: Altyn Management

The existing and planned processing plants incorporate crushing, milling, leaching, refining (electrowinning and smelting) and carbon regeneration to process gold doré from RoM ore.

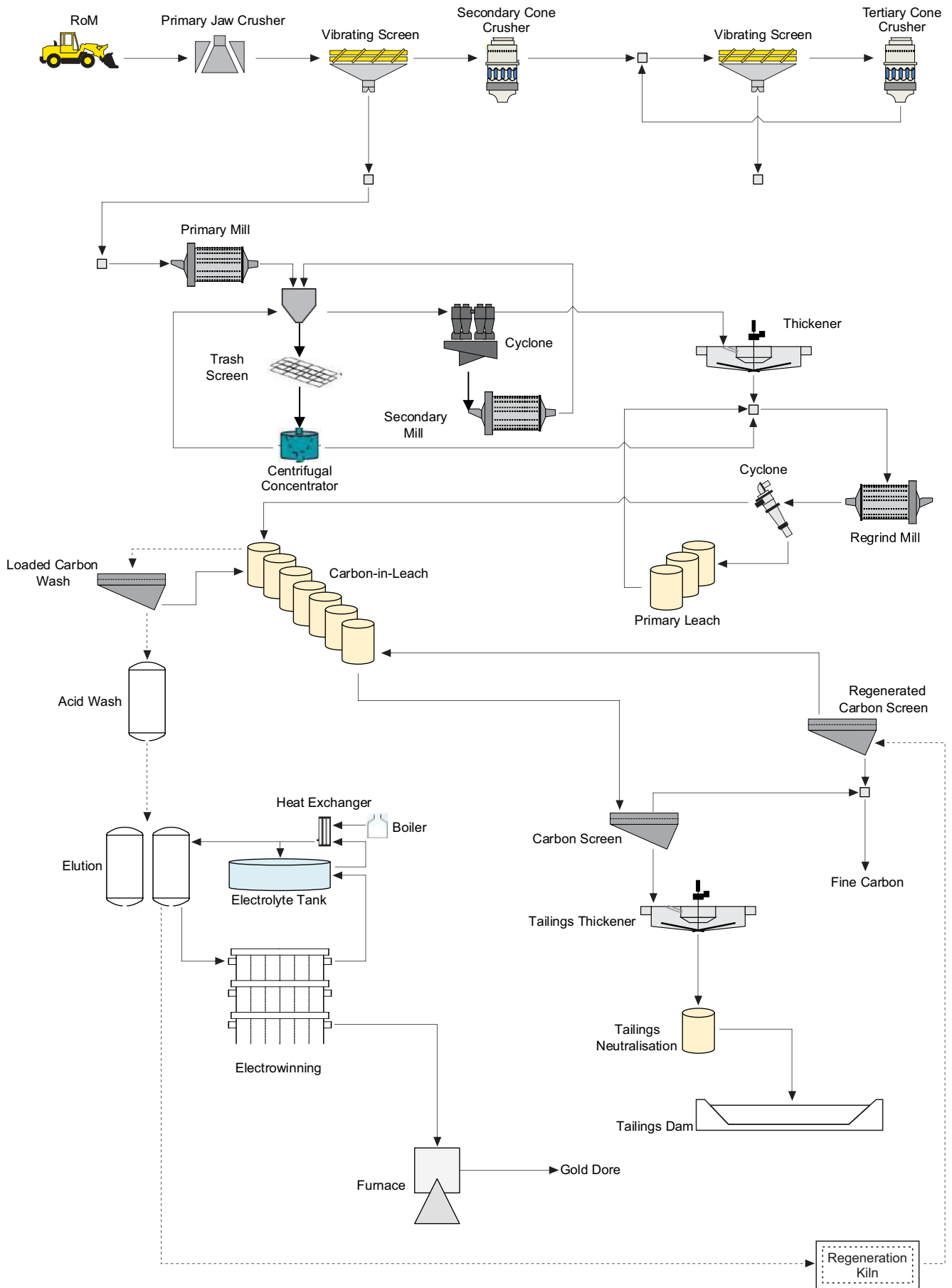
Mined ore is stockpiled at the RoM pad. The crushing circuit consists of tertiary crushing, inclusive of two separate jaw crusher lines, one secondary cone crusher and two tertiary cone crushers. The crusher circuit has a capacity of 360tph with a target product size distribution of 100% passing 1mm. Ore is loaded into two separate RoM bins. The ore is extracted from the bins via a static grizzly. The grizzly undersize bypasses the jaw crusher and the oversize reports to the jaw crusher to produce a 90% passing 100mm product.

The crushed material is conveyed to a primary vibrating double deck screen with a bottom deck cut size of 15mm. The bottom deck undersize (<15mm) reports to the final crusher product stockpile and the oversize from both decks reports to the secondary cone crusher. The cone crusher product is discharged onto a secondary vibrating double deck screen with a bottom deck cut size of 15mm. The bottom deck undersize (<15mm) reports to the final crusher product stockpile and the oversize from both decks reports to two tertiary cone crushers. The tertiary cone crusher product is conveyed to the secondary screen in a closed-circuit system.

The <15mm ore from the crusher product stockpile is processed through two milling circuits, each consisting of a primary mill in open circuit configuration, a secondary mill in a closed-circuit configuration with classifying cyclones and a regrind mill in closed circulation with cyclones and the primary leach. The capacity of each milling circuit is 129tph with a target grind of 85% passing 74µm. The crushed ore is fed into the primary mill with water and discharges into a sump. A proportion of the slurry is pumped to the centrifugal concentrator via a trash screen and the remainder is pumped to a bank of classifying cyclones.

The centrifugal concentrator's tailings are recycled to the primary mill discharge sump whilst the concentrate is transferred to the regrind mill circuit working in closed circuit with cyclones and the primary leach. The proportion of the primary mill discharge that is processed through the classifying cyclones operates in closed circuit with a secondary mill, where the cyclone underflow reports to the mill and the overflow gravitates to a thickener. The thickener underflow combines with the centrifugal concentrator concentrate before advancing to the regrind mill. The discharge from the regrind mill is pumped to a cyclone, from which the underflow reports to the primary leach and the overflow reports to the CIL tanks. Air and sodium cyanide are added to the three leach tanks and the leached slurry is recycled to the regrind mill.

High Level Process Flow Diagram



The CIL circuit consists of seven leach tanks with air and sodium cyanide addition. The slurry flows counter current to the regenerated activated carbon which is added to the last tank and the loaded carbon is recovered from the second leach tank. Leaching involves the reaction of gold in the ore with sodium cyanide to form a gold cyanide solution. The gold cyanide is adsorbed onto the activated carbon and removed by wire mesh screening. The residue from the leach is thickened and neutralised with sodium hypochlorite and hydrochloric acid before being discarded on the tailings dam.

The gold-loaded carbon is washed with hydrochloric acid. The washed carbon is transferred to the elution column where the gold is stripped from the carbon using the Zadra Process (elevated temperature and pH). The loaded gold solution undergoes electrowinning where gold is precipitated on cathodes. The gold is then smelted in a furnace to produce gold doré, the final product of the Sekisovskoye process plant. The doré typically contains between 35-40% gold, 50% silver and 10-15% impurities. The gold is then transported to a refinery for further processing.

The eluted carbon is regenerated in a kiln at elevated temperatures to remove organic contaminants. The regenerated carbon is screened to remove fines and fresh carbon is added to balance the process requirement in the leach.

13.1 Historical Production

13.1.1 Processing Rate

A maximum mill production rate of 0.74Mtpa was achieved over the processing history in 2011 when the open pit was operating. Process improvements were initiated to improve the production capacity to the targeted 1Mtpa (and original 0.85Mtpa design). The primary limiting factors have been availability of ore and the uncovered design of the crushing and sorting circuit (affecting production during the winter months). The crushing and sorting circuit has subsequently been enclosed in buildings and improvements have been made to the original designs to improve operations.

Based on the inability to achieve the design capacity, achievement of the target processing rate, as per the life of mine plan, is considered an ongoing risk. Management are, however, in the process of further debottlenecking and expanding the current plant, these include but are not limited to the following installations and improvements:

- ▶ replacement of slurry and water pumps;
- ▶ expansion of smelter;
- ▶ changes to crusher circuit with a reduced target particle size;
- ▶ closed circuit first stage grinding and targeting a coarser grind (testwork has indicated that recoveries would not be reduced). furthermore, changes to ball sizes are being considered as test results have been optimistic;
- ▶ improved automation and control of the grinding circuit; and
- ▶ organisational and technical upskilling.

The processing history is presented in Figure 6. Reasons for production shortfalls and process improvements are indicated in Table 16.

Table 16: Processing Rate History

Year	Mill Production (ktpa)	Reason for Shortfall in Processing Capacity and Process Improvements
2008	392	Failure of eluate boiler; Crusher plant blockages due to wet clay-like ore - crusher circuit modified.
2009	677	Low crushing rates achieved - installation of new secondary crusher; improved crusher operation and maintenance
2010	712	Installation of second high voltage transmission line; Replacement of crusher and screening equipment (and change to more reliable suppliers); Elution and smelter expansion.
2011	744	Replacement of main jaw crusher and secondary cone crusher; New elution electric boiler; New doré furnace.
2012	629	New screens for the tertiary crushing circuit; Two new tertiary crushers.
2013	701	Ore crushing and sorting plant failures; Lower than planned underground ore supply due to maintenance; Improvements made to production procedures.
2014	729	-
2015	567	Winding down and closure of the open pit.
2016	263	Winding down and closure of the open pit.
2017	333	Availability of underground ore; three-week closure for plant refurbishments.

Source: Altyn Management

The installation of the second 1Mtpa process plant circuit will increase the total complex capacity to 2Mtpa. The second line has a similar design to the operating plant; therefore, the risks of the new installation are considered low due to the experience in operating and management of the current plant. Capital costs for the engineering, procurement and construction for the current plant expansion and the additional process plant line were quantified by SQL.

13.1.2 Metallurgical Testwork

One metallurgical testwork report was provided regarding underground ore laboratory scale testwork of the Sekisovskoye orebody. The highlights of the testwork are provided below:

- ▶ Two samples were tested, sample 12-1 with a head grade 4.1g/t gold and 6.0g/t silver and sample 12-2 with a head grade of 3.8g/t gold and 4.5g/t silver. Approximately 600kg of each sample was collected for testwork and the samples are representative of orebody 11;
- ▶ Testwork included characterisation testwork inclusive of physico-mechanical properties, mineralogy, chemical analysis, gravity separation, flotation and cyanidation; and
- ▶ The total gold recovery into gold doré achieved with intensive cyanidation and cyanidation of gravity tailings was 81.1% for sample 12-1 and 82.0% for sample 12-2.

Although EY TAS have not been supplied with other metallurgical reports, the reports identified below were reviewed in a CPR completed by Venmyn Deloitte in 2014. EY TAS cannot comment on the results and the applicability, however, the overarching results are provided as follows:

- ▶ Bulk processing testwork programme at Altay Ken-Baityu in 2011-2012: 13 bulk samples with Au head grades varying between 1g/t and 7g/t with a consistent recovery performance around 80%; and
- ▶ Bulk Processing testwork programme of Underground Ore Sample at Altay Ken-Baityu in 2013: 13 bulk samples with gold head grades varying between 2g/t and 4g/t with a consistent recovery performance around 85%.

EY TAS cannot comment on the representivity of testing, considering that only one testwork report for orebody 11 was reviewed. However, significant processing has commenced since 2013, thereby mitigating the risk of unexpected performance.

13.1.3 Recovery Performance

The gold recovery has typically been above 80% since project inception, with an improved performance at higher feed grades. It is noted that the higher feed grades have corresponded to the processing of a higher proportion of underground ore. Gold recoveries for 2017 and 2018 were approximately 83.5%.

Historical laboratory test work on underground ore yielded recoveries of approximately 82% with bulk processing results yielding recoveries of approximately 80-85% despite variations in the feed grade. Therefore, the production recoveries are in accordance with expectations and predictions of 83%.

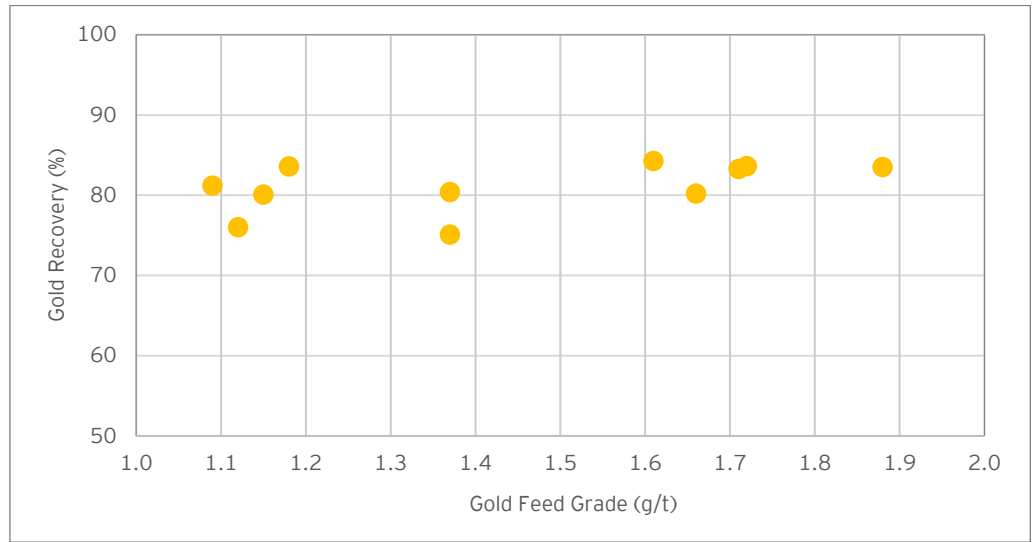
Silver recoveries have also improved with the proportion of underground ore. Recent recoveries have consistently been around 74% which is in accordance with predictions of 73%.

The historical gold and silver recoveries as provided in Section 4.2. The feed grades and recovery performance for gold and silver are presented in Figure 31 and Figure 32, respectively.

The following process improvements have assisted in increasing recoveries:

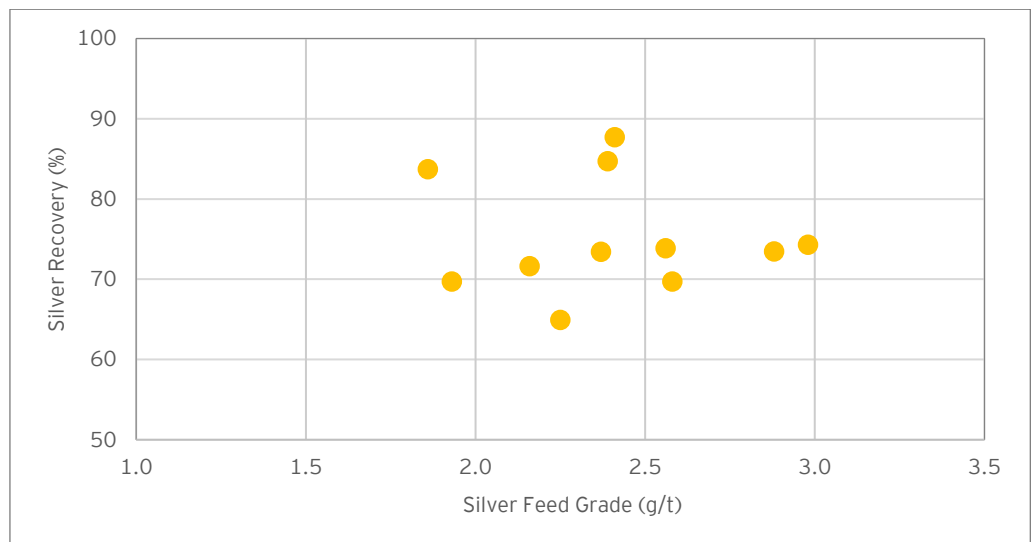
- ▶ optimised grinding;
- ▶ automation of cyanide addition and expansion of dissolved oxygen system; and
- ▶ installation of an extensive gravity circuit.

Figure 31: Gold Recovery Performance



Source: Altyn Management

Figure 32: Silver Recovery Performance



Source: Altyn Management

13.2 Processing Capital Expenditure

Capex has been provisioned for the incremental expansion and the second 1Mtpa plant. The breakdown of equipment and the Capex is provided in Table 17 and Table 18.

Table 17: Incremental Expansion Processing Capital and Associated Costs

Equipment	Cost (USD)
Semi-Autogenous Grinding Mill	4,000
Main Conveyor and Gallery	1,000
Vacuum Filter	280
Jaw Crusher	160
Pumps	274
Other Equipment	423
Steel Piping and Sheeting	360
Electrical	110
Instrumentation	100
Extension to Main Building	500
Construction Work	1,171
Total	8,378

Source: Altyn Management

Table 18: 1Mtpa Plant Expansion Capital and Associated Costs

Equipment	Cost (USD)
Comminution	9,468
Leaching	1,640
Elution	1,440
Electrolysis	60
Filtration	368
Pumping	916
Ancillary Equipment	129
Buildings	5,250
Steelwork	500
Instrumentation	900
Electrical	1,900
Laboratory	450
Construction	7,150
PP Design	500
Total	30,671

Source: Altyn Management

13.3 Processing Operating Expenditure

Operating expenditure (“Opex”) has been provisioned for the incremental expansion and the second 1Mtpa plant. The breakdown of equipment and the Opex is provided in Table 19.

Total operating costs are forecasted to increase from USD8.2m in 2017 to USD24.2m with throughput increasing from 333ktpa to 2,000ktpa, equivalent to a decrease from USD18.7/t to USD12.1/t. The major decrease in unit cost was as a result of the fixed costs contribution. Forecasted variable costs increased from USD6.5/t in 2017 to USD9.6/t, as a result of increased forecasts in reagents and maintenance costs.

The following is noted on the fixed costs:

- ▶ the fixed costs are driven by salaries and power;
- ▶ the forecast labour cost is approximately double the 2018 cost provided by management (USD921m), therefore, the labour cost forecast is considered appropriate; and
- ▶ the increase in power cost is driven by the variable power cost while the fixed power cost does not change significantly. The forecast increase in power requirements are considered appropriate.

Based on the above observations, it is the view of the EY TAS team that the fixed costs are optimistic.

Table 19: Processing Operating Costs

Processing Cost	Units	2015	2016	2017	2018 ^H	Forecast
Processing Rate	ktpa	567	257	333	183	2,000
Actual Costs						
Salaries	'000 USD	1,271	972	1,502*	484	1,785
Power	'000 USD	1,282	669	647	372	1,922
Maintenance Costs	'000 USD	634	495	696	296	527
Fuel	'000 USD	256	160	304	229	1
Laboratory Tests	'000 USD	0.7	0.1	0.1	0.9	16
Other Processing	'000 USD	1,526	1,076	895	950	732
Total Fixed Costs	'000 USD	4,970	3,372	4,043	2,332	4,983
Reagents	'000 USD	2,583	2,394	2,545	1,631	11,846
Grinding Media	'000 USD	529	469	577	333	2,839
Maintenance	'000 USD	110	136	68	98	4,538
Total Variable Costs	'000 USD	3,222	1,943	2,170	1,401	19,223
Total Actual Costs	'000 USD	8,192	5,315	6,213	3,733	24,206
Unit Costs						
Total Fixed Unit Costs	USD/t	8.8	13.1	12.1	12.8	2.5
Reagents	USD/t	4.6	6.0	5.2	6.1	5.9
Grinding Media	USD/t	0.9	1.2	1.2	1.2	1.4
Maintenance	USD/t	0.2	0.3	0.1	0.4	2.3
Total Variable Unit Costs	USD/t	5.7	7.5	6.5	7.7	9.6
Total Unit Costs	USD/t	14.5	20.6	18.7	20.4	12.1

Source: Altyn Management

^H- Half Year

*- 2017 salaries include some administration staff costs. Management report that 2016 and 2018 costs are accurate.

The variable costs are highlighted in Table 20. The following is noted on the variable costs:

- ▶ the variable costs have historically been driven by reagents and grinding media;
- ▶ the forecast reagent costs are in line with that obtained in 2016-2018. The historic consumption rates were not provided; therefore, reagent prices and consumptions were not evaluated; and
- ▶ forecast maintenance costs have increased significantly by approximately 2USD/t, driven by equipment lining costs. It is unlikely that the price of liners has driven this increase, therefore, it is believed that the lining costs are overestimated.

Although it is viewed that the fixed costs have been underestimated, the variable costs are believed to have been overestimated with the net effect being a reasonable total operating cost.

Table 20: Reagent Consumption Forecast

Reagent	Forecast (kg/t)
Cyanide	0.67
Carbon	0.07
Hydrated Lime	1.60
Caustic Soda	0.34
Hydrochloric Acid	0.30
Flocculant	0.04
Calcium Hypochloride	2.50
Mill Balls	2.17

Source: Altyn Management

14. Infrastructure

Infrastructure at the Sekisovskoye Mine includes the following:

- ▶ administrative buildings;
- ▶ mining areas;
- ▶ processing plant;
- ▶ power supply systems;
- ▶ heat supply system;
- ▶ Tailings Storage Facility (“TSF”);
- ▶ Waste Rock Dumps;
- ▶ water supply system; and
- ▶ railway access.

14.1 Administrative Buildings

The administrative buildings include a former kindergarten building situated in the southern part of the village. The head office and company offices including finance, HR, operations and environmental departments are based in this building.

14.2 Processing Plant

The current design production capacity of the gold processing plant is 850,000RoMt per annum, producing a final product called doré. The plant occupies an area of 30,500m² and includes the following:

- ▶ mills;
- ▶ chemical treatment site and equipment;
- ▶ administrative office;
- ▶ main warehouse;
- ▶ reagent warehouse;
- ▶ screening and crushing unit; and
- ▶ laboratory.

The plant expansion will require the addition of new mills, crushing and screening units, CIL units and furnaces.

14.3 Power Supply System

The Sekisovka village is the main source of power, which is served by a 6kV transmission line connected to a 110kW line. Power supply is through double chain power lines of 110kV from the Altaenergo system, using a 12.5km extension of the overhead powerline.

14.4 Heat Supply System

A central boiler house with 60Gcal/hour productivity currently supplies Sekisovskoye Mine with heat. This boiler house is operated by three boilers using coal from Kuznetsk coal-basin. Steam is used to supply heat to the mine, workshops and headframes to allow operations to continue throughout the winter months. The heat requirements of the mine consumers are provided in Table 21.

Table 21: Central Heat Supply Parameters

Name	Heat Requirement	Heat Source Boiler House Type	Type and Quantity of Boilers	Heat Productivity (MW)	Heat Medium and Parameters
Underground	20.3	Unified operational heating boiler house	KV-TS-20	52	Overheated water up to 160°C
Mining area			3 ea		
Industrial site of mine	28.7				Saturated steam PO.6 MPa
Ventilation shaft	0.7				Hot water up to 80-95°C
Total	49.7			52	

Source: The 2014 CPR by Venmyn Deloitte

14.5 Tailings Storage Facility

Tailings are currently sent to the TSF where 30% of the water is returned to the processing plant. This TSF consists of 4 sections (TD1, TD2, TD3 and TD4) and a start-up complex. The quantity of incoming tailings (solids) was permitted for 2018 at 354ktpa and this is according to the Draft Standards for Waste Disposal, 2016 -2018 of the East Kazakhstan Ecology Dept.

The mine has a new permit (KZ49VCZ00208932 dated 29th Oct 2018) to dispose of tailings in the amount not exceeding 500ktpa until 2020 and a reduced volume in 2021 due to TD4 reaching capacity, granted by the Ministry of Energy, Republic of Kazakhstan.

Section TD4 of the TSF was designed and commissioned in 2016. Additional TSFs will be constructed as required. The land available is limited to that granted in the permit and as new TSF are created and filled, additional TSF permits may be required. The TD4 section is located north of the existing TSF.

The option of returning neutralized tailings back underground as a paste fill ground support for the stopes is an option that the company is further investigating, following on from the Golder Associate's 2011 Pre-Feasibility mining study recommendation.

14.6 Waste Rock Dump

A Complex Dump-Tailings Facility ("CDTF") to store process waste and waste rock from underground mining has been provided for. The northern zone of the open pit has been backfilled with the waste rock. Backfilling of mined out areas with waste rock is planned to continue where possible.

14.7 Water Supply

The Sekisovka River, which is a tributary of the Ruba River is located approximately 20km north of the mine area and is the main water source for the mining operations. An additional water supply source for up to 50% of the required water is provided from an existing borehole, located 300m toward south-east of the processing plant. The remaining water supply is provided from the TSF, where water is accumulated over a period of five years.

There is no mine water discharge from Sekisovskoye Mine as water recycling is carried out where possible. Mine water is recycled at the processing plant and then re-used.

15. Environmental, Social and Governance Compliance Status

15.1 Environmental Requirements Applicable to the Mining Industry

The requirements of the environmental legislation of Kazakhstan for the mining industry can be split into 2 main categories:

- ▶ conducting environmental impact assessments ("EIA"); and
- ▶ obtaining environmental permits.

Pursuant to the environmental legislation of Kazakhstan, subsoil use is a "natural resource use" activity and environmental legislation requirements are prescribed for subsoil users during each stage of operations, including planning, designing, operating and closure.

All users of natural resources are subdivided into four categories in accordance with the hazard class of their facilities. Allocation of users of natural resources to one or another category affects the procedures for obtaining environmental permits and conducting an EIA. Hazard class means a category of a facility which is established depending on capacity, operating conditions, nature and amount of pollutants, noise, vibration, non-ionizing radiation, having a negative impact on the environment and human health. This is determined by an organizational structure and documentation developed for subsoil use operations.

Exploration and production of solid mineral resources such as the Sekisovskoye Mine fall under the first hazard category as detailed in Table 22.

Table 22: Hazard Categories for Exploration and Solid Mineral Resources.

Category of a Natural Resource User	Hazard Class According to Sanitary Classification	Types of Activities Included in the Category
I category	1 and 2 hazard classes	Exploration and production of mineral resources, except for commonly occurring mineral resources (e.g. sands, gravel).
II category	3 hazard class	Exploration and production of commonly occurring mineral resources, all types of forest use and special water use.
III category	4 hazard class	Production of mixed fertilizers, production of paper out of ultimate cellulose and rags, production of glycerol, etc.
IV category	5 hazard class	All types of wild nature use, except for amateur (sports) fishing and hunting.

15.1.1 Environmental Impact Assessment

An EIA is an obligatory requirement for any type of activity that may have a direct or indirect impact on the environment and/ or health of the population. An EIA includes three stages:

- ▶ pre-EIA;
- ▶ EIA; and
- ▶ section "Environmental protection" within design documentation.

At the Pre-EIA stage, potential changes to the environment and socio-economic environment, as well as the consequences caused by them must be defined within a pre-feasibility study. A feasibility study was undertaken for the Sekisovskoye Mine in June 2018 by SQL.

The EIA stage follows and is performed for the purpose of a full and integrated analysis of possible effects of project implementation, substantiation of alternatives and the development of a plan (program) of environmental protection management within a feasibility study.

The Section "Environmental protection" is developed within design documentation, containing finalised engineering solutions regarding prevention of adverse environmental impact. It should be noted that the "Environmental protection" section of the design documentation should also include emission limits, which ensure compliance with environmental quality standards based on which permits for environmental emissions are issued.

15.1.2 Permits for Emissions

Over and above the obligation to conduct an EIA for subsoil use operations, subsoil users have to obtain permits for emissions into the environment.

Generally, facilities requiring permits for emissions into environment are subdivided into four categories: I, II, III and IV (as described in Table 22).

Subsoil users having facilities within the category I, such as the Sekisovskoye Mine, need to develop the following package of documents required for obtaining a permit for emissions into the environment:

- ▶ project of emission limit values developed at stages 2 and 3 of the EIA and further indicated in design documentation, which has to be approved by the state ecological expertise;
- ▶ action plan for protection of the environment; and
- ▶ program for ecological control.

To obtain a permit for environmental emissions as part of production and consumption wastes, users should also submit a waste management program.

Permits for emissions into the environment are issued to individuals, Kazakhstan legal entities, as well as branches and representative offices of foreign legal entities registered in Kazakhstan that make emissions into the environment. Permits for emissions into the environment are issued for a period of up to a change in the applied technologies and environmental management conditions specified in the current permit, but not more than 10 years for categories I, II and III.

It should be noted that Kazakhstan legislation has a 2-fold liability for emissions into the environment, exceeding maximum allowable limits. The liability is under: (i) environmental legislation and (ii) administrative violations legislation.

Environmental legislation considers economic evaluation of damage caused to the environment, which is assessed through direct or indirect methods, depending on whether it is possible to remediate the damage through restoration. The direct method of estimating the damage is based on a simple mechanism of the cost to restore. The indirect method of evaluation is based on the difference between the actual impact on the environment and established standards based on monthly estimates, environmental hazard levels, and using a multiplication coefficient of 10. This method is complex and usually requires users to pay compensation that is not necessarily commensurate with real damages.

Under the administrative violation legislation, exceeding of maximum allowable emissions established in the environmental permit or emission in the absence of a permit results in an environmental and administrative liability, i.e. substantial fines for legal entities.

15.1.3 Quotas for Greenhouse Gas Emissions

The state regulation for emissions and absorption of greenhouse gases include:

- ▶ distribution of quotas for emissions of greenhouse gases by the facility operators;
- ▶ setting up market mechanisms in order to reduce emissions and absorption of greenhouse gases; and
- ▶ administration of facility operators.

For facility operators whose emissions exceed the equivalent of 20,000t of carbon dioxide per annum and are performing activities in the sphere of mining, it is prohibited to perform subsoil use operations without obtaining quotas for greenhouse gas emissions.

The quota for greenhouse gas emissions is credited to the account of a facility operator in the State Register of carbon units pursuant to the volumes specified in the National Plan for the distribution of quotas for greenhouse gas emissions. The facility operator provides a plan for monitoring emissions of greenhouse with respect to the National Plan for the distribution of quotas for greenhouse gas emissions.

In order to receive units of quotas for a new facility, the facility operator must submit a request for the following, no later than one month prior to the commissioning of the relevant facility:

- ▶ application for issuing quotas for greenhouse gas emissions for a new facility;
- ▶ validated plan for monitoring greenhouse gas emissions;
- ▶ verified facility passport; and
- ▶ copy of the certificate of state registration (re-registration).

Kazakhstan legislation does not include any payments for obtaining quotas for greenhouse gas emissions. However, it should be noted that facility operators are prohibited from exceeding the quota for greenhouse gas emissions established in the National Plan for the distribution of quotas for greenhouse gas emissions, except for cases where a facility operator acquires quota units from another facility operator.

In the event that a facility operator has extra quota units in comparison with the established quota for the greenhouse gas emissions and liabilities on reduction of the greenhouse gas emissions, it may decide to sell the extra units to other facility operators. Exceeding of the established and additionally purchased volume of quotas for greenhouse gas emissions is subject to an administrative fine per unit of quota that exceeds the allowable volume.

15.2 Environmental and Social Compliance Status for the Sekisovskoye Mine

The environmental permits have been granted for the Sekisovskoye Mine are summarised in Table 23.

Table 23: Summary of Environmental Permits.

Licence Type	Comment
Subsoil use	The Sekisovskoye deposit is operating under an approved Contract No. 555, dated 20 October 2000. In accordance with this contract (Clause 3.1), the operating period for Sekisovskoye Mine is valid until 18 July 2020. The company has intentions of extending the term of the Contract in connection with the increase in stock. A feasibility study is currently being undertaken in this regard.
Approved EIA	<ul style="list-style-type: none"> ▶ Mining and Processing Complex - an Environmental Authorisation on the Mining and Processing Complex EIA was received from the Ministry of Environmental Protection of the Republic of Kazakhstan dated 27 July 2007 (Ref No. 03-1-1-10 / 7879); ▶ Expansion of the tailings dump and gold extraction plant - an Environmental Authorisation on the Expansion of the Tailings Dump and Gold Extraction Plant EIA

Licence Type	Comment
	<p>was received from the Department of Ecology dated 28 December 2012 (Re No. 06-19 / 3436); and</p> <ul style="list-style-type: none"> ▶ An Environmental Authorisation dated 02 October 2017 (Ref No. Z25VCY00089844) was received for the "Development of the Sekisovskoye field to the horizon +20m and additional exploration of deep horizon to the 340m level environmental impact.
Licence for Recycling Factory	According to the Kazakhstan Law on "Permits and Notifications" (with amendments and additions as of 09 January 2018), a licence for the processing of raw material is not required.
Licence for the Underground Mining Operations	BaurGold holds Licence No. 17007947 (dated 28 April 2017) for the operation of mining and chemical industries.
Environmental Emission Permits	<p>The following Environmental Emission Permits are currently held by Altyn MM LLP:</p> <ul style="list-style-type: none"> ▶ Emission Permit (Ref No. KZ49VCZ00208932) has been issued for the period from 29 October 2018 to 31 December 2021; ▶ Permission No. KZ49VCZ00208932; ▶ Approved Environmental Action Plan for 2018-2021; ▶ Positive conclusions to the following: <ul style="list-style-type: none"> ▶ Draft standards for maximum permissible emissions ("MPE") LLP MMC ALTYN MM" dated 28 November 2017 for the period 2018-2027 (Ref No. KZ31VCY00101473); and ▶ Draft standards of accommodation production and consumption waste of MMC ALTYN MM LLP dated 19 September 2018 for the period 2018-2021 (Ref No. KZ90VCY00130190). <p>The following Environmental Emission Permits are currently held by BaurGold:</p> <ul style="list-style-type: none"> ▶ Emission Permit (Ref No. KZ09VDD00072190) dated 23 May 2017 has been issued for the period from 01 January 2018 to 31 December 2020; ▶ Emission Permit (Ref No. KZ09VDD00072190) dated 23 May 2017; and ▶ Environmental Action Plan for 2018-2020 for the project "Adjustment of the project "Development of the Sekisovskoye field to the horizon "+ 20m" and further exploration of deep horizons to the mark "-340m" Volume 2 Book 2 Part 2 Development Sekisovskoye deposits by underground method.
Licence for Utilisation of Highly Toxic Substances.	<p>The following licences are currently held by Altyn MM LLP:</p> <ul style="list-style-type: none"> ▶ Licence No 18010461 (dated 25 May 2018) for activities related to the circulation of precursors; and ▶ Licence No. 16017261 (dated 10 November 2016) for the production, processing, acquisition, storage, sale, use and destruction of poisons.
Special Water Use	<ul style="list-style-type: none"> ▶ BaurGold holds a special water use permit in terms of waste water discharges into surface water dated 06 April 2018 (Ref No. KZ24VTE00001603). This permit is valid until 09 February 2023. This permit was previously issued for the State Unitary Enterprise in terms of water intake from underground water; and ▶ A permit is in place, dated 03 July (Ref No. 03-UK-361/15) for the extraction and use of a portion of the depths of domestic and industrial water. This permit is valid until 31 December 2019.
Water Use Licence	BaurGold holds Water Use Licence No. KZ24VTE00001603, which is valid from 06 April 2018 to 09 February 2023.
State Energy Licence	According to the current legislation of the Republic of Kazakhstan, a licence for engaging in electricity transmission and distribution activities, operation of power plants, power lines and substations is not required.
Other Authorisations	At DTOO "BAURGOLD PIU" there is a developed draft of standards for water consumption for various technological processes and specific norms of water consumption for water disposal, which were agreed by the Committee for Water Resources of the Ministry of Agriculture of the Republic of Kazakhstan No. KZ41VUV00001132 of 02 April 2018.

Source: Altyn Management

15.3 Environmental Studies

The latest details pertaining to Interested and Affected Parties (“IAPs”) involvement plan, complaints and suggestions procedure, Environmental and Social Plan and ore mine date back to 2012 and 2013. SQL recommended Altyn to consider the status of these documents in terms of the Equator Principles and update them in accordance with the current state of production. As such, the following recommendations for the preparation of an environmental and social action plan for the mine have been made:

- ▶ perform monitoring of noise and vibration as a result of explosive operations and impact on workers and local residents for risk analysis;
- ▶ update the 2012 cyanide audit report in accordance with International Code and implement the results for compliance with the Code requirements;
- ▶ further develop current environmental management system, monitoring plan and internal audit schedule in relation to all aspects of the Equator Principle No 1;
- ▶ conduct an analysis of available documents that correspond to Equator Principles, namely, Interested Party Involvement Plan, Complaints and Suggestions Procedure, Environmental and Social Action Plan for current project parameters and efficiency analysis on a regular basis;
- ▶ further develop the existing Health and Safety Management system that will promote a continuous improvement culture; and
- ▶ ore mine liquidation and reclamation plan has to be reviewed in line with corporate liabilities determined in Altyn’s public account. This review must take into account operational mechanisms of future business.

15.4 Environmental Protection

The deposit at Sekisovskoye Mine is currently mined by an underground mining method as approved by the state since the completion of open-pit mining in 2016. As a result of this underground mining method, emissions to the atmosphere have reduced significantly. The overburden will also be reduced from 2,595kt to 64kt as mining progresses.

15.5 Environmental Practices and Operational Environmental Management

Mr Oleg Parkhomov is the mine’s Environmental Engineer and is responsible for ensuring overall compliance with the country’s regulatory requirements. Mr Parkhomov is also responsible for overseeing environmental monitoring work which is performed by a contractor.

Sekisovskoye Mine is operating under the auspices of the Kazakhstan local and national health, safety, and environmental regulations and legislation. According to the 2018 Feasibility Study, SQL established that the Sekisovskoye Mine protocols and procedures were developed for the purpose of corresponding with the Equator Principles by previous management. SQL considered it reasonable to update these documents in accordance with the current state of production when seeking funding from institutions guided by the Equator Principles.

Various monitoring programs are conducted at Sekisovskoye Mine to ensure compliance with environmental requirements and these include:

- ▶ quarterly surface and underground water monitoring;

- ▶ quarterly air sampling; and
- ▶ annual soil sampling.

15.5.1 Social Practices and Operational Social Management

Altyn holds regular public meetings to discuss plans that may have a direct influence on the environment and public health of affected communities and other IAPs. All EIAs go through public meetings before they are submitted to the regulatory authorities. Sekisovskoye Mine manages a social initiative and community development fund which is updated on an annual basis. This fund is paid to the local authorities and is within the framework of the budget allocated for social development.

The Sekisovskoye Mine holds open discussions with the local community and shareholders, following the guidance from regulatory requirements and international guidelines.

15.5.2 Mine Closure Provision, Closure and Rehabilitation Planning

According to Clause 19.1 of the Subsoil Use Contract, 80 days before the expiration of the Contract, Altyn is required to submit a liquidation program for eliminating the consequences of its activities under the contract, including an estimate for liquidation costs. This program must be approved by a Competent Authority. The liquidation and conservation of the activity must be carried out in accordance with the procedure established by the Government.

At present, Altyn makes an allowance of 1% of mining costs towards a Liquidation Fund (set aside for rehabilitation) on an annual basis in accordance with Clause 19.5 of the Contract. A liquidation fund has been created, which transfers funds intended for the liquidation of the mine. The contractual payments to the fund are scheduled to carry on until the completion of mining activities. The 2018 estimated liquidation cost is KZT46.4m. According to Clause 19.1 of the Contract, closure provision should reflect the actual state of the mining operations at the end of the mine life.

Sekisovskoye Mine is currently in the process of reclaiming the North Pit where mining activities have been completed. The reclamation will use the material produced by underground mining operation and is expected to be completed by 2020. The South pit is not expected to be reclaimed until completion of the underground mining operation as the bottom pit serves as an access point for a second transportation decline.

15.6 Environmental Factors and Assumptions

An EIA for the Processing Plant and the Sekisovskoye Mining and Processing Complex was approved on 27 July 2007 by the Ministry of Environmental Protection of the Republic of Kazakhstan. This EIA was based on engineering designs and alternatives and contains no detailed assumptions for each of the process designs.

This EIA concluded that the implementation of the reviewed designs and facility will not result in significant environmental degradation but will have a potential social economic effect such as employment for the local community, provided that the proposed environmental mitigation measures and requirements are implemented.

Further to this, the following additional EIAs were conducted (all authorisations were granted):

- ▶ expansion of the TSF and gold extraction plant and this was approved by the Department of Ecology for East Kazakhstan on 28 December 2012; and
- ▶ development of the Sekisovskoye field to the horizon "+ 20m" and additional exploration of deep horizons to the "-340m" level environmental impact.

Based on the environmental audit results, no significant violations of environmental legislation were recorded, and in instances where significant impacts were identified, the following measures have been put in place:

- ▶ since the capacity of the ore processing complex has been designed to cater for 850kt per annum, the facility will be upgraded to 1Mtpa for the underground mining extension;
- ▶ to mitigate the emission of air contaminants from the TSF, Sekisovskoye Mine has installed pollution control equipment, a group cyclone and dust collection devices;
- ▶ potable water undergoes a process of disinfection by ultraviolet radiation;
- ▶ the base of the ore storage area is designed to include a clay blanket to prevent groundwater contamination; and
- ▶ the Sekisovskoye Mine envisages the drilling of a borehole to monitor groundwater in the MPC area and the TSF.

16. Kazakhstan Country Profile

16.1 Basic History and Development of the Mining Sector in Kazakhstan

The mining industry of Kazakhstan has undergone several historical eras, including the period under the Russian Empire, the Soviet period under the Union of Soviet Socialist Republics ("USSR"), and the post-Soviet period of Independence.

The very first natural resource discoveries in Kazakhstan date back to late 18th century. In 1784, a grandson of a Swedish medical doctor and a prisoner of the Russian troops, Filip Ridder, was sent to the Altay region in Eastern Kazakhstan to search for minerals. Two years later, he discovered polymetallic a gold and silver deposit and founded one of the first mine facilities called "Ridder Pit". About 100 years later, an English entrepreneur, John Leslie Urquhart bought out the "Ridder Metal and Mining" joint stock company that today belongs to Kazzinc.

During the 1850s, Kazakhstan's deposits such as the Karaganda coal deposit and the Dzheskazgan copper deposit were sold to Russian entrepreneurs. They, in turn, quickly began developing open pit mines and constructing plants. These deposits later became part of the Spasskiy copper smelting plant with an average annual capacity of up to 480t of copper.

Unexplored areas, in addition to the availability of low-cost labour and land created the perfect conditions for the growth of the mining industry in Kazakhstan.

In the late 19th century the mining industry was centred around the Akmola, Semipalatinsk regions, where copper, silver-lead, coal and gold mining were prevalent. However, two factors restricted development. Many deposits and plants needed funding which was not available at the time and there was an absence of infrastructure. The first construction of railroads connecting various parts of Russia and Kazakhstan began in late 1880s that allowed Russians to gain access to Kazakhstan's raw material base. In 1899, a mining company, JV Voskresenskoe was formed. It leased large pieces of land in the Pavlodar region near the Balkhash Sea that had reserves of coal, copper and silver-lead ore.

At the end of the 19th century, Kazakhstan became the main copper producer after the Urals and the Caucasus in the Russian Empire. At the beginning of the 20th century, foreign capital left France, the UK and the US and was invested in the Kazakhstani mining industry as resources of precious metals, coal and petroleum were discovered.

However, after becoming a part of the USSR in the early 20th century, Kazakhstan geology was extensively explored by Soviet geologists. The resurgence of the Kazakh mining industry was closely associated with Kanysh Satpaev, the first president of the Kazakhstan Academy of Sciences, and the first director of the Kazakhstan Institute of Geology. He was one of the founders of the Soviet minerals industry. He led the team of geologists in the 1940-60s and discovered the vast majority of known minerals and deposits in Kazakhstan. Active exploration was suspended in the 1980s, in light of economic difficulties in the USSR. Importantly, exploration records created during the Soviet period are still archived and used.

After the fall of the Soviet Union in 1991, virtually the entire mining sector of Kazakhstan was privatized by 1998. During the period of independence little exploration was conducted, with most operations developed using known deposits discovered during the Soviet Union period. Today, Kazakhstan's mining industry is one of the most prominent, fastest growing and competitive sectors in the world, as Kazakhstan holds a wide range of natural resources. The country is one of the largest producers of beryllium, tantalum, barite, uranium, cadmium, titanium, ferroalloys, and arsenic. Kazakhstan also currently holds a third of the world's total chromium and manganese deposits and has a fifth of the world's uranium reserves.

State registered geological records indicate over 7,630 deposits in Kazakhstan, 3,500 of which are already licensed. In 2017, "Kazgeology" had conducted exploration on 14 projects, 10 of which have been successfully completed and four will continue onto the next year.

The main commercial companies in the market are Kazzinc, now 70% owned by Glencore and 30% by SamrukKazyna, Kazakhstan's sovereign wealth fund; Kazakhmys Corporation LLC; KAZ Minerals PLC; Eurasian Resources Group (previously ENRC); and NAC Kazatomprom JSC, the national uranium mining company. These players are man-power intensive in their operations but have been investing in their production processes to increase efficiency, particularly in light of the recent fall in world commodity prices. They are also restructuring to increase performance.

The Committee of Geology is in the process of improving interactive mapping where blocks available for the "First Come, First Served" model (according to this model, Kazakhstan land will be divided into blocks) and blocks in a buffer zone will be indicated. Potential miners will be entitled to undertake their own geological exploration on these blocks. The Government of Kazakhstan will finance prospecting surveys on prospective blocks and terrains. Currently, the block plan is functioning on a trial basis. Additionally, within the "Digital Kazakhstan" program, a national data bank of minerals resources will be formed on the basis of the interactive map where all geological information will be available. The information received will result in a new generation map on a 1:200,000 scale.

16.2 Key Concerns in the Mining Industry in Kazakhstan

As a rich mineral province, the international community is concerned with legislative, accounting, and transparency issues in Kazakhstan. Of the total geography of the country only 21% has been explored in detail. Apart from Almaty, the country is mainly flat having been extensively glaciated leaving either bare rock exposures or extensive cover of glacial tills and moraines.

Whilst adhering to the Committee for Mineral Reserves International Reporting Standards (“CRIRSCO”) mineral resource reporting standards where possible there are currently only 53 qualified professionals in the country who are registered Competent Persons.

The following are key concerns that Kazakhstan’s mining industry faces today:

- ▶ soviet era exploration data is generally not digital. Therefore, it is stored as hard copies and sometimes lost in the archives. Soviet engineers did not include low-grade ores in the resource statements. This suggests opportunities to re-discover lower-grade ores that could be commercially viable using new technologies;
- ▶ there is a need to explore at depth. As the global mining industry explores the depth extensions of orebodies Kazakhstan is shifting in the same direction. The inevitable increase in Opex may lead to consolidation;
- ▶ the shortage of skilled workers and professionals is a constraint;
- ▶ there is a shortage of investment capital;
- ▶ there is a negative environmental perception of mining;
- ▶ despite low cost electricity there is limited downstream beneficiation in the country. The gold industry is one of the exceptions with gold bullion refined in country and sold to the National Bank of the Republic of Kazakhstan. There are copper smelters in Kazakhstan;
- ▶ a number of small and medium mining companies have to use old and outdated equipment, since they cannot afford new equipment;
- ▶ inefficient government procurement procedures open the way for new procurement structuring; and
- ▶ renewed interest is seeing a revival of activity albeit slowly.

16.3 Subsoil Code Change

In 2017, the government amended the regulation on Subsoil and Subsoil Use. Among others, the code improved and simplified procedures for obtaining mineral rights, guaranteed access to geological and, most importantly, amended the licensing model that is now similar to the Australian “First Come, First Served” model. Kazakhstani land was divided into blocks of about 2km wide and long (depending on the region) that would be given to explorers and miners.

One of the key improvements of the new code is the consolidation of the license into exploration and production. Now companies can conduct exploration activities or/and mine the reserves. Mining licenses, in general, became more accessible to individuals and non-governmental entities (in particular smaller companies). As the law took effect on June 29, 2018, it is currently difficult to see the results of this regulatory change.

In addition, the government plans on developing an additional 122 regulations regarding geological and subsoil use, 26 bylaws that would regulate the committee and a more detailed plan on further implementation of the program in charge of the country’s mineral resources.

16.4 Licensing and Permitting Requirements for Activities in the Mining Industry

16.4.1 Licences for Exploration and Production of Solid Mineral Resources

According to Kazakhstan legislation subsoil resources are the state’s property and the state grants subsoil use rights based on the grounds and conditions envisaged by the recently enacted SSU Code, which came into force on 29 June 2018 and replaced the previous subsoil use regulatory regime under the Law “On Subsoil and Subsoil Use” dated 24 June 2010.

Pursuant to the SSU Code rights for exploration and production of solid mineral resources are subject to a License-based subsoil use regime.

Under the licence for exploration of solid mineral resources, its owner has the exclusive right to use a subsoil plot for the purpose of conducting exploration operations for solid mineral resources, including the search for solid mineral resource deposits and appraisal of their resources and reserves for subsequent production.

Under the licence for production of solid mineral resources, its owner has the exclusive right to use a subsoil block for the following operations: -

- ▶ extraction of solid mineral resources;
- ▶ use of subsoil space for conducting mining operations, placement of mining and/or mining and processing facilities in it, tailings and wastes; and
- ▶ exploration for reserve extensions (operational exploration).

Licenses for exploration/production of solid mineral resources are issued based on the “first come - first served” principle, based upon which applications for issuing licences are considered in the order of their receipt by the Ministry of Investments and Development (“MID”).

Subsequent applications are considered only after a refusal to issue a license for the previous application. The MID proceeds to the consideration of subsequent applications after 10 working days from the date of notification of the previous applicant on refusal to issue a licence.

To obtain a licence for exploration/production of solid mineral resources the documents and information summarised in Table 24 must be submitted to the MID.

Table 24: Exploration and Production Licence Requirements for Solid Minerals in Kazakhstan

Exploration of solid mineral resources	Production of solid mineral resources
Name of the applicant; its location; information on state registration as a legal entity (extract from the trade register or other legalized document certifying that the applicant is a legal entity under the laws of a foreign state); information about management of the applicant; legal entities and individuals, states and international organizations directly or indirectly controlling the applicant.	
Indication of the block (s) constituting the exploration territory and determining the subsoil plot, which the applicant requests to	Description of the territory of subsoil area that the applicant requests to provide for production with

Exploration of solid mineral resources	Production of solid mineral resources
provide for exploration. The territory indicated in the application for a licence for exploration of solid mineral resources cannot be more than 200 blocks.	calculations (size) of area and geographic coordinates of corner points; Indication of production period for the requested subsoil use area.
<i>The applications should be accompanied by the following documents:</i>	
Copies of documents confirming the information about the applicant;	
Document confirming the authority of the person acting on behalf of the applicant when submitting the application, if such person is appointed by the applicant;	
Written description of the types, methods, approximate dates by years and the volume of exploration work that the applicant intends to carry out in the requested subsoil area;	Documents containing information about the territory of the requested subsoil area: a cartogram of the location of the site, made to scale, providing visibility, overview (situational) scheme, topographic map of the surface;
Consent of the person to issue a license for the exploration of solid mineral resources, if at the requested area or part thereof such person performs hydrocarbon production operations on the basis of a subsoil use contract;	Draft mining plan;
Documents confirming that the applicant has the financial and professional capabilities to carry out exploration operations;	Draft liquidation plan;
Agreement on social and economic support for the local population, if the territory of the requested subsoil area is fully or partially related to the lands of settlements and adjacent territories at a distance of 1000 meters;	Report on appraisal of resources and solid mineral reserves of the subsoil area;
Certificate from the tax authority confirming that the applicant does not have a tax debt greater than 6 times the monthly calculation index established for the relevant financial year by the law on the republican budget of Kazakhstan (Monthly Calculation index ("MCI") for 2018 is approx. USD 6.5), issued no earlier than 10 calendar days preceding the date of application.	Report on fulfilment of licensing obligations for the exploration area for the reporting period preceding the date of the application, if the application is submitted by a holder of exploration license;
	Document confirming payment of land use (rental payments) for the current reporting period under an exploration license, if the application is submitted by a holder of exploration license;
	Documents confirming that the applicant has financial, professional and technical capabilities to carry out operations on production of solid mineral resources;
	Consent of the subsoil user conducting hydrocarbon production operations in the requested subsoil area (or part thereof), if applicable;
	Agreement on the socio-economic support of the local population, if the territory of the requested subsoil area is fully or partially related to the lands of settlements and adjacent territories at a distance of 1,000m;
	Certificate from the tax authority confirming that the applicant does not have a tax debt greater than 6 times the MCI, issued no earlier than 10 calendar days preceding the application date.

A license for exploration of solid mineral resources is issued by the MID within 10 working days from the date of an application.

So far as a license for production is concerned, if the MID does not have any comments on application and submitted documents, they are sent to the Committee for Geology and Subsoil Use of the MID ("Committee") for further consideration. Within 10 days from the date of receipt of the application, the Committee inputs received information into the unified cadastral map of the state subsoil resources fund and agrees the boundaries of the requested territory.

The applicant is notified within three working days regarding the necessity to agree the mining and decommissioning plans. Mining and decommissioning plans are approved not later than one year from the date of notification (the timeline depends on how quickly the applicant agrees the plans with the state authorities). Subsequently, within five working days from the date of submission of positive conclusions of the state expertise on mining and decommissioning plans a license for production of solid mineral resources is issued.

Overall, the procedure for issuing a license for production of solid mineral resources takes up to 30 working days from the date of receiving an application by the MID.

Licenses for exploration of solid mineral resources are issued for six consecutive years. The term of such a license may be extended once for a period of up to five consecutive years at the request of a subsoil user. Under license for exploration its holder has the exclusive right to obtain a license for production. Such right may be exercised at any time during the term of exploration license.

The term of a license for production of solid mineral resources may not exceed 25 consecutive years. The term of such a license may be extended at the request of a subsoil user for a period not exceeding the initial term of the license and the number of extensions of such a license is not limited.

16.4.2 Other Licences and Permits Required for Conducting Subsoil Use Operations

Kazakhstan legislation categorizes all permits based on the level of danger of the activities or operations to be performed:

- ▶ first-category permits include licenses required for activities or operations associated with a high level of danger;
- ▶ second-category permits include all permits that are not licenses required for activities or operations associated with a medium level of danger;
- ▶ notifications are required for activities or operations where there is a low level of danger but when the relevant government authority needs to be notified upon the commencement/completion of business activity.

There is an exhaustive list of activities which require licenses or permits as well as notifications to be submitted to the Kazakhstan government authorities pursuant to the Law "On Permits and Notifications of Kazakhstan" dated 16 May 2014. The state authorities are not entitled to request companies to have any license or permit that is not stipulated in the mentioned law.

The range of business and professional activities that are subject to permit regulation is very broad. It is important for subsoil users to determine if there is a need for a license, permit or notification in advance. Kazakhstan law imposes various types of liability and substantial penalties for failure to comply with permit regulations.

Engaging in activities without a license/permit (whichever is applicable) leads to an administrative fine of up to USD960 and, more importantly, confiscation of income (dividends), money, securities obtained as a result of activities without a license/permit.

Subsoil users (or their contractors and subcontractors) operating in the mining industry are required to obtain the following licenses and permits for conducting subsoil use operations:

- ▶ license for conducting activities related to exploitation of mining and chemical facilities, entitling a subsoil user to perform;
- ▶ extraction of solid mineral resources;
- ▶ opening and developing deposits by underground and open pit methods;
- ▶ technological works at deposits;
- ▶ blasting operations for extraction of solid mineral resources;
- ▶ cleaning, cementing, testing and completing wells;
- ▶ other operations necessary at a deposit.
- ▶ licenses for (i) designing and (ii) construction-assembly works, entitling a subsoil user to:
 - ▶ develop design documentation and
 - ▶ construct facilities necessary for subsoil use operations at a deposit.
- ▶ licence for acquisition, storage and use of explosive and pyrotechnical substances and products, entitling a subsoil use to perform:
 - ▶ acquisition of explosive and pyrotechnical substances and products for extraction activities; and
 - ▶ storage of explosive and pyrotechnical substances and products.
- ▶ permit for conducting blasting works;
- ▶ permit for emissions into the environment; and
- ▶ permit for exploitation of technology, technical devices, materials used on hazardous production facilities, permit for exploitation of hazardous technical devices.

All of the licenses and permits outlined above can be obtained in an electronic or paper form based on one-stop-shop principle by submitting the required set of documents to the relevant licensor-state authority or via the web-portal of the Government (the www.elicense.kz or www.e-gov.kz).

Kazakhstan legislation sets out that the licensing authority should issue a license not later than 15 working days from the moment of submitting the application and documents. In practice, this may take longer (up to one to three months) since the licensing authority may request additional documents/information in the course of the application process.

16.5 New mining legislation for foreign investors

From 29 June 2018 subsoil use in Kazakhstan is regulated by a new SSU Code which replaced the Law "On Subsoil and Subsoil Use" dated 24 June 2010 ("SSU Law").

It should be noted that the SSU Code envisages different regulations for the mining, hydrocarbons, uranium and other mineral resource industries. Hence, the SSU code takes into account specifics pertinent to different mineral resources as compared to the previous SSU law, which established a general regulatory regime for all mineral resource industries, which in practice gave rise to a multitude of uncertainties and difficulties for subsoil use companies upon interaction with the state authorities and other stakeholders.

16.5.1 Licensing Regime for Exploration/Production of Solid Mineral Resources

The SSU Code introduced a licensing regime for the geological study of subsoil resources, exploration/production of solid mineral resources, production of commonly occurring mineral resources, use of the subsurface and prospecting. Contractual regimes are retained only for exploration/production of hydrocarbons and production of uranium.

One of the intentions of the Government of Kazakhstan upon adopting the SSU Code was to increase the flow of foreign investment into the mining sector and replenish the mineral resource base of the country. Hence, the SSU Code introduced relatively short time periods for obtaining exploration/production licenses for solid mineral resources as compared to the previous contractual regime envisaged in the SSU Law which took from one and a half to two years for concluding a subsoil use contract which had to be agreed with a number of the state authorities along with design documents relating to the deposits. Hence, under the SSU Code a license for exploration/production of solid mineral resources may be issued within 10 working days from the date of receiving an application.

It should be noted that under the previous SSU Law there were no restrictions on the size of the area for exploration and in practice subsoil users could obtain large territories for exploration and hold them for years. Under the SSU Code a subsoil user can apply for a maximum of up to 200 blocks (400km²) for exploration purposes and for each of the blocks a subsoil user pays rent tax at the rates established by the Tax Code of Kazakhstan. The Government introduced an incentive for subsoil users to promptly perform exploration works on all of the blocks granted for subsoil use operations and relinquish the blocks which are commercially inexpedient. The size of an exploration/production site is increased or relinquished in blocks only and the exploration period is extended with respect to blocks within which the expected outline of the deposit is located.

It should be noted that under the previous regulatory regime a subsoil use contract for exploration had to contain provisions regarding the amount of expenses for the socio-economic development of the region. Based on the SSU Code the obligation on socio-economic development of the region is applicable only if the territory of the requested subsoil plot fully or partially falls within the lands of settlements and adjacent territories at a distance of 1,000m. The SSU Code also abolished the obligation of subsoil users engaged in exploration of solid mineral resources based on a license to annually finance training of local personnel and scientific works. The above financial obligations previously imposed on subsoil users created a burden of additional costs during the period of exploration works, where the return on investment is still at a risk without any guarantees of finding a commercial discovery.

Based on the SSU Code in order to obtain a license a subsoil user pays a subscription bonus, the starting amount of which is determined based on the size of the minimum subscription bonus for each block set by the Tax Code of Kazakhstan. Meanwhile, a commercial discovery bonus envisaged by the previous SSU Law, which was mainly perceived as a “penalty for success” by the mining industry, is abolished and only rent payments for blocks retained. Please see more detailed information on applicable tax payments for the mining industry in the section below.

It should also be noted that the SSU Law allowed national companies of Kazakhstan to conclude subsoil use contracts through direct negotiations with the Government. In this regard, during the effective period of the SSU Law Tau-Ken Samruk JSC, which is a national company in the sphere solid mineral resources, concluded a number of subsoil use contracts in various regions of Kazakhstan.

The SSU Law allowed Tau-Ken Samruk JSC to subsequently enter into joint ventures with partner companies for exploration/production operations, provided that such partner companies reimburse the signature bonus paid for obtaining subsoil use rights and assume the obligation to finance exploration works on a field (unless otherwise agreed with partner companies). The SSU Code abolished direct negotiations as a method for granting subsoil use rights for solid mineral resources and retained it only for hydrocarbon and uranium industries. Hence, under the SSU the only method for obtaining subsoil use rights for solid mineral resources is licensing.

16.5.2 Introduction of the CRIRSCO standards into the subsoil use legislation of Kazakhstan

The key factors for increasing foreign investments in exploration and development of solid mineral resource deposits of Kazakhstan were predicated on ensuring high resource potential and low investment risks. It is widely known that one of the main risks for foreign investors in the mining industry is the risk of not confirming the appraisal results of exploration, as well as resources and reserves, provided by subsoil users in public reports.

In order to reduce such investment risk Kazakhstan switched from the Soviet based GKZ system to the CRIRSCO standards for reporting resources and reserves of solid mineral resources, which are widely used and accepted in the world.

In this regard, the SSU Code envisages that a subsoil user holding a license for exploration of solid mineral resources is entitled to obtain a license for production provided that it provides to the MID, among others, a report on appraisal of resources and reserves of solid mineral resources prepared pursuant to the CRIRSCO standards.

However, at the request of mining companies already operating in Kazakhstan, the SSU Code introduced a transitional period until 01 January 2024 within which subsoil users are entitled to prepare mineral resources and ore reserve reports either under the procedure of previously effective SSU Law (i.e. the GKZ system) or under the CRIRSCO standards since deposits nearing their end of life need not switch to the CRIRSCO standards.

17. Market Review

17.1 Gold Market Review

17.1.1 The Gold Industry in Kazakhstan

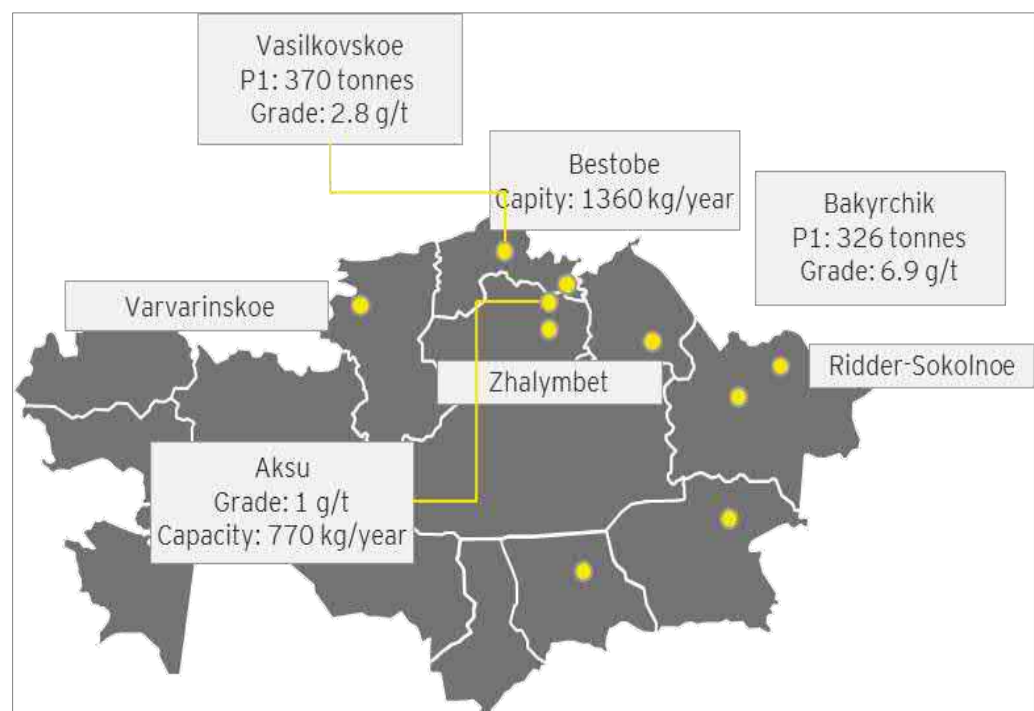
The gold industry in Kazakhstan is characterized by a number of market players (small, medium to large enterprises as well as individuals). A competitive environment exhibits constant restructuring transactions, mergers and acquisitions.

As for the supply base, Kazakhstan shows a number of gold fields, with a variety of orebodies with more than a million ounces in mineral resources. However, the majority of the fields are classified as small with reserves of up to less than one million ounces. Kazakhstan is ranked fourteenth in the world and third among CIS countries by production, with 204 gold fields in total, 130 of which are undergoing exploration and 36 are mining. Of these 38 are undergoing both exploration and mining. The major types of gold fields found in Kazakhstan include quartz-vein (e.g. Bestobe), stockwork (e.g. Vasilkovskoe and Bakyrchik) and complex (e.g. Ridder-Sokolnoe).

The majority of the country's gold is mined from 67 deposits with reserves of 5t and more located in Eastern, Central and Northern regions of the country. The largest deposits in Kazakhstan are Vasilkovskoe and Bakyrchik. Medium sized deposits include Aksu, Zholymbet, Bestobe and Akbakay that are mainly mined using the underground method. Promising medium sized deposits include Kengir, Kopalinskoe, Duma-Shuak, and Zholymbet.

Other gold deposits in Kazakhstan have vein gold and alluvial gold (that are limited to the Eastern Kazakhstan region). In Kazakhstan, gold is mined at primary deposits as well as via ancillary mining as a component of polymetallic deposits. A number of the countries deposits are highlighted in Figure 33.

Figure 33: Gold Deposits in Kazakhstan



While the country has reserves of gold graded A, B, C1 as per the Russian classification system amounting to 1,159t and C2 in the amount of 1,107t, most of the fields contain low-grade difficult gold ores. The average concentration of metal in the gold ore is 6.3 g/t (for developed fields the average concentration is about 9 g/t). One feature of gold ore found in Kazakhstan is that they generally contain high levels of arsenic and carbon.

17.1.2 Key Concerns of the Gold Mining Industry in Kazakhstan

A number of the key issues regarding the gold mining industry in Kazakhstan are as follows:

- ▶ many of the larger gold deposits have already been discovered suggesting that the industry will shift its focus to smaller deposits;
- ▶ many of the gold deposits contain increasing amounts of impurities;
- ▶ because of the impurities, there is a propensity to generate hazardous waste;
- ▶ the perception of a closed market is restrictive. The government of Kazakhstan retains the first right of purchase on all gold that is produced in the country. In addition, there is a ban on exporting raw gold and gold products. The ban, however, does not apply to the countries of the customs union but even so, the government still has the priority of purchase;
- ▶ there is a problem with access to historical information. Geological data compiled by the Soviet scientists is not compliant with modern reporting standards. Geologists did not consider small deposits significant and therefore did not record any of the low-grade samples; and
- ▶ the mining legislation forbids the export of gold materials for foreign refining. There is a requirement to conduct all refining locally unless the three local refining facilities (Kazzinc, Kazakhmys and a plant in Nur- Sultan with capacity of 25t per year) reject the order due to full capacity. In this instance, the company may be allowed to export the raw material for refining.

17.1.3 Key Players in the Gold Industry in Kazakhstan

While over 100 companies hold a license to mine gold, only about 35 of them are currently operating. The largest gold producers in Kazakhstan are Polymetal, Altyntau Kokshetau (subsidiary of Kazzinc), Kazakhmys and Kazakhaltyn. While many gold companies are currently consolidating or acquiring smaller companies, most activity involves these key players (reorganization or redistribution). The key players are summarised in Table 25.

There are only three companies that conduct gold refining namely, "Tau Ken Samruk" LLP that has a facility in Nur- Sultan, "Kazakhmys Corporation" and "Kazzinc" LLP.

Table 25: Key Gold Players in Kazakhstan

Company Name:	Polymetal International PLC
Shareholders:	Investment Construction Technology ICT Group Ltd. (22.5%), TKRITIE Holding JSC (7.13%), F Group NV (6.23%), Alexander Mamut and Family (9.75%), other.
Production Volume:	85kt of gold
Processing volume:	3,199kt of ore
Location:	Eastern Kazakhstan Region
Deposits	- Varvara, operating, open-pit (Kostanay Region) - Kyzyl, under development, open-pit followed by underground (North-Eastern Kazakhstan)
Facilities:	N/A

Company Name:	Altyntau Kokshetau JSC (subsidiary of Kazzinc)
Shareholders:	"Kazzinc Holdings" LLP (subsidiary of "Tau-Ken Samruk" National Mining Company" and "Glencore Xstrata International PLC"
Production Volume:	Average of 8Mt of ore (2016)
Location:	Akmola Region
Deposits	Vasilkovsky
Facilities:	Refining plant at Vasilkovsky deposit

Company Name:	Kazakhmys Gold Inc. (subsidiary of Kazakhmys)
Shareholders:	"Kazzinc Holdings" LLP (subsidiary of "Tau-Ken Samruk" National Mining Company" and "Glencore Xstrata International PLC"
Production Volume:	3,040kg (2015)
Location:	Toronto, Canada
Deposits	Central Mukur, Myaly
Facilities:	N/A

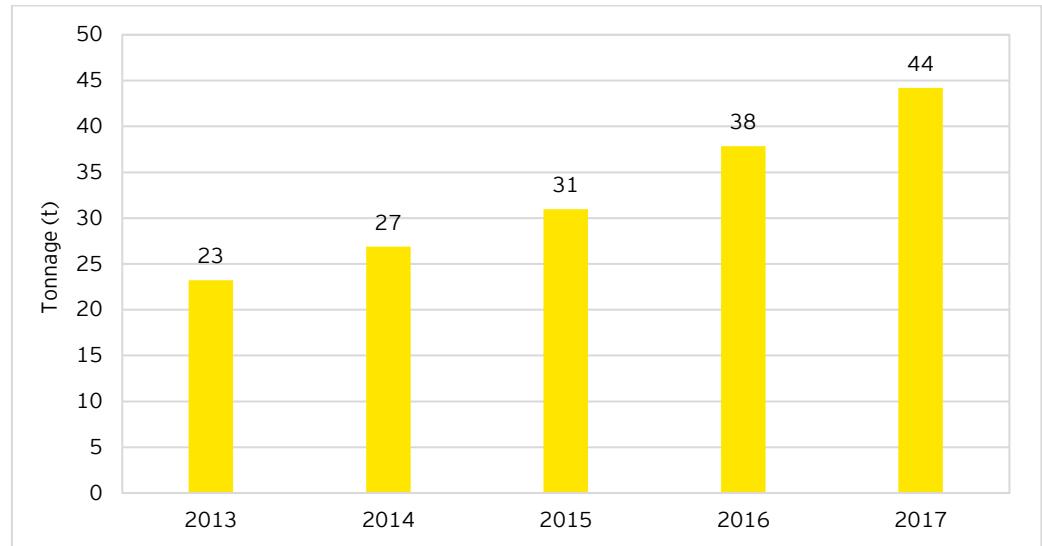
Company Name:	JSC Kazakhaltyn MMC
Shareholders:	Eduard Ogay (Kazakhmys) (75%), Financial Services B.V. (25%)
Production Volume:	N.A.
Location:	Stepnogorsk, Akmola Region
Deposits	Aksu, Bestobe, Zholimbet
Facilities:	Bozshakol, Orlovskaya, Nikolayevskaya, Belousovskaya plants.

17.1.4 Gold Production and Consumption in Kazakhstan

Gold production has increased annually between 2012 and 2017. In 2017, the key players in Kazakhstan mined 19.7Mt of gold ore to produce 44.2t of refined gold, an increase of 16.8% from the previous year. Gold produced in Kazakhstan over the last five years is illustrated in Figure 34.

Long-term gold production objectives for Kazakhstan are to reach 130t of refined gold by 2025 to 2030. If this is achieved, Kazakhstan will become the world's ninth largest gold producer and second among the CIS countries. All of the gold produced in Kazakhstan is purchased by the government.

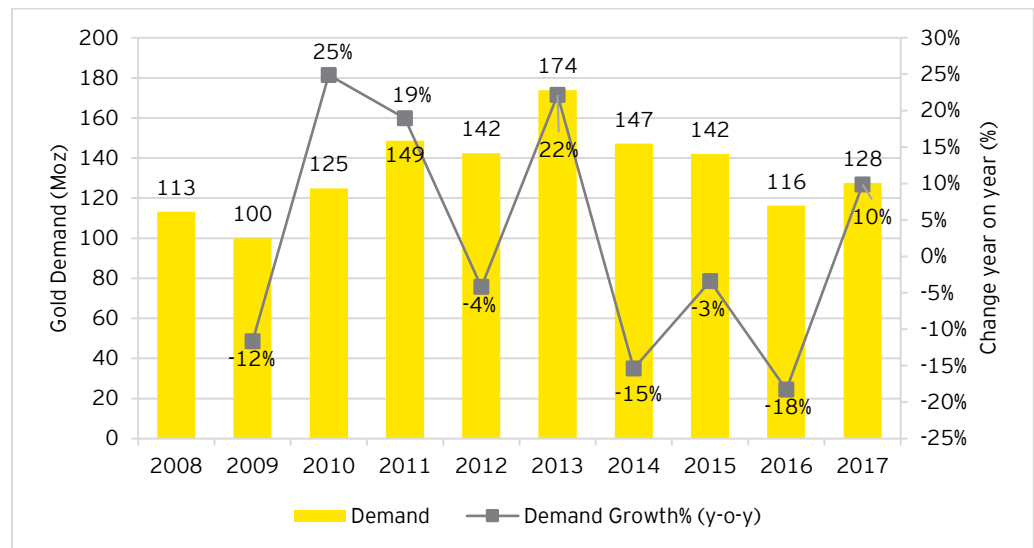
Figure 34: Gold Production in Kazakhstan



17.1.5 Gold Demand

Global demand for gold increased by 10% year on year (“y-o-y”) in 2017. The demand in growth was supported by an increase in demand for jewellery, industrial use as well as use in the electronics sector. The global demand for gold is illustrated in Figure 35.

Figure 35: Global Demand Trends for Gold



Source: GFMS Gold Survey 2018

Global jewellery demand reached 71Moz in 2017, up from 62Moz in 2016, driven by a significant recovery in consumption in India. The demand for gold jewellery also experienced a growth in the Middle East, Europe and North America markets. These regions experienced growth of 4%, 2% and 1% y-o-y respectively. Depreciation of local currency further supported the increase in demand for gold as an investment in many developing countries.

In addition, a surge in demand from industrial, dental and electronics sectors strengthened the increased demand for gold. Growth in the electronics sector increased to ~9Moz in 2017 from ~8Moz in 2016.

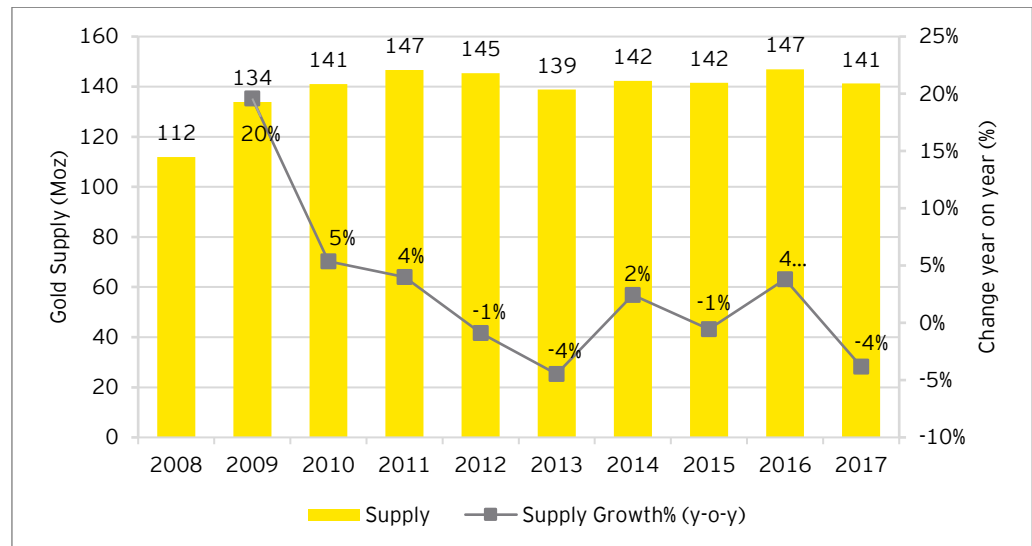
However, demand was tempered by the decline in demand for processed jewellery in East Asia, which was primarily due to decline in demand in China where structural changes in the jewellery market resulted in reduced consumption of pure gold. Further the decline in consumption of gold jewellery was also experienced in Saudi Arabia and Egypt.

Furthermore, decline in demand of gold coins and gold bullion resulted in a decline in retail investment in gold, including a decline in ETF Identifiable gold investments. This decrease directly impacted the gold investments, as they declined to USD49 billion in 2017, decreasing by 23% y-o-y.

17.1.6 Gold Supply

Global gold supply contracted to 141Moz in 2017, declining by 4% y-o-y. The decrease in supply is primarily due to a marginal decline in mine production output of 0.1% y-o-y and significant drop in gold scrap supply of 7% y-o-y. Global gold supply is illustrated in Figure 36.

Figure 36: Global Supply Trends for Gold



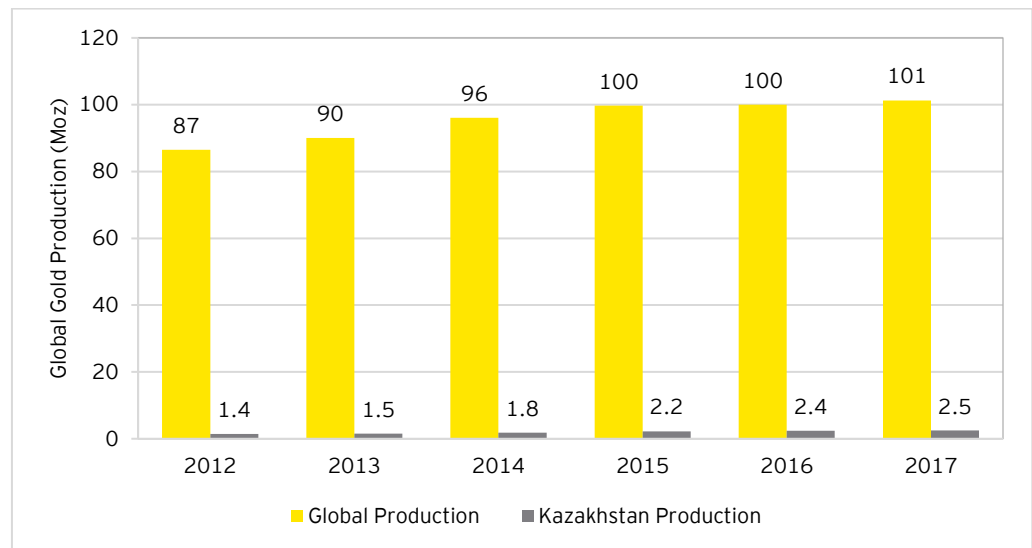
Source: GFMS Gold Survey 2018

During 2017, supply of gold scrap declined to 39Moz from 42Moz in 2016. The Asian region, as the largest scrap producer (accounting for 55% of share of the total gold scrap supply), also experienced a decline in supply. The decrease was primarily due to a significant decline in India, with a reduction of 12% as demand for jewellery increased. Gold scrap supply also reduced in Europe and North America.

Global gold mining production declined marginally by 0.1% y-o-y, with production of 103.9Moz in 2017. The marginal decline in gold mining production was also impacted by a government crackdown on illegal mining in Indonesia and environmental problems in China. In addition, Chile, Colombia, and Peru cut mine production. Russia, Canada and the USA conversely recorded a minor increase in production on the back of new mining projects and an improvement in quality of products. Global mining production is illustrated in Figure 37.

Increasing mining costs also contributed to the decline in gold supply, with a global average increase in total cash costs of 4%, and all-in sustaining costs of 5%. The largest increase in cost of production was in South Africa with an increase of 18%.

Figure 37: Gold Mining Production



Source: BMI & CEIC Data

In contrast to the global production decline, gold production in Kazakhstan increased to 2.5Moz in 2017 from 2.4Moz in 2016, with a growth of 4.2% y-o-y. The gold mining industry in Kazakhstan has grown at a compounded annual growth rate of 11.9% during the period 2012-2017. The Kazakhstan government aims to boost the country's growth by setting up new gold mining projects and elevating gold production sufficiently to boost Kazakhstan into the top gold-mining countries in the near future.

During the first half of 2018, overall production of unwrought gold and semi-processed gold or gold in powder form reached 1.9Moz, between January 2018 to July 2018 with the growth of 9.7% in comparison to the same period in 2017.

The majority of Kazakhstan's gold production comes from the processing of polymetallic and copper deposits. Leading gold producers are Kazzinc, Kazakhmys and KazakhAltyn. In addition, approximately 100 companies hold licenses to produce gold in Kazakhstan.

Further, the merger between Barrick Gold and Randgold Resources will act as a platform to create a gold mining superpower in the industry, which owns a large portion of the world's tier-one assets and boasts a low cash cost among gold miners.

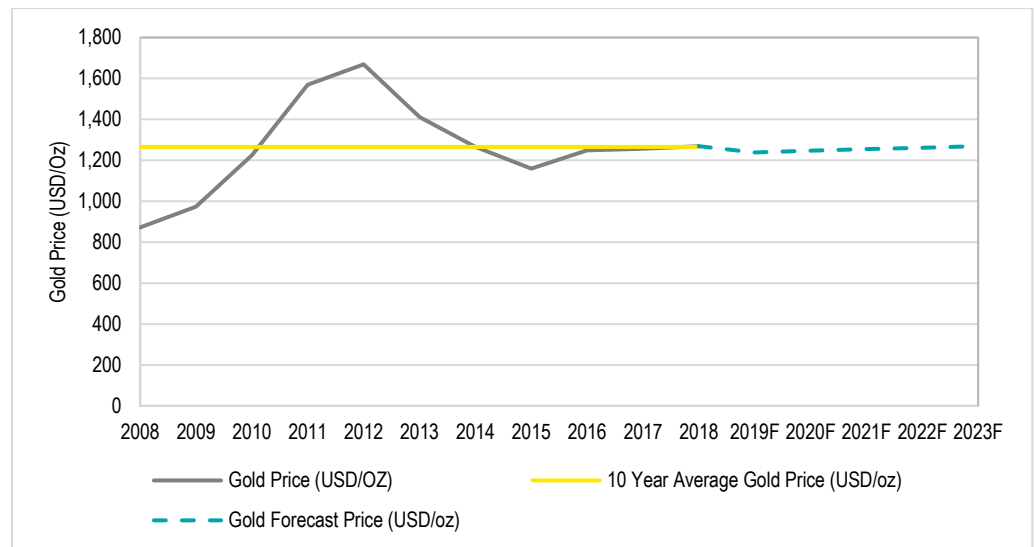
17.1.7 Gold Price Trends

Global gold prices increased marginally in 2018, reaching USD1,269/oz, increasing from USD1,257/oz in 2017. This was primarily due to the decrease in production of gold from gold mining, along with surge in demand for gold. The gold price has grown at a Compounded Annual Growth Rate ("CAGR") of 3.8% during the period 2008 to 2018.

The appreciation of the USD resulted in gold being more expensive in domestic currency terms, particularly in countries like, China, India, Iran, and Turkey.

A rise in inflation negatively impacts on the value of currency and leads to inflation of the gold price. Under inflationary conditions, gold also becomes a tool to hedge against inflation and further increases demand for gold and inflates gold prices. Historical trends illustrate that there is a negative relationship between gold and interest rates. Gold prices are illustrated in Figure 38.

Figure 38: Gold Price Trends

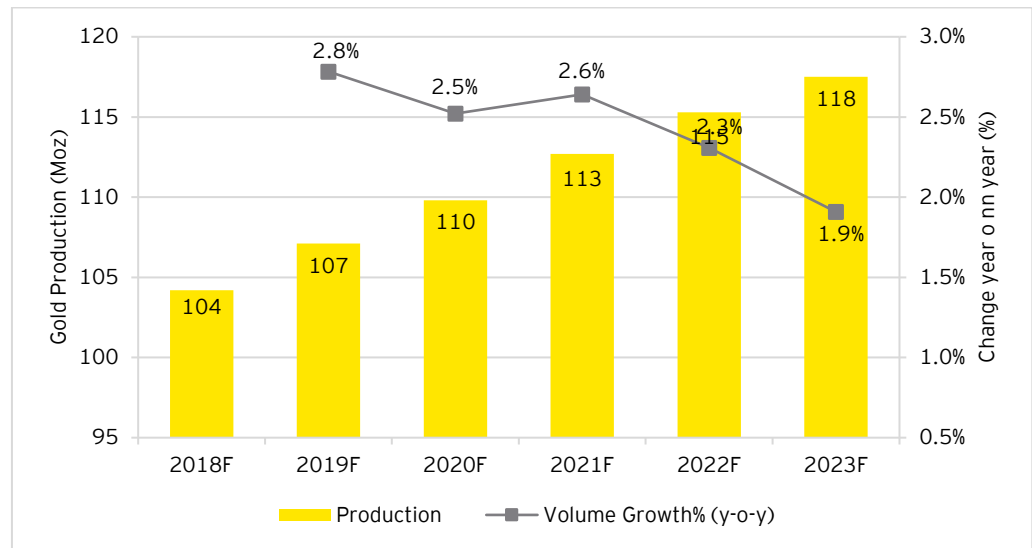


Source: Oxford Economics

17.1.8 Gold Market Outlook

According to BMI, the global gold mining production outlook appears stable and was forecast to reach 104Moz by 2018 and 107Moz by 2019. A CAGR of 2.4% is forecast during the period 2018-2023. The global gold mining production forecast is illustrated in Figure 39.

Figure 39: Global Gold Mining Production Forecast



Source: BMI

Moderately higher prices and stronger company financial positions will encourage greater investment in mining operations. Further the global gold mine output growth is forecast to increase, supported by higher prices and solid pipelines of projects in key countries such as Australia, Russia and the USA.

This will be tempered as China's gold production is expected to stagnate over the next 10 years due to declining grades, tightening environmental standards and a focus on acquiring low-cost assets abroad, restricting the country's project pipeline. Nonetheless, China will remain the largest global producer of gold ore by a significant margin.

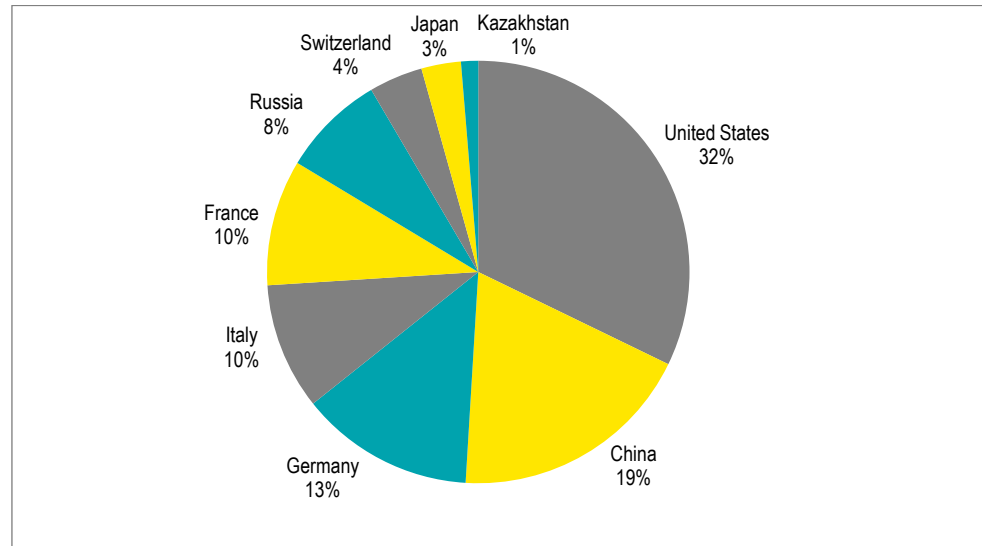
According to the Oxford Economics, gold prices are expected to decline to USD1,238/oz in 2019, by 2.4%. The decline is forecast due to ongoing monetary policy normalisation by the Federal Reserve in the USA and rise in value of USD.

However, after the short-term decrease, gold prices are expected to increase from 2020 and are forecast to reach USD1,247/oz with a growth of 0.7% y-o-y. Furthermore, prices are expected to grow to USD1,269/oz by 2023 as the sentiment towards gold prices is expected to rebound from depressed levels in 2019, with an increase in demand for gold in the form of investment, gold bullions and jewellery.

17.1.9 Global Gold Reserves

According to Statista, global gold reserves totalled 30,433Moz in 2018. The USA holds the highest gold reserves by country with ~269Moz, followed by China and Germany. Kazakhstan holds 11Moz, accounting for ~1% of global gold reserves. Global gold reserves are illustrated in Figure 40.

Figure 40: Global Gold Reserves



Source: Statista

17.2 Silver Market Review

17.2.1 Silver Demand

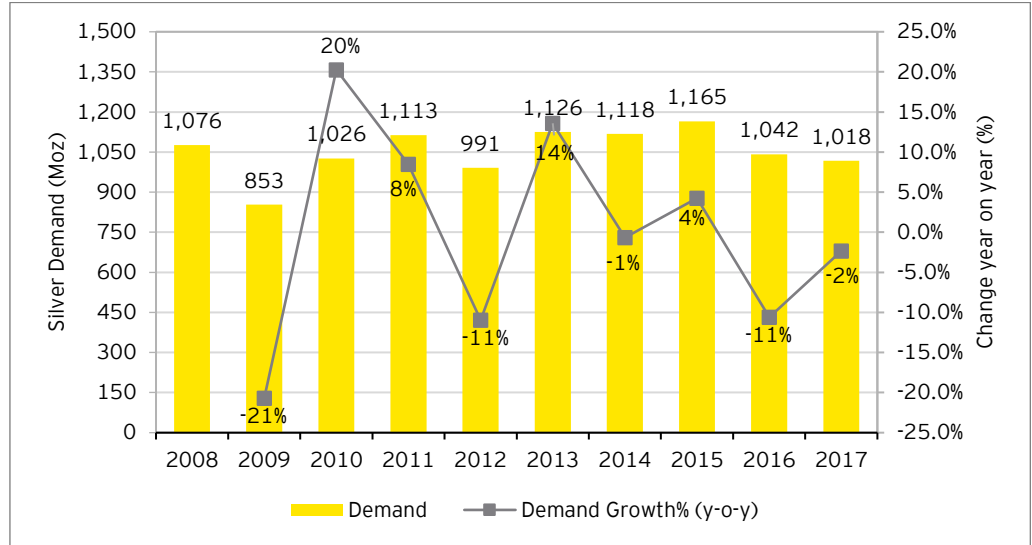
Global demand for silver contracted by 2% y-o-y to 1,018Moz in 2017. The decline was due to a combination of factors, including a decrease in demand for bars, coins and medals, a decrease in coin and bar fabrication and the demand for used coins instead of new coins, consequently hindering the sale of new coins. In addition, the evolution of new elements such as crypto currencies, has attracted speculators and caused a shift away from the commodity-based investments. The global demand for silver is illustrated in Figure 41.

The decline in demand was tempered by an increasing demand for silver jewellery, the electronics sector and silverware. Demand for silver jewellery grew by of 2% y-o-y. The growth was backed by strong demand in regions like India, East Asia, North America and Europe. A surge in demand for silver in India was due to building of stock ahead of implementation of a new Goods and Service Tax, along with retail stores expansion in the region.

Further demand for silver is on the back of an increase in usage of silver in photovoltaic products in the electronics sector. The demand of silver from photovoltaic industry reached 94Moz in 2017 from 79Moz in 2016. The majority of this demand is due to demand for solar panel installations in the regions like China, India and Europe.

Furthermore, demand for silverware increased by 11.6% y-o-y. Increased demand for silverware is from India, which was key behind growth in this sector.

Figure 41: Global Demand Trends for Silver

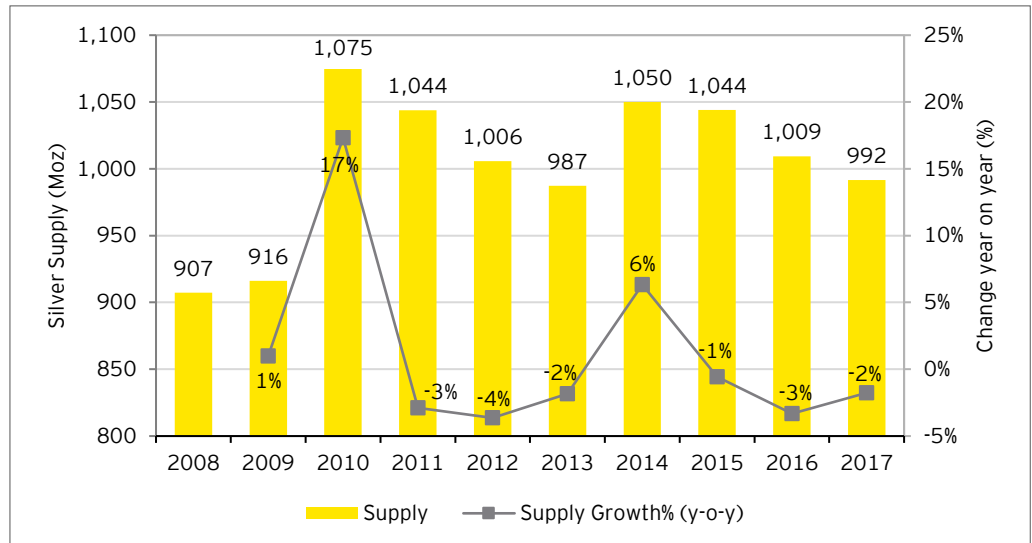


Source: The Silver Institute

17.2.2 Silver Supply

Global silver supply contracted to 992Moz in 2017, declining by 2% y-o-y. Decrease in supply was primarily due to the decline in mine production output. Furthermore, the silver supply was impacted by a decrease in global scrap supply. The decrease was due to the decline in supply from Asia, mostly from China, which experienced a decline of 10% y-o-y. The global supply of silver is illustrated in Figure 42.

Figure 42: Global Supply Trends for Silver



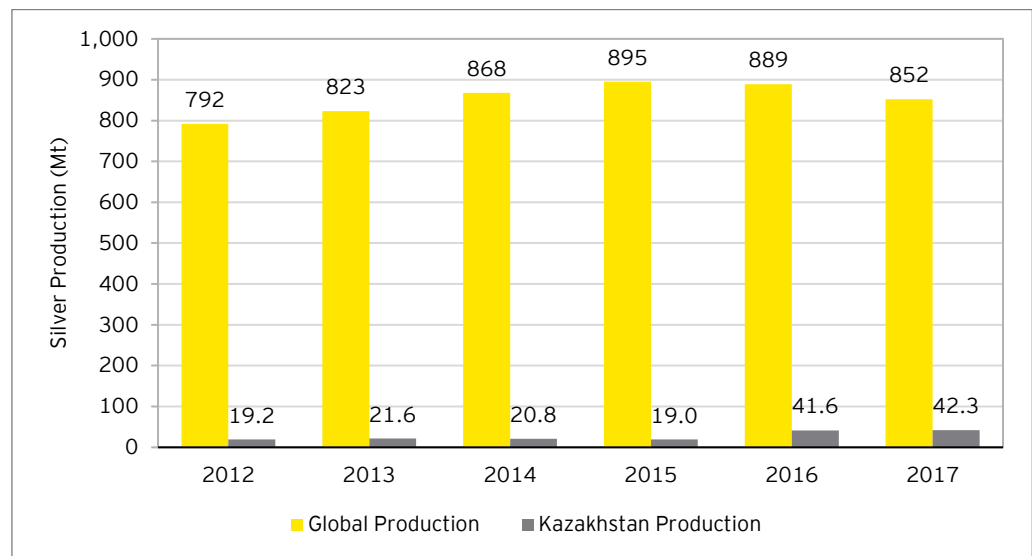
Source: The Silver Institute

The supply of silver remains constricted by lower capital expenditure by mining companies. Global silver production declined to 852Moz in 2017 from 889Moz in 2016, primarily due to a decrease in prices globally.

With the series of disruptions across the Americas, due to temporary suspensions of its mining licenses, along with ongoing strikes and ageing mines in the region, the country's output has been negatively impacted and this led to a significant decline in production. Furthermore, regions including China and Australia also experienced decline in output due to environmental concerns.

The decline in silver mining production was the highest in Oceania, followed by Central and South America and Europe. However, regions like Mexico and Africa posted growth in production. Mine production in Kazakhstan also grew to 42.3Moz in 2017 from 41.6Moz in 2016, growing by 1.7% y-o-y. Further, the country's production experienced a significant higher compounded annual growth rate (CAGR) of 17.1% during the period 2012 to 2017, as illustrated in Figure 43.

Figure 43: Silver Mining Production



Source: The Silver Institute and CEIC Data

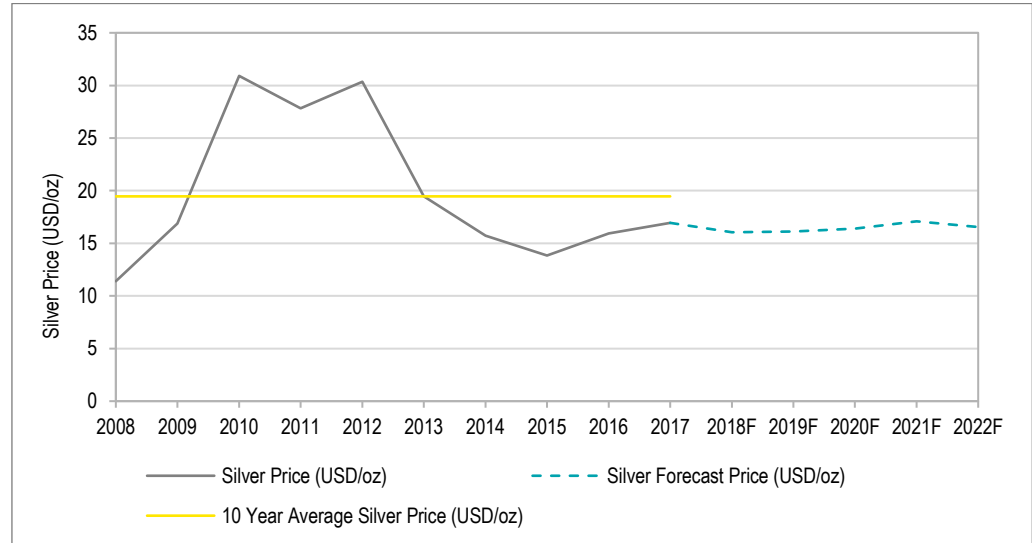
17.2.3 Silver Price Trends

Global silver prices reached USD16.9/oz in 2017 from USD15.9/oz in 2016, with a growth of 6% y-o-y. The growth was primarily due to the decrease in supply and production of silver mines along with a weak dollar during the year, which has supported the marginal growth in silver prices. Silver prices also tend to move in parallel with gold prices. Therefore, the growth in gold prices has also contributed to the increase in silver prices.

Regionally, the Chinese silver price declined due to the appreciation of the Yuan against the USD. In addition, the Euro and British Pound prices declined by 8% and 4% y-o-y, respectively. However, the London and Indian silver prices increased by 4% and 2% y-o-y, in dollar terms, respectively. Relatively weak silver prices denominated in non-dollar currencies, reflected that the positive price performance was mainly due to the weaker USD.

According to Bloomberg, the average 10-year price is USD19.5/oz with minimum price of USD11.4/oz in 2008 and maximum price of USD30.9/oz in 2010. Furthermore, the prices have grown at a CAGR of 1.4% between 2007 between 2017. The global price trends and forecasts are illustrated in Figure 44.

Figure 44: Silver Price Trends



Source: Bloomberg

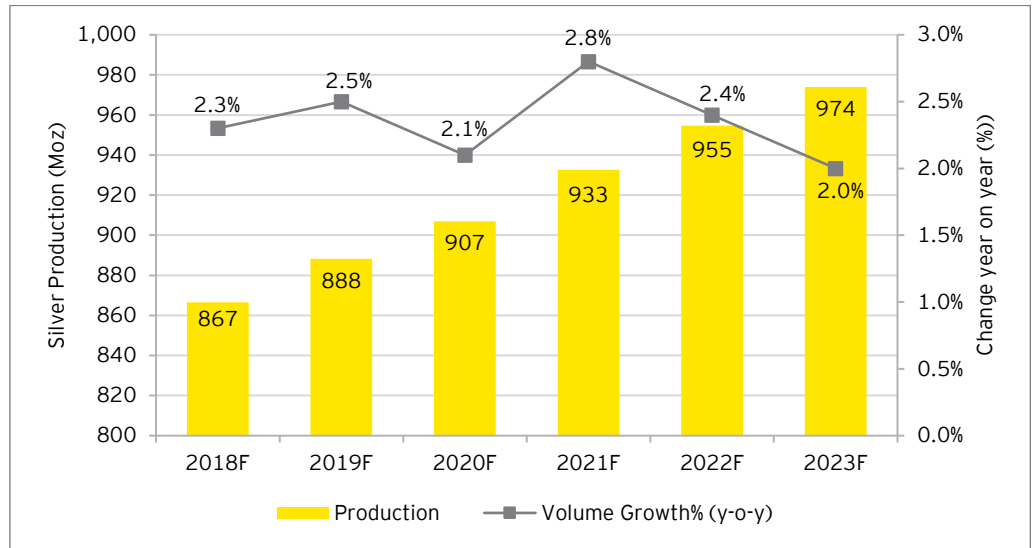
17.2.4 Silver Market Outlook

According to BMI data, the global silver mining production outlook appears stable and is expected to grow by 2.5% y-o-y, reaching ~888Moz by 2019. Furthermore, it is expected to grow at a CAGR of 2.4% during the period 2018 to 2023. Production forecasts are provided in Figure 45.

As per the Silver Institute report, silver supply is expected to grow due to an increase in mining activities. The majority of output is expected to be from Argentina followed by Mexico and Australia. Mexican production will account for the largest annual gain, growing by 6Moz.

According to Bloomberg, silver prices are expected to decline. The decline is due to the declining demand in silver, along with the increasing value of USD on the back of change in monetary policy in USA. However, it is expected to marginally increase by 2019. The silver price is expected to decline with negative CAGR of 0.4% during the period 2017 to 2022 as illustrated in Figure 44.

Figure 45: Silver Mining Production Forecast



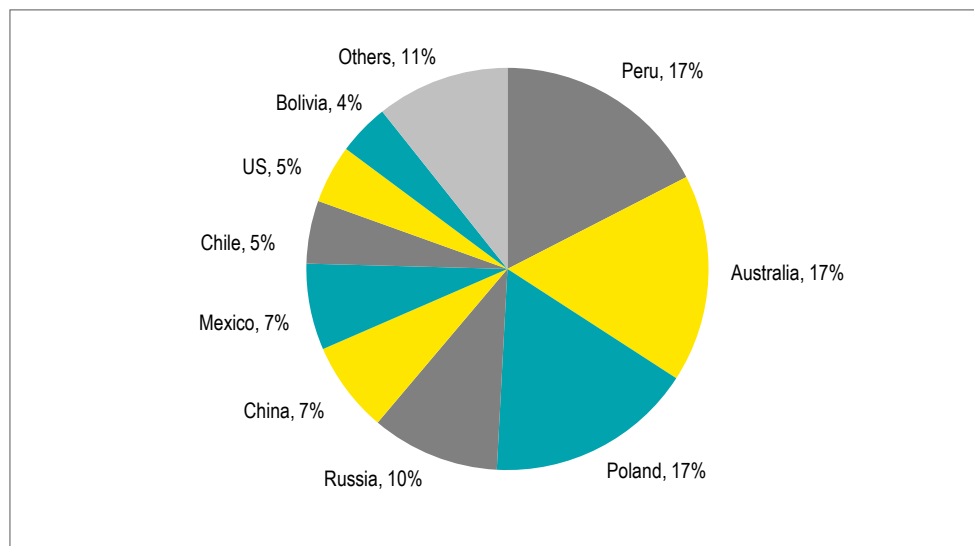
Source: BMI

In short term, the weakness in silver prices will attract the investors as a buying opportunity and this will increase the demand for silver coins and bars. However, the price is expected to rise from 2018 onwards, which may temper demand going forward.

17.2.5 Global Silver Reserves

According to the US Geological Survey, the global silver reserves totalled 18,801Moz in 2017. Globally, Peru holds the highest silver reserves by country with ~3,280Moz, followed by Australia and Poland. Russia and China also hold significant reserves. The global reserves are illustrated in Figure 46.

Figure 46: Global Silver Reserves



Source: Investing News (2018)

18. Mineral Asset Valuation

EY was appointed by Altyn to perform an independent mineral asset valuation in support of a CPR on the Sekisovskoye Mine, a gold project located in East Kazakhstan. EY understand that the CPR is required as part of the documentation requirements for the London Stock Exchange to be prepared in accordance with the JORC Code. To this end, the independent mineral asset valuation has been conducted in accordance with the 2015 edition of the Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets (“the VALMIN Code”), the companion code the JORC Code.

18.1 Mineral Asset Valuation Approaches and Methodologies

The VALMIN Code prescribes that a mineral asset valuation makes use of a minimum of two valuation approaches. As such, a valuation exercise may produce different outcomes for the same mineral asset depending on which valuation approach has been applied and, therefore, a realistic and reasonable range of values can be estimated.

Three widely accepted valuation approaches are stipulated in the VALMIN Code namely, the Market-based Valuation Approach, the Income-based Valuation Approach and the Cost-based Valuation Approach. The valuation approaches appropriate to value the Sekisovskoye Mine are principally dependent on the development stage of the Project, the geological confidence of the Mineral Resources and Ore Reserves and the potential of the mineral asset to demonstrate reasonable and realistic prospects for eventual economic extraction. However, the VALMIN Code prescribes Table 26 as a general guide to the applicability of each valuation approach.

Table 26: VALMIN Appropriate Valuation Approaches

Valuation Approach	Exploration Projects	Pre-Development Projects	Development Projects	Production Projects
Market	Yes	Yes	Yes	Yes
Income	No	In some cases	Yes	Yes
Cost	Yes	In some cases	No	No

Source: *The VALMIN Code, 2015*

The development stages referred to in Table 26 are defined by the VALMIN Code as follows:

- ▶ Early-stage Exploration Projects: Tenure holdings where mineralisation may or may not have been identified, but where Mineral Resources have not been identified;
- ▶ Advanced Exploration Projects: Tenure holdings where considerable exploration has been undertaken and specific targets identified that warrant further detailed evaluation, usually by drill testing, trenching or some other form of detailed geological sampling. A Mineral Resource estimate may or may not have been made, but sufficient work will have been undertaken on at least one prospect to provide a good understanding of the type of mineralisation present and encouragement that further work will elevate one or more of the prospects to the Mineral Resources category;
- ▶ Pre-Development Projects: Tenure holdings where Mineral Resources have been identified and their extent estimated (possibly incompletely), but where a decision to proceed with development has not been made. Properties at the early assessment stage, properties for which a decision has been made not to proceed with development, properties on care and maintenance and properties held on retention titles are included in this category if Mineral Resources have been identified, even if no further work is being undertaken;

- ▶ Development Projects: Tenure holdings for which a decision has been made to proceed with construction or production or both, but which are not yet commissioned or operating at design levels. Economic viability of Development Projects will be proven by at least a Pre-Feasibility Study; and
- ▶ Production Projects: particularly mines, wellfields and processing plants that have been commissioned and are in production.

Accordingly, Sekisovskoye Mine has been classified as a Producing Project. As such, EY has applied the Market-based Valuation Approach and Income-based Valuation Approach, in accordance with Table 26, for the Project.

18.2 Valuation Date

The effective date of the valuation is 31 May 2019.

18.3 General Valuation Assumptions

The valuation of the Sekisovskoye Mine has been based on a number of specific assumptions as discussed in the relevant sections, including the following general assumptions:

- ▶ all information provided to EY by Altyn can be relied upon as accurate;
- ▶ the legal status of the mineral rights and statutory obligations were fairly stated;
- ▶ the corporate structures and on-going activities are fairly presented;
- ▶ that Altyn and its subsidiaries would continue as going concerns and would continue to be fully funded;
- ▶ reliance can be placed on the Annual Financial Statements and any other historic financial information provided by Altyn;
- ▶ reliance can be placed on the current Mineral Resource and Ore Reserve statements; and
- ▶ that Altyn would be able to secure funding to implement the proposed future operations and production increases.

EY made due enquiry into these issues to be satisfied of the potential impact on the mineral asset valuation and where practical has corroborated, whether in writing, discussion with Altyn Management or publicly available information, the reasonableness of the information provided to it for the purpose of the valuation.

18.4 Market Approach

The Market-based Valuation Approach (the Market Approach) relies on the principle of “willing buyer, willing seller” and requires that the amount obtainable from the sale of the mineral asset is determined as if in an arm’s length transaction. Furthermore, the International Valuations Standards, considers the Market Approach to provide an indication of value by comparing the subject property with identical or similar properties for which the price information is available.

EY applied the widely accepted comparable transaction methodology, under the Market Approach. The comparable transaction methodology is based on recent and historical transactions, of a similar nature as the asset being valued, preferably concluded in a jurisdiction with a broadly similar market, commercial and political risk conditions. The methodology determines an indicative monetary value per unit of contained Mineral Resource, inclusive of Ore Reserves (USD/oz) applicable to each transaction. EY identified four transactions with underlying gold assets similar to that of the Sekisovskoye Mine and are presented in Table 27. Per unit values have been adjusted for price differential between the valuation date of the report and the transaction date.

The logic for selecting each of the transactions listed in Table 27 as comparable to that of the Sekisovskoye Mine is discussed below:

- ▶ the Komarovskoye transaction: The Komarovskoye project was acquired by Polymetal International PLC by Glencore in 2016. The gold project is located in Kazakhstan and exhibits a similar geology to that of the Sekisovskoye Mine. At the transaction date, the project had a similar stage of development than the asset under review as it was producing. The mining method applied open cast, the project does not have an underground mining portion. In general, an open cast mine transaction will fetch a higher value per ounce of contained gold as the operation would likely have lower operating costs due to the higher economies of scale that can be achieved in these operations;
- ▶ the Aksu, Bestobe, Zholymbet, Akzhal transaction: the gold projects, located in Kazakhstan, were sold by Polymetal International PLC in 2013. Aksu, Bestobe and Zholymbet projects are mined via open cast and underground mining methods, similar to Sekisovskoye Mine, however at the date of the transaction Akzhal was at exploration stage. The projects furthermore display similar geology to that of the Sekisovskoye Mine;
- ▶ the Kyzyl transactions: the high-grade gold project was involved in two transactions, in 2013 and 2014. The gold project is located in Kazakhstan and was classified as development stage at the date of the transaction and was envisaged to be mined via open cast and underground mining methods, similar to Sekisovskoye Mine. The project furthermore has similar geology to that of Sekisovskoye Mine, however the grade of gold is higher than that of Sekisovskoye Mine.

EY extrapolated unit values (USD/oz) for each Mineral Resource category using the abovementioned transactions and the EY Benchmarking tool, a graphical representation of gold equivalent transactions based on their respective unit values and Mineral Resource combination, inclusive of Ore Reserves. The valuation results are presented in Table 28. The value range for Sekisovskoye Mine is estimated as between USD236m (low) and USD439m (high). The mean value for the Project is estimated as USD338m.

Table 27: Comparable Transactions

Buyer	Seller	Target	Mining method	Geological setting	Development stage	Date	Mineral Resource USD/oz	Commodity price at transaction date	Commodity price at valuation date	Factor 1 - Gold price adjustment	Adjusted Mineral Resource (USD/oz)
Polymetal Int. PLC	Glencore	Komarovskoye project	Open cast	Low-sulphide quartz gold deposit	Production	2016	89.32	1,349.98	1,215.54	0.90	80.43
Institute project B.V.	Polys Gold Int. Ltd	Aksu, Bestobe, Zholymbet, Akzhal	Under-ground/O pen cast	Stockwork	Production	2013	33.97	1,582.94	1,215.54	0.77	26.09
Polymetal Int. PLC	Sumery Gold BV	Altynalmas Gold (Kyzyl project)	Open cast*	Stockwork	Development	2014	64.93	1,305.88	1,215.54	0.93	60.44
Sumery Gold BV	Turquoise Hill Resources	Kyzyl	Open cast*	Stockwork	Development	2013	45.17	1,253.35	1,215.54	0.97	43.80

Source: EY analysis, company websites, S&P Global Metals and Mining, 2018

Note: All Mineral Resources are inclusive of Ore Reserves and expressed as gold equivalent units on an attributable basis.

*Project Kyzyl is to employ an underground mining method in the future.

Table 28: Sekisovskoye Mine Market-based Valuation Approach results, 31 May 2019

Resource Category	Tonnage (Mt)	Gold Grade (g/t)	Silver grade (g/t)	Contained Gold (Moz)	Contained Silver (Moz)	Gold equivalent units (Moz)	Total contained metal (Moz)	Lower unit value (USD/oz)	Upper unit value (USD/oz)	Mean unit value (USD/oz)	Lower value (USDm)	Upper value (USDm)	Mean value (USDm)
Measured	29.03	3.76	6.20	3.51	5.79	0.06	3.57	60.00	110.00	85.00	214.43	393.12	303.77
Indicated	3.48	3.03	5.08	0.34	0.57	0.01	0.35	20.00	50.00	35.00	6.90	17.26	12.08
Inferred	37.15	2.37	3.99	2.83	4.77	0.05	2.88	5.00	10.00	7.50	14.42	28.84	21.63
Total	69.66	2.98	4.97	6.68	11.12	0.12	6.80	34.65	64.56	49.61	235.75	439.22	337.49

Source: EY analysis

Note: The valuation results are presented on a 100% basis.

18.5 Income Based Approach

The Income-based Valuation Approach (“Income Approach”) on the “value-in-use” principle requires determination of the present value of future cash flows over the useful life of the mineral asset. The discounted cashflow (“DCF”) method is a widely accepted methodology under the Income Approach. EY constructed a DCF model, under the aforementioned methodology, to value the Sekisovskoye Mine. The DCF model estimates the present value of the expected future cash flows, by using a discount rate appropriate to the mineral asset under review. The economic and technical assumptions included in the DCF model is discussed in the relevant sections below.

18.5.1 Adjustment to the 2018 Feasibility Study LoM

The 2018 Feasibility Study assumed a 20-year LoM, and a start date of 2018 with 500kt of production (“the Feasibility Study LoM”). The Feasibility Study LoM assumed a ramp-up from 500kt in 2018 to 2Mtpa in 2023. The ramp-up in production is contingent on capital expenditure required to further develop the underground portion of Sekisovskoye Mine and for construction of a second processing plant, amongst other capital requirements. The capital expenditure is concurrently reliant on securing the necessary funding to be able to incur the capital expenditure required to fulfil the Feasibility Study LoM.

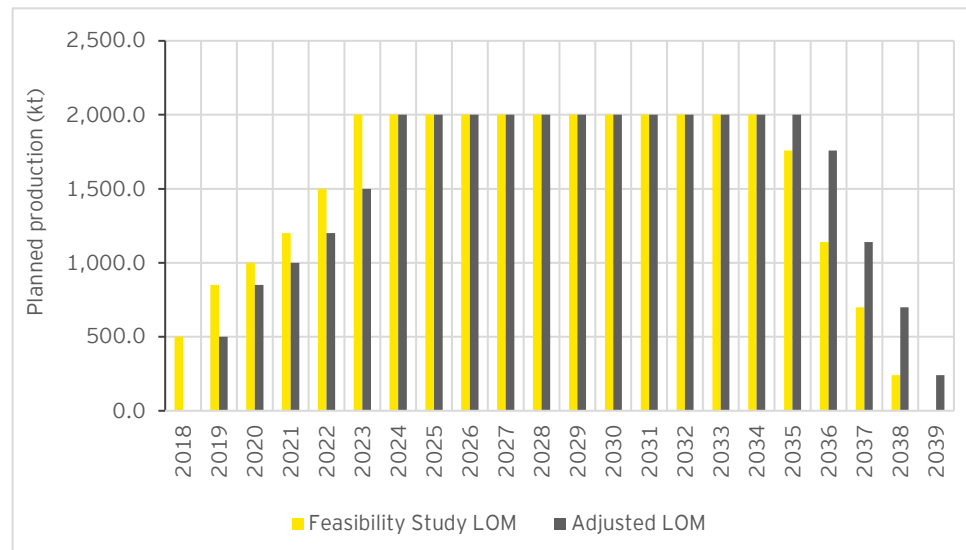
As at 30 May 2019, the Sekisovskoye Mine had not achieved the planned 2018 production of 500kt as per the Feasibility Study LoM, as the required funding had not yet been secured. The 2018 Annual Financial Statements of Altyn PLC (“2018 AFS”), published in April 2019, reported 2018 annual production at ~287kt. The 2018 AFS further reports that management has secured the necessary funding to increase production to approximately 40ktpm in 2019, i.e. 480ktpa, which is in line with the 2018 production target of 500ktpa. The Chairman’s statement assures shareholders that it is Altyn’s core resolve to secure funding to increase production in the coming periods to between 60kt-70ktpm, i.e. between 720ktpa to 840ktpa, which is in line with the production target for 2019 as per the Feasibility Study LoM.

As the required capital funding was not secured in 2018, to commence with the planned production increase and subsequently reach 500kt production, the Feasibility Study LoM had in effect been postponed until funding could be secured. As is reported in the 2018 AFS, funding has been received to put into effect the production increase to 500kt. EY has been in multiple discussions with management and have been assured that funding for the remaining production increase from 500ktpa to the steady state 2Mtpa will be secured in the near future.

Due to the postponement of the Feasibility Study LoM and subsequent assurance of secured funding from Altyn Management, EY adjusted the LoM included in the DCF model to start from 2019 and end in 2039 (Figure 47). As part of the adjustment, EY has adjusted the necessary rates, such as diesel rates etc., included in the Feasibility Study LoM to reflect 2019 money terms.

EY further considered the increased risk related to securing the required capital expenditure, expanding Sekisovskoye Mine and achieving the planned LoM in the specific risk premium included in the discount rate discussed later in this report (Section 18.5.6).

Figure 47: Feasibility Study LoM vs Adjusted LoM



Source: Altyn Management, the 2018 Feasibility Study

18.5.2 Production Assumptions

The production assumptions applied in the DCF model, including RoM tonnes and gold and silver grade have been sourced from Altyn Management. The mine production schedule is presented in Table 30.

The DCF model assumes an 83% gold recovery and 73% silver recovery for processing plant feed, as cited in the 2018 Feasibility Study. The DCF model further allows for refinery recoveries of 99.75% for gold and 99.70% for silver, as per the refinery agreement between Altyn and the national refinery, Tau-Ken Samruk (“the refinery agreement”). EY adjusted the RoM tonnes planned for 2018 to reflect the RoM tonnes as at the effective date of 31 May 2019, the effective date of the valuation.

18.5.3 Commodity Prices

The commodity prices included in the DCF model are presented in Table 29. EY considered both spot and forecast commodity prices on a real basis in the valuation of Sekisovskoye Mine.

Table 29: Forecast and Spot Commodity Prices (Real), May 2019

Description	Unit	2019	2020	2021	2022	2023	2024-2039
Gold commodity price (real)							
Mean	USD/oz	1,313	1,329	1,320	1,336	1,321	1,321
High	USD/oz	1,389	1,422	1,735	1,980	2,125	2,125
Low	USD/oz	1,238	1,194	1,205	1,103	939	939
Spot - 31 May 2019	USD/oz	1,300	1,300	1,300	1,300	1,300	1,300
Silver price (real)							
Mean	USD/oz	16	18	19	20	17	17
High	USD/oz	15	15	14	14	12	12
Low	USD/oz	14	14	14	14	14	14
Spot - 31 May 2019	USD/oz	16	16	16	17	15	15

Source: Bloomberg, S&P Metal and Mining

18.5.4 Taxation

Various taxes and payments may be applicable to the subsurface user, in addition to the taxes and payments that all legal entities need to pay to the state budget. Mineral specific taxes and payments include:

- ▶ signature bonus: a lump-sum payment by a subsurface user for obtaining the subsoil use rights, as well as for extension of the contract territory. The amount of signature bonus depends on the type of contract, type of mineral resources and the amount of approved recoverable reserves;
- ▶ commercial discovery bonus (applicable until 31 December 2018): The commercial discovery bonus is paid by a subsurface user when a commercial discovery is made on the contract territory, including discovery during additional exploration and / or recalculation of recoverable reserves of mineral resources. The amount of commercial discovery bonus depends on the amount of recoverable reserves of mineral resources approved by the relevant state authority. The commercial discovery bonus will no longer be applicable starting from 31 December 2018;

Table 30: Sekisovskoye Mine Production Schedule

Description	Units	Total/ average	2019	2020	2021	2022	2023	2024 - 2035	2036	2037	2038	2039
Mine production												
RoM	kt	32,889	500	850	1,000	1,200	1,500	2,000	1,758	1,141	700	240
Ore grade - Gold	g/t	3.5	2.3	2.5	2.9	3.2	3.5	3.6	3.7	3.7	3.9	3.9
Ore grade - Silver	g/t	5.74	3.9	4.2	4.8	5.2	5.7	5.8	6.0	6.1	6.3	6.3
Contained ounces - Gold	koz	3,715	37	68	93	122	168	230	209	137	88	30
Contained ounces - Silver	koz	6,065	63	114	154	201	274	376	340	222	143	49
Processing												
Processing plant feed - Gold	koz	3,715	37	68	93	122	168	230	209	137	88	30
Processing plant feed - Silver	koz	6,065	63	114	154	201	274	376	340	222	143	49
Processing recoveries - Gold	%	83	83	83	83	83	83	83	83	83	83	83
Processing recoveries - Silver	%	73	73	73	73	73	73	73	73	73	73	73
Recovered ounces - Gold	koz	3,084	31	56	77	101	139	191	173	114	73	25
Recovered ounces - Silver	koz	4,428	46	83	112	147	200	274	248	162	104	36
Refinery												
Refinery feed - Gold	koz	3,084	30.8	56.2	77.2	101.4	139.2	191.1	173.4	113.5	73.1	25.1
Refinery feed - Silver	koz	4,428	45.7	82.8	112.3	146.6	200.0	274.1	248.2	162.4	104.3	35.8
Refinery recoveries - Gold	%	99.75	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
Refinery recoveries - Silver	%	99.70	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
Saleable product - Gold	koz	3,075	30.8	56.1	77.0	101.1	138.8	190.7	173.0	113.2	72.9	25.0
Saleable product - Silver	koz	4,414	45.6	82.6	112.0	146.1	199.4	273.3	247.4	161.9	104.0	35.7

Source: Altyn Management, the 2018 Feasibility Study

- ▶ payment for compensation of historical costs: a payment for compensation of costs incurred by the government on geological investigation of the contract territory and exploration of mining fields. The obligation to compensate historical costs arises from the date when a confidentiality agreement is concluded between the subsurface user and the authorized state body. The amount of payment for compensation of historical costs is fixed and is specified in each subsoil use contract. Payment for compensation of historical cost does not apply to licenses for exploration or production of mineral resources issued after 31 December 2017 for territories for which previously subsoil use rights were not granted; and
- ▶ mineral extraction tax: The mineral extraction tax is a volume-based (gold contained in the RoM tonnes) royalty type tax applicable to mineral resources. A rate of 5% is applied for gold and silver.

Payment for the use of land plots: imposed for provision of land plots by the state under the license for exploration or production of mineral resources. Payment for use of land plots is paid by the entities which have received land plots based on the license for exploration or production of mineral resources. The amount of payments varies between 15 and 450 MCIs per land plot (approximately between USD98 to USD2,925), depending on the license's validity period.

It should be noted that excess profit tax, a tax based on the net margin, is no longer applicable to subsoil companies as per the New Tax Code, effective 01 January 2018.

EY furthermore included the following general tax regime assumptions as per the Code of the Republic of Kazakhstan No. 120 VI "On Taxes and Other Mandatory Payments to the Budget (Tax Code)", dated 25 December 2017, ("the New Tax Code"):

- ▶ Corporate Income Tax ("CIT") of 20% levied on taxable income;
- ▶ property tax on all immovable property located in Kazakhstan at a rate of 1.5%; and
- ▶ payroll tax, i.e. social tax, levied on payroll costs. As per the New Tax Code, payroll tax is reduced from 11% to 9.5% as of 01 January 2018 and will be reinstated as 11% from 01 January 2025. Also, with effect from 01 January 2018, the rate of social security contributions is reduced from 5% to 3.5%, with the rate of 5% reinstated from 01 January 2025. Payroll tax is inclusive of social security contributions.

EY allowed for a VAT refund payment in the calculation of working capital, of 60% of Input VAT as Sekisovskoye Mine receives 0% Output VAT from the sales of doré bars to Tau Ken Altyn. The VAT refund percentage of 60% is based on one-year historic VAT refund payments received by Altyn. Documentation to this effect has been provided to EY for confirmation of the assumption.

18.5.5 Exchange Rate

All revenue assumptions and the majority of cost assumptions included in the source DCF model which underpins the 2018 Feasibility Study are denominated in Kazakhstani Tenge (“KZT”) and converted to USD. As such EY has conducted an assessment of the exchange rate, the results are presented in Table 31. EY considered both forecast exchange rate, on a real basis, and the exchange rate as at 31 May 2019.

Table 31: Forecast and Spot USD: KZT Exchange Rates (Real), May 2019

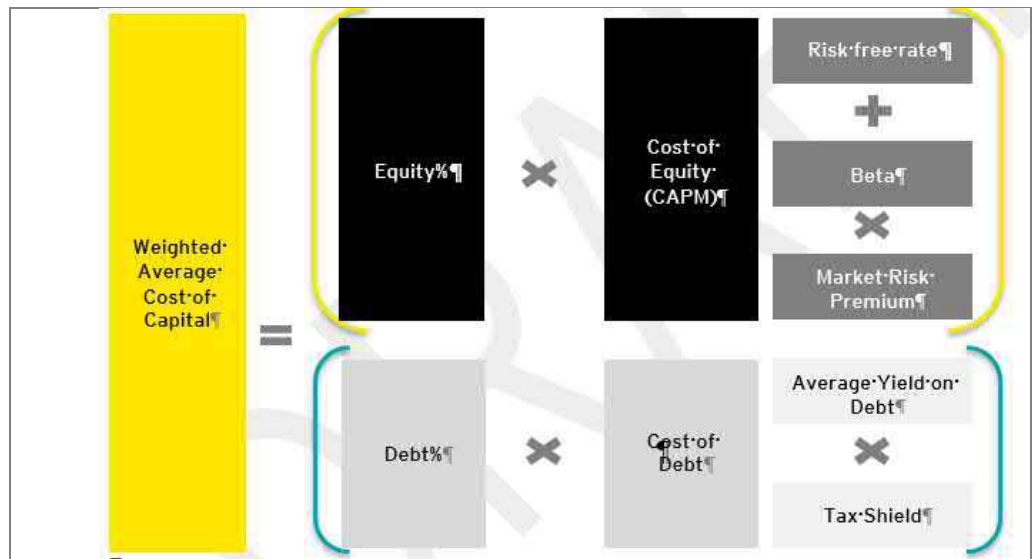
Description	Unit	2019	2020	2021	2022	2023-2039
USD: KZT - spot as at 31 May 2019	USD: KZT	382	382	382	382	382
USD: KZT - real forecast	USD: KZT	396	410	422	434	464

Source: Bloomberg, S&P Metal and Mining

18.5.6 Discount Rate

The discount rate or Weighed Average Cost of Capital (“WACC”) is used in the DCF method to calculate the value of a mineral asset from its expected free cash flow to the firm. Mid period discounting is applied in the DCF model as the cash flows are assumed to be earned semi-annually. The calculation of WACC is illustrated in Figure 48.

Figure 48: Weighted Average Cost of Capital Calculation



As is current industry best practice, EY used the capital asset pricing model (“CAPM”) in calculating the cost of equity in the WACC calculation. The CAPM formula (Figure 17) used is: $Ke = Rfr + (Rm - Rfr) \times \beta$, where:

- ▶ Ke is the cost of equity;
- ▶ Rfr is the risk-free rate;
- ▶ Rm is the market return;

- ▶ $(R_m - R_{fr})$ is the market risk premium; and
- ▶ β is systematic risk or a measure of the relative risk of an investment relative to a well-diversified portfolio of investments.

EY estimated a real discount rate for the Sekisovskoye Mine between 12.37% (low) and 13.30% (high). An average real discount rate for the Sekisovskoye Mine was estimated as 12.83%, as presented in Table 32.

Table 32: Sekisovskoye Mine Discount Rate, 31 May 2019

Description	Low WACC	High WACC
Cost of equity (Ke)		
Risk free rate - US	0.49%	0.58%
Country risk premium (default spread)	2.48%	2.48%
Synthesised Kazakhstan Rf (USD)	2.97%	3.06%
Market risk premium	6.5%	6.5%
Beta	1.085	1.170
Small stock premium	2.0%	2.0%
Specific risk premium	2.9%	2.9%
Ke	14.94%	15.58%
Proportion of equity	72.58%	72.58%
Cost of debt (Kd)		
Debt cost	6.97%	9.06%
Tax rate	20.00%	20.00%
Kd	5.58%	7.25%
Proportion of debt	27.42%	27.42%
WACC	12.37%	13.30%
Average WACC	12.83%	

Source: EY analysis

The individual line items included in the calculation of the Sekisovskoye Mine are discussed below:

- ▶ USA risk free rate: EY synthesized a risk-free rate for Kazakhstan. As the cash flows presented in the life of mine model are real, a real risk-free rate was applied. EY used the Real yield on a 15-year US Treasury Bond for the Low WACC and a Real yield on a 20-year US treasury Bond for the High WACC;
- ▶ Country Risk Premium (“CRP”): the CRP is based on ratings based on the credit default spread for Kazakhstan, sourced from Damodaran. This has been added to the real yields based on US treasury bonds to arrive at a USD denoted real risk-free rate;

- ▶ Beta: Beta is based on raw five-year monthly betas regressed against the local indices ending at valuation date for Global listed gold entities, sourced from Capital IQ. The betas were unlevered and re-levered at industry average D/E ratios. The betas are an average and median of the target's comparable entities' re-levered betas excluding outliers;
- ▶ Market Risk Premium ("MRP"): The Equity risk premium is based on mature market ERP adjusted for country risk, sourced from Damodaran. EY applied the MRP for a mature equity market of 5.37%, adjusted for the additional CRP for Kazakhstan;
- ▶ small stock premium: EY applied a small stock premium of 2% to the cost of equity based on increased risk inherent in the size in market capitalisation of Altyn relative to its peers;
- ▶ proportion of debt to equity: the target debt to equity ratios are based on comparable companies;
- ▶ cost of debt: the cost of debt was determined by adding a credit spread of 2% to the real risk-free rate based on a likely market participant borrowing rate;
- ▶ tax rate: the corporate tax rate for Kazakhstan was used; and
- ▶ specific risk premium ("SRP"): The specific risk factors considered in determining the SRP for Sekisovskoye Mine is presented in Table 33.

18.5.7 Capital Expenditure

Capex provided by Altyn Management is purported to have been prepared to a Class 3 cost estimate as defined by the Association for the Advancement of Cost Engineering. The Capex estimate addresses the engineering, procurement, construction and start-up cost requirements of increasing the capacity of the existing processing plant, with a capacity of 850ktpa, to 1Mtpa. The Capex estimate provided by Altyn Management further accounts for the construction of a new processing plant with a capacity of 1Mtpa.

The Capex profile received from Altyn Management and cited in the 2018 Feasibility Study, includes a 10% contingency, to take into account potential underestimation of the Capex requirements in regard to the ramp-up in underground mining and a subsequent required increase in processing capacity. EY considers the inclusion of the contingency reasonable and have therefore included the provision in the DCF model.

A cost for sustaining Capex has been included on the model, based on 10% of operating expenditure. The assumption is based on historic sustaining Capex achieved relative to historic operating expenditure.

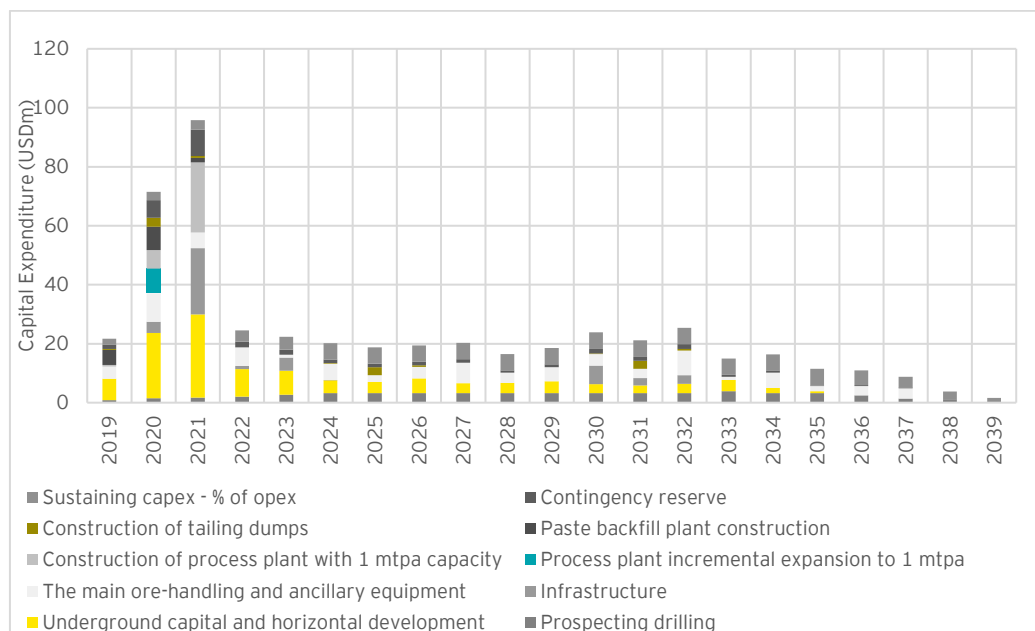
The Capex included in the DCF Model is graphically presented in Figure 49.

Table 33: Specific Risk Premium factors

Description	Factor	Rank	Factor Sensitivity
Reserves	1.98%	Normal	0.30
Commodity Prices	1.42%	Normal	0.30
Operating Costs	1.10%	Normal	0.30
Political and Country Risk	0.98%	Normal	0.30
Social and Environmental	0.81%	Normal	0.30
Location	0.63%	Normal	0.30
Capital Costs	0.62%	Normal	1.00
Management	0.30%	Low	0.00
Ownership	0.32%	Low	0.00
Taxation	0.20%	Low	0.00
Recovery	0.12%	Normal	0.30
Data Quality	0.10%	Normal	0.30
Geology	0.08%	Normal	0.30
Cost Inflation	0.08%	N/A	0.00
Mining Processing Method	0.06%	Normal	0.30
Development Stage	0.06%	Normal	0.30
Life of Mine	0.04%	Normal	0.63
Scale of Project	0.03%	Normal	0.30
Expansion	0.02%	Normal	1.00
TOTAL α			2.88%

Source: EY analysis, public domain research

Figure 49: Sekisovskoye Mine Capital Expenditure Profile (Real)



Source: Altyn Management, the 2018 Feasibility Study.

Note: The underground capital and horizontal development, and construction of tailings dumps estimates are based in KZT and converted to USD based on the EY forecast exchange rate assumption.

18.5.8 Operating Expenditure

Operating Expenditure (“OPEX”) relating to mining, processing and refining that have been allowed for in the DCF Model are presented in Figure 50, and all other operating expenditure included in the DCF Model is presented in Table 34.

Mining and hauling cost presented in Figure 50 include cost estimates for stoping, horizontal development, backfill and laboratory tests, maintenance costs and overhead costs related to mining activities. Processing costs presented in Figure 50 include cost estimates for reagents, grinding media, maintenance costs and overhead costs related to processing activities.

Mining and hauling cost, and processing costs are purported to be based on actual costs achieved over Sekisovskoye Mine’s past production period. EY compared the forecast per unit cost for mining and processing with the historically achieved mining and processing cost provided by Altyn Management. EY considers the forecast estimates to be in line with the historically achieved costs as detailed in Sections 12.4 and 13.1.

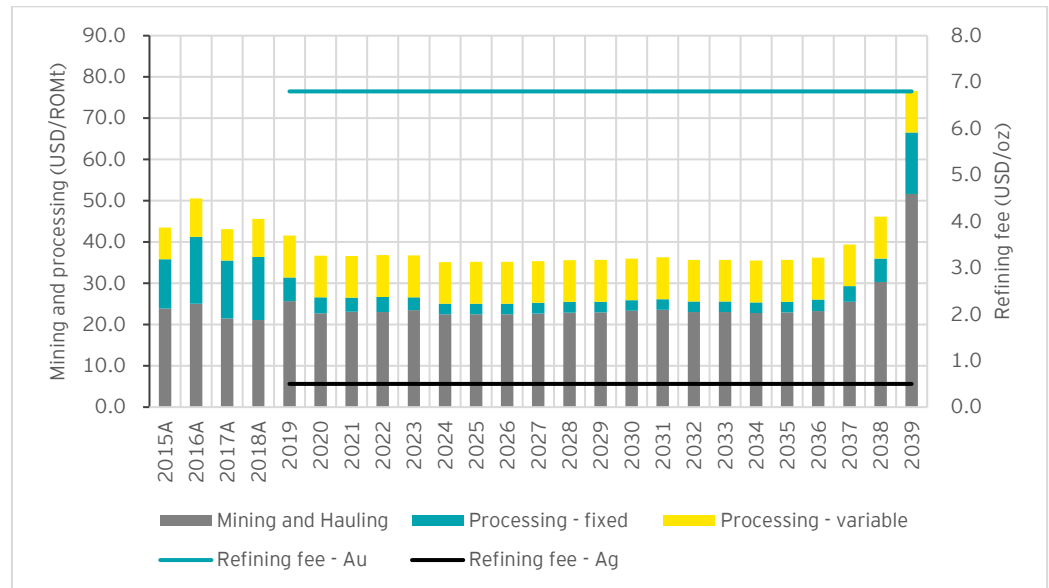
EY compared the forecast per unit cost for mining and processing cost to the historically achieved mining and processing cost provided by Altyn Management as per the management accounts.

EY considers the forecast estimates for mining cost to be reasonable with the historically achieved costs as detailed in Section 12.4 and Table 14. EY considers the variable portion of the forecast processing cost to be reasonable compared to the historically achieved variable processing cost. It can be seen from Section 13.3 and Table 19 that the fixed cost portion decreases over the LoM due to economies of scale. The fixed portion of the forecast processing cost is considered optimistic and is discussed in more detail in Section 13.3.

It should be noted that EY did not make separate allowance for Stay-in-Business (“SIB”) costs as maintenance costs have been included in both mining and hauling cost as well as processing costs.

The per unit refining fee charges presented in Figure 50, are based on an annual agreement between Altyn and the national refinery, Tau-Ken Samruk. The agreement details the cost of refining gold amounts to USD6.8 for every payable troy ounce of the final gold contained in the doré bar, and the cost of refining silver amount to USD0.5 for every payable troy ounce of the final silver contained in the doré bar.

Figure 50: Sekisovskoye Mine Mining, Processing and Refining Operating Expenditure (Real)



Source: Altyn Management

EY furthermore allowed for a security transport cost in the DCF Model, to transport the doré bars from Sekisovskoye Mine to the refinery, the cost amounts to USD0.78m over the RoM, as presented in Table 34. The security transport cost included in the model was provided by Altyn in KZT and converted to USD using the applicable EY exchange rate.

A cost of USD3m per annum was assumed by Altyn for general and admin expenses over the LoM. EY received historically achieved general and admin expenses pertaining to Sekisovskoye in support of the USD3m. EY considers it reasonable to include the cost of USD3m per annum for general and admin expenses in the DCF Model.

It is the assumption of management that general and admin expenses include all statutory payments, as presented in Table 34. The statutory payments consist of:

- ▶ historical cost payments: an established payment intended to reimburse the State expenses for exploration and settlement of the contractual territory, incurred before the contract on subsoil use was concluded. The historical cost payments amount to USD0.4m;
- ▶ personnel training: a payment calculated as 0.1% of Opex annually;
- ▶ social development programs: a fixed payment of USD3,000 per annum for funding of social responsibility programs of Altyn; and
- ▶ environmental fees: an annual payment to the State to mitigate and rehabilitate any negative impact of the after-effects of operations. The environmental fees involve payments pertaining to polluting substances, rock removal, atmosphere pollution, waste and tailings, etc.

Table 34: Sekisovskoye Mine other Operating Expenses (Real), 31 May 2019

Description	Total (USD)	2019	2020	2021	2022	2023	2024- 2032	2033	2034	2035	2036	2037	2038	2039
Doré Transport Security	0.87	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Total G&A Expenses*	64.21	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
Historical costs	0.41	0.29	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personnel training	0.56	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.01
Social development programs	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Environmental fees	3.16	0.06	0.09	0.11	0.12	0.14	0.18	0.19	0.19	0.19	0.17	0.12	0.08	0.04
Liquidation fund payment	5.55	0.11	0.16	0.18	0.21	0.25	0.32	0.33	0.32	0.33	0.29	0.21	0.15	0.09

Source: Altyn Management, the 2018 Feasibility Study.

*Assumed to include historical cost, personnel training, social development programs and environmental fees
EY forecast exchange rates used

The Sekisovskoye Mine further contributes to a liquidation fund, i.e. a rehabilitation fund, to ensure funds required for the full rehabilitation of the environment upon conclusion of the operation. Liquidation fund contribution is calculated as 1% of mining and hauling costs. At present, the liquidation fund is forecast to incur approximately USD4.9m by the end of the RoM.

18.5.9 Valuation Results

EY constructed a DCF Model with the above mentioned technical and economic assumptions to estimate an independent mineral asset value for the Sekisovskoye Mine by calculating a net present value (“NPV”), i.e. the Technical Value of the Sekisovskoye Mine. The VALMIN Code defines a Technical Value as an assessment of a mineral asset’s future net economic benefit at the valuation date under a set of assumptions deemed most appropriate by the Competent Valuator, excluding any premium or discount to account for market consideration.

EY considered two scenarios to calculate the NPV of the Sekisovskoye Mine. Scenario 1 is based on forecast commodity prices and forecast exchange rates. Scenario 2 is based on the spot rate for the gold and silver commodity prices as at 31 May 2019 and the spot exchange rate as at 31 May 2019. The results of the independent mineral asset valuation in Scenario 1 and Scenario 2 are presented in Table 35.

Table 35: Sekisovskoye Mine Income-Based Valuation Approach Results, 31 May 2019

Description	Units	Low value	High value	Mean value
Scenario 1: Forecast				
NPV	USDm	237.26	1,050.83	493.35
Long term forecast Au price	USD/oz	938.96	2,124.60	1,321.05
Discount rate	%	13.30	12.37	12.83
IRR	%	41.23	105.78	63.06
Unit value	USD/oz in situ	63.86	282.84	132.79
Scenario 2: Spot				
NPV	USDm	409.05	447.32	427.70
Spot Au price	USD/oz	1,300.11	1,300.11	1,300.11
Discount rate	%	13.30	12.37	12.83
IRR	%	54.74	54.74	54.74
Unit value	USD/oz in situ	110.10	120.40	115.12

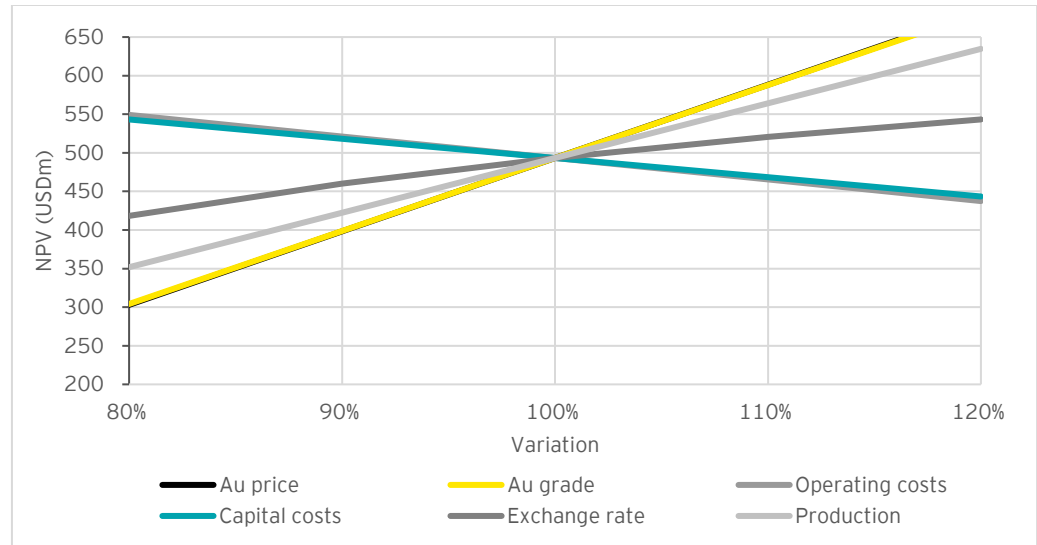
Source: EY analysis

The NPV results presented in Scenario 1 and Scenario 2 are based on a discount rate range of 12.83% (mean), 12.37% (low) and 13.30% (high). It can be seen from Table 35 that Scenario 1, based on forecast assumptions results in a mean NPV of USD493m, low NPV of USD237m and high NPV of USD1 050m. Scenario 2 NPV, based on spot assumptions, results in a mean NPV of USD428m, a low NPV of USD409m and a high NPV of USD447m. An extract of the Sekisovskoye Mine DCF Model is presented in Appendix A.

18.5.10 Sensitivity Analysis

The results indicated that the NPV is most sensitive to metal price and grade and least sensitive to a change in exchange rate. The NPV is least sensitive to a change in exchange rate as both the gold and silver commodity prices are USD denominated and therefore unaffected by a change in exchange rate. The sensitivities of the NPV of Scenario 1 to a 10% incremental change in metal price, gold grade, operating costs, capital costs, exchange rates and production are presented in Figure 51.

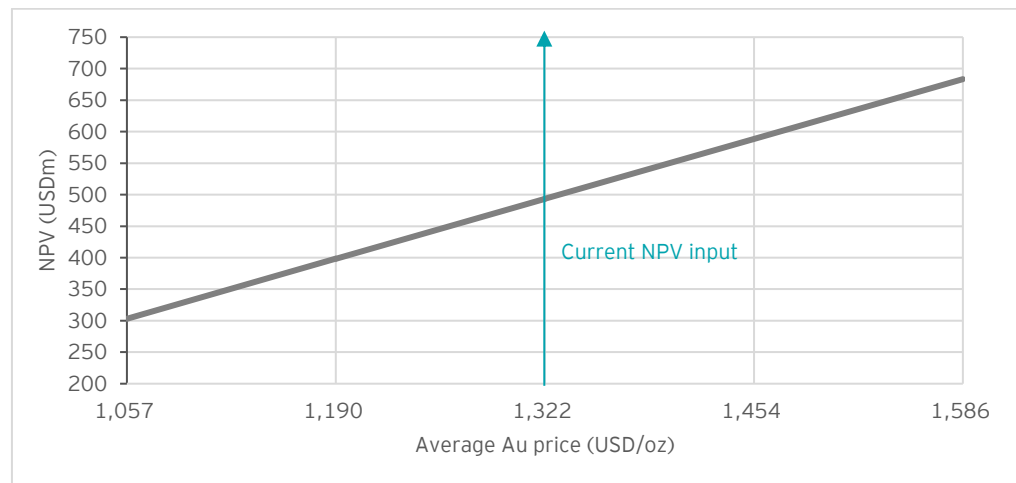
Figure 51: Sekisovskoye Mine Cashflow Sensitivity Analysis (Real), 31 May 2019



Source: EY analysis

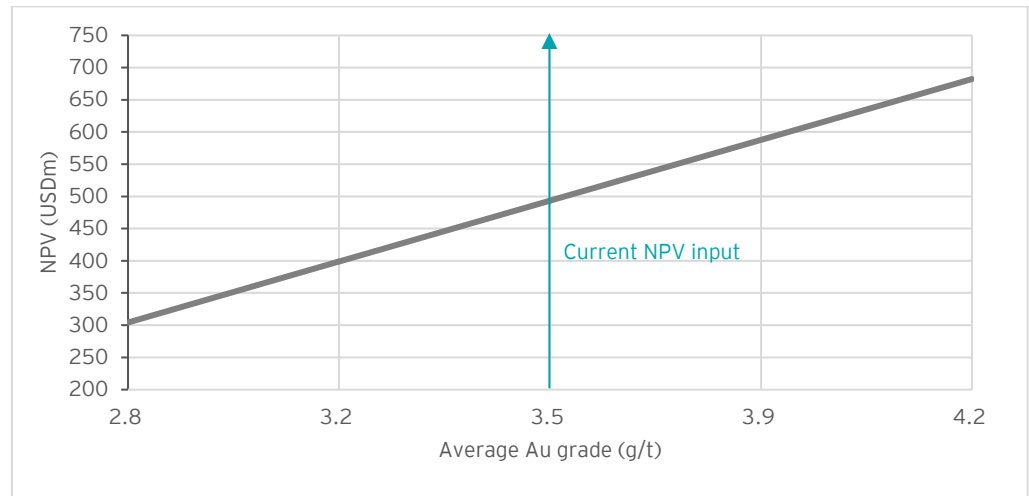
EY determined the quantum of the percentage change in the gold price, the gold grade and the LoM production as per the sensitivity analysis presented in Figure 51; the results can be seen in Figure 52, Figure 53 and Figure 54.

Figure 52: Sensitivity Analysis Gold Price (USD/oz) (Real)



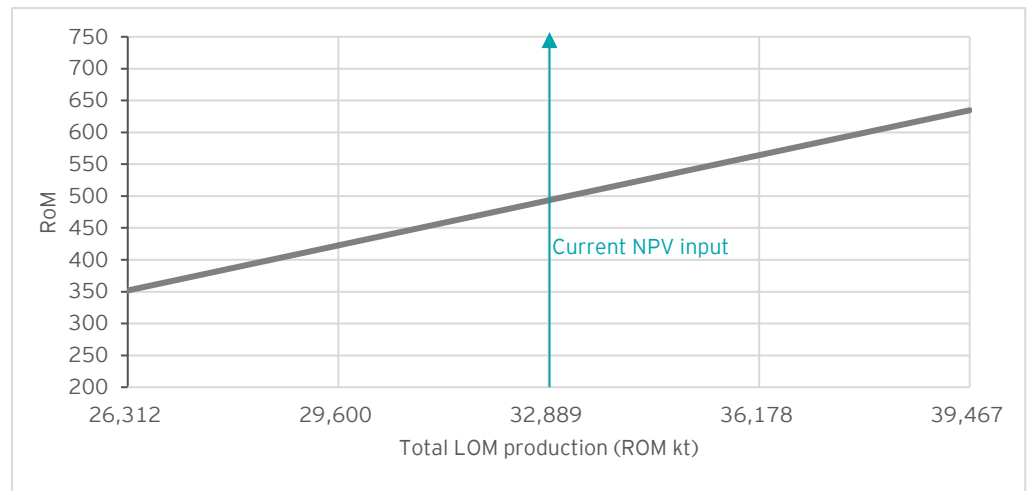
Source: EY analysis

Figure 53: Sensitivity Analysis: Gold Grade (g/t)



Source: EY analysis

Figure 54: Sensitivity Analysis LoM production (RoM kt)



Source: EY analysis

18.6 Valuation Summary

EY has performed an independent mineral asset valuation on the Sekisovskoye Mine using the Income-based approach and Market-based approach methodologies. The results are presented in Table 36.

It should be noted that the independent mineral asset valuation included in this report and the subsequent valuation results are contingent on securing the necessary funding to expand Sekisovskoye Mine's current production to the planned production targets as set out in the LoM.

Table 36: Mineral Asset Valuation Summary of Sekisovskoye Mine, 31 May 2019

Project	Units	Income-Based Approach - Mean value	Market-Based Approach - Mean value	Preferred Value
Scenario 1: Forecast	USDm	493.35	337.49	415.42
Scenario 2: Spot	USDm	427.70	337.49	382.59

Source: EY analysis

EY estimated the preferred value of Sekisovskoye Mine as the average value between the Income-based approach and the Market-based approach. Therefore, the preferred value for Sekisovskoye Mine under Scenario 1 is estimated as USD415m, and the preferred value for Sekisovskoye Mine under Scenario 2 is estimated as USD383m.

19. Conclusions

This CPR represents the updated Mineral Resource and Ore Reserve estimate for the Sekisovskoye Mine. The Mineral Resources and Ore Reserves have been estimated by Altyn after conducting exploration activities intended to increase the geological confidence.

The Sekisovskoye Mine is an operating underground mine, with a current RoM of approximately 278ktpa. The Sekisovskoye Mine is currently ramping up to a planned production of 2Mtpa. The ramp up will require approximately six years to achieve. Current underground development has been completed to approximately +150masl and the Sekisovskoye Mine will be mining from approximately +250masl to approximately +150masl during 2019 targeting a RoM of 500kt.

Ten breccias have been mapped in and around the Sekisovskoye Mine. Of these, seven breccias fall within the Sekisovskoye Mine licence boundary. The Sekisovskoye Mine is currently targeting breccia bodies 2, 3 and 4. The Sekisovskoye Mine and adjacent Teren- Sai Project are both targeting gold mineralisation hosted in pipes-like breccia intrusions that are considered part of the Zmeinogorsky Complex.

The Sekisovskoye Mine, is characterized by:

- ▶ gold-sulphides hosted in brecciated zones and stockworks within the Zmeinogorsky complex;
- ▶ gold-sulphides typically hosted in the cement matrix of the brecciated zones (diorite, gabbro and plagiogranite debris);
- ▶ northwest striking faults relating to the Irtysk Fault and the North-East Fault that display control on the orebody; and
- ▶ the breccias are frequently cross cut by barren dykes.

EY has reviewed the data used in the orebody modelling and estimation procedure and the approach is considered reasonable to the style of mineralisation and considers the items and guidelines outlined in the JORC Code. EY has not re-estimated the Mineral Resources but has conducted checks to confirm that the estimate is a reasonable representation of the deposit.

A common problem that can emerge during resource estimation is to over-estimate grade and underestimate tonnage. This may be aggravated by using a cut-off grade that is too high. The Sekisovskoye Mine has lowered the cut-off grade since 2014. The choice of cut-off grade is driven by the requirements prescribed by the State but allowance has been made to adjust these based on what is practically mineable. Based on the gradient of the grade-tonnage curve and the mining practicalities, the cut-off grade of 1.5g/t is considered reasonable for the repeatability of the Mineral Resources.

During 2008 production commenced from the open pit and continued until depletion of the open pit in 2016. Underground mining commenced in 2013 and reached 278ktpa production in 2017 and 2018. The Sekisovskoye Mine is ramping up to a planned steady state of 2Mtpa. The Sekisovskoye Mine makes use of the sub-level stoping mining method, which is a mining method for vertical and near-vertical deposits with regular orebody boundaries.

Sub-level stoping involves the excavation of drilling drifts on main development levels and sub-levels between the main development levels, from which longhole drilling is conducted and the ore is blasted to create the stope. The blasted ore is then loaded out at the bottom of the stope and the stope is then backfilled.

Between 2018 and 2020 production will be between +400masl and +150masl, with production below +150masl occurring from 2021 onwards. The LoM plan also shows considerably higher gold and silver grade targets relative to historical achievements. The average head grade achieved between 2014 and 2018 was 2.35g/t for gold and 3.33g/t for silver, while the LoM average head grades are 3.51g/t for gold and 5.74g/t for silver.

Management has indicated the reasons for the lower historical head grade achievements to include the mining of lower grade Ore Reserves above +150masl (grades below +150masl are higher than 3g/t) and the higher anticipated proportions of development relative to stoping that has been achieved historically.

Management believes that as mining progresses deeper and the ratio of stoping to development increases that the higher grades in the LoM plan should be achieved. EY does not consider the higher head grades unreasonable, however emphasis on grade control for the defined ore reserve blocks will be required, albeit that there will be limited ability to sort waste whilst mining higher production tonnages. Therefore, it should be noted that there is risk associated with the achievability of the grade targets in conjunction with the steep LoM production.

For the Ore Reserve estimation, an average mining extraction factor of 100% has been utilised. This is on the upper limit of what is usually planned for the sub-level stoping operations and is subject to downside risk due to potential orebody geometry irregularity.

The planned 5% mining dilution for the underground Ore Reserves is on the lower end of what is typically achievable using the sub-level stoping mining method and can typically be achieved with orebodies with very consistent geometries and clear contacts with the country rock. Dilution over the RoM may surpass the 5% target due to irregularities in orebody geometry, which would result in lower than expected grades.

A capital expenditure ("Capex") of USD204m is planned for the LoM underground development including a new vertical skip, cage and ventilation shafts and associated infrastructure. A further USD83.1m is planned for the new underground mining and haulage equipment fleet.

Further, it is the intention of Altyn Management to ramp up production to 2Mtpa over a six-year period. This plan involves an increase in the capacity of the existing processing plant from 0.85Mtpa to 1Mtpa for USD8.4m and the construction of a new 1Mtpa metallurgical plant and tailings dumps for USD45.7m.

As at 30 May 2019, the Sekisovskoye Mine had not achieved the planned 2018 production of 500kt as per the Feasibility Study LoM, as the required funding had not yet been secured. The 2018 AFS, published in April 2019, reported 2018 annual production at ~287kt. The 2018 AFS further reports that management has secured the necessary funding to increase production to approximately 40ktpm, i.e. 480ktpa, in 2019, which is in line with the 2018 production target of 500ktpa. The Chairman's statement assures shareholders that it is Altyn's core resolve to secure funding to increase production in the coming periods to between 60kt-70ktpm, i.e. between 720ktpa to 840ktpa, which is in line with the production target for 2019 as per the Feasibility Study LoM.

As the required capital funding was not secured in 2018, to commence with the planned production increase and subsequently reach 500kt production, the Feasibility Study LoM had in effect been postponed until funding could be secured. As is reported in the 2018 AFS, funding has been received to put into effect the production increase to 500kt. EY has been in multiple discussions with management and have been assured that funding for the remaining production increase from 500ktpa to the steady state 2Mtpa will be secured in the near future.

Due to the postponement of the Feasibility Study LoM and subsequent assurance of secured funding from Altyn Management, EY adjusted the LoM included in the DCF model to start from 2019 and end in 2039. As part of the adjustment, EY has adjusted the necessary rates, such as diesel rates etc., included in the Feasibility Study LoM to reflect 2019 money terms.

The adjusted Sekisovskoye LoM plan extends from 2019 to 2039 and involves ramping up RoM production from the 287kt achieved in 2018 to a steady state production of 2Mtpa in 2024.

The Sekisovskoye process plant is a conventional CIL gold recovery plant. The nameplate capacity of the current processing plant is 0.85Mtpa with the plan to increase capacity to 1Mtpa within two years. The 2018 Feasibility Study details the plan to extend the plant capacity to 2Mtpa by the installation of an additional plant line (milling, CIL and refining), over a period of three years.

The installation of the second 1Mtpa process plant line will increase the total complex capacity to 2Mtpa. The second line has a similar design to the operating plant, therefore, the risk of the new installation is considered low due to the experience in operating and management of the current plant, however the inability to achieve the design capacity, achievement of the target processing rate, as per the life of mine plan, is considered an ongoing risk.

EY estimated the preferred value of Sekisovskoye Mine as the average value between the Income-based approach and the Market-based approach. Therefore, the preferred value for Sekisovskoye Mine under Scenario 1 is estimated as is estimated as USD415m, and the preferred value for Sekisovskoye Mine under Scenario 2 is estimated as USD383m as summarised in the table below.

Mineral Asset Valuation Summary of Sekisovskoye Mine, 31 May 2019

Scenario	Units	Income-Based Approach - Mean Value*	Market-Based Approach - Mean Value*	Preferred Value
Scenario 1: Forecast	USDm	493.35	337.49	415.42
Scenario 2: Spot	USDm	427.70	337.49	382.59

Source: EY analysis.

*Mean values derived from high and low value ranges for respective valuation approaches.

20. Date and Signature Page

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Appendix A Cashflow Extract

			0	1	2	3	4	5	6	15	16	17	18	19	20	
Description	Unit	Total/ Ave	2019	2020	2021	2022	2023	2024	2025	2034	2035	2036	2037	2038	2039	
MINE PRODUCTION																
ROM	kt	32,889.39	500.00	850.00	1,000.00	1,200.00	1,500.00	2,000.00	2,000.00	...	2,000.00	2,000.00	1,758.21	1,140.99	700.00	240.19
Ore grade - Au	g/t	3.51	2.31	2.48	2.89	3.17	3.48	3.56	3.64	...	3.39	3.57	3.70	3.73	3.91	3.91
Ore grade - Ag	g/t	5.74	3.90	4.15	4.79	5.20	5.68	5.81	5.92	...	5.55	5.82	6.01	6.06	6.35	6.35
PROCESSING																
Processing plant feed - Au	koz	3,715.26	37.15	67.73	93.02	122.15	167.69	228.90	233.87	...	218.09	229.59	208.91	136.76	88.08	30.22
Processing plant feed - Ag	koz	6,065.02	62.63	113.46	153.89	200.79	273.92	373.37	380.97	...	356.82	374.42	339.98	222.45	142.86	49.02
Processing recoveries - Au	%	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	...	83.00	83.00	83.00	83.00	83.00	83.00
Processing recoveries - Ag	%	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	...	73.00	73.00	73.00	73.00	73.00	73.00
REFINERY																
Refinery feed - Au	koz	3,083.67	30.83	56.21	77.20	101.39	139.18	189.99	194.11	...	181.01	190.56	173.39	113.51	73.11	25.08
Refinery feed - Ag	koz	4,427.47	45.72	82.83	112.34	146.57	199.96	272.56	278.11	...	260.48	273.33	248.18	162.39	104.29	35.78
Refinery recoveries - Au	%	99.75	99.75	99.75	99.75	99.75	99.75	99.75	99.75	...	99.75	99.75	99.75	99.75	99.75	99.75
Refinery recoveries - Ag	%	99.70	99.70	99.70	99.70	99.70	99.70	99.70	99.70	...	99.70	99.70	99.70	99.70	99.70	99.70
Saleable product - Au	koz	3,075.96	30.76	56.07	77.01	101.13	138.83	189.51	193.63	...	180.56	190.08	172.96	113.23	72.92	25.02
Saleable product - Ag	koz	4,414.18	45.58	82.58	112.00	146.13	199.36	271.74	277.28	...	259.70	272.51	247.44	161.90	103.98	35.68
REVENUE CALCULATION																
Au - sold to market	USDm	4,065.14	40.38	74.53	101.68	135.09	183.40	250.36	255.79	...	238.53	251.11	228.49	149.58	96.33	33.06
Ag - sold to market	USDm	66.03	0.72	1.36	1.78	2.43	2.96	4.03	4.11	...	3.85	4.04	3.67	2.40	1.54	0.53
Dore Transport Security	USDm	(0.87)	(0.05)	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	...	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
MET - Au	USDm	(245.50)	(2.44)	(4.50)	(6.14)	(8.16)	(11.08)	(15.12)	(15.45)	...	(14.41)	(15.16)	(13.80)	(9.03)	(5.82)	(2.00)
MET - Ag	USDm	(4.54)	(0.05)	(0.09)	(0.12)	(0.17)	(0.20)	(0.28)	(0.28)	...	(0.26)	(0.28)	(0.25)	(0.16)	(0.11)	(0.04)
Total revenue (incl sales expenses)	USDm	3,880.25	38.56	71.25	97.16	129.15	175.04	238.95	244.14	...	227.67	239.67	218.07	142.74	91.91	31.51
OPERATING COSTS																
Mining and Hauling	USDm	(555.08)	(10.69)	(15.58)	(18.08)	(21.02)	(25.08)	(31.97)	(32.03)	...	(32.45)	(32.67)	(29.14)	(20.68)	(15.10)	(8.83)
Processing	USDm	(309.45)	(6.63)	(9.54)	(10.55)	(12.60)	(14.12)	(18.04)	(18.04)	...	(18.04)	(18.04)	(16.14)	(11.31)	(7.86)	(4.26)
Refining fee - Au	USDm	(20.97)	(0.21)	(0.38)	(0.52)	(0.69)	(0.95)	(1.29)	(1.32)	...	(1.23)	(1.30)	(1.18)	(0.77)	(0.50)	(0.17)
Refining fee - Ag	USDm	(2.21)	(0.02)	(0.04)	(0.06)	(0.07)	(0.10)	(0.14)	(0.14)	...	(0.13)	(0.14)	(0.12)	(0.08)	(0.05)	(0.02)
Total G&A	USDm	(64.21)	(3.06)	(3.06)	(3.06)	(3.06)	(3.06)	(3.06)	(3.06)	...	(3.06)	(3.06)	(3.06)	(3.06)	(3.06)	(3.06)
Liquidation fund payment	USDm	(5.55)	(0.11)	(0.16)	(0.18)	(0.21)	(0.25)	(0.32)	(0.32)	...	(0.32)	(0.33)	(0.29)	(0.21)	(0.15)	(0.09)
Contingency	USDm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	...	0.00	0.00	0.00	0.00	0.00	0.00
Total opex	USDm	(957.48)	(20.71)	(28.75)	(32.45)	(37.65)	(43.56)	(54.82)	(54.90)	...	(55.23)	(55.52)	(49.93)	(36.11)	(26.72)	(16.42)
OPERATING PROFIT (LOSS)																
EBITDA	USDm	2,922.78	17.85	42.49	64.71	91.49	131.48	184.13	189.24	...	172.44	184.15	168.13	106.63	65.20	15.09
Depreciation	USDm	(452.83)	(5.56)	(11.41)	(21.43)	(26.06)	(23.99)	(24.14)	(23.47)	...	(25.10)	(23.67)	(21.30)	(19.25)	(18.49)	(15.94)
CAPEX REQUIREMENTS																
1. Prospecting drilling	USDm	(53.40)	(0.90)	(1.55)	(1.72)	(2.08)	(2.68)	(3.22)	(3.22)	...	(3.22)	(3.22)	(2.48)	(1.44)	(1.13)	(0.01)
2. Underground capital and horizontal development	USDm	(114.06)	(7.19)	(22.11)	(28.24)	(9.25)	(8.13)	(4.40)	(3.81)	...	(1.74)	(0.72)	0.00	0.00	0.00	0.00
3. Infrastructure	USDm	(43.66)	0.00	(3.75)	(22.42)	(1.12)	(4.50)	(0.12)	0.00	...	0.00	0.00	0.00	0.00	0.00	0.00
4. The main ore-handling and ancillary equipment	USDm	(83.08)	(4.19)	(9.65)	(5.30)	(6.30)	(0.95)	(5.45)	(2.32)	...	(5.18)	(1.68)	(3.16)	(3.40)	0.00	0.00
5. Process plant incremental expansion to 1 mtpa	USDm	(8.38)	0.00	(8.38)	0.00	0.00	0.00	0.00	0.00	...	0.00	0.00	0.00	0.00	0.00	0.00
6. Construction of process plant with 1 mtpa capacity	USDm	(30.67)	(0.50)	(6.32)	(23.85)	0.00	0.00	0.00	0.00	...	0.00	0.00	0.00	0.00	0.00	0.00
7. Paste backfill plant construction	USDm	(14.56)	(5.15)	(7.88)	(1.52)	0.00	0.00	0.00	0.00	...	0.00	0.00	0.00	0.00	0.00	0.00
8. Construction of tailing dumps	USDm	(11.12)	(0.32)	(3.09)	(0.61)	0.00	0.00	(0.27)	(2.73)	...	0.00	0.00	0.00	0.00	0.00	0.00
9. Contingency reserve	USDm	(33.16)	(1.37)	(5.94)	(8.85)	(1.96)	(1.69)	(1.21)	(1.15)	...	(0.76)	(0.27)	(0.32)	(0.34)	0.00	0.00
Sustaining capex - % of opex	USDm	(95.75)	(2.07)	(2.88)	(3.25)	(3.77)	(4.36)	(5.48)	(5.49)	...	(5.52)	(5.55)	(4.99)	(3.61)	(2.67)	(1.64)
Total capex	USDm	(487.83)	(21.69)	(71.55)	(95.76)	(24.47)	(22.31)	(20.15)	(18.72)	...	(16.42)	(11.44)	(10.96)	(8.79)	(3.80)	(1.65)
Earnings Before Interest and Tax																
EBIT	USDm	1,982.12	(9.40)	(40.47)	(52.48)	40.97	85.18	139.85	147.05	...	130.91	149.04	135.87	78.58	42.91	(2.50)
TAX CALCULATION																
Payroll tax/social tax	USDm	(1.87)	(0.10)	(0.10)	(0.10)	(0.09)	(0.09)	(0.09)	(0.09)	...	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Property tax	USDm	(3.88)	(0.08)	(0.13)	(0.22)	(0.27)	(0.25)	(0.25)	(0.25)	...	(0.19)	(0.18)	(0.17)	(0.16)	(0.15)	(0.14)
CIT payable	USDm	(488.76)	0.00	(3.27)	(8.65)	(13.09)	(21.50)	(32.00)	(33.15)	...	(29.47)	(32.10)	(29.37)	(17.47)	(9.34)	0.00
Total tax payable	USDm	(495.01)	(0.18)	(3.50)	(8.97)	(13.45)	(21.84)	(32.34)	(33.49)	...	(29.76)	(32.38)	(29.64)	(17.73)	(9.59)	(0.24)
PROJECT UNDISCOUNTED CASHFLOW																
Income after tax	USDm	1,939.94	(4.03)	(32.55)	(40.02)	53.57	87.34	131.65	137.03	...	126.26	140.33	127.54	80.10	51.80	13.19
Working capital changes	USDm	(15.61)	(4.65)	(7.66)	(9.82)	(3.60)	(7.63)	(9.67)	(3.73)	...	(0.10)	(1.76)	2.37	10.57	9.27	11.26
Project undiscounted	USDm	1,924.33	(8.68)	(40.21)	(49.85)	49.97	79.70	121.98	133.30	...	126.16	138.56	129.91	90.67	61.07	24.45
Partial period factor (0 months into Year 0)	#		1.00	1.00	1.00	1.00	1.00	1.00	1.00	...	1.00	1.00	1.00	1.00	1.00	1.00
Discount period (mid-period discounting)	#		0.50	1.50	2.50	3.50	4.50	5.50	6.50	...	15.50	16.50	17.50	18.50	19.50	20.50
Cashflow Constant PV Multiplier	#		0.94	0.83	0.74	0.66	0.58	0.51	0.46	...	0.15	0.14	0.12	0.11	0.09	0.08
Project discounted cashflow	USDm	493.35	(8.17)	(33.55)	(36.86)	32.75	46.29	62.79	60.81	...	19.41	18.90	15.70	9.71	5.80	2.06

Appendix B Glossary and Abbreviations

The following abbreviations are used in this report:

Altyn	Altyn PLC
Altyn laboratory	MMC Altyn laboratory
BaurGold	BaurGold Mining Enterprise SLLP
BFS	Bankable Feasibility Study
CAGR	Compounded Annual Growth Rate
CAOB	Central Asian Orogenic Belt
Capex	Capital Expenditure
CAPM	Capital Asset Pricing Model
CDTF	Complex Dump-Tailings Facility
CIL	Carbon-in-leach
CPR	Competent Persons Report
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CRP	Country Risk Premium
Datamine	Datamine Studio3
DCF	Discounted Cashflow
DGPS	DTOO Gornorudnoe Predpriatie Sekisovskoye
EAEU	Eurasian Economic Union
EBRD	European Bank for Reconstruction and Development
ECSA	Engineering Council of South Africa
ECT	Energy Charter Treaty
EIA	Environmental Impact Assessment
EY	Ernst and Young Advisory Services (Pty) Ltd
EY TAS	The Transaction Advisory Services department within Ernst and Young Advisory Services (Pty) Ltd
g	Grams
GKZ	Russian State Commission on Mineral Resources
Goldbridges	Goldbridges Global Resources PLC
g/t	Grams per tonnes
GWS	Goods, Works and Services
Ha	Hectares
Hambledon	Hambledon Mining plc
IAPs	Interested and Affected Parties
ICSID	International Court for Settlement of Investment Disputes
Income Approach	The Income-based Valuation Approach
JORC Code	The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition
km	Kilometres
km ²	kilometres squared
koz	Thousand ounces
ktpa	kilo tonnes per annum
KZT	Kazakhstani Tenge
LHDs	Load-Haul Dumpers
LoM	Life of Mine
m	Metres
m ²	Metres squared
Market Approach	Market-based Valuation Approach
masl	metres above mean sea level
MCI	Monthly Calculation Index
MID	Ministry for investment and Development

MMC Altyn	MMC Altyn MM LLP (previously Altai Ken- Baiytu)
MPE	Maximum Permissible Emissions
MPEP	Method of Pulse Electromagnetic Probing
MRP	Market Risk Premium
MSO	Mineable Shape Optimizer
Mt	Million Tonnes
Mtpa	Million tonnes per annum
NPV	Net Present Value
Opex	Operating Expenditure
PFD	Process Flow Diagram
Poisk	Cooperative of Prospectors
QA/QC	Quality Assurance/Quality Control
RoM	Run of Mine
SIB	Stay-in-Business
SQL	SRPI Qaztauken LLP
SRP	Specific Risk Premium
SSU Code	Subsoil and Subsoil Use Code of Kazakhstan
t/m ³	tonnes per metre cubed (density)
The Project	The Sekisovskoye Mine held under Subsoil Use Contract No.555
tph	Tonnes per hour
TSF	Tailings Storage Facility
USD	United States Dollar
VALMIN Code	Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets
WACC	Weighed Average Cost of Capital
WTO	World Trade Organisations
y-o-y	Year on Year

Appendix C Sources of Information

We have relied on the following sources of information:

- ▶ Altyn, 2008-2017, Annual Reports
- ▶ Altyn Management, September 2018, Financial Model entitled "180905-Altyn%20FM%202M"
- ▶ Bloomberg, 30 November 2018, Silver Prices
- ▶ BMI Research, 30 November 2018, Global Silver Data
- ▶ BMI Research, 21 January 2019, Global Gold Data
- ▶ Bunker News, 2018, The Gold Reserves of the National Bank of Kazakhstan Reach 321 Tons
- ▶ CEIC, 2017, Kazakhstan Silver Production
- ▶ CEIC, 2017, Kazakhstan Gold Production
- ▶ Engineering and Mining Journal, 2018, Kazakhstan Intent on Becoming Top 10 Gold Producer
- ▶ Han, Y. and Zhao, G., 2017, Final amalgamation of the Tianshan and Junggar orogenic collage in the southwestern Central Asian Orogenic Belt: Constraints on the closure of the Paleo-Asian Ocean. Earth-Science Reviews. Available from <https://doi.org/10.1016/j.earscirev.2017.09.012>
- ▶ Henley, S. and Young, N., 2008, Alignment of the Resource and Reserve Classification Systems: Russian Federation and CRIRSCO
- ▶ Investing News Network, 2018, World's Largest Silver Reserves by Country
- ▶ Kazinform, 2018, Kazakhstan's gold production grows 9.7% Jan-Jul 2018
- ▶ Oxford Economics, 2018, Commodity Price Forecasts
- ▶ S&P Metal and Mining, 2018, Commodity Prices
- ▶ Safanova, I., 2014, The Russian-Kazakh Altai orogen: An overview and main debatable issues. Geoscience Frontiers 5, p537-552.
- ▶ SEP Sekisovskoye, 2018, Report: Gold reserves, Sekisovskoye field, for the feasibility study as at August 2018- as reported to the State Reserves Committee of Kazakhstan
- ▶ SRPI Qaztauken LLP, 2018, Feasibility Study of the Underground Mine at the Sekisovskoye Deposit and Area no.2 of the Sekisovskoye Orefield
- ▶ Statista, 2018, Gold Reserves by Country
- ▶ The Silver Institute, 2018, World Silver Survey 2018
- ▶ Thompson Reuters, 2018, GFMS Gold Survey 2018
- ▶ Thomson Reuters, 2018, Quarterly Research Report
- ▶ Venmyn Deloitte, 2014, Independent Competent Persons' Report on the Sekisovskoye Gold Project prepared for GoldBridges Global Resources Plc
- ▶ World Bank, 2018, Commodity Markets Outlook, October 2018
- ▶ Relevant information gained via a number of internet searches and public information including company websites.

Appendix D Competent Person/ Expert and Valuators' Certificates

CV of the Competent Expert

Name of Staff: Viktor Redozubov-Gorskiy
Position: Chief Geologist
Name of Firm: BaurGold LLP
Address: Ust-Kamenogorsk, Kazakhstan
Profession: Geologist
Years of Experience: 35
Citizenship: Kazakh

Education:

Degree/diploma	Field	Institution	Year
B.Sc.	Geology	Tomsk State Institute, Tomsk, The Russian Federation	1990

Language Skills (5 Excellent and 1 Poor):

Language	Reading	Speaking	Writing
Kazakh	5	5	5
Russian	5	5	5

Membership in Professional Societies:

Class	Professional Society	Year of Registration
Member	Australian Institute for Mining and Metallurgy	2019

Key Qualifications:

Viktor is a hands-on project manager that has worked and adapted in a variety of demanding CIS environments. A proven track record in exploration field programmes and resource management in adding to the mineral resource base and value to projects, as well as taking exploration plays through evaluation into operation.

Over 20 years of experience in mining and exploration geology for gold, silver and has held senior management roles in Kazakhstan and the Russian Federation.

A solid communicator on the ground and at board level and able to formulate and get ideas across quickly, not afraid to reassess and challenge preconceived views on projects and bring fresh ideas with the view towards adding to the mineral resource base of various projects, or questioning mining plans by proposing alternative options based upon experience.

Provides strong mentorship for those working within the technical departments and believes that close evolving relationships with geological, mining, metallurgical, safety, environmental and survey departments is a key to long term project success.

Employment Record:

Position	Company	Job Description	Duration
Technical Supervisor	Geology team/ Miass, Russian Federation	<ul style="list-style-type: none"> Documented drillholes and developments; Headed the team members. 	1983 - 1987
Geologist	Altay Geology Expedition/ Opytnoe Pole, Kazakhstan	<ul style="list-style-type: none"> Documented drillholes and developments; Was responsible for geology and exploration works. 	1987 - 1992
Geologist	Ust-Kamenogorsk Geology and Exploration Expedition, Ust-Kamenogorsk, Kazakhstan	<ul style="list-style-type: none"> Documented drillholes and developments; Was responsible for geology and exploration works. 	1992 - 1994
Leading Engineer	Vniitvetmet (geomechanics laboratory), Ust-Kamenogorsk, Kazakhstan	<p>One of the oldest research institutes in Kazakhstan with a history over 65 years of history:</p> <ul style="list-style-type: none"> Evaluated rock rigidity during underground mining. 	1994 - 1997
Geologist at Ridder-Sokolniy Mine	JSC "Kazzinc", Ust-Kamenogorsk, Kazakhstan	<ul style="list-style-type: none"> Arranged design of follow-up exploration; Documented developments; Controlled mining works. 	1997 - 2001
Leading Geologist at Bolshevik Mine	JSC "Artel Trud", Semipalatinsk, Kazakhstan	<ul style="list-style-type: none"> Planned and controlled mining works; Submitted geological and government reports. 	2001 - 2004
Leading Geologist at Baladzhal Mine	JSC "Semgeo", Semipalatinsk, Kazakhstan	<ul style="list-style-type: none"> Planned and controlled mining works; Submitted geological and government reports. 	2004 - 2005
Head of Geology and Surveying Department	Dangyl As" LLP, Almaty, Kazakhstan	<ul style="list-style-type: none"> Planned and controlled mining works; Submitted geological and government reports. 	2005 - 2007
Director	KazStone Group" LLP, subsidiary of "Dangyl As" LLP, Almaty, Kazakhstan	<ul style="list-style-type: none"> Planned and controlled mining works; Submitted geological and government reports. 	2007 - 2010
Geologist, Section Geologist, Chief Geologist	Sekisovskoye" LLP, Ust-Kamenogorsk, Kazakhstan	<ul style="list-style-type: none"> Arranged geological, geology and exploration works; Arranged operational calculation of resources and reserves; Amended changes in mining works sequence; Submitted geological and government reports. 	2010 - 2015
Chief Geologist	JSC "Rusdragmet", Khabarovsk, Russia	<p>One of the largest deposits and plants in the Russian Federation:</p> <ul style="list-style-type: none"> Arranged geological, geology and exploration works; Arranged operational calculation of resources and reserves; Amended changes in mining works sequence; Submitted geological and government reports. 	2015 - 2017
Chief Geologist at Mnogovershinniy Mine	"BaurGold" LLP (former Sekisovskoye LLP)	<p>A subsidiary of Altyn Plc, that mines and processes Au & Ag:</p> <ul style="list-style-type: none"> Arranged geological, geology and exploration works; Arranged operational calculation of resources and reserves; Amended changes in mining works sequence; Submitted geological and government reports. 	2017-current

Date: January 2019
Full name: Viktor Redozubov-Gorskiy

CV of the Competent Valuator ad Competent Expert

Name of Staff: Andrew Neil Clay
Position: Principal Consultant, Executive Coach, Competent Person and Competent Valuator
Name of Firm: Ernst and Young Advisory Services Limited
Address: 102 Rivonia Road, Sandton, Gauteng, South Africa
Profession: Geologist
Date of Birth: 16 April 1955
Years of experience: 40
Nationality: British

Education:

Degree/ Diploma	Field	Institution	Year
BSc. Hons.	Geology	University College Cardiff	1976
MSc. Econ. Geol.	Economic Geology (awarded Corstorphine Medal for Best M.Sc. Thesis)	University of the Witwatersrand	1981
GDE	Graduate Diploma in Mining Engineering	University of the Witwatersrand	1986
MSc.	Mining Engineering	University of the Witwatersrand	1988
Dip. Bus. M.	Diploma in Business Management	Damelin College	1983
Tax Mgmt	Tax Management and Planning	University of the Witwatersrand	1988

Language Skills (5 Excellent and 1 Poor):

Language	Reading	Speaking	Writing
English	5	5	5

Membership in Professional Societies:

Class	Professional Society	Year of Registration
Member	Canadian Institute of Mining, Metallurgy and Petroleum	2006
Advisor	JSE Limited Listings Advisory Committee	2005
Advisor	JSE Issuer Services	2008
Member	JSE Issuer Mining Sub-committee	2009
Associate Member	American Association of Petroleum Geologists	2005
Member	South African Institute of Directors	2004
Fellow	Geological Society of South Africa	2003
Member	American Institute of Mineral Appraisers	2002
Member	South African Institute of Mining and Metallurgy	1998
Fellow	Australasian Institute of Mining and Metallurgy	1994
Member	Natural Scientist Institute of South Africa	1988
Member	Investment Analysts Society of South Africa	1990
Member	Society of Petroleum Engineers	2009
Member	Project Management Institute	2011
Expert	Hong Kong Stock Exchange	2012

Key Qualifications:

Andy has more than 40 years' experience in the minerals industry, from field geology, research, and mineral resource management to commercial due diligence and evaluation of a wide range of local and international mineral assets. In addition he has more than 40 years of experience working with commercial banks and financial institutions on transactions in the minerals industry, and has been involved in the preparation of numerous reporting codes and rules for compliance and reporting in the public domain.

Andy's key areas of expertise lie in the detailed financial valuation of mineral and mining projects using discounted cash flow models and comparative valuation techniques. In this regard he has undertaken numerous valuations for most mineral and oil and gas commodities over the last thirty years. These valuations have been used in listing and merger documentation both in local and international stock exchanges and for the private use of the companies concerned.

Andy continues to seek innovative solutions to many mineral asset problems. This includes making water a defined mineral resource and reassessment of historical project data. Andy currently has a special interest in incorporating oil and gas reporting procedures into the general application of mineral asset valuation.

Employment Record:

Position	Company	Job Description	Duration
Principal Consultant/ Executive Coach	EY	<ul style="list-style-type: none"> Mr Clay assists the team in idea generation based upon the shifting regulatory and statutory reporting framework minerals industry. 	2018 - Present
Managing Director	Venmyn Deloitte	<ul style="list-style-type: none"> Mr Clay served as the Managing Director of Venmyn Deloitte and was responsible for the company's strategic process as well as finances, budgeting and operations; Venmyn operates as a subsidiary of Deloitte Consulting, serving as a techno-economic consultancy for the resources industry on a world-wide basis; Mr Clay has been a key member of the SAMREC Working Group, responsible for compiling the SAMREC Code; Served on the JSE/SAMREC working committee for the development of the JSE Section 12 requirements; Serves on the Readers Panel for the JSE; Mr Clay was a director of the advisory business and provided hands-on services to all the company's major clients; His expertise in financial valuation is particularly appropriate for ensuring market to market presentation of both the technical and financial issues of resources projects; Course leader for the Witwatersrand University and Continuing Education programme on Compliance in the Minerals Industry; and Mr Clay has a special interest in the proposed International Accounting Standards "IAS" Extractive Industries rules for determining NAV and NPV calculations in the minerals industry. 	2012 - 2017
Managing Director and Founding partner	Venmyn Rand (Pty) Ltd	<ul style="list-style-type: none"> Mr Clay served as the Managing Director of Venmyn and was responsible for the company's strategic process as well as finances, budgeting and operations; Venmyn operated as a techno-economic consultancy for the resources industry on a world-wide basis; Mr Clay has been a key member of the SAMREC Working Group, responsible for compiling the SAMREC Code; Served on the JSE/SAMREC working committee for the development of the JSE Section 12 requirements; Serves on the Readers Panel for the JSE; Mr Clay was a director of the advisory business and provided hands-on services to all the company's major clients; His expertise in financial valuation was particularly appropriate for ensuring market to market presentation of both the technical and financial issues of resources projects; 	1997 - 2012

Position	Company	Job Description	Duration
		<ul style="list-style-type: none"> Course leader for the Witwatersrand University and Continuing Education programme on Compliance in the Minerals Industry; and Mr Clay has a special interest in the proposed International Accounting Standards "IAS" Extractive Industries rules for determining NAV and NPV calculations in the minerals industry. 	
General Manager	RMB Resources Rand Merchant Bank	<ul style="list-style-type: none"> Continuing business functions detailed below; Also valuing, managing and marketing investment projects of the Resources division including deal structuring and corporate finance. 	1996 - 1997
Managing Director and founding partner	Venmyn Rand (Pty) Ltd	<ul style="list-style-type: none"> Techno-economic evaluation of a wide range of mineral resource projects using cashflow, market capitalisation, option pricing and other comparative methods. 	1987 - 1996
Senior Geologist	Rand Mines Ltd	<ul style="list-style-type: none"> Resident senior gold mine geologist responsible for the development and implementation of modern computerised ore reserve evaluation techniques at Harmony Gold Mine and Durban Roodepoort Deep Gold Mine. Transferred to head office where he was responsible for all gold mine ore reserve valuation functions. This computer work involved the development and planning of very large databases for orebody modelling. 	1981 - 1988
Senior Geologist	Zimro (Pty) Ltd (Industrial Minerals Division of AAC)	<ul style="list-style-type: none"> Market development and application of a wide range of industrial and base minerals. 	1979 - 1981
Geologist	Geological Survey of Zimbabwe	<ul style="list-style-type: none"> Mapped a 100 km² area of granite-greenstone terrain and assisted in the compilation of a Bulletin over the area. Assisted the small mining sector with geological advice on gold, copper, gemstones and industrial minerals. 	1975 - 1979

Involvement in Code Writing:

Position	Professional Code	Date of Involvement
Chairman	South African Oil and Gas Committee (SSC)	2011 - present
Member	South African (SAICA) extractive industries deliberations	2003 - present
Member	International Minerals Valuation Code (IMVAL)	2012 - present
Representative	Investment Analysts Society on the SSC (IAS)	2009 - present
Initiator	SAMREC / IAS Award	2002 - present
Advisor	JSE Listing Requirements (Section 3 On-going obligations)	2002 - present
Working Group Member	SAMREC Code (Oil and Gas)	2005 - present
Working Group Member	SAMVAL Code	2001 - present
Working Group Member	SAMREC Code (Re-write Sections 1 - 5)	2005 - present
Working Group Member	SAMREC Code (Re-write)	2003 - present
Working Group Member	SAMREC Code (First Version)	1996 - 2001

Involvement in Fund Management:

Position	Fund	Date of Involvement
Member of Investment and Audit Committee	New Africa Mining Fund (NAMF)	2007 - 2012
Director	Strategic African Mineral Investment Fund (SAMI)	2008 - 2012

Fairness Opinions:

Year	Client	Securities Exchange Jurisdiction	Transaction Type	Implied Value (USDm)	Description
2014	Bauba Platinum	JSE	Exchange of cash for shares	10	Independent Professional Expert Report
2013	Platinum Australia	ASX, JSE	Scheme of arrangement	50	Independent Technical Expert Report
2011	Optimum Coal	JSE	The specific offer of ZAR38.00 in cash per ordinary share by an external party		Independent Professional Expert Report
2011	Chrometco	JSE	Acquisition of an Interest in Line-Chem	66.6	Independent Professional Expert Report
2011	Wesizwe	JSE	Financing Solution for the Development of Wesizwe's Project 2	227	Independent Professional Expert Report
2010	Sylvania	ASX	Issuing new ordinary shares	34	Independent Professional Expert Report
2009	Chrometco	JSE	Acquisition of interest	8.3	Independent Professional Expert Report
2009	Metorex	JSE	Disposal of 6.3% interest	5.7	Independent Professional Expert Report
2009	Braemore Resources	JSE	Acquisition of interest	36.3	Independent Professional Expert Report
2007	Diamondcore/BRC	JSE	Acquisition	50	Independent F&R for Diamondcore
2006	LionOre International	TSX	Acquisition notification documentation.	650	Independent Technical and Valuation Fatal Flaws Report and F&R opinion for the Board of LionOre. Not published as an F&R.
2005	Diamond Core	JSE	Category I Merger	10.0	Independent CPR on the mineral assets of Samadi Resources SA (Pty) Ltd and Diamond Core Resources Limited.
2005	LionOre International	TSX	Acquisition notification documentation.	110.0	Tati Nickel Review of Mineral Resources.
2005	Aquarius	JSE	26% BEE	150.0	Independent Techno-Economic Valuation and Fair and Reasonable Opinion on the PIC, IDC, DBSA 26% Empowerment Transaction. Documents waived for the secondary listing.
2004	Barplats	JSE	Offer to Barplats Minorities	60.0	Offer by Platinum Consortium to take out Implats. The SRP insisted our report be prepared in full. In the end Investec wrote the Fair and Reasonable but was fully reliant upon the Venmyn work as demonstrated in the circular.
2004	Zimplats	ASX	Collapse of the Makwiro Structure for shares to Implats.	38.0	Fair Value calculation in a corporate restructure.
2003	Amplats	JSE	Acquisition price calculation for Unki Platinum.	Confidential	Preparation of an Independent Techno-Economic Valuation Report and Fair and Reasonable Opinion. Document not used as the transaction became immaterial for reporting purposes.
2003	Aquarius Platinum (South Africa) (Pty) Ltd	ASX	Opinion on the value of a Refinery Agreement.	10.0	Fair and Reasonable Opinions for Aquarius Platinum for the Impala Refinery Commitments.
2002	Consolidated African Mines Limited.	JSE	CAM acquired 40% of the Letseng diamond mine for CAM shares.	10.0	Preparation of an Independent Techno-Economic Valuation Report and Fair and Reasonable Opinion. Document used in full.
2002	Zimplats	ASX	Implats acquired a controlling interest in Zimplats by acquiring Aurion Gold shares.	50.0	Preparation of an Independent Techno-Economic Valuation Report and Fair and Reasonable Opinion. Document used in full.

Year	Client	Securities Exchange Jurisdiction	Transaction Type	Implied Value (USDm)	Description
2002	Aquarius	ASX	Aquarius acquires 65% in ZCE Platinum Limited.	50.0	Preparation of an Independent Techno-Economic Valuation Report and Fair and Reasonable Opinion. Document used in full.
2000	DiamondWorks	TSX	Lyndhurst a South African Company takes control of Canadian junior DiamondWorks.	20.0	Preparation of an Independent Techno-Economic Valuation Report and Fair and Reasonable Opinion. Document used in full and special representation required in Toronto to explain the transaction and the assets.
1999	New Mining Corporation	JSE	Listing and acquisition documentation.	50.0	Complicated transaction and full Independent Techno-Economic Valuation prepared with Fair and Reasonable Opinion included in our report. This satisfied the JSE and the SRP.
1996	West Witwatersrand Gold Holdings Limited	JSE	Section 440k Offer	20.0	Independent Competent Persons Report on the Offer by Durban Deep to West Wits under Section 440k. Document included in circulars to both shareholders. Our Fair and Reasonable Opinion was specifically requested by the SRP.

Detailed Tasks Assigned:

Year	Client	Commodity	Documentation
2017	Goldfields	Gold	Tax complication
2016	Badimo	Gas	SAMOG Valuation
2016	Reenergy	Gas	SAMOG documentation
2016	Standard Bank	Copper	Discovery Copper Restructuring
2015	Aquila Valuation	Coal	Valuation
2015	Bauba Chrome Valuation	Chrome	Valuation
2015	Aquila Valuation	Coal	Valuation
2015	Great Western Minerals Steenkampskraal	Rare Earths	PFS
2015	Kemin Drozhil	Mo-Tu	Competent Persons Report
2015	Kemin Smimov	Mo-Tu	Competent Persons Report
2015	Aktobe Kokbulak AGR Advisory	Iron	PEA
2015	Somaf	Gold	Prospectivity Review
2015	BHP Billiton	Coal	Valuation
2015	Fasken Martenau Tharisa Minerals	Chrome	Technical Review
2015	Samancor / Sinosteel Valuation	Chrome	Valuation
2015	Molopo	Gas	Resource Review
2015	Ironveld	Iron	Valuation
2015	Village Reef	Gold	Valuation
2015	Samancor Chrome Limited	Chrome	Valuation
2015	Discovery Metals Deloitte Botswana	Base Metals	Technical Review
2015	MCC Prospectivity	Diamonds and Coal	Resource Review
2015	Rwanda Gas	Gas	Resource Review
2015	Bushy Park	Zinc and Lead	Valuation
2015	Keaton Energy	Coal	Competent Persons Report
2015	Reenergy	Gas	JSE Listing
2015	HSBC and others	Platinum	Resource Review

Year	Client	Commodity	Documentation
2015	Bauba	Chrome	Resource Review
2015	Grassvalley	Chrome	Valuation
2014	Aquila Valuation	Coal	Valuation
2014	Minera Gold Valuation	Gold	Valuation
2014	Fasken Martenau Tharisa Minerals	Chrome	Technical Review
2014	Samancor / Sinosteel Valuation	Chrome	Valuation
2014	Buchanan DFS	Iron	Financial Model
2014	Somaf	Gold	Prospectivity Review
2014	Veremo	Iron	Technical Review
2014	Sentula Nkomati	Various	Competent Persons Report
2014	J Francks Portfilo	Oil and Gas	Assessment of Technical and Commercial Information
2014	Hambledon Mining	Gold	Phase 2 Kazakhstan
2013	Busitema / Greenstone Mining	Gold	Resource Review
2013	Sylvania Grasvally	Chrome	Valuation
2013	Resource Generation	Coal	Technical Review
2013	Great Western Minerals Steenkampskraal	Rare Earths	PFS
2013	Taung Gold / Ncondezi	Gold	Technical Review
2013	Xceed / Keaton Energy	Coal	Resource Review
2013	Rand Refinery / Deloitte Audit	Gold	Audit
2013	TRX Buckreef Remodelling	Gold	3D Model
2013	Bauba	Chrome	Valuation
2013	Memor	Chrome	Cash Flow
2013	Forrest Oil	Oil and Gas	Valuation
2013	Glencor Xstrata	Ferrochrome	Audit
2013	Eureka	Gold	Technical Statement
2013	Aura	Coal	Exploration
2013	Nkwe	PGE	Technical Review
2013	Lesego Broadtec Beijing	PGE	Due Diligence
2013	Zyl Sentula	Coal	Valuation
2013	Samancor CITIC	Chrome	Valuation
2013	Jubilee Platinum	Platinum	Valuation
2013	Gold One Tulo Gold	Gold	Valuation
2013	Eureka Delta Gold	Gold	Technical Statement
2013	Exarro	Iron	Valuation
2013	Deloitte Grindrod	Manganese	Audit
2013	Aquarius	PGE	Review
2012	Banro Lugushwa	Gold	Technical Review
2012	Araxa	Rare Earths	NI 43-101
2012	Bauba	Platinum	Technical and Economic Assessment
2012	IFC Mining		Technical and Economic Assessment
2012	Central Rand Gold	Gold	CPR
2012	Lanxess	Chrome	Technical and Economic Assessment

Year	Client	Commodity	Documentation
2012	Loncor Ngayu	Gold	Mineral Resource Valuation
2012	Loncor Makapela/Mangajuripa	Gold	Mineral Resource Valuation
2012	Pering Listing Hong Kong	Zinc Lead / Base metals	CPR
2012	Stonebridge Hanieal Mozambique	Gold	Corporate Advice and Project setup
2012	Stonebridge Zim Gold	Gold	Corporate Advice and Project setup
2012	Terra Nova Manica Investment	Gold	Technical and Corporate Valuation
2012	PSIL Arbitration		Expert Witness
2012	AngloCoal	Coal	Valuation
2012	Virgil Mining	Gold	Technical Report
2012	Sikhuliso Harmony Dumps	Gold	Corporate Transaction Advice
2012	Smart Carbon Combrink Coal	Coal	Technical Report and Valuation
2012	Optimum Coal	Coal	Independent Opinion
2012	Wits Gold	Gold	CPR and Valuation
2012	Pan African Resources	Gold	CPR and Valuation
2012	Banro	Gold	Technical Report and Valuation
2012	Harmony Evander	Gold	Full CPR and Valuation
2012	Boynnton	PGM	Pre-feasibility Study
2012	Sudor Coal	Coal	Valuation
2012	NMIC	Gold	Technical Report and Valuation
2011	SSC Mandarin	Gold	Independent Corporate and Technical Advisor
2011	Harmony	Gold	CPR
2011	Afrisam	Cement	Independent Valuation
2011	Chromex	Chrome	Hong Kong Listing
2011	Banro	Gold	Independent Technical Statement
2011	Xceed Capital	Coal	Independent Valuation Statement
2011	Chrometco	Chrome	Independent Valuation
2011	Scinta	Coal	Independent Technical Statement and Valuation
2011	Seque Manganese	Manganese	Prospectivity and Scoping Study
2011	Sable	PGE	Prospectivity and Drilling Density CP
2011	Taung	Gold	Hong Kong Listing
2011	Maghreb Minerals	Zinc	CPR
2011	Veremo	Iron	Updated Technical Statement on Veremo
2011	Smart Carbon	Coal	Strategic Advisor
2011	Sephaku	Cement	Technical and Economic Documentation
2011	Axmin	Gold	Technical and Economic Documentation
2011	Absa Vanadium	Vanadium	Vanadium Project Valuation
2011	BCL Dumps	Nickel	Scoping Study
2011	AMRT	Copper/Gold	Scoping Study
2011	Jindal Mining	Coal	Techno-Economic Statement on the Mbili Coal Project
2011	Essar RioZim	Various	Corporate Transaction
2011	SEW Trident	Coal	Transaction and Valuation Planning
2011	PSIL	Uranium	Strategic Valuation

Year	Client	Commodity	Documentation
2011	Kibo Mining	Gold/Variou s	Tanzanian Assets
2011	Moabsveld en Coal	Coal	Technical and Valuation Work
2011	Wesizwe	PGE	Fairness Opinion
2010	Namane	Coal	Technical Assessment
2010	Bauba Platinum	Platinum	Independent Strategic Technical Advisor
2010	Evraz Mapochs		Independent Valuation
2010	African Copper	Copper	Independent Mass Balance and Orebody Fatal Flaws Assessment
2010	Advanced Mineral Recovery Technologies	Gold	Independent Sampling and Mass Balance Report
2010	Xstrata Coal	Coal	Independent Valuation Certificate
2010	Sephaku	Cement	Independent Technical Review
2010	White Water Resources	Gold	Independent Competent Persons' Report
2010	White Water Resources	Gold	Independent Technical Statement
2010	Platmin	Platinum	Independent Techno-Economic Reports and Valuation
2010	West Wits Mining	Gold	Independent Prospectivity Review
2010	SSC Mandarin	Gold	Independent Corporate and Technical Review
2010	Ultra Tech	Cement	Independent Techno-Economic Statements
2010	Taung	Gold	Independent Technical Review
2010	Taung	Gold	Independent Valuation Statement
2010	Sylvania	PGMs	Independent Technical and Valuation Experts Report
2010	Mzuri Capital	Gold	Independent AIM Compliant Competent Person's Report
2010	Kalagadi	Manganese	Independent High Level Techno-Economic Review
2010	Lesego	Platinum	Independent Techno-Economic Valuation Report
2010	Lesego	Platinum	Independent Executive Summary
2010	G&B Resources	Li	Independent Prospectivity Review
2010	Miranda	Coal	Independent Technical Resource and Valuation Statement
2010	Loncor	Gold	Independent Techno-Economic Valuation Report
2010	Gentor Resources	Copper	Independent Techno-Economic Report
2010	ETA Star	Coal	Independent Valuation Report
2010	AfriSam	Cement	Independent Technical Review
2010	Buildmax	Cement	Independent Short-Form Competent Report
2010	Anglo Platinum	Platinum	Independent Valuation of the PGM Assets
2010	Nyota Minerals	Gold	Independent Inferred Resource Estimate
2010	Absolute Holdings	Platinum	Independent Competent Persons' Report
2010	AfriSam	Cement	Independent Technical Review
2010	African Copper	Copper	Mass Balance and Orebody Fatal Flaws Assessment
2010	Ruukki	Platinum	Short-Form Techno-Economic Statements
2010	Umbono Capital	PGMs	Independent Competent Persons' Report
2010	Anglo Platinum	PGMs	Independent Mineral Asset Valuation
2010	Zambia Copper Investments	Copper	Mineral Asset Valuation
2010	White Water Resources	Gold	Short-Form Valuation Statements
2010	Central African Gold	Gold	NI 43 - 101 Technical Report

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.



Date: December 2018

Full name of staff member: Andrew Neil Clay

Appendix E JORC Table 1

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 1 Sampling Techniques and Data			
1	Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the mineral under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	<p>The Sekisovskoye Mine has been mined by Altyn (then Hambledon) since 2008. The open pit was mined until depletion and closure of the pit in 2016. Therefore, exploration and orebody modelling has focussed increasingly on infill drilling to improve geological confidence in the underground Mineral Resources as well as delineation of the orebody to depth. More recent exploration campaigns (since 2011) have consisted of almost exclusively underground drilling.</p> <p>The Mineral Resource is based on 982 underground diamond drillholes ("DD"). Drillhole samples typically comprise 1m lengths of diamond drilled core although core length varies from 0.25m to 1.25m. Samples were typically taken across the entire core length from surface to end of hole. Underground channel sampling are used for mine planning and reconciliation purposes. Samples are not used for geological modelling.</p>
		Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<p>Samples are taken from and to the contacts of mineralisation, often along the entire core length. Samples are typically 1m in length except in cases where changes in lithology, hydrothermal alteration or mineralisation are evident. In these cases, sample lengths are reduced to a minimum length of 0.25m The DD drilling were surveyed by a qualified surveyor using a LeicaTS-09 theodolite following completion of the drillhole. The drillhole orientation and downhole deviations are surveyed using an Ez-Shot 100075 at 20m intervals.</p>
		Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	<p>Diamond core drilling was used to obtain 1m samples of approximately 3-5kg that are crushed, reduced and milled to produce 100g samples.</p> <p>Gold analysis was completed by fire assay using 30g aliquots of rock pulp with an Atomic Absorption finish. The oversize fraction and two 30g aliquots of undersize were fire assayed. The gold grade representing the original rock sample was determined as a weighted average of the oversize and two undersize fire assay results.</p> <p>All historical samples were analysed for silver content using aqua regia digestion with an Atomic Absorption finish. A study that was carried out by the mine using a total of 800 samples identified a relationship between gold and silver. Silver content is estimated using regression based on the gold content and is no longer assayed on a regular basis.</p>
	Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<p>Diamond drilling is used. Core is typically 42mm in diameter using a double-tube core barrel, but larger and smaller diameter core sizes are used where required or for special purpose drilling.</p> <p>Most DD have been completed from various underground access points and are typically inclined at 60° but fan drilling configuration has also been used to maximise sampling from each access point. DD holes were drilled on approximately 20m by 40m drillhole spacing, dependent on accessibility. Drillhole density also decreases with depth.</p>

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 1 Sampling Techniques and Data			
1	Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Core is laid out into wooden core boxes and core recovery measured at the start and end of each drilling interval by the geologist on site. Overall core recovery in mineralised zones is >95%. Recovery is not noted in the database and EY has recommended that this be completed going forward.
		Measures taken to maximise sample recovery and ensure representative nature of the samples.	With core recovery of >95%, no additional measures are required. Samples are taken along the entire core length from surface to end of hole.
		Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sample bias due to areas with low core recovery was not observed. Mineralised zones are competent rock and no material loss or gain of material was observed.
	Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	The geological logging procedure is considered standard and has captured sufficient detail to be used for its intended purpose of Mineral Resource estimation. Drilling and sampling are carried out according to Altyn's standard operating procedures. EY was not able to see a copy of the standard operating procedures during the compilation of this report. The procedures outlined are based on discussions with the technical team on site.
		Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is quantitative and is captured in hard copy and digital (Excel) format. Each core box is photographed prior to sampling. EY has not had sight of the logs.
		The total length and percentage of the relevant intersections logged.	A total of 982 underground drillholes have been completed by BaurGold since 2011. Drilling prior to 2011 is no longer included in the database as older data is not relevant to the underground Mineral Resources. All relevant intersections are logged and sampled, resulting in a total of over 114,000 samples submitted for assay.
	Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Up to and including 2017, core was sawn into halves before sampling. Since 2018, whole core has been sampled.
		If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	N/A. Samples used for orebody modelling are all core samples.
		For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples are received at the Altyn laboratory at their sample receiving site where the samples are checked, weighed and then dried prior to being prepared for sampling. Samples undergo two stages of crushing during which samples are reduced and duplicates are taken. The duplicate samples are labelled and stored. Samples are then assayed to determine the gold content. Samples are collected along the full core length, and as such, the full length of mineralisation was sampled, ensuring representivity. The 3kg to 5kg size of sample is considered suitable.
		Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	During each reduction stage of sample preparation, the sample is mixed before splitting and a duplicate is kept. Duplicate samples are assayed at the primary and a referee laboratory as a part of the quality control procedures.
		Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	Until 2018, half core was sampled and since 2018, whole core has been sampled. Samples are collected along the full core length and therefore the full length of mineralisation was sampled, ensuring representivity. An external audit has shown no concern regarding repeatability of duplicates. Samples are taken for the full intersection of drilling.
		Whether sample sizes are appropriate to the grain size of the material being sampled.	The samples sizes are standard and considered appropriately sized.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 1 Sampling Techniques and Data			
1	Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<p>The AltynMM Laboratory is certified by the Kazakhstan Institute of Metrology and duplicate samples are routinely sent to the ISO accredited Topaz laboratory.</p> <p>Gold analysis was undertaken using standard fire assay methodology with atomic absorption finish, which is considered appropriate for the sample type. The analysis is considered total in nature. The Altyn Laboratory is certified by the Kazakhstan Institute of Metrology and duplicate samples are routinely sent to the NC KPMS RK VNIItsvetmet ("NKRVT"), an independent State-owned laboratory that holds Accreditation Certificate KZ. И.07.0480 that was granted in 2014. The NKVR laboratory holds ISO/ IEC 17025-2009 and meets State standards (also referred to as GOST standards).</p> <p>Gold analysis was undertaken using standard fire assay methodology with atomic absorption finish, which is considered appropriate for the sample type. The analysis is considered total in nature.</p>
		For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	N/A as these tools were not used.
		Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Standards, blanks and duplicates are submitted into the sample batches that are assayed at the Altyn laboratory. Duplicates are also sent to the referee laboratory, Topaz Laboratory. Certified Reference Material, duplicates and blanks are inserted into each batch at a rate of 1 per 100 samples, 5% and per batch, respectively. An internal audit of the quality control samples concluded that the results were satisfactory.
	Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Duplicate samples are sent to the independent Topaz laboratory for verification of sample results. An external audit of the duplicate samples concluded that the results were satisfactory.
		The use of twinned holes.	Twinned holes were drilled to verify the sampling results of some soviet data. The majority of this data is no longer incorporated into the database as it was in relation to the open pit Mineral Resources that have since been mined out.
		Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<p>Hard copy logs are captured into a Microsoft Excel database. Assay results from the laboratory are incorporated into an Excel database upon satisfactory performance of QA/QC samples. Altyn does not use any special database management software, however it is understood that senior geological staff verify the captured fields. The orebody modelling software, Datamine Studio3 (Datamine) will automatically flag duplicate records, record overlaps and illogical records such as negative assay values or text in numerical fields upon importation into the package.</p> <p>Apart from the hard copy data stored at the Altyn offices, the exploration database is managed primarily by the group geologist through the software programme Datamine.</p> <p>All geological data, including borehole logs, photos of core, analytical data and Datamine data, is stored weekly on the server of the company and backed up monthly.</p>
		Discuss any adjustment to assay data.	EY is not aware of any adjustments to assay data.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 1 Sampling Techniques and Data			
1	Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Each hole is surveyed by the surveyor using a LeicaTS-09 theodolite. Accuracy of this equipment is 2mm.
		Specification of the grid system used.	The Soviet Union considered mineral assets to be strategic and locations were often not published or reported in local datums that are related to a particular year. The requirements are set out in the "Instruction for geodesic support of geological exploration works" published in 1984. The Sekisovskoye Mine carried out surveying based on this system using the 1942 system of co-ordinates.
		Quality and adequacy of topographic control.	A topographic survey was completed prior to mining of the open pits and is still maintained in the geological models; however it is not relevant to the underground Mineral Resources and Reserves.
	Drill spacing and distribution	Data spacing for reporting of Exploration Results.	No drillhole intersections used for reporting of Exploration Results.
		Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	A drill spacing of 20m by 40m is typically used with infill spacing of 20m by 10m in some areas depending on accessibility. Drilling is conducted from underground and often conducted in a fan configuration from a single point of origin. Drilling has been conducted to various depths with the deepest hole being 1,200m. The majority of holes have been drilled to -400masl, where Measured and Indicated Resources are estimated.
		Whether sample compositing has been applied.	The drillhole grid spacing is close for typical gold drilling programmes and the entire length of the intersection is sampled. This is considered sufficient to establish geological and grade continuity appropriate for the relevant classifications applied.
	Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Samples have not been composited. Approximately 95% of the samples in the database were originally 1m in length, which minimises the impact of differing sample sizes. EY recommends that compositing of samples be considered to ensure consistency of data in the database and to eliminate systematic bias due to differences in the length of samples.
		If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling is typically orientated at 60° or in a fan arrangement in order to intersect downdip extensions of the orebody. This is suitable for the type of deposit under consideration.
	Sample security	The measures taken to ensure sample security.	No relationship between orientation of drilling and mineralisation has been observed. Drilling is inclined in order to intersect the orebody at close to perpendicular and sample across high and low-grade areas.
	Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Core boxes are transported by truck to the laboratory. Samples are labelled, bagged and sealed individually with a cable tie and then grouped in large boxes holding up to 30kg of sample that are sent to the Altyn laboratory. The samples are checked by the laboratory upon receipt. Duplicate slurries and sample remaining after sample reduction are stored, bagged and in boxes, in the basement of the laboratory.
		An external audit of the sampling techniques and laboratory results was undertaken in June 2018 by consultant SRPI Qaztauken LLP ("SQL"). SQL found the results to be satisfactory.	

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 2 Reporting of Exploration Results			
2	Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Sekisovskoye Mine was granted Subsoil Use Contract No. 555 through subsidiary BaurGold, effective from 20 October 2000. Subsoil Use Contract No.555 covers an area of 0.56km ² and the mining allotment is valid for gold ore up to a depth of -340masl. It is understood that additional addendums to increase the mining depth maybe applied for.
		The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The current contract expires in 2020. Legal tenure is dependent on approval of a renewal to be submitted prior to expiry of the current contract, however no impediment to renewal is envisaged.
	Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Certain historical exploration data was obtained from previous parties. This has been acknowledged throughout the report although this data is not relevant to exploration results.
	Geology	Deposit type, geological setting and style of mineralisation.	The Sekisovskoye Mine is hosted in a complex geology that has been subject to much alteration and metamorphism. The Sekisovskoye Mine is exploiting gold hosted in pipe-like breccia bodies that have intruded into the Rudny Altai poly-metallic belt, which is part of the larger Central Asian Orogenic Belt. Ten breccias have been mapped in and around the Sekisovskoye Mine. Of these, seven breccias fall within the Sekisovskoye Mine licence boundary. The Sekisovskoye Mine is currently targeting breccia bodies 2, 3 and 4. Mineralisation is hosted in the breccia bodies and includes free gold and gold sulphides. Gold is embedded in the cement of the explosive hydrothermal breccias and tends to be concentrated at the geological boundaries between breccias and igneous rocks. The breccias are cut by barren igneous dykes that are typically planar and dip steeply to the northeast.
	Drill2 hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> ▶ easting and northing of the drill hole collar; ▶ elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar; ▶ dip and azimuth of the hole; ▶ down hole length and interception depth; ▶ hole length. 	Exploration Results have been reported for the depth extension of the pipe-like orebody that is being targeted at the Sekisovskoye Mine. The Exploration Results are estimated from the depth of the deepest drillhole intersection and extrapolated to depth. As such, no drillholes have been used for estimation of Exploration Results.
		If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	N/A. No drillhole intersections were used to estimate Exploration Results. Exploration Results have been estimated between the deepest drillhole and the depth extension identified by geophysical survey results where no sampling has taken place.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	N/A. No drillhole intersections were used to estimate Exploration Results. Exploration Target estimation was completed using the block model compiled using all drillhole data and no averaging, grade truncation or cut-offs were used.	

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 2 Reporting of Exploration Results			
2		Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	N/A. Approximately 95% of the samples in the database are 1m, which was chosen as the composite length. Therefore minimal compositing was required.
		The assumptions used for any reporting of metal equivalent values should be clearly stated.	Silver grades are estimated based on regression of the estimated gold grades.
	Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	N/A. No drillhole intersections were used to estimate Exploration Results.
		If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	N/A. No drillhole intersections were used to estimate Exploration Results.
		If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	N/A. No drillhole intersections were used to estimate Exploration Results.
	Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Provided throughout the report.
	Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	N/A. No drillhole intersections were used to estimate Exploration Results.
	Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant exploration data has been incorporated into the report. The breccias reach depths of approximately 2km below surface based on geophysical survey results. Relative density is measured for each sample using the Archimedes principle. The relative density of the samples taken at the Sekisovskoye Mine vary between 2.67 to 2.91. The Sekisovskoye Mine has used a density of 2.83 for geological modelling, based on a combination of the measured densities as well as the extensive density data from the Sekisovskoye Mine.
	Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Ongoing infill drilling is ongoing.
		Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams illustrating the extension to depth is illustrated in various sections of the report.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 3 Estimation and Reporting of Mineral Resources			
3	Database Integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Hard copy logs are captured into a Microsoft Excel database. Assay results from the laboratory are incorporated into an Excel database upon satisfactory performance of QA/QC samples. Altyn does not use any commercial database management software, however it is understood that senior geological staff verify the captured fields.
		Data validation procedures used.	The typical database validation checks were completed in Datamine including flagging of duplicate records, overlaps and illogical records such as negative assay values or text in numerical fields. The data was further checked for outlier values and spatial errors through univariate statistics, histograms and cumulative frequency plots. On inspection, the collar positions of the drillholes plotted in the expected locations. Analytical outlier values were capped in the database before the estimation process. As a result of the validation processes carried out, the database is considered an accurate representation of the original data provided.
	Site Visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Mr A. Clay and various authors of this report undertook a site visit from 11 to 14 September 2018. During the site visit, the authors interviewed various mine personnel to gain an understanding of the operations. The authors inspected the site infrastructure, workings and operations including the underground mine, the processing plant, geological models and general facilities in the general area and within the site itself.
		If no site visits have been undertaken indicate why this is the case.	N/A, a site visit was undertaken.
	Geological Interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The geological model was based on diamond drilling on an approximately 40m by 20m drillhole spacing. Underground drillholes were sampled in their entirety in order to gain an understanding of the geological and grade continuity across the deposit, especially as grade is not correlated to lithology within the breccia. Drilling intersects were used to delineate the limits of the orebody. Orebody modelling is completed in Datamine using Ordinary Kriging.
		Nature of the data used and of any assumptions made.	The Mineral Resource classification has resulted in Measured and indicated Resources from surface (approximately +430masl) to a depth of -400masl and Inferred Resources from -400masl to a depth of -800masl, the depth of the deepest intersections. An Exploration Result has been estimated from -800masl to -1,500masl, extending 700m past the deepest intersection and extending to 2km below surface, based on geophysical survey results.
		The effect, if any, of alternative interpretations on Mineral Resource estimation.	Geological interpretation is primarily based on diamond drilling results and is supported by historical geophysical results and extensive mining data. No alternate interpretations on Mineral Resource estimation have been completed.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 3 Estimation and Reporting of Mineral Resources			
3		<p>The use of geology in guiding and controlling Mineral Resource estimation.</p> <p>The factors affecting continuity of both grade and geology.</p>	<p>The mineralisation, while limited to the breccia pipe in extent, is highly variable in nature and there is a lack of correlation between the gold content and lithology. Gold mineralisation is hosted primarily in hydrothermal veins and tends to be smeared across lithology. Therefore, a wireframe of the breccia is developed and Mineral Resources are limited to this wireframe. Lithology is not considered in any detail in the geological model.</p>
	Dimensions	<p>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</p>	<p>The pipe is sub-vertical in nature, has a diameter of approximately 650m. The pipe outline is well-defined and drilling has confirmed the deposit to continue to a depth of -800masl through sampled intersections. The pipe is assumed to continue to a depth of -1,500masl based on geophysical data although the confidence in the deeper extents is limited to an Exploration Target.</p> <p>The Mineral Resource classification has resulted in Measured and indicated Resources from surface (approximately +430masl) to a depth of -400masl and Inferred Resources from -400masl to a depth of -800masl, the depth of the deepest intersections. An Exploration Result has been estimated from -800masl to -1,500masl.</p>
	Estimation and modelling techniques	<p>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</p>	<p>The primary estimation method is Ordinary Kriging using Datamine software. Block sizes are based on sample spacing and mine configuration. The volume of the blocks are calculated based on the density. Grade is interpolated into each parent block using Ordinary Kriging.</p> <p>Silver grade is assigned based on regression with the estimated gold grade.</p> <p>A density of 2.83 is applied to all blocks based on density studies completed for the Sekisovskoye Mine on sampling results. It is recommended that the density of all DD samples is measured before analysis.</p> <p>Resource classification is based on the State Reserves Committee guidelines. These guidelines state that a drilling density of 50m by 50m is dense enough to allow classification of C1 and C2 reserves for a Category 3 deposit.</p> <p>All extreme values have been capped. The basis for the cap was based on the decile method. This involves a frequency distribution analysis of the assay results in the database. Based on the analysis, a maximum of 60g/t has been selected and all samples higher than this are replaced with 60g/t. Capping of extreme values is carried out on the full dataset of all samples within the modelled ore bodies.</p>

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 3 Estimation and Reporting of Mineral Resources			
3			<p>The Sekisovskoye Mine is using a cut-off grade of 1.5g/t. The choice of cut-off grade is driven by the requirements prescribed by the State but allowance has been made to adjust these based on what is practically mineable. Based on the gradient of the grade-tonnage curve and the mining practicalities, the cut-off grade of 1.5g/t is considered reasonable.</p> <p>The domain boundaries are hard boundaries and therefore only data from within the domain is used to estimate blocks within the domain. The sample data has been clipped to the breccia orebody wireframe and modelling and estimation are limited to the boundaries of the breccia orebody.</p>
		The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Underground channel samples taken during mining are used for reconciliation on an ongoing production basis. A reconciliation of the mined material versus the open pit geological model was completed. EY has not had sight of the reconciliations that have been completed. EY recommends that ongoing reconciliation of the geological model is completed using the production results.
		The assumptions made regarding recovery of by-products.	Silver is recovered as a by-product in the dedicated gold plant.
		Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	N/A, there are no deleterious or other economically significant variables requiring estimation.
		In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	<p>Underground blocks were modelled at 10m x 10m x 10m sizing in the X; Y; Z; directions respectively, and the modeller allowed for sub-celling down to a 1.25m x 1.25m x 0.5m block. Drilling was completed on an approximately 20m by 40m drillhole spacing.</p> <p>Search ellipses, based on the variogram, were used in order to collect data for the block interpolation in the perceived directions of longest continuity. The search ellipse for the Sekisovskoye Mine is 50m x 10m x 75m with a strike azimuth of 312° and a dip angle of 80° northeast. A minimum of three and a maximum of 30 samples were required to estimate a block in the first search volume. Should enough samples not be sourced by the first search, the search was expanded to a minimum of two samples and then to three samples.</p>
		Any assumptions behind modelling of selective mining units.	Selective mining is not employed at the Sekisovskoye Mine.
		Any assumptions about correlation between variables.	Silver grade is assigned based on regression with the estimated gold grade.
		Description of how the geological interpretation was used to control the resource estimates.	The mineralisation, while limited to the breccia pipe in extent, is highly variable in nature and there is a lack of correlation between the gold content and lithology. Gold mineralisation is hosted primarily in hydrothermal veins and tends to be smeared across lithology. Therefore, a wireframe of the breccia is developed and Mineral Resources are limited to this wireframe. Lithology is not considered in any detail in the geological model.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 3 Estimation and Reporting of Mineral Resources			
3		Discussion of basis for using or not using grade cutting or capping.	All extreme values have been capped. The basis for the cap was based on the decile method. This involves a frequency distribution analysis of the assay results in the database. Based on the analysis, a maximum of 60g/t has been selected and all samples higher than this are replaced with 60g/t. Capping of extreme values is carried out on the full dataset of all samples within the modelled ore bodies.
		The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Estimated grades have been visually and statistically validated relative to the original samples and swath plot validation has been completed. No reconciliation data was available for review.
	Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnage is estimated on a dry basis. Moisture content is measured at the laboratory when samples received are weighed, dried in an oven and then weighed again. The difference in weight is considered to be moisture.
	Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The Sekisovskoye Mine is using a cut-off grade of 1.5g/t. The choice of cut-off grade is driven by the requirements prescribed by the State but allowance has been made to adjust these based on what is practically mineable. Based on the gradient of the grade-tonnage curve and the mining practicalities, the cut-off grade of 1.5g/t is considered reasonable.
	Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The Sekisovskoye Mine is a historical open pit mine that has transitioned to underground mining. The Sekisovskoye Mine uses the sub-level stoping mining method, which is a mining method suitable for vertical and near-vertical orebodies with well-defined boundaries. Sub-level stoping involves the excavation of drilling drifts on main development levels and sub-levels between the main development levels, from which long hole drilling is carried out and the ore is blasted to create the stope. The blasted ore is then loaded out at the bottom of the stope and the stope is then backfilled. Sub-level open stoping is ideal for orebodies with dips ranging between 60° to 90°, with regular orebody thicknesses within the range of 6m to 30m and competent host rock. This mining method can be employed at depths of up to 1.2km. Mining dilution typically ranges from 5% to 20% for sub-level stoping operations. This mining method is suitable for the Sekisovskoye orebody.
	Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	The processing plant has been operating with a proportion of underground ore feed since 2013 and exclusively underground ore since 2017. The processing assumptions are considered reasonable due to the extent of plant-scale operation and previous testwork conducted.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 3 Estimation and Reporting of Mineral Resources			
3	Environmental factors or assumptions	<p>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</p>	<p>An EIA for the Processing Plant and the Sekisovskoye Mining and Processing Complex was approved on 27 July 2007 by the Ministry of Environmental Protection of the Republic of Kazakhstan.</p> <p>This EIA concluded that the implementation of the reviewed designs and facility will not result in significant environmental degradation but will have a potential social economic effect such as employment for the local community, provided that the proposed environmental mitigation measures and requirements are implemented.</p> <p>Based on the environmental audit results, no significant violations of environmental legislation were recorded, and in instances where significant impacts were identified, the following measures have been put in place:</p> <ul style="list-style-type: none"> ▶ since the capacity of the ore processing complex has been designed to cater for 850kt/yr, the facility will be upgraded to 1mtpa for the underground mining extension; ▶ to mitigate the emission of air contaminants from the TSF, Sekisovskoye Mine has installed pollution control equipment, a group cyclone and dust collection devices; ▶ potable water undergoes a process of disinfection by ultraviolet radiation; ▶ the base of the ore storage area is designed to include a clay blanket to prevent groundwater contamination; and ▶ Sekisovskoye Mine envisages the drilling of a borehole to monitor for groundwater in the MPC area and the TSF.
	Bulk Density	<p>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</p> <p>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</p> <p>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</p>	<p>Relative density was measured using the Archimedes principle for each sample at the adjacent Sekisovskoye Mine until 1996. Using a total of 2,483 sample results, the chief geologist at the time completed an assessment of the sample density results. Samples were reviewed based on density with respect to lithology type. The study found that the average density of waste rock, including diorite and granites, is 2.82 and that the average density of mineralised zones, such as breccias, is 2.83. This assessment was repeated in 2004 using eight samples per lithology type. The 2004 data did not have significantly different density results and a standard density of 2.83 is applied to all mineralised zones. EY recommends that all DD samples are measured for density prior to assay to ensure that density is representative.</p>

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 3 Estimation and Reporting of Mineral Resources			
3	Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	Mineral Resource classification is based on the level of geoscientific confidence in the data available. Due to the nature of the deposit, which is generally narrow and extending to depth in a pipe-like deposit, drilling and the resultant number of samples is more dense near surface and becomes less and less dense with depth.
		Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Resource classification is based on State Reserves Committee guidelines. These guidelines state that a drilling density of 50m by 50m results in the classification of C1 and C2 reserves. These are considered equivalent to Measured and Indicated Resources based on the drillhole density, data quality and geological confidence. Based on the decreasing number of samples with depth, the resource classification has resulted in Measured and Indicated Resources from surface to a depth of -400masl and Inferred Resources from -400masl to -800masl. Resource classification is based primarily on drilling density, which decreases with depth.	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The Mineral Resources were reviewed in a technical study entitled "Feasibility Study of the Underground Mine at the Sekisovskoye Deposit and Area no.2 of the Sekisovskoye Orefield" completed by SQL in June 2018. Previous JORC Mineral Resource estimation was undertaken by Venmyn Deloitte in the report entitled "Independent Competent Persons' Report on the Sekisovskoye Gold Project prepared for GoldBridges Global Resources Plc" as at 31 May 2014.	
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The block models were validated by:	
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	<ul style="list-style-type: none"> ▶ visual examination of the input data against the block model estimates; and ▶ swath plot validations; and ▶ comparison of the input data statistics against the model statistics. 	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The block model was examined visually in sections to ensure that the drillholes grades were locally well represented by the model. EY has compared the statistics of the raw data with that of the estimated data from the block model. EY has used swath analyses to compare the spatial correlations of the estimates to the composite data. These show that the estimates are smoothed in comparison to the composite data but represent the overall grade trends well.	

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4	Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserves were estimated per level to a depth of -400masl as this is the area of the deposit for which the Mineral Resources are in the Measured and Indicated categories. Based on the Ore Reserves, a detailed LoM plan is developed based on the various modifying factors.
		Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Mineral Resources are reported inclusive of Ore Reserves.
	Site Visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Mr A. Clay and various authors of this report undertook a site visit from 11 to 14 September 2018. During the site visit, the authors interviewed various mine personnel to gain an understanding of the operations. The authors inspected the site infrastructure, workings and operations including the underground mine, the processing plant, geological models and general facilities in the general area and within the site itself.
		If no site visits have been undertaken indicate why this is the case.	N/A, a site visit was undertaken.
	Study Status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	A feasibility study on the Sekisovskoye Mine was completed by SQL in June 2018. The feasibility study developed a life of mine (LoM) plan, to demonstrate the technical and economic viability of the project. The LoM plan was used as the basis for the conversion of Mineral Resources to Ore Reserves. The level of detail provided in the Feasibility Study is of concern, however based on the long mining history of the operation, sufficient information is available to support the conversion of Mineral Resources to Ore Reserves.
		The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	
	Cut-off Parameters	The basis of the cut-off grade(s) or quality parameters applied.	The Ore Reserves were estimated per level. All the Mineral Resource blocks that are above the Mineral Resource cut-off grade of 1.5 g/t were included in the Ore Reserve, as no selective mining has been assumed for the Ore Reserve and LoM plan. The fact that no selective mining will be employed in the underground operations other than primary block selections was informed by guidance included in the Kazakhstan mining legislation, which does not allow for the selective mining of blocks above the cut-off grade approved by the State Reserves Committee of Kazakhstan. No pay limit, above cut-off grade, was used for mining selectivity and the definition of Ore Reserves. No paylimit has been applied.
	Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	The Ore Reserves at the Sekisovskoye Mine have been based on the Measured and Indicated Mineral Resources from surface (approximately +430masl) to a depth of -400masl. All the Mineral Resource blocks that are above the Mineral Resource cut-off grade were included in the Ore Reserve, as no selective mining has been assumed for the Ore Reserve estimation.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4			<p>The Ore Reserve calculation includes a 5% dilution factor, 2% mining loss and 100% extraction factor. Based on the estimated Ore Reserves, a detailed Life of Mine (“LoM”) plan is developed based on the modifying factors and these factors are incorporated into a financial model.</p> <p>The planned mining dilution and mining extraction factor are on the upper limit of what is usually planned for sub-level stoping operations and is subject to downside risk.</p>
		<p>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</p>	<p>The Sekisovskoye LoM shows a considerable ramp up from current production levels to the anticipated target of 2Mtpa RoM production. RoM production is planned to be ramped up to 1Mtpa using the upgraded processing plant, with a further ramp up to 2Mtpa RoM requiring an additional processing plant.</p> <p>The ramp up will require commissioning of a rock hoisting shaft and associated cage and ventilation shafts and skip and ventilation shafts planned to follow. Initial ramp up production will be achieved using the two transport declines. Production in these years will be from two levels above +100masl, with planned hauling distance for the ore through the two transport declines being 2.0-2.2km. Ten trips per truck per shift have been scheduled for each of the seven trucks dedicated to the two production levels, to achieve a daily production of 3.36ktpa.</p> <p>The ramp-up to the commissioning of the vertical shafts and the planning parameters used in the ramp-up plan are on the upper end of what is achievable, therefore there is some downside risk associated with achieving the planned production volumes, especially considering that 2018 production did not achieve the targeted 500kt RoM production. The targeted 500kt RoM production has been postponed to 2019.</p> <p>The LoM plan detailed in this report has been based on the optimal development plan of ramping up to 2Mtpa. However, this LoM plan is dependent on Altyn raising the required funding. If the funding is not raised, commencement of the ramp up will be pushed out beyond the target date. The sub-level stoping mining method is suitable to the Sekisovskoye deposit due to the steep dip (75° on average) and relative thickness (10-12m on average) of the deposit.</p>
		<p>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</p>	<p>On the basis of the geotechnical investigation conducted, the stope dimensions are recommended not to exceed the following hydraulic radii (HR):</p> <ul style="list-style-type: none"> • To a depth of 350 m from the surface: <ul style="list-style-type: none"> • HR of the hanging wall = 5.5 • HR of the roof = 4.5

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4			<ul style="list-style-type: none"> • From 350 m to 600 m from the surface: • HR of the hanging wall = 4 HR of the roof = 3
		<p>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</p>	<p>The location and geometry of the mineable blocks for Sekisovskoye Mine were estimated using Mineable Shape Optimizer (“MSO”) software produced within Datamine. MSO generates optimised stope designs and then estimates the maximum recoverable ore based on orebody geometry and design constraints. Adjustments are then made by the mine planner to the MSO stope designs based on practical consideration, experience and professional judgement.</p> <p>The Sekisovskoye Mine uses the sub-level stoping mining method, which is a mining method suitable for vertical and near-vertical deposits with well-defined boundaries. Sub-level stoping involves the excavation of drilling drifts on main development levels and sub-levels between the main development levels, from which longhole drilling is carried out and the ore is blasted to create the stope. The blasted ore is then loaded out at the bottom of the stope and the stope is then backfilled.</p> <p>Sub-level open stoping is ideal for orebodies with dips ranging between 60° to 90°, with regular orebody thicknesses within the range of 6m to 30m and competent host rock. This mining method can be employed at depths of up to 1.2km. Mining dilution typically ranges from 5% to 20% for sub-level stoping operations.</p> <p>The Sekisovskoye Mine uses main development level spacing of 50m with sub-levels spaced at approximately 16m to 17m within the stopes. Typical parameters consist of mining blocks of lengths ranging from 100m to 160m, widths ranging from 60 to 100m and a height of 50m. The mining blocks are then further divided into sub-blocks of lengths of 25m to 40m, widths of 12m to 20m and heights of 16m to 17m. The 16-17m sub-level spacing was selected after trials of different sub-level spacing combinations over a six-year period and was designed to better adhere to the contours of the orebody and minimise dilution. Currently uncemented waste rock is used as backfill, however cemented backfill will be used from 2020 for levels 200masl to -400masl.</p>
		<p>The mining dilution factors used.</p>	<p>The average estimated losses and dilution for the deposit included in the LoM plan are estimated at mining losses of 2% and mining dilution of 5%. The planned 5% mining dilution is on the low side of what is typically achievable using the sub-level stoping mining method, and can typically be achieved with orebodies with very consistent geometries and clear contacts with the country rock. Dilution over the RoM may surpass the 5% target due to irregularities in orebody geometry, which would result in lower than expected grades.</p>

Section	Criteria	Explanation	The Sekisovskoye Mine	
Section 4 Estimation and Reporting Of Ore Reserves				
4		The mining recovery factors used.	An average mining extraction factor of 100% has been utilised for the Ore Reserve estimation, this is on the upper limit of what is usually planned for the sub-level stoping operations and is subject to downside risk due to potential orebody geometry irregularity.	
		Any minimum mining widths used.	The mining blocks are divided into sub-blocks of lengths of 25m to 40m, widths of 12m to 20m and heights of 16m to 17m.	
		The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	No Inferred Mineral Resources were included in the LoM plan. The Ore Reserves were estimated per level from 400masl to -400masl as this is the area of the deposit for which the Mineral Resources are in the Measured and Indicated categories	
		The infrastructure requirements of the selected mining methods.	Vertical rock hoisting, cage and ventilation shafts will need to be developed to achieve the planned LoM production levels. There are currently two transport declines in operation at Sekisovskoye Mine. The additional vertical shafts are scheduled to begin sinking in 2019, with commissioning for the skip and ventilation shafts planned to follow.	
	Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	Whether the metallurgical process is well-tested technology or novel in nature.	The current metallurgical operation is a conventional carbon-in-leach (CIL) process consisting of gravity, cyanide leaching, electrowinning and smelting techniques. The metallurgical process is well tested and used globally for similar deposit types.
				The conventional CIL process adopted is well tested and underground ore has been processed since 2013. Results are in line with expected performance.
		The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.		Metallurgical reports were not available for review, however, a Sekisovskoye CPR report completed in 2014 was reviewed. Furthermore, considerable processing of underground ore (approximately 600,000t between 2013 and 2017) mitigates the risk of poor estimates of metallurgical recovery factors. The representativeness and domaining could not be commented on. Testwork on the underground ore included: <ul style="list-style-type: none"> ▶ a study on the underground ore process parameters required. This included investigating the inclusion of flotation; ▶ bulk processing economic and sub-economic underground ore through the Altay Ken-Baityu process plant in 2011-2012; and ▶ further bulk processing of underground ore samples through the Altay Ken-Baityu process plant in 2013.
		Any assumptions or allowances made for deleterious elements.		Detailed analysis of the products were not made available. Impurity concentrations were provided as a bulk composition only, however the results are not considered to have a material impact on the operations based on historical results.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4		The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	The representativity cannot be commented on, however, two sets of plant scale bulk testing was conducted on the underground ore (during years 2011-2012 and 2013). Furthermore, the plant has been operating with a proportion of underground feed since 2013. The plant has been operating with underground ore only since 2017 with results to date in accordance with testwork predictions.
		For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	N/A, no industrial minerals considered.
	Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	<p>The EIA studies conducted found that activities at Sekisovskoye Mine will not result in significant environmental degradation and will have evident social economic effect such as employment for the local community. It was further recommended by the appointed consultants that the proposed environmental mitigation measures and requirements be implemented to prevent environmental degradation.</p> <p>The latest details pertaining to Interested and Affected Parties (IAPs) involvement Plan, complaints and suggestions procedure, Environmental and Social Plan and ore mine date back to 2012 and 2013. SQL recommended Altyn to consider the status of these documents in terms of the Equator Principles and update them in accordance with the current state of production.</p> <p>As such, the following recommendations for the preparation of an environmental and social action plan for the mine have been made:</p> <ul style="list-style-type: none"> ▶ Perform monitoring of noise and vibration as a result of explosive operations and impact on workers and local residents for risk analysis; ▶ Update the 2012 cyanide audit report in accordance with International Code and implement the results for compliance with the Code requirements; ▶ Further develop current environmental management system, monitoring plan and internal audit schedule in relation to all aspects of the Equator Principle No 1; ▶ Conduct an analysis of available documents that correspond to Equator Principles, namely, Interested Party Involvement Plan, Complaints and Suggestions Procedure, Environmental and Social Action Plan for current project parameters and efficiency analysis on a regular basis;

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4			<ul style="list-style-type: none"> ▶ Further develop the existing Health and Safety Management system that will promote continuous improvement culture; and ▶ Ore mine liquidation and reclamation plan has to be reviewed in line with corporate liabilities determined in Altyn's public account. This review must take into account operational mechanisms of future business. <p>The necessary environmental permits and approvals from the state have been received for the Sekisovskoye Project. Based on the environmental audit work conducted, no significant non-compliances in terms of environmental legislation were recorded.</p>
	Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	<p>As an established operating mine, the appropriate infrastructure and service are well established and are considered appropriate and sufficient for the duration of the life of mine.</p> <p>The new plant line to accommodate the mine expansion is under construction and is expected to be completed and operating after a period of six years, based on raising the required capital. This has been accounted for in the financial model.</p> <p>The tailings storage facilities are constructed on an ongoing basis. Section TD4 of the TSF was designed and commissioned in 2016. Additional TSFs will be constructed as required. The land available is limited to that granted in the permit and as new TSFs are created and filled, additional TSF permits may be required.</p>
	Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	<p>Capex was provided by Altyn management and includes engineering, procurement, construction and start-up cost requirements for increasing the capacity of the existing processing plant, with a capacity of 850ktpa, to 1Mtpa. The capex estimate provided by Altyn Management further accounts for the construction of a new processing plant line with a capacity of 1Mtpa.</p> <p>The capex profile received from Altyn Management and cited in the 2018 Feasibility Study, includes a 10% contingency, to take into account potential underestimation of the capex requirements in regards to the ramp-up in underground mining and a subsequent required increase in processing capacity. EY considers the inclusion of the contingency reasonable and have therefore included the provision in the DCF model.</p> <p>A cost for sustaining capex has been included on the model, based on 10% of operating expenditure. The assumption is based on historic sustaining capex achieved relative to historic operating expenditure. Costs were verified against actuals reported in Altyn's annual reports.</p>

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4		The methodology used to estimate operating costs.	Opex has been provided by Altyn management and includes mining and hauling costs, processing costs, refining fees, transport and security, general and admin fees, and contribution to the liquidation fund. There is no separate allowance for Stay-in-Business costs as maintenance costs have been included in both mining and hauling costs as well as processing costs. Costs were verified against historically achieved costs reported in Altyn's annual reports and are considered reasonable.
		Allowances made for the content of deleterious elements.	N/A, no deleterious elements.
		The source of exchange rates used in the study.	EY considered both forecast exchange rate, on a real basis, and the spot exchange rate as at 31 May 2019. The exchange rate spot and forecast rates were sourced from Bloomberg and S&P Metal and Mining.
		Derivation of transportation charges.	Transport was included in the operating costs for the Sekisovskoye Mine. Transport costs have been provided by Altyn management and compared against historically achieved costs and is considered reasonable. Transport costs include security for transporting Dore bars to the refinery.
		The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	This is based on a contract between MMC Altyn and the Tau-Ken-Samruk Refinery in Nur- Sultan for the purchase of the Dore alloy. The Dore alloy is produced at the Sekisovskoye Mine, packaged and then sent to state refinery, Tau-Ken-Samruk Refinery. This contract is valid from January 2019 until December 2019 is renewed on an annual basis and includes the details of charges, penalties, etc.
		The allowances made for royalties payable, both Government and private.	The mineral extraction tax in Kazakhstan is a volume-based (Au contained in the RoM tonnes) royalty type tax applicable to mineral resources. A rate of 5% is applied for Au and Ag.
	Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	The assumptions applied in the DCF model, including RoM tonnes and gold and silver grade have been sourced from Altyn management and verified against historically achieved costs. The DCF model assumes an 83% Au recovery and 73% Ag recovery for processing plant feed, as cited in the 2018 Feasibility Study. The DCF model further allows for refinery recoveries of 99.75% for Au and 99.70% for Ag, as per the refinery agreement between Altyn and the national refinery, Tau-Ken Samruk. EY adjusted the RoM tonnes planned for 2018 to reflect the RoM tonnes as at the effective date of 31 May 2019, the effective date of the valuation. Exchange rates, transport, processing and refining costs are described above.
		The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	Commodity prices used in the DCF considered both spot and forecast commodity prices on a real basis. The exchange rate spot and forecast values were sourced from Bloomberg and S&P Metal and Mining.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4	Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	Supply, demand, global reserves and commodity prices are described for both the gold and silver markets within the report.
		A customer and competitor analysis along with the identification of likely market windows for the product.	A summary of the gold market globally and in Kazakhstan has been provided in the report. The government of Kazakhstan retains the first right of purchase on all gold that is produced in the country. This provides market security to producing gold mines operating within Kazakhstan. In addition, there is a ban on exporting raw gold and gold products.
		Price and volume forecasts and the basis for these forecasts.	Price is determined based on the refinery contract in place as above. Volume is based on historically achieved volumes and ramps up to the planned production volumes as a part of the mine expansion. The ramp up and maximum volumes forecast are sourced from the 2018 Feasibility Study.
		For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	N/A. No industrial minerals considered.
	Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	Inputs have been provided by Altyn management and verified by EY against historically achieved values. The discount rate or Weighed Average Cost of Capital ("WACC") is used in the DCF method to calculate the value of a mineral asset from its expected free cash flow to the firm. Mid period discounting is applied in the DCF model as the cash flows are assumed to be earned semi-annually. EY estimated a real discount rate for the Sekisovskoye Mine between 12.37% (low) and 13.30% (high). An average real discount rate for the Sekisovskoye Mine was estimated as 12.83%.
		NPV ranges and sensitivity to variations in the significant assumptions and inputs.	EY considered two scenarios to calculate the NPV of the Sekisovskoye Mine. Scenario 1 is based on forecast commodity prices and forecast exchange rates. Scenario 2 is based on the spot rate for the gold and silver commodity prices as at 31 May 2019 and the spot exchange rate as at 31 May 2019. The NPV results presented in Scenario 1 and Scenario 2 are based on a discount rate range of 12.83% (mean), 12.37% (low) and 13.30% (high). Scenario 1, based on forecast assumptions results in a mean NPV of USD493m, low NPV of USD237m and high NPV of USD1 050m. Scenario 2 NPV, based on spot assumptions, results in a mean NPV of USD428m, a low NPV of USD409m and a high NPV of USD447m.
	Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Altyn holds regular public meetings to discuss plans that may have a direct influence on the environment and public health of affected communities and other I&APs. All EIAs go through public meetings before they are submitted to the regulatory authorities. Sekisovskoye Mine manages a social initiative and community development fund which is updated on an annual basis. This fund is paid to the local authorities and is within the framework of the budget allocated for social development.

Section	Criteria	Explanation	The Sekisovskoye Mine
Section 4 Estimation and Reporting Of Ore Reserves			
4			The Sekisovskoye Mine holds open discussions with the local community and shareholders, following the guidance from regulatory requirements and international guidelines.
	Other	<p>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</p> <ul style="list-style-type: none"> ▶ Any identified material naturally occurring risks. ▶ The status of material legal agreements and marketing arrangements. ▶ The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	The authors of this report are not qualified to provide extensive commentary on the legal issues associated with Altyn's and/or its subsidiaries' rights to the mineral properties. EY has reviewed the mineral tenure, refinery agreement and other relevant and material contracts as far as possible. No warranty or guarantee, be it express or implied, is made by the authors with respect to the completeness or accuracy of the legal aspects of this document.
	Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	All Measured Mineral Resources above -400masl were converted to Proved Ore Reserves, while all the Indicated Mineral Resources above -400masl were converted to Probable Ore Reserves.
		Whether the result appropriately reflects the Competent Person's view of the deposit.	The Ore Reserve estimate was based on a conversion of all the Mineral Resources above -400masl. Mr V. Redozubov-Gorskiy , the chief geologist at the Sekisovskoye Mine, is the Competent Person who estimated the Mineral Resources and Mineral Reserves.
		The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	No Measured Mineral Resources were included in the estimated Probable Ore Reserves.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	<p>The Ore Reserves were reviewed in a technical study entitled "Feasibility Study of the Underground Mine at the Sekisovskoye Deposit and Area no.2 of the Sekisovskoye Orefield" completed by SQL in June 2018.</p> <p>Previous JORC Ore Reserve estimation was undertaken by Venmyn Deloitte in the report entitled "Independent Competent Persons' Report on the Sekisovskoye Gold Project prepared for GoldBridges Global Resources Plc" as at 31 May 2014.</p>	

4	Discussion of relative accuracy/ confidence	<p>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</p>	<p>No quantitative methods were applied in assessing the confidence level of the estimated Ore Reserve estimate. A qualitative assessment of the Ore Reserves was conducted based on the quality of modifying factors used in the estimation process. In general, the modifying factors were found to be reasonable. However, some risk was identified with the mining loss (2%), dilution (5%) and recovery (100%) assumptions used in estimating the Ore Reserves. The modifying factors were found to be on the lower (upper in the case of recovery) limit of the reasonable range for the selected mining method, with no allowance for deviation. While the assumed mining modifying factor are achievable, any deviation from the targeted values would negatively affect the recoverable grade.</p>
		<p>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</p>	
		<p>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</p>	
		<p>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</p>	

Appendix F Objectives and Restrictions

Objective and Nature of Services

In accordance with instructions received from Altyn PLC ("Altyn"), Ernst and Young Advisory Services (Pty) Ltd ("EY") have prepared an Independent Competent Persons' Report ("CPR") on the Sekisovskoye Gold Mine ("the Sekisovskoye Mine" or "the Project"), located in Kazakhstan.

EY understand that the CPR is required as part of the documentation requirements for the London Stock Exchange ("LSE") to be prepared in accordance with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition ("the JORC Code") in order to update the previously reported Mineral Resources and Ore Reserves reported in the previous CPR, entitled "Independent Competent Persons' Report on the Sekisovskoye Gold Project prepared for GoldBridges Global Resources Plc" as at 31 May 2014 by Venmyn Deloitte ("the 2014 CPR"). Altyn has estimated the updated Mineral Resources and Ore Reserves.

EY has therefore compiled this CPR in accordance with the JORC Code, summarising the technical aspects of the project including the location, infrastructure, environmental, geology, mining and exploration to-date and Mineral Resources and Ore Reserves.

Scope of our Services

The project scope of work is to compile a Competent Persons' Report on the Sekisovskoye Mine for Altyn PLC. In completing this scope of work, EY has undertaken a review of the following items:

- ▶ Mineral Resource and Ore Reserve estimates by Altyn, including a review of the 3D geological model to satisfy itself of the soundness of the resources and reserves declared by Altyn;
- ▶ Historical and recent production performance, particularly with respect to the planned production levels;
- ▶ The mine plan and life of mine schedule;
- ▶ The modifying factors applied in the conversion of Mineral Resources to Ore Reserves;
- ▶ The suitability of the plant design and expansion plan; and
- ▶ EY will carry out a valuation exercise as part of the CPR, primarily using the income approach, based on a cash flow model already prepared by Altyn.

The review has been based on relevant previous reports, supporting documentation, plans and recent and historical activities as well as any additional results, documentation or commentaries provided. EY has considered information from publicly available information and through consultation with technical experts and EY's previous experience from this project to update the information already on hand.

Restrictions

The work that we have performed does not constitute an audit nor does it constitute a due diligence exercise and we have not independently verified any assets or liabilities of Altyn.

Release of our report is subject to receiving our prior written consent.

We have also relied on the explanations provided by management of the entity during the course of our review, without independent verification. We have assessed such comments and explanations for reasonableness within the context of our knowledge and understanding of the business and the industry within which it operates.

We have principally relied on and challenged the forecasts as provided by management. The forecasts for Altyn relate to future events and are based on assumptions that may or may not remain valid for the whole of the forecast period. Consequently, such information cannot be relied upon to the same extent as that derived from audited financial statements for completed accounting periods. We express no opinion as to how closely the actual future results for the business will correspond to those projected. Therefore conclusions arrived at in this document should be interpreted in this light.

We also do not express an opinion on the commercial merits of any aspects of the business.

Limitations

Subject to our obligation to conduct our work with reasonable skill and care, we shall have no liability for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by the directors, employees, or agents of Altyn or any other person of whom we make enquiries except to the extent that such loss or damage arises as a result of our bad faith or wilful default or where the withholding, concealment or misrepresentation should have been apparent to us without further enquiry from the information provided to us and required to be considered by us under the terms of our assignment.

If we become aware, in carrying out our work, of any withholding, concealment or misrepresentation, which we believe will have material implications for the performance of our work, we will inform you as soon as reasonably practicable.

Disclaimer

This report has been prepared by EY for Altyn. EY neither accepts responsibility nor owes any duty of care to any person (except to Altyn under the relevant terms of the Service Contract, including the provisions limiting EY's liability) for the preparation of the report. Accordingly, regardless of the form of action, whether in contract, tort or otherwise, and to the extent permitted by applicable law, EY neither accepts any liability or responsibility of any kind nor owes any duty of care for the consequences to any person (other than Altyn on the above basis) acting or refraining to act in reliance on the report or any part thereof or for any decisions made or not made which are based on such report or any parts thereof.

This report contains information obtained or derived from a variety of sources as indicated within the report and in our transmittal letter. EY has not sought to establish the reliability of those sources or verified the information provided. Accordingly, no representation or warranty of any kind (whether express or implied) is given by EY to any person (except to Altyn under the relevant terms of the Engagement) as to the accuracy or completeness of the report. Moreover, the report is not intended to assist Altyn to form the basis of any investment or other type of decision, and does not absolve any third party from conducting its own due diligence in order to verify its contents.

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