KROPZ

FEED THE WORLD

AIM Admission Document

HANNAM&PARTNERS Grant Thornton MIRABAUD 1819

THIS DOCUMENT IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION. If you are in any doubt about the contents of this document or as to the action you should take, you should immediately consult your stockbroker, bank manager, solicitor, accountant or other independent financial adviser duly authorised under FSMA if you are in the United Kingdom or, if not, you should immediately consult another appropriately authorised independent professional adviser.

The Company, whose registered office appears on page 20 and the Directors, whose names appear on page 20, accept responsibility for the information contained in this document. To the best of the knowledge and belief of the Company and the Directors (each of whom have taken all reasonable care to ensure that such is the case), the information contained in this document is in accordance with the facts and does not omit anything likely to affect the import of such information.

This document, which comprises an AIM admission document, has been drawn up in accordance with the AIM Rules. This document does not contain an offer of transferable securities to the public within the meaning of section 85 and 102B of FSMA and is not a prospectus for the purposes of the Prospectus Rules. Accordingly, this document has not been prepared in accordance with the Prospectus Rules, nor has it been approved by the FCA pursuant to section 85 of FSMA and a copy has not been delivered to the FCA under regulation 3.2 of the Prospectus Rules. Application will be made for the Enlarged Share Capital to be admitted to trading on AIM. It is expected that Admission will become effective, and that dealings in the Enlarged Share Capital will commence on 30 November 2018.

AIM is a market designed primarily for emerging or smaller companies to which a higher investment risk tends to be attached than to larger or more established companies. AIM securities are not admitted to the Official List of the UK Listing Authority. A prospective investor should be aware of the risks of investing in such companies and should make the decision to invest only after careful consideration and, if appropriate, consultation with an independent financial adviser. Each AIM company is required pursuant to the AIM Rules for Companies to have a nominated adviser. The nominated adviser is required to make a declaration to the London Stock Exchange on Admission in the form set out in Schedule Two to the AIM Rules for Nominated Advisers. The London Stock Exchange has not itself examined or approved the contents of this document. The AIM Rules for Companies are less demanding than those which apply to companies whose shares are listed on the Official List. It is emphasised that no application is being made for admission of the Enlarged Share Capital to the Official List or any other recognised investment exchange.

Your attention is drawn to the discussion of risks and other factors which should be considered in connection with an investment in the Placing Shares set out in Part II (*Risk Factors*) of this document. All statements regarding the Company and the Group's future business should be viewed in light of these risk factors. NOTWITHSTANDING THIS, PROSPECTIVE INVESTORS IN THE COMPANY SHOULD READ THE WHOLE TEXT OF THIS DOCUMENT.

KROPZ PLC

(incorporated in England & Wales under the Company's Act 2006 with registered number 11143400)

PROPOSED ACQUISITION OF COMINCO RESOURCES LIMITED
PROPOSED PLACING AND SUBSCRIPTION OF 68,021,093 NEW ORDINARY SHARES AT 40 PENCE PER ORDINARY SHARE
ADMISSION OF THE ENLARGED SHARE CAPITAL TO TRADING ON AIM

Nominated Adviser	Joint Broker to the Placing	Joint Broker to the Placing
Grant Thornton UK LLP	H&P Advisory Limited	Mirabaud Securities Limited

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Grant Thornton, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority, is acting as nominated adviser to the Company in connection with the Placing and the proposed admission of the Enlarged Share Capital to trading on AIM. Its responsibility as the Company's nominated adviser under the AIM Rules for Nominated Advisers is owed solely to the London Stock Exchange and is not owed to the Company or to any Director or to any other person in respect of their decision to acquire shares in the Company in reliance on any part of this document. Grant Thornton is acting exclusively for the Company and for no one else and will not be responsible to anyone other than the Company for providing the protections afforded to its clients or for providing advice in relation to the contents of this document or the Placing or the proposed admission of the Enlarged Share Capital to trading on AIM.

H&P, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority, is acting as joint broker, joint global coordinator and financial adviser to the Company in connection with the Placing and the proposed admission of the Enlarged Share Capital to trading on AIM. H&P is acting exclusively for the Company and for no one else and will not be responsible to anyone other than the Company for providing the protections afforded to its clients or for providing advice in relation to the contents of this document, the Placing or the proposed admission of the Enlarged Share Capital to trading on AIM.

Mirabaud, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority, is acting as joint broker to the Company in connection with the Placing and the proposed admission of the Enlarged Share Capital to trading on AIM. Mirabaud is acting exclusively for the Company and for no one else and will not be responsible to anyone other than the Company for providing the protections afforded to its clients or for providing advice in relation to the contents of this document or the Placing or the proposed admission of the Enlarged Share Capital to trading on AIM.

The whole of this document should be read. Your attention is drawn, in particular, to Part I (*Information on the Enlarged Group*) and Part II (*Risk Factors*) for a more complete discussion of the factors that could affect the Group's future performance and the industry in which it operates.

An investment in the Company carries risk. Prospective investors should read the whole of this document and should carefully consider whether an investment in Ordinary Shares is suitable for them in light of their circumstances and financial resources. Your attention is particularly drawn to Part II of this document which sets out certain risk factors relating to any investment in the Company. All statements regarding the Company's business, financial position and prospects should be viewed in the light of the risk factors set out in Part II of this document. The contents of the Company's website, including any websites available from hyperlinks on the Company's website, do not form part of this document.

IMPORTANT NOTICE

This document should be read in its entirety before making any decision to subscribe for Ordinary Shares (including the Subscription Shares and the Placing Shares). Prospective investors should rely only on the information contained in this document. No person has been authorised to give any information or make any representations other than as contained in this document and, if given or made, such information or representations must not be relied on as having been authorised by the Company, Grant Thornton, H&P or Mirabaud or any of their respective affiliates, officers, directors, partners, employees or agents. Without prejudice to the Company's obligations under the AIM Rules for Companies, neither the delivery of this document nor any subscription made under this document shall, under any circumstances, create any implication that there has been no change in the affairs of the Company or the Enlarged Group since the date of this document or that the information contained herein is correct as at any time subsequent to its date.

Prospective investors in the Company must not treat the contents of this document or any subsequent communications from the Company, Grant Thornton, H&P or Mirabaud or any of their respective affiliates, officers, directors, partners, employees or agents as advice relating to legal, taxation, accounting, regulatory, investment or any other matters.

If you are in any doubt about the contents of this document or the action you should take, you should immediately seek your own personal financial advice from your stockbroker, bank manager, solicitor, accountant or other independent adviser who is authorised under the FSMA if you are in the United Kingdom, or, if outside the United Kingdom, from another appropriately authorised independent adviser. The Company does not accept any responsibility for the accuracy or completeness of any information reported by the press or other media, nor the fairness or appropriateness of any forecasts, views or opinions expressed by the press or other media or any other person regarding the Placing, the Company and/or the Enlarged Group. The Company makes no representation as to the appropriateness, accuracy, completeness or reliability of any such information or publication.

As required by the AIM Rules for Companies, the Company will update the information provided in this document by means of a supplement to it if a significant new factor that may affect the evaluation of the Placing by prospective investors occurs prior to Admission or if it is noted that this document contains any mistake or substantial inaccuracy. This document and any supplement thereto will be made public in accordance with the AIM Rules for Companies.

This document is not intended to provide the basis of any credit or other evaluation and should not be considered as a recommendation, by the Company, the Directors, Grant Thornton, H&P or Mirabaud or any of their respective representatives, that any recipient of this document should subscribe for or purchase any of the Ordinary Shares. Prior to making any decision as to whether to subscribe for or purchase any Ordinary Shares, prospective investors should read the entirety of this document and, in particular, Part 2 (*Risk Factors*).

Investors should ensure that they read the whole of this document and not just rely on key information or information summarised within it. In making an investment decision, prospective investors must rely upon their own examination (or an examination by the prospective investor's FSMA-authorised or other appropriate advisers) of the Company and the terms of this document, including the risks involved. Any decision to purchase Ordinary Shares should be based solely on this document and the prospective investor's own (or such prospective investor's FSMA-authorised or other appropriate advisers') examination of the Company and the Enlarged Group.

Investors who subscribe for Subscription Shares or Placing Shares will be deemed to have acknowledged that: (i) they have not relied on Grant Thornton, H&P or Mirabaud or any affiliated person in connection with any investigation of the accuracy of any information contained in this document for their investment decision; (ii) they have relied only on the information contained in this document; and (iii) no person has been authorised to give any information or to make any representation concerning the Company or the Shares (other than as contained in this document) and, if given or made, any such other information or representation has not been relied upon as having been authorised by or on behalf of the Company, the Directors, Grant Thornton, H&P or Mirabaud or any of their respective representatives.

None of the Company, the Directors, Grant Thornton, H&P or Mirabaud or any of their respective representatives makes any representation to any subscriber of Subscription Shares regarding the legality of an investment by such subscriber.

This document does not constitute an offer to issue or sell, or the solicitation of any offer to subscribe for or buy, any of the Ordinary Shares in any jurisdiction where it may be unlawful to make such offer or solicitation. The distribution of this document in certain jurisdictions may be restricted by law and therefore persons into whose possession this document comes should inform themselves about and observe such restrictions. Any such distribution could result in a violation of the laws of such jurisdictions. In particular, this document is not for distribution in or into the United States, Canada, Australia, Japan or South Africa and is not for distribution directly or indirectly to any US Person. The Ordinary Shares have not been and will not be registered under the US Securities Act, or under the securities legislation of, or with any securities regulatory authority of, any state or other jurisdiction of the United States or under the applicable securities laws of any province or territory of Canada or under the securities laws of Australia, Japan or South Africa.

Copies of this document will be available free of charge during normal business hours on any day (except Saturdays, Sundays and public holidays) from the registered office of the Company at Suite 4F, Easistore Building, Longfield Road, North Farm Estate, Tunbridge Wells, United Kingdom TN2 3EY from the date of this document and for at least one month from Admission and from the Company's website: www.kropz.com.

United States Securities Law

The Ordinary Shares have not been and will not be registered under the Securities Act or the securities laws of any state or other jurisdiction of the United States and may not be offered or sold except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act.

The Ordinary Shares are only being offered and sold outside the United States in ''offshore transactions'' within the meaning of and pursuant to Regulation S. There will be no public offer of Ordinary Shares in the United States.

The Ordinary Shares have not been approved or disapproved by the US Securities and Exchange Commission or by any US state securities commission or authority, nor has any such US authority reviewed, approved or confirmed on the accuracy or adequacy of this document. Any representation to the contrary is a criminal offence.

Notice to Prospective Investors in the EEA

In relation to each Member State of the EEA, no Ordinary Shares have been offered or will be offered pursuant to the Placing and Subscription to the public in that Member State prior to the publication of a prospectus in relation to the Ordinary Shares which has been approved by the competent authority in that Member State, all in accordance with the Prospectus Directive, except that offers of Ordinary Shares to the public may be made at any time under the following exemptions under the Prospectus Directive:

(1) to any legal entity which is a qualified investor as defined in the Prospectus Directive; or

(2) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) in such Member State; or

(3) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of Ordinary Shares shall result in a requirement for the publication of a prospectus pursuant to Article 3 of the Prospectus Directive or any measure implementing the Prospectus Directive in a Member State and each person who initially acquires any Ordinary Shares or to whom any offer is made under the Placing and Subscription will be deemed to have represented, acknowledged and agreed that it is a ''**qualified investor**'' within the meaning of the law of the Member State implementing Article 2(1)(e) of the Prospectus Directive.

For the purposes of this provision, the expression ''**to the public**'' in relation to any offer of Ordinary Shares in any Member State means a communication in any form and by any means presenting sufficient information on the terms of the offer and any Ordinary Shares to be offered so as to enable an investor to decide to purchase or subscribe for the Ordinary Shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State.

Mineral Resources and Ore Reserves Disclosure

The Competent Person in respect of the Elandsfontein Phosphate Project in South Africa, Jaco van Graan of SRK Consulting (South Africa) Ltd, has reviewed the Enlarged Group's Elandsfontein Mineral Resources and Ore Reserves in accordance with the JORC Code (2012).

The Competent Person in respect of the Aflao Phosphate Project in Ghana, Mark Burnett of Snowden Mining Industry Consultants (Pty) Ltd, has reviewed the Enlarged Group's Aflao Phosphate Project in accordance with the JORC Code (2012).

The Competent Person in respect of the Hinda Phosphate Project in the Republic of Congo, Dr Timothy Lucks of SRK Consulting (UK) Limited, has reviewed the Enlarged Group's Hinda Mineral Resources in accordance with the JORC Code (2012).

The JORC Code (2012) sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code (2012) has been drawn up by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia.

Forward Looking Statements

Certain statements in this document are ''forward-looking statements'' including, without limitation, statements containing the words ''believes'', ''anticipate'', ''expect'', ''target'', ''estimate'', ''will'', ''may'', ''should'', ''would'', ''plan'', ''goal'', ''could'', ''intend'' and similar expressions. These forward-looking statements are not based on historical facts but rather on the expectations of the Directors regarding the Company's future growth, results of operations, performance, future capital and other expenditures (including the amount, nature and sources of funding thereof), planned expansion and business prospects and opportunities. Such forward-looking statements reflect the Directors' current beliefs and assumptions and are based on information currently available to the Directors. Forward-looking statements involve significant known and unknown risks and uncertainties. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements, including risks associated with vulnerability to general economic market and business conditions, competition, environmental and other regulatory changes or actions by governmental authorities, the availability of capital, reliance on key personnel, uninsured and underinsured losses and other factors, many of which are beyond the control of the Company. Although the forward-looking statements contained in this document are based upon what the Directors believe to be reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements.

These forward-looking statements speak only as at the date of this document. Subject to its legal and regulatory obligations (including under the AIM Rules for Companies), the Company expressly disclaims any obligations to update or revise any forward-looking statement contained herein to reflect any change in expectations with regard thereto or any change in events, conditions or circumstances on which any statement is based.

Third Party Information

The data, statistics and information and other statements in this document regarding the markets in which the Company operates, or its market position therein, is based upon the Company's records or are taken or derived from statistical data and information derived from the third-party sources described in this document.

In relation to these third-party sources, such information has been accurately reproduced from the identified information, and, so far as the Directors are aware and are able to ascertain from the information provided by the suppliers of this information, no facts have been omitted which would render such information inaccurate or misleading.

Time Zone

All times referred to in this document are, unless otherwise stated, references to London time.

Presentation of Financial Information

Various figures and percentages in tables in this document have been rounded and accordingly may not total. Certain financial data has also been rounded. As a result of this rounding, the totals

of data presented in this document may vary slightly from the actual arithmetical totals of such data.

Currencies

Unless otherwise indicated, all references in this document to: (a) **''GBP''**, **''£''**, **''pounds sterling''**, **''pounds''**, **''sterling''**, **''pence''** or **''p''** are to the lawful currency of the United Kingdom; (b) **''US$''**, **''US Dollar''**, are to the lawful currency of the United States of America; (c) **''EUR''**, ''**€**'' are to the lawful currency of the European Union; (d) **''Rand''** or **''ZAR''** or **''R''** are to the lawful currency of the South Africa; (e) ''**XAF**'' are to the lawful currency of the Republic of Congo; and (f) ''**GHS**'' or ''**Ghanaian Cedi**'' are to the lawful currency of Ghana.

No Incorporation of website information

The contents of the Company's website, any website mentioned in this document or any website directly or indirectly linked to these websites have not been verified and do not form part of this document, and prospective investors should not rely on such information.

Notice to Distributors

Solely for the purposes of the product governance requirements contained within: (a) EU Directive 2014/65/EU on markets in financial instruments, as amended (''**MiFID II**''); (b) Articles 9 and 10 of Commission Delegated Directive (EU) 2017/593 supplementing MiFID II; and (c) local implementing measures (together, the ''**MiFID II Product Governance Requirements**''), and disclaiming all and any liability, whether arising in tort, contract or otherwise, which any ''manufacturer'' (for the purposes of the Product Governance Requirements) may otherwise have with respect thereto, the Shares have been subject to a product approval process, which has determined that the Shares are: (i) compatible with an end target market of retail investors and investors who meet the criteria of professional clients and eligible counterparties, each as defined in MiFID II; and (ii) eligible for distribution through all distribution channels as are permitted by MiFID II (the ''**Target Market Assessment**'').

Notwithstanding the Target Market Assessment, distributors should note that: the price of the Shares may decline and investors could lose all or part of their investment; the Ordinary Shares offer no guaranteed income and no capital protection; and an investment in the Ordinary Shares is compatible only with investors who do not need a guaranteed income or capital protection, who (either alone or in conjunction with an appropriate financial or other adviser) are capable of evaluating the merits and risks of such an investment and who have sufficient resources to be able to bear any losses that may result therefrom. The Target Market Assessment is without prejudice to the requirements of any contractual, legal or regulatory selling restrictions in relation to the Placing and Subscription. Furthermore, it is noted that, notwithstanding the Target Market Assessment, H&P and Mirabaud will only procure investors who meet the criteria of professional clients and eligible counterparties.

For the avoidance of doubt, the Target Market Assessment does not constitute: (a) an assessment of suitability or appropriateness for the purposes of MiFID II; or (b) a recommendation to any investor or group of investors to invest in, or purchase, or take any other action whatsoever with respect to the Ordinary Shares. Each distributor is responsible for undertaking its own target market assessment in respect of the Ordinary Shares and determining appropriate distribution channels.

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EXPECTED TIMETABLE OF PRINCIPAL EVENTS

Offer posted	1 November 2018
First Closing Date	9.00 p.m. on 21 November 2018
Offer wholly unconditional as to acceptances	21 November 2018
Publication of this document	27 November 2018
Admission becomes effective, completion of the Acquisition and issue of the First Offer Shares and dealings in the Enlarged Share Capital expected to commence on AIM	8.00 a.m. on 30 November 2018
CREST accounts expected to be credited (where applicable) in respect of the New Shares	8.00 a.m. on 30 November 2018
Definitive share certificates expected to be despatched in respect of the New Shares (where applicable)	12 December 2018
Final Closing Date	1.00 p.m. on 30 November 2018
Admission of the Further Offer Shares to trading on AIM expected to become effective	8.00 a.m. on 7 December 2018
CREST accounts expected to be credited (where applicable) in respect of the Further Offer Shares	8.00 a.m. on 7 December 2018
Date by which certificates in respect of the Further Offer Shares are expected to be despatched	21 December 2018

Each of the times and dates in the above timetable is subject to change without further notice. All references are to London time unless otherwise stated. Temporary documents of title will not be issued.

ADMISSION STATISTICS

Number of Existing Ordinary Shares[1]	116,200,226
Price per Offer Share, Placing Share and Subscription Share	40 pence
Number of Placing Shares and Subscription Shares to be issued pursuant to the Fundraising	68,359,376
Number of First Offer Shares to be issued at Admission pursuant to the Acquisition	55,669,176
Number of Further Offer Shares to be issued following Final Closing Date pursuant to the Acquisition[2]	not more than 22,455,810
Enlarged Share Capital at Admission	240,228,778
Further Enlarged Share Capital at Further Offer Share Admission of the Further Offer Shares[2]	not more than 262,684,588
Market capitalisation on Admission at the Placing Price	£96.1 million
Number of Warrants and Options outstanding on Admission	8,357,269
Percentage of the Enlarged Share Capital represented by the Placing Shares and the Subscription Shares	28.5 per cent.
Percentage of the Enlarged Share Capital represented by the First Offer Shares	23.2 per cent.
Percentage of the Further Enlarged Share Capital represented by the Offer Shares[2]	29.7 per cent.
Percentage of the Enlarged Share Capital held by the Directors at Admission	22.3 per cent.
Percentage of Enlarged Share Capital represented by Warrants and Options outstanding at Admission[2]	3.5 per cent.
Gross proceeds of the Fundraising, before expenses	£27.3 million
Estimated net proceeds of the Fundraising receivable by the Company, after expenses	£25.0 million
AIM symbol	KRPZ
ISIN	GB00BZ1HLP69
SEDOL	BZ1HLP6
LEI	2138005Y467BCQ3QOT77

(1) Following the issue of 16,777,846 Ordinary Shares immediately prior to Admission pursuant to the Capitalisation and Conversion.

(2) Assuming 71.3 per cent. acceptances of the Offer by First Closing Date and 100 per cent. acceptances of the Offer by Final Closing Date.

DEFINITIONS

The following definitions apply throughout this document, unless otherwise stated or the context requires otherwise:

''2015 DFS''	a definitive feasibility study on the Hinda Project prepared by Ausenco Engineering Canada in June 2015;
''£'' or **''Pounds Sterling''** or **''GBP''**	pounds sterling, the lawful currency of the UK from time to time;
''Acquisition''	the proposed acquisition by the Company of the entire issued share capital of Cominco by way of the Offer to be completed on Admission;
''Admission''	admission of the Enlarged Share Capital to trading on AIM and such admission becoming effective in accordance with Rule 6 of the AIM Rules for Companies;
''Aflao Competent Person's Report'' or **''Ghana CPR''**	the Aflao Ghana Competent Person's Report as prepared by Snowden and which appears in Section C of Part VI of this document;
''Aflao Exploration Area''	the land in the Ketu South District area of the Volta region of Ghana, measuring 131.93km^2 in area, described in the Aflao Prospecting Right;
''Aflao Phosphate Project'' or **''Aflao Project''** or **''Aflao''**	the Aflao Phosphate Project, further details of which are set out in Section C of Part III of this document;
''Aflao Prospecting Right'' or **''Prospecting Right''**	the prospecting right over the Aflao exploration area, prospecting right number PL.4/15 awarded on 12 October 2018;
''AIM''	the AIM market operated by the London Stock Exchange;
''AIM Rules'' or **''AIM Rules for Companies''**	the AIM Rules for Companies published by the London Stock Exchange from time to time;
''AIM Rules for Nominated Advisers''	the AIM Rules for Nominated Advisers published by the London Stock Exchange from time to time;
''ARC'' or **''African Rainbow Capital''**	African Rainbow Capital (Pty) Limited a private company registered and incorporated in South Africa with registered number 2015/000394/07;
''ARC Fund'' or **''BEE Partner''**	an en commandite partnership established in South Africa and represented by UBI General Partner Proprietary Limited in its capacity as general partner, a company registered in accordance with the laws of South Africa under registration number 2016/224437/07;
''ARC Relationship Agreement''	the relationship agreement dated 27 November 2018 between the Company, Kropz Elandsfontein, H&P, Mirabaud, Grant Thornton and the ARC Fund;
''Articles'' or **''Articles of Association''**	the articles of association of the Company as amended from time to time;
''Audit and Sustainability Committee''	the audit and sustainability committee of the Board as described in paragraph 16.2 of Part I of this document;
''BEE''	the Black Economic Empowerment programme launched by the Government of South Africa which embodies all Codes of Practice gazetted by the Government of South Africa and legislation;
''BNPP''	BNP Paribas SA;
''BNPP Facility Agreement''	the facility agreement dated 13 September 2016 between Kropz Elandsfontein (1) and BNPP (2) in respect to a US$30 million term loan facility provided by BNPP to Kropz Elandsfontein,

	details of which are set out in paragraph 15.33 of Part X of this document;
''Board''	the directors of the Company from time to time;
''BVI''	the British Virgin Islands;
''Capitalisation''	the conditional capitalisation at the Placing Price of the amount of US$5,056,357.61 owing from the Company to the ARC Fund following various restructurings and capitalisations implemented by the Kropz Group in contemplation of Admission;
''Capitalisation Shares''	the 9,875,698 Ordinary Shares to be issued and allotted by the Company to the ARC Fund immediately prior to Admission pursuant to the Capitalisation;
''City Code''	The City Code on Takeovers and Mergers issued by the Panel;
''Cominco''	Cominco Resources Ltd, a company incorporated in the BVI with registered number 1416753, whose registered office is at Woodbourne Hall, Romasco Place, Road Town, Tortola, British Virgin Islands;
''Cominco Group''	Cominco and its subsidiary undertakings (including Cominco S.A.);
''Cominco Locked-in Shareholders''	Cominco Shareholders (excluding Ackerman Group Holdings Limited and Macquarie Bank Limited) who accept the Offer and either on Admission or on the Final Closing Date (if applicable) will hold more than 1 per cent. of the Enlarged Share Capital;
''Cominco S.A.''	Cominco S.A, company number RCCM CG/PNR/11 B 2044, of 1st Floor, Obambi Building, Rond-Point d'Avoum, BP 282, Pointe-Noire, Republic of Congo;
''Cominco Shares''	the ordinary shares of no par value in the capital of Cominco;
''Cominco Shareholders''	the registered holders of Cominco Shares;
''Companies Act'' or **''Act''**	the UK Companies Act 2006 (as amended from time to time);
''Company'' or **''Kropz''**	Kropz plc, a company incorporated in England and Wales with registered number 11143400, whose registered office is at Suite 4F, Easistore Building, Longfield Road, North Farm Estate, Tunbridge Wells, TN2 3EY;
''Conversion''	the conversion of the amount owing under the Convertible Loan Note Instrument into Ordinary Shares at Admission;
''Conversion Shares''	the 6,902,148 Ordinary Shares to be issued and allotted by the Company immediately prior to Admission pursuant to the Conversion;
''Convertible Loan Note Instrument''	the convertible loan note instrument dated 27 November 2018 relating to the issue of US$2,500,000 convertible notes of the Company to Kropz International, details of which are set out in paragraph 15.14 of Part X of this Document;
''Convertible Notes''	the unsecured convertible loan notes of the Company due 2019 constituted by the Convertible Loan Note Instrument;
''CREST''	the computerised settlement system (as defined in the CREST Regulations) operated by Euroclear which facilitates the transfer of title to shares in uncertificated form;
''CREST Regulations''	the Uncertificated Securities Regulations 2001 (SI 2001/3755) including any enactment or subordinate legislation which amends or supersedes those regulations and any applicable rules made under those regulations or any such enactment or subordinate legislation for the time being in force;
''CRU''	CRU Consulting of Chancery House, 53-64 Chancery Lane, London, WC2A 1QS, an independent market analysis group

	commissioned by the Company to prepare a report on the phosphate market;
''Directors''	the board of directors of the Company as at Admission whose names are set out on page 20 of this document;
''DMR''	Department of Mineral Resources of South Africa;
''DRA''	DRA Projects SA (Pty) Limited, a private company incorporated in South Africa with registered number 2005/042496/07;
''Elandsfontein Competent Person's Report'' or **''Elandsfontein CPR''**	the Elandsfontein Competent Person's Report as prepared by SRK (SA) and which appears in Section A of Part VI of this document;
''Elandsfontein Mining Area''	Portion 2 and Portion 4 of the Elandsfontein 349, situated at Western Cape Magisterial in the Administrative District of Malmesbury and measuring 1529.6711 hectares in extent;
''Elandsfontein Mining Right'' or **''Mining Right''**	the mining right over the Elandsfontein Mining Area granted to Kropz Elandsfontein by the Minister of Mineral Resources;
''Elandsfontein Phosphate Project'' or **''Elandsfontein Project''** or **''Elandsfontein''**	the Elandsfontein Phosphate Project, further details of which are set out in Section A of Part III of this document;
''ELH''	Elandsfontein Land Holdings (Pty) Ltd, a private company registered and incorporated in South Africa with registered number 2010/0067950/07;
''Enlarged Group''	the Company and its subsidiaries on Admission, including the Cominco Group;
''Enlarged Share Capital''	the total number of Ordinary Shares in issue on Admission, comprising the Existing Ordinary Shares, and the Placing Shares, the Subscription Shares and the First Offer Shares;
''ESOP''	the Company's executive share option plan, details of which are set out in paragraph 10.4 of Part X of this document;
''Euroclear''	Euroclear UK & Ireland Limited, a company incorporated in England & Wales with registration number 02878738, being the operator of CREST;
''Existing Ordinary Shares''	the existing ordinary shares of 0.1 pence each in the capital of the Company in issue immediately resort to Admission (following the issue of 16,777,846 Ordinary Shares immediately prior to Admission pursuant to the Capitalisation and Conversion);
''FCA''	the United Kingdom's Financial Conduct Authority;
''FGE Loan Agreements''	together the First FGE Loan Agreement and the Second FGE Loan Agreement;
''Final Closing Date''	1 p.m. on 30 November 2018;
''First Closing Date''	9 p.m. on 21 November 2018;
''First FGE Loan Agreement''	the loan agreement dated 4 June 2018 between the Company (1) and FGE (2) (as novated to the Company on 4 June 2018) pursuant to which the Company made a loan facility for the sum of US$100,000 available to FGE for an initial term of 15 years. The loan can be repaid by FGE in whole or in part at any time;
''First Offer Shares''	the 55,669,176 Offer Shares to be issued and allotted to Cominco Shareholders for whom valid acceptances have been received by First Closing Date;

''First Gear Exploration'' or **''FGE''**	First Gear Exploration (Pty) Ltd, a private company registered and incorporated in Ghana with registered number CS066302017 which is a 50 per cent. share Subsidiary of the Company;
''FGE Shareholders' Agreement''	the First Gear Exploration Shareholders' Agreement, details of which are set out in paragraphs 15.42 of Part X of this document;
''Foskor''	Foskor (Pty) Limited, a private company registered and incorporated in South Africa with registered number 1951/002918/07, the primary producer of phosphate rock and phosphate fertilizers in South Africa;
''FSMA''	the UK Financial Services and Markets Act 2000 as amended;
''Fundraising''	the Placing and Subscription;
''Further Enlarged Share Capital'	the total number of Ordinary Shares in issue on Further Offer Share Admission, comprising the Enlarged Share Capital and the Further Offer Shares (assuming 100 per cent. acceptances of the Offer by Final Closing Date);
''Further Offer Shares''	those Offer Shares to be issued and allotted to Cominco Shareholders for whom valid acceptances are received after the First Closing Date but by Final Closing Date;
''Further Offer Share Admission''	admission of the Further Offer Shares to trading on AIM and such admission becoming effective in accordance with the AIM Rules for Companies;
''Ghana''	Republic of Ghana;
''GHS''	the lawful currency of Ghana from time to time;
''Grant Thornton''	Grant Thornton UK LLP of 30 Finsbury Square, London EC2A 1AG, the Company's nominated adviser;
''H&P''	H&P Advisory Limited of 2 Park Street, London W1K 2HX, joint broker to the Company;
''Hinda Competent Person's Report'' or **''Hinda CPR''**	the Hinda Competent Person's Report as prepared by SRK (UK) and which appears in Section B of Part IV of this document;
''HDSA''	Historically Disadvantaged South Africans;
''Hinda Exploitation Convention''	the mining exploitation convention entered into between Cominco (1), Cominco S.A. (2) and the Republic of Congo (3) dated 10 July 2018, to regulate operations under the Hinda Exploitation Licence;
''Hinda Exploitation Licence''	the mining exploitation licence granted through Decree number 2015-975 on 7 December 2015, over the Hinda Mining Area;
''Hinda Mining Area''	an area covering an extent of 263,68 km^2 in the Kouilou Department;
''Hinda Phosphate Project'' or **''Hinda Project''** or **''Hinda''** or **''HPP''**	the Hinda Phosphate Project, further details of which are set out in Section B of Part III of this document;
''HKK''	the Hahotoé-Kpogamé-Kpémé deposit in Togo;
''ISIN''	International Securities Identification Number;
''Kalyaan''	Kalyaan Resources DMCC, a private company registered in Dubai with registration number DMCC4435;
''Keytrade''	Keytrade AG, a private company registered in Switzerland with registration number CHE108.610.705;
''Kropz Elandsfontein''	Kropz Elandsfontein (Pty) Ltd, a private company registered and incorporated in South Africa with registered number 2010/006791/07;
''Kropz Group''	the Company and its subsidiaries as at the date of this document;

''Kropz International''	Kropz International S.à.r.l., registered in Luxembourg with company number B191463, a significant shareholder of the Company;
''Kropz SA''	Kropz SA (Pty) Limited, a private company registered and incorporated in South Africa with registered number 2010/006964/07;
''LEI''	Legal Entity Identifier;
''Lock-in Agreements''	the lock-in agreements, details of which are set out in paragraph 15.8 of Part X of this document;
''Locked In Shareholders''	the Directors, Kropz International and the ARC Fund;
''London Stock Exchange''	London Stock Exchange plc;
''LTIP''	the Company's executive long term incentive plan, details of which are set out in paragraph 10.5 of Part X of this document;
''MAR''	the Market Abuse Regulation (2014/596/EU) (incorporating the technical standards, delegated regulations and guidance notes, published by the European Commission, London Stock Exchange, the FCA and ESMA);
''Mining Code''	the mining code of the Republic of Congo, adopted in 2005;
''Mining Charter''	the 2004 Broad-Based Socio-Economic Charter for the South African Mining Industry, as amended in 2010 and in 2018;
''Mirabaud''	Mirabaud Securities Limited of 5th Floor, 11 Bressenden Place, London SW1E 5DH, joint broker to the Company;
''MMA''	Minerals and Mining Act 2006 (Act 703), as amended of Ghana;
''MN Relationship Agreement''	the relationship agreement dated 27 November 2018 between the Company, H&P, Mirabaud, Grant Thornton, Mike Nunn and Kropz International;
''MPRDA''	the Mineral and Petroleum Resources Development Act, No. 28 of 2002, as amended of South Africa;
''New Shares''	the Placing Shares, First Offer Shares, Subscription Shares, Capitalisation Shares and the Conversion Shares;
''Nominated Adviser Agreement''	the agreement between the Company (1), Grant Thornton (2) and the Directors (3) dated 27 November 2018 pursuant to which the Company has appointed Grant Thornton to act as nominated adviser to the Company for the purposes of the AIM Rules for Companies and for the purpose of making the application for Admission as summarised in paragraph 15.4 of Part X of this document;
''Offer''	the offer by the Company pursuant to the Offer Document for the entire issued share capital of Cominco details of which are set out in paragraph 14 of Part X of this document;
''Offer Document''	the offer document dated 1 November 2018 issued by the Company to the Cominco Shareholders containing the terms and conditions of the Offer;
''Offer Shares''	the up to 78,124,986 Ordinary Shares to be allotted and issued to the Cominco Shareholders as consideration for their acceptance of the Offer (assuming 100 per cent. acceptances of the Offer);
''Official List''	the Official List of the UK Listing Authority;
''Options''	the existing options to subscribe for Ordinary Shares, details of which are set out in paragraph 10.3 of Part X of this document;
''Ordinary Shares''	the ordinary shares of 0.1 pence each in the capital of the Company;
''Panel''	the Panel on Takeovers and Mergers;

''Phosphate Market Report''	the phosphate market report prepared by CRU which appears in Part IV of this document;
''Placing''	the conditional placing of the Placing Shares by H&P and Mirabaud at the Placing Price pursuant to the Placing Agreement;
''Placing Agreement''	the conditional agreement dated 27 November 2018 between the Company (1), the Directors (2), Roderick Smith (3), Grant Thornton (4), H&P (5) and Mirabaud (6), relating to the Placing, as summarised in paragraph 15.3 of Part X of this Document;
''Placing Price''	40 pence per Placing Share;
''Placing Shares''	the 3,338,283 new Ordinary Shares to be issued by the Company and subscribed for pursuant to the Placing;
''Projects''	together, the Elandsfontein Project, the Hinda Project and the Aflao Project;
''Prospectus Rules''	the prospectus rules of the UK Listing Authority made in accordance with section 73A of FSMA as amended from time to time brought into effect on 1 July 2005 pursuant to Commission Regulation (EC) No.809/2004 and the Prospectus Regulations 2005 (SI 2005/1433);
''QCA Code''	the Corporate Governance Code for Small and Mid-Size Quoted Companies, as published by the Quoted Companies Alliance in 2018;
''Rand'' or **''ZAR''**	South African Rand, the lawful currency of South Africa from time to time;
''Registrar''	Link Asset Services;
''Regulation S''	Regulation S as promulgated under the Securities Act;
''Regulatory Information Service''	any information service authorised from time to time by the FCA for the purpose of disseminating regulatory announcements;
''Remuneration and Nomination Committee''	the remuneration and nomination committee of the Board as described in paragraph 16.2 of Part I of this document;
''Republic of Congo'' or **''Congo Brazzaville''** or **''ROC''** or **''Congo''**	the Republic of Congo;
''Russell Brooks''	Russell Brooks Limited, a company incorporated in Guernsey with registered office at 8-20 The Pollet, GY1 1WH, The Bailiwick of Guernsey, 15 per cent. shareholder in First Gear Exploration;
''Second FGE Loan Agreement''	the loan agreement dated 4 June 2018 between the Company (1) and FGE (2) (as novated to the Company on 4 June 2018) pursuant to which the Company made a loan facility for the sum of US$70,000 available to FGE for an initial term of 15 years. The loan can be repaid by FGE in whole or in part at any time;
''Securities Act''	the United States Securities Act of 1933, as amended;
''Shareholders''	the holders of Ordinary Shares from time to time;
''Shareholders' Agreements''	the shareholders' agreements in relation to the subsidiaries of the Kropz Group, details of which are set out in paragraphs 15.41 to 15.43 of Part X of this document;
''Snowden'' or **''Aflao Competent Person''**	Snowden Mining Industry Consultants (Pty) Ltd, a private company registered and incorporated in South Africa with registered number 1998/023556/07, authors of the Aflao Competent Person's Report;
''South Africa'' or **''SA''**	the Republic of South Africa and its respective territories or possessions;

''SRK (SA)'' or **''Elandsfontein Competent Person''**	SRK Consulting (South Africa) Pty Ltd, a private company registered and incorporated in South Africa with registered number, 1995/012890/07, authors of the Elandsfontein South Africa Competent Person's Report;
''SRK (UK)'' or **''Hinda Competent Person''**	SRK Consulting (UK) Limited, a private company registered and incorporated in England and Wales with registered number 01575403, authors of the Hinda Competent Person's Report;
''Subscribers''	the subscribers who have agreed to subscribe for the Subscription Shares at the Placing Price pursuant to the Subscription Letters;
''Subscription''	the conditional subscriptions for the Subscription Shares to be issued to Subscribers by the Company;
''Subscription Letters''	the subscription letters entered into between the Company and the Subscribers;
''Subscription Shares''	the 65,021,093 new Ordinary Shares to be issued at the Placing Price to the Subscribers pursuant to the Subscriptions;
''subsidiary'' or **''subsidiary undertaking''**	have the meanings given to them in the Act;
''Tiestabyte''	Tiestabyte (Pty) Limited, a private company registered and incorporated in South Africa with registered number 2013/048448/07;
''UK'' or **''United Kingdom''**	the United Kingdom of Great Britain and Northern Ireland, its territories and dependencies;
''UK Listing Authority''	the FCA acting in its capacity as the competent authority for the purposes of Part VI of FSMA;
''uncertificated'' or **''in uncertificated form''**	recorded on the relevant register of the share or security concerned as being held in uncertificated form in CREST and title to which, by virtue of the CREST Regulations, may be transferred by means of CREST;
''US'' or **''United States''**	the United States of America, its territories and possessions, any state of the United States of America and the district of Columbia and all other areas subject to its jurisdiction;
''US Persons''	bears the meaning ascribed to such term by Regulation S promulgated under the Securities Act;
''US$'', **''USD''** or **''US Dollars''**	United States Dollars, the lawful currency of the United States of America from time to time;
''Warrants''	the existing warrants to subscribe for Ordinary Shares to be issued to the Joint Brokers, details of which are set out in paragraph 10.2 of Part X of this document;
''Water Tribunal''	an independent body in South Africa established to hear appeals against directives and decisions made by responsible authorities, catchment management agencies or water management agencies about matters covered by the National Water Act, Act 36 of 199 of South Africa;
''West Coast Fertilizers''	West Coast Fertilizers (Pty) Limited, a private company registered and incorporated in South Africa with registered number 2013/144418/07;
''XAF''	Central African CFA franc, the lawful currency of the Republic of Congo from time to time; and
''Xsando''	Xsando (Pty) Limited, a private company registered and incorporated in South Africa with registered number 2014/035557/07.

A glossary of technical terms and expressions is set out on pages 17 to 19 of this document.

GLOSSARY OF TECHNICAL TERMS

The following table provides an explanation of certain technical terms and abbreviations used in this document. The terms and their assigned meanings may not correspond to standard industry meanings or usage of these terms.

''BCM''	bank cubic meter;
''BPL''	bone phosphate of lime, equivalent to 2.185 x per cent. P_2O_5 content;
''Cd''	cadmium;
''CAGR''	compound annual growth rate;
''Cretaceous Tertiary''	the mass extinction at the bounday between the Cretaceous period and the Paleogene period, approximately 66.0 Ma;
''DAP''	diammonium phosphate;
''DD''	direct-direct flotation configuration;
''DFS''	definitive feasibility study;
''diamond drilling''	the act or process of drilling boreholes using bits inset with diamonds as the rock-cutting tool;
''dwt''	deadweight tonnage, a measure of a vessel's weight carrying capacity;
''EBITDA''	earnings before interest, tax, depreciation and amortisation;
''EIA''	environmental impact assessment;
''EMPr''	environmental management programme;
''FOB''	free on board, in accordance with the International Commercial Terms;
''GDP''	gross domestic product;
''ha''	hectare;
''Indicated Mineral Resource''	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 and is sufficient to assume geological and grade or quality continuity between points of observation;
''Inferred Mineral Resource''	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. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration;
''IPCC''	in-pit crushing and conveying;
''IRR''	internal rate of return;
''JORC Code''	2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia;
''km^2''	square kilometre;

''LIBOR''	Intercontinental Exchange London Interbank Offered Rate;
''LoM''	life of mine;
''Lower Cretaceous''	the first geological epoch of the Cretaceous period, extending from approximately 139.8 Ma to 100.5 Ma;
''m''	metre;
''Ma''	mega annum or million years ago;
''MAP''	monoammonium phosphate;
''mbgl''	metres below ground level;
''Measured Mineral Resource''	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 and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource;
''Mineral Reserve''	the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified;
''Mineral Resource''	a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling;
''μm''	mirometer;
''MMI^{TM},,	mobile metal ion geochemistry, a proven advanced geochemical exploration technique known to find mineral deposits;
''MER''	minor element ratio;
''Miocene''	the first geological epoch of the Neogene Period extending from about 23.03 to 5.333 Ma;
''mm''	millimetre;
''Mt''	million tonnes;
''Mtpa''	million tonnes per annum;
''MVA''	mega volt amperes;
''NPK''	nitrogen, phosphorous and potassium, the three macro elements required for plant growth, typically used in reference to fertilizers which contain all three elements;
''NPV''	net present value;
''P_2O_5''	phosphorous pentoxide (phosphate);
''Paleoproterozoic''	the first geological epoch of the Proterozoic eon, extending from approximately 2,500 Ma to 1,600 Ma;
''Percussion Drilling''	the process of boring into rock by means of an air or hydraulic powered drill bit;

''PFS''	prefeasibility study;
''Phanerozoic''	the second geological eon, representing time from 541 Ma to present day;
''Pliocene''	the second geological epoch of the Neogene Period extending from about 5.333 to 2.58 Ma;
''ppm''	parts per million;
''Precambrian''	the first geological eon, representing time from 4,600 Ma to 541 Ma;
''Probable Mineral Reserve''	the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve;
''Probable Ore Reserve''	the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve;
''Proved Mineral Reserve''	the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors;
''Proved Ore Reserve''	the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors;
''Quaternary''	the third geological epoch of the Cenozoic Era, extending from approximately 2.58 Ma to present day;
''RC''	reverse circulation;
''ROM''	run of mine;
''RR''	reverse-reverse flotation configuration;
''SSP''	single super phosphate, a simple phosphate fertilizer
''tonnes''	thousand kilograms;
''tpa''	tonnes per annum;
''tpm''	tonnes per month;
''Upper Cretaceous''	the second geological epoch of the Cretaceous period, extending from approximately 100.5 Ma to 66.0 Ma;
''VALMIN''	2015 Edition of the Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets;
''VIU''	value-in-use analysis used for valuing quasi-commodities such as phosphate, by normalising products of different specifications to allow a like-for-like comparison;
''WUL''	water use licence; and
''WULA''	water use licence application.

DIRECTORS, SECRETARY AND ADVISERS

Directors:	Lord Robin William Renwick of Clifton – Non-Executive Chairman Ian Timothy Harebottle – Chief Executive Officer Mark Robert Summers – Chief Financial Officer Michael (Mike) John Nunn – Non-Executive Director Machiel Johannes Reyneke – Non-Executive Director Michael (Mike) Albert Daigle – Independent Non-Executive Director Linda Janice Beal – Independent Non-Executive Director
Company Secretary:	Mark Robert Summers
Registered Office:	Suite 4F Easistore Building Longfield Road North Farm Estate Tunbridge Wells TN2 3EY
Nominated Adviser:	Grant Thornton UK LLP 30 Finsbury Square London EC2A 1AG
Joint Broker:	H&P Advisory Limited 2 Park Street Mayfair London W1K 2HX
Joint Broker:	Mirabaud Securities Limited 5th Floor 10 Bressenden Place London SW1E 5DH
Legal Advisers to the Company:	*As to English law:* Memery Crystal LLP 165 Fleet Street London EC4A 2DY *As to South African law:* Werksmans Attorneys The Central, 96 Rivonia Road Sandton 2196 Johannesburg South Africa *As to Ghanaian law:* Bentsi-Enchill Letsa & Ankomah 4 Momotse Avenue P.O. Box GP 1632 Accra Ghana GA-073-2077 *As to the laws of Republic of Congo:* PricewaterhouseCoopers Tax & Legal 88 Avenue du Général de Gaulle B.P. 1306 Pointe-Noire, Congo *As to the laws of the British Virgin Islands:* Harney Westwood & Riegels LP Craigmuir Chambers PO Box 71, Road Town Tortola VG1110, British Virgin Islands
Legal Advisers to the Placing:	Charles Russell Speechlys LLP 5 Fleet Place London EC4M 7RD

Auditors and Reporting Accountants to the Company:	Mazars LLP Tower Bridge House St Katherine's Way London E1W 1DD
Elandsfontein Competent Person:	SRK Consulting (South Africa) (Pty) Ltd 265 Oxford Road Illovo 2196 Johannesburg South Africa
Hinda Competent Person:	SRK Consulting (UK) Limited 5th Floor Churchill House 17 Churchill Way Cardiff CF10 2HH
Aflao Competent Person:	Snowden Mining Industry Consultants (Pty) Ltd Technology House Greenacres Office Park Victory Park 2195 Johannesburg South Africa
Market Consultant:	CRU Consulting Chancery House 53-64 Chancery Lane London WC2A 1QS
Financial PR:	Tavistock Communications Limited 1 Cornhill London EC3V 3ND
Registrar:	Link Asset Services The Registry 34 Beckenham Road Beckenham Kent BR3 4TU
Company's website:	www.kropz.com

PART I

INFORMATION ON THE ENLARGED GROUP

1. Introduction

Kropz is an emerging plant nutrient producer with an advanced stage phosphate mining project in South Africa, a large-scale phosphate project in the Republic of Congo and exploration assets in Ghana. The vision of the Enlarged Group is to become a leading independent phosphate rock producer and to develop into an integrated, mine-to-market plant nutrient company focusing on sub-Saharan Africa.

Kropz's flagship operation is the Elandsfontein Phosphate Project, a near-term producing asset in South Africa's Western Cape Province, close to export infrastructure and primed to take advantage of a recovery in phosphate prices.

The Company's medium-term development asset is the Hinda Phosphate Project in the Republic of Congo. Hinda is believed to be one of the largest undeveloped phosphate reserves in the world, also located in close proximity to export infrastructure.

The Company has also secured a prospecting right in Ghana, to undertake further exploration work on the Aflao Phosphate Project, the potential extension of the well-known, high grade and historically exploited Hahotoé-Kpogamé-Kpémé ("**HKK**") deposit in Togo.

The Company is seeking admission to AIM in order to raise the funds required to complete the commissioning of the Elandsfontein Phosphate Project, to further develop its West African assets, to reduce the Company's overall net debt position, and to take advantage of AIM's profile, liquidity and access to a broad institutional investor base. The Directors believe being a publicly traded company will also assist in the achievement of its strategic objectives, which include taking advantage of additional opportunities in the fertilizer supply chain.

The Directors believe the long-term outlook for fertilizer products is favourable, primarily due to a growing world population combined with constraints on arable land, that will necessitate increased demand for phosphate-based fertilizer products, in order to boost crop yields.

Phosphate rock prices have performed strongly in 2018 with increases between 10 per cent. and 20 per cent. at major benchmark prices since the start of the year. It is CRU's assessment that 2018 marks a turning point in phosphate rock prices, with Q4 2017 marking the low point. The future outlook is positive, with a long-term CAGR of 3.9 per cent., based on CRU's forecast rock price of US$185/t in 2035 (2018-2035) and continued recovery in prices in the medium-term from 2020.

Revenue generation is anticipated by the Directors over the near term once design and commissioning of the Elandsfontein Project is completed, and the operation comes into production. This is further supported by a conditional off-take agreement that is already in place, together with further off-take terms agreed in principle for a total of 100 per cent. of the production from the Elandsfontein Project.

2. Projects Overview

The Company has secured a strong sub-Saharan African phosphate project portfolio to ensure short, medium and long term growth.

2.1 Elandsfontein

Kropz's most developed asset is the Elandsfontein Project on the West Coast of South Africa. Located in a region that has a history of phosphate mining since the 1960s, the Council for Geoscience, formerly the Geological Society of South Africa, regards the Elandsfontein Project to be the second largest known sedimentary deposit in South Africa. The deposit is situated in the Western Cape Province, approximately 95km north northwest of Cape Town, within the Saldanha Bay Municipality.[1]

Kropz acquired the land where the Elandsfontein Project is located in August 2010 and has since invested approximately US$120 million on exploration, bulk sampling, feasibility studies and the subsequent construction of a mine, mineral processing facility and associated infrastructure.

The Directors believe that Elandsfontein is a robust and substantially de-risked mining project. The box cut has been established and the highly automated processing facility is near completion, with a capacity to deliver up to 1.2Mtpa of 31 per cent. P_2O_5 phosphate rock concentrate. Final commissioning is dependent upon ongoing test work and final design modifications.

According to CRU, the Company's operating cost estimates suggest that the Elandsfontein Project is well-positioned to compete effectively with other phosphate rock suppliers in the traded market. Furthermore, Elandsfontein's advantageous location in proximity to the deep-water port of Saldanha Bay enables it to target demand in both the Atlantic and Indian Ocean markets.[2]

In terms of competitiveness, the Directors believe that the Elandsfontein Project should enjoy advantageous freight rates to Brazil, once in full production, and it should also maintain a freight advantage in the important Indian market over North African-based suppliers.

Development of the Elandsfontein Project has enabled Kropz to achieve strong, long-term partnerships, including a positive relationship with one of Elandsfontein's significant shareholders, the ARC Fund, a South African based BEE partner and a leading investment company listed on the Johannesburg Stock Exchange with a total net asset value of R9.1 billion (approximately US$730 million) as at 31 December 2017.

Further details relating to the Elandsfontein Phosphate Project are contained in Section A of Part III (*Information on the Elandsfontein Phosphate Project*) and Section A of Part VI (*Elandsfontein Competent Person's Report*) of this document.

2.2 Hinda

Cominco, through its wholly owned subsidiary, Cominco S.A., currently owns 100 per cent. of the Hinda Project which is expected to be diluted to 90 per cent. through the participation of the Republic of Congo. Further details of the Republic of Congo's participation rights are contained in paragraph 6 of Section B of Part III (*Information on the Hinda Phosphate Project*) of this document.

Conditional on Admission, the Company will acquire a minimum of 71.3 per cent. of Cominco and the Offer will remain open to acceptance to the Cominco Shareholders until the Final Closing Date and under which the Company may acquire up to 100 per cent. of Cominco.

The Hinda Project consists of a sedimentary hosted phosphate deposit located approximately 40km northwest of the city of Pointe-Noire in the Republic of Congo[3] and includes the Hinda Exploitation Licence that covers 263.68km^2 of the coastal basin in the Republic of Congo.

The Hinda Project has a substantial JORC compliant Mineral Resource base totalling 675.8Mt at a grade of 10.0 per cent. P_2O_5, with 86 per cent. included in the Measured and Indicated Mineral Resource categories.[4]

The Hinda Project is supported by a substantial body of mineral processing test work, conducted as part of, and subsequent to, historical feasibility studies and, according to the Hinda CPR, supports the design input parameters for the beneficiation plant design. The 2015 DFS targeted the

1 Elandsfontein CPR – executive summary, page iii.
2 Phosphate Market Report – page 10.
3 Hinda CPR – main report, page 1.
4 Hinda CPR – executive summary, page i.

production of 4.1Mtpa of phosphate concentrate at a grade of 32 per cent. P_2O_5. At the time of reporting the 2015 DFS, based on the technical and economic parameters defined, the unleveraged NPV (assuming a 10 per cent. discount rate) was US$1.85 billion, with an associated IRR of 38 per cent., based on an average life of mine phosphate rock price of US$149/t. The required initial capital investment was US$601.3 million, with operating costs of US$36.6/t for the first 5 years and US$47.9/t thereafter.[5]

The Directors believe that, whilst the 2015 DFS reported a positive economic outcome, in consideration of both current market conditions and the long-term supply/demand position of the phosphate market, an initially smaller scale project targeting the production between 1.0Mtpa and 1.2Mtpa, potentially increasing to 2.0Mtpa, can be developed for a significantly lower level of upfront capital investment, compared to the 2015 DFS requirements.

In support of the above strategy the Company has prepared a phased programme of work that will aim to review and verify the underlying design parameters, assess various optimisation opportunities and develop a proposed single solution to feasibility study level within 12 months of Admission.

Further details relating to the Hinda Project are contained in Section B of Part III (*Information on the Hinda Phosphate Project*) and Section B of Part VI (*Hinda Competent Person's Report*) of this document.

2.3 Aflao

First Gear Exploration, a 50 per cent. + 1 share owned subsidiary of the Company, is currently undertaking exploration work to confirm the Company's belief that the phosphate bearing horizons of the HKK deposit in Togo extend into neighbouring Ghana.

The Aflao Project area currently under review by First Gear Exploration is located in the Ketu South District, Volta Region, Ghana, referred to as the Keta Basin. Exploration undertaken in the 1960's by the Geological Survey of Ghana ("**GSG**") indicated the presence of calcareous phosphate bearing horizons in the area.

Phosphates have been mined since 1961 in the Keta basin in the southern parts of Togo by the state-owned company Société Nouvelle des Phosphates du Togo ("**SNPT**"), near the capital city, Lomé. Following the commencement of mining, preliminary investigations undertaken by the GSG in the 1960's suggested that the mineralisation may extend westwards into Ghana.[6]

GSG sampled phosphate bearing calcareous horizons intersected in a series of water wells drilled in the Keta Basin, near the town of Aflao, Ketu South District. The assay results obtained from the water drill holes were considered to be low at the time, with intersections ranging from 5m to 11m in thickness and with assays ranging from 14 per cent. to 22 per cent. P_2O_5. These results were not followed up at the time and all data relating to the GSG work was lost.[7]

First Gear Exploration completed a MMI™ geochemistry study in the target area and determined that phosphate and other indicator element anomalies are present. The anomalies detected were similar in nature to those observed in a trial run undertaken in Togo where units of the known HKK deposit occur.

First Gear Exploration intends to undertake a detailed exploration program with the intention of delineating a phosphate resource to support a beneficiation plant and associated infrastructure.

The SNPT Kpeme mine in Togo is the single major producer in the country with production capacity estimated at 2.0Mtpa, averaging between 700,000 tonnes and 1.2Mtpa in the last five years. The deposit produces a phosphate rock concentrate high in P_2O_5 with beneficiated product grades typically ranging between 35.5 per cent. and 36 per cent. P_2O_5, placing it at the high end of the commonly traded phosphate rock scale.

Further details relating to the Aflao Project are contained in Section C of Part III (*Information on the Aflao Phosphate Project*) and Section C of Part VI (*Aflao Competent Person's Report*) of this document.

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5 Hinda CPR – executive summary, page i.
6 Aflao CPR – executive summary, page 4.
7 Aflao CPR – executive summary, page 4.

3. Overview of Phosphate Market

Population growth and food security are key drivers of plant nutrient demand. According to the Food and Agricultural Organisation, almost one in nine people around the world are reported to be chronically hungry, lacking enough food to be healthy and lead active lives. The Food and Agricultural Organisation projects that by 2050, population and economic growth will result in a doubling of food demand across the globe. As the world's population grows, urbanises and industrialises, farm land per capita has decreased. Consequently, more food production is required per unit area of arable farm land, which in turn equates to an increasing reliance on plant nutrients.

Phosphates are essential for all life on earth as phosphorus forms an essential component of most biochemical reactions in living organisms. Phosphorus is naturally occurring in various forms, but in order to sustain modern agricultural yields it needs to be added as a substitute in the form of phosphate fertilizer.

Fertilizer-based demand will be driven by the need to feed a growing world population and by constraints on arable land expansion that will necessitate increased phosphate fertilizer application rates to boost crop yields. CRU forecasts global phosphate rock trade to increase by 3.2Mt from 2017 to 2022, reaching 35.3Mtpa. This represents a 1.9 per cent. CAGR and marks a significant acceleration in the phosphate rock import demand growth that has been observed since 2000.

This increase in import demand growth started in 2017 when total trade increased by 4.3Mt, or 15.6 per cent. This sharp increase in import demand was driven by strong phosphate fertilizer demand in countries that import rock (including India and Brazil) and relatively low phosphate rock prices. CRU forecasts that the growth in phosphate rock import demand will continue into 2022.

Using their long-term price guidance and the projected VIU of the Saldanha rock concentrate, CRU forecasts an FOB Saldanha rock price of US$185/t in 2035 for the Elandsfontein Project. This represents a long-term CAGR of 3.9 per cent. (2018-2035). From 2023, long-term price guide developments are determined solely by the calculated cost inflation of the long-run marginal cost of production. Assuming an 85 per cent. utilisation rate, CRU expects Elandsfontein's output will represent approximately 4 per cent. of the internationally traded phosphate rock market.

CRU's VIU for the 32 per cent. P_2O_5 product from Hinda on an FOB Pointe Noire basis is forecast to increase to US$190/t in 2035, representing a long-term CAGR of 3.9 per cent. (2018-2035). Again, from 2023, long-term price guide developments are determined solely by the calculated cost inflation of the long-run marginal cost of production.

It is notable that the cadmium content of Elandsfontein rock, which is measured at an average of 4.2ppm, is low relative to other major sedimentary phosphate rock sources in North Africa.

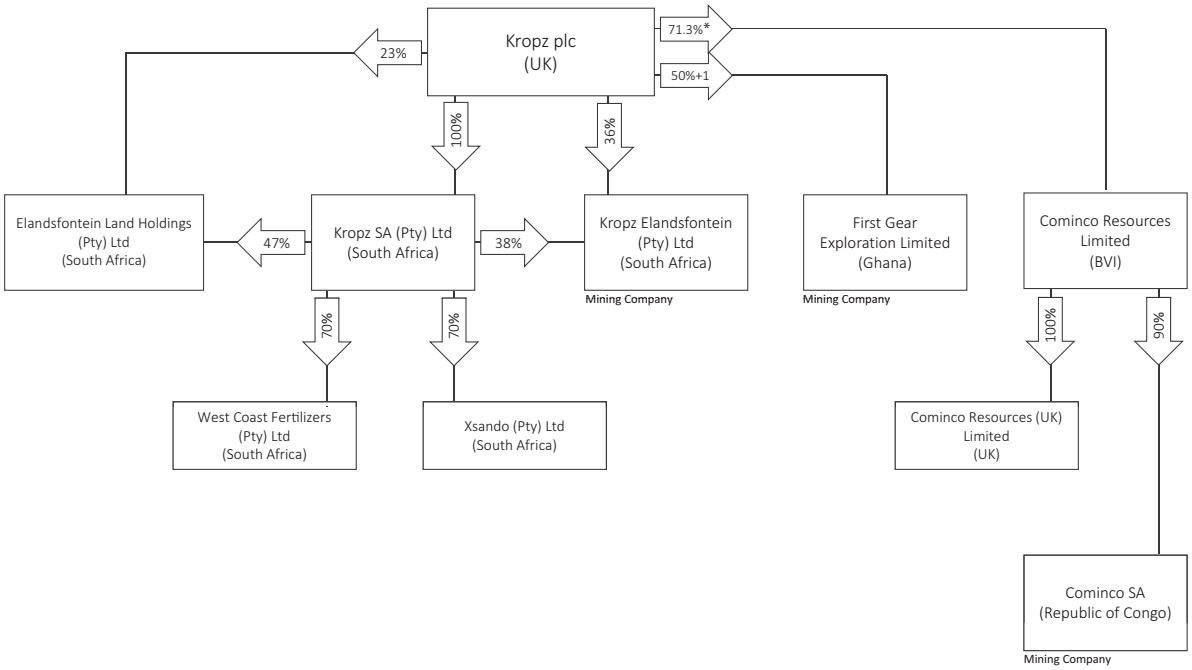
In October 2017, the European Parliament voted for the recommendation for lower cadmium limits in fertilizers. CRU believes the comparatively low cadmium content of the Elandsfontein rock could improve its marketability, particularly among producers of high-purity phosphate acid and in markets where the cadmium content of fertilizers is strictly regulated.

Further details relating to the phosphate market are contained in Part IV (*Phosphate Market Report*) of this document.

4. History and Background to the Enlarged Group

The Company was incorporated on 10 January 2018 in England and Wales and will be the holding company of the Enlarged Group.

An Enlarged Group structure as at Admission is below:



*As at Admission and may increase to up to 100 per cent. if the remaining Cominco Shareholders accept the Offer by Final Closing Date.

On 4 June 2018, the Company acquired a 50 per cent. + 1 share interest in the share capital of First Gear Exploration from its shareholder Kropz International. The remaining shareholding in First Gear Exploration is held by Kropz International (25 per cent. – 1 share), Russell Brooks (15 per cent.) and Thomas Amoah (10 per cent.), a local partner in Ghana. The shareholders of First Gear Exploration have entered into a shareholders' agreement further details of which are in paragraph 15.43 of Part X (*Additional Information*) of this document.

On 27 November 2018, the Company acquired, from its then sole shareholder Kropz International, (i) the entire issued share capital of Kropz SA; (ii) 32 per cent. of the issued share capital of Kropz Elandsfontein; and (iii) 23 per cent. of the issued share capital of ELH, in exchange for shares in the Company. Further details of the arrangement are contained in paragraph 15.18 in Part X (*Additional Information*) of this document.

On 27 November 2018, the Company acquired 4 per cent. of the issued share capital of Kropz Elandsfontein from the ARC Fund. The ARC Fund retains minority positions in the Enlarged Group's South African subsidiaries as the BEE Partner.

Immediately prior to Admission, Kropz International's interest in the Company is 44.4 per cent. (assuming the issue of 16,777,846 Ordinary Shares immediately prior to Admission pursuant to the Capitalisation and Conversion). Following the Placing, Subscription and Acquisition, Kropz International's interest in the Enlarged Share Capital will be 21.5 per cent. at Admission.

Conditional on Admission, the Company will acquire a minimum of 71.3 per cent. of the Cominco Shares, subject to the Offer, that will remain open to acceptance to the Cominco Shareholders, until the Final Closing Date and under which the Company may acquire up to 100 per cent. of the Cominco Shares. Further details relating to Acquisition are contained in paragraph 12 of this Part I and paragraph 14 of Part X (*Additional Information*) of this document.

5. Licences and Rights

The Enlarged Group holds a number of licences relating to the Projects which are set out below:

5.1 Elandsfontein

The following Mining Right was granted in terms of Section 23(1) of the MPRDA:

MR Number	*Licence Holder*	*Company Interest*	*Minerals*	*Status*	*Area*
WC/5/1/2/2/10043MR	Kropz Elandsfontein	74 per cent. (held through Kropz Elandsfontein)	Phosphate and silica sand	Right commenced on 30 January 2015 for a period of fifteen years ending on 29 January 2030	1529.6711 ha

5.2 Hinda

The following Exploitation Licence was granted in terms of Law No 5-2005, 11 April 2005, the Mining Code:

MR Number	*Licence Holder*	*Company Interest*	*Minerals*	*Status*	*Area*
Decree No. 2015-975	Cominco S.A.	63 per cent. as at Admission (held through Cominco S.A.)*	Phosphate	Right commenced on 17 December 2015 until 16 December 2040 (renewable for periods of 15 years thereafter)	263.68km^2

* percentage interest calculated on basis of 70 per cent. acceptances for the Offer and assuming a 10 per cent. dilution by virtue of Republic of Congo participation right.

5.3 Aflao

The following Prospecting Right was granted in terms and pursuant to regulations of the MMA:

PR Number	*Licence Holder*	*Company Interest*	*Minerals*	*Status*	*Area*
PL.4/15	First Gear Exploration	50 per cent. + 1 share (held through First Gear Exploration)	Phosphate	Right commenced on 12 October 2018 until 11 October 2021 (renewable for a period of 2 years thereafter)	131.93km^2

6. Group Strategy

Phosphate is essential to the production of crop fertilizers and animal feeds. The market growth in the sector is underpinned by world population expansion and associated constraints on arable land expansion. Sub-Saharan Africa has the fastest growing population on earth, with regional food demand expected to triple by 2050. According to Word Bank statistics, fertilizer application and crop yields in the region are the lowest per capita and per hectare of arable land, compared to the rest of the world. The Directors believe that this will compound the demand for phosphates and fertilizers.

The fertilizer sector is recovering from a decade of depressed pricing; prices have increased by between 10 per cent. and 20 per cent. at major benchmarks since the start of the year. The Company's strategy is to leverage the current cycle lows to consolidate quality African fertilizer assets, positioning itself to be a post-recovery leader and a global top 12 phosphate producing company.

The Enlarged Group has established a high-quality project pipeline, with three phosphate projects, one with near term production, one at advanced development stage and the final project being early stage exploration. The Company's ambition is to achieve a combined phosphate resource exceeding one billion tonnes, with more than 3.0Mtpa of phosphate rock production and over 50-year cumulative life of mine. The projects are all located in well-established mining jurisdictions, located in close proximity to existing export facilities, with available utilities and infrastructure.

The Company has an experienced management team in place to explore, mine, develop and expand its assets and a proven track record encompassing the entire project development pipeline, as well as in-depth understanding of South and Southern African operating environment, regulations and mineral laws. In addition to the Kropz team, the Company has established an independent technical team of senior phosphate and fertilizer specialists, providing ad hoc technical and strategic support. The Directors believe that there also exists the opportunity to eventually blend Elandsfontein, Hinda and Aflao concentrate streams to meet specific market requirements.

Sub-Saharan Africa not only hosts significant phosphate resources, but also potash (the source of the essential macronutrient potassium) and natural gas (a reliable source of nitrogen). This further supports the Company's longer-term vision to become a leading, integrated, mine-to-market plant nutrient company within sub-Saharan Africa.

7. Key Investment Proposition

The Directors believe that the Enlarged Group's key strengths are:

- an experienced management team capable of leading and growing the Enlarged Group to become a major player within the sub-Saharan African plant nutrient sector, with a track record in exploring, developing, operating and consolidating assets on the African continent, as well as disrupting other mature sectors throughout the supply chain;
- a near-term, producing asset capable of operating within most pricing environments and providing a strong base from which the Company can achieve its further growth objectives;
- a strong asset base, underpinned by US$120 million spent to date at Elandsfontein on developing and constructing the mine, processing plant and associated infrastructure and circa US$50 million spent to date at Hinda;
- a highly marketable product with conditional off-take agreements in place for Elandsfontein product;
- a competitive operating cost structure, net of freight costs;
- a strong BEE Partner in the ARC Fund, which has similar aims of achieving transformation within the African continent and helping small scale farmers improve yields and become competitive on a global scale;
- access to a well-defined, JORC compliant, extensively drilled, comprehensively tested and positively feasible resource in the Republic of Congo; and
- an exploration prospect in Ghana that lies on the extension of a quality, producing phosphate resource in neighbouring Togo.

8. Reasons for Admission and Use of Proceeds

8.1 Reasons for Admission

The Directors believe that Admission is an important step in the Enlarged Group's development which is expected to (i) bring the Elandsfontein Phosphate Project into production; (ii) allow greater access to capital to fund future corporate activities, including acquisitions; (iii) define the programme for the development of the Hinda project; (iv) explore the Company's greenfield Ghanaian project; (v) fund the Company's working capital requirements; and (vi) raise the profile and reputation of the Enlarged Group within the industry.

8.2 Use of Proceeds

The Enlarged Group expects to receive gross proceeds of approximately US$35 million (approximately £27.3 million) from the Placing and Subscription. The gross proceeds of the Placing and Subscription receivable by the Enlarged Group are intended to be used as follows:

Elandsfontein final development capital		US$16 million
Project development and operating costs:		US$8 million
– Kropz	US$1.0 million	
– Elandsfontein	US$3.7 million	
– Hinda	US$2.8 million	
– Aflao	US$0.5 million	
Elandsfontein debt reduction (creditors)		US$8 million
Admission Expenses		US$3 million

9. Information on the Directors and Senior Management

9.1 Executive Directors

Ian Harebottle, Chief Executive Officer, aged 55

Ian Harebottle is responsible for leading the development and execution of the Company's long-term strategy with a view to creating shareholder value. He is also ultimately responsible for all day-to-day management decisions and for implementing the Company's long and short-term plans. Ian is the direct liaison between the Board and management of the Company and communicates on behalf of the Company to shareholders, employees, government authorities, other stakeholders and the public as a whole. Ian joined Kropz in 2018.

Ian's skills lie in facilitating and participating in high-level operational initiatives, including infrastructure design, process re-engineering, turnaround management, and re-organisation. He has a strong transactional background in start-ups, mergers, acquisitions and stock exchange listings. For the past 16 years Ian has been actively involved in the mining sector, and his tenure as Chief Executive Officer of TanzaniteOne Ltd and more recently of AIM-quoted gemstone miner Gemfields plc, has delivered a consistent record of creating shareholder value via strong operational results in growth, revenue generation, operational performance and profitability.

Mark Summers, Chief Financial Officer, aged 49

Mark Summers is responsible for the finance function, administration, structuring of projects, accounting, taxation and corporate finance. Mark joined Kropz in 2015.

Mark has over 20 years of experience as a Chartered Accountant in the mining and resources industry, predominantly in Africa. His extensive experience as a senior mining executive spans various financial positions at a number of companies including Anglo American plc and HSBC plc. Most recently he held the position of Chief Financial Officer of Gemfields plc. Prior positions included Chief Financial Officer of Amari Resources Ltd, MDM Engineering Group Ltd and TanzaniteOne Ltd. Mark holds an Honours Degree in Accounting from the University of Johannesburg.

9.2 Non-Executive Directors

Lord Renwick of Clifton, Non-Executive Chairman, aged 80

Lord Renwick of Clifton is a former diplomat and served as British Ambassador to South Africa and the United States. He served subsequently as Deputy Chairman of the merchant bank Robert Fleming, then for fifteen years as Vice Chairman of J.P. Morgan Europe. He has served on many boards including BHP Billiton, Fluor Corporation, SABMiller, British Airways and Harmony Gold. He is currently a director of Stonehage Fleming and Senior Adviser to Richemont.

Linda Beal, Independent Non-Executive Director, aged 57

Linda Beal is a Chartered Accountant and was a partner at PwC for over sixteen years. She provided tax advice to natural resources clients on many transactions such as IPOs, mergers and group restructurings. She was partner at Grant Thornton for two years to June 2016 where she led the global energy and natural resources group. Linda is currently non-executive director at Tax Systems plc and San Leon Energy plc. She is co-founder and director of a professional services business network and a business and tax advisor.

Mike Daigle, Independent Non-Executive Director, aged 71

Mike Daigle is a chemical engineer by qualification and has 40 years of experience in the phosphate fertilizer industry. He worked at the Mosaic Company from 2004 until 2016 where he served as a Senior Director responsible for Research and Development, Production Planning and Business Development in the Phosphates Group, and was also in charge of Mosaic's Joint Venture in Saudi Arabia. Mike also served as VP Operations for IMC Phosphates, and worked for Cargill Fertilizer and Occidental Chemical. He is now a consultant to the Phosphate Industry, where he provides expertise in phosphate mining, fertilizer production, business development, as well as mergers and acquisitions.

Mike Nunn, Non-Executive Director, aged 58

Mike Nunn is a South African mining entrepreneur, investor and philanthropist. Mike has founded and developed various businesses and charitable initiatives, primarily in and related to the mining

industry in Africa. Mike is widely recognised as being the pioneer of the global tanzanite industry and was the founder of TanzaniteOne and the Tanzanite Foundation. Subsequent to his involvement in tanzanite, Mike established Amari in 2005, where he developed multiple mining businesses in various sub-Saharan African countries. These businesses included diamonds, gold, nickel, platinum, coal, manganese and mining engineering services.

Mike established Kropz with the objective of developing a world class fertilizer business with a sub-Saharan African focus. Mike has more than 25 years of mining experience.

Machiel Reyneke, Non-Executive Director, aged 61

Machiel Reyneke has extensive experience in the insurance industry and financial services sector. In addition to being a Director and Head of Mergers and Acquisitions of ARC, the controlling company of the ARC Fund, a substantial shareholder in the Company, since 2015, he also serves as a board member and member of various sub-committees of notable unlisted and listed companies. After completing his articles at PwC, Machiel joined the corporate finance division of Gencor. Three years later he joined Sappi Limited and subsequently he became the Finance Director of Sappi International. After a period at Gensec Bank as a General Manager looking after strategic projects, he joined Santam Limited in 2001 as Finance Director, a role which he filled for ten years. Machiel is a Chartered Accountant and holds a B.Com (Hons) from the University of Johannesburg.

9.3 Senior Management

Michelle Lawrence, Chief Operating Officer

Michelle Lawrence is responsible for the technical and operational functions at Kropz, including the design and development of mineral processing and related infrastructure. Michelle joined Kropz in January 2014. Michelle has been instrumental in ensuring that socially and environmentally responsible decisions have been taken throughout the design process, and she is driven by her desire to ensure that Kropz becomes a world-class model of responsible and sustainable operations. Michelle has 16 years of experience in mining and minerals processing. Prior to joining Kropz, Michelle held various roles in the mining industry including operations manager at Impala Platinum Ltd; design engineer at DRA International Ltd and Ausenco Ltd and Minerals Analyst at Qinisele Resources (Pty) Ltd. Michelle holds an Honours Degree in Chemical Engineering from the University of Cape Town.

Philip le Roux, Principal Geologist

Philip le Roux is the Principal Geologist at Kropz, responsible for the exploration and early development of mineral resources. Philip joined Kropz in 2013 and has been integral in the advancement of the Elandsfontein project from early assessment, through to the legal and environmental permitting process, to project execution. Philip has over 25 years' experience in exploration and mining geology, with extensive time spent across the African continent. Prior to joining Kropz, Philip worked as the mine geologist for Gencor Limited, mining analyst for the Industrial Development Corporation, and as an independent consultant for a number of junior and mid-tier mining companies across a range of minerals such as phosphate, manganese, diamonds, gold and base metals.

Mark Maynard, General Manager

Mark Maynard is the General Manager at Elandsfontein. He is responsible for overseeing the engineering and operational functions of the Projects. Mark joined Kropz in early 2016 and has overseen the implementation of the Project's operating systems and processes. He has provided leadership during various stakeholder engagements and has helped to ensure that more than 60 per cent. of the permanent labour force recruited at Elandsfontein consists of local personnel. Mark has 22 years of mining experience in the safe establishment and management of mine infrastructure and diverse teams. Mark received a B.Sc Mechanical Engineering Degree from Wits University and has completed management and executive development programmes through the University of South Africa and the Gordon Institute of Business Science. He also holds an Engineers Government Certificate of Competency for Mines.

9.4 Independent Technical Panel

The Company also engages the following experts to provide technical advice on an ad hoc basis.

Michael Kelahan

Over the last 28 years Michael Kelahan has either managed or was process lead for 50 feasibility studies and basic engineering projects comprising both sedimentary and igneous phosphates. His expertise covers slurry handling equipment, reagent conditioning, flotation (mechanical and column) and solids-liquid separation for pilot plants and production facilities.

Dave Dodd

Dave Dodd has 43 years of extractive metallurgy experience covering research and development, technical sales and predominantly metallurgical project development and execution. Skills include metallurgical test programme development and supervision, process development, feasibility study management, project process design and commissioning and competent person review.

Dr. Gert Van Der Linde

Dr. Gert Van Der Linde has over 35 years' experience in the field of phosphate production, phosphoric acid production and the fertilizer industry covering all aspects of research, process development and plant operations. More specifically he has extensive experience in the characterisation of phosphate minerals, both igneous and sedimentary, and their amenability to specific beneficiation processes; the co-ordination and implementation of laboratory and pilot plant activities leading to process development for specific phosphate minerals; plant design and equipment selection in the various unit processes to satisfy the developed processes; and project implementation, plant construction, plant expansion, plant operation and plant debottlenecking.

10. Summary Financial Information

Set out below is an extract from the aggregated financial information of the Company's subsidiaries for the period ended 31 December 2015, 2016 and 2017 and for the six month period ended 30 June 2018, as extracted from Section A of Part VII (*Accountants' Report and the Aggregated Historical Financial Information of the Subsidiaries of Kropz plc*) and Section A of Part VIII (*Independent Review Report and the Aggregated Interim Financial Information of the Subsidiaries of Kropz plc*) of this document.

	31 Dec 2015 US$	31 Dec 2016 US$	31 Dec 2017 US$	30 June 2018 US$
ASSETS				(unaudited)
Non-Current Assets				
Property, plant and equipment	7,774,370	18,403,020	116,366,667	103,531,931
Exploration asset	2,644,275	3,010,538	3,337,255	2,985,346
Mine under construction	13,505,480	69,240,001	—	—
Loans receivable	690,599	2,611,659	3,629,172	4,026,838
Other financial assets	1,168,110	1,723,448	1,897,630	1,697,529
Deferred tax	—	—	2,755,559	7,689,064
	25,782,834	**94,988,666**	**127,986,283**	**119,930,708**
Current Assets				
Assets held for disposal	—	—	645,642	—
Inventories	—	—	900,456	912,706
Trade and other receivables	978,668	3,373,903	544,546	300,473
Cash and cash equivalents	1,253,071	5,161,905	318,469	39,832
	2,231,739	**8,535,808**	**2,409,113**	**1,253,011**
TOTAL ASSETS	**28,014,573**	**103,524,474**	**130,395,396**	**121,183,719**

	31 Dec 2015 US$	31 Dec 2016 US$	31 Dec 2017 US$	30 June 2018 US$
EQUITY & LIABILITIES				
Equity				
Shareholder capital	28	28	2,354	2,354
Accumulated loss	(9,171,975)	(5,706,534)	(9,142,920)	(20,288,161)
Foreign currency translation reserve	2,102,111	1,397,291	631,217	2,684,159
Owners' equity	(7,069,836)	(4,309,215)	(8,509,349)	(17,601,648)
Non-controlling interest	(1,411,293)	27,679	(1,710,082)	(5,516,270)
	(8,481,129)	**(4,281,536)**	**(10,219,431)**	**(23,117,918)**
Non-Current Liabilities				
Group loan payable	32,173,628	57,304,934	64,129,332	65,351,967
Other financial liabilities	—	35,653,341	45,376,330	49,428,996
Deferred tax	—	134,663	17,249	—
Provisions	—	556,501	4,758,148	4,256,409
	32,173,628	**93,649,439**	**114,281,059**	**119,037,372**
Current Liabilities				
Trade and other payables	4,322,074	12,387,626	11,333,768	10,264,265
Other financial liabilities	—	1,768,945	15,000,000	15,000,000
	4,322,074	**14,156,571**	**26,333,768**	**25,264,265**
TOTAL EQUITY & LIABILITIES	**28,014,573**	**103,524,474**	**130,395,396**	**121,183,719**

Cominco

Set out below is an extract from the consolidated financial information of the Cominco Group for the period ended 31 December 2015, 2016 and 2017 and for the six month period ended 30 June 2018, as extracted from Section B of Part VII (*Accountants' Report and Historical Financial Information of the Cominco Group*) and Section B of Part VIII (*Independent Review Report and the Interim Financial Information of the Cominco Group*) of this document.

	31 Dec 2015 US$'000	31 Dec 2016 US$'000	31 Dec 2017 US$'000	30 June 2018 US$'000
				(unaudited)
ASSETS				
Non-Current Assets				
Exploration and evaluation assets	38,868	37,961	43,614	42,565
Property, plant and equipment	85	31	18	14
Available-for-sale investments	5	—	—	—
Other receivables	66	56	—	—
	39,024	**38,048**	**43,632**	**42,579**
Current Assets				
Other receivables	231	47	150	108
Cash and cash equivalents	476	100	523	247
	707	**147**	**673**	**355**
TOTAL ASSETS	**39,731**	**38,195**	**44,305**	**42,934**
EQUITY & LIABILITIES				
Equity				
Share capital	48,946	48,946	50,750	50,750
Share-based payments reserve	125	—	—	—
Foreign currency translation reserve	(4,546)	(5,933)	(634)	(1,840)
Accumulated loss	(5,503)	(5,864)	(6,195)	(6,311)
	39,022	**37,149**	**43,921**	**42,599**
Non-Current Liabilities				
Provisions	264	144	164	160
	264	**144**	**164**	**160**
Current Liabilities				
Trade and other payables	445	192	220	175
Loans and borrowings	—	710	—	—
	445	902	220	175
TOTAL EQUITY & LIABILITIES	**39,731**	**38,195**	**44,305**	**42,934**

11. Current Trading and Future Prospects

In January 2015, the Mining Right was awarded and a feasibility study was completed in March 2015 for the Elandsfontein Phosphate Project. Subsequent to the completion of this feasibility study, a competitive tender process led to the appointment of, and EPCM contract awarded to, DRA for the construction of the project. Following development of the box-cut and construction of the processing plant, first ore was processed on 28 March 2017. Due to a number of issues and challenges that were experienced which prevented the continuous productions of on-specification rock phosphate concentrate, and against a backdrop of falling phosphate prices at that time, the decision was taken to place the mine on care and maintenance in July 2017. Further study work has been undertaken following this date to the end of the period in order to enable the re-commissioning of the plant with a modified RR circuit.

The Elandsfontein Phosphate Project is currently under care and maintenance with limited activities on the site. The site teams are working according to a care and maintenance plan and the dewatering of the mining pit is continuing. Since 30 June 2018, existing Kropz shareholders, along with Ian Harebottle and Mark Summers, funded an additional US$4 million, in anticipation of Admission. These amounts will be converted into equity at Admission.

Since 30 June 2018, the US$30 million project finance facility with BNPP, which was in payment default at the time, was renegotiated and a new amendment and conditional waiver agreement signed on 20 September 2018 pursuant to which the first capital repayment by Kropz Elandsfontein was deferred to 31 March 2020. In addition, BNPP provided the necessary consents required to facilitate the contemplated reorganisation of the Kropz Group leading up to Admission. Further details of the amendment and conditional waiver and the BNPP project finance facility are set out in paragraphs 15.33 and 15.34 of Part X (*Additional Information*) of this document.

Currently, further test work is being conducted on samples from the Elandsfontein Project at various laboratories, and designs are being details for required plant modifications. First orders of long lead capital items are expected by the end of October 2018.

Production at Kropz's Elandsfontein Phosphate Project is expected to recommence in late 2019.

12. Principal Terms of the Acquisition

The Company has conditionally offered to acquire the entire issued and to be issued share capital of Cominco on the basis of 1.66 Ordinary Share for each Cominco Share.

The Offer values the whole of Cominco at US$40 million, and is conditional, *inter alia*, on:

- valid acceptances being received (and not withdrawn) by First Closing Date (or such later time(s) and/or date(s) as the Company may decide) in respect of Cominco Shares which constitute not less than 70 per cent. (or such lesser percentage, being not less than 51 per cent., as the Company may decide) of the Cominco Shares;
- the Company raising a minimum of US$35 million pursuant to the Placing and Subscription (before expenses);
- the Placing Agreement becoming unconditional in all respects (save for Admission) and not having been terminated in accordance with its terms; and
- Admission.

On Admission, the Company will acquire 71.3 per cent. of Cominco, which will require the issue of the First Offer Shares to Cominco Shareholders (representing 23.2 per cent. of the Enlarged Share Capital).

As at First Closing Date, valid acceptances to accept the Offer have been received in respect of 33,440,246 Cominco Shares representing 71.3 per cent. of the Cominco Shares and, accordingly, the Offer is unconditional as to acceptances.

Cominco Shareholders who have not accepted by First Closing Date will have until Final Closing Date to accept the Offer. Consequently, the Company may, under the Offer, acquire a further 28.7 per cent. of Cominco post Admission, which would require the issue of a further 22,455,810 Ordinary Shares following the Final Closing Date.

Cominco Shareholders holding 90 per cent. of the votes of the issued Cominco Shares have the right, pursuant to section 176 of the BVI Business Companies Act 2004, to direct Cominco to compulsorily redeem the Cominco Shares held by the remaining Shareholders.

If Kropz receives acceptances under the Offer in respect of, and/or otherwise acquires, 90 per cent. or more of the Cominco Shares and the Offer becomes or is declared unconditional in all respects, then Kropz intends to apply the provisions of section 176 of the BVI Business Companies Act 2004 to compulsorily redeem any outstanding Cominco Shares held by the remaining Cominco Shareholders.

Further details of the terms and conditions of the Offer are set out in paragraph 14 of Part X (*Additional Information*) of this document.

13. The City Code

The Company is a public company incorporated in England and Wales and its Ordinary Shares will be admitted to trading on AIM. Accordingly, the City Code applies to the Company and operates principally to ensure that the Shareholders are treated fairly and are not denied an opportunity to decide on the merits of a takeover and that shareholders of the same class are afforded equivalent treatment. The City Code also provides an orderly framework within which takeovers are conducted and the Takeover Panel has now been placed on a statutory footing.

Pursuant to the City Code Mike Nunn*, Ian Harebottle and Mark Summers are presumed to be acting in concert for the purposes of the City Code ("**Director Concert Party**") and, on Admission, will together hold Ordinary Shares representing an aggregate of up to 22.3 per cent. of the Enlarged Share Capital.

Ian Harebottle, Mark Summers and Michelle Lawrence are participants in the ESOP and will at Admission be granted options over certain Ordinary Shares ("**ESOP Options**"). Further details relating to the ESOP are set out in paragraph 10.4 of Part X (*Additional Information*) of this document.

Assuming that the ESOP Options, which will not be fully vested at Admission, were exercised in full by Ian Harebottle, Mark Summers and Michelle Lawrence, then the members of the Director Concert Party could hold in aggregate (and where there are no other changes to the Company's issued share capital), a maximum of 61,787,517 Ordinary Shares, representing approximately 24.9 per cent. of the Company's issued share capital at that time (on the basis of the assumptions set out above).

On the basis that the ESOP Options will be in existence at Admission, the Panel has confirmed that any exercise of the Options will not result in the Director Concert Party incurring an obligation to make an offer under Rule 9 of the City Code. However, should any member of the Director Concert Party acquire any interest in Ordinary Shares other than pursuant to the acquisitions of interests in Ordinary Shares summarised above or the exercise of the ESOP Options this may give rise to an obligation upon that or another member of the Concert Party to make an offer for the entire issued share capital of the Company at a price no less than the highest price paid by the individual member of the Director Concert Party or any other member of the Director Concert Party in the previous 12 months, under Rule 9 of the City Code.

Pursuant to the City Code all accepting Cominco Shareholders (save for Macquarie Bank Limited) will be deemed to be a concert party for the purposes of the Acquisition ("**Cominco Concert Party**"). The Cominco Concert Party is not currently interested in any Existing Ordinary Shares but, following the completion of the Acquisition and on Admission (assuming 71.3 per cent. acceptances of the Offer), the Cominco Concert Party's interest will be approximately 18.3 per cent. of the Enlarged Share Capital by virtue of the issue to them of the Offer Shares.

Should the Cominco Concert Party acquire any further interest in Ordinary Shares or should any individual member of the Cominco Concert Party acquire any interest in Ordinary Shares such that they are interested in 30 per cent. or more of the voting rights of the Company, the Panel may regard this as giving rise to an obligation upon the Cominco Concert Party or such individual member of the Cominco Concert Party (as the case may be) to make an offer for the entire issued share capital of the Company at a price no less than the highest price paid by the Cominco Concert Party or such individual member of the Cominco Concert Party in the previous 12 months.

Mike Nunn and the ARC Fund are presumed to be acting in concert for the purposes of the City Code ("**ARC Concert Party**") and, on Admission, will together hold Ordinary Shares representing an aggregate of 73.6 per cent. of the Enlarged Share Capital (assuming 71.3 per cent. acceptances of the Offer by Final Closing Date) and consequently will have a controlling interest

*Mike Nunn's beneficial interest in Ordinary Shares is held through Kropz International.

and therefore be free to acquire further interests in Ordinary Shares without any obligation arising under Rule 9 of the City Code to make a general offer to all remaining shareholders to acquire their shares.

If following First Closing Date but prior to the Final Closing Date further Cominco Shareholders holding not less than 18.7 per cent of the outstanding Cominco Shares accept the Offer, this would reduce the ARC Fund holding as a percentage of the Enlarged Share Capital to below 50 per cent. In the event that ARC Fund falls below 50.5% as a result of these additional acceptances Kropz International has undertaken to the ARC Fund to transfer to it such number of Ordinary Shares for nil consideration as are needed to ensure The ARC fund shareholding at the Final Closing Date is above 50.5%. In addition certain IPO fees are being settled by the issue of Ordinary Shares on Completion and these shall be taken into account in any balancing transfer to The ARC Fund to ensure they remain above 50.5%.

Pursuant to Rule 9 of the City Code any person who together with persons acting in concert with him is interested in shares which in aggregate carry not less than 30 per cent. of the voting rights of a company but does not hold shares carrying more than 50 per cent. of such voting rights and such person, and/or any such person acting in concert with it, acquires an interest in any other shares which increases the percentage of shares carrying voting rights in which it is interested, such person or persons acting in concert with it will normally be required to make a general offer to all remaining shareholders to acquire their shares.

Further information on the provisions of the City Code and the Director Concert Party, the Cominco Concert Party and the ARC Concert Party can be found in paragraph 6 of Part X (*Additional Information*) of this document.

14. Details of the Placing and Subscription

H&P and Mirabaud have conditionally agreed, pursuant to the Placing Agreement and as agents for the Company to use their reasonable endeavours to procure subscribers for the Placing Shares at the Placing Price. The Placing is intended to raise approximately US$1.7 million (approximately £1.3 million) (before expenses) for the Company. The Placing, which is not underwritten, is conditional upon, *inter alia*, Admission becoming effective by not later than 8.00 a.m. on 30 November 2018 and on the Placing Agreement not being terminated.

Following Admission, the Placing Shares will collectively represent approximately 1.4 per cent. of the Enlarged Share Capital. The Placing Shares will be issued as fully paid and will, upon issue, rank *pari passu* with the Existing Ordinary Shares. This includes the right to receive all dividends and other distributions declared, made or paid on or in respect of such shares after their date of issue, being the date of Admission.

In addition, the Subscribers have entered into the Subscription Letters with the Company pursuant to which the Subscribers have agreed, conditional upon Admission occurring, to subscribe for the Subscription Shares at the Placing Price to raise approximately US$33.3 million (approximately £26.0 million) (before expenses) for the Company. The Subscription Shares will represent 27.1 per cent. of the Enlarged Share Capital on Admission. For further information on the Subscription Letters, see paragraph 15.12 of Part X (*Additional Information*) of this document.

Following Admission, the Directors will, between them, hold 53,597,162 Ordinary Shares, representing approximately 22.3 per cent. of the Enlarged Share Capital, as referred to in paragraph 9 of Part X (*Additional Information*) of this document. Following Admission, certain other Significant Shareholders, as referred to in paragraph 9 of Part X (*Additional Information*) of this document, will each hold three per cent. or more of the Enlarged Share Capital. There will be a total of 240,228,778 Ordinary Shares (including the Placing Shares, First Offer Shares, Subscription Shares, Capitalisation Shares and Conversion Shares), 8,190,355 Options and 166,914 Warrants in issue on Admission. The shareholdings of the existing Shareholders (assuming the issue of 16,777,846 Ordinary Shares immediately prior to Admission pursuant to the Capitalisation and Conversion) prior to the Placing, Subscription and Acquisition will be diluted to 41.39 per cent. of the Enlarged Share Capital and 40.0 per cent. on a fully diluted basis (assuming all Options and Warrants are exercised in full).

Further details of the Placing Agreement are set out in paragraph 15.3 of Part X (*Additional Information*) of this document.

15. Lock-ins and Orderly Market Arrangements

The Directors, Kropz International and the ARC Fund (together the "**Locked-In Shareholders**") who, at Admission, will hold in aggregate up to 178,700,226 Ordinary Shares (representing up to approximately 74.4 per cent. of the Enlarged Share Capital) have undertaken, save in limited circumstances, not to dispose of any of their interests in Ordinary Shares (including Ordinary Shares that they may acquire through the exercise of Options) at any time prior to the first anniversary of Admission.

In addition, in order to ensure an orderly market in the Ordinary Shares the Locked-In Shareholders have further undertaken, in respect of themselves and each of their connected persons, that for a further period of 12 months thereafter they will not (subject to certain limited exceptions) deal or otherwise dispose of any such interests other than through H&P or Mirabaud (or such other broker appointed by the Company from time to time).

The Cominco Locked-in Shareholders who, at Admission, will hold in aggregate up to 21,721,458 Offer Shares (representing approximately 9 per cent. of the Enlarged Share Capital) have undertaken, save in limited circumstances, not to dispose of their interests in 49.6 per cent. of such Offer Shares at any time prior to the first anniversary of Admission.

The Cominco Locked-in Shareholders have also undertaken that for a further period of 12 months thereafter, that they will only dispose of 49.6 per cent. of such Offer Shares through H&P or Mirabaud (or the Company's then retained broker) in order to maintain an orderly market in the Ordinary Shares, save in certain circumstances.

Ackerman Group Holdings Limited, a significant shareholder of Cominco who, at Admission, will hold 18,073,368 Ordinary Shares (representing up to approximately 7.5 per cent. of the Enlarged Share Capital) ("**Ackerman Shares**") and Macquarie Bank Limited, a significant shareholder of Cominco who, at Admission, will hold 11,633,045 Ordinary Shares (representing up to approximately 4.8 per cent. of the Enlarged Share Capital) ("**Macquarie Shares**") have each undertaken, save in limited circumstances, not to dispose of 49.6 per cent. of the respective Ackerman Shares and Macquarie Shares for a period of six months from the date of Admission.

Ackerman Group Holdings Limited and Macquarie Bank Limited have each also undertaken that for the period of twelve months following the six month period from the date of Admission, they will only dispose of 49.6 per cent. of the respective Ackerman Shares and Macquarie Shares through H&P or Mirabaud (or the Company's then retained broker) in order to maintain an orderly market in the Ordinary Shares, save in certain circumstances.

Further details of the lock-in and orderly-marketing arrangements are set out in paragraph 15.8 of Part X (*Additional Information*) of this document.

16. Corporate Governance

The Directors support high standards of corporate governance and confirm that, following Admission, they will adopt the Quoted Companies Alliance Corporate Governance Code (2018 Edition) (the "**QCA Code**"). The Directors also note that with effect from 28 September 2018, all AIM companies must provide details on their website of the recognised corporate governance code that the Company has decided to apply, how it complies with that code and where it departs from this, an explanation of the reasons for doing so. The adoption of the QCA Code will enable the Company to comply with that provision. To the extent that the Company departs from any of the provisions of the QCA Code it will provide details on its website (www.kropz.com) as required. The Board is responsible for formulating, reviewing and approving the Group's strategy, budgets and corporate actions. The Company holds Board meetings at least four times each financial year and at other times as and when required.

The Board is comprised of two Executive Directors: Ian Harebottle and Mark Summers and five Non-Executive Directors: Lord Renwick of Clifton, Linda Beal, Mike Daigle, Mike Nunn and Machiel Reyneke. Three are considered fully independent: Lord Renwick of Clifton, Linda Beal and Mike Daigle. Two Directors, Mike Nunn and Machiel Reyneke, are not considered independent due to the fact that Mike Nunn is a substantial shareholder of the Company, and Machiel Reyneke is the board representative of the Company's BEE Partner, as a significant shareholder of the Company, the ARC Fund.

16.1 Relationship Agreements

ARC Relationship Agreement

The Company, Kropz Elandsfontein, H&P, Mirabaud, Grant Thornton and the ARC Fund entered into the ARC Relationship Agreement, such agreement to become effective upon Admission.

Under the ARC Relationship Agreement, the ARC Fund has given certain undertakings to the Company, Kropz Elandsfontein, H&P, Mirabaud and Grant Thornton to: (i) ensure that transactions entered into between any member of the Enlarged Group and either the ARC Fund or its associates, are conducted on an arm's length basis and on normal commercial terms; (ii) that the Enlarged Group shall be managed for the benefit of the Shareholders and the business of the Enlarged Group and not solely for the benefit of the ARC Fund; and (iii) ensure that the ARC Fund, together with its associates shall not acquire any shares or other securities of the Company, where to do so would give rise to an obligation to make a general offer for the Company under Rule 9 of the City Code.

Machiel Reyneke has been appointed to the Board as nominee Director pursuant to the ARC Relationship Agreement

MN Relationship Agreement

The Company, H&P, Mirabaud, Grant Thornton, Kropz International and Mike Nunn entered into the MN Relationship Agreement, such agreement to become effective upon Admission.

Under the MN Relationship Agreement, Kropz International and Mike Nunn have given certain undertakings to the Company, H&P, Mirabaud and Grant Thornton to: (i) ensure that transactions entered into between any member of the Enlarged Group and either Kropz International and/or Mike Nunn or their associates, are conducted on an arm's length basis and on normal commercial terms; (ii) that the Enlarged Group shall be managed for the benefit of the Shareholders and the business of the Enlarged Group and not solely for the benefit of the Kropz International and/or Mike Nunn; and (iii) ensure that Mike Nunn, Kropz International, together with their associates shall not acquire any shares or other securities of the Company, where to do so would give rise to an obligation to make a general offer for the Company under Rule 9 of the City Code.

16.2 Committees

The Company has established an Audit and Sustainability Committee and a Remuneration and Nomination Committee with formally delegated duties and responsibilities.

Audit and Sustainability Committee

The Audit and Sustainability Committee has primary responsibility for monitoring the quality of internal controls and ensuring that the financial performance of the Group is properly measured and reported on. It will receive and review reports from the Group's management and auditors relating to the interim and annual accounts and the accounting and internal control systems in use throughout the Group. Under its terms of reference, it is required to meet twice a year, and is responsible for keeping under review the scope and results of the audit, its cost effectiveness and the independence and objectivity of the auditors. It also has responsibility for public reporting and internal controls and arrangements whereby employees may raise matters of concern in confidence. It will also be responsible for leading the Group's risk-assessed strategic decision-making and to ensure that wherever practical all principal operations are managed in such a way as to impose minimal environmental impacts and compliance with internal best practice standards. The Audit and Sustainability Committee is chaired by Linda Beal and its other members are Machiel Reyneke and Lord Renwick of Clifton. Linda Beal is deemed by the Board to have recent and relevant financial expertise.

Remuneration and Nomination Committee

The Remuneration and Nomination Committee will review the performance of the executive Directors and make recommendations to the Board on matters relating to their remuneration and terms of employment. Under its terms of reference, it is required to meet twice a year and is responsible for ensuring that the executive Directors, officers and other key employees are fairly rewarded (which extends to all aspects of remuneration) for their individual contribution to the overall performance of the Group.

The Remuneration and Nomination Committee will nominate for the approval of the Board candidates to fill Board vacancies as and when they arise. The Remuneration and Nomination Committee is chaired by Lord Renwick of Clifton and its other members are Linda Beal, Mike Daigle and Mike Nunn.

16.3 Share Dealing Code

The Company has adopted, with effect from Admission, a share dealing code which sets out the requirements and procedures for the Board and applicable employees' dealings in any of its AIM securities in accordance with the provisions of MAR and of the AIM Rules for Companies.

16.4 Bribery and Anti-Corruption Policy

The Company has adopted an anti-corruption and bribery policy which applies to the Board and employees of the Company and the Enlarged Group. It generally sets out their responsibilities in observing and upholding a zero-tolerance position on bribery and corruption in all the jurisdictions in which the Group operates. It also provides guidance to those working for the Group on how to recognise and deal with bribery and corruption issues and the potential consequences of failing to adhere to this guidance. The Company expects all employees, suppliers, contractors and consultants to conduct their day-to-day business activities in a fair, honest and ethical manner, be aware of and refer to this policy in all of their business activities worldwide and to conduct business on the Company's behalf in compliance with it. Management at all levels are responsible for ensuring that those reporting to them, internally and externally, are made aware of and understand this policy.

17. Share Options and Incentives

In order to provide suitable employee and management incentives, the Company has established the ESOP and the LTIP, further details of which are set out in paragraph 10 of Part X (*Additional Information*) of this document.

18. Dividend Policy

Whilst the Company's dividend policy is yet to be formalised, the Directors will consider declaring and paying dividends to Shareholders following Admission. This is subject to the capital requirements of the Company, the Enlarged Group's future strategy and dependent on available cash resources and reserves. Accordingly, and while no fixed commitments can be given, the potential to pay dividends will be reviewed and considered by the Board on an annual basis.

19. Taxation

Information regarding certain taxation considerations for corporate, individual and trustee Shareholders in the United Kingdom with regard to Admission is set out in paragraph 20 of Part X (*Additional Information*) of this document.

20. Admission, Settlement and Dealings

Application has been made to the London Stock Exchange for the Enlarged Share Capital to be admitted to trading on AIM. It is expected that Admission will become effective and dealings in the Ordinary Shares on AIM will commence at 8.00 a.m. on 30 November 2018. The above-mentioned dates and times may be changed without further notice.

The Ordinary Shares will be in registered form and will be capable of being held in either certificated or uncertificated form (i.e. in CREST).

21. CREST

CREST is a paperless settlement system enabling securities to be evidenced otherwise than by a certificate and transferred otherwise than by written instrument in accordance with the CREST Regulations.

The Ordinary Shares will be eligible for CREST settlement. Accordingly, following Admission, settlement of transactions in the Ordinary Shares may take place within the CREST system if a Shareholder so wishes. CREST is a voluntary system and Shareholders who wish to receive and retain share certificates are able to do so.

For more information concerning CREST, Shareholders should contact their stockbroker or Euroclear UK & Ireland Limited at 33 Cannon Street, London EC4M 5SB or by telephone on +44 (0) 20 7849 0000.

22. Risk Factors and Additional Information

Your attention is drawn to the additional information set out in Parts II to X (inclusive) of this document. You are recommended to read all the information contained in this document and not just rely on the key or summarised information. In particular prospective investors should read in full the Risk Factors set out in Part II (*Risk Factors*) of this document.

PART II

RISK FACTORS

An investment in the Ordinary Shares may not be suitable for all prospective investors and is subject to a number of risks. Before making an investment decision, prospective investors are advised to consider carefully the risks and uncertainties associated with any investment in the Ordinary Shares, the Enlarged Group's business and the industry in which it operates, consult a professional adviser authorised under FSMA who specialises in advising on investments of the kind described in this document. Prospective investors should consider carefully whether an investment in the Company is suitable for them in the light of their personal circumstances and the financial resources available to them.

The exploration for, and development of, natural resources is a highly speculative activity which involves a high degree of risk. Accordingly, the Ordinary Shares should be regarded as a highly speculative investment and an investment in the Company should only be made by those with the necessary expertise to evaluate the investment fully.

The Enlarged Group's business, financial condition or results of operations may be materially and adversely affected by any or a combination of the risks described below. In such cases, the market price of the Ordinary Shares may decline and investors may lose all or part of their investment.

In addition to the other relevant information set out in this document, the Directors consider that the following risk factors, which are not set out in any particular order of priority, magnitude or probability, are of particular relevance to the Enlarged Group's activities and to any investment in the Company. It should be noted that additional risks and uncertainties not presently known to the Directors or which they currently believe to be immaterial may individually or cumulatively also have a material adverse effect on the Enlarged Group's operating results, financial condition and prospects. Any one or more of these risk factors could have a materially adverse impact on the value of the Company's Ordinary Shares and/or the Enlarged Group's business, financial condition, results of operations or prospects and should be taken into consideration when assessing the Enlarged Group.

There can be no certainty that the Enlarged Group will be able to successfully implement the strategy set out in this document. No representation is or can be made as to the future performance of the Enlarged Group and there can be no assurance that the Enlarged Group will achieve its objectives.

It should be noted that the factors listed below are not intended to be exhaustive and do not necessarily comprise all of the risks to which the Enlarged Group is or may be exposed or all those associated with an investment in the Company. In particular, the Company's performance is likely to be affected by changes in market and/or economic conditions, political, judicial, and administrative factors and in legal, accounting, regulatory and tax requirements in the areas in which it operates. There may be additional risks and uncertainties that the Directors do not currently consider to be material or of which they are currently unaware which may also have an adverse effect upon the Enlarged Group.

If any of the risks referred to in this Part II occurs, the Enlarged Group's business, financial condition, results or future operations could be materially and adversely affected. In such case, the price of the Ordinary Shares could decline and investors may lose all or part of their investment.

None of the Risk Factors set out in this Part II seek to qualify in any way the working capital statement set out at paragraph 19 of Part X (*Additional Information*) of this document.

Risks relating to the operations of the Enlarged Group

Completion of commissioning of Elandsfontein

The Elandsfontein Phosphate Project requires a number of modifications to the processing facility and successful commissioning in order to recommence operations in 2019. Any delays or further issues in the receipt of final test work results, procurement or delivery of mechanical equipment items or, in the construction and commissioning periods, will have an adverse impact on the business and financial performance of the operation. There can be no guarantee that implementation of the modifications identified by the Company and its technical consultants will result in a successful commissioning of the mine. Failure to complete the commissioning of the Elandsfontein Project, or a significant delay in the completion of the commissioning, could result in a material adverse impact on the business, and the financial performance and position of the Enlarged Group.

Operational targets

The Enlarged Group's principal asset, the Elandsfontein Phosphate Project, is an advanced stage mining project that has no operating track record upon which to base estimates of future production rates, operating costs, capital expenditures or financial performance. The operational targets of the Enlarged Group will be subject to the completion of planned operational goals on time and according to budget, and are dependent on the effective support of personnel, systems, procedures and controls. Any failure of these may result in delays in the achievement of operational targets with a consequent material adverse impact on the business, operations and financial performance of the Enlarged Group. It is, therefore, possible that mining and production rates might fluctuate.

The financial performance of the Enlarged Group is subject to its ability to achieve a target concentrate specification and production efficiency at its Elandsfontein Phosphate Project, according to its pre-determined budget. Failure to do this may result in failure to achieve operational targets with a consequent material adverse impact on the business, operations and financial performance of the Enlarged Group. Further, mining and production rates might fluctuate.

Excessive overburden stripping, non-economical mining of ore and the dilution of feed grade to the processing facility could all have an adverse impact on the processing operations. Furthermore, a high variability in the daily feed grades could also have an adverse impact on operations and financial performance of the Enlarged Group.

Once mining has commenced at Elandsfontein, any further unscheduled interruptions in the Enlarged Group's operations due to mechanical or other failures or industrial relations related issues or problems or issues with the supply of goods or services could have a serious impact on the financial performance of those operations. The Enlarged Group will not generate any material income until mining has successfully re-commenced, while continuing to expend its cash reserves.

Mining risks

The business of mining and mineral processing involves a number of risks and hazards, including industrial accidents, labour disputes, community conflicts, activist campaigns, unusual or unexpected geological conditions, geotechnical risks, equipment failure, changes in the regulatory environment, environmental hazards, ground water and weather and other natural phenomena such as earthquakes and floods. The Enlarged Group may experience material mine or plant shutdowns or periods of reduced production as a result of any of the above factors. Such occurrences could result in material damage to, or the destruction of, mineral properties or production facilities, human exposure to pollution, personal injury or death, environmental and natural resource damage, delays in mining, monetary losses and possible legal liability, and may result in actual production differing, potentially materially, from estimates of production, including those contained in this document, whether expressly or by implication. There can be no assurance that the realisation of operating risks and the costs associated with them will not materially adversely affect the results of operations or financial conditions of the Enlarged Group.

Geotechnical risks could have a material adverse impact on the safety, business and financial performance of the Enlarged Group's operation.

The biggest geotechnical risk to the mining at Elandsfontein is the possibility of pit 'basal heave failure' below the mineralised zone. A detailed study has been conducted by SRK (SA) including numerical modelling of the pit – based on shear strength parameters determined by geotechnical

test work. SRK (SA) concluded that the base of the excavation should be limited to a 50m width in order to mitigate this risk. In order to achieve this, discipline must be employed in ensuring that backfilling never lags mining and that dewatering systems remain effective.[1]

Possible groundwater inflow into the pit has also been identified by SRK (SA) as a potential geotechnical risk as increased pore water pressures could lead to pit wall instability. This risk has been mitigated by the borehole dewatering system that has been implemented, which coupled with in-pit sump dewatering has proven to be effective to date and working as designed. Diligent and regular monitoring of the efficacy of the dewatering is required to ensure that pit wall instability is minimised.[2]

Failure to successfully dewater the mining area and maintain water levels in the mining area at the Elandsfontein Phosphate Project could have a material adverse impact on the operational performance, financial performance and financial condition of the Enlarged Group.

Mineral Resource and Mineral Reserve estimates

The Enlarged Group's reported Mineral Resources are only estimates, which are based on a range of assumptions. In addition, Mineral Resource estimates are based on limited sampling and consequently are uncertain because the samples may not be representative. There are numerous uncertainties inherent in estimating Mineral Resources and Ore Reserves, including factors beyond the control of the Enlarged Group. The estimation of Mineral Resources and Ore Reserves is a subjective process and the accuracy of any such estimates is a function of the quality of available data and of engineering and geological interpretation and judgment. Results of drilling, metallurgical testing, production, evaluation of mine plans and exploration activities subsequent to the date of any estimate may justify revision (up or down) of such estimates. There is no assurance that Mineral Resources can be economically mined. Those portions of the Mineral Resources that have not been converted to Ore Reserves do not have demonstrated economic viability. A Mineral Resource is not the equivalent of a commercially mineable ore body or an Ore Reserve. Lower market prices, increased production costs, reduced recovery rates and other factors may render the Enlarged Group's future Ore Reserves uneconomic to exploit and may result in revision of its future Ore Reserve estimates from time to time. Ore Reserve data is not indicative of future results of operations. If in the future, the Enlarged Group's actual Mineral Resources and Ore Reserves prove to be less than the current estimates, other than as a result of depletion through production, or if the Enlarged Group fails to develop its resource base through the upgrading of Inferred Mineral Resources to Indicated or Measured Resources, or by the realisation of identified new mineralised potential, the Enlarged Group's results of operations and financial condition may be materially and adversely affected. The Company and the Directors cannot give any assurance that the estimated Ore Reserves will be recovered as the Enlarged Group proceeds through production or that they will be recovered at the volume, grade and rates estimated.

Commodity pricing

The future profitability and viability of the Enlarged Group's operations will be dependent upon the market price of the product, in particular phosphate rock, to be sold by the Enlarged Group. Mineral prices fluctuate widely and are affected by numerous factors beyond the control of the Company. The level of interest rates, the rate of inflation, the world supply of mineral commodities, the global level of demand from consumers and the stability of exchange rates can all cause significant fluctuations in prices. Such external economic factors are in turn influenced by changes in international investment patterns, monetary systems and political developments. Commodity prices have fluctuated widely in recent years, and future price declines could cause commercial production to be impracticable, thereby having a material adverse effect on the Company's business, financial condition and results of operations. A significant or sustained downturn in commodity prices would adversely affect the Enlarged Group's available cash and liquidity and could have a material adverse effect on the business, results of operations and financial condition of the Enlarged Group in the longer term. In recent years, global phosphate rock and fertilizer supply growth has out-paced demand. As a result, sharp declines have taken place in both phosphate rock and phosphate fertilizer prices since 2011. CRU expects that 2018 will represent a turning point in the phosphate rock market. A failure of the market price for phosphate rock to recover in line with market expectations could have an adverse impact on the Company's business,

1 Elandsfontein CPR – main report, page 93.
2 Elandsfontein CPR – executive summary, page ix.

financial condition and results of operations. Furthermore, reserve estimates and feasibility studies using significant lower commodity prices could result in material write-downs of the Enlarged Group's investment in its assets and increased amortisation, reclamation and closure charges. In addition to adversely affecting the Enlarged Group's reserve estimates and its financial condition, declining commodity prices can impact operations by requiring a reassessment of the feasibility of a particular project. Such a reassessment may be the result of a management decision or may be required under financing arrangements related to a particular project. Even if the Projects are ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays or may interrupt operations until the reassessment can be completed.

Dependence on key personnel/employees

The Enlarged Group's future success is substantially dependent upon the continued services and performance of its senior management and other key personnel in the various areas of the Enlarged Group's business and, in particular, the senior management's ability to maintain important relationships with governmental, regulatory and local communities in South Africa, Ghana and the Republic of Congo. The loss of the services of certain key employees or the inability to recruit personnel of the appropriate calibre could have a material adverse effect on the business of the Enlarged Group. There can be no assurance that the Enlarged Group will be successful in attracting and retaining such personnel.

Although the Company believes that the Enlarged Group's relations with its employees are good, there can be no assurance that a work slowdown or stoppage will not occur at any of the Enlarged Group's operating units or exploration prospects. Any future work slowdowns, stoppages, disputes with employee unions or other employment-related developments or disputes, including the entry into or renegotiation of collective bargaining agreements, could result in a decrease in the Enlarged Group's production levels and adverse publicity and/or increase costs, which could have a material adverse effect on the Enlarged Group's business, results of operations and financial condition and the price of its shares.

Contractor risks

The Enlarged Group's ongoing operations depend significantly on the maintenance of good relationships with, and the solvency of, its key contractors, including exploration, mining and plant operating contractors, laboratory services, concentrate transport, logistics and export and warehousing contractors.

Failure of any of the key operating contractors to achieve suitable levels of operational readiness will impact on the successful commissioning of the Elandsfontein Phosphate Project, which will have an adverse impact of the performance of the operation.

Failure of any of the contractors to perform the required scope of work may also pose a risk to the operational performance of the Enlarged Group.

The timely success of the plant modifications at the Elandsfontein Phosphate Project also requires maintenance of good relationships with previous subcontractors and equipment vendors. Failure to maintain these relationships may adversely impact the ability to successfully commence operations, which may have a material adverse impact on the business operations and the financial performance of the Enlarged Group.

The Enlarged Group's operations may be affected by labour-related problems with its contractor workforce in the future, such as union demands and litigation for pay rises and increased benefits. There can be no assurance that work stoppages or other labour-related developments (including the introduction of new labour regulations) applicable to contractors, will not adversely affect the results of operations or the financial condition of the Enlarged Group. It is expected that certain members of the contractor workforce who will be engaged to operate the Elandsfontein Mine when it becomes operational will belong to unions.

Dependence on maintenance of good relationships with regulatory and governmental departments

The Enlarged Group relies on the maintenance of good relationships with regulatory and governmental departments in South Africa, Ghana and the Republic of Congo. Failure to maintain these relationships may adversely impact the Company's performance.

Exploration and development risks

The exploration for and development of mineral deposits is speculative and involves significant risks which even a combination of careful evaluation, experience and knowledge may not be eliminated. While the discovery of an ore body may result in substantial rewards, few properties that are explored are ultimately developed into producing mines. Once a mineral deposit is discovered it can take several years to determine whether Mineral Resources or Ore Reserves exist. During this time the economic viability of production may change. Substantial expenditure may be required to locate and establish mineral resources or ore reserves through drilling, metallurgical and other testing techniques, to develop metallurgical processes to extract metal from the ore and to construct mining and processing facilities at a particular site. It is impossible to ensure that the exploration or development programmes planned by the Enlarged Group will result in a profitable commercial mining operation. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are: (i) the particular attributes of the deposit, such as size, grade and proximity to infrastructure; (ii) commodity prices, which are highly cyclical; and (iii) government regulations, including regulations relating to prices, taxes, royalties, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Company not receiving an adequate return on invested capital and a material adverse effect on the Enlarged Group's financial performance.

Competition

The mineral exploration and mining business is competitive in all of its phases. The Enlarged Group competes with numerous other companies, including competitors with greater financial, technical and other resources than the Enlarged Group. The Enlarged Group's ability to acquire exploration and development rights on properties in the future will depend not only on its ability to develop the properties on which it currently has exploration and mining rights, but also on its ability to select and acquire exploration and development rights on suitable properties for exploration and development. There is no assurance that the Enlarged Group will continue to be able to compete successfully in acquiring exploration and development rights on such properties. As a result, the Enlarged Group's revenues may decline over time, thereby materially and adversely affecting its results of operations and financial condition.

Limited operating history

The Enlarged Group does not have an established operating track record. The Company has not earned profits since incorporation and there is no assurance that it or the Enlarged Group will earn profits in the future. The Enlarged Group is not currently generating positive cash flow and its ultimate success will depend on its ability to generate positive cash flow from its mining operations.

Financing and commercial viability of future projects

The capital expenditure plans of the Enlarged Group and the further development and exploration of mineral properties in which the Enlarged Group holds interests or which the Enlarged Group may acquire, may depend upon the Enlarged Group's ability to obtain financing through joint ventures, debt financing, equity financing or other means. No assurance can be given that the Enlarged Group will be successful in obtaining any required financing as and when needed on acceptable terms or at all, which could prevent the Enlarged Group from further development and exploration or additional acquisitions.

Failure to obtain additional financing on a commercial and timely basis may cause the Enlarged Group to postpone its capital expenditure plans, forfeit its rights in properties or reduce or terminate operations. Reduced liquidity or difficulty in obtaining future financing could have a material adverse effect on the Enlarged Group's business, financial condition, results of operations and prospects.

The Enlarged Group's Projects may require greater investment than currently expected or suffer delays or interruptions, which could cause cost overruns. Any such delay, interruption or cost overruns in implementing the Enlarged Group's planned capital investments could result in the Group failing to complete the Projects and a reduction in future production volumes, which could have a material adverse effect on the Enlarged Group's business, financial condition, results of operations and prospects. In addition, the Projects may not prove to be commercially viable upon completion.

The Enlarged Group's ability to obtain future financing will depend in part on its ability to achieve positive cash flows from its current operations within time and budget, an extended commissioning ramp-up period will have an adverse impact on the business and financial performance of the Enlarged Group.

Risks relating to the BNPP Facility Agreement

The Enlarged Group's BNPP Facility Agreement contain restrictive covenants, the breach of which may trigger default provisions and acceleration of the Enlarged Group's obligations and execution of the guarantees and security it grants. Pursuant to an amended and default conditional waiver dated 20 September 2018, BNPP agreed, subject to the satisfaction of certain conditions including Admission, to permanently waiver the pre-existing non-payment event of default and the project completion event of default. If a further breach of the BNPP Facility Agreement were to occur and the Company was unsuccessful in negotiating such further amendments and/or waivers this may have a material adverse effect on the Enlarged Group's business, financial condition, results of operations and prospects.

Minority shareholder rights

The Company does not hold 100 per cent. of its principal operational subsidiaries and therefore its assets are not wholly owned (as is shown by the structure chart at paragraph 4 of Part I (*Information on the Enlarged Group*) of this Document). Minority shareholder partners in those subsidiaries may have rights under the governing documentation of such subsidiaries or under relevant local law and regulation which may, were such rights to be utilised, constrain the Company's ability to operate through those subsidiaries in the way which it could if they were wholly-owned. Whilst the Company intends to maintain good working relationships with such partners there is no guarantee that in the future such partners will not seek to exercise such rights. In such circumstances the relevant subsidiary's performance and therefore the Company's performance may be adversely affected.

Access to infrastructure

Mining, processing, development and exploration activities depend, to a significant degree, on adequate infrastructure. In the course of developing future mines, the Enlarged Group, may need to construct and support the construction of infrastructure, which includes permanent water supplies, tailings storage facilities, power, rail and maintenance facilities and logistics services and access roads. Reliable rail facilities, roads, bridges, power sources and water supply are important determinants, which affect capital and operating costs. Unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of such infrastructure could materially adversely affect the Enlarged Group's operations, financial condition and results of operations. Any such issues arising in respect of the supporting infrastructure or on the Enlarged Group's sites could materially adversely affect the Enlarged Group's results of operations or financial condition. Furthermore, any failure or unavailability of the Enlarged Group's operational infrastructure (for example, through equipment failure, disruption to its transportation arrangements or reduced port capacity) could materially adversely affect the production output from its mines or impact its exploration activities or development of a mine or project.

Limited port capacity at the Port of Saldanha and the ports in the Republic of Congo and Ghana, as well as the associated cost increase for procuring alternative logistics could have an adverse impact on the business and financial performance of the Enlarged Group.

Consistency of electricity supply

Electricity supply and distribution in South Africa is solely conducted by Eskom. Eskom is currently experiencing a number of financial and operating challenges. If the Company is unable to source sufficient electricity to mine and process material at the Elandsfontein Phosphate Project to the extent envisaged in this Document it would need to find alternative power sources, which may involve extra cost, senior managerial resources and delays in developing the Elandsfontein Phosphate Project, and therefore a material adverse impact on the business and financial performance of the Enlarged Group.

Water supply issues

The Western Cape of South Africa is currently experiencing an extended drought, and water availability for the Elandsfontein Phosphate Project cannot be guaranteed. The Enlarged Group has

secured water for the Elandsfontein Phosphate Project for the first three years of operation, and the right to municipal waste water thereafter.

The availability of suitable processing water is dependent on a number of factors beyond the Enlarged Group's control. Any failure to obtain sufficient supplies of water at economically viable rates, or at all, could materially and adversely affect the operational and financial performance of the Enlarged Group.

Uninsured risks

The Enlarged Group may be subject to substantial liability claims due to the inherently hazardous nature of its business or for acts and omissions of contractors, sub-contractors or operators. Any indemnities the Enlarged Group may receive from such parties may be limited or may be difficult to enforce if such contractors, sub-contractors or operators lack adequate resources. As discussed further in 'Environmental regulation and environmental compliance' below, the Enlarged Group is uninsured for environmental risks, including potential liability for pollution or other hazards as a result of the disposal of waste products occurring from exploration and production. The Directors believe that the level of the Enlarged Group's insurance cover (and that of the operators of assets it does not itself operate) is reasonable based on the costs of cover, the risks associated with its business and industry practice. The Company can give no assurance that the proceeds of insurance applicable to covered risks will be adequate to cover expenses relating to losses or liabilities. Accordingly, the Enlarged Group may suffer material losses from uninsurable or uninsured risks or insufficient insurance coverage. The Enlarged Group will also be subject to the risk of unavailability, increased premiums or deductibles, reduced cover and additional or expanded exclusions in connection with its insurance policies and those of operators of assets it does not itself operate.

If the Enlarged Group incurs losses related to any significant events not covered by its insurance policies or incurs losses in excess of its carried coverage, such losses may have a material adverse effect on the Enlarged Group's business, revenues, financial condition, results of operations or prospects or the market price of the Ordinary Shares.

Unknown environmental risks

Environmental hazards may exist on the properties in which the Enlarged Group holds interests that are unknown to the Company and that have been caused by previous or existing owners or operators of the properties. To the extent the Enlarged Group is subject to environmental liabilities, the payment of any liabilities or the costs that may be incurred to remedy environmental impacts would reduce funds otherwise available for operations.

Limited diversification

The Enlarged Group's early revenues will be derived from the sale of phosphate rock produced by the Enlarged Group's Elandsfontein Phosphate Project. Consequently, if there were any change in law or policy or other circumstances arising in South Africa which materially reduced or interrupted or halted mining or processing operations at the Elandsfontein Phosphate Project then the Enlarged Group's results of operations and financial condition could be materially and adversely affected.

Inability to find appropriate acquisition targets and/or integrate future acquisitions

The Enlarged Group may acquire other assets if suitable opportunities become available. Any future acquisition poses integration and other risks which may significantly affect the Enlarged Group's results or operations. To the extent that suitable opportunities arise, the Company may expand its business through the identification and acquisition of, or significant investments in, complementary companies, assets, products and services.

There can be no assurance that the Company will identify suitable acquisitions or opportunities, obtain the financing necessary to complete and support such acquisitions or acquire businesses on satisfactory terms, or that any business acquired will prove to be profitable. In addition, the acquisition and integration of independent companies is a complex, costly and time-consuming process involving a number of possible problems and risks, including possible adverse effects on the Enlarged Group's operating results, diversion of management's attention, failure to retain personnel, failure to maintain customer service levels, disruption to relationships with customers and other third parties, risks associated with unanticipated events or liabilities and difficulties in the

assimilation of the operations, technologies, systems, services and products of the acquired companies.

No assurance can be given that the Enlarged Group will be able to manage future acquisitions profitably or to integrate such acquisitions successfully without substantial costs, delays or other problems and any failure to achieve successful integration of such acquisitions could have a material adverse effect on the results of operations or financial condition of the Enlarged Group. If the Enlarged Group is unable to attract and retain key officers, managers and technical personnel to adequately effect any such acquisitions and integration, the Enlarged Group's ability to execute its business strategy successfully could be materially and adversely affected.

Risks Relating to the Cominco Acquisition

Unfair prejudice

A Cominco Shareholder who has not accepted the Offer may apply to the BVI court if it considers that the affairs of the company have been, are being, or are likely to be, conducted in a manner which is, or any act or acts of the company have been, or are likely to be, oppressive, unfairly discriminatory or unfairly prejudicial to the shareholder in that capacity. If the court agrees with the shareholder, and considers it to be just and equitable that an order be made in relation to the particular conduct, it may make any order that it thinks fit, including an order requiring the company or any other person to acquire the shareholder's shares or to pay compensation to the shareholder.

Contravention of the BVI Business Companies Act

In certain circumstances, a shareholder has the right to seek various remedies against a company in the event its directors are in breach of their duties under the BVI Business Companies Act 2004. Pursuant to section 184B of the BVI Business Companies Act 2004, if a company or director of a company engages in, or proposes to engage in or has engaged in, conduct that contravenes the provisions of the BVI Business Companies Act 2004 or the memorandum or articles of association of the company, the BVI court may, on application of a shareholder or director of the company, make an order directing the company or director to comply with, or restraining the company or director from engaging in conduct that contravenes the BVI Business Companies Act 2004 or the memorandum or articles of association. If the court considers it just and equitable to do so, it can make an order which, *inter alia*, can require the company or any other person to pay compensation to the shareholders.

Derivative actions

A Cominco Shareholder who has not accepted the Offer may be able to apply for and obtain a derivative action in the BVI courts. A derivative action refers to an action initiated by a shareholder to enforce a wrong done to the company, the action being taken in the company's name rather than the shareholder's name. Accordingly, the shareholder obtains no direct benefit if judgment is given in the company's favour. Further under the BVI Business Companies Act 2004, a shareholder of a company may bring an action against a company for breach of a duty owed by the company to him as a shareholder.

There can be no assurance that the Enlarged Group will realise the anticipated benefits of the Acquisition

The Enlarged Group may not realise the anticipated benefits from the Acquisition or may encounter difficulties in achieving the anticipated benefits. The Cominco Group is subject to all of the risks set forth in this "Risk Factors" section which may impact the Enlarged Group's ability to realise the benefits its Directors believe will result from the Acquisition. In addition, if the future financial performance and cash flows generated by the Cominco Group are not in line with the Directors' expectations, or the mineral resource is not of the quality the Directors expect, it may significantly affect the financial performance of the Enlarged Group. This could reduce the potential benefits arising from the Acquisition, adversely affect the market price of the Ordinary Shares, or have a material adverse effect on the Enlarged Group's business, financial condition, operating results and prospects.

Title risk

While the Company has investigated, Cominco S.A.'s title to, and rights and interests in, the Hinda Licences making up the Hinda Project, and to the best of its knowledge, such title and interests

are in good standing, this should not be construed as a guarantee of the same. Title to the Hinda Project may be subject to undetected defects. If a defect does exist it is possible that the Enlarged Group may lose all or part of its interest in the Hinda Project.

Cominco pre-emption rights

The Company is aware that certain historic pre-emption rights were in place between a number of Cominco Shareholders which, if still existing, would fetter certain Cominco Shareholders ability to accept the Offer.

Whilst the Company has been advised that these pre-emption rights have lapsed, there is a risk that if such pre-emption rights still exist, the Company's ownership to the title of certain Cominco Shares could be challenged. If such challenge were successfully made, such challenge may have a material adverse effect on the Enlarged Group's business, revenues, financial condition, results of operations or prospects or on the market price of Ordinary Shares.

The due diligence carried out in respect of the Cominco Group may not have revealed all relevant facts or uncovered significant liabilities

While the Company conducted certain due diligence in respect of the Acquisition with the objective of identifying any material issues that may affect its decision to proceed with the Acquisition, there can be no assurance that all such issues have been identified. The Company also used information revealed during the due diligence process to formulate its business and operational planning. During the due diligence process, the Company is only able to rely on the information that was made available to it. Any information that was provided or obtained from available sources may not have been accurate at the time of delivery and/or remained accurate during the due diligence process and in the run-up to the Acquisition. More broadly, there can be no assurance that the due diligence undertaken was adequate or accurate or revealed all relevant facts or uncovered all significant liabilities. If the due diligence investigation failed to identify key information in respect of the Cominco Group, or if the Company considered certain material risks to be commercially acceptable, the Company may be forced to write-down or write-off assets in respect of the Cominco Group, which may have a material adverse effect on the Enlarged Group's business, financial condition or results of operations. In addition, following the Acquisition, the Company may be subject to significant, previously undisclosed liabilities in respect of the Cominco Group that were not known or identified during due diligence and which could have a material adverse effect on the Enlarged Group's business, financial condition and results of operations.

Stage of development

The Enlarged Group's focus for the Hinda Project will be initially concerned with the project's exploration and development; however, there can be no assurance that the Hinda Project will be brought into production, or that it will ever be profitable. The commercial viability of mineral deposits of the kind located and believed to be located at the Hinda Project area is dependent upon a number of factors, including, but not limited to, the market price of phosphate, the quality, size, grade and other attributes of the deposits and the proximity to, and availability of, infrastructure necessary to develop, exploit and transport minerals on a commercial scale.

Limited recourse

The Acquisition is being made by way of a share for share offer to the Cominco Shareholders. Under the terms and conditions of the Offer, the Company requires selling Cominco Shareholders to give title warranties only upon acceptance of the Offer. The Company will not therefore have the benefit of warranties or indemnities in relation to the business or assets of the Cominco Group. Further, the consideration under the Offer is the allotment and issue of Offer Shares. Therefore the Cominco Shareholders will not receive cash pursuant to the Offer and may have limited resources from which to meet any claim by the Company in relation to the title warranties or any other matter to do with the Offer. The Company will have no recourse to the Cominco Shareholders for any unanticipated obligations or liabilities of the Cominco Group, which obligations and liabilities may have a detrimental effect on the value and operations of the Cominco Group and in consequence on the business and prospects of the Enlarged Group and the value of the Ordinary Shares. However, Roderick Smith, in his capacity as an executive director of Cominco, has given warranties under the Placing Agreement to Grant Thornton, H&P, Mirabaud in relation to the Cominco Group and its affairs. Roderick Smith's liability is capped.

Hinda Exploitation Convention

The Hinda Exploitation Convention provides a set of protection rights, including the Republic of Congo's guarantees in relation with the Hinda Project's Operations, and sets out the Company's and its shareholder's commitments in terms of working programmes and corresponding financings.

Enforcing the Hinda Exploitation Convention against third parties remains subject to the approbation of the Convention by Parliament and the subsequent publication of the approbation law in the Official Gazette. The Republic of Congo has committed, under the Hinda Exploitation Convention to provide its best efforts in view of the adoption, by Parliament, of the law of approbation of the Convention by Parliament, by 10 December 2018 (which is not guaranteed).

The adoption, by Parliament, of the law of approbation of the Hinda Exploitation Convention and the subsequent publication of the approbation law in the Official Gazette will protect the Company against any third party claim aiming at challenging the benefit, by Cominco S.A., of the legal regimes and tax and customs incentives granted to it under the Hinda Convention which go beyond the existing laws. This procedure elevates the Hinda Exploitation Convention to the rank of a special law and prevents any third party action aiming at challenging Cominco S.A.'s benefit of the conventional regime and incentives which go beyond the existing laws. In the absence of Parliamentary approval, the Hinda Exploitation Convention would remain binding on the Republic of Congo. However, the incentives and regimes granted by the Hinda Exploitation Convention that go beyond existing laws could be disputed in Court by the third parties. Any failure or delay of Parliament to approve the Hinda Exploitation Convention (and the subsequent publication of the approbation law in the Official Gazette), could have a detrimental effect on the business, operations and financial performance of the Enlarged Group.

Enforcement of contractual rights in the Republic of Congo may be brought into question

The legal system in the Republic of Congo is based on the French civil law system (the Civil Code of the former French Equatorial Africa), which has enacted the Uniform Act to harmonise business law in Africa in order to guarantee legal and judicial security for investors and companies in its Member states, as well as a Uniform Act on Arbitration Law, allowing recourse to a standard arbitration mechanism for the settlement of contractual disputes arising from civil or commercial contracts concluded in the Republic of Congo as an alternative to Republic of Congo courts for legal proceedings relating to contracts.

Under Congolese law, parties may enter into private contracts in the language of their choice, however, a French translation is always required for them to be used before any constituted authority in Congo. In addition, enforcement of contracts concluded outside of Congo before an Republic of Congo court, administrations and other constituted authorities, requires their prior registration with the Office for Registration and Stamp Duties and, in the absence of a specific exemption, payment of the applicable registration fees and stamp duties.

Certain contracts concluded in Congo (such as leases) must also be presented for registration with the Office for Registration and Stamp Duties, due to their nature and listing in the General Tax Code, Volume 2. Moreover, certain contracts (such as commercial leases) must also be notarised or authenticated by a notary if concluded as private deeds, prior being registered as described above.

If any of these processes are not strictly followed, the Republic of Congo courts and administrations may disregard the concerned contract and, as regards the requirement to register certain contracts with the Office for Registration and Stamp Duties, the tax administration may apply fines of 100 per cent. of the amount of registration fees due. Further, the tax administration tends to disregard any payment conventional exemption for the purpose of applying these fines.

If any of the Enlarged Group's contracts are deemed unenforceable, this could have a material adverse effect on the operations and financial results of the Group.

Risks relating to the Enlarged Group's business

Requirements for permits and licences

The operations of the Enlarged Group require licences, permits and in some cases renewals of existing licences and permits from various governmental authorities. The Enlarged Group's ability to obtain, sustain or renew licences and permits and other licences and permits that are required by it on applicable terms is subject to changes in regulations and policies and is at the discretion of the applicable governmental authorities.

The Elandsfontein Phosphate Project holds the necessary environmental, water and mining permits and licences to operate. The WUL and Elandsfontein Mining Right are the subject of High Court litigation which is described in more detail under the heading ''Elandsfontein Mining Right, WUL and associated litigation'' below. The litigation does not suspend the Elandsfontein Mining Right or WUL while it is pending and operations may continue in accordance with those licences.

The proposed plant modifications at Elandsfontein may require the use of additional chemical reagents. This may necessitate an amendment to the Elandsfontein mine's approved EMPr and potentially also to its WUL. Although there is no guarantee that the amendments will be granted, the Directors believe these are minor amendments in the context of the Elandsfontein Phosphate Project and there is no reason to believe that the authorities will not grant the amendments. The environmental, water and mining licences are granted subject to conditions. Failure to comply with any material conditions could result in the suspension or revocation of a permit or licence which could have a material adverse effect on the business and financial performance of the Enlarged Group.

Elandsfontein Mining Right, WUL and associated litigation

There are currently two pending High Court applications in the Western Cape High Court and an administrative appeal which is pending before the Water Tribunal. The applicant and appellant in all three of these matters is a small group of local residents who have formed a local action group which has been opposed to the Elandsfontein Phosphate Project from the outset.

The first High Court application seeks an order compelling the Minister of Mineral Resources's to take a decision on an appeal by the same applicant against the grant of the Mining Right. The appeal had been pending before the Minister of Mineral Resources for over two years and was rejected in a decision dated 14 December 2017. This renders the bulk of the relief sought by the applicant moot and the applicant will now need to supplement its application papers or bring a new application seeking the judicial review of the Minister of Mineral Resources's appeal decision if it wants to proceed with the litigation.

In the second High Court application the applicant sought to interdict, on an urgent basis, the water use activities authorised in the integrated WUL, on the basis that they automatically suspended by their appeal to the Water Tribunal. The interdictory relief was subsequently abandoned by the applicant and, in any event, became moot in the light of the Minister of Water Affair's decision on 11 December 2017 to lift the suspension of the integrated WUL.

The administrative appeal currently pending before the Water Tribunal also seeks the setting aside of the Project's integrated WUL. Kropz has submitted comprehensive responding submissions, however, the Water Tribunal has yet to set the appeal down for hearing. Pending the Water Tribunal's decision, there is no legal impediment to the continuation with the water use activities authorised in the integrated WUL.

There can be no guarantee that the administrative appeal will be rejected, or that there will not be future successful actions or appeals against Kropz's WUL. If the ongoing appeal or any future actions were to be successful, this would have a material adverse effect on the business, operations and financial performance of the Enlarged Group.

Environmental regulation and environmental compliance

Mining operations have inherent risks and liabilities associated with damage to the environment and the disposal of waste products occurring as a result of mineral exploration and production. Environmental and safety legislation and regulation (e.g. in relation to reclamation, disposal of waste products, pollution and protection of the environment, protection of wildlife and otherwise relating to environmental protection) is frequently changing and is generally becoming more restrictive with a heightened degree of responsibility for companies and their directors and employees and more stringent enforcement of existing laws and regulations. Future changes could impose significant costs and burdens on the Enlarged Group (the extent of which cannot be predicted) both in terms of compliance and potential penalties, liabilities and remediation. Breach of any environmental obligations could result in penalties and civil liabilities and/or suspension of operations, any of which could adversely affect the Enlarged Group. Further, approval may be required for any material plant modifications or additional land clearing and for ground disturbing activities. Delays in obtaining such approvals could result in the delay to anticipated exploration programmes or mining activities.

There may also be unforeseen environmental liabilities resulting from mining activities, which may be costly to remedy. If the Enlarged Group is unable to fully remedy an environmental problem, it may be required to stop or suspend operations or enter into interim compliance measures pending completion of the required remedy. The potential exposure may be significant and could have a material adverse effect on the Enlarged Group. The Enlarged Group has not purchased insurance for environmental risks (including potential liability for pollution or other hazards as a result of the disposal of waste products occurring from exploration and production) as it is not generally available at a price which the Enlarged Group regards as reasonable.

The Regulations Pertaining to the Financial Provision for Prospecting, Exploration, Mining or Production Operations 2015 (R1147 of 20 Nov 2015) provides that the holder of a mining right must provide for rehabilitation and remediation costs, with particular reference to when the mine is decommissioned at the end of mining, or production operations. It is expected that mining operations at Elandsfontein will cease in year 2032.

Section 24P (3) of the National Environmental Act, 1998 (107 of 1998) ("**NEMA**") provides that the liability is assessed annually by a professional independent consultant, to the satisfaction of the Minister of the DMR. Discussions with the DMR relating to the conditions at mine closure are ongoing. Some of the mine land will be transferred to the Government as part of offset provisions in the environmental authorisation, which will include roads, electrical infrastructures, and building structures. These matters are considered by the Directors to be open to interpretation.

Kropz Elandsfontein has received a letter from the DMR stating that an amount of ZAR78 million (US$6.53 million) has been approved for financial provisions. The DMR is the competent authority that prescribes financial provisioning and Kropz Elandsfontein is in the process of providing a guarantee for that amount. Although the DMR letter implies legal compliance, it is SRK's opinion that this estimate is insufficient to address the current rehabilitation requirements and would not cover the liability for unplanned closure. Such an under-provision could result in future liabilities being payable, which could have a material adverse impact on the financial condition of the Enlarged Group.

Weather patterns and natural disasters

Adverse weather conditions, such as natural disasters, crop disease, pests and other anomalies in regional weather conditions may have a significant and unpredictable impact on the demand for phosphate rock, and fertilizers more generally, which may impact future revenue. Agricultural production, at the regional level, is highly seasonal and farmers have narrow windows of time in a given season to cultivate and harvest crops. Should adverse weather cause unfavourable growing conditions and decrease agricultural production during these seasonal windows, the Enlarged Group's revenues could be materially impacted.

Black economic empowerment and social development

Under South African mining regulatory framework it is a requirement that a minimum of 26 per cent. of the shares in companies holding interests in mining rights in South Africa is held by HDSA.

The minority interests in the Elandsfontein Phosphate Project are held by the ARC Fund and must continue to be held by the ARC Fund in accordance with the HDSA requirements of the Mining Charter. There can be no guarantee that the ARC Fund will retain its BEE status, in which case the Enlarged Group would be obliged to find alternative HDSA investors and agree a transfer of the existing interest of the ARC Fund to a new HDSA partner.

In regard to social development, obligations are currently imposed in terms of both the Mining Charter and the social and labour plan obligations set out in an attachment to the Mining Right held by the Group. There are certain procurement and employment equity targets set out in the new Mining Charter III, gazetted in September 2018, and Kropz Elandsfontein has a period of 5 years within which to attain those targets and will have to submit an implementation plan within 6 months of the coming into effect of the Mining Charter III. These could materially affect the financial position of the Enlarged Group.

Government regulation and political risk

The Enlarged Group's operating activities are subject to laws and regulations governing expropriation of property, health and worker safety, employment standards, waste disposal, protection of the environment, mine development, land and water use, prospecting, mineral

production, exports, taxes, labour standards, occupational health standards, toxic wastes, the protection of endangered and protected species and other matters. While the Directors believe that the Enlarged Group is in substantial compliance with all material current laws and regulations affecting its activities, future changes in applicable laws, regulations, agreements or changes in their enforcement or regulatory interpretation could result in changes in legal requirements or in the terms of existing permits and agreements applicable to the Enlarged Group or its properties, which could have a material adverse impact on the Enlarged Group's current operations or planned development projects. Where required, obtaining necessary permits and licences can be a complex, time consuming process and the Enlarged Group cannot assure whether any necessary permits will be obtainable on acceptable terms, in a timely manner or at all.

The costs and delays associated with obtaining necessary permits and complying with these permits and applicable laws and regulations could stop or materially delay or restrict the Enlarged Group from proceeding with any future exploration or development of its properties. Any failure to comply with applicable laws and regulations or permits, even if inadvertent, could result in interruption or closure of exploration, development or mining operations or material fines, penalties or other liabilities.

The Enlarged Group has operations located in South Africa, Ghana and the Republic of Congo and the Enlarged Group's activities may be affected in varying degrees by political stability and governmental regulations. Any changes in regulations or shifts in political attitudes in South Africa, Ghana and the Republic of Congo are beyond the control of the Enlarged Group and may adversely affect its operations.

Legal systems

Jurisdictions in which the Enlarged Group might operate in the future, including Ghana, Republic of Congo and South Africa, may have less developed legal systems than more established economies which could result in risks such as (i) effective legal redress in the courts of such jurisdictions, whether in respect of a breach of law or regulation, or in an ownership dispute, being more difficult to obtain; (ii) a higher degree of discretion on the part of governmental authorities; (iii) the lack of judicial or administrative guidance on interpreting applicable rules and regulations; (iv) inconsistencies or conflicts between and within various laws, regulations, decrees, orders and resolutions; or (v) relative inexperience of the judiciary and courts in such matters. In certain jurisdictions the commitment of local business people, government officials and agencies and the judicial system to abide by legal requirements and negotiated agreements may be more uncertain, creating particular concerns with respect to the Enlarged Group's licences and agreements for business. These may be susceptible to revision or cancellation and legal redress may be uncertain or delayed. There can be no assurance that joint ventures, licences, licence applications or other legal arrangements will not be adversely affected by the actions of government authorities or others and the effectiveness of and enforcement of such arrangements in these jurisdictions cannot be assured.

Risk of crime and corruption

Countries in Africa generally experience high levels of criminal activity and governmental and business corruption. Exploration and mining companies operating in certain areas of Africa may be particular targets of criminal actions. Criminal or corrupt action against the Enlarged Group could have a material adverse effect on the Group's business, operations, financial performance, cash flow and future prospects. In addition, the fear of criminal or corrupt actions against the Group could have an adverse effect on the ability of the Enlarged Group to adequately staff and/or manage its operations or could substantially increase the costs of doing so.

The Enlarged Group is subject to anti-corruption and anti-bribery legislation and regulations, including the UK Bribery Act and other laws and regulations that prohibit companies and their intermediaries from making improper payments or offers of payments to foreign governments and their officials and political parties, or others for the purpose of obtaining or retaining business and other benefits.

By doing business in South Africa, Ghana, the Republic of Congo and other jurisdictions in Africa, the Enlarged Group could face, directly or indirectly, corrupt demands by officials, militant groups or private entities. Consequently, the Group faces the risk that one or more of its employees, agents, intermediaries or consultants may make or receive unauthorised payments given that such persons may not always be subject to its control.

Although the Company has policies and procedures designed to ensure that the Enlarged Group itself, employees, agents, intermediaries and consultants comply with the UK Bribery Act and other anti-corruption legislation, there is no assurance that such policies or procedures will work effectively all of the time or protect the Enlarged Group against liability under any such legislation for actions taken by its agents, employees, intermediaries and consultants with respect to its business.

If the Enlarged Group is not in compliance with the UK Bribery Act or other laws governing the conduct of business with indigenous governments and entities (including local laws), the Enlarged Group or its Directors may be subject to criminal and civil penalties and other remedial measures.

Furthermore, any remediation measures taken in response to potential or alleged violations of the UK Bribery Act or other anti-corruption or anti-bribery laws, including any necessary changes or enhancements to the Enlarged Group's procedures, policies and controls and potential personnel changes and/or disciplinary actions, may result in increased compliance costs.

Any such findings, or any alleged or actual involvement in corrupt practices or other illegal activities by the Enlarged Group or its commercial partners or anyone with whom it conducts business could damage its reputation and its ability to do business, including by affecting its rights and title to assets or by the loss of key personnel, and together with any increased compliance costs, could adversely affect its business, operations, financial performance, cash flow and future prospects.

Adverse sovereign action

The Enlarged Group is exposed to the risk of adverse sovereign action by the governments of South Africa, Ghana, Republic of Congo and other governments. The mining industry is important to the economies of these countries and thus can be expected to be the focus of continuing attention and debate. In similar circumstances in other developing countries, mining companies have faced the risks of expropriation and/or renationalisation, breach or abrogation of project agreements, application to such companies of laws and regulations from which they were intended to be exempt, denials of required permits and approvals, increases in royalty rates and taxes that were intended to be stable, application of exchange or capital controls, and other risks.

Deposits of strategic importance

There can be no assurance that industries deemed of national or strategic importance to countries in Africa such as mineral production will not be nationalised. Government policy may change to discourage foreign investment, re-nationalisation of mining industries may occur and other government limitations, restrictions or requirements not currently foreseen may be implemented. There can be no assurance that the Enlarged Group's assets in Africa will not be subject to nationalisation, requisition or confiscation, whether legitimate or not, by any authority or body. Similarly, the Enlarged Group's operations may be affected in varying degrees by government regulations with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, environmental legislation, mine safety and annual payments to maintain mineral properties in good standing. There can be no assurance that the laws of South Africa (or of other African states), protecting foreign investments, will not be amended or abolished or that these existing laws will be enforced or interpreted to provide adequate protection against any or all of the risks detailed above. There can be no assurance that any agreements with the governments of South Africa, Ghana, the Republic of Congo and other jurisdictions that the Enlarged Group may operate in will prove to be enforceable or provide adequate protection against any or all of the risks described above.

Currency risk

While the sale of phosphate fertilizer is principally in US Dollars throughout the world, a significant portion of the Enlarged Group's expenses incurred in connection with the projects will be in the local currencies of South Africa, Ghana and the Republic of Congo. As a result, fluctuations in currency exchange rates could have a material adverse effect on the financial condition, results of operation or cash flow of the Enlarged Group. The Enlarged Group does not currently intend to enter into any hedging arrangements with respect to foreign currencies.

Fluctuations in exchange rates between currencies in which the Enlarged Group invests, reports or derives income, may cause fluctuations in the Company's financial results that are not necessarily related to the Enlarged Group's underlying operations. This may result in additions to the Company's reported costs or reductions in the Company's reported revenues.

Exchange control risk

The Enlarged Group will operate in countries that may impose foreign exchange controls, which may prevent local companies from paying dividends or repatriating profits to their foreign shareholders. Additional administrative procedures and requirements, such as the retention of a portion of foreign currency holdings in local banks, may also be imposed on local companies.

Future litigation

Save as disclosed in this document, the Company is not currently aware of any other material outstanding litigation, there can be no guarantee that the current or future actions of the Enlarged Group will not result in further litigation. The mining industry, as with all industries, is subject to legal claims, both with and without merit, in particular in relation to environmental and health and safety liability. Defence and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, there can be no assurance that the resolution of any particular legal proceeding will not have a material adverse effect on the Enlarged Group's financial position or results of operations.

Unanticipated tax liabilities

The Enlarged Group is subjected to the tax laws of several jurisdictions, including South Africa, Ghana the Republic of Congo and the United Kingdom. The combined effect of the application to the Enlarged Group of the tax laws of more than one of these jurisdictions and/or their interpretation by the relevant tax authorities could, under certain circumstances, give rise to unanticipated tax liabilities which could have an adverse effect on the Enlarged Group's business, results of operations and financial condition.

The costs of compliance with AIM, corporate governance and accounting requirements are significant

In becoming a listed public company, the Company will be subject to enhanced requirements in relation to disclosure controls and procedures and internal control over financial reporting. The Company may incur significant costs associated with its public company reporting requirements, including costs associated with applicable AIM Rules and associated corporate governance requirements. The Company expects to incur significant legal and financial compliance costs as a result of these rules and regulations and if the Company does not comply with all applicable legal and regulatory requirements, this may have a material adverse effect on the Enlarged Group's business, financial condition, results of operations and prospects.

General risks relating to the Ordinary Shares

General risks of investing in shares traded on AIM

Application has been made for the Ordinary Shares to be admitted to trading on AIM, a market designated primarily for emerging or smaller companies. The AIM Rules are less onerous than those of the UK's Official List and an investment in shares that are traded on AIM is likely to carry a higher risk than an investment in shares listed on the Official List of the UK Listing Authority. Further, neither the London Stock Exchange nor the FCA (in its capacity as the UK Listing Authority) has examined or approved the contents of this document. The shares will not be listed on the Official List of the UK Listing Authority and although the shares will be traded on AIM, this should not be taken as implying that there will always be a liquid market in the Ordinary Shares.

It may be more difficult for investors to realise their investment on AIM than to realise an investment in a company whose shares are listed on the Official List. The market for shares in smaller public companies is less liquid than for larger public companies. The share price of publicly traded early stage companies can be highly volatile. The price at which the Ordinary Shares will be traded and the price at which investors may realise these investments will be influenced by a large number of factors, some not specific to the Enlarged Group and its operations. Furthermore, there is no guarantee that the market price of an Ordinary Share will accurately reflect its underlying value.

AIM has been in existence since 1995 but its future success and liquidity in the market for the Ordinary Shares cannot be guaranteed. Investors should be aware that the value of the Ordinary Shares may be volatile and may go down as well as up and investors may therefore not recover their original investment.

Liquidity

There may not be sufficient liquidity in the market for the Ordinary Shares in order for investors to sell their Ordinary Shares.

The Ordinary Shares will be traded on AIM rather than the Official List. Whilst the Company is applying for the admission of the Enlarged Share Capital to trading on AIM, there can be no assurance that an active trading market will develop, or if developed, that it will be maintained.

AIM is a market for emerging or smaller, growing companies and may not provide the liquidity normally associated with the Official List or other exchanges. The future success of AIM and liquidity in the market for the Ordinary Shares cannot be guaranteed. In particular, the market for the Ordinary Shares may be, or may become, relatively illiquid and therefore the Ordinary Shares may be or may become difficult to sell.

An investment in the Company may not be suitable for all recipients of this document. Accordingly, investors are strongly advised to consult an independent financial adviser authorised for the purposes of FSMA.

The Company may not pay dividends and so investors may not receive any return on their investment

As stated in paragraph 18 of Part I (*Information on the Enlarged Group*) of this document, the Company's dividend policy is yet to be formalised but the Directors will consider declaring and paying dividends to Shareholders following Admission. However, the declaration and payment of dividends (including special dividends) is restricted under English law and a company can only pay cash dividends if it has sufficient distributable reserves available to do so. The Company will not pay dividends to the extent it will not be lawful to do so, and the Directors will determine whether any dividends should be declared or paid in the future based on a variety of factors, including the results of operations, financial condition, cash requirements and future prospects of the Enlarged Group, as well as other factors deemed by Directors to be relevant at the time. Any of the foregoing could limit the payment of dividends to Shareholders or, if the Company does pay dividends, the amount of such dividends.

Holding company structure and restrictions on dividends

The Company's operating results and its financial condition are dependent on the trading performance of members of the Group. The Company's operating cash flow, cash and financial position and its ability to pay dividends will depend on the level of distributions received from the Company's subsidiaries and in particular from Kropz Elandsfontein, First Gear Exploration and Cominco S.A. Members of the Enlarged Group may from time to time be subject to restrictions on their ability to make distributions to the Company, as a result of factors such as restrictive covenants contained within loan agreements, foreign exchange limitations, regulatory, fiscal or other restrictions. There can be no assurance that such restrictions will not have a material adverse effect on the Enlarged Group's business, operating results and financial condition.

Market perception

Market perception of mining exploration and production companies may change which could impact on the value of investors' holdings and impact on the ability of the Company to raise further funds by the issue of further shares or other securities in the Company.

Future issues of Ordinary Shares may result in immediate dilution of existing shareholders

The Company may decide to issue additional Ordinary Shares in the future in subsequent public offerings or private placements to fund the future funding requirements of the Enlarged Group and may also issue additional Ordinary Shares in connection with future acquisitions if the Directors consider it appropriate to do so. In the case of pre-emptive offerings, if existing Shareholders do not subscribe for additional Ordinary Shares on a *pro rata* basis in accordance with their existing shareholdings, this will dilute their existing interests in the Company and, in the case of any non-pre-emptive offering, existing interests of Shareholders will be diluted by the issuance of new Ordinary Shares. Furthermore, the issue of additional Ordinary Shares may be on more favourable terms than the Placing Shares. In addition, the issue of additional shares by the Company, or the possibility of such issue, may cause the market price of the Ordinary Shares to decline and may make it more difficult for Shareholders to sell Ordinary Shares at a desirable time or price.

Substantial sales of Ordinary Shares by significant Shareholders could depress the price of the Placing Shares

Subsequent sales by key Shareholders, in particular by Kropz International, the ARC Fund or the Cominco Locked-in Shareholders, of a substantial number of Ordinary Shares may significantly reduce the price of the Ordinary Shares. Each of the Directors, Kropz International, the ARC Fund, Ackerman Group Holdings Limited, Macquarie Bank Limited and the Cominco Locked-in Shareholders has agreed to certain restrictions on their ability to sell, transfer and otherwise deal in their Ordinary Shares from the date of Admission until the first anniversary of Admission, with the Directors, Kropz International, the ARC Fund and the Cominco Locked-in Shareholders agreeing to a 12 month lock-up period (save in relation to Ackerman Group Holdings and Macquarie Bank Limited, who shall be subject to a six month lock-up period from the date of Admission). The Directors, Kropz International, the ARC Fund, Ackerman Group Holdings Limited, Macquarie Bank Limited and the Cominco Locked-in Shareholders have also agreed to comply with certain requirements designed to maintain an orderly market in the Ordinary Shares for a further 12 months after the expiry of the lock-up. Nevertheless, the Company is unable to predict whether substantial amounts of Ordinary Shares (in addition to Placing Shares and/or Offer Shares) will be sold in the open market following the termination of the lock-up and orderly market arrangements. Any sales of substantial amounts of Ordinary Shares in the public market, or the perception that such sales might occur, could materially and adversely affect the market price of the Ordinary Shares.

Shareholder influence

Following Admission, the aggregate interest in the Company of the ARC Fund will amount to 125,103,064 Ordinary Shares, being 52.1 per cent. of the Enlarged Share Capital and the aggregate interest in the Company of Kropz International (in which Mike Nunn has a beneficial interest) will amount to 51,587,817 Ordinary Shares, being 21 per cent. of the Enlarged Share Capital. Accordingly, the ARC Fund and Kropz International (and therefore Mike Nunn) are in a position to have significant influence over the Company's operations and business strategy.

Notwithstanding that the ARC Fund has entered into the ARC Relationship Agreement and Mike Nunn and Kropz International have entered into the MN Relationship Agreement, as described in paragraphs 15.10 and 15.11 respectively of Part X (*Additional Information*) of this document, there is no guarantee that the ARC Fund, Kropz International or Mike Nunn's interests (either individually or jointly) will coincide with the interests of other Shareholders. The ARC Fund and/or Kropz International (and therefore Mike Nunn) will be in a position to exert significant influence over the Company's affairs, and will be able to significantly influence the outcome of any Shareholder resolution, irrespective of how other Shareholders vote.

The ARC Fund, Kropz International and Mike Nunn (either individually or jointly) may cause the Company to take actions that are not in the interests of the Company or its other Shareholders. In the event that the interests of one or more of ARC Fund, Kropz International and/or Mike Nunn (either individually or jointly) conflict with those of other Shareholders, such other Shareholders may be left in a disadvantageous position as a result of the actions of one or more of the ARC Fund, Mike Nunn and/or Kropz International.

Share price volatility

The trading price of the Ordinary Shares may be subject to wide fluctuations in response to a range of events and factors, such as variations in operating results, announcements of technological innovations or new products and services by the Enlarged Group or its competitors, changes in financial estimates and recommendations by securities analysts, the share price performance of other companies that investors may deem comparable to the Enlarged Group, the general market perception of mining companies, news reports relating to trends in the Enlarged Group's markets, legislative changes in the Enlarged Group's sector and other factors outside of the Enlarged Group's control. Such events and factors may adversely affect the trading price of the Ordinary Shares, regardless of the performance of the Enlarged Group. Prospective investors should be aware that the value of the Ordinary Shares could go down as well as up and investors may therefore not recover their original investment especially as the market in the Ordinary Shares may have limited liquidity.

Share options and warrants

As detailed in paragraph 10 of Part X (*Additional Information*) of this document, the Company has issued share options and warrants to, amongst others, certain directors and certain of its existing professional advisers. The Company may, in the future, issue further share options and/or warrants to subscribe for new Ordinary Shares to certain advisers, employees, Directors, senior management and consultants of the Enlarged Group. The exercise of any such share options and warrants would result in a dilution of the shareholdings of other investors.

There is no guarantee that the Company will maintain its quotation on AIM

The Company cannot assure investors that the Company will always retain a quotation on AIM. If the Company fails to do so, certain investors may decide to sell their Ordinary Share, which could have an adverse impact on the share price. Additionally, if in the future the Company decides to obtain a listing on another exchange this may affect the liquidity of the Ordinary Shares traded on AIM.

Forward looking statements

Historical facts, information gained from historic performance, present facts, circumstances and information and assumptions from all or any of these are not a guide to the future. Statements as to the Enlarged Group's aims, targets, plans and intentions and any other forward looking statement referred to or contained herein are no more than that and do not comprise forecasts. Any such forward looking statements are based on assumptions and estimates and involve risks, uncertainties and other factors which may cause the actual results, outcome, financial condition, performance, achievements or findings of the Enlarged Group to be materially different from any future results, performances or achievements expressed or implied by such forward looking statements.

PART III

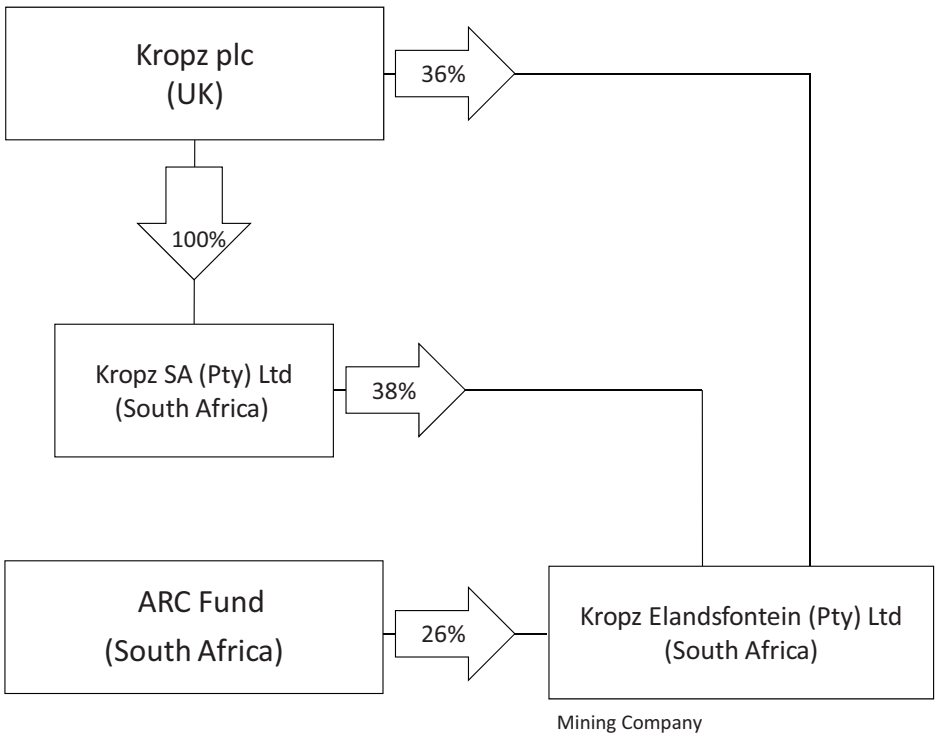
SECTION A

INFORMATION ON THE ELANDSFONTEIN PHOSPHATE PROJECT

1. Highlights

- Mining Right awarded on 30 January 2015.
- Competent Person Report completed by SRK (SA) confirming a JORC compliant Probable Reserve of 63.63Mt.
- SRK (SA) confirmed a JORC compliant gross Mineral Resource of 101.1Mt at an average grade of 7.65 per cent. P_2O_5, with 47.5Mt in the Measured category, at a grade of 10.31 per cent. P_2O_5.
- Near complete processing facility, designed to deliver up to 1.2Mtpa of rock concentrate from a shallow Mineral Resource.
- Operations expected to recommence in H2 2019.
- Conditional off-take agreement secured and principal terms agreed for additional off-take.
- CPR signed off NPV (at 8 per cent. discount rate) of US$262 million.
- Elandsfontein CPR cash flows indicate an internal rate of return (IRR) of 158 per cent.* on new capital, with a total project IRR of 26 per cent.*

2. Holding Structure



* IRR calculated from the cashflows in the Elandsfontein CPR financial model.

3. Timeline

Timeline	Details
2010	On 12 August 2010, ELH, purchased portions 2, 4, 5 and 7 of the farm Elandsfontein 349, and an adjacent property named Groenheuwel, to secure a land parcel of just over 4,900ha in size. The purchase of the land ensures that the Kropz Group hold all necessary surface rights over the mining area.
2010	On 17 June 2010, Kropz Elandsfontein applied for a prospecting right over portion 4 and a portion of portion 2 (1,428ha) of the farm Elandsfontein 349.
2013	On 26 July 2013, the prospecting right was subsequently granted by the DMR for a period of three years.
2013	On 11 December 2013, Kropz Elandsfontein application for the Mining Right over a portion of portion 2 and portion 4 (1530ha) of the farm Elandsfontein 349 was accepted by the DMR.
2015	On 30 January 2015, the Mining Right was granted by the DMR, commencing for a period of fifteen years ending on 29 January 2030.
2015	Environmental Management Plan approved by the DMR in February 2015.
2015	Construction of mine access road started in February 2015.
2015	Feasibility study completed in March 2015.
2015	Civil construction commenced in September 2015.
2015	Scheme departure obtained for mining from Saldanha Bay Municipality in December 2015.
2016	Application lodged for WUL in February 2016.
2016	Application lodged for atmospheric emissions licence in March 2016.
2016	Power lines and substation completed in April 2016.
2016	Mining development started in August 2016.
2017	WUL awarded in April 2017.
2017	Plant commissioning commenced in April 2017.
2017	Air emissions licence granted in May 2017.
2017	Mine operations placed under care and maintenance in August 2017.
27 November 2018	As part of the pre-Admission reorganisation, the Company acquired from Kropz International (i) the entire issued share capital of Kropz SA; (ii) 32 per cent. of the issued share capital of Kropz Elandsfontein; and (iii) 23 per cent. of the issued share capital of ELH.
27 November 2018	As part of the pre-Admission reorganisation, the Company acquired a further 4 per cent. interest in Kropz Elandsfontein from the ARC Fund following which the Company owns a 74 per cent. interest in the Elandsfontein Project (38 per cent. through Kropz SA and 36 per cent. directly).
2019	Commissioning is expected to commence in September 2019.

4. The Elandsfontein Phosphate Project

The Elandsfontein Project has the second largest phosphate deposit in South Africa, behind Foskor's operation in Phalaborwa. The sedimentary deposit is a free-digging operation and does not involve drilling or blasting activities. Elandsfontein has been developed with the capacity to produce up to 1.2Mtpa of rock concentrate from a shallow Mineral Resource which will be sold on both local and international markets.[1]

To date, Kropz Elandsfontein has spent approximately US$120 million on project capital expenditure to construct the processing plant and infrastructure, initial mining and capitalised working costs.[2] The infrastructure is substantially complete and appropriate. Further capital expenditure will however be required to upgrade the processing plant, in order to address the challenges identified during initial commissioning, further details of which are set out in paragraph 13 below (Initial Commissioning Problems and Proposed Remedial Work).

Elandsfontein's logistics are advantageous, ensuring continued and secure supply to port. Infrastructure includes a newly constructed mine access road onto a national freight route, connecting the mine to the deep-water Port of Saldanha. The Elandsfontein Project, is close to securing warehousing facilities back of port, with access to the existing port terminal via a haul road. The logistics allow easy access to both local and international markets.

In terms of competitiveness, the Directors believe that the Elandsfontein Project should enjoy advantageous freight rates to Brazil, once in full production, and it should also maintain a freight advantage in the important Indian market relative to the North African suppliers. New power lines have been erected to connect the operation to the Eskom grid. Water lines have been laid to connect the operation to the district municipality's water supply.[3]

5. Location of the Elandsfontein Project

Elandsfontein is located approximately 18km east of the Atlantic shore on the West Coast of South Africa, 95km north-northwest of Cape Town, near the town of Hopefield in South Africa's Western Cape Province.[4]

Source: Kropz, 2018

1 Elandsfontein CPR – executive summary, page iii.
2 Elandsfontein CPR – executive summary, page iii.
3 Elandsfontein CPR – executive summary, page iv.
4 Elandsfontein CPR – main report, page 47.

The mine is surrounded by private farms and borders the West Coast National Park to the south and west. The closest communities are Langebaan and Hopefield, approximately 14km to the west and 15km east of the mine respectively. The land on which the project is located was previously zoned as agricultural land, and no communities or economic activities were displaced as part of the mine development.[5]

6. Historical Work

The South African Geological Survey (currently the Council of Geoscience) initiated a multidisciplinary project in 1975 to study the recent sediments on the coastal plain between Cape Town and the Olifants River. During this study, a potential economic phosphate deposit was discovered on the farm Elandsfontein 349, situated some 15km southeast of the previously mined, Chemfos operation, owned and operated by Samancor. Phosphate mining began in the Chemfos operated area in 1943, and continued until 1993. Production peaked at 250,000 tonnes per annum of 29 per cent. P_2O_5 rock, produced from phosphatic sand.

Samancor obtained an option to purchase the surface and mineral rights over Portion 3 of the farm Elandsfontein, the land adjacent to Portion 4, which has been developed by Kropz Elandsfontein. A drilling program between 1984 and 1986, consisting of 18 boreholes on Portion 4 (for a total of 533m), confirmed the presence of potentially economic phosphate. A deposit restricted to the inside of the drilling area indicated a resource of 50Mt at grade of 10.1 per cent. P_2O_5. Metallurgical test work that was conducted on these samples proved that the ore could be upgraded to a saleable grade of 32 per cent. P_2O_5 by means of flotation. However, due to changes in Samancor's strategy, they chose not to develop the resource.

The Samancor data (including drilling logs, assay results and metallurgical test results) was purchased by Kropz Elandsfontein from the Council of Geoscience in 2012. Using this information, a 3D geological model was built, to assist with the planning of the Elandsfontein drilling.

6.1 Kropz Drilling Programme

Kropz Elandsfontein initiated its drilling campaign in October 2013, with the initial aim to replicate three of the previous Samancor holes, to verify the historical Samancor results. The results from the initial drilling and assays by an independent laboratory, SGS South Africa (Pty) Ltd, confirmed that the Samancor data could be used for the resource calculations.

The semi consolidated overburden and orebody, posed a challenge for sample recovery during drilling. Forty one HQ size (96mm hole diameter, 63.5mm core diameter), triple tubed, vertical holes, were drilled using a four step spiral bit.

From the exploration drilling campaigns, certain sites were selected as suitable for reverse circulation drilling to extract surplus for metallurgical testing. A total of 26 reverse circulation holes were drilled to delineate the resource and check variations on a smaller grid.

In 2017, the diamond and reverse circulation program were followed up by additional sonic core drilling. A total of 11 sonic holes were drilled. During 2017 an additional 13 reverse circulation holes were also drilled (for a total of 427m) in support of the pit development for the first box cut.[6]

Summary of drilling on the Elandsfontein property

	Period	Type	Size (mm)	No. of holes	Average recovery	Total metres drilled
Samancor	1977-1985	RC	Unknown	18	NA	Unknown
Orientation (Geoserve)	2013	DD	HQ 63.5	41	80%	918
RC phase 1	2015 to 2017	RC	114	26	80%	839
RC phase 2	2017	RC	114	13	80%	427
Sonic	2017	Sonic	110	11	90%	567

Source: Kropz, 2018

5 Elandsfontein CPR – main report, page 47.
6 Elandsfontein CPR – main report, page 60.

6.2 Feasibility Studies

In October 2013, Kropz Elandsfontein commissioned Royal Haskoning DHV (Pty) Ltd (''**RHDHV**'') (previously Turgis Consulting (Pty) Ltd) to conduct a scoping study on the Elandsfontein Project to determine high level economic feasibility of the project. The outcome of the scoping study was intended to guide the decision on the mining right application, further geological drilling and metallurgical test work. The study was largely based on the drilling and metallurgical test work completed by Samancor. Additional geological drilling was carried out while the scoping study was underway.

The positive outcome of the scoping study lead to the submission of the Mining Right application in December 2013.

In March 2014, on the completion of the geological drilling, and receipt of first metallurgical test work results from SGS in Johannesburg, Kropz Elandsfontein approached a number of engineering companies to tender for the completion of a feasibility study for the project, focussing on mining, beneficiation and concentrate logistics. DRA was awarded the contract. Design of the mine access road and bulk electrical supply was undertaken by RHDHV.

Following the drilling campaign that was undertaken by Kropz Elandsfontein, Snowden Mining Industry Consultants (Pty) Ltd (''**Snowden**'') prepared a Mineral Resource Estimate. The resource block model was classified as Indicated and Inferred based on the drill spacing, grade continuity and drilling recovery. DRA converted the resource to a Probable Reserve for mine design.

The process design commenced based on historical test work completed by Samancor and SGS. The results indicated that saleable concentrate could be produced by flotation. Once adequate samples were available, test work commenced concurrently at Mintek (Pty) Ltd (''**Mintek**'') in South Africa and Eriez Manufacturing Co (''**Eriez**'') in the USA. The flotation test work conducted confirmed that column cell technology was required, as grade could not be achieved in the Mintek flotation campaign. Mintek continued with other exploratory test work and Eriez focussed on flotation test work. In the second pilot run at Eriez, the proposed direct flotation circuit produced unsatisfactory grade and recovery. Eriez conducted further test work to define an appropriate flotation circuit. In the subsequent four bulk runs at Eriez, reverse flotation was successfully tested and achieved concentrate grades of 31.5 per cent. P_2O_5 at acceptable flotation recoveries. During the four runs, head grades varied between 6.5 per cent. and 13 per cent. P_2O_5. Based on these results a flow sheet was developed that included screening, cyclone classification and milling, reverse flotation of a coarse and fine fraction, concentrate dewatering, tailings dewatering, concentrate handling and tailings handling.

The feasibility study was completed in March 2015, and provided a capital and operating cost estimate, and project execution plan for the development and construction of the Elandsfontein Project. Based on the positive economic results of the feasibility study, Kropz Elandsfontein decided to approach the market in a competitive tender process for the engineering, procurement, and construction management (''**EPCM**'') services for the execution of the Elandsfontein Project. The EPCM contract was awarded to DRA.

In November 2015, SRK (SA), who was appointed to provide an independent technical review, issued a due diligence report on the compliance of the mineral resource estimate to the JORC Code, the recently completed feasibility study, and the social and environmental compliance to the Equator Principles. SRK identified one material issue, namely the behaviour of the clay layer underlying the mineral resource and the Elandsfontein aquifer, when exposed during mining. It was suggested that the clay layer below the ore body may bulge upwards and crack when the load above it (i.e. mineral resource and overburden) was removed. The remainder of the risks identified had been substantially reduced during further test work and design which had been continuing in parallel with the technical review.

As a result of the due diligence findings and subsequent geotechnical work on the clay layer, the mine design was changed, the position of the box cut was moved to its current position, and the width of the mining strips was reduced such that the maximum exposed width at the base of the pit would never exceed 50m.

7. Licences and Mining Rights

The following Mining Right was granted in terms of Section 23(1) of the MPRDA:

MR Number	*Current Holding Company*	*Company Interest*	*Minerals*	*Status*	*Area*
WC/5/1/2/2/10043MR	Kropz Elandsfontein	74 per cent. (held through Kropz Elandsfontein)	Phosphate and silica sand	Right commenced on 30 January 2015 for a period of fifteen years ending on 29 January 2030	1529.6711 hectare

8. Surface Rights

Kropz Elandsfontein does not hold the surface rights of the area over which the Mining Right has been granted. The owner of the land, ELH, has granted Kropz Elandsfontein written permission to prospect and mine on this land, pursuant to a land use and compensation agreement dated 25 April 2016, further details of which are set out in paragraph 15.22 of Part X (*Additional Information*) of this document. ELH is owned by the Company (23 per cent.), Kropz SA (47 per cent.) and ARC (30 per cent.).

9. Geology

The Elandsfontein phosphate deposit belongs to the sedimentary phosphate deposit type known as phosphorites. In South Africa, and specifically in the Western Cape Province both authogenic and diagenetically modified phosphorite deposits have been identified in the Langebaan area. The phosphate mineralization at Elandsfontein is in the form of the calcium phosphate mineral apatite.[7]

The Elandsfontein phosphate deposit is situated in the south western coastal region of South Africa. This area is underlain by the Miocene and Paleocene Sandveld Group comprising of the Elandsfontyn, Varswater, Velddrif, Langebaan, Springfontein Hill and Witzand Formations. This Group is dated between the Miocene and the Pliocene. The Varswater Formation hosts the Elandsfontein phosphate deposit. The Sandveld Group unconformably overlies the Neoproterozoic Malmesbury Group and plutons of the Cape Granite Suite.[8]

The Varswater Formation is formed by estuary and marine sediments, which locally overlie the Elandsfontyn Formation and consists of poorly sorted angular sands and gravels grading upwards into carbonaceous clays and peaty material, known as the Langeenheid Clay Member.[9]

The Elandsfontein phosphate deposit occurs at an approximate depth of 55 – 57m.[10] and is located within the upper Elandsfontein aquifer. Groundwater in the upper Elandsfontein aquifer flows in a south-westerly direction towards Langebaan Lagoon (approximately 12km away) and onwards to the coastline. The natural groundwater levels mostly lie between 10 and 20mbgl at the mine site. Thus, most of the phosphate deposit is situated below the natural water table and dewatering is required to provide practical and safe mining conditions.[11]

7 Elandsfontein CPR – executive summary, page v.
8 Elandsfontein CPR – executive summary, page v.
9 Elandsfontein CPR – executive summary, page v.
10 Elandsfontein CPR – executive summary, page ix.
11 Elandsfontein CPR – main report, page 105.

10. Mineral Resource and Ore Reserve

In 2014, Snowden prepared a Mineral Resource Estimate for Elandsfontein, based on all historical work. Following additional exploration work undertaken in 2015 and 2017, Snowden updated its Mineral Resource estimate in 2018. SRK independently re-estimated the Elandsfontein Mineral Resource in 2018 and reported the tonnages and grades reported below. These do not materially differ from the 2018 Snowden estimate.

	Gross							
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**Grade (%Al_2O_3)**	**Grade (%MgO)**	**Grade (%Fe_2O_3)**	**Grade (%CaO)**	**Grade (%SiO_2)**	**Contained P_2O_5 (Mt)**
Measured	47.5	10.31	1.18	0.20	0.98	14.9	69.8	4.90
Indicated	30.3	5.14	1.15	0.12	0.85	7.1	82.9	1.56
Inferred	23.3	5.48	1.15	0.13	0.95	7.5	82.5	1.28
Total	**101.1**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**7.73**
	Net Attributable (74 per cent. attributable to the Company)							
Measured	35.2	10.31	1.18	0.20	0.98	14.9	69.8	3.62
Indicated	22.4	5.14	1.15	0.12	0.85	7.1	82.9	1.15
Inferred	17.2	5.48	1.15	0.13	0.95	7.5	82.5	0.94
Total	**74.8**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**5.72**

Source: Elandsfontein CPR – executive summary, page viii.

SRK (SA) has classified the planned measured and indicated mineral resources as Probable Ore Reserves. The Ore Reserves for Elandsfontein, based on the mine planning process set out in paragraph 11 below (Mining), is presented below.

	Gross		
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**P_2O_5 Content (Mt)**
Proven			
Probable	63.63	9.60	6.11
Total	**63.63**	**9.60**	**6.11**
	Net Attributable (74 per cent. attributable to the Company)		
Proven			
Probable	47.09	9.60	4.52
Total	**47.09**	**9.60**	**4.52**

Source: Elandsfontein CPR – executive summary, page ix.

11. Mining

The Elandsfontein Phosphate Project is planned to be mined by conventional open pit mining methods, though no production drilling and blasting is necessary due to the sandy characteristics (with only low percentage of thin hard rock lenses) of the deposit.[12] Specifically, a roll over mining method has been employed. The mining will take place in a number of discrete phases, which will reduce the overall mining foot print:

12 Elandsfontein CPR – executive summary, page viii.

- topsoil is removed and stockpiled;
- soft overburden is stripped and hauled to the softs stockpile for the first two years only;
- phosphate ore is mined, hauled to the ROM tip, and conveyed to the plant;
- the mined-out strips are then immediately backfilled (after year 2) with the soft overburden and tailings sands from the plant; and
- topsoil is returned to the backfilled strips to complete the rehabilitation process.

The mining box cut development includes a ramp to the top of ore. Mining will proceed on several benches concurrently. The mining fleet, consisting of 50 tonne articulated dump trucks, will be loaded by hydraulic excavators in a backhoe configuration. The dump trucks will transport the material to the appropriate destination and return to the excavator in a cyclic manner.

The mining will take place sequentially from the north east to the south west of the mining licence area in cuts with a maximum mining width at the bottom of the cut not exceeding 50 m. This maximum width is to ensure the clay layer below the mineralised zones does not fail under the artesian water pressure from below. The mining method has proven, during the 2017 commissioning phase, that it is efficient in removing overburden and Mineral Resource material to supply the plant with ore.[13]

The mining area is currently being dewatered by a system comprising 36 boreholes drilled through the upper aquifer unit down to the top of the underlying clay layer. It was agreed to mitigate any potential drawdown risk to local surface environment by actively recharging the aquifer with the dewatering scheme water on the coastal side (hydraulically down-gradient) of the mining site. This is undertaken using 20 injection boreholes, which are gravity fed from a closed tank.[14]

12. Processing

RoM material is crushed using a mineral sizer, before being conveyed to the processing facility. A milling and classification circuit, using screens and hydrocyclones, prepares the ore for flotation.

In line with test findings, the selected process route included reverse-reverse flotation. By way of clarification, there are two principal modes of flotation. Direct flotation is the process in which the desirable minerals are floated and recovered to final product, while the undesirable gangue is depressed and rejected to tailings. In reverse flotation, the undesirable gangue is floated and rejected to tailings, while the desirable minerals are depressed and recovered to final product. In the selected reverse-reverse arrangement, reverse flotation was employed in both roughing and cleaning circuits.[15]

Concentrate and tailings streams are thickened and filtered. The concentrate is dried and stored for dispatch to port via road, while the tailings is collected, initially for deposition on the softs stockpile, until steady state mining is reached, after which it will be co-deposited with overburden as part of the backfilling operation.

Construction of the Elandsfontein Phosphate Project commenced in February 2015.[16]

First ore was processed through the plant on 28 March 2017. Failure of the mill motor shortly thereafter resulted in a 10-week delay in the commissioning process. Following the re-commencement of commissioning, a number of issues and challenges were experienced that prevented the continuous production of on-specification rock phosphate concentrate. On 28 July 2017, in light of these issues and the falling phosphate price at the time, the Kropz Elandsfontein management team took the decision to suspend operations and delay further commissioning efforts and place the mine on care and maintenance.[17]

13. Initial Commissioning Problems and Proposed Remedial Work

Assisted by experts in the field of phosphate processing, the Company examined the causes behind the initial challenges experienced in the plant. A number of key factors have been identified and it is now proposed to address these and re-commission a modified reverse-reverse circuit.[18]

13 Elandsfontein CPR – executive summary, page viii.
14 Elandsfontein CPR – main report, page 107.
15 Elandsfontein CPR – main report, page 50.
16 Elandsfontein CPR – executive summary, page xii.
17 Elandsfontein CPR – main report, page 50.
18 Elandsfontein CPR – main report, page 50.

Non Representative Feed

Relocation of the boxcut and initial delayed dewatering resulted in the total ore package not being accessible ahead of commissioning. The plant was accordingly commissioned on ore that differed significantly in terms of mineralogy, grade and particle size distribution from the composite samples that were tested.[19]

Dewatering has continued since the suspension of mining operations, and it is anticipated that ongoing dewatering will allow access to virtually the complete ore package when the plant is recommissioned which should allow the mine to process material as per its original mine plan.[20]

Impact of Slimes

Experts advised that the use of amines for reverse flotation of silica from phosphate requires clean particle surfaces and water that is free of slimes and dissolved salts. It was evident during initial commissioning that slimes handling was ineffective, and the recycled water stream was unsuitable and impacted negatively on flotation performance. In addressing the slimes issues, a number of actions are proposed:

- the desliming cut point will be increased from 10μm to 20μm. SRK (SA) believes this should reduce slime related problems;
- though not strictly related to sliming, it is planned to replace the split coarse and fine flotation circuits with a single circuit handling the composite size range. This is considered an appropriate solution by SRK (SA), subject to confirmation in the planned pilot test programme; and
- a new thickener and ancillary equipment will be installed to separate the slimes and tailings circuits. SRK (SA) believes this should significantly reduce the impact of slimes and the effect of residual reagents and flocculant, and improve the quality of the recycled water.[21]

Apatite Rimming

A RoM sample, taken after the last commissioning run, was submitted for Scanning Electron Microscopy analysis. It was evident that certain quartz grains had coatings of ultra-fine apatite and clay cement binding the silica particles, as well as occasional rims comprising only of apatite. It is possible that such rimming may impact negatively on flotation performance, in that such a rimmed particle may present itself as apatite in flotation, resulting in contamination of the concentrate by silica. In order to address the attritioning concern, two attrition scrubbers will be incorporated into the modified comminution circuit.[22]

Inadequate Conditioning

The original plant design relied on in-circuit amine conditioning rather than dedicated conditioning tanks ahead of the flotation circuit. The modified flotation circuit will accordingly be provided with a conditioning tank and pumps.

According to SRK (SA), it is reasonable to expect that the proposed remedial action will allow the plant to meet its baseline targeted performance.[23]

Future Mineral Processing

It is SRK (SA)'s opinion that analysis of the overall spectrum of historical and recent test results, plus an understanding of the causes behind earlier non-performance as assisted by experts within this field, support the decision to remain with the reverse-reverse flotation configuration. Further support is derived from the experience of other international operations that have experienced and managed to overcome similar issues. It is accordingly proposed to re-commission the plant with the original configuration once the following modifications have been implemented:

- Modification of the classification circuit to allow the desliming cut point to be increased from 10μm to 20μm;

19 Elandsfontein CPR – main report, page 170.
20 Elandsfontein CPR – main report, page 170.
21 Elandsfontein CPR – main report, page 171.
22 Elandsfontein CPR – main report, page 171.
23 Elandsfontein CPR – main report, page 171.

- Reconfiguration of the flotation circuit to replace the split coarse and fine flotation circuits with a single circuit handling the combined size range;
- Amine conditioning ahead of rougher flotation;
- Provisional allowance for a mechanical rougher scavenger;
- Installation of a new thickener and ancillary equipment in order to separate the slimes and tailings circuits; and
- Installation of two attrition scrubbers to clean particle surfaces ahead of flotation.[24]

14. Off-Take Arrangements

Kropz has a conditional off-take agreement already in place, together with further off-take terms agreed in principle for a total of 100 per cent. of the production from the Elandsfontein Project. Further details relating to conditional off-take arrangements already in place are contained in paragraphs 15.30 – 15.32 of Part X (*Additional Information*) of this document.

24 Elandsfontein CPR – executive summary, pages xiv-xv.

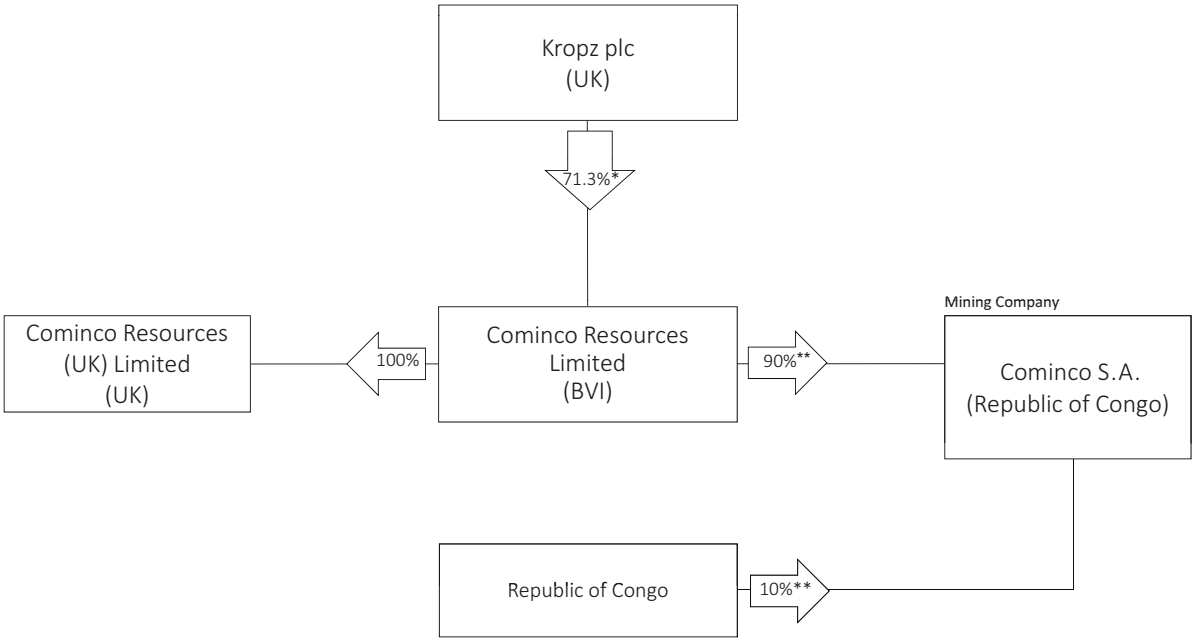
SECTION B

INFORMATION ON THE HINDA PHOSPHATE PROJECT

1. Highlights

- Hinda Exploitation Licence awarded on 17 December 2015.
- Competent Person Report completed by SRK (UK) confirming a total JORC compliant Mineral Resource of 675.8Mt at a grade of 10.0 per cent. P_2O_5.
- Of the total Mineral Resource, 86 per cent. is included in the Measured and Indicated categories, consisting of 200.5Mt Measured material at a grade of 11.6 per cent. P_2O_5, and 380.9Mt Indicated material at a grade of 9.8 per cent. P_2O_5.
- 2015 DFS with sound technical mining and processing solution, showing positive economic outcomes with unleveraged NPV (assuming a 10 per cent. discount rate) of US$1.85 billion and an associated IRR of 38 per cent. (in 2015 terms).
- Approved Environmental and Social Impact Assessment ("**ESIA**") for the Hinda Exploitation Licence.
- Hinda Convention signed with the Republic of Congo giving stability of title and fiscal conditions, significant tax exonerations.
- A 12-month works programme is in place that will aim to review and verify the underlying design parameters, assess various optimisation opportunities and develop a proposed single solution to feasibility study level, accompanied by a $\pm$ 15 per cent. cost estimate and updated ESIA.

2. Holding Structure



* As at Admission and may increase to up to 100 per cent. if the remaining Cominco Shareholders accept the Offer by Final Closing Date.

**Cominco S.A. currently owns 100 per cent. of the Hinda Project which is expected to be diluted to 90 per cent. through the participation of the Republic of Congo.

3. Timeline

Timeline	Details
2008	Cominco S.A. (then called African Investment Group Congo SA) was formed.
2010	Cominco S.A. granted a mining exploration licence for phosphates in the Kouilou department, which was valid for 3 years, from 21 January 2010 to 20 January 2013.
2010	Exploration commenced in April 2010 including satellite imagery and airborne geophysical surveys. It was found that phosphate mineralisation extended to the border of the Hinda Exploration Licence and beyond.
2011	Cominco granted a mining exploration licence for phosphates in the Kouilou department, which was valid for 3 years, from 14 April 2011 to 13 April 2014.
2013	PFS targeting production of 4.1Mtpa completed in November. A second renewal of the Hinda Exploration Licence was granted to Cominco S.A. for two more years, commencing on 15 August 2013 to 14 August 2015.
2015	The 2015 DFS confirmed the economics of a 24-year life project to exploit the ore types within the Hinda, in line with the PFS.
2015	The ROC Council of Ministers granted Cominco the Hinda Exploitation Licence.
2016	The ESIA for the Hinda Exploitation Licence duly approved by the Minister in charge of Environment.
2016	A third renewal of the Hinda Exploration Licence was granted to Cominco S.A. for 2 more years, commencing on 19 May 2016 to 18 May 2018.
10 July 2018	Cominco S.A. and Cominco entered into the Hinda Convention with the Republic of Congo, to regulate operations under the Hinda Exploitation Licence.
1 November 2018	Offer Document sent to Cominco Shareholders.
21 November 2018	First Closing Date of the Offer and the Offer unconditional as to acceptances.
Admission	Offer wholly unconditional and acquisition of 71.3 per cent. of Cominco completes and Admission of First Offer Shares to trading on AIM.
30 November 2018	Final Closing Date of the Offer.
7 December 2018	Admission of Further Offer Shares to trading on AIM expected to become effective.

4. The Hinda Phosphate Project

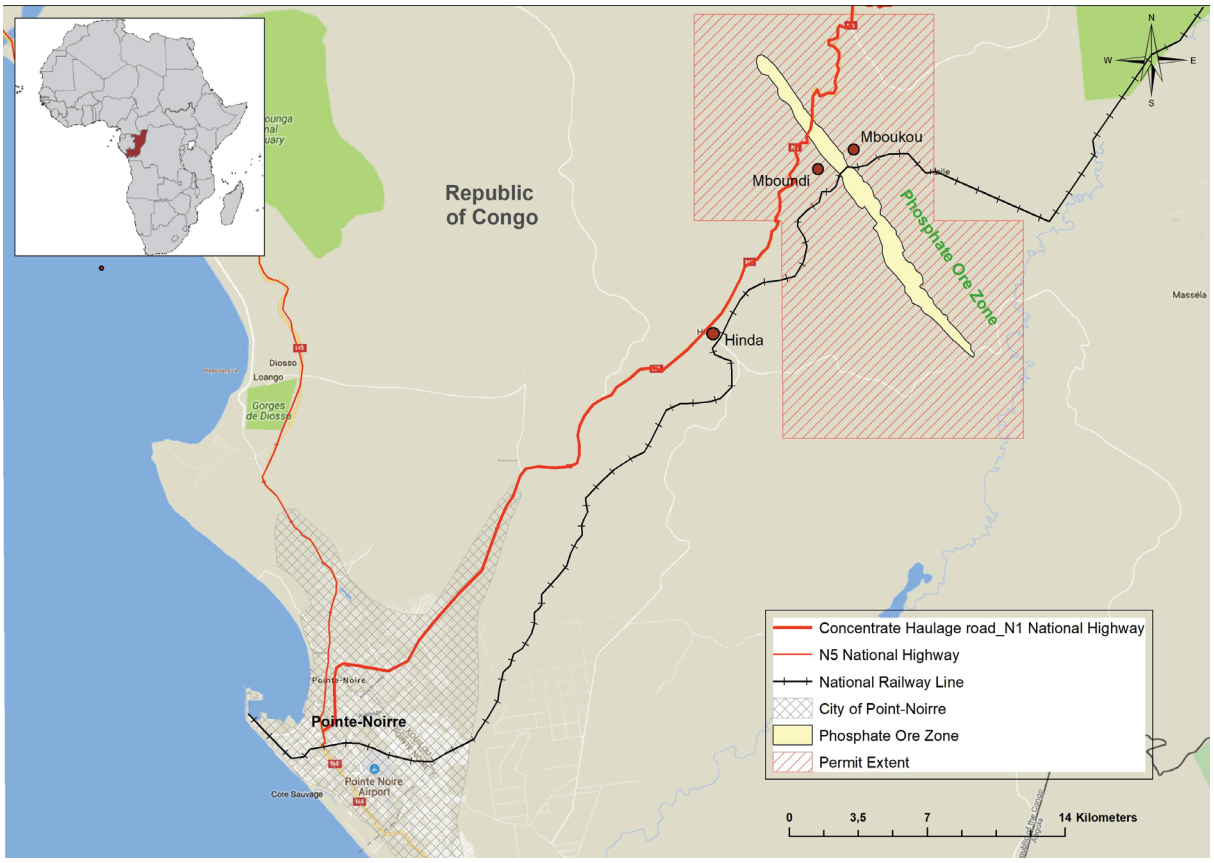
The Hinda phosphate deposit is believed to be one of the world's largest undeveloped phosphate reserves.[1] Like Elandsfontein, the sedimentary deposit is a free-digging operation and does not involve drilling and blasting activities. The 2015 DFS showed positive economic results for a 4.1Mtpa project. It is the Directors' opinion that whilst the 2015 DFS reported a positive economic outcome, that in consideration of the long-term supply/demand conditions of the phosphate rock market and the current economic market conditions, that an initially reduced capacity project targeting the production between 1.0Mtpa and 1.2Mtpa, potentially increasing to 2.0Mtpa, can be developed for a significantly lower level of upfront capital investment.

To date, approximately US$50 million has been spent on project development, including drilling, metallurgical test work and feasibility studies.

In terms of competitiveness, the Directors believe that the Hinda Project, as a result of the phosphate deportment and project location, can be competitively positioned on the phosphate production cost curve. Furthermore, they believe that the Hinda Project should enjoy advantageous freight rates to North America and Brazil, once in full production.

5. Location of the Project

The Hinda Project is located in the southwest of the Republic of Congo, approximately 30km northeast of Pointe-Noire, and approximately 10km northeast of Hinda village**.** Access to the site from Pointe-Noire is via National Road, N1, a paved dual carriageway connecting Pointe-Noire with the capital, Brazzaville. N1 passes through Hinda village from where an existing 12km track connects Hinda village to the project site. Pointe-Noire port is the largest deep-water port on the African west coast, and has regular container traffic, handling over 12Mt each year.[2]



A 300MW gas-fired power station and the national oil refinery lie respectively south and north of Pointe-Noire. The nearest national grid substation is located 17km from the Hinda Project's proposed beneficiation plant site.[3]

1 2015 DFS – executive summary, page 41.
2 Hinda CPR – main report, page 35.
3 Hinda CPR – main report, page 35.

6. Licences and Mining Rights

The Hinda Exploitation Licence was granted through a presidential decree. Operations conducted within the framework of the Hinda Exploitation Licence are regulated by the Hinda Convention which was signed on 10 July 2018 with the Republic of Congo. The Hinda Convention expires on 16 December 2040, the same time as the Hinda Exploitation Licence, subject to the licence's renewals.

Under the Hinda Convention, upon the satisfaction of certain suspensive conditions, the Republic of Congo is entitled to a 10 per cent. equity interest on a free-carry basis in the share capital of Cominco S.A., whereby it will not contribute to any of the required financing and costs but will have rights to 10 per cent. of dividends distributions, 10 per cent. of voting rights and at least one seat on Cominco S.A.'s board of directors. In addition, the Republic of Congo is entitled to acquire an additional 5 per cent. equity interest in Cominco S.A.'s share-capital on a fully participating basis.

MR Number	*Current Holding Company*	*Company Interest*	*Minerals*	*Status*	*Area*
2015-975	Cominco S.A.	63 per cent. (as at Admission, held through Cominco S.A.)*	Phosphate	Right commenced on 17 December 2015 until 16 December 2040 (renewable for periods of 15 years thereafter)	263.68km^2

* Percentage interest calculated on the basis of 70 per cent. acceptances for the Offer and assuming a 10 per cent. dilution by virtue of Republic of Congo's participation right.

7. Surface Rights

Provided that it is in the public interest, upon the request of a holder of an exploitation licence, the government of the Republic of Congo may make a Declaration of Public Utility ("**DUP**" or Declaration d'Utilité Publique), whereby land within and outside the mining licence concession area may be expropriated from its existing owners in order to accommodate the needs of the mining project, its works and installations. Under Congolese Law number 11-2004, any expropriation for DUP purposes includes the following consecutive steps: (i) a preliminary inquiry (ii) the declaration of public utility or DUP; (iii) a detailed inquiry; (iv) execution of a Decree or Order materialising transfer and (v) payment of the requisite compensation to the former owner of the expropriated land area. Pipes, transport routes and installations used/built on a land recognised of public interest may be subject to public services obligations under the conditions set in the bill of specifications. The DUP process has been documented and is planned to commence early in 2019.

8. Geology

The Hinda phosphate deposit forms part of the Lower Congo Basin which is known to be prospective for phosphate, potash and hydrocarbons, which is characteristic of an environment typified by continental rifting, ocean opening and the formation of deep sea sediment fans.[4]

The morphology and location of the phosphate bearing horizons is strongly associated with the structural evolution of the Lower Congo basin. Sediments in the basin are part of a Cretaceous-Tertiary sequence, bounded by the Precambrian basement Mayombe Massif. The basin was generated during rifting associated with the opening of the South Atlantic in the Lower Cretaceous period. Generally, the surface topography reflects the underlying bedrock morphology. Typically, streams trend in a north-northwest to south-southeast trend, which reflect fault escarpments.[5]

Definition of lithologies within the project area has largely focussed on sediments within the graben. The primary phosphate mineral is carbonate-fluorapatite, also known as francolite. Part of the phosphate mineralisation is formed during supergene enrichment, when the upper parts of the sequence were exposed to surface process, during a period of tectonic uplift.[6]

4 Hinda CPR – main report, page 19.
5 Hinda CPR – main report, page 20.
6 Hinda CPR – main report, page 21.

The phosphate mineralisation is hosted by the Upper Cretaceous (65Ma to 72Ma) Holle Formation and younger sediments situated within the Cretaceous to Quaternary terrestrial and marine succession. Being sedimentary in nature, the mineralisation is typically flat lying, with approximately 20km strike length currently explored sufficiently to be included in the Mineral Resource estimate.[7]

The phosphate bearing units consist of coarse and poorly sorted coprolitic quartz rich marine sediments, and typically consist of sharks' teeth, coprolites, fish bones, pellets and some phosphate rich micrite clasts. These units are interpreted as being pristine marine sediments, which have been subjected to varying amounts of weathering. A quartz pebble conglomerate marks the footwall of the mineralisation. The phosphate bearing units have been altered through weathering, which took place in the upper portion of the original phosphate series.[8]

9. Mineral Resource

The Mineral Resource estimates completed for the Hinda Project between 2012 and 2014 were authored by CSA Global (UK) Ltd ("**CSA**"). The drill hole database was also managed by CSA during the drilling programmes. The final drilling dataset used to estimate the Mineral Resources comprised 557 holes, with a total meterage of 44,095m.[9] Of these holes, 52 (5,127m) were diamond core, and 505 (38,968m) were drilled using aircore methods.

As part of the preparation of the CPR, SRK (UK) reviewed the processes used to estimate and report the Mineral Resource Statement, which are derived using 3D computerised techniques. In SRK's opinion, all processes are aligned with good international practice.

	Gross							
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**Grade (%Al_2O_3)**	**Grade (%MgO)**	**Grade (%Fe_2O_3)**	**Grade (%CaO)**	**Grade (%SiO_2)**	**Contained P_2O_5 (Mt)**
Measured	200.5	11.6	3.7	3.8	1.4	21.8	42.7	23.3
Indicated	380.9	9.8	5.0	3.3	1.8	17.6	48.5	37.3
Inferred	94.4	7.5	4.8	3.6	1.7	15.8	52.2	7.1
Total	**675.8**	**10.0**	**4.6**	**3.5**	**1.7**	**18.6**	**47.3**	67.7
	Net Attributable (63% attributable to the Company)*							
Measured	126.3	11.6	3.7	3.8	1.4	21.8	42.7	14.7
Indicated	240.0	9.8	5.0	3.3	1.8	17.6	48.5	23.5
Inferred	59.5	7.5	4.8	3.6	1.7	15.8	52.2	4.5
Total	**425.8**	**10.0**	**4.6**	**3.5**	**1.7**	**18.6**	**47.3**	**42.6**

Source: Hinda CPR – executive summary, page i.

* Net attributable, calculated on the basis of 70 per cent. acceptances for the Offer and assuming a 10 per cent. dilution by virtue of the Republic of Congo's participation right.

10. Feasibility Studies

A scoping study for the Hinda Project was completed in 2012. A PFS for production of 4.1Mtpa was completed in November 2013. This work established the technical and economic feasibility of the Hinda Project, which, at the time, was aiming to be one of the top 10 phosphate producers in the world. In January 2014, Cominco awarded a contract to Ausenco Engineering Canada Inc. ("**Ausenco**") for the provision of services relating to specification and supervision of metallurgical test work, design of the beneficiation plant, infrastructure, power supply, slurry pipeline, product drying, storage and ship loading components, in the preparation of the Hinda DFS. SRK (UK) was engaged by Cominco to complete the hydrology, hydrogeology, dewatering, pit geotechnical, mine planning and tailings storage components of the DFS.

The 2015 DFS targeted the production of 4.1Mtpa of phosphate concentrate at a concentrate grade of 32 per cent. P_2O_5. At the time of reporting the 2015 DFS, based on the technical and economic parameters defined, the unleveraged NPV (assuming a 10 per cent. discount rate) was

7 Hinda CPR – main report, page 21.
8 Hinda CPR – main report, page 22.
9 Hinda CPR – main report, page 27.

US$1.85bn, with an associated IRR of 38 per cent., based on an average life of mine, rock concentrate price (life of mine) of US$149/t, initial capital investment of US$601.3 million and operating costs of US$36.6/t for the first 5 years and US$47.9/t thereafter.[10]

The Company's current strategic plan is to target capital costs for the refined capacity scenario for the mine, beneficiation plant and associated infrastructure at the Hinda Project, of between US$80 million and US$100 million. This estimate is based on the Company's internal benchmarking against the Elandsfontein Project currently under development in South Africa.[11]

10.1. Mining

The 2015 DFS mining proposed using conventional open pit truck and shovel methods, with IPCC systems installed for both free dig ore and waste. Operations are to start in the southernmost corner of the deposit and, once at full depth, will advance northwest along strike at an average annual rate of approximately 700m, allowing for continual backfill.[12]

10.2. Processing

The Hinda Project is supported by a substantial body of mineral processing test work as part of the historical pre-feasibility and definitive feasibility studies, which has subsequently been reviewed by independent potential third party off takers, that supports the design input parameters for the beneficiation plant design.[13]

Metallurgical test work, summarised in the Hinda CPR, addresses the following:

- Crushing test work at laboratory and pilot scale;
- Attritioning test work;
- Milling and classification work at pilot scale;
- Flotation test work at pilot scale at a number of international laboratories;
- Solid-liquid separation test work by international equipment suppliers; and
- Acidulation test work.[14]

The processing plant consists of secondary crushing using a mineral sizer, an attritioning circuit to recover additional phosphate, sizing and classification using screens and hydrocyclones and ball milling ahead of flotation. The flotation circuit consists of three stages of conditioning, a reverse rougher flotation followed by a reverse cleaner flotation.

In the 2015 DFS, thickened concentrate was pumped to Pointe Indienne, where it was filtered and dried. The capital costs included the construction of a 42km buried concentrate pipeline, and jetty.

10.3. Way Forward

The Company has prepared a phased programme of works that will review and verify the underlying design parameters, conduct an option analysis to trade-off various optimisation opportunities and develop a single solution to definitive feasibility study level, accompanied by a $\pm$15 per cent. cost estimate and updated ESIA. The revised lower capital cost option envisioned by the Company, and commented on by SRK (UK) as competent persons, will test the following opportunities associated with a reduced production rate:

- Reduced capital costs:
  - reduced processing plant size and reassessment of its positioning in relation to the mine and access road;
  - opportunity to preferentially mine the higher-grade weathered ore in the earlier phases of mine operations, potentially deferring the requirement to implement the flotation circuit;
  - switching from an owner operated model for mining to a contractor operating model, reducing mining equipment/fleet requirements;

10 Hinda CPR – executive summary, page i.
11 Hinda CPR – executive summary, page ii.
12 Hinda CPR – main report, page 41.
13 Hinda CPR – main report, page 85.
14 Hinda CPR – main report, pages 47-52.

- reconsideration of the IPCC system and trading off the deferment of the ore IPCC system based on the revised plant location and mine schedule. This in turn may lead to an opportunity to reengineer the scale of the transport corridor to consider reduced load bearing requirements;
- deferment of substantial capital expenditure relating to the expansion of tailings and surface water management infrastructure to later periods in the project schedule.;
- removal of the slurry pipeline infrastructure for transport of concentrate from the mine site to the port, instead considering logistics contractors, thus avoiding the capital investment associated with the infrastructure and fleet;
- reorganisation of the site infrastructure and facilities, to a single location, to include the processing plant and thickening, filtration, drying (that was previously located at Point Indienne, thus avoiding capital investment for additional site offices and workshops, control room, reagent and fuel storage facilities); and
- utilising the existing port of Pointe-Noire, rather than the construction of a purpose-built facility at Port Indienne.[15]

In the opinion of SRK (UK), based on the findings and the level of work previously completed on the project, there is good merit in following the proposed programme of works considering a reduced production rate, where there may also be operational benefits of selecting a smaller scale project.[16]

The Company has allocated a total budget of US$1.77 million, with approximately US$0.8 million to update the feasibility study, and US$0.5 million allocated to update the ESIA. The study is proposed to be completed over a 10 to 12 month period. SRK (UK) is of the opinion that the programme of work as proposed contains appropriate activities to rescale the Hinda Project and produce an updated definitive feasibility study, including cost estimate, and ESIA. The Company has furthermore allowed a reasonable duration for the completion of these activities and sufficient budget to conduct the base case programme. It shall be noted that should the Company wish to consider the option of prioritising production of BM ore formation material, then this would require additional time and budget to complete on top of that presented, including a programme of additional drilling.[17]

15 Hinda CPR – executive summary, pages ii-iii.
16 Hinda CPR – executive summary, page iii.
17 Hinda CPR – executive summary, page iv.

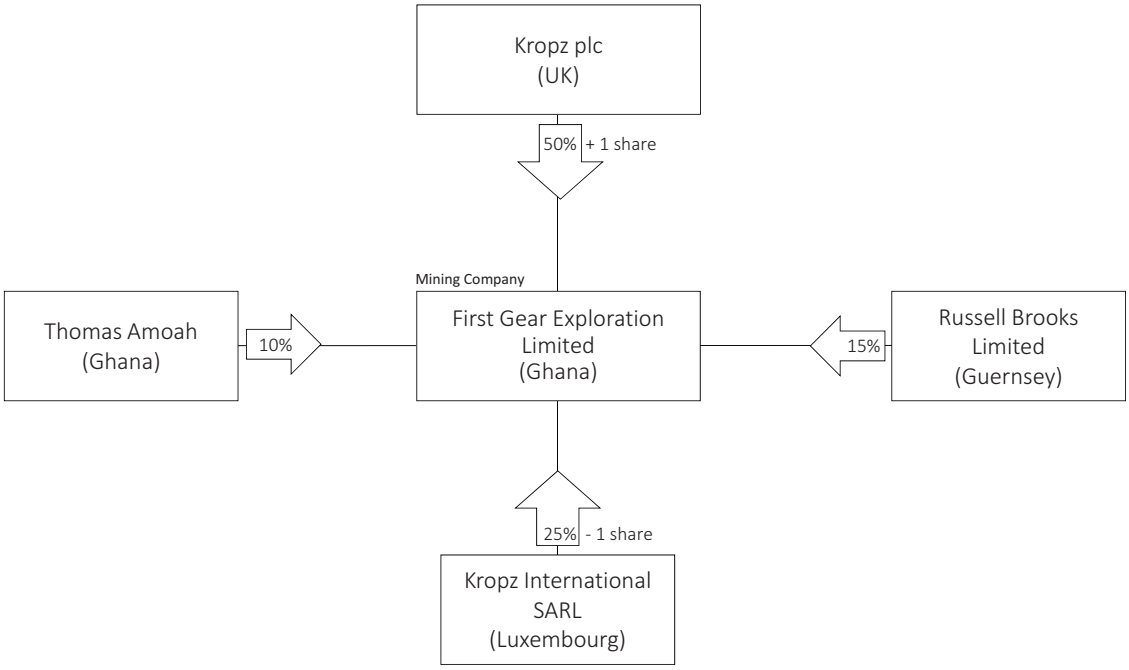
SECTION C

INFORMATION ON THE AFLAO PHOSPHATE PROJECT

1. Highlights

- Prospecting Right approved on 9 August 2018 and granted on 12 October 2018.
- Competent Persons Report completed by Snowden for exploration target and confirmation of way forward.

2. Holding Structure



3. Timeline

Timeline	Details
1960's	Extension of Togolese deposit into Ghana confirmed by preliminary investigations undertaken by the Geological Survey of Ghana.
2017	Application for Prospecting Right submitted.
2017	Conducted MMI™ survey for high level confirmation of extension of Togolese HKK deposit.
12 October 2018	Prospecting Right awarded on.

4. The Aflao Project

Phosphates have been mined since 1961 in the Keta basin in the southern parts of Togo by the state-owned company Société Nouvelle des Phosphates du Togo ("**SNPT**"), near the capital city, Lomé. Following the commencement of mining preliminary investigations undertaken by the Geological Survey of Ghana ("**GSG**") in the 1960's suggested that the mineralisation may extend westwards into Ghana.[1]

GSG sampled phosphate bearing calcareous horizons intersected in a series of water wells drilled in the Keta Basin, near the town of Aflao, Ketu South District. The assay results obtained from the

1 Aflao CPR – executive summary, page 4.

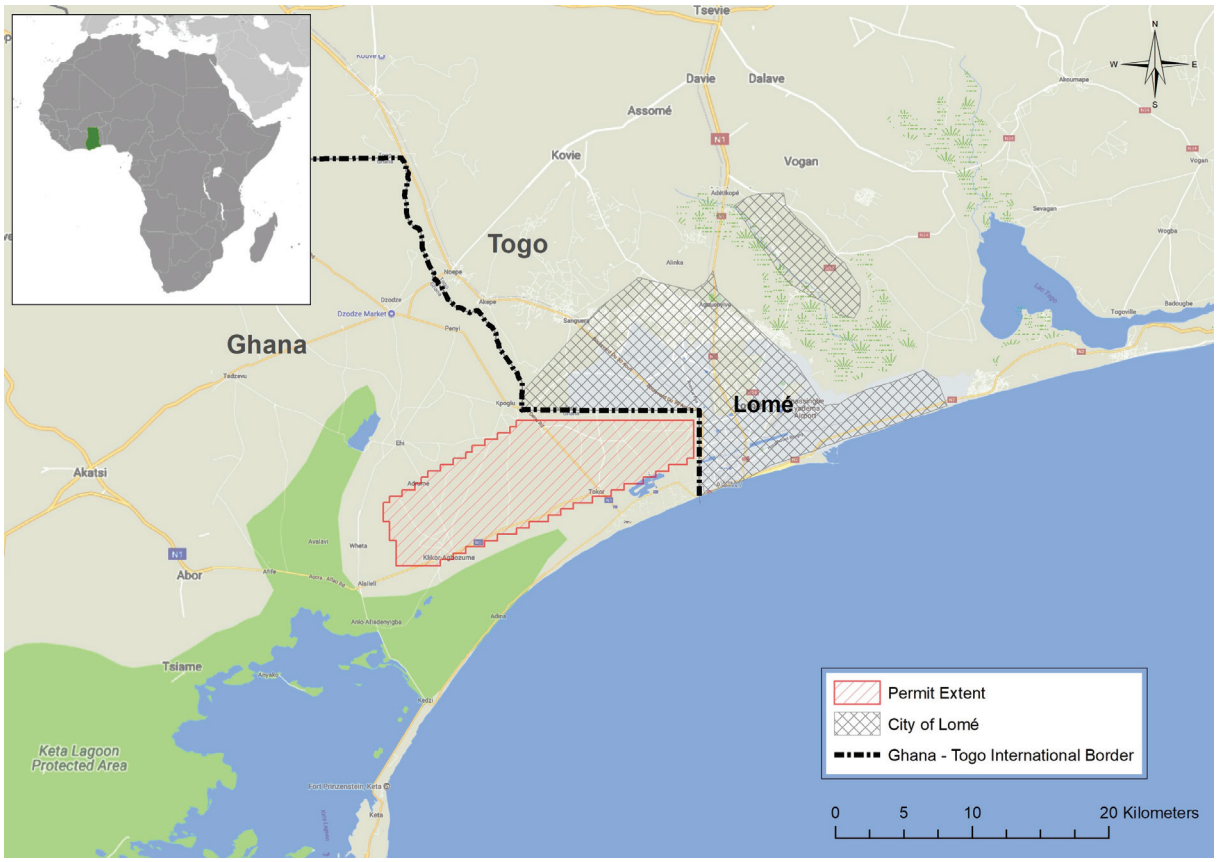
water drill holes were considered to be low at the time, with intersections ranging from 5m to 11m in thickness and with assays ranging from 14 per cent. to 22 per cent. P_2O_5. These results were not followed up at the time and all data relating to the GSG work was lost.[2]

First Gear Exploration completed MMI™ geochemistry study in the target area and determined that phosphate and other indicator element anomalies are present. The anomalies detected were similar in nature to those observed in a trial run undertaken in Togo where units of the known HKK deposit occur.[3]

First Gear Exploration intends to undertake a detailed exploration program with the intention of delineating a phosphate resource to support a beneficiation plant and associated infrastructure.[4]

5. Location

The exploration target is located in the Keta Basin (Prospecting Right centre at 6° 08'48.28'' N; 1° 10'28.59'' E), in the Aflao/Denu area. The town of Aflao is located 2km south of the tenement, on the eastern coast of Ghana, and is the major border town with Togo.[5]



Source: First Gear Exploration, 2018

The target area has a relatively low population density away from the main access roads. Access to the exploration area is via the, tarred single lane, N1 road from Accra, then via a series of gravel roads into the prospecting area. The N1 road connects Ghana with Togo, Benin and Nigeria.[6]

A large cement factory owned by Diamond Cement Pty Ltd is located within the tenement area on the eastern boundary. A large substation is located on the Togolese side of the border, which is anticipated to be the primary power source if a mine is developed. Adequate water supply should not be a problem for phosphate processing.[7]

2 Aflao CPR – executive summary, page 4.
3 Aflao CPR – executive summary, page 4.
4 Aflao CPR – executive summary, page 4.
5 Aflao CPR – main report, page 25.
6 Aflao CPR – main report, page 25.
7 Aflao CPR – main report, page 25.

The Kotoka International Airport in Accra receives direct flights from South Africa and major cities in Europe on a daily basis. The Lomé port could be considered as a port for shipment. The border between Ghana and Togo is a free trade zone assisting in the movement of goods between the two countries.[8]

6. Licences and Rights

The following Prospecting Right was granted in terms and pursuant to regulations of the MMA:

PR Number	*Current Holding Company*	*Company Interest*	*Minerals*	*Status*	*Area*
PL.4/5	First Gear Exploration	50 per cent. + 1 share (held through First Gear Exploration)	Phosphate	Right commenced on 12 October 2018 until 11 October 2021 (renewable for a period of 2 years thereafter)	131.93km^2

7. Geology

Geologically, Ghana can be subdivided into three different major units: Paleoproterozoic rocks predominate in the southwestern and north-western part of the country, whereas gneisses and supracrustal rocks of mostly Neoproterozoic age occur in the southeast and east of the country. Flatlying shelf/marine sediments of very late Precambrian to Paleozoic age are found in the central and north-eastern part of the country. Mostly Cenozoic sediments occur in a small strip along the south eastern coast.[9]

The Volta Basin contains a package of sedimentary rocks located in the central-eastern part of Ghana, which cover the Paleo-proterozoic greenstone belts. Off shore exploration for oil and gas has been undertaken in the Keta basin, one of a series of Mesozoic and Tertiary age sedimentary basins found in the Gulf of Guinea. The onshore portion of the Keta basin in the south eastern part of the country is also believed to host sedimentary beds that may contain economically viable phosphate deposits.[10]

The most recent work undertaken on the Keta Basin was by the British Geological Survey in 2009 (Jordan et. al., 2009). The Keta Basin, also referred to as the Eastern or the Keta Togo Benin (KTB) Basin, is a modified, pullapart basin structurally bounded by two north east – south west trending fault systems, the Chain Fracture Zone in the east and the Romanche Fracture Zone in the west. It covers an area of approximately 33,900km^2, of which 1,900km^2 are located onshore.[11]

The Ghanaian onshore portion of the Keta Basin lies at the extreme south east corner of the country, adjoining Togo. The rocks of the southern half of the Keta Basin comprise Cenozoic and Quaternary sediments dipping at a shallow angle to the south east overlying Paleo-proterozoic rocks of the Birimian Supergroup (Dahomeyan Complex) that occur in the northern part of the Basin.[12]

This Aflao Project area represents the western most extremity of the coastal sediments that extend westward from the Niger delta into eastern Ghana. Surface exposures comprise mainly Cenozoic and Quaternary sands, gravels, siltstones, shales, and clays with layers of fossiliferous limestone that are expected to overlie the phosphate bearing horizons. Near the surface, these sediments have a gentle dip of approximately 2° towards the south east. Jordan et. al., (2009) describe some informally named stratigraphical units for the sediments occurring in the coastal areas.[13]

It can be expected that the descriptions of the nature and potential characteristics of phosphate bearing horizons derived from descriptions of the SNPT mining areas in Togo may be applicable in this area.[14]

8 Aflao CPR – main report, page 26.
9 Aflao CPR – main report, page 18.
10 Aflao CPR – main report, page 19.
11 Aflao CPR – main report, pages 19-20.
12 Aflao CPR – main report, page 20.
13 Aflao CPR – main report, page 20.
14 Aflao CPR – main report, page 20.

8. Way Forward

It is intended that the work programme will be conducted in three phases.

- Phase 1 will include non-invasive exploration (MMI™ soil sampling, and geophysical surveys) and a detailed desktop study to delineate potential phosphate bearing horizons for subsequent evaluation and drilling.
- In Phase 2 exploration targets will be drilled to confirm the presence of mineralised horizons and delineate a resource (volume and grade); bulk samples will then be taken for metallurgical and pilot plant test work.
- The resource delineation and metallurgical results will be used as the basis of a pre-feasibility study.
- Phase 3, if justified by earlier phases of work, will include additional drilling, and implementation of a bulk sampling programme. The full timeframe for this exploration programme is expected to be three years at a current proposed budget of US$2.6 million. This programme and budget may vary depending on the outcomes of the various exploration phases.[15]

Snowden is of the opinion that if exploration drilling confirms the continuation of potentially economic phosphate bearing deposits into Ghana, First Gear Exploration's exploration work will be directed towards assessing the potential for development of a phosphate mining operation with a similar production profile, processing methodology and product specification to the Kpeme mine on the HKK deposit in Togo. According to CRU, the annual production of the HKK operation in Togo has averaged between 0.7 Mtpa and 1.2 Mtpa in the last five years. It produces a beneficiated phosphate rock of approximately 36 per cent. P_2O_5 concentrate, placing it at the high end of commonly-traded rock. The ore is easily exploited using shovels and bucket wheels, due to the unconsolidated nature of the deposit. Kpeme processing includes washing, concentrating and drying prior to shipping, with no flotation required.[16]

15 Aflao CPR – main report, page 30.
16 Aflao CPR – executive summary, page 5.

PART IV

PHOSPHATE MARKET REPORT

Phosphate Rock Market Study

A report prepared for Kropz

Final April 2018 & August 2018

CRU Consulting

CRU Reference: ST1653-17

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Note: CRU Consulting presents this phosphate rock market introduction and overview of demand, supply and trade in sections 1-3 which were delivered to Kropz in April 2018. Appended to this report in section 4 is CRU's latest phosphate rock price outlook, a high-level value-in-use assessment of the Elandsfontein and Hinda rock specifications and a short overview of the Togo phosphate rock market; this was delivered to Kropz in August 2018.

Introduction

The phosphate rock market has undergone a rapid expansion in the ten-year period to the end of 2017. In that time, the phosphate rock market has expanded by 40% to reach 213 million metric tonnes (Mt), driven principally by the rapid development of the Chinese phosphate rock and fertilizer industries.

However, in recent years global phosphate rock and fertilizer supply growth has out-paced demand. This is particularly true in China where a slowdown in domestic phosphate fertilizer demand has tipped its supply-demand balance, transforming the world's largest phosphate fertilizer market from a net importer to the world's leading exporter of phosphate fertilizers. As a result, sharp declines have taken place in both phosphate rock and phosphate fertilizer prices since 2011.

CRU expects that 2018 will represent a turning point in the phosphate rock market. High production costs and tightening environmental restrictions in the Chinese industry mean that China will be replaced by Morocco and Saudi Arabia as key drivers of supply growth in the phosphates market. This is reflective of the trend in recent years of large, integrated phosphate rock mines and fertilizer production complexes capturing the lion's share of industry growth, while the internationally-traded market between non-integrated producers has remained relatively flat.

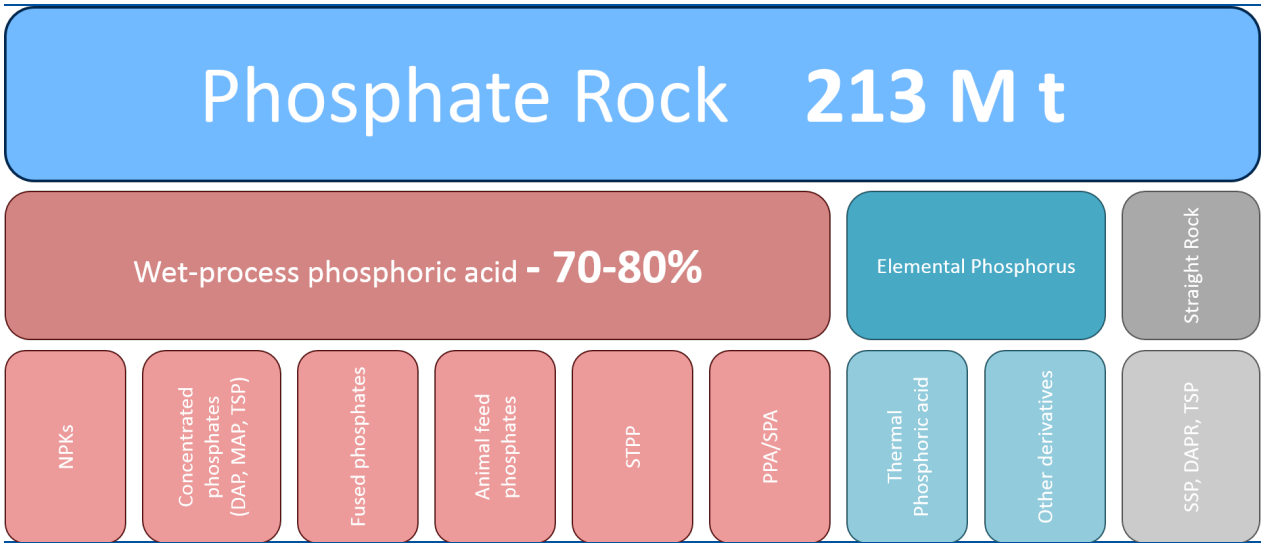
2017 was, however, characterised by a significant and sudden uptick in phosphate rock import demand, spurred by the improved cost-competitiveness of non-integrated phosphate fertilizer producers in India and other markets which were partly incentivised by relatively low phosphate rock raw material costs. CRU forecasts that global phosphate rock import demand will continue to grow by a further 2.7Mt between 2018 and 2022 to reach 35.3 Mt. This represents a 2% compound annual growth rate (CAGR) marking a significant acceleration in phosphate rock import demand growth. This may represent an opportunity for non-integrated phosphate rock supplier including Kropz.

1. Phosphate Rock Demand

1.1. Introduction to phosphate rock demand

Phosphate rock is a phosphorous-bearing mineral that is the building block for a range of downstream products including fertilizers, animal feeds and industrial phosphates. While an essential element for all forms of life, it represents one of the three macro-nutrients[1] required by plants. As such, the main driver of phosphate rock demand is the production of a range of phosphate and multi-nutrient fertilizers which are critical to boosting crop yields and sustaining global food supplies to feed an expanding world population. However, phosphorous is also an important dietary supplement in animal feed, demand for which is determined by global meat production. Finally, smaller amounts of phosphorous are demanded for a wide range of industrial and food applications. When operational, Kropz' Elandsfontein mine will introduce a production capacity of 1.5 million metric tonnes (Mt) of phosphate rock to a market which CRU estimates at 213Mt globally in 2017.

Figure 1 Phosphate rock is the starting point for all downstream phosphate products



As much as 80% of all phosphate rock is used in the production of wet-process phosphoric acid (WPA), which is an intermediate product used to produce a variety of downstream fertilizers and other products:

[1] The other two being nitrogen and potassium

1. **Concentrated phosphate fertilizers:** This is the most significant segment, including diammonium phosphate (DAP), monoammonium phosphate (MAP) and triple superphosphate (TSP). These fertilizers are produced on a large scale and traded globally in high volumes.
2. **Multi-nutrient fertilizers:** WPA can be used to produce a wide range of multi-nutrient 'NPK' formulations, demand for which has been growing in recent years.
3. **Animal feed:** Phosphorous-bearing animal feed supplements, such as di-calcium phosphate (DCP) are produced via the WPA route.
4. **Industrial and food applications:** WPA can be purified to produce a high purity acid for use as an intermediate in the production of industrial and food phosphates. A major use of this purified acid is in the production of phosphate salts, such as sodium tripolyphosphate (STPP).

The remaining 20-30% of phosphate rock demand is for use in production of elemental phosphorous and other fertilizers not produced via the WPA route:

5. **Elemental phosphorous:** (or white phosphorous) is a raw material in thermal phosphoric acid production (TPA). TPA has the same applications as those of purified grades of WPA.
6. **Other fertilizers:** Other 'low-analysis' fertilizers including single superphosphate (SSP) and direct application phosphate rock (DAPR) are produced from phosphate rock. These markets are smaller and more localized compared to concentrated phosphate fertilizers.

There exists a high degree of variation in the level of integration throughout the various segments of the phosphate value chain. An important distinction to make when analysing the phosphate rock market is that between integrated (or captive) supply versus non-integrated supply.

'Integrated' phosphate rock production relates to phosphate rock miners which are integrated with the production of WPA or other downstream products. Conversely, 'non-integrated' phosphate rock production is available for sale to third parties for the onward downstream processing into derivative products. In its current form, Kropz' Elandsfontein operation represents a non-integrated phosphate rock mine from which the majority of production will be exported to satisfy the demand of downstream phosphate producers.

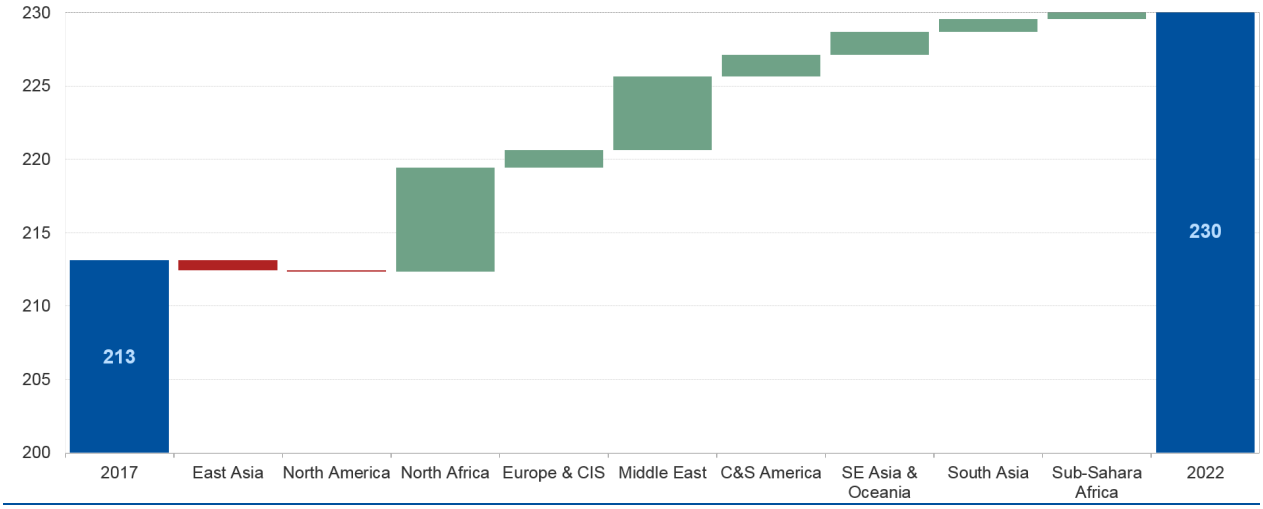
1.2. Phosphate rock demand outlook

CRU forecasts that total global phosphate rock demand will increase to 230.2Mt in 2022, up from 213.1Mt in 2017. This represents a 1.6% compound annual growth rate (CAGR) from 2017 and significantly marks a shift in demand growth from China to other world regions.

Our medium-term outlook represents a deceleration in demand growth from the strong 2.7% CAGR observed 2010-2017 that was driven largely by rapidly expanding Chinese demand. Phosphate rock demand reached a peak of nearly 93Mt in China in 2015, but has fallen

significantly since then and is expected remain in the range of 82Mt over the medium term. This trend reflects a shift in agricultural practices and policies, prompted by government actions targeting overuse of fertilizers as well as greater international competition. Higher cost Chinese producers of phosphate fertilizer are unable to compete with now low-cost production emerging elsewhere. Combined these developments are sharply limiting demand within the country.

Figure 2 Apparent phosphate rock demand growth by region (Mt)



The MENA region (Middle East and North Africa) will replace China as the main driver of phosphate rock demand growth over the next five years. Demand for phosphate rock will increase by 6.6Mt in Morocco and nearly 4.4Mt in Saudi Arabia by 2022. In both cases this represents captive demand for downstream fertilizer production.

Significant increases in demand from non-integrated producers, however, will also contribute to medium term demand growth. Indian demand rebounded by 6.5% year-on-year in 2017 due to favourable phosphate market dynamics – phosphate rock and sulphur prices (raw materials for DAP) were low relative to import prices of finished fertilizer. This incentivised an increase in domestic DAP production, which in turn incentivised increased rock import demand in this important market. We expect these dynamics to persist into 2018 and beyond. Overall, Indian demand will reach nearly 9.7Mt in 2022, up from 8.9Mt in 2017. Indonesian growth over the period is forecast to add 1Mt, driven by expanding oil palm plantings whilst other Southeast Asian countries are expected to add a further 0.7Mt. Phosphate rock demand in the US and Mexico is also expected to rise by about 1Mt over the intermediate term, despite ebbing rock production.

1.2.1. Long term phosphate rock demand outlook

CRU forecasts phosphate rock demand will accelerate in the period 2022-2035 to 2% CAGR. As a result, we project that total consumption will reach 297Mt in 2035, up by 67Mt from 2022. While CRU's medium-term outlook for phosphate rock demand is based on our analysts' assessment of demand on a country-by-country basis, our long-term demand methodology is based on a higher-level assessment for global demand based on extensive research into longer term trends in the fertilizer, animal feed and industrial and food phosphate industries. Key assumptions underpinning the fertilizer segment of phosphate rock demand include CRU's outlook for population growth, regional crop mix and economic growth.

Fertilizer-based demand will be driven by the need to feed a growing world population and by constraints on arable land expansion that will necessitate increased fertilizer application rates. Central to this long run outlook is that farmers will not only need more fertilizer but will also move towards achieving a better nutrient balance among the three major plant nutrients (nitrogen, phosphorous and potassium). Nitrogen applications are currently high relative to the ideal balance achieved in most developed markets. Achieving a better balance will therefore require utilising more phosphorous relative to nitrogen in the future.

Industrial and food phosphate-based demand is expected to decline in the long-term. Total consumption in these industries has and will continue to wane due to increased regulations and a voluntary shift away from use of detergent-grade phosphate salts, such as STPP.

Demand losses in the industrial sector are expected to be offset by growing demand in the animal feed sector, however. Growing consumption of meat will increase inorganic feed phosphate demand, particularly as tastes change in emerging markets experiencing long term growth in population and rising per-capita GDP.

2. Phosphate Rock Supply & Costs

2.1. Introduction to phosphate rock supply

Phosphate rock deposits are found and exploited across the world. These deposits can generally be divided into sedimentary and igneous deposits depending on their geological origin (some phosphate deposits occur as guano and metamorphic rock, but these are less common). Significant sedimentary occurrences, which are by far the most common source of rock, are found in China, North and Southern Africa, North America and the Middle East. Kropz' Elandsfontein phosphate rock mine is included in this category of deposits. Significant igneous occurrences, meanwhile, are found in Russia (Kola Peninsula), Southern Africa, Brazil, Finland and Canada.

Phosphate rock is not a homogeneous commodity. There exists a meaningful difference in the characteristics of each rock source; this means that downstream operations are often configured and optimised to process phosphate rock with a specific set of characteristics. Phosphate rock buyers therefore tend to have preferences for certain rock grades and characteristics when sourcing rock in the market.

For example, there exists a meaningful difference between sedimentary and igneous rock characteristics. Generally, beneficiated igneous rocks contain higher P_2O_5 content and fewer impurities (such as heavy metal content) than sedimentary rocks. However, this is not always the case. There also exists a wide variation within sedimentary rock deposits in terms of P_2O_5 and other contents.

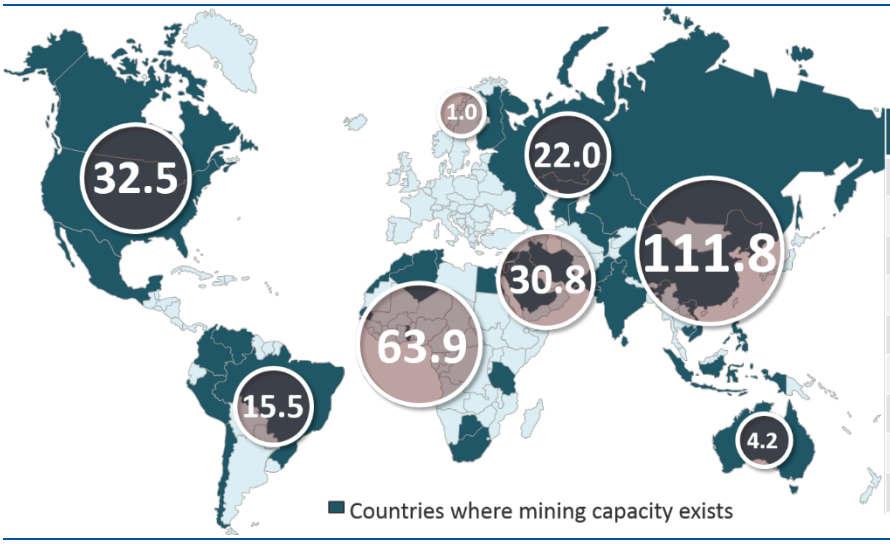
Widely traded rock grades[2] range from about 29% P_2O_5 (e.g., grades sold from Egypt) to 35% (e.g., grades sold from West Africa). Buyers of high-grade rock, for example, are willing to pay a premium to minimise the volumes of rock required and to minimise the operational risks associated with using a rock with higher levels of impurities. Conversely, consumers of low-grade rock will demand lower prices relative to global benchmark grades to compensate for the higher costs associated with its transport (on a P_2O_5 content basis) and use.

The chart below illustrates the countries where phosphate rock mining takes place as well as the total phosphate rock mining capacity in each region. Historically, most phosphate rock mining capacity developed in countries with large domestic fertilizer sectors, such as the USA and China. In 2000, 49% of all phosphate rock capacity was in these two countries. Morocco was also a major producer at that time, possessing 14% of global rock capacity with almost half of its output utilised for exports. Since 2000, US phosphate rock capacity has declined by 14Mt as mines have become depleted and new sourced s of supply have been established elsewhere. In that time Chinese rock capacity has more than doubled as the country rapidly developed its domestic phosphate industry.

[2] Phosphate rock is generally graded by its P_2O_5 content. This is commonly measured as bone phosphate in lime (BPL). A grade of 68-72% BPL, an industry standard, translates to 31-33% P_2O_5.

This development led to China moving from being a large net importer of phosphate fertilizers to a large net export position. With domestic Chinese phosphate fertilizer consumption now in decline and exporters experiencing significant cost pressure, CRU expects China's phosphate rock capacity utilization to fall significantly in the next five years.

Figure 3 Global phosphate rock capacity (Mt)



Total 2017 capacity: 289.2M t

Producing region/country	Total phosphate rock capacity (Mt)
North America	32.5
Central & South America	15.5
Finland	1.0
Africa	63.9
Russia & Kazakhstan	22.0
Middle East	30.8
China	111.8
Oceania	4.2
Rest of World	7.5

Morocco and other MENA-based producers, such as Saudi Arabia, meanwhile, have accounted for the most significant phosphate rock capacity increases outside of China since 2000. Much of this rock capacity has been built in tandem with new downstream phosphate fertilizer capacity, which is characteristic of the industry trend whereby large integrated rock and fertilizer complexes have accounted for the majority of industry growth in recent years. For example, despite the significant expansion in Moroccan phosphate rock mining capacity, the share of rock exports in total production has declined to 33% in 2017 versus 49% in 2000, with current rock exports at volumes similar to the levels recorded in the early 2000s.

Industry operating rates have been relatively stable since 2000, averaging about 74% of capacity. As a result, phosphate rock production has grown from 133 MT in 2000 to 213 Mt in 2017.

2.2. Phosphate rock supply outlook

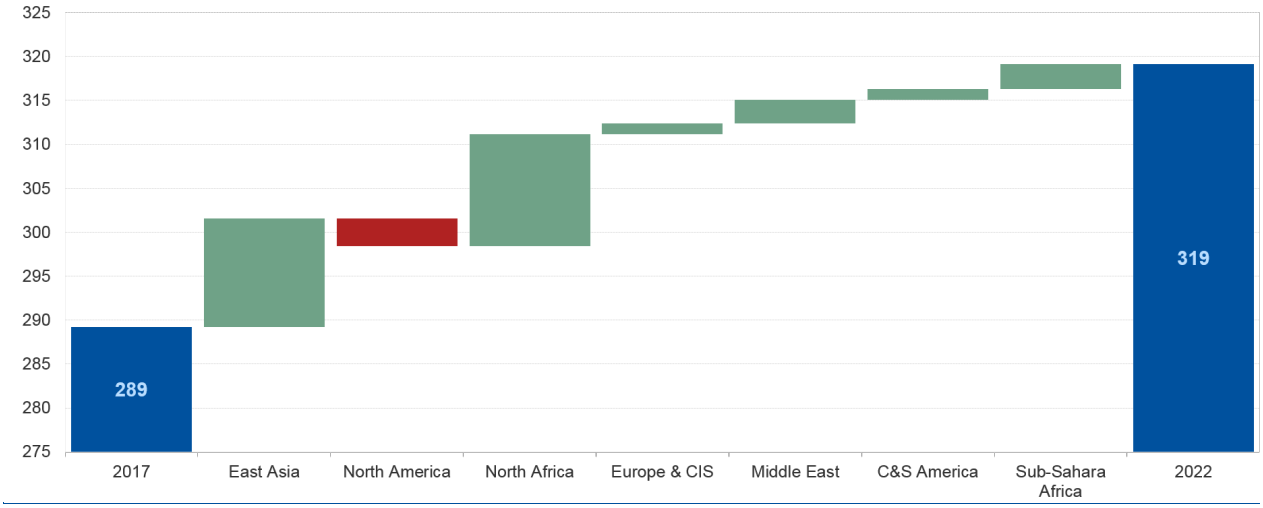
CRU forecasts global phosphate rock capacity will increase to 319Mt in 2022, up from 289Mt in 2017. This represents a 2.0% CAGR. Phosphate rock capacity integrated with downstream fertilizer production will continue to drive supply growth. Morocco will expand capacity by 11.9Mt over the medium-term. Although it is expanding downstream capacity also, it will maintain the flexibility to vary exports of both rock, WPA and phosphate fertilizers. In Saudi Arabia, phosphate rock capacity rose 2Mt last year and another 3 Mt is expected to be added by 2022.In both cases

we expect that growth in phosphate rock capacity will principally be directed into captive fertilizer production rather than exported. In North America we expect phosphate rock capacity closures to outweigh any scheduled expansions. We forecast a total reduction of 3.1Mt capacity in North America by 2022 driven by closures in the USA.

The chart below shows total year-on-year closures alongside gains in capacity. Near term increases in capacity will come in the MENA region and Russia whilst increases in the latter half of the forecast will be concentrated in China.

We expect minor capacity closures totalling 0.4Mt in China to occur in 2018 and 2019 as the phosphate industry copes with new environmental regulations and their associated costs. Issues with production costs have been exacerbated in the downstream phosphate industry due to substantial swings in raw material prices. These dynamics have spurred action: Chinese producers of downstream phosphate fertilizers have attempted to maintain production cuts to avoid sacrificing margin at a time when production costs have been so volatile. This has had a knock-on effect on rock demand. Indeed, many rock mines faced temporary closures in 2017 due to both regulatory measures and declining demand from downstream producers.

Figure 4 Phosphate rock capacity growth by region (Mt)

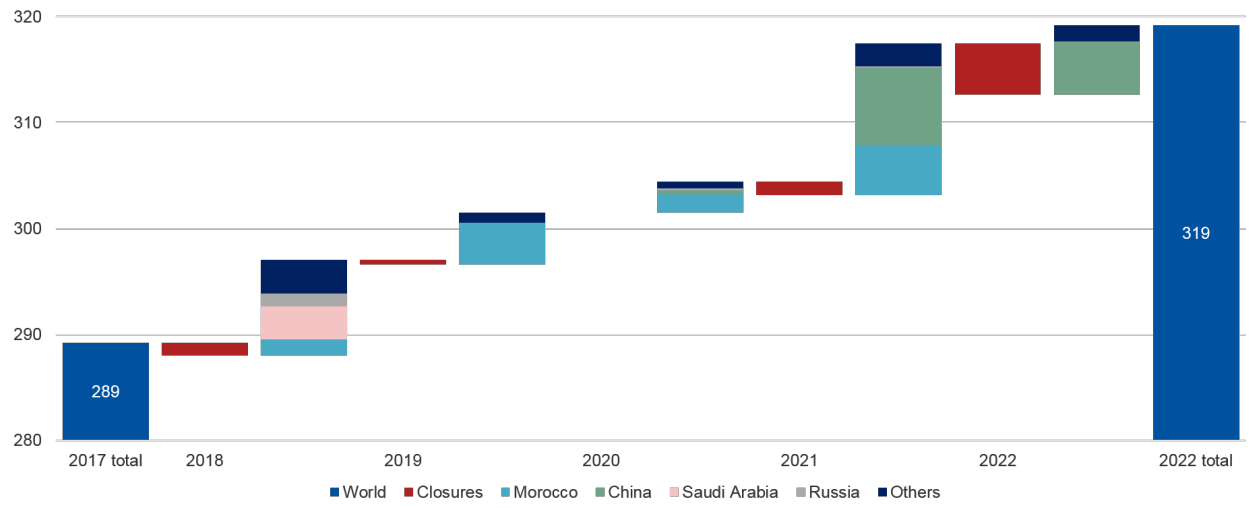


Chinese phosphate rock production fell by 5.1Mt, or 5.8%, in 2017. We expect rock production to decline by an additional 2.0Mt in 2018 due to sustained downstream production cuts. Only from 2019, following some industry restructuring, will lower-cost operations begin ramping up their demand for domestic rock. Although we forecast a substantial increase in Chinese phosphate rock capacity to occur in 2021, as new and more efficient operations are brought on line, total

production is expected to remain level with smaller and higher cost operations reducing output or being completely idled.

CRU forecasts that phosphate rock production will steadily rise to 230 Mt by 2022. The increases in capacity coupled with a slowdown in Chinese capacity use will result in a slight drop in the industry average operating rate to 72% over the forecast period.

Figure 5 Year-on-year closures and expansions in capacity (Mt)



2.3. Phosphate rock costs

2.3.1. Introduction to phosphate rock industry costs

The CRU Phosphate Rock Cost Model is designed to illustrate on a comparable basis where a particular phosphate rock mine lies in the ranking of industry cost competitiveness, how and why it differs from its peers, and the extent to which these differences reflect external (macroeconomic) and internal conditions.

The Model is populated with information from CRU's databases of phosphate rock capacity and production, our central economic forecasts (labour rates, energy prices, exchange rates, etc.), and operational parameters from various sources, including the co-operation of producers. This has resulted in a platform from which we are able to present a highly comprehensive, flexible and extensive analysis of industry costs.

The cost analysis in this section presents FOB (free-on-board) costs. This is the total cost borne by the producer from production through to loading the product onto the vessel at the port of origin. FOB costs are defined as the sum of **site costs** and **cost to port** (freight and loading).

Site costs: All operating costs associated with providing phosphate rock concentrate at a point-of-sale (ex-works). Site costs are comprised of resource costs and conversion costs.

- Resource costs: the cost of purchasing or otherwise acquiring the principal input(s) required for the production activity in question. Any royalties, fees and taxes associated with the extraction of ore are also considered as raw material costs.
- Conversion costs: all site-specific costs incurred in converting in-situ phosphate ore into phosphate rock concentrate that can be sold or further processed into other phosphate materials. Conversion costs include all labour costs, fuel and power, process consumables, maintenance materials, supplies and purchased services of all kinds that are associated with mining, internal transportation and beneficiation.

Cost to port: All costs associated with transferring phosphate rock concentrate from the site onto the shipping vessel at the port of origin (ex-works to FOB).

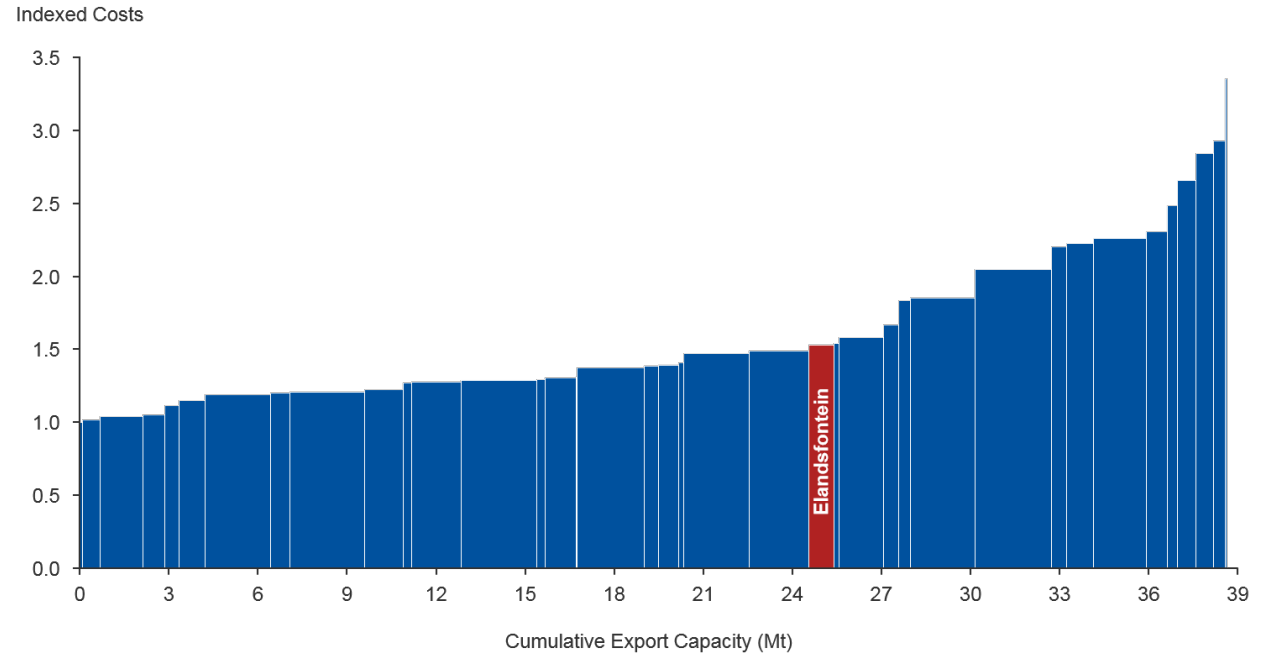
Costs in the phosphate rock industry are driven by conversion costs. Macroeconomic factors, including national wage rates, power rates and costs of supplies, have the strongest impact on rock costs. Indeed, labour and consumables together comprise approximately two-thirds of average site costs on a global basis. Resource costs, which vary across the industry, comprise a relatively small portion of total site costs (8% in 2019).

2.3.2. Cost competitiveness

In March 2018 Kropz has provided CRU with its latest FOB cost estimates for the Elandsfontein phosphate rock mine. We have placed the project on an indexed cost curve using 2019 FOB costs according to estimated export capacity for the major phosphate rock exporters. The y-axis indicates indexed FOB costs in US dollars per tonne whilst the x-axis indicates cumulative phosphate rock capacity. Based on our estimates and the costs provided by Kropz, the Elandsfontein mine will be positioned in the third cost quartile and have FOB costs slightly above the average cost among major phosphate rock exporters.

Kropz' operating cost estimates suggest that the Elandsfontein mine is well-positioned to compete effectively with other phosphate rock suppliers in the traded market. Furthermore, Elandsfontein's advantageous location in proximity to Saldanha Bay enables it to target demand in both the Atlantic and Indian Ocean markets. In terms of competitiveness, the mine should enjoy particularly advantageous freight rates to Brazil, although it should also maintain a freight advantage in the important Indian market relative to North African suppliers.

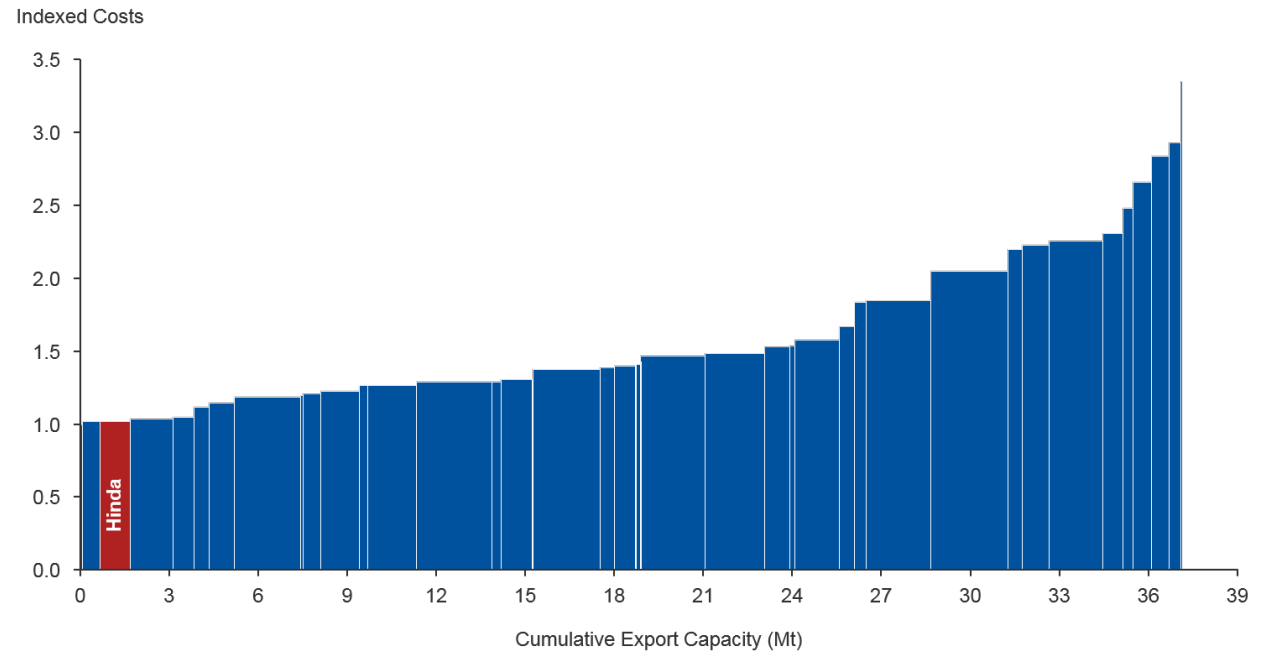
Figure 6 Phosphate Rock 2019 FOB Export Cost Curve (Elandsfontein)



CRU; Kropz

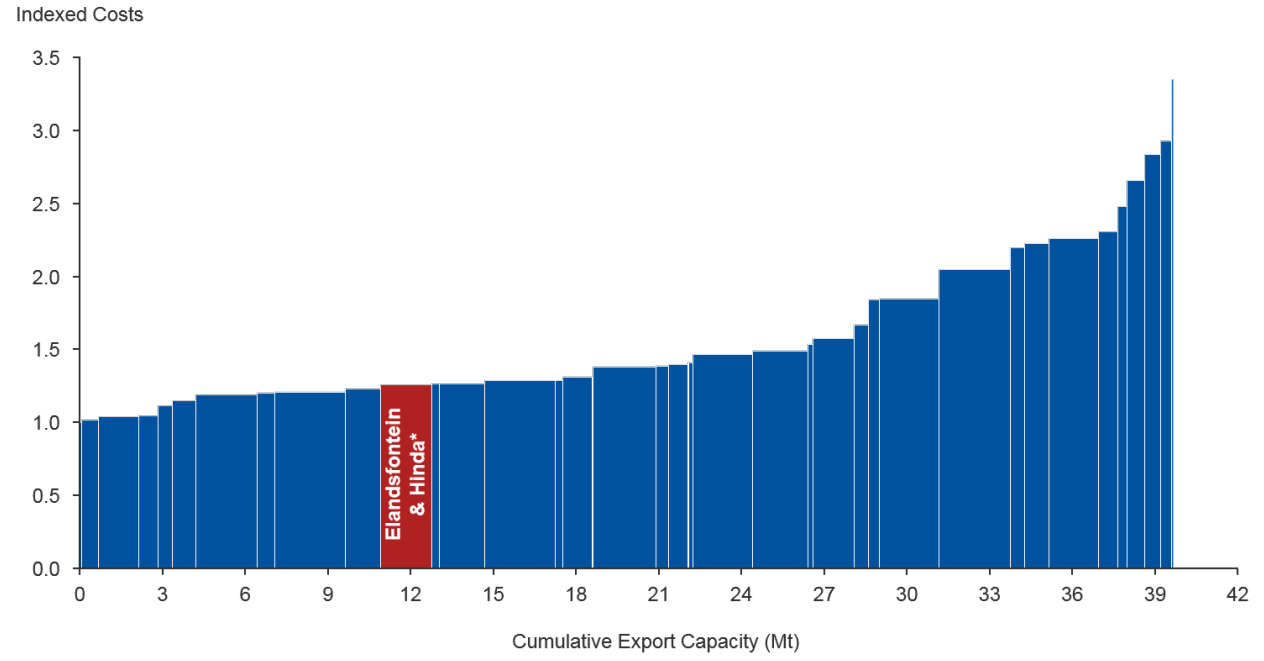
The following two figures present the Hinda phosphate rock project on CRU's 2019 phosphate rock export cost curve. Cost information was provided by Kropz for a 1Mt mine configuration. In the first cost curve the project individually. On the second, we present the weighted average of the two mining projects.

Figure 7 Phosphate Rock 2019 FOB Export Cost Curve (Hinda)



CRU; Kropz

Figure 8 Phosphate Rock 2019 FOB Export Cost Curve (Elandsfontein & Hinda)



CRU; Kropz

2.3.3. Elandsfontein rock grade in comparison to the industry benchmark

It has already been noted that phosphate rock specifications are not homogeneous; the preceding analysis of phosphate rock industry costs therefore does not reflect the complexity of factors impacting the value and marketability of individual phosphate rocks.

We present in Table 1 below the latest specifications of the Elandsfontein phosphate rock received from Kropz in March 2018 relative to the Moroccan 68-72% BPL benchmark grade which are widely considered as an industry reference point.

Table 1 Elandsfontein and benchmark grade specifications

	Chemical composition	Benchmark	Elandsfontein
a.	P_2O_5 (phosphate content)	32.0%	31.1%
b.	CaO (calcium)	51.5%	46.0%
c.	Fe_2O_3 (Iron)	0.2%	1.5%
d.	Al_2O_3 (aluminum)	0.4%	0.8%
e.	MgO (magnesium)	0.4%	0.5%
f.	SiO_2 (silica)	2.3%	10.8%
g.	F (fluorine)	3.7%	3.5%
	Key ratios		
	CaO:P_2O_5 (b/a)	1.61	1.48
	R_2O_3 (c+d)	0.60%	2.28%
	Minor elements ratio ([c+d+e]/a)	0.03	0.09

Overall, CRU assesses that the rock is of similar quality to that of the Moroccan benchmark. We expect that it should generate a price at least on par with the benchmark grade. As noted, the total phosphate content is of primary interest to buyers of rock. At 31% P_2O_5, Elandsfontein rock is slightly below the average of the Moroccan benchmark grade of 32% P_2O_5. As such, we would expect this difference in P_2O_5 content to lead to only a minor discount relative to the benchmark.

Phosphate content is not the only relevant metric in such comparisons. Since most phosphate rock purchased is used in downstream processing of WPA, CRU undertakes a complete value-in-use (VIU) assessment based on how the rock in question impacts the performance of downstream phosphoric acid production. These assessments allow rocks of differing specifications to be normalised and compared on a like-for-like basis with a global benchmark. There are three key ratios scrutinised when performing VIU assessments of phosphate rock:

$CaO:P_2O_5$: The $CaO:P_2O_5$ ratio determines the amount of sulphuric acid consumption required in the phosphoric acid production process. A ratio below 1.55 is preferred. Elandsfontein rock concentrates are within the preferred range and would require less acid than the benchmark grade when used in WPA production. This savings on sulphuric acid costs results in a minor premium relative to the benchmark.

R_2O_3: Iron and aluminium tend to report to the phosphoric acid stream and may become an issue in the neutralisation of phosphoric acid by ammonia to produce DAP and MAP. As such, the lower the R_2O_3 value, the better. For high-analysis fertilizer products, such as DAP and MAP, a level below 2.0% is preferred and levels above 3.0% become problematic. Elandsfontein rock has a high R_2O_3 relative to the benchmark but is not considered problematic. This element should result in a minor discount relative to the benchmark.

Minor Elements Ratio (MER): The minor elements ratio is similar to R_2O_3, but with the inclusion of MgO. An MgO value below 1.0% is preferred for phosphoric acid production. A MER ratio, encompassing iron, aluminium and magnesium, below 0.1 is preferred. Elandsfontein rock has a MER slightly above the benchmark but well within the preferred range.

Rock impurities: CRU has reviewed the complete specifications of Elandsfontein rock including details of impurities. Asymmetries in the regulation of impurities (most notably heavy metals) complicates the quantification of their impact on international prices. However, it is possible to comment on their impact on the marketability of individual rock grades in regional markets.

It is notable that the cadmium (Cd) content of Elandsfontein rock, measured at 4.2ppm, is low relative to other major sedimentary phosphate rock sources in North and West Africa. Low cadmium levels improve the marketability of Elandsfontein's rock particularly among producers of high-purity phosphoric acid for industrial purposes and in markets where the cadmium content in phosphate fertilizers is strictly regulated. This may soon include the European Union where

preparations are currently being made to harmonise and gradually reduce the cadmium content permitted in phosphate fertilizers distributed in that market.

3. Phosphate Rock Trade

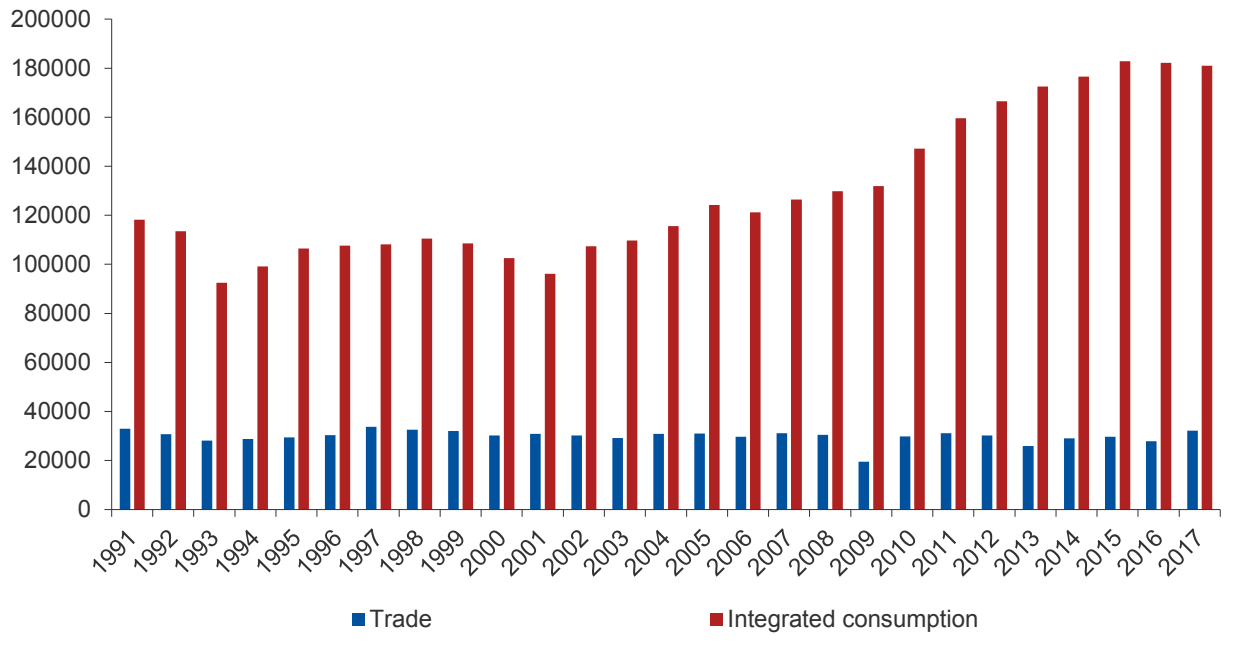
3.1. Introduction to phosphate rock trade

In the absence of downstream phosphate fertilizer production capacity, it is expected that the majority of Elandsfontein's phosphate rock production will be exported into the international market. Assuming an 85% utilisation rate, Elandsfontein's output should represent approximately 4% of the internationally traded rock market.

The buy side of this market is characterised by a diverse set of non-integrated phosphate fertilizer producers and producers of purified phosphoric acid and its derivative products. The import side of the market features a significant concentration in India which accounted for approximately one quarter (7.9Mt) of phosphate rock imports in 2017, principally for the production of phosphate fertilizers including DAP and SSP. Other major import markets include Indonesia (2.6Mt), Brazil (1.9Mt), the USA (2.5Mt) and Western Europe (3.2Mt).

As mentioned previously, the expansion in integrated phosphate rock and fertilizer production has captured the lion's share of rock market growth in recent years; this has limited growth potential in the traded market which has remained relatively flat in recent decades.

Figure 9 Integrated consumption and total trade of phosphate rock ('000t)

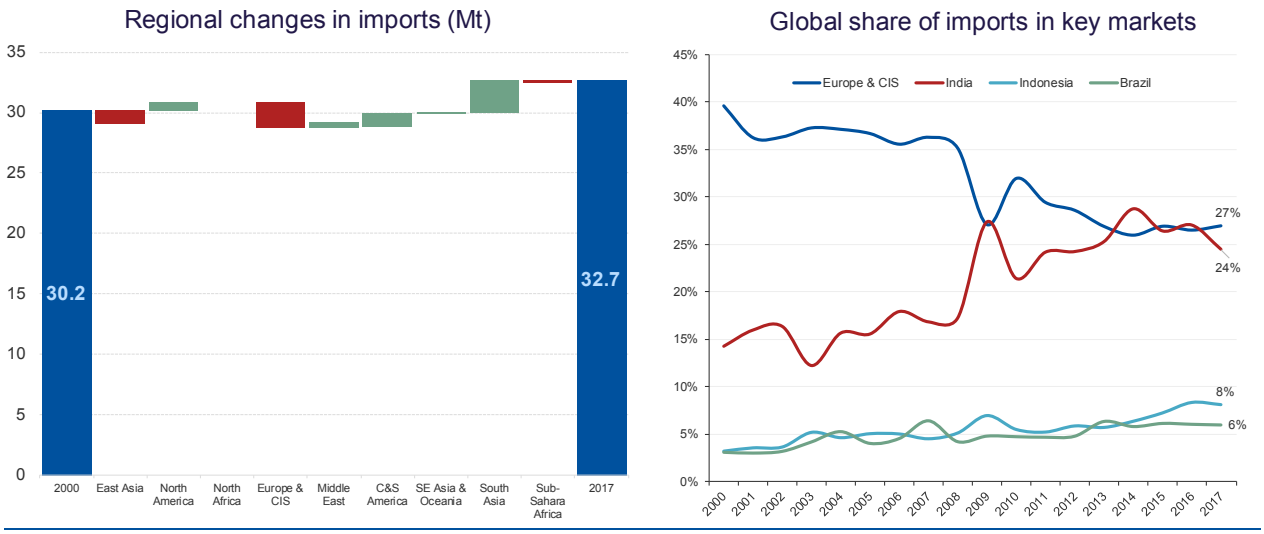


From 2000 to 2017, phosphate rock consumption by integrated producers increased from 102Mt to 181Mt, representing a 77% increase. This equates to a CAGR of 3.4%. Over the same period,

total trade of phosphate rock has remained flat. In fact, phosphate rock trade has remained approximately stable since the early 1990s. From 1991 to 2017, total rock trade has averaged 29.9Mt. If we exclude 2009, an aberrant year due to the impact of the global recession, total annual trade over this period ranged from a low of 26Mt in 2013 to a peak of 33.7Mt in 1997.

This stability in traded rock volumes is a result of sustained demand among non-integrated producers, particularly those in India and Europe. The charts below shows changes in import demand on a regional basis from 2000-2017. Whilst both India and Europe remain major consumers of rock imports, India's importance has increased as Europe's has declined. The right-hand side of the chart indicates India's share of global imports has reached approximately 25%, up 9% since 2000. Brazil and Indonesia have also become integral to the traded market. In 2000, each of these markets represented ~3% of total trade. Brazil now commands a 6% share of global imports and Indonesia 8%. Given its advantageous geographic location, each of these markets may represent tangible future market opportunities for Elandsfontein's phosphate rock output.

Figure 10 Regional changes in imports (LHS) and global share of imports in key markets (RHS)

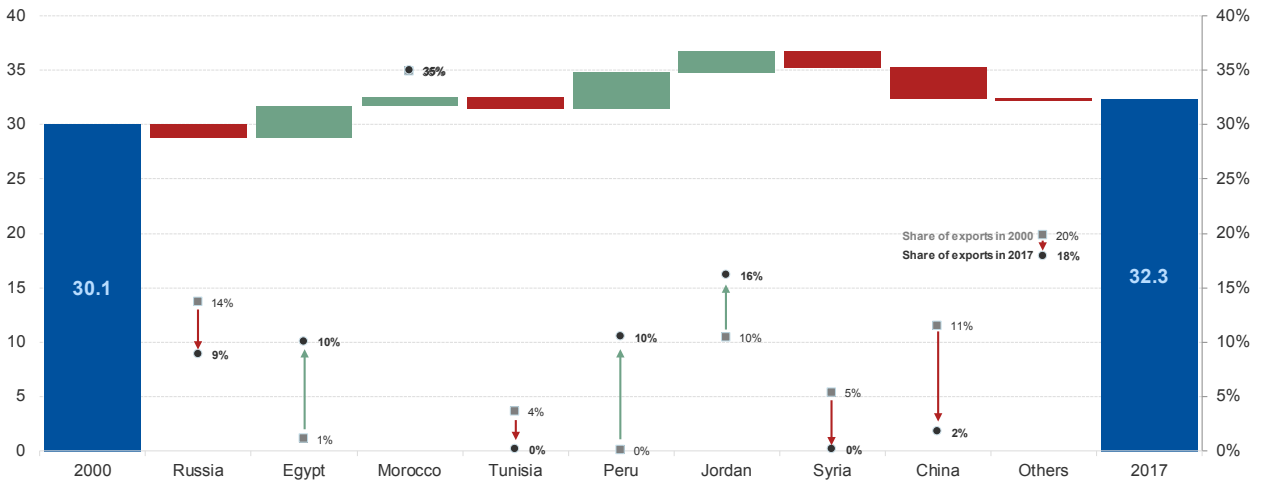


However, it should be noted that a significant portion of this trade represents intra-company trade (i.e., a company sending rock from its own mining assets in one country to downstream phosphate fertilizer production assets in another country) or is the feature of joint ventures (JVs) and long-term agreements (LTAs). The already significant decline in global import share observed in Europe & CIS 2000-2017 may have been greater if not for the rise in intra-company trade within the CIS and between CIS and Europe. A similar pattern can be observed in North America where depletion of some reserves has led fertilizer producers to secure phosphate rock supply in other regions (e.g. Peru) to supply North American phosphate fertilizer plants.

While Elandsfontein may be precluded from targeting phosphate rock import demand representing intra-company and JV trade (CRU Consulting estimates that this represents 10-15% of global import demand), it should be possible to target remaining import demand traded on a spot basis (55-60% of the market) or to compete to displace suppliers in existing long-term supply agreements (approximately 30% of the market). There have also been notable changes in which countries are exporting rock over this period. The chart below indicates changes in exports from 2000-2017 among major rock exporters, both in terms of absolute volume and market share. The most significant changes include the sharp decline in China's role in trade and the near disappearance of Syrian and Tunisian volumes from the market driven by recent years of regional strife. Although we do not expect that China will again become a significant phosphate rock exporter, a recovery in Syrian and Tunisian phosphate rock production and exports may increase supply competition relative to our base case outlook.

Egypt and Peru, each of which now comprise 10% of the global share of exports, have been significant in replacing these lost tonnages. Morocco's share of the total exports was 35% in both 2000 and 2017, but this belies marked volatility over this period – Morocco's share of global exports peaked at 46% in 2004 and reached a low of 29% as recently as 2016.

Figure 11 Changes in exports, major exporting countries (Mt)



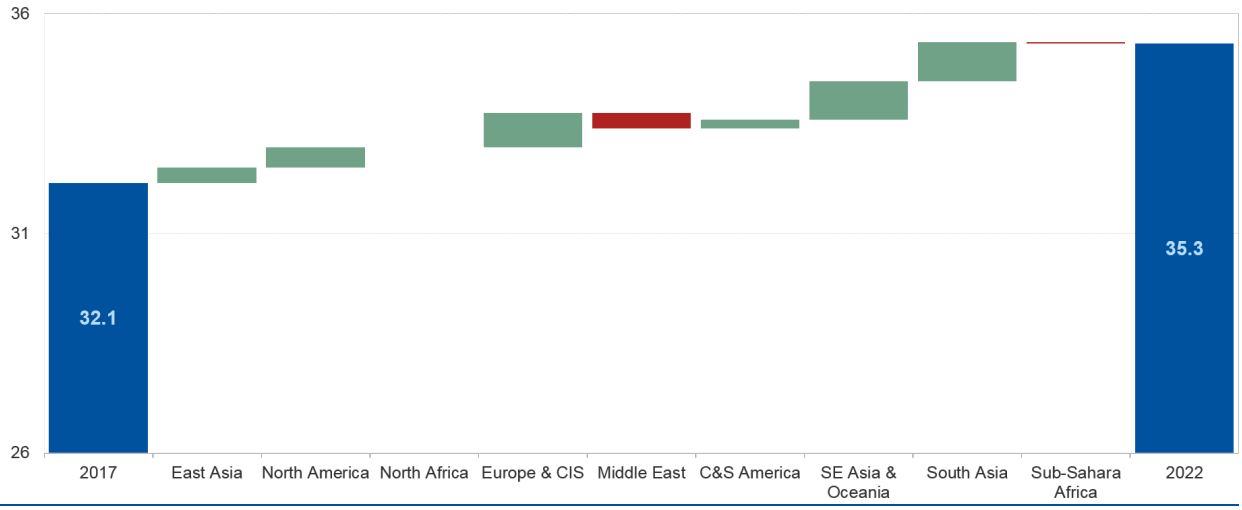
3.2. Phosphate rock trade outlook

CRU forecasts global phosphate rock trade to increase by 3.2Mt 2017-2022, reaching 35.3 Mt. This represents a 1.9% CAGR and marks a significant acceleration in the phosphate rock import demand growth that has been observed since 2000.

This increase in import demand growth already commenced in 2017 when total trade increased by 4.3Mt, or 15.6%. This sharp increase in import demand was driven by strong phosphate fertilizer demand in countries that import rock (including India and Brazil) and relatively low phosphate rock prices. Growth in phosphate rock import demand will continue to 2022.

India is the world's largest import market with imports of approximately 7.9Mt in 2017 (24.5% of total trade). We expect the favourable spread in finished phosphate fertilizer prices relative to rock to continue to support import demand in India in 2018. Increasing rock prices will temper this course in 2019. Overall, however, our outlook is one of growth: total imports in India will reach 8.6Mt in 2022 driving total South Asian imports 0.9Mt higher over the medium term. Considering the size of this market and Elandsfontein's logistical advantage relative to other major suppliers, this represents an important demand opportunity for Elandsfontein's future rock supply.

Figure 12 Phosphate rock import growth by region (Mt)



Other significant drivers of import demand (2017 – 2022) will originate in Southeast Asia (+1Mt in Indonesia), Europe and CIS (+0.5Mt in Russia) and North America (+1.4Mt in the USA). However, a significant amount of this growth will take place in the context of existing agreements and joint ventures. Expanding JV activity in Indonesia, for example, is the main driver behind growth in Southeast Asia. Intra-company trade between Kazakhstan and Russia as well as between Peru and the USA will also drive most growth in the CIS and North America. However, market opportunities outside of these supply agreements will be available to Elandsfontein. Its geographic positioning will enable it to target import demand in both Atlantic Basin and Asian markets.

4. Phosphate rock prices and value-in-use analysis

4.1. Introduction to phosphate rock prices

As in many other commodity markets, the market tumult of 2008 and 2009 marks a breaking point in phosphate rock market prices. After significant volatility in these years phosphate rock prices reclaimed their highs in the years 2011 and 2012. However, global phosphate rock prices have declined sharply since then. According to CRU's data, 2017 average phosphate rock prices for key benchmarks have declined by an average of 44% when compared with prices in 2011 and 2012, with the FOB Morocco 68-72% BPL price down more than 50% at the end of 2017.

This decline in rock prices has been closely correlated with price developments in the phosphate fertilizer sector. By 2017, phosphate fertilizer and phosphoric acid prices had declined about 39% since 2011-2012 peak. The effect of the drop in downstream product prices, however, has been furthered by the increase in industry rock capacity that was instigated during the years of relatively high phosphate rock and phosphate fertilizer prices. The combined effect has been reflected in the downward pressure on phosphate rock prices since 2011.

However, phosphate rock prices have performed strongly in 2018; prices have increased by between 10% and 20% at major benchmarks since the start of the year. It is CRU's assessment that 2018 marks a turning point in phosphate rock prices with 2017Q4 marking the low point. To date, this recovery partly reflects the sustained improvement in phosphate fertilizer prices that commenced in late 2017. CRU's analysis forecasts a continued recovery in phosphate rock prices in the medium and longer terms, most significantly driven by increasing phosphate fertilizer prices.

4.2. Phosphate rock price outlook

CRU forecasts an FOB Saldanha phosphate rock price of $96/t in 2018 increasing to $114/t in 2022. This represents a 4.4% CAGR. This price assessment is based on our medium-term price outlook for phosphate rock prices, which is driven by medium-term market fundamentals, and the value-in-use analysis of the Elandsfontein phosphate rock specifications which are presented in Table 2. The VIU analysis estimates a projected value for the Elandsfontein rock concentrate relative to other benchmark prices.

While CRU forecasts that market prices will weaken slightly in 2019H1 following the recent strong increase, the underlying trend will remain positive in the medium-term. Assessing the Elandsfontein phosphate rock specifications in relation to our benchmark forecasts, we project that FOB Saldanha prices, on an annualised basis, will increase by approximately 1% in 2019. We

then project stronger growth particularly in 2020 and 2021 as phosphate rock prices continue to react favourably to increasing phosphate fertilizer prices.

4.3. Long term phosphate rock price outlook

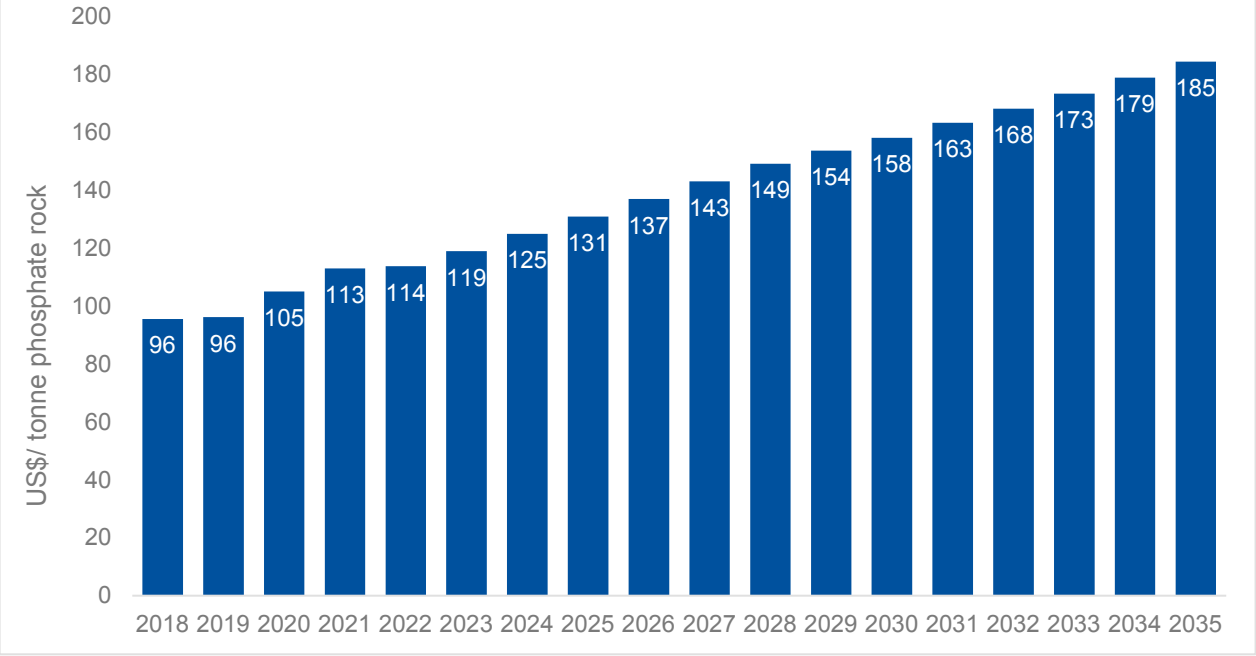
CRU's medium-term price forecasts are driven by known and expected market dynamics. Beyond the medium-term, CRU employs its long run marginal cost (LRMC) methodology to forecast prices. According to economic theory, competition among producers should set the price of a good at the marginal cost, which is equivalent to the cost of producing the last unit of output required to meet demand. In the near term, defined as the next five years (i.e., the period covered in CRU's medium-term forecasts), capacity remains relatively fixed. This means that a producer is limited to controlling its variable costs when responding to changes in demand and prices

As the time horizon surpasses five years, we assume all costs become variable. That is, investments in capacity can be made to meet market demand. Operating decisions for long run marginal producers (producers building and operating profitable capacity sufficient to meet future expected demand), are based on the relationship between market prices and operating and capital costs. The result of our LRMC methodology is CRU's long-term trend price around which we expect actual market prices to oscillate.

4.3.1. Elandsfontein rock

Using this long-term price guidance and the projected value-in-use of the Saldanha rock concentrates, CRU forecasts an FOB Saldanha rock price of $185/t in 2035. This represents a long-term CAGR of 3.9% (2018-2035) and is presented in the figure below. The continued recovery in prices in the medium-term from 2020 is evident. From 2023, long-term price guide developments are determined solely by the calculated cost inflation of the long-run marginal cost of production. Throughout this period beyond 2022 shorter-term developments in the phosphate rock market will inevitably result in oscillations around this trend.

Figure 13 FOB Saldanha Elandsfontein phosphate rock VIU forecast



4.4. Hinda phosphate rock

CRU Consulting has also undertaken a high-level VIU assessment of two phosphate rock specifications associated with the Hinda phosphate rock project in the Republic of Congo. The first set of specifications, denoted 'Hinda 1', represent the average of a number of tests for an intended starter project producing up to 1Mt per annum. The second, denoted 'Hinda 2' represent those of the complete project producing on a larger scale at a volume to be determined. Both specifications are presented in the table below alongside those of the Elandsfontetin rock concentrate and the benchmark grade.

Table 2 Phosphate rock specifications

Chemical composition	Benchmark	Elandsfontein	Hinda 1	Hinda 2
P_2O_5 (phosphate content)	32.00%	31.10%	32.10%	32.10%
CaO (calcium)	51.50%	46.00%	43.61%	45.10%
Key ratios				
CaO:P_2O_5	1.61	1.48	1.36	1.40
Minor elements ratio (MER)	0.03	0.09	0.09	0.06

Source: CRU; Kropz

The results of CRU's VIU analysis for these two specifications are presented in the two subsequent figures on an FOB Republic of Congo basis. The value of the 'Hinda 2' concentrate is estimated to be on average 1% lower than that of the starter 'Hinda 1' principally as a result of its higher CaO

content. The value of the Elandsfontein concentrate is estimated at 3-5% below the two Hinda concentrates.

Figure 14 FOB Republic of Congo 'Hinda 1' VIU forecast

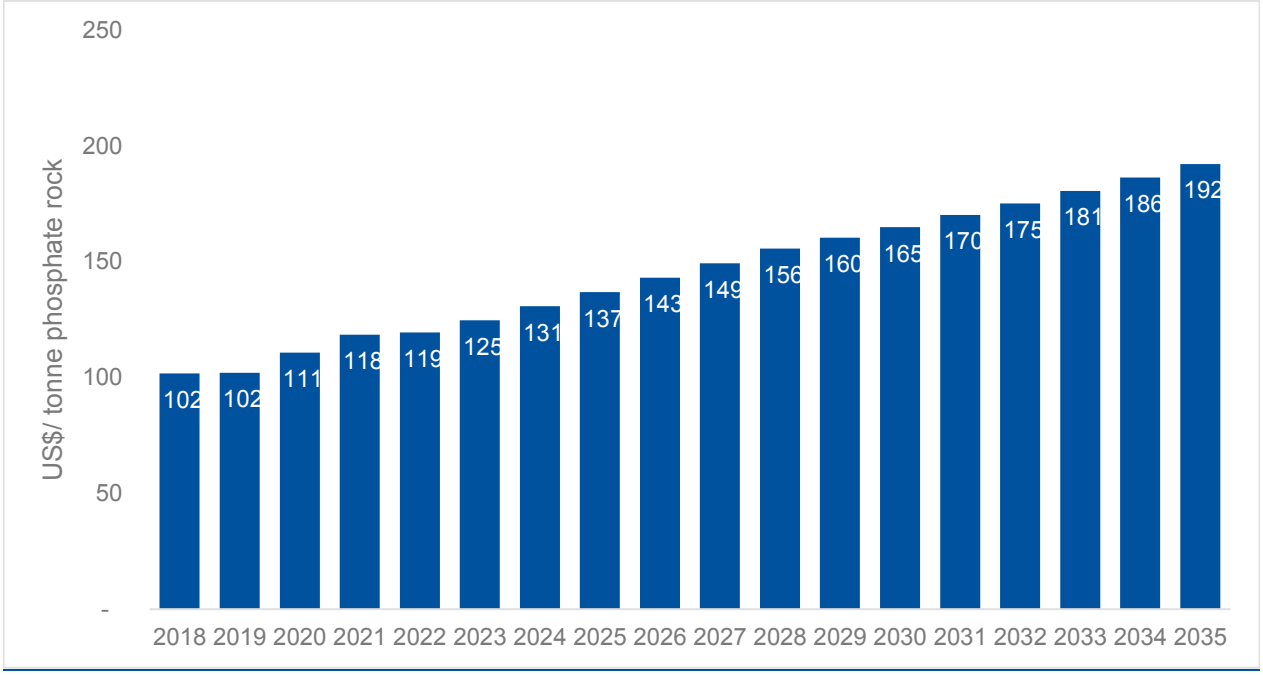
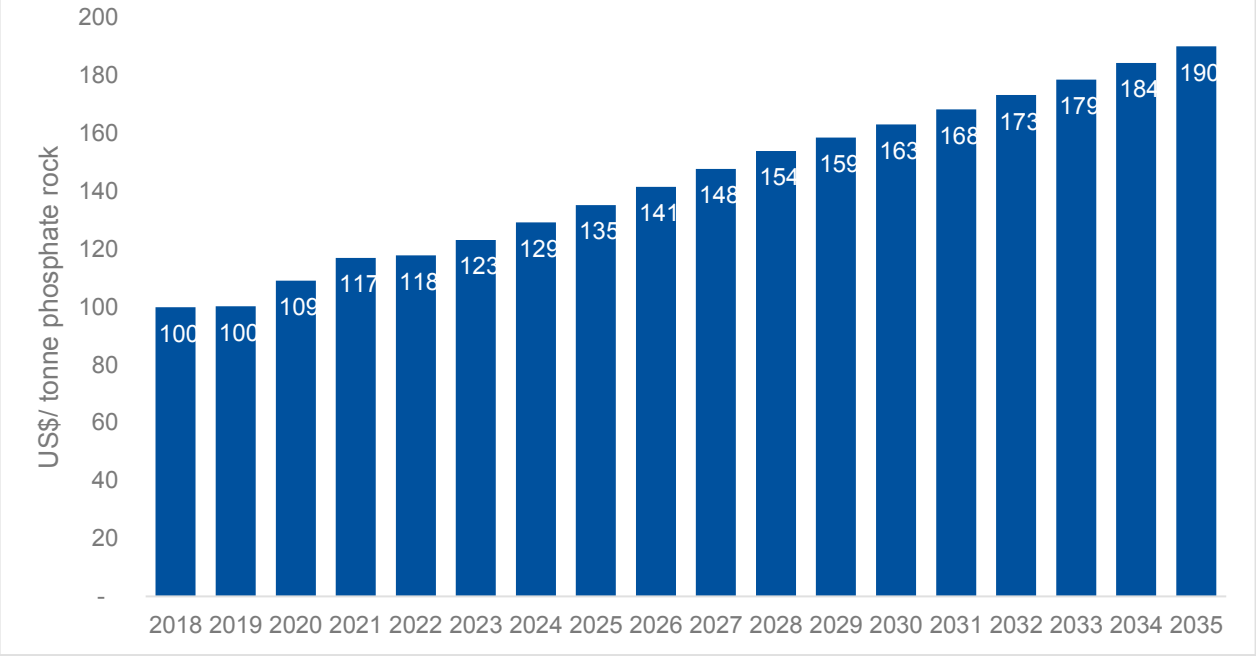


Figure 15 FOB Republic of Congo 'Hinda 2' VIU forecast



4.5. Togo phosphate rock market

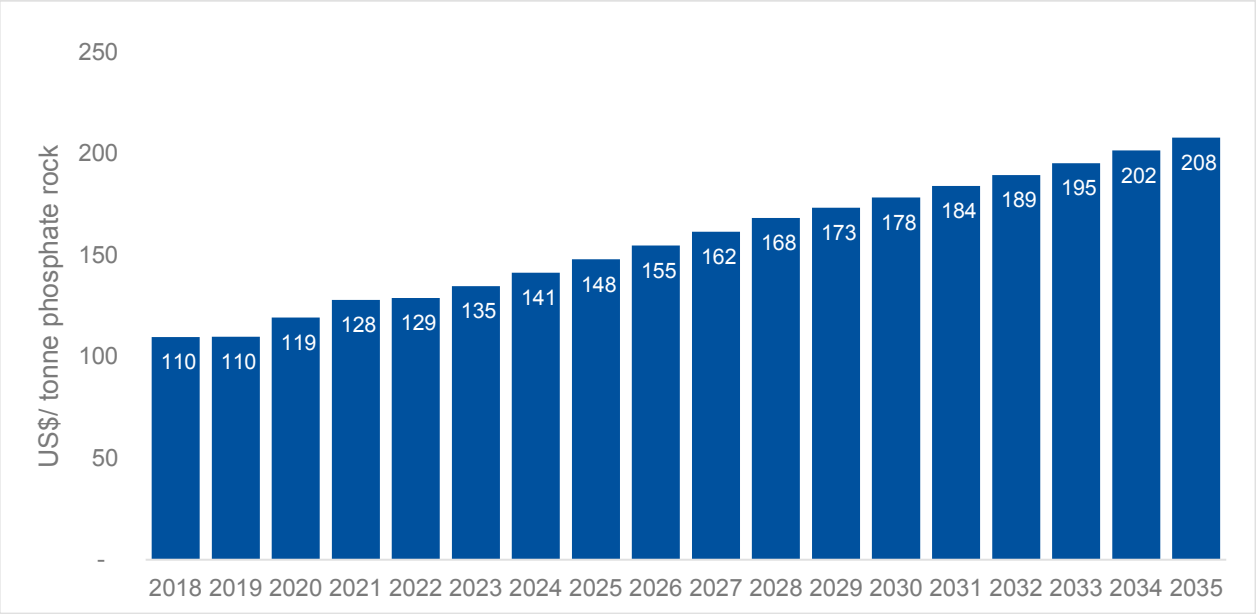
The Togolese phosphate rock market is dominated by one significant producer and can be characterised principally as an export market. The *Société Nouvelle des Phosphates du Togo* (SNPT) Kpéme mine in operation since 1961 is the single major producer in the country with a nameplate production capacity estimated at 2 million tonnes per annum.

According to CRU data, annual production has averaged between 700,000 tonnes and 1.2 million tonnes per annum in the last five years. The deposit is sedimentary in nature and produces a phosphate rock concentrate high in P_2O_5. According to information available to CRU, P_2O_5 content in the beneficiated product typically ranges between 35.5% and 36% P_2O_5 which places it at the high end of commonly-traded rock.

In the absence of downstream phosphate fertilizer production capacity, virtually all the phosphate rock produced in Togo is exported to international markets. The majority of rock is supplied to the Indian market, however regular shipments have also been supplied to Australia, South Korea, Turkey, Lebanon and South American markets in recent years. Togolese rock was also supplied to the European market in the past, although we believe the rock cadmium's content can cause marketing issues in some markets.

The figure below presents CRU's VIU assessment of the estimated Togolese phosphate rock specifications considering a 36% P_2O_5, 50% CaO and an MER of 0.3. As with the other VIU assessments presented here, other specifications including heavy metals which can be a factor in individual markets are not considered.

Figure 16 FOB West Africa Togo rock VIU forecast



PART V

SECTION A

INFORMATION ON SOUTH AFRICA AND SOUTH AFRICAN MINERAL POLICY AND LAW

1. Overview of South Africa

South Africa is a developing, industrialised, middle-income, market economy with an abundant supply of natural resources as well as an advanced financial, legal, communications, energy and transport infrastructure. South Africa's major industries comprise agriculture, automobile manufacture and assembly, textiles, general manufacture, mining and tourism.

South Africa is one of the world's largest producers of gold, platinum and chromium and is a major producer of diamonds, manganese, coal and iron ore.

On 27 April 1994, South Africa held its first, multi-party, democratic elections culminating in the appointment of Nelson Mandela as President of South Africa. The current president of South Africa is Cyril Ramaphosa. The next general election is due to be held in 2019.

With effect from 4 February 1997, South Africa adopted a new constitution, the Constitution of the Republic of South Africa, 1996 ("**Constitution**"). The Constitution, *inter alia*, provides for a common citizenship for all South Africans, the creation of a sovereign and democratic state, nine provinces with defined legislative and executive powers, an independent judiciary that includes the Constitutional Court, the Supreme Court of Appeal, and High and Magistrates' Courts in each province. The Constitution places an obligation on the South African government to take legislative and other measures to achieve land, water and related reform in order to redress the consequences of the historic racial discriminatory policies of the previous National Party Government. In addition, the South African Government is enjoined to implement a procurement policy in order to provide for categories of preference in the allocation of contracts (for government procurement) and the protection and advancement of persons historically disadvantaged by unfair discrimination. As a result of these obligations the government has introduced black economic empowerment at a legislative level in an effort to provide previously disadvantaged persons with, accelerated access to, *inter alia*, property, business opportunities and employment.

During 2000, the first of a number of statutes aimed at implementing the obligations placed on the government in terms of the Constitution was promulgated in the form of the Preferential Procurement Policy Framework Act, 2000 ("**PPA**"). This was followed in 2002 by the MPRDA. Following the promulgation of the MPRDA and pursuant to section 100(2)(a) of the MPRDA, the Mining Charter was promulgated. The Mining Charter was subsequently amended in 2010 by the Amendment to the Broad-Based Socio-Economic Charter for the South African Mining Industry 2010 ("**Mining Charter II**"). On 27 September 2018, a new Mining Charter ("**Mining Charter III**") was gazetted, aimed at strengthening the efficacy of the Mining Charter, as a tool for effecting broad based and meaningful transformation of the mining and minerals industry. In addition, the Broad-Based Black Economic Empowerment Act, 2003 ("**BBBEE Act**") was promulgated as an overarching legislative mechanism to cater for the advancement of "black people" (as defined in the BBBEE Act) and the creation of further sector codes and Codes of Good Practice (promulgated under section 9 of the BBBEE Act) which act as a guideline for the compliance with and measurement of empowerment initiatives undertaken in the various economic sectors.

2. Geography and Population

South Africa occupies the southern tip of Africa, its coastline stretching more than 2,500km (1,600 miles) from the desert border with Namibia on the western coast, southwards around the tip of Africa and then northeast to the border with Mozambique on the Indian Ocean. South Africa covers an area of 1,200,000 km^2.

The South African population has grown from approximately 45 million people in 2000 to approximately 57 million people in 2017.

There are eleven official languages in South Africa, with English, Afrikaans, Xhosa, Sotho and Zulu being the most widely spoken. Business in South Africa and court proceedings are conducted primarily in English.

3. Government

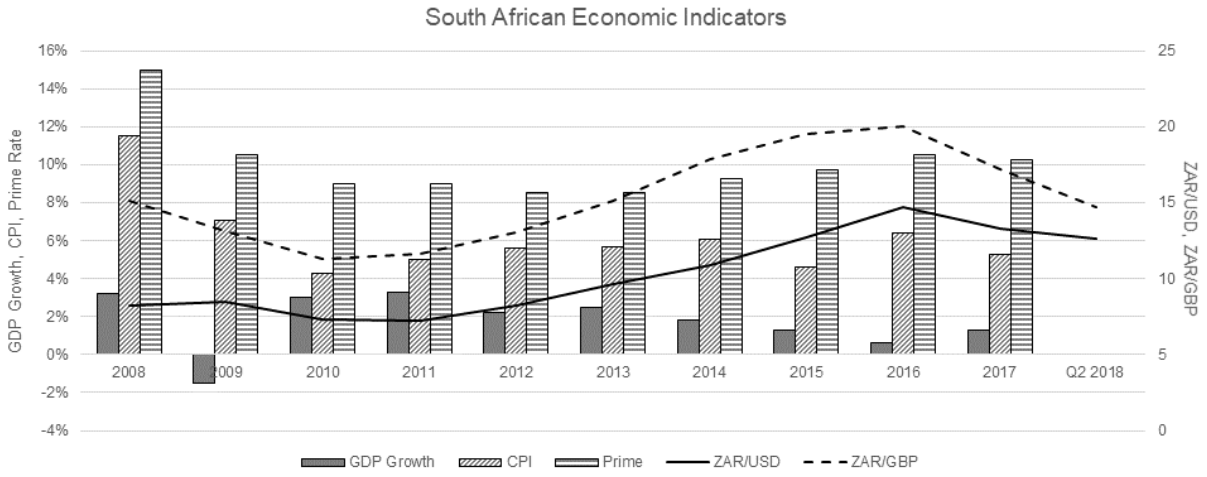
South Africa is a parliamentary republic with a three-tier system of government. The legislature (vested in Parliament and comprising of a national assembly and national council of provinces), executive (headed by the President who acts both as head of the executive and the head of state) and independent judiciary all operate within the parliamentary system.

All bodies of the South African government are subject to the rule of the Constitution, which is the supreme law in South Africa.

The provincial governments of the nine provinces of South Africa have their own executive and legislative branches, but not separate judicial systems. The legislature elects one of its members as Premier to lead the executive branch, and the Premier appoints between five and ten members of the legislature as an executive council (a cabinet) to lead the various departments of the provincial government. Local government in South Africa consists of municipalities of various types. The largest metropolitan areas are governed by metropolitan municipalities, while the rest of the country is divided into district municipalities, each of which consists of several local municipalities.

The majority party in South Africa is the African National Congress, led by Cyril Ramaphosa. The main opposition party is the Democratic Alliance with the Economic Freedom Fighters gaining traction, although the Economic Freedom Fighters' support remains comparatively low.

4. Economic Overview



Sources: GDP Growth – World Bank
CPI – Statistics South Africa (STATS SA)
Prime – South African Reserve Bank
ZAR/USD – Nedbank Limited
ZAR/GBP – Nedbank Limited

According to statistics South Africa (STATSSA), real gross domestic product (measured by production) decreased by 0.7 per cent. in the second quarter of 2018, following a decrease of 2.6 per cent. in the first quarter of 2018.

The South African economy remains dependant on the mining industry as a valuable contributor to the country's exports. Over the last ten years exports of precious minerals and metals accounted for approximately 8 per cent. of GDP.

5. Mineral Legislation

5.1 Overview

Until 30 April 2004, the right to prospect and mine for minerals was primarily regulated by the Minerals Act, 1991 ("**Minerals Act**"). Under the Minerals Act, the right to mine or prospect attached to the land itself, as a result of this the owner of the land automatically held sway of the minerals in, on or under it. When the MPRDA came into force on 1 May 2004, it repealed the Minerals Act and placed the custodianship of all of the mineral resources in South Africa under the custodianship of the state for the common benefit of all South Africans, fundamentally changing the mineral governance regime. The MPRDA regulates the prospecting for and exploitation, processing and utilisation of minerals as well as the rehabilitation of land disturbed by exploration and mining

activities. Alongside the MPRDA are the Mine Health and Safety Act, 1996 (''**MHSA**'') and the NEMA which respectively cater for the management of health and safety and the prevention of unacceptable environmental degradation of prospecting and mining areas.

As the custodian of all of the minerals in South Africa, the State, acting through the DMR, is entitled to grant (provided the criteria for such grant are met), *inter alia*, prospecting and mining rights. As a result of this fundamental shift in the control over mineral resources, a transitional period from the old regime (in which the role of the State was predominantly regulatory in nature) to the new regime was granted. Schedule II to the MPRDA contains the transitional arrangements that provide for the preservation and security of tenure of so-called ''old order rights'' in force immediately prior to the MPRDA coming into force, for a limited period after the commencement of the MPRDA.

The MPRDA seeks to facilitate participation by HDSAs in mining ventures and to ensure that unexploited mining rights are exploited by applying a ''use it or lose it'' approach which has been adopted and applied in several developed countries.

Every application for a mining right under the MPRDA must demonstrate that the granting of such right will: (i) substantially and meaningfully expand opportunities for HDSAs, including women, to enter the mineral and petroleum industry in order to benefit from the exploitation of the nation's mineral and petroleum resources, and (ii) promote employment and advance the social and economic welfare as dictated by the Mining Charter and Mining Charter II.

It is now a prerequisite for the granting of a mining right that a 26 per cent. effective interest in the relevant mining right is held by HDSAs.

5.2 Prospecting Rights

Prospecting rights are governed by sections 16 and 17 of the MPRDA. The application must be made to the regional office of the DMR in which the minerals are situated. The Regional Manager of the DMR is obliged to accept an application for processing in circumstances where (i) the application is made in the correct form and subject to payment of the fee, (ii) no other person holds a prospecting right, mining right, mining permit or retention permit for the same mineral over the same land, and (iii) no prior application for a prospecting right, mining right, mining permit or retention permit has been accepted for the same mineral on the same land that remains to be decided.

Once the Regional Manager has considered the application it is referred to the Minister of Mineral Resources for a decision, based on the recommendations of the Regional Manager. Such decision must be made within 30 days of the receipt of the application by the Minister of Mineral Resources. The Minister of Mineral Resources is obliged to grant the prospecting right if the applicant has demonstrated (i) financial and technical ability to prospect optimally in accordance with the prospecting work programme, (ii) the estimated expenditure is compatible with the proposed prospecting operation and the duration of the prospecting work programme, (iii) the prospecting will not result in unacceptable pollution, ecological degradation or damage to the environment and an environmental authorisation is issued, (iv) the applicant has the ability to comply with the MHSA, the applicant is not in contravention of the MPRDA and in respect of prescribed minerals, the applicant has given effect to the objects referred to in section 2(d) of the MPRDA (i.e. access to HDSAs to the mining industry).

Prospecting rights are granted for a maximum period of five years and contain an exclusive right to apply for a mining right. Prospecting rights can be renewed once, for a period of three years.

5.3 Mining Rights

Mining rights are governed by sections 22 and 23 of the MPRDA. The application must be made to the regional office of the DMR where the minerals are situated. The Regional Manager must accept the application if (i) the application is made in the prescribed manner and the fee paid, (ii) no other person holds a prospecting right, mining right, mining permit or retention permit over the same land and mineral; and (iii) no prior application for a prospecting right, mining right, mining permit or retention permit has been accepted for the same land and mineral and remains to be decided.

The Minister of Mineral Resources must grant a mining right if (i) the mineral can be mined optimally in accordance with the mine works programme, (ii) the applicant has demonstrated financial and technical ability to conduct the operation optimally, (iii) the financing of the operation is compatible with the intended operation (including its duration), (iv) the mining will not result in

unacceptable pollution, ecological degradation or damage to the environment and an environmental authorisation is issued, (v) the applicant has provided a social and labour plan, (vi) the applicant is not in contravention of the MPRDA and (vii) the granting of the right will further the objects of sections 2(d) and (f) of the MPRDA. If the land is occupied by a community, the Minister of Mineral Resources may include conditions in the mining right, including those relating to participation by the community in the mining operations.

Mining rights are granted for renewable periods not exceeding 30 years.

5.4 Compensation and Royalties

A mining or prospecting right constitutes a limited real right that entitles the holder thereof to enter onto the land, construct infrastructure, conduct prospecting and mining and remove the minerals won, notwithstanding that the holder of the right may not be the owner or lawful occupier of the land in question. As a result a detailed consultative process must be undertaken prior to the granting of the relevant right, and once the right is granted fourteen days' notice must be given to the land owner of the intention to enter on the land for purposes of winning minerals. Pursuant to section 54 of the MPRDA, compensation is payable to the owner of the land for losses that are suffered as a result of the prospecting or mining operation conducted. This frequently takes the form of a land-use agreement in which a monthly or annual rental amount is payable in lieu of compensation.

In addition to compensation payable to land owners and lawful occupiers, an annual fee is payable to the DMR based on the size of the relevant prospecting or mining area.

In terms of the Mineral and Petroleum Royalty Act, 2008 ("**Royalty Act**") all mining companies must pay a royalty to the National Revenue Fund in respect of the transfer of any refined or unrefined mineral that has been disposed, consumed, stolen, destroyed or lost (other than by way of flaring or other liberation into the atmosphere during exploration or production). The royalty payable is calculated by multiplying the gross sales of the mining company in respect of that mineral or resource during the year of assessment by the relevant percentage applicable following a formula contained in section 4 of the Royalty Act to refined (subject to a maximum of 5 per cent.) or unrefined minerals (subject to a maximum of 7 per cent.).

6. Environmental Legislation

Section 24 of the Constitution of the Republic of South Africa, 1996 creates the right to an environment that is not harmful to health or well-being. To achieve this right various laws have been promulgated, with the NEMA being the principal, framework statute which governs sustainable development and integrated environmental management in South Africa.

Other laws governing environmental impacts which fall under the NEMA framework legislation include:

- Environment Conservation Act (No. 73 of 1989) (now largely repealed);
- NEM: Air Quality Act (No. 39 of 2004) (NEM: AQA) which requires compliance with certain air emissions thresholds and prescribes air emissions licences;
- NEM: Protected Areas Act (No. 57 of 2003) (NEM: PA) which requires consent to undertake certain activities in declared protected areas;
- NEM: Biodiversity Act (No. 10 of 2004) (NEM: BA) which requires consent to undertake certain activities listed under the Act;
- NEM: Integrated Coastal Management Act (No. 24 of 2008) (NEM: ICMA) (as amended by NEM: Integrated Coastal Management Amendment Act, 2014 (No.36 of 2014)) which requires consent for activities in coastal areas defined in the Act; and
- NEM: Waste Act (No. 59 of 2008) (NEM: WA) which requires consent for undertaking certain listed activities or compliance with Norms and Standards.

The National Water Act, 1998 "**NWA**" also lists water uses which require licencing under the Act and enforcement measures for failing to comply with the Act.

In addition to the environmental laws, various provincial regulations and municipal by-laws may apply. A mine will also require the necessary land use planning approvals, including the appropriate zoning consent from the Municipality in order to undertake mining and its associated activities.

Historically the environmental regulation and permitting of prospecting and mining activities fell under the ambit of the Minerals Act, 1991 and subsequently the MPRDA Minerals and Petroleum Resources Development Act, 2002 which repealed the Minerals Act.

This changed with effect from 8 December 2014 when the streamlined environmental and mining statutory regime, known as the ''One Environmental System'' came into force and effect. In terms of this system, the environmental regulation of prospecting and mining and their related activities were repealed from the MPRDA and transferred to NEMA. This includes the financial provisioning for mine closure and rehabilitation. The Minister of Mineral Resources will issue environmental authorisations and waste management licences in terms of the NEMA and NWA respectively, for mining and related activities while the Minister of Environmental Affairs will be the appeal authority for these authorisations.

The Ministers of Environmental Affairs, Mineral Resources and Water and Sanitation have agreed on fixed time-frames for the consideration and issuing of the permits, licences and authorisations in their respective legislation.

The amendments to NEMA include transitional provisions which provide, *inter alia*, that all environmental management plans or programmes approved in terms of the MPRDA immediately before 8 December 2014, shall be deemed to be approved in terms of the NEMA and all applications for prospecting or mining rights that were still pending as at 8 December 2014 shall be processed and finalised in terms of the MPRDA Regulations.

7. Health and Safety Legislation

Health and safety of all employees in the mining industry is governed by the MHSA under the auspices of the Chief Inspector of Mines. The MHSA sets out in detail the steps that employers must take to identify, assess, record, and control health and safety hazards on the mine. The MHSA entrenches basic employee rights, notably their entitlement to participate in health and safety issues, to receive health and safety information, training and the right to withdraw from the workplace in the face of danger. The MHSA sets out various appointments and chains of responsibility, as well as the various workplace fora and codes of practice that must be compiled with in order to monitor and comply with the MHSA.

8. Exchange Control

South Africa's exchange control regulations provide for restrictions on the exporting of capital and for various other exchange control matters. Transactions between residents of the Common Monetary Area (South Africa, Namibia, Lesotho and Swaziland) on the one hand and non-residents of the Common Monetary Area, on the other hand, are subject to these exchange control regulations which are enforced by the Financial Surveilance Department of the South African Reserve Bank.

SECTION B

INFORMATION ON THE REPUBLIC OF CONGO AND ON CONGOLESE MINERAL POLICY AND LAW

1. Overview

The Republic of the Congo, also known as ROC, Congo-Brazzaville, the Congo Republic or simply the Congo, is a country in Central Africa. It is bordered by five countries: Gabon (and the Atlantic Ocean) to the west; Cameroon to the northwest; the Central African Republic to the northeast; the Democratic Republic of the Congo to the east and south; and the Angolan exclave of Cabinda to the southwest.

While some progress has been made in transforming its natural resources into economic growth, the country has not fully succeeded in leveraging them to achieve robust socio-economic outcomes. Overall, the heavy reliance on hydrocarbon resources has crowded out development of sectors such as agriculture and forestry.

The Republic of Congo also has large untapped base metal, gold, iron and phosphate deposits.

2. Geography and Population

The Republic of Congo is located in the central-western part of sub-Saharan Africa, along the Equator. It has a short coast on the Atlantic Ocean, and covers an area of 342,000km^2.

The capital, Brazzaville, is located on the Congo River, in the south of the country, immediately across the Congo river from Kinshasa, the capital of the Democratic Republic of Congo.

The southwest of the country is a coastal plain for which the primary drainage is the Kouilou-Niari River; the interior of the country consists of a central plateau between two basins to the south and north. Forests are under increasing exploitation pressure.

The Republic of Congo is highly urbanized with more than half its population of 5 million living in the two largest cities, Brazzaville and Pointe-Noire. The rest of the country ranks among the least dense areas in Africa, with a population density of 12.8 persons per square kilometre.

The country is largely covered by tropical forests and has abundant unused arable land equivalent to about one third of its total area. Most importantly, it is endowed with significant hydrocarbon reserves with an estimated proven 1.6 billion barrels of oil reserves and 90 billion cubic meters of natural gas. In addition, the country benefits from significant mining resources.

3. Government

The Republic of Congo became independent from France in 1960. Denis Sassou-Nguesso seized power in 1979 and ruled until allowing a multiparty election, which he lost, in 1992. He seized power again following a 1997 civil war and then won elections in 2002, 2009, and 2016. A referendum approved in 2015 modified the constitutional limits on a president's age and the number of terms he could serve, allowing the 74-year-old Sassou-Nguesso to run again.

The legislative and local elections took place on July 2017. The main ruling party, Sassou-Nguesso's Congolese Labour Party (PCT) won most of the seats, and the reshuffling of the Government resulted in no major changes in key ministerial positions.

4. Economic Overview

The economy is a mixture of subsistence agriculture, an industrial sector based largely on oil, and support services. Oil has supplanted forestry as the mainstay of the economy and provides a major share of government revenues and exports.

In the early 1980s, rapidly rising oil revenues pushed the Republic of Congo's GDP growth to a 5 per cent. annual average, one of the highest rates in Africa. Subsequent trends in oil prices have continued to affect economic progress.

In 2016, the petroleum industry accounted for an estimated 70 per cent. of the state's revenue and, despite a decade of modest reforms initiated by the government of President Sassou Nguesso, the Republic of Congo remains heavily dependent on oil revenues to finance its development.

The oil and gas downturn have significantly impacted the economic environment. With the severe strain of continued low oil prices, the Congolese government has initiated political and economic

actions to diversify its revenue stream to reduce its dependence on hydrocarbon and increase the contribution of tax-based revenue. In this respect, incentives are available for the development of other sectors, such as agriculture, forestry, and tourism.

5. Congolese Mining Licence Regime

5.1. Introduction

The legal system in the ROC is inspired by the French civil law system (the Civil Code of the former French Equatorial Africa remains in force in the ROC). The ROC is a member state of the Organisation for the Harmonization of Business Law in Africa, which aims at harmonising business law in Africa in order to guarantee legal and judicial security for investors and companies in its Member states, and has notably enacted the Uniform Act on commercial companies and economic interest group as well as a Uniform Act on Arbitration Law, allowing recourse to a standard arbitration mechanism for the settlement of contractual disputes arising from civil or commercial contracts as an alternative to ROC courts for legal proceedings relating to contracts.

The legal framework for the development and use of mineral resources in the ROC was established by the constitution of the ROC (approved by referendum in 2002 but since replaced by the 2015 constitution) and the law enacting and implementing the Mining Code adopted in 2005. The Mining Code was enacted to promote development of mineral projects by the private sector with the principal role of the state to promote and regulate the development of the mining industry.

The state owns the mineral substances contained in the soil and the subsoil of the ROC, including those beneath the territorial and maritime waters. The Mining Code governs the prospecting, exploration, exploitation, custody, transportation, and processing of mineral substances and fossils, and the administrative control over these activities. The president has jurisdiction over enactment of the mining legislations with the Minister of Mines and Geology responsible for day-to-day implementation of the Mining Code.

Those wishing to undertake mining operations in the ROC are required to hold a mining title. The nature of the mining title (authorisation or licence) depends on the nature of the mining operations. There are six categories of mining licences that may be issued in the ROC under the Mining Code namely: (i) prospecting authorisation; (ii) exploration licences; (iii) artisanal mining licences; (iv) industrial mining licences; (v) exploitation licences; and (vi) licences for the possession, circulation and conversion of precious mineral substances. Prospective authorisation, exploration licences and exploitation licences are considered in greater detail below.

5.2. Prospecting authorisation

The prospecting authorisation is granted by Order of the Ministry of Mines. A prospecting authorisation allows the holder to conduct prospecting works in the authorised area, without exclusive right. Holders of this type of permit work jointly with other holders of prospecting permits for the same substances and in the same areas. In addition, this authorisation allows the holder to move the mineral substance with or without the prior approval of the authorities, depending on the destination of the substances.

In the case of successful prospecting works, the authorisation allows the holder the right to request an exploration licence, for the same mineral substances and for the same area. The prospecting authorisation is non-assignable, valid for one year and can be renewed once for the same duration.

5.3. Exploration (or research) licence

Exploration (or research) licences are issued by way of decree passed by the Conseil des Ministres (the ''**Council of Ministers**'') and signed by the President. The principle of ''first come, first served'' is applied to the granting of exploration licences, subject to applicants of equal financial and technical ability. The exploration licences are granted on the basis of a report drawn up by the Minister of Mines and Geology.

Exploration licences confer on titleholders the exclusive right of prospection and exploration (to an unlimited depth) for the substances covered by and within the surface area set out in the licences. Exploration licences are transferable subject to the prior authorisation or consent of the Minister of Mines and Geology.

Exploration licences are valid for a period of three years from the date of publication of their attribution decree in the Congolese Government Gazette (''**Journal Officiel**'') and may be renewed twice for periods of two years, upon the application of the titleholder, addressed to the Minister of

Mines and Geology. Renewal of an exploration licence is accompanied by a reduction in the surface area covered by the licence which will not exceed 50 per cent. of the previous surface area. Any reduction in surface area will be specified in the relevant decree, which will be passed in the same manner as the issue of the original exploration licence. The holder of the exploration licence may propose the remaining area which the holder wishes to retain on the renewal of the licence. The exploration licence may be extended to cover new mineral substances in the same form and subject to the same conditions as the grant of the original licence, i.e. by way of decree passed by the Council of Ministers.

The main obligations of an exploration licence holder include:

- signing a mining research agreement with the ROC as represented by the Minister of Mines and Geology (although in principle, the Minister of Finance should jointly represent the ROC for this purpose but in practice, it is rarely the case);
- performing an environmental impact assessment study;
- providing to the Congolese Administration of Mining and Geology, according to the mining research convention, information on the existence of financial resources necessary to carry out the research works;
- notifying and informing the Congolese Administration of Mining and Geology of the types and quantities of exploration samples collected and the location from where such samples were taken;
- complying with the relevant laws and the environmental plan, and paying the applicable taxes and royalties; and
- providing quarterly reports to the Congolese Administration of Mining and Geology of the activity carried out during the period.

The exploration licence may be withdrawn upon the decision of the Minister of Mines and Geology in the following circumstances:

- failure to start the exploration or research operations within nine months from the date of the award of the licence, for the substances and for the area stated in the licence;
- performance of activities that clearly have no relation to the financial investment made;
- failure to fulfil expenses commitments as stipulated in the exploration licence application and in accordance with the mining research agreement; and
- the works of exploration are restricted without any justifiable reason and in a manner which is prejudicial to public interest for a period of more than six months.

The mining research conventions signed between the ROC and the operator provides a set of protection rights and guarantees including, notably, a legal grandfathering in the event of any new legal regulations and settlement of disputes through international arbitration (CCJA/ICSID).

5.4. Exploitation licence

In the event that the holder of an exploration licence discovers a mineral deposit, the application to convert the exploration licence into an exploitation licence must be submitted to the Minister of Mines and Geology within three months of the production of a study that confirms the presence of a commercially viable and exploitable deposit. In addition, the application for an exploitation licence must be accompanied by the documents set out in Article 50 of the Mining Code which includes, amongst others:

- a report on the results of the exploration work programme;
- a feasibility study (not defined);
- a development and exploitation plan; and
- an environmental and social impact assessment (ESIA).

The exploitation licence is formally issued by way of a Council of Minister's decree. The licence is officially granted on the basis of a report and proposal from the Minister of Mines and Geology, following a public benefit inquiry of the licence.

The exploitation licence confers on its holder the exclusive right to undertake exploitation works within the limits of its perimeter without a limit on depth, for the substances for which it has been

granted. Depending on the mineral substance concerned, exploitation licences have a maximum surface area of either 1,000km^2 or 2,000km^2.

Exploitation licences are valid for an initial period not exceeding 25 years and can be renewed on the same conditions as it was granted, indefinitely for periods not exceeding 15 years each, subject to further extraction being proved from the relevant deposit. The exploitation licence may be assigned, transferred and sublet with the prior consent of the Ministry of Mines and Geology.

Exploitation licences can be withdrawn, without compensation, further to a formal notice, upon proposal of the Minister of Mines and Geology followed by a decision of the Council of Ministers in the following scenarios:

- the holder has not commenced development works in the mining area within 12 months of being awarded the licence;
- complete lack or prolonged insufficiency of mining operations that is clearly contrary to the potential of the field or to the interest of consumers and that is not justified by market conditions;
- the mining operations have been conducted under conditions that seriously compromise the economic interests or the preservation and subsequent use of the fields; and
- failure to comply with the conditions set forth in the Mining Code, and non-fulfilment of the commitments mentioned in the mining convention.

The mine operator to whom an exploitation licence has been granted is required to enter into a mining agreement (convention) with the Republic of Congo. The mining convention defines the rights and obligations of the parties with regard to the investments and operations of the mine project and specifically addresses, amongst other things:

- the minimum works programme as well as the timing for conducting exploitation works;
- the minimum expenses for the exploitation works;
- the conditions of formation of associations, joint ventures or production sharing agreements or any other agreements, to conduct mining activities in common;
- the ROC's contribution or the contributions of other persons to the capital or to profits of the companies involved in the mining project;
- the conditions of realisation and organisation of the exploitation works;
- the total or partial processing of minerals found or produced during the exploitation works;
- the definition of the merchant value of the minerals;
- the technical and financial guaranties;
- the setting-up of bank accounts for the performance of decommissioning obligations;
- the specific tax and customs regime reserved for the mining company;
- the arbitration and settlement of disputes;
- the coordination of the operations of exploitation carried on by the operator on neighbouring sites; and
- the tax regime of the investments' depreciation.

The holder of an exploitation licence is required to incorporate a Congolese company to be the operating entity, and not less than 10 per cent. of the share capital is to be held by the ROC in consideration for the granting of the licence. The Republic of Congo may purchase additional shares in, or make a cash contribution to, the share capital of the operating entity during its negotiations involving the exploitation agreement.

Pursuant to the mining agreement, the operator commits to comply with the terms and conditions of the mining agreement which typically includes:

- financing the full construction of the project;
- obtaining the certificate of compliance for starting the project construction and authorisation of opening for starting the project operations as well as complying with the environmental management plan and the relevant laws;
- paying the mining and surface royalties taxes and levies, where applicable;

- undertaking to provide the State with a report at the end of each calendar quarter. The report will include: information on the objectives set for the production of Product; the type and a brief description of the work undertaken; an excerpt from the extraction, storage and shipment log; the production statistics; and a list of all management and supervisory staff ranked by position and a list of employees organised by category; and
- allocating a seat in the Board of Directors to the representative of the Republic of Congo.

The mining convention is signed by the Republic of Congo, namely the Minister of Mines and Geology, the Minister of Transports, Civil Aviation and Merchant Marine, and the Minister of Finance and Budget. The operator can request that the mining convention is approved by the Parliament which ranks the mining convention at the level of special law. The mining convention signed between the ROC and the operator provides a set of protection rights and guarantees including, notably, a legal grandfathering in the event of any new legal regulations and settlement of disputes through international arbitration (ICSID).

SECTION C

INFORMATION ON REPUBLIC OF GHANA AND GHANAIAN MINERAL POLICY AND LAW

1. Overview

The Republic of Ghana is situated in West Africa, immediately north of the equator and on the Greenwich meridian. Ghana is bordered to the west by Côte d'Ivoire (Ivory Coast), to the north and northwest by Burkina Faso, to the east by Togo and to the south by the Atlantic Ocean. Formerly a British colony known as the Gold Coast, Ghana was the first nation in sub-Saharan Africa to achieve independence in 1957.[1]

Ghana is well-endowed with natural resources, which include gold, timber, industrial diamonds, bauxite, manganese and petroleum, while agricultural production include cocoa, rubber, coconuts, coffee, pineapples, cashews, pepper and other food crops.[2]

2. Geography and population

Ghana covers a total area of 238,533km^2. Its capital city is Accra, while other major cities include Kumasi, Tema, Tamale and Sekondi-Takoradi. Ghana experiences a tropical climate, with conditions warm and comparatively dry along the southeast coast, hot and humid in the southwest and hot and dry in the north. The terrain generally comprises mostly low plains with dissected plateaux in the south and central areas.[3]

Ghana's population is estimated at approximately 27 million (2016 estimate). English is the official language of the country and is used in schools, but several Ghanaian languages, in addition to French, are also spoken. Christianity has been adopted by approximately 71 per cent. of the population, Islam by about 17 per cent., with traditional religions adhered to by 5 per cent. of the population. Other religions make up the total.[4]

The Aflao Phosphate Project is located within the Volta region. Eight major ethnic groups are represented in the Volta region and approximately 62 sub-groups speak 56 dialects. The classification of ethnic groups is based on that of the Bureau of Ghana Languages. The main ethnic group is the Ewe (69 per cent.), followed by the Guan (9 per cent.), the Akan (9 per cent.) and the Gurma (7 per cent.). The Guan is made up of over 18 sub-groups while the Akan comprises over 19 sub-groups. The Gurma has about 8 sub-groups and accounts for about 6.5 per cent. of the region's population.[5]

The Volta region accounts for 9 per cent. of the country's population and the majority of its population (73 per cent.) lives in rural areas. The most urbanized parts of the region are in the south; these include Keta, the most urbanized district with more than half (53 per cent.) of the district's population living in urban areas. The Ketu district is relatively urbanized (35 per cent. of population living in urban areas), mainly as a result of the land port of Aflao.[6]

3. Government

Following independence in 1957, Ghana has seen four republics with intermittent military rule. The current president is Nana Addo Dankwa Akufo-Addo, who was elected on 7 December 2016.[7] In terms of its political terrain, Ghana has a stable multiparty constitutional democracy founded on elections by open and free universal adult suffrage. The country has witnessed three smooth transitions of change of governments in the current democratic dispensation. The main arms of government are the Executive, Legislature, and Judiciary, each of which is independent of the other. At the local level, the District Assemblies are to be the highest political and administrative authority in each district, with deliberative, executive, and legislative powers.

1 Aflao CPR – main report, page 13.
2 Aflao CPR – main report, page 14.
3 Aflao CPR – main report, page 13.
4 Aflao CPR – main report, page 14.
5 Aflao CPR – main report, page 15.
6 Aflao CPR – main report, page 15.
7 Aflao CPR – main report, page 14.

4. Economic Overview

In terms of its political terrain, Ghana has a stable multiparty constitutional democracy founded on elections by open and free universal adult suffrage. The country has witnessed three smooth transitions of change of governments in the current democratic dispensation. The main arms of government are the Executive, Legislature, and Judiciary, each of which is independent of the other. At the local level, the District Assemblies are to be the highest political and administrative authority in each district, with deliberative, executive, and legislative powers. Ghana has a market-based economy with relatively few policy barriers to trade and investment in comparison with other countries in the region. Ghana reports roughly twice the per capita output of the poorer countries of West Africa. Ghana's gross GDP amounted to US$46.6 billion in 2017, with the services sector accounting for about half of GDP. Ghana's industries are dominated by mining, timber processing, light manufacturing, fishing, aluminium production and tourism. Gold, petroleum, timber and cocoa production are major sources of foreign exchange. Ghana is the world's tenth and Africa's second largest producer of gold. According to the Ghana Revenue Authority (GRA), gold accounts for approximately 97 per cent. of all mineral receipts.

One of the largest economic hurdles facing Ghana is the lack of consistent electricity. Ghana has received an extended credit facility with the International Monetary Fund to help it address its growing economic crisis. Ghana's fiscal consolidation programme is broadly on track. Ghana aims to narrow its government debt further; with this debt now estimated at 62 per cent. of GDP (2014: 72 per cent.). Nevertheless, in July 2016, Ghana revised its budget to reflect the expected shortfall in domestic revenue as a result of unanticipated technical problems in the Jubilee oil field and weaker than expected oil prices.[8]

In January 2017, the BoG's Monetary Policy Committee reported that for the first time since 2011, the provisional balance of payments in 2016 recorded a surplus. This largely reflected an improvement in the trade balance driven by a rise in gold export receipts and a fall in oil import prices. At the end of 2016 the total workforce employed by mining companies was 11,628 as compared to 9,939 for 2015, indicating an increase of 16 per cent., of which less than 2 per cent. are expatriates.[9]

Total investments in the mining sector within the past 10 years have exceeded US$10 billion. These investments came from companies engaged in gold production, exploration and support services.[10]

5. Mineral rights and legislation

The mining industry in Ghana is overseen by the Ministry of Lands and Natural Resources and regulated by the Minerals Commission ("**MinCom**") under the Minerals and Mining Act, 2006 (Act 703) and Minerals Commission Act 1993 (Act 450).[11]

The Minerals and Mining Act grants mineral rights, specifies conditions for dealing with mineral rights, change of control of mining companies and reporting requirements of companies involved in reconnaissance, exploration and mining. There are separate laws governing environmental obligations and taxation.[12]

Both Ghana's Constitution and its Minerals and Mining Law states that all minerals are the property of the country and the President holds them in trust for the people. There are the following seven types of mineral rights:

- Reconnaissance licence, which provides for the right to carry out reconnaissance for a specific mineral by geochemical or photo-geological survey or other remote sensing techniques, but does not allow drilling, excavation or other sub-surface techniques;
- Prospecting licence, which provides for the exclusive right to carry on prospecting and exploration for specific minerals to determine their extent and economic value, including the drilling of boreholes and the digging of excavations;
- Mining lease, which provides for the extraction and processing of minerals;

8 Aflao CPR – main report, page 14.
9 Aflao CPR – main report, page 15.
10 Aflao CPR – main report, page 15.
11 Aflao CPR – main report, page 16.
12 Aflao CPR – main report, page 16.

- Restricted prospecting licence, which provides the right to prospect for industrial minerals such as basalt, clay, granite, gravel, gypsum, laterite, limestone, marble, rock, sand, sandstone, slate, talc and salt;
- Restricted reconnaissance licence, which provides the right to search for industrial minerals by reconnaissance;
- Restricted mining lease, which provides the right to mine for industrial minerals; and
- Small-scale mining licence which authorises the holder to win, mine and produce minerals in respect of an area not exceeding 10 hectares.

A licence is issued by the Minister acting on the recommendation of the MinCom. The grant of a mining lease must be ratified by Ghana's parliament in accordance with Article 268(1) of the 1992 Constitution of Ghana. Future phosphate production will be subject to royalty rates. Royalty rates are yet to be prescribed, pending which a flat rate of 5 per cent. of the total revenue from minerals obtained is payable.

The Government of Ghana ("**Government**") is entitled to a 10 per cent. free carried interest in mining or exploitation operations, for which the Government is not required to make any financial contribution. In addition to the Government's 10 per cent. carried interest, the Government may, by agreement with the mineral right holder, acquire an additional participating interest in the mining operation.

PART VI

SECTION A

ELANDSFONTEIN COMPETENT PERSON'S REPORT

Competent Persons' Report on Elandsfontein Project assets, Western Cape, South Africa

Report Prepared for

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Grant Thornton UK LLP

Mirabaud Securities Limited

H&P Advisory Limited

Report Prepared by

SRK Consulting (South Africa) (Pty) Ltd

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Competent Persons' Report on Elandsfontein Project assets, Western Cape, South Africa

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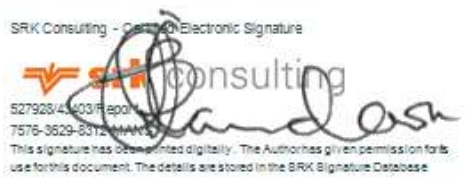

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Executive Summary

ES1: Purpose

Kropz plc (Kropz, the Company) requested SRK Consulting Pty Ltd (SRK) to conduct a review, and compile a Competent Persons Report (CPR), on the Kropz Elandsfontein (Pty) Ltd (Elandsfontein) project operations and assets situated in the Western Cape Province of South Africa. Kropz plans to list the project on the AIM market of the London Stock Exchange plc.

The CPR is required for inclusion in the Prospectus, Admission Document, and Circular or similar (Circular) in support of the Company's proposed listing on AIM. The Admission Document must satisfy the reporting requirements of Schedule 2(b) of the AIM Rules for Companies (the Listing Rules).

Reporting Standard

The Company has adopted "The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). The JORC Code is a professional code of practice that sets minimum standards for Public Reporting of Exploration Results, Mineral Resources and Ore Reserves.

In this CPR process, the JORC Code is the applied standard for the Mineral Resources and Ore Reserves of the Elandsfontein Phosphate Project. The Techno-Economic Model (TEM) was reviewed for compliance to the VALMIN Code. The VALMIN Code sets out requirements for the technical assessment and valuation of mineral assets and securities for independent expert reports.

Background

Kropz Elandsfontein, 74% owned directly and indirectly by Kropz, holds a new order mining right (WC) 30/5/1/2/2 10043 MR over Portion 4 and part of Portion 2 of the farm Elandsfontein 349 and is located approximately 18 kilometres (km) east of the Atlantic shore, 95 km north-northwest of Cape Town.

The Elandsfontein deposit is generally recognised as being the second largest phosphate deposit in South Africa by contained phosphate, behind Foskor's operation in Phalaborwa. The sedimentary deposit is a free-digging operation and does not involve drilling and blasting activities. Elandsfontein has the capacity to produce up to 1.2 Mtpa of rock concentrate from a shallow Mineral Resource, which will be shipped from the Saldanha port to customers in both local and international markets.

The Company plans to bring the operation back into production in 2019 and is currently focusing on two key areas in order to achieve this objective, namely:

- Finalising the revised plant design and commissioning to accommodate the specific ore body characteristics; and
- Raising the requisite capital to bring this project back on line.

Description of Assets

The main assets on the mine are provided in Table ES.1. To date, the Company has spent ZAR1 393 million (approximately USD120 million) on project Capital Expenditure (Capex) to construct the requisite infrastructure and processing plant, and the initial mining to expose a section of the ore body and capitalised working costs.

Based on site visits by SRK, the infrastructure was found to be well constructed, of a high quality, substantially complete and project appropriate. The plant is well constructed, and the materials and

equipment are of a high quality. Further Capex will however be required to upgrade the process plant, in order to address the shortcomings identified during initial commissioning.

Table ES.1: Elandsfontein Phosphate Project key assets

Asset		Remark
The open pit, process plant and equipment		The 500 ha operations area contains the current excavation area, future mining area, softs stockpile, plant and offices
Softs stockpile		The overburden that is removed from the mining area for the early production period is deposited on the softs stockpile.
Infrastructure		The operation is accessed via a newly developed mine access road running 13 km south from the R45. New overhead power lines have been erected to connect the operation to the national power utility (Eskom) grid. Water lines are laid to connect the operation to the district municipality's water supply.
The process plant	Crushing, milling and classification circuits	Phosphate is liberated from silica sand by progressive size reduction and separation, until the product size is appropriate for downstream flotation.
	Flotation circuits	A process of reverse flotation is applied in which silica sand and phosphate are separated by recovering the silica to the flotation froth phase, with the phosphate concentrate thus reporting to the underflow.
	Concentrate handling	Phosphate concentrate is thickened, filtered and dried ahead of storage.
	Concentrate storage and despatch	Final concentrate is stored in a closed shed ahead of despatch by road.
	Tailings handling	Flotation tailings are thickened and filtered ahead of co-deposition with mine overburden.
	Water storage	Water on site is stored in lined water dams and tanks.
Employment, up-skilling and care		Over 1 700 people were employed during the construction phase of the project with nearly 50% being sourced from local communities. Over 450 contractors and staff will be employed as members of the Elandsfontein operational workforce at steady state production.
Office		The mine offices and access road will be left behind after mine closure, to serve as a tourist centre, allowing access to the nearby fossil area and future Elandsfontein Nature Reserve.

ES2: Effective Date

The effective date (Effective Date) of this CPR is deemed to be 27 November 2018. No material changes have occurred between the Report Date and Effective Date of the CPR.

ES3: Compliance

This CPR has been prepared in accordance with JORC Code and the VALMIN Code as well as the AIM Listing Requirements.

ES4: Forward Looking Statements

This report contains statements of a forward-looking nature which are subject to a number of known and unknown risks, uncertainties and other factors that may cause the results to differ materially from those anticipated in this report. The achievability of these projections is neither assured nor guaranteed by SRK. The projections cannot be assured as they are based on economic assumptions, many of which are beyond the control of the Company and SRK. Future cashflows and profits derived from such projections are inherently uncertain and actual results may be significantly more or less favourable.

ES5: Mineral Tenure

According to the Company, no director, promoter or shareholder has had any current or past interests in the assets.

SRK confirms that none of the CPs and contributors to the CPR have had any past or current interest in the Company.

Legal Opinion on Title

Elandsfontein holds a Mining Right, granted 26 November 2014 in terms of Section 23(1) of the Minerals and Petroleum Resources Development Act 28 of 2002 (MPRDA), effective 30 January 2015, for (mining) phosphate and silica sand. The Mining Right was appealed, but in a letter dated 14 December 2017 the Minister of Mineral Resources confirmed and upheld the decision to grant the Mining Right, effectively dismissing the appeal.

This report relies on information disclosed by the Company. The legality of the underlying agreements was not verified by SRK. The legal letter provided to SRK by Dr. Martin Carstens (the Company's legal advisor) on 22 March 2017, which is attached and marked Appendix A, addresses the security of tenure of the properties, mining rights and surface rights with reference to Table 1.7 and the information made available in February 2018. A full legal due diligence as notified by the Company, is being conducted in parallel by Werksmans Attorneys.

ES6: Geology

The Elandsfontein phosphate deposit is situated in the south western coastal region of South Africa. This area is underlain by the Miocene and Paleocene Sandveld Group comprising of the Elandsfontyn, Varswater, Velddrif, Langebaan, Springfontein Hill and Witzand Formations. This Group is dated between the Miocene (23 Ma to 5.3 Ma) and the Pliocene (5.3 Ma to 2.6 Ma). The Varswater Formation hosts the Elandsfontein phosphate deposit. The Sandveld Group unconformably overlies the Neoproterozoic Malmesbury Group and plutons of the Cape Granite Suite.

The Varswater Formation is formed by estuary and marine sediments, which locally overlie the Elandsfontyn Formation and consists of poorly sorted angular sands and gravels grading upwards into carbonaceous clays and peaty material, known as the Langeenheid Clay Member.

Deposit Type

The Elandsfontein phosphate deposit belongs to the sedimentary phosphate deposit type known as phosphorites. These deposits have been found on most continents and it is estimated that the world inventory of this style of deposit exceeds 200 000 Mt. They range in age from the Precambrian to recent, but the commercially exploited deposits are mainly of Phanerozoic age. In South Africa, and specifically in the Western Cape Province both authogenic and diagenetically modified phosphorite deposits have been identified by Birch (1990) in the Langebaan area. In the Saldanha embayment deposits of calcium phosphate formed during the Miocene and Pliocene periods. The Elandsfontein deposit is a diagenetically modified phosphorite deposit.

Mineralisation

The phosphate mineralization at Elandsfontein is in the form of the calcium phosphate mineral apatite, that presents itself as one of three types that may be described from top to bottom of the mineralised ore horizon as:

- Rounded reworked orange coloured phosphate grains in the terrace ores;

- A mixture of the orange grains in addition to the crystalline dark green apatite in the unconsolidated F and G Units; and
- As a phosphate matrix between mainly quartz grains in cemented phosphorite lenses in the F Unit, but mainly in the G Unit.

The host of the apatite mineralization consists mainly of poorly sorted, angular quartz sands and gravels, alternating with fine sands and silts.

Quality Assurance and Quality Control

Systematic samples were collected from each series of drilling campaigns and submitted to two independent primary laboratories and two independent umpire laboratories. A satisfactory level of accuracy and precision was achieved and demonstrated through the insertion of independent blank, duplicate and Certified Reference Material (CRM) samples. Samples from the two significant drilling programmes have also been submitted to independent, accredited laboratories that confirmed the primary results. SRK is of the opinion that the chemical analytical results are suitable for Mineral Resource estimation purposes.

Relative Density

Relative densities were measured for the more competent material obtained during the diamond drilling programme. These samples were covered with wax and the density was determined using the Archimedes bath method.

SRK recommended measurements of the in situ dry density, using the sand replacement method. These measurements were made within the dewatered pit at the top of the F-Unit and the results confirmed the results previously obtained from the same stratigraphic interval.

SRK is therefore of the opinion that the relative density measurements available are suitable for tonnage conversion and Mineral Resource estimation.

ES7: Mineral Resources

In 2014, Snowden prepared the Mineral Resource estimate (MRE) for Elandsfontein taking into account all the historical work and the additional exploration work that was completed in 2014. SRK reviewed the Snowden 2014 MRE in 2015. In 2018, Snowden updated the Mineral Resource for Elandsfontein, after additional exploration work was done during 2015 and 2017. This forms the basis of the Mineral Resources reported in this CPR. The 2018 Snowden MRE has been audited by SRK and tests conducted by SRK confirmed the MRE but indicate a lower degree of confidence in the Terrace domain, which resulted in a minor portion of that domain being downgraded from a Measured to an Indicated Resource.

Dimensions

The Elandsfontein Mineral Resource extends over 3.6 km in NE-SW direction and 1.8 km in a NW-SE direction. The combined FG package varies in thickness from 3 m to 30 m, having an average thickness of 17 m.

Domains

Snowden defined two domains namely, the Basin and Terrace domains, as there is a distinct change in the grade distribution between the two areas. These two areas were estimated independently. The F and G units were combined for statistical analysis, variography and estimation purposes.

Variography

In examining the data in the Basin Domain, which has an approximately normal distribution, SRK were able to independently generate experimental semi-variograms that showed good grade continuity and SRK could model similar ranges to those modelled by Snowden.

However, SRK was unable to generate a meaningful semi-variogram for the Terrace domain. There appears to be a bi-modal population for the data in the Terrace domain and very little grade continuity displayed in the semi-variograms. SRK is of the opinion that the data in the Terrace area does not show sufficient grade continuity to justify a Measured Resource classification in this area and has therefore reclassified it to that of an Indicated Resource.

Estimation Methodology

Snowden combined the F and G Units for estimation into parent cells within the three dimensional block model, using Ordinary Kriging (OK) to estimate the percentage of P_2O_5, MgO, Fe_2O_3, Al_2O_3, SiO_2 and CaO. Grade estimation was run in a three pass process using the actual ranges obtained from the variograms for the first search pass. For the second search pass, the range was doubled and for the third search pass, a search volume (SVOL) factor of 10 was used. The dry bulk density measurements taken on core from the diamond drill holes in 2014 were used for the Inverse Power of Distance Squared (IPD^2) tonnage estimate in 2018 (as was the case in 2014). These bulk densities were verified by check measurements in 2018 using the sand replacement method as recommended by SRK.

Validations

SRK is satisfied that Snowden has done sufficient validations as required by international reporting codes. SRK's review of the Snowden validations indicate an acceptable correspondence between the input drill hole data and the estimates.

Mineral Resource Classification

The 2018 model was classified by Snowden into Measured, Indicated and Inferred Resource based on the data quality, drill spacing, geological and grade continuity, and drill hole sample recovery and the reconciliation results from the initial mining. Not all estimated blocks were classified as a Mineral Resource.

An increase in confidence, relative to the 2014 MREs, is due to the additional 50 exploration drill holes (26 reverse circulation (RC) holes, 13 production RC holes, and 11 sonic holes) completed between 2015 and 2017, which included RC and sonic drill holes with drill recoveries above 90%; the drill holes are now more closely spaced and there was an increased quantity of data available for Mineral Resource estimation purposes.

The percentage tonnage split for the SRK audited 2018 Resource is Measured 46.98%, Indicated 29.97% and Inferred 23.05%.

The SRK audited 2018 Elandsfontein Mineral Resource is presented in Table ES.2.

Table ES.2: SRK Audited Elandsfontein Mineral Resource at 31 October 2018, (above a 4.0% P_2O_5 cut-off)

Class	Quantity (Mt)	Grade (%P_2O_5)	Grade (%Al_2O_3)	Grade (%MgO)	Grade (%Fe_2O_3)	Grade (%CaO)	Grade (%SiO_2)	Contained P_2O_5 (Mt)
Gross								
Measured	47.5	10.31	1.18	0.20	0.98	14.9	69.8	4.90
Indicated	30.3	5.14	1.15	0.12	0.85	7.1	82.9	1.56
Inferred	23.3	5.48	1.15	0.13	0.95	7.5	82.5	1.28
Total	**101.1**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**7.73**
Net Attributable (74% attributable to the Company)								
Measured	35.2	10.31	1.18	0.20	0.98	14.9	69.8	3.62
Indicated	22.4	5.14	1.15	0.12	0.85	7.1	82.9	1.15
Inferred	17.2	5.48	1.15	0.13	0.95	7.5	82.5	0.94
Total	**74.8**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**5.72**

Note: All numbers are reported to two significant figures. Rounding may cause minor discrepancies in this table
Source: Snowden, 2018 and modified by SRK.

Project risks

No major project risks or potential fatal flaws could be identified associated with the sampling, delineation and estimation of the Mineral Resources, however the reader is reminded that the lack of additional density data for the new drill holes could be regarded as a risk in terms of tonnage estimation; this has however been negated to a large extent by additional check density measurements done by Kropz during 2017 by the sand replacement method which confirm the 2014 density measurements.

ES8: Mining and Ore Reserve

The Elandsfontein Phosphate Project is planned to be mined by conventional open pit mining methods, though no production drilling and blasting is necessary due to the sandy characteristics (low percentage of thin hard rock lenses) of the deposit. The material is removed by excavator loaders and articulated dump trucks (ADTs). The ADTs transport material to the Softs Stockpile (SS), Run of Mine (RoM) crusher and in future, once the space is available, to the backfill area in the mining pit. The mining will take place sequentially from the north east to the south west of the mining licence area in cuts with a maximum mining width at the bottom of the cut of 50 m. This maximum width is to ensure the clay layer below the mineralised zones does not fail under the artesian water pressure from below. At this stage the mining method has proven, during the 2017 commissioning phase that it is efficient in removing overburden and Mineral Resource material to supply the plant with ore.

The biggest geotechnical risk (See ES9) that can affect mining remains the possibility of pit 'basal heave failure' below the mineralised zone and this will need to be monitored and appropriately managed once the overburden and mineralised material has been removed from the mining area. This risk was previously identified by SRK and the mine management, and current mine plan, are both committed to managing this risk.

There is sufficient confidence in all modifying factors to declare an Ore Reserve, based on a Pre-Feasibility Study (PFS). The confidence in the plant recoveries and product specification being achieved is good, hence SRK being able to declare an Ore Reserve, but will be improved by the on-going level of metallurgical test work as described in ES13 currently being undertaken before recommencing production. Bulk test work should further increase the level of confidence in these modifying factors. The capacity of the mine to blend the F1, F2 and G ore horizons will also need to be proven.

SRK has classified the planned Measured and Indicated Mineral Resources to Probable Ore Reserve to cater for the current level of confidence in the modifying factors discussed above and in ES13.

The Ore Reserve was reported from the production schedule with the following modifying factors:

- Mining Recovery 1.35%; and
- Dilution 5%.

The SRK 2018 Elandsfontein Ore Reserve is presented in Table ES.5.

Table ES.5: Elandsfontein Ore Reserve as at 31 October 2018, (above a 4.0% P_2O_5 cut-off)

Gross			
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**P_2O_5 Content (Mt)**
[1]Proven			
Probable	63.63	9.60	6.11
Total	**63.63**	**9.60**	**6.11**
Net Attributable (74% attributable to the Company)			
[1]Proven			
Probable	47.09	9.60	4.52
Total	**47.09**	**9.60**	**4.52**

Note:
[1]No Proven Ore Reserves declared due to the current level of confidence in processing modifying factor.

ES9: Geotechnical Engineering

The Elandsfontein phosphate deposit occurs at an approximate depth of 55 – 57 m. Due to its lateral extent and shallow depth, strip mining has been deemed the most appropriate mining method for extraction of ore. The deposit is overlain by loose and partially cemented quartz rich sand, which displays poor shear strength properties.

The open pit will be mined in a roll over operation where mining will progress to the south west in benches once the current initial boxcut is complete. The integrity of slope angles was assessed using numerical modelling techniques, with input slope angles being extracted directly from the mine plan submitted to SRK at the time. Waste will be mixed with concentrator tailings and this will be used to sequentially backfill the eastern portion of the boxcut as mining progresses. Backfill slope angles were similarly extracted from the mine plan prior to input into the numerical model. Mining and backfilling will occur concurrently ensuring a maximum pit floor width of 50 m. The maximum pit floor width (50 m) is specified, and based on numerical modelling investigations, where 'pit basal heave' in particular was explored. The catalyst for pit basal heave is the potential upward pressure head acting on the clay aquitard at the base of the ore deposit from a confined aquifer. This clay aquitard forms the base of the pit.

Possible groundwater inflow into the pit has been identified as a potential geotechnical risk as increased pore water pressures could lead to pit wall instability. This risk has been mitigated by the borehole dewatering system that has been implemented, which coupled with in-pit sump dewatering has proven to be effective to date and working as designed. Diligent and regular monitoring of the efficacy of the dewatering is required to ensure that pit wall instability is minimised.

Operating standards are described in a Code of Practice (CoP) that has been created specifically for Elandsfontein and is considered comprehensive for the scale of the operation. The CoP complies with accepted guidelines and the impression gained during the site inspection is that the Company demonstrates commitment to a safe working environment. Some geotechnical risks have been identified, however, but these are accommodated for in the design and standard operating

procedures. No direct risk to the Life of Mine (LoM) is envisaged provided that there is strict compliance with the indicated procedures, which is currently being demonstrated by the operating team.

The groundwater and subsequent geotechnical risks are well managed by Elandsfontein.

ES10: Safety and Occupational hygiene

Safety

There are inherent safety risks associated with mining activities. While Elandsfontein's safety risks can be considered to be lower than those prevailing at many other mining operations, due care should always be taken to maintain high levels of safety.

In terms of the safety performance statistics, there were no fatalities from the construction phase in 2016 to date. Three lost time injuries were recorded in 2016 resulting in a Lost Time Injury Frequency (LTIFR) rate of 0.26, well below the target of 0.40. No lost time injuries were recorded during 2017 and 2018 to date.

Elandsfontein complies with all the requirements of the Mine Health and Safety Act 29 of 1996 (MHSA).

Occupational Health

Occupational health is aimed at the protection and promotion of the health of workers by preventing and controlling occupational diseases.

Dust is formed at most mining and rock handling processes. Employees continuously exposed to dust containing silicon dioxide (SiO_2) in concentrations in excess of 18% are at risk of contracting the lung disease silicosis (Source: Dept. of Labour). Due to the health effects of silicosis, it is probably one of the most severe and costly occupational health problems in the South African mining industry.

The silica sand overburden at Elandsfontein contains SiO_2. An analysis (December 2017) of the Elandsfontein inhalable silica dust (dust particles of <5 µm) indicates a low SiO_2 content of 2.38%. There is therefore limited to no risk, of employees contracting silicosis.

In terms of the occupational health performance for 2017, in the period before production was put on hold, there were no occupational health diseases reported.

The airborne pollutant (main pollutant: dust) measurement results were well below the occupational exposure limits.

Noise Induced Hearing Loss (NIHL) is one of the most common compensable occupational diseases globally. Approximately 52% of employees at the Elandsfontein Phosphate Project will be exposed to greater than the noise rating limit ≥85 dBA from time to time. However, the mine procedures require that all employees entering noise zones must wear hearing protection devices.

In terms of the health surveillance statistics, there have been no certified cases of NIHL to date.

The Company's ability to maintain zero harm to employees can be maintained with the safety initiatives which are in place.

ES11: Hydrogeology

Groundwater

The current dewatering and re-injection scheme at the mine is operating successfully. The potential impacts to the mining schedule, safety (due to flooding and slope stability) and the environment are high if the dewatering scheme were to fail. However, the likelihood of failure is low. There is

redundancy in the system in terms of additional boreholes that are currently on standby, and there is an emergency power generator. The installed infrastructure is regularly checked and appropriately maintained, and monitoring is diligently undertaken and reported. Continued planning includes consideration of seepage quality and quantity from tailings backfill, the extension of the mine pit beyond the current line of dewatering boreholes, and the potential for cavity intersection resulting in temporary high inflows during mining. The water-retention characteristics of the material within the mine pit area, the geometry of dewatering (only down to the clay horizon a few metres below the ore body) and the potential for seepage from tailings, result in there being a high likelihood that in-pit sump pumping will continue to be required at a rate of approximately 15 – 25 L/s throughout the LoM. These elements have been factored into the mine plan and schedule, as well as the site wide water balance. It is our observation that the groundwater, and subsequent geotechnical risks, are currently well managed by the Elandsfontein team.

Specialist studies, backed up by latest monitoring results have all indicated insignificant groundwater impacts on account of the mines ongoing operations. The Water Use Licence (WUL) is also currently subject to an appeal that does not affect the mine's ability to dewater as designed but has been referred to the Water Tribunal. This is unlikely to be decided on in the near term. Although unlikely, if this appeal forces suspension of dewatering, mining would be forced to halt and there would be a high risk of pit wall failure (materially affecting future mining), along with associated environmental impacts. The mine is thus encouraged to continue its existing, comprehensive, monitoring, reporting and stakeholder engagement activities.

Surface water

Stormwater management at the site is currently effective. Continued maintenance and management is required to ensure that the pit and dams do not flood, and that contamination is not spread from dirty areas to the environment. Given the regions inherently low rainfall statistics the primary risk is that rising levels of 'dirty' water in the stormwater dams (from continued pumping of in-pit sump water and direct runoff from the plant), will result in exceedance of the stormwater dam capacity which will eventually overtop. This risk will persist until the process water treatment plant is commissioned. The Company has requested that the two 'drainage line/water course alteration' activities of the WUL (Section 21 (c) and Section 21(i)) be appropriately amended. However, if this is not agreed to by Department of Water and Sanitation (DWS) then further action will be required of the Company in terms of appropriate identification and management of the alleged drainage channels/water courses.

ES12: Softs Stockpile

The SS is designed to accommodate 25.5 million tonnes of concentrator tailings and mine overburden over the initial 25 month period of mine operations. This is adequate to accommodate the tonnage indicated for the LoM plan. Following the 25 month period, the overburden and tailings will be deposited in the pit, in accordance with the 'roll over' mining method that has been adopted. The facility covers an area of approximately 87 ha, with a maximum termination height of 42 m and overall side slopes of 1V:4H. The facility was designed for co-disposal of 79% by mass of soft overburden and 21% by mass of filtered tailings. It is understood that the ratio may alter, however, the overall quantity of material is expected to remain the same.

The stability assessment of the SS indicates that it will have an acceptable factor of safety against failure in accordance with legislative requirements and international best practice.

Drainage facilities have been designed in accordance with required standards and include stormwater collection channels reporting to a 30 000 m^3 storm water dam. Two decant pipes have been allowed for.

The SS has a Low Risk safety classification in terms of the requirements of the SABS Code of Practice for Mine Residue Deposits (SABS 0286:1998).

The SS has been designed as a Class D landfill assuming a Type 4 waste. The report indicates that although the material classifies as a Type 3 waste, the elevated concentrations of certain determinands are not considered to be enriched and the leachate concentrations are below threshold values. For this reason, a risk based approach was recommended to assess and mitigate as necessary the impacts on groundwater.

The initial geochemical testing carried out on tailings and overburden samples to date indicate that there may be some potential risks to the groundwater posed by leachates emanating from the SS and open pit backfill. The risks are currently not quantifiable but are being assessed through continued leachate test work programmes and ground water modelling.

The operating costs for the soft overburden are estimated at ZAR161.5/tonne (USD13.4/tonne) and the tailings at ZAR31.5/tonne (USD2.6/tonne) which is considered to be market related.

The following recommendations are proposed, and are being considered by the Company, as the project progresses into development and production:

- Soil parameters of the tailings feed used in the design should be confirmed through laboratory testing once a representative sample is available, and further through in situ sampling during Phase 1 of the development. A sample has recently been taken to progress such testing;
- The stability assessment should be reassessed should the ratio of soft overburden to filtered tailings vary significantly and/or the soil parameters differ from the design assumptions; and
- A detailed design should be developed for the in-pit backfill subsequent to completion of the SS.

ES13: Metallurgy and Mineral Processing

Process Plant Commissioning

Construction of the Elandsfontein Phosphate Project commenced in February 2015. First ore was processed through the plant on 28 March 2017. Failure of the mill motor shortly thereafter resulted in a 10 week delay in the commissioning process.

Metallurgy

Initial test work undertaken by Mintek followed the Direct-Direct (DD) flotation arrangement using mechanical flotation cells. Eriez promoted the use of column cells, testing DD flotation on a coarse fraction and Reverse-Reverse (RR) flotation on a fine fraction.

The next phase of investigation by Eriez included three variability samples in the range 9% to 13% P_2O_5. Upon introduction of the 13% sample to the column, it became evident that flotation selectivity was poor. Following successful testing of RR flotation on all of the variability samples, this mode of flotation was chosen for all further flotation testing.

In line with test findings, RR flotation was selected as the preferred process route that was installed at Elandsfontein. Unfortunately, a number of issues and challenges were experienced during commissioning that prevented the continuous production of on-specification rock phosphate concentrate. Detail of the challenges are described below. On 28 July 2017, the Elandsfontein management team took the decision to suspend operations.

Since the suspension of operations, Elandsfontein have commissioned test programmes at Mintek (South Africa), Arrmaz (United States), Betachem (South Africa) and Tenova Advanced Technologies (TAT) (Israel). Arrmaz conducted bench scale reverse flotation tests on samples of

F1 and F2 ore. They demonstrated the benefit of attritioning, (P_2O_5 recovery of approximately 70% for deslimed and attritioned feed versus approximately 62% for deslimed feed). Attritioning did however, result in increased slimes generation and loss. Following comprehensive investigations, TAT concluded that Direct-Reverse (DR) flotation achieved the targeted final concentrate grade at higher P_2O_5 recovery than RR flotation. At product grade of 31% P_2O_5 DR flotation achieved an average P_2O_5 recovery of 78.3% compared to 55.4% for the best tests of RR flotation, using the same amines as currently employed at Elandsfontein. The DR flotation configuration has however been shown to have considerably higher operating and capital costs than the RR circuit and has therefore been discarded as an economic option. Further test work at Mintek was originally commissioned to confirm the TAT results. Following some circuit optimisation, Mintek achieved P_2O_5 recoveries of 77% for F1 and 83% for F2 in the RR configuration, which is in line with the results achieved at Eriez during the earlier test work conducted on a blended sample.

It is important to note that the abovementioned results represent flotation performance after desliming. Test results have shown that up to 30% of the P_2O_5 content can report to the -20 µm slimes fraction in this upfront process. Planned circuit modifications allow this material to be collected separately. There is accordingly an opportunity to develop a process to recover some of the P_2O_5 in the -20 µm fraction. This will, however, not be without its challenges, firstly due to settlement difficulties and secondly because of technology constraints with such fine material. It does however, offer upside potential should the company be able to develop a suitable solution and it is therefore recommended that this opportunity be pursued as a secondary priority.

Prior to initial commissioning, one of the metallurgical shortcomings identified was that test work undertaken, was primarily conducted on a number of composite samples representing the average expected blend of the different ore types. Elandsfontein elected not to test individual ore types but rather composite samples, as selective mining and separate processing of discrete ore types cannot be realistically achieved in practice. SRK acknowledged this rationale but considered that separate testing of the individual ore types would have improved the overall understanding of deposit metallurgy prior to initial commissioning. Since operations were discontinued, Mintek, Arrmaz and TAT have undertaken test work on individual ore type samples. An additional part of the on-going testwork is a programme of variability testing to be undertaken at TAT to assess the performance of RR flotation on individual ore types, a range of ore type blends and at different grades in terms of phosphate, silica, iron and aluminium oxide plus spatial location representing future years of mining. SRK strongly supports the need for variability testing. SRK has been advised that test results will be incorporated into final design specifications.

Results achieved under bench scale laboratory conditions may not necessarily be achieved at industrial scale. Pilot plant testing should increase the level of confidence in predicting full scale plant performance. Elandsfontein have advised that pilot plant testing is being planned. SRK strongly supports this proposal but cautions that careful consideration will have to be given to the composition of the bulk samples.

Initial Commissioning Problems and Proposed Remediation

Assisted by experts in the field of phosphate processing, Elandsfontein examined the causes behind the initial non-performance of the installed RR flotation circuit. A number of key factors have been identified and it is now proposed to address these and re-commission a modified RR circuit.

- *Non Representative Feed*: Relocation of the boxcut and delayed dewatering resulted in the total ore package not being accessible ahead of commissioning. The plant was accordingly commissioned on ore that differed significantly in terms of mineralogy, grade and particle size distribution from the composite samples that were tested. The early ore mined was significantly

lower in grade (~6%) than design feed grade (~9%), and coarser than material tested thus impacting the required duties of the column flotation cells; and

It is anticipated that ongoing dewatering will allow access to virtually the complete ore package when the plant is recommissioned which should allow the mine to process material as per its original mine plan.

- *Impact of Slimes*: Experts advised that the use of amines for reverse flotation of silica from phosphate requires clean particle surfaces and water that is free of slimes and dissolved salts. It was evident during commissioning that slimes handling was inefficient and impacted negatively on flotation performance. In addressing the slimes issues, a number of actions are proposed:
  - The desliming cut point will be increased from 10 µm to 20 µm. This should reduce slime related problems but will result in increased mass and P_2O_5 losses to slimes;
  - Though not strictly related to sliming, it is planned to replace the split coarse and fine flotation circuits with a single circuit handling the composite size range. This is considered an appropriate solution by SRK, subject to confirmation in the planned pilot test programme; and
  - A new thickener and ancillary equipment will be installed to separate the slimes and tailings circuits. This should significantly reduce the impact of slimes and the effect of residual reagents and flocculant. The impact, if any, of dissolved salts can only be assessed once the industrial plant and water circuits stabilize.
- *Apatite Rimming*: A Run of Mine (RoM) sample, taken after the last commissioning run, was submitted for Scanning Electron Microscopy analysis. It was evident that certain quartz grains had coatings of ultra-fine apatite and clay cement binding the silica particles, as well as occasional rims comprising only of apatite. It is possible that such rimming may impact negatively on flotation performance, in that such a rimmed particle may present itself as apatite in flotation, resulting in contamination of the concentrate by silica. In their test programme, Arrmaz demonstrated the benefit of attritioning, (P_2O_5 recovery of approximately 70% for deslimed and attritioned feed versus approximately 62% for deslimed feed). Attritioning did however, result in increased slimes generation and associated loss;

  In order to address the attritioning concern, two attrition scrubbers will be incorporated into the modified comminution circuit; and
- *Inadequate Conditioning:* The original plant design relied on in-circuit amine conditioning rather than dedicated conditioning tanks ahead of the flotation circuit. Controlled conditioning is considered to be important for optimum column flotation of silica.

  The modified flotation circuit will accordingly be provided with a conditioning tank and pumps.

Future Mineral Processing

The evolution of the process route as described above, compounded by the inability of the originally installed RR flotation circuit to reach target concentrate grades during the short period of initial commissioning, is indicative of somewhat challenging metallurgical characteristics. However, analysis of the overall spectrum of historical and recent test results, plus an understanding of the causes behind earlier non-performance as assisted by experts within this field, support the decision to remain with the RR flotation configuration. Further support is derived from the experience of other international operations that have experienced and managed to overcome similar issues. It is accordingly proposed to re-commission the plant with the original configuration once the following modifications have been implemented:

- Modification of the classification circuit to allow the desliming cut point to be increased from 10 µm to 20 µm;
- Reconfiguration of the flotation circuit to replace the split coarse and fine flotation circuits with a single circuit handling the combined size range;
- Amine conditioning ahead of rougher flotation;
- Provisional allowance for a mechanical rougher scavenger;
- Installation of a new thickener and ancillary equipment in order to separate the slimes and tailings circuits; and
- Installation of two attrition scrubbers to clean particle surfaces ahead of flotation.

Also, given the difficulties associated with the very short initial start-up, a six month ramp up has been provided for in the re-commissioning.

Subsequent to these technical assessments, further bench scale testwork undertaken by TAT but in particular that undertaken by Mintek, resulted in a significantly modified flotation circuit, including multiple stages of attritioning and cleaning. SRK concurs that the identified technical issues very likely contributed to the non-performance of the Elandsfontein process plant. In addition, positive test results support the recommended modifications to the flotation circuit. It is thus reasonable to expect that the proposed remedial actions and circuit modifications will allow the plant to meet its baseline targeted performance, subject to the various ore types performing in line with test results. As mentioned, an on-going programme of optimisation, pilot and variability testing is planned prior to recommissioning. It should be noted that such testing does not necessarily remove the risk of process non-performance, it merely improves the level of confidence in its likely success as well as identifying potential opportunities for increased plant performance. Higher recoveries could support a more positive outcome.

Kropz delivered approximately 45 kg of phosphate ore from the F2 horizon of the Elandsfontein deposit for further process development work at Mintek. The grade of the sample was just over 12% P_2O_5, which is significantly higher than the planned LoM grade for the F2 horizon.

The circuit recently proposed by Mintek however, is significantly more complex than those proposed by others. Flotation performance was also shown to be extremely sensitive to operating conditions. Mintek are accordingly undertaking further investigation into simplify their circuit and making it more robust.

It is also worth noting that cessation of operations during commissioning did not allow all unit processes to be tested at design capacity. The capacity of the rest of the plant has therefore still to be demonstrated but can reasonably be expected to meet design specification.

Process Plant Operating Costs

Maintenance costs for the process plant are scheduled as a fixed cost per annum of ZAR36.1 million (USD3 million). This is approximately 5% of the relevant portion of the planned annual process plant Capex and is considered to be reasonable.

ES14: Infrastructure and Capital Expenditure

The mine and plant are currently under care and maintenance whilst the technical process issues are being resolved.

The engineering and infrastructure was visited on 22/23 February 2018. The infrastructure was found to be substantially complete and appropriate. The plant is well constructed, and the materials and equipment are of a high quality.

The plant and infrastructure has been well maintained and is in a condition that should support an efficient re-start. Systems are in place to provide adequate maintenance when the operation recommences. Adequate provision has also been made for strategic spares and standby equipment.

Capital Costs

To date, the Company has spent ZAR1 393 million (approximately USD120 million) on project Capex to construct the processing plant and associated mine infrastructure, initial mining and capitalised working costs. In order to proceed with the modifications required to restart production it is estimated that an additional ZAR195.9 million capital (approximately USD15 million) will be needed to implement modifications to the plant. This is based on a conceptual design supplied by DRA in their document "Plant Retrofit: Scoping Study (Interim Update)" dated 11 April 2018 and an updated schedule of costs as at 10 April 2018.

Although the level of study done to prepare the Capex and cash flow is currently at the stage of a Level 4 scoping study estimate, it is SRK's opinion that these are reasonably achievable to construct the proposed modifications for the following reasons, provided there are no significant changes to the design:

- 32% of the process Capex is for mechanical items and spares where recent supplier cost estimates have been obtained;
- The bulk of the remainder of the costs are informed by the experience of DRA in the construction of the plant during 2016/2017; and
- On the basis of the above items, the 30% contingency applied by DRA is considered reasonable.

With respect to the proposed Capex and cashflow available at this stage, SRK notes that:

- Whilst the process flowsheet has been finalised, further design is still required to increase the level of accuracy in the final cost and the cash flow estimate;
- Variability and pilot plant test work which is expected to confirm the design and hence the Capex is on-going. This work has been initiated and is expected to take place in the near term; and
- In the opinion of SRK, however, it is unlikely that the final Capex requirements will exceed the total stated here.

Over the 14 year LoM, the process plant maintenance operating cost will include any requirements for planned replacement expenditure which would normally be reported as sustaining Capex. The contractor is responsible for the sustaining capital cost of the mining equipment as part of his contract.

ES15: Power Supply

The installed electrical infrastructure is sufficient to supply the power requirements of the plant. The design of the power supply allows for redundancy, ensuring continuous supply should one supply fail or be taken out of service for maintenance purposes. Two 1 MW generators have been installed for emergency power supply to critical equipment during Eskom power failure.

ES16: Environmental, Social Impact

SRK reviewed environmental and social performance and compliance and concluded as follows:

- *Regulatory Approvals*: The Elandsfontein Environmental Management Programme (EMPr) was approved by the DMR. The Company has been instructed to upgrade the EMPr to reflect the

proposed changes to the processing facility. Approval of this EMPr is almost certainly a formality but is pending at present (subject to confirmation of final design). Kropz compiled a Social and Labour Plan (SLP), which was approved on 27 November 2014, upon receipt of the Mining Right. Subsequently, Kropz submitted the 2017 SLP Annual Report to DMR. While the Company believes it has a strong case, the appeal against the WUL has been referred to the Water Tribunal and is unlikely to be decided on in the near term. To date, Kropz has received no correspondence from the Water Tribunal since December 2017. The appeal does not impact Elandsfontein's water use activities, including their ability to dewater the mine;

- *Environmental and Social Management*: Environmental and social management was of a high standard during construction. Elandsfontein is preparing an Environmental Management System (EMS) for operations. A functional EMS, and a larger Safety, Health and Environment (SHE) staff complement will be required once operations commence to ensure continual improvement of environmental management and performance;
- *Reputational risk*: Elandsfontein has garnered periodic adverse publicity, in large part driven by a few NGOs and primarily linked to permitting processes and potential impacts linked to groundwater management; and
- To date, no significant environmental and social risks associated with operation of the mine have been identified.

ES17: Mine Closure and Liabilities

The Company has received a letter from the DMR stating that an amount of ZAR78 million (USD6.53 million) has been approved for financial provisions. The DMR is the competent authority that prescribes financial provisioning and the Company is in the process of providing a guarantee for that amount. Although the DMR letter implies legal compliance, it is SRK's opinion that this estimate is insufficient to address the current rehabilitation requirements and is unlikely to cover the liability for unplanned closure.

ES18: Valuation

Techno-Economic Model Parameters

Commodity price forecasting company (CRU) developed a custom Value-In-Use (VIU) study for Elandsfontein that considered the specific composition of their product, and the impact the composition may have on the value and marketability. In addition, a medium and long-term price forecast was supplied to assist with the valuation. The CRU document has been appended to this report.

- The VIU noted that the Elandsfontein product was of a medium grade with properties that would be well suited to the production of granular diammonium phosphate (DAP) and monoammonium phosphate (MAP); and
- The current market distribution is for at least 33% of the product to be sold to Foskor and the balance being sold primarily to India and other markets (with a number of stakeholders having shown interest in sourcing the Company's production). India, South America, Australia and New Zealand are the most important markets for Elandsfontein as there is a freight advantage over rival suppliers. It was also forecast that the demand for phosphate rock in India is likely to increase during the LoM.

The price forecast noted the following:

- The demand is predicted to grow, primarily as a result of population and income growth;

- Prices are depressed in the short term, however not to the extent that Elandsfontein would be unable to generate a positive operating profit, provided the product can be sold and prices are expected to gradually increase over the medium term;
- Phosphate rock is considered a quasi-commodity as it is not homogenous, and the specific composition has impacts on a user's process and costs; and,
- The price forecast used in the TEM is based on the August 2018 FOB Saldanha price forecast by CRU.

The total production and revenue for Elandsfontein is summarised in Table ES.7 below. The production and revenue profile over the LoM is shown in Table ES.8. The weighted average price (nominal) received is forecast at USD135/tonne (approximately USD 111 in real terms). The offtake agreement was signed with Foskor in June 2017, prior to the recent price recovery. A revised draft agreement, based on current market prices, is under review. The current agreement is binding through to June 2020. Incorporating the agreed price lowers the NPV. The absence of a signed off-take agreement at a price in line with the forecast is a risk. An exchange rate forecast is used as supplied by BNP Paribas. It is noted that the forecast is for a substantially weaker Rand than the forecast supplied by Standard Bank. The starting rate is ZAR12.73 per USD (2018).

The updated price forecast adds approximately 11% to revenue compared to the April forecast. The ZAR revenue increases by approximately 44% from the combination of the higher USD revenue and the weaker Rand forecast.

Table ES.7: Production profile and revenue of Elandsfontein

Production Profile		
Item	**Unit**	**Total**
Tonnes ore mined	Mt	63.6
Tonnes waste mined	Mt	209
Strip ratio	-	3.3
P_2O_5 feed grade	%	9.6
Revenue		
P_2O_5 product	Mt	10.4
Market P_2O_5 price (nominal)	USD/tonne (Free on Board (FOB))	135
Phosphate revenue	ZAR billion	27.5
Phosphate revenue	USD million	1 406

A summary of the cashflow calculations is presented in Table ES.8.

Table ES.8: Cashflow calculations

Cashflow Calculations	**Total USD million**	**Total ZAR million**
EBITDA	**758**	**15 071**
Capex	131	1 589
Land use agreement	13	247
Mining royalty	91	1 802
Pre-Tax Cashflow	2 031	50 667
Tax	143	3 013

Cashflow Calculations	Total USD million	Total ZAR million
Cashflow	**406**	**8 912**
NPV (at 8% nominal discount rate)	262	

The results of the sensitivity analyses are shown in Table ES.9 below.

The current base case NPV, discounted at 8%, is USD262 million. All tested scenarios showed a positive NPV. A 20% higher price increased the NPV to USD359 million.

A 10% lower mass yield recovery reduced the NPV from USD262 million to USD214 million, while a 10% increase in mass recovery produced an NPV of USD311 million. Confidence in the recovery of the modified process and the level of mass yield at which the plant can produce a saleable product will be the key factors in confirming the viability of the project.

Changes in Capex had the smallest impact on the NPV, primarily because the bulk of the Capex is sunk. Increasing the remaining Capex by 40% reduced NPV by approximately USD4 million.

Table ES.9: Sensitivity analyses on the NPV (post tax)

Factor	Sensitivity analyses results					
Price sensitivity	Sensitivity scenarios	80%	90%	100%	110%	120%
	Change from base case	- 20%	- 10%	0	+ 10%	+ 20%
	NPV (USD million)	165	214	262	311	359
Opex sensitivity	Sensitivity scenarios	80%	90%	100%	110%	120%
	Change from base case	-20%	-10%	0	+10%	+20%
	NPV (USD million)	311	286	262	239	215
New Capex sensitivity	Sensitivity scenarios	100%	110%	120%	130%	140%
	Change from base case	0	+10%	+20%	+30%	+40%
	NPV (USD million)	262	261	260	259	258
Recovery sensitivity	Sensitivity scenarios		90%	100%	105%	110%
	Change from base case	-	-10%	0	+5%	+10%
	NPV (USD million)		214	262	287	311
Discount rate sensitivity	Sensitivity scenarios	6%	7%	8%	9%	10%
	Change from base case	-25%	-12.5%	0	+12.5%	+25%
	NPV (USD million)	308	284	262	242	225

Note: Opex – Operating expenditure

The NPV for the project is positive in all outcomes of the sensitivity analysis. Increased certainty or improved performance in terms of plant recovery and Capex would serve to further substantiate these values to confirm the NPV. A Probable Ore Reserve has been declared as the proposed plant modifications still have a relatively high level of uncertainty associated. The completion of the test programme will increase the confidence in the economics by increasing the confidence in the selectivity and recovery of the modified plant prior to the initiation of the capital programme.

The recent weakening of the Rand along with other emerging market currencies and the subsequent adjustment of exchange rate forecasts has translated into an improved base NPV. NPV has been further improved by the improvement in the outlook for Phosphate in USD terms. The combined impact has led to a sharp increase in NPV (from USD 173 to USD 262). However, there is added uncertainty arising from the relatively sudden change, particularly in the exchange rate.

The long term impact of the recent events is not clear, and the outlook is likely to change. The volatility is considered to increase the uncertainty associated with the NPV. In addition to the possibility of the exchange rate recovering (or the current trend establishing a new, weaker level) it is not clear how the cost forecasts may be impacted. It is likely that fuel, reagents and many other cost drivers will experience higher than forecast inflation as the primary and secondary effects of the weakening of the Rand filter through the economy.

It is also not clear whether the weakness in emerging market currencies will affect the outlook for USD prices. At the time of writing the developments are positive for the project and, despite the higher volatility and corresponding uncertainty, make the economics of the project more robust.

ES19: Risk Factors

SRK has declared a Probable Ore Reserve at Elandsfontein. An Ore Reserve was previously declared in 2015. Mining commenced, but following a short period of initial commissioning, the plant was stopped when it failed to produce product that met the required specifications. Elandsfontein evaluated a number of options for modifying the plant to improve the quality of the product. This has been described in ES13 and in Section 5.3 of this CPR.

SRK considers non-achievement of the predicted metallurgical performance of RR flotation to be the primary process risk:

- P_2O_5 recovery is lower than predicted; and/or
- Product mass yield is lower than predicted; and/or
- Ore types with metallurgical characteristics that differ from those used in predicting process performance, do not produce a saleable product.

Following detailed analysis by DRA and Kropz, supported by advice of international phosphate experts, principal factors that likely contributed to the commissioning difficulties were identified. Plant modifications are accordingly planned to address the identified issues as previously described in ES13. In addition, variability and pilot plant testing is planned in order to improve the confidence of predicting full scale RR flotation. Given these mitigation measures, the probability of successfully re-commissioning the upgraded Elandsfontein plant is considered to be good.

Further process related risks and mitigation measures include the following:

- That P_2O_5 losses in -20 µm slimes are higher than predicted:
  - Optimisation of attrition scrubbing during re-commissioning and on-going operation should assist in managing this issue. It is noted that the slimes fraction will be separately collected in the modified slimes and tailings handling circuits. This offers the opportunity for further processing should this be technically and economically viable.
- That plant feed grade and/ or product size distribution varies to the extent that it impacts negatively on plant throughput and recovery:
  - Variability testing is planned to improve the understanding of P_2O_5 deportment by size between ore types and across the deposit. This in conjunction with detailed mine scheduling and in-pit blending should assist in managing this issue;
- That unit processes not yet tested at full capacity do not perform according to design specifications:
  - This will be assessed during re-commissioning, but can be reasonably be expected to meet design throughput specifications.

It is worth noting that several of the phosphate processing experts consulted by Elandsfontein, considered that re-commissioning of the modified plant would be considerably more valuable in resolving metallurgical issues than reliance on laboratory investigations alone.

It is important to note that the Capex of the original capital programme are considered sunk and are thus not considered in the economic analysis.

As per JORC code requirements, an Ore Reserve can be declared on completion of a PFS. The Elandsfontein Phosphate Project presents an unusual case where much of the work is at the level of an operating mine, but aspects are at a lower level, specifically (as described above) the detailed design of the processing route and the costing of the proposed modifications.

As described in ES14, the Capex estimate has been prepared to Level IV accuracy. In the opinion of SRK, it is unlikely that the final capital requirements will exceed the total estimate. The sensitivity analysis also shows low sensitivity to variances in new Capex.

In ES13, further bench scale testwork undertaken by TAT and Mintek, resulted in a significantly modified flotation circuit, including multiple stages of attritioning and cleaning. SRK concurs that these results indicate that it is reasonable to expect design throughput specifications can be met. There is a new risk, due to the additional attritioning and complexity of the processing, that both higher capital and operational costs can be expected. To mitigate this Mintek, are undertaking further investigations to simplify their circuit and making it more robust.

In conclusion, Elandsfontein have constructed and partially completed commissioning of the majority of the project except for the final detailed design of the plant modifications proposed to facilitate the production of a saleable product. There are no major concerns with the existing infrastructure or equipment. Successful completion of the proposed metallurgical test programme would be a suitable basis for committing to the balance of the proposed capital programme.

Glossary of Terms, Abbreviations and Units

GLOSSARY

AIM Rules for Companies or AIM Rules for Nominated Advisers	The AIM Rules for Companies or AIM Rules for Nominated Advisers' as issued by the Exchange from time to time.
Assets	All assets, licences, joint ventures or other arrangements owned by the applicant or AIM company or proposed to be exploited or utilised by it.
Diamond drilling	The act or process of drilling boreholes using bits inset with diamonds as the rock-cutting tool.
Ephemeral	Lasting a very short time; short-lived; transitory.
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 and is sufficient to assume geological and grade or quality continuity between points of observation.
Inferred Mineral Resource	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. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
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 and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource.
Ore Reserve	The economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

Mineral Resource	A concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.
Probable Ore Reserve	Is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.
Proved Ore Reserve	Is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.
Percussion Drilling	The process of boring into rock by means of an air- or hydraulic-powered drill bit.
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition.
VALMIN	2015 Edition of the Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets.

ABBREVIATIONS

Acronym	Definition
2-D	2-Dimensional
3-D	3-Dimensional
ADTs	Articulated dump trucks
AEL	Air Emission Licence
AMIS	African Mineral Standards
BCM	Bank cubic meter
CBA	Critical Biodiversity Areas
CRMs	Certified Reference Materials
CoP	Codes of Practice
CP	Competent Person
CPR	Competent Person's Report
CRU	Commodity price forecasting company
°C	Degree Celsius
CV	Competent Evaluator
dB	Decibel
D	Direct flotation
DB	Dry Bulb
DD	Direct-Direct flotation
DEA	Department of Environmental Affairs
DMR	Department of Mineral Resources
DWS	Department of Water and Sanitation
DPM	Diesel Plant Matter
DR	Direct-Reverse flotation
DTM	Digital Terrain Model
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings before Interest, Taxes, Depreciation and Amortisation
EC	Electric Conductivity
ECT	Equivalent chill temperature
ECSA	Engineering Council of South Africa
EIA	Environmental Impact Assessment
EDRS	Environmental Drilling and Remediation Services
EMPr	Environmental Management Programme
EMS	Environmental Management System
EPM	Elandsfontein Phosphate Mine
EWMC	Elandsfontein Water Monitoring Committee
FA	Fatty Acid
FFSG	Future Forum Stakeholder Group
FOB	Free on Board
FM	Financial Model
g/t	Grams/tonne
GSSA	Geological Society of South Africa

Acronym	Definition
HFO	Heavy Fuel Oil
HRD	Human Resources Development
IPD^2	Inverse Power of Distance Squared
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition
km	Kilometres
kt	Thousand tonnes
ktpa	Thousand tonnes per annum
ktpm	Thousand tonnes per month
kPa	Kilopascal
kW	Kilowatt
LoM	Life of Mine
LRAS	Langebaan Road Aquifer System
LTIFR	Lost time injury frequency rate
Ma	Million years before present
mamsl	Metres above mean sea level
mbgl	Metres below ground level
MHSA	Mine Health and Safety Act 29 of 1996
Mining Charter	Charter to facilitate the sustainable transformation and development of the South African mining industry
MER	Minor Elements Ratio
MPRDA	Mineral and Petroleum Resources Development Act
MRE	Mineral Resource Estimate
Mt	Million tonnes
Mtpa	Million tonnes per annum
MVA	Mega Volt Amperes
MW	Megawatt
n.d	Not defined
NEMA	National Environmental Management Act 107 of 1998
NHRA	National Heritage Resources Act 25 of 1999
No.	Number
NWA	National Water Act 36 of 1998
OEL	Occupational Exposure Limits
Pa	Pascal
PFS	Pre-Feasibility Study
PSD	Particle size distribution
QAQC	Quality Assurance and Quality Control
QC	Quality Control
R	Reverse
RD	Relative Density
RoM	Run-of-mine
RR	Reverse-Reverse flotation
SA	South Africa
Section 54 safety stoppages	In terms of section 54 of the Mine Health and Safety Act 29 of 1996, if an inspector of mines believes that an occurrence, practice or condition at a mine endangers or may endanger the health or safety of people at the mine, the inspector may give any instruction necessary to protect the health or safety of people at the mine, including instructing that operations at the mine or a part of the mine be halted

Acronym	Definition
S&EIR	Scoping and Environmental Impact Reporting
SEC	Securities and Exchange Commission
SEP	Stakeholder Engagement Plan
Set Point	Set Point Laboratories
SHEMS	Safety, Health and Environmental Management System
SLP	Social and Labour Plan
SoP	Standard Operating Procedure
SRK	SRK Consulting (South Africa) Pty Ltd
SVOL1	First-search ellipsoids
SVOL2	Second-search ellipsoids
SWD	Stormwater Dam
TEP	Techno-Economic Parameter
TEM	Technical Economic Model
tonne	thousand kilograms
the previous year	The year ended 31 December 2017
the year or the year under review	The year ended 31 December 2018
tpd	Tonnes per day
TOFA	Tall Oil Fatty Acid
tpm	Tonnes per month
WB	Wet Bulb
WCNP	West Coast National Park
WML	Waste Management Licence
WUL	Water Use Licence
XRF	X-Ray fluorescence
Financial terms	
CRU	the independent market analysis group
DAP	Diammonium phosphate
IRR	Internal rate of return
LSE	London Stock Exchange
MAP	Monoammonium phosphate
NPV	Net present value
USD	US Dollar
VALMIN	2015 Edition. of the Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets
VIU	Value-In-Use
YTD	Year to date
ZAR	South African Rand
ZAR million	Million SA Rands

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1 Introduction

1.1 Property Description

1.1.1 Background

Kropz plc (Kropz, the Company) requested SRK Consulting Pty Ltd (SRK) to conduct a review, and compile a Competent Persons Report (CPR), on the Kropz Elandsfontein (Pty) Ltd (Elandsfontein) project operations and assets situated in the Western Cape Province of South Africa. Kropz plans to list the project on the AIM market of the London Stock Exchange plc.

The CPR is required for inclusion in the Prospectus, Admission Document, and Circular or similar (Circular) in support of the Company's proposed listing on the AIM. The admission document must satisfy the reporting requirements of Schedule 2(b) of the AIM Rules for Companies (the Listing Rules).

1.1.2 Scope of Work

The scope of work as defined by Kropz included:

- Review of the Elandsfontein Phosphate Project operations and assets;
- Grade Control assessment;
- Mineral Resources and Reserves review (including all the other mining modifying factors i.e. Geotechnical engineering, Hydrogeology, Mineral Processing, Engineering Infrastructure, Environmental, Social, Permitting Impacts and Closure Provision etc.);
- Review of the Techno Economic Model (TEM); and
- The population of Table 1 of the JORC Code and the compilation of a CPR.

1.1.3 Corporate Structure

Kropz is an explorer, mine developer, and miner of fertilizer feed minerals. The Company strives to develop a vertically integrated fertilizer manufacturing capability producing a progressive range of plant nutrients for the sub-Saharan African agricultural industry.

The operating model of the Elandsfontein mine is based on a combination of full time employees and outsourced employees. All operational work taking place in the mine, plant and the laboratory is currently outsourced and will continue to be outsourced when the mine is in operation.

The mine provided 1 776 jobs during the construction phase of which 924 were employees residing in the Saldanha Bay Municipality (SBM). Kropz currently employs only nine people on site and at full capacity the mine will employ 450 people, mostly as contractors.

Shareholding Structure

Kropz owns 74% of the share capital of the Elandsfontein Phosphate Project, comprising of a 39% direct interest with 35% owned by its wholly owned subsidiary, Kropz SA (Pty) Ltd. African Rainbow Capital Investments Ltd (ARC), a broad-based black economic empowerment company chaired by Mr. Patrice Motsepe, has a broad range of business interests, of which only a portion is in mining. ARC has a 26% stake in Kropz. The Kropz shareholding structure and summary table of assets is provided in Figure 1.1 and Table 1.1.

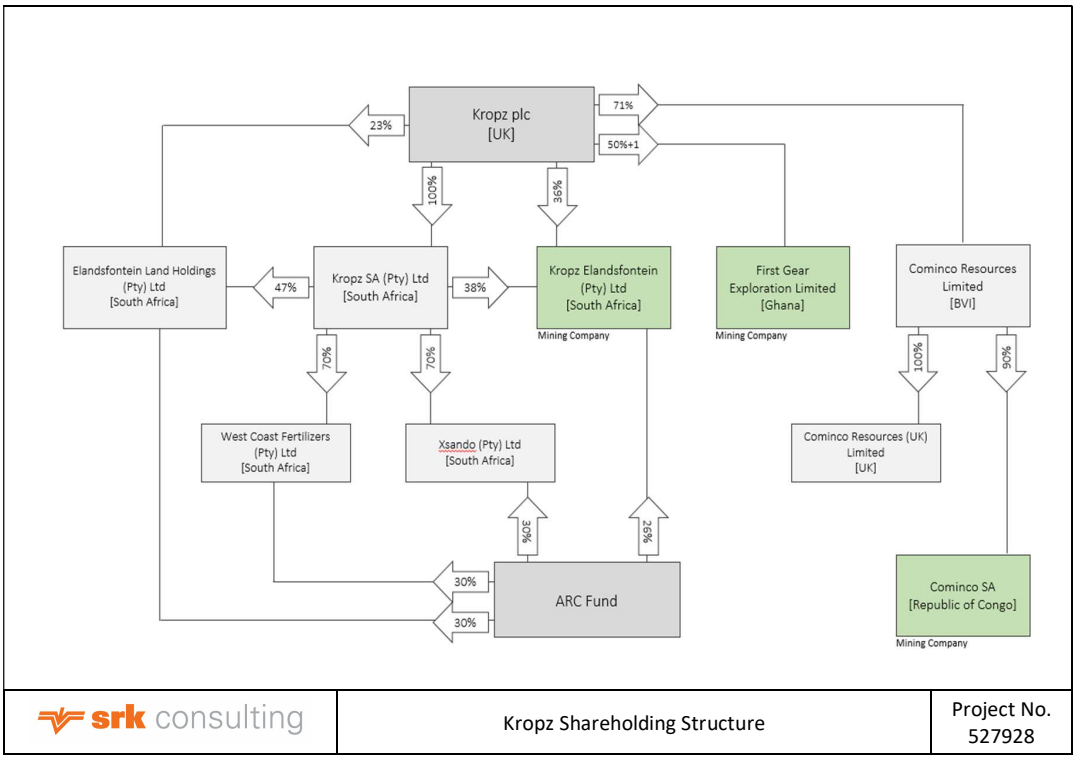


Figure 1.1: Kropz Shareholding Structure

Table 1.1: Kropz Summary Table of Assets

Asset	Holder	Interest (%)	Status	Licence expiry date	Licence area	Comments
Elandsfontein Phosphate Mine located in the Western Cape Province of South Africa	Kropz plc (UK)	39%	Commissioning and development	29 January 2030	5 km^2	The mine is currently under care and maintenance is planned to restart production in 2019
	Kropz SA (Pty) Ltd (South Africa)	35%	Commissioning and development			
	African Rainbow Capital Investments Ltd	26%	Commissioning and development			

Company Overview

Elandsfontein Exploration and Mining (Pty) Ltd (EEM) was incorporated in 2010 and is headquartered in Cape Town, South Africa. EEM subsequently changed its name to Kropz Elandsfontein (Pty) Ltd in May 2017. The organogram that outlines how the company is managed is provided in Figure 1.2.

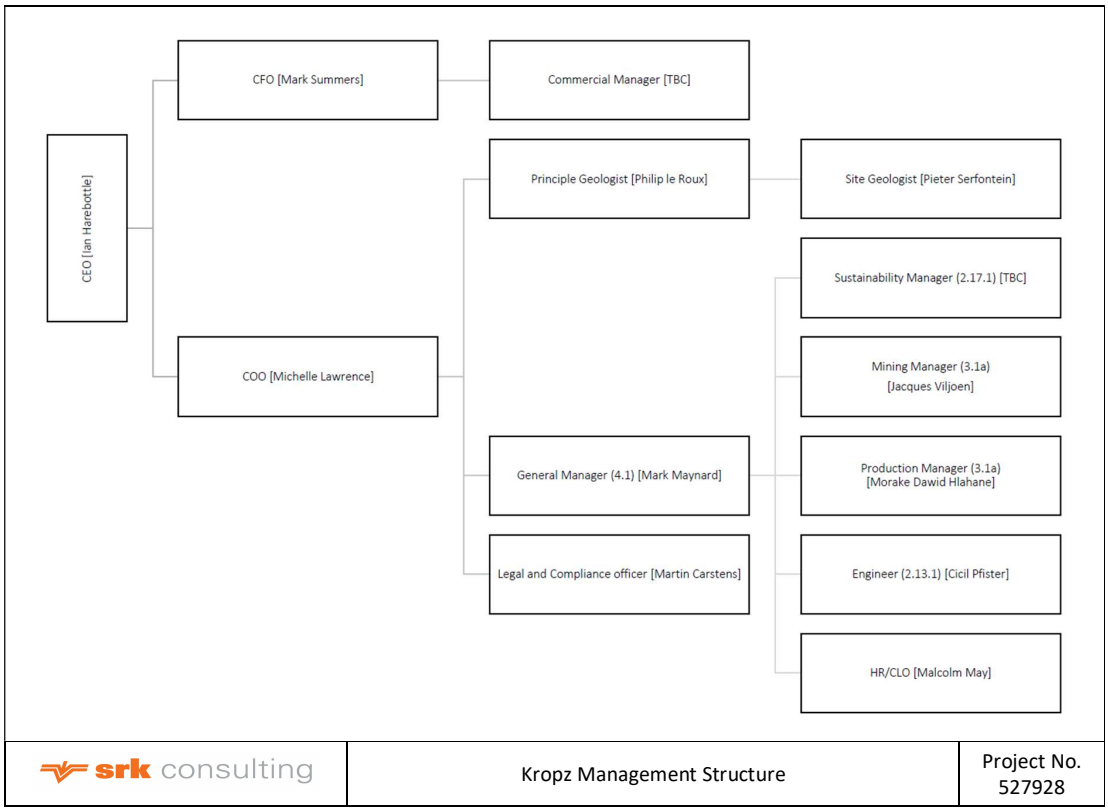


Figure 1.2: Kropz Management Structure

1.1.4 Nature of the Brief

Kropz delineated the phosphate deposit on the farm Elandsfontein 349 approximately 14 km east of Langebaan in the Western Cape Province, as a target and conducted further exploration to confirm a phosphate Mineral Resource. This was followed by a Feasibility Study (FS), which involved a group of different consulting firms who contributed various components to the study. SRK was engaged to review the various technical contributions.

In the peer review, SRK reviewed the following sections of the FS that were originally prepared by the parties defined in Table 1.2.

Table 1.2: The Elandsfontein Feasibility Study

Section No.	Section Description	Responsible Party
1	Executive Summary	Not for Review
2	Project History	Not for Review
3	Geology	Snowden
4	Mineral Resources	Snowden
5	Mining	DRA Mining
6	Process and Metallurgy	DRA Mineral Processing
6.2	Ore Characterisation and Mineralogy	Mintek
6.3	Process Test work	Eriez
7	Site and Infrastructure	DRA Mineral Processing
7.2	Residue Disposal Facilities	Epoch Resources

Section No.	Section Description	Responsible Party
7.5	Site Access	RHDHV
7.6	Water Management	DRA Mineral Processing
7.7	Electrical Power Supply	RHDHV
8	Marketing	Commodity price forecasting company (CRU)
9	Logistics and Export	Elandsfontein
10	Engineering Design	DRA Mineral Processing
11	Capital Estimate	DRA Mineral Processing
12	Operating Cost	DRA Mineral Processing
13	Financial Model	Elandsfontein
14	Risk Analysis	Arete Consulting
15	Project Implementation	DRA Mineral Processing
16	Social and Environmental	Braaf Environmental Practitioners

1.1.5 Description of Assets

The historical interest in the asset is described in Section 3.1. The main assets found on the mine are provided in Table 1.3.

The main assets found on the mine are provided in Table 1.3. To date, Kropz has spent ZAR 1 393 million (approximately USD120 million) on project Capital Expenditure (Capex) to construct the processing plant and infrastructure, initial mining and capitalised working costs. Based on site visits by SRK, the infrastructure was found to be substantially complete and appropriate. The plant is well constructed, and the materials and equipment are of a high quality.

Table 1.3: Elandsfontein Mine Key Assets

Asset		Remark
The open pit, process plant and equipment		The 500 ha operations area contains the current excavation area, future mining area, softs stockpile, plant and offices
Softs stockpile		The overburden that is removed from the mining area for the early production period is deposited on the softs stockpile.
Infrastructure		The operation is accessed via a newly developed mine access road running 13 km south from the R45. New overhead power lines have been erected to connect the operation to the national power utility (Eskom) grid. Water lines are laid to connect the operation to the district municipality's water supply.
The process plant	Crushing, milling and classification circuits	Phosphate is liberated from silica sand by progressive size reduction and separation, until the product size is appropriate for downstream flotation.
	Flotation circuits	A process of reverse flotation is applied in which silica sand and phosphate are separated by recovering the silica to the flotation froth phase, with the phosphate concentrate thus reporting to the underflow.
	Concentrate handling	Phosphate concentrate is thickened, filtered and dried ahead of storage.
	Concentrate storage and despatch	Final concentrate is stored in a closed shed ahead of despatch by road.
	Tailings handling	Flotation tailings are thickened and filtered ahead of co-deposition with mine overburden.
	Water storage	Water on site is stored in lined water dams and tanks.
Employment, up-skilling and care		Over 1 700 people were employed during the construction phase of the project with nearly 50% being sourced from local communities. Over

Asset	Remark
	450 contractors and staff will be employed as members of the Elandsfontein operational workforce at steady state production.
Office	The mine offices and access road will be left behind after mine closure, to serve as a tourist centre, allowing access to the nearby fossil area and future Elandsfontein Nature Reserve.

1.1.6 Accessibility, Climate, Local Resources, Infrastructure and Physiography

Accessibility

The mining operation can be accessed via a newly developed mine access road running 13 km south from the R45. New power lines have been erected to connect the operation to the Eskom grid.

The mine access road was constructed as part of the mine capital programme and is complete and operational. Game fencing along the road has been installed where the road passes though the game area and cattle grids are installed where required.

Water lines have been laid to connect the operation to the district municipality's water supply.

The security infrastructure at the public road intersection is as yet not complete and temporary security arrangements are in place to prevent unauthorised access to the mine. The mine property is fully fenced to prevent unauthorised access and for game control.

Vehicle access to the plant area is first via a boom gate at the security house, then through a second gate which is controlled by the security team via a remote control. Employee access is through turnstiles controlled by a biometric card reader. All visitors first go through these security controls before gaining access on to the site.

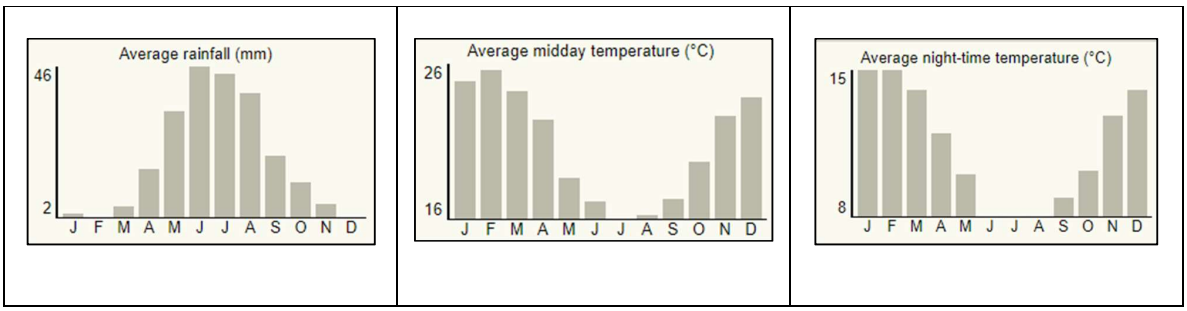
Access to the plant and mine for employees and contractors is through controlled turnstiles. A change house is available on site for use by employees.

Access to major electrical infrastructure such as the main incoming substation, generators and Eskom yard is controlled by means of security fencing (palisade fencing for Eskom yard and main incoming substation area) with lockable gates, to avoid vandalism of electrical equipment by unauthorised personnel. Substations are fitted with lockable doors complete with panic bars on the inside

Climate

The type of climate in the mining area is Mediterranean. Rainfall is variable and less than 300 mm per annum is the norm. The chart below (Figure 1.3, lower left) shows the average rainfall values per month. It receives the lowest rainfall (2 mm) in February and the highest (46 mm) in June. Most rainfall occurs between April and September, with very little in the summer months.

The monthly distribution of average daily maximum temperatures (Figure 1.3, centre chart below) shows that the average midday temperatures range from 16.5°C in July to 25.6°C in February. The region is the coldest during June when the mercury drops to 8°C on average during the night. The chart below (Figure 1.3, lower right) shows the monthly variation of average minimum daily temperatures.



srk consulting	Average Rainfall and Temperature in Elandsfontein Mining Area	Project No. 522673

Figure 1.3: Average Rainfall and Temperature in Elandsfontein Mining Area: SA Explorer

Physiography

Between the Elandsfontein Farm and the coast, (both north and south), the land is undulating with many small koppies (hills); whereas, to the east, the land is more open, with gentler slopes.

Elandsfontein Farm is considered to be part of the Southwest Fynbos bioregion and falls within what is generally known as the Sandveld. The Sandveld supports various vegetation types, each with distinct floras (with some overlap), and large numbers of vulnerable plant species. Ecological connectivity across the site is currently regarded as fully functional, connecting to the West Coast National Park (WCNP), which is expanding towards the east and northeast, and will in fact border the mine. The illustration shown below, Figure 1.4 shows the typical physiography at Elandsfontein.

srk consulting	Typical Physiography at Elandsfontein	Project No. 527928

Figure 1.4: Typical Physiography at Elandsfontein

1.1.7 Site Visits

SRK personnel visited the project site as part of the inspection of the surface facilities, metallurgical processing facilities, geotechnical, hydrogeology conditions and Softs Stockpile (SS) and met with personnel representing relevant disciplines as indicated in Table 1.4 and includes the following:

- Discuss and review the database;
- Review geological and grade model generation procedures;
- Review Mineral Resource validation procedures;
- Define geological modelling procedures;
- Review the operational performance and statistics;
- Review the Life of Mine (LoM) planning process and the conversion of Mineral Resources to Ore Reserves;
- Review the operation's engineering infrastructure;
- Review the processing plants; and
- Interview project personnel.

Andrew van Zyl did not attend the site visit. He interacted with a range of senior officials from the Company in teleconference meetings to discuss the assets and TEM. In addition, he held meetings with the SRK personnel who attended the site visits and gave input into the operating and capital costs and other technical inputs into the TEM.

Table 1.4: Summary of Site Visit

Discipline	Operation	Consultant			Kropz		Date of Visit	Work place visited and remarks
		Name	Company	Designation/Role	Name	Designation/Role		
Geology and Mineral Resources	Elandsfontein	H F J Theart	SRK	Corporate Consultant Geology	Philip Le Roux	Principal Geologist	21-22 Feb 2018	• Core storage facility to view sonic drilling core and exposed ore body in-pit; and • Discussions with geologists on site.
Mining and Ore Reserves, tailings, and health and safety	Elandsfontein	J F Van Graan	SRK	Principal Mining Engineer	Jacques Viljoen	Mining Manager	21-22 Feb 2018	Elandsfontein site: • Mining Area; • Waste Dump; • Core Shed; • Laboratory; and • Processing Plant
Geotechnical engineering	Elandsfontein	C Maduray	SRK	Senior Engineering Geologist	Jacques Viljoen	Mine Manager	21 Feb 2018	Impressions gained at Elandsfontein is that there is general compliance to design and standards with some geotechnical concerns that are accounted for in the design and mining methodology
Metallurgy and mineral processing discussion and data gathering	Elandsfontein	V W Hills	SRK	Principal Mineral Processing Consultant	Michelle Lawrence	Chief Operating Officer	05 Mar 2018	Elandsfontein Office, Cape Town Discussed metallurgical test results and proposed plant modifications
Engineering and Infrastructure	Elandsfontein	C F P Smythe	SRK	Principal Mechanical Engineer	Cicil Pfister	Site Engineer	21 Feb 2018	The Elandsfontein mine site was visited. The infrastructure was found to be substantially complete and appropriate. The plant is well constructed, and the materials and equipment are of a high quality. Adequate provision has been made for strategic spares and standby equipment. The plant is currently on care and maintenance and is being maintained in a condition that restarting should not be problematic
					Mark Maynard	General Manager	22 Feb 2018	
Mine surface and groundwater discussion, data gathering and site visit	Elandsfontein	S Imrie	SRK	Principal Hydrogeologist Consultant	Mark Maynard	Operations Manager	21 Feb 2018	Elandsfontein site

1.1.8 Sources of Data

Details of the information used to prepare this report are listed below;

- Electronic information received from the mine;
- Review of information gleaned from the internet and Kropz's website;
- Review of current and past reports compiled by DRA, Snowden, SRK and other consulting companies;
- Information available in the public domain;
- Discussion with the relevant Project team members and discipline heads at the mining operations; and
- Discussion with Kropz executive management.

1.1.9 Reporting Compliance, Reporting Standard and Reliance

Reporting Standard

The Company has adopted "The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" 2012 edition (JORC Code). The JORC Code is a professional Code of Practice (CoP) that sets minimum standards for Public Reporting of Exploration Results, Mineral Resources and Ore Reserves.

In this CPR, the JORC Code is the applied standard for the Mineral Resources and Ore Reserves of the Elandsfontein operation. The TEM will be reviewed for compliance to the VALMIN Code (2015 edition). The VALMIN Code sets out requirements for the technical assessment and valuation of mineral assets and securities for independent expert reports.

Technical Reliance

The Competent Person (CP) is satisfied, that as far as reasonably practical sufficient checks have been conducted to demonstrate that all technical information provided to SRK since February 2018, is both valid and accurate for the purpose of compiling this CPR.

Legal Reliance

The mining rights granted to the Company were administered in terms of section 23 (1) of the Mineral and Petroleum Resources Development Act, 28 of 2002.

This report relies on information disclosed by the Company. The legality of the underlying agreements was not verified. The legal letter provided to SRK by Dr. Martin Carstens (the Company's legal advisor) on 22 March 2017, which is attached and marked Appendix A, addresses the security of tenure of the properties, mining rights and surface rights with reference to Table 1.7 and the information made available as at February 2018. A full legal due diligence as notified by the Company, is being conducted in parallel by Werksmans Attorneys.

1.1.10 Effective Date

The effective date (Effective Date) of this CPR is deemed to be 27 November 2018. No material changes have occurred between the Report Date and Effective Date of the CPR.

1.1.11 Verification and Validation

This report is dependent upon technical, financial and legal input. The technical information as provided to and taken in good faith by SRK has not been independently verified by means of re-calculation. SRK has, however, conducted a detailed review and assessment of all material

technical issues likely to influence the future performance of the Elandsfontein Phosphate Project, which included the following:

- Inspection visits to the operations, processing facilities, surface structures and associated infrastructure at Elandsfontein undertaken during the months of February and March 2018;
- Discussion and enquiry with key on-mine personnel during the site visit;
- A review of Elandsfontein estimates and classification of Mineral Resources and Ore Reserves, including the methodologies applied in determining such estimates and classifications;
- A review of historical operating records and management accounting statements from Elandsfontein;
- A review and where considered appropriate by SRK, modification of the production forecasts contained in the LoM mine plans;
- A review and where considered appropriate by SRK, modification of the projected future operating costs and Capex schedules for the LoM; and
- Review of the Financial Model (FM) for Elandsfontein provided by the Company, including the forecast macro-economic parameters and consensus price forecasts, and verified by SRK for consistency with historical performance, and adjusted where deemed appropriate by SRK.

SRK has satisfied itself that such information is both appropriate and valid for evaluation as reported herein.

SRK considers that, with respect to all material technical-economic matters, it has undertaken sufficient investigation, both in terms of level of investigation and level of disclosure, to satisfy the reporting requirements of the JORC Codes and to place an appropriate level of reliance on the information provided by Kropz.

1.1.12 Limitations, Declarations and Consent

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

1.1.13 Reliance on Information

SRK has relied upon the accuracy and completeness of technical, financial and legal information and data:

- Furnished by or through the Company, including information and data originating with the Company's Advisors; and
- In respect of, publicly available information published by the Company from time to time, including but not limited to any Mineral Resources and Ore Reserve statements and technical studies contained in such information or data.

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

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

The technical views in this report are based on information provided by the Company and its advisors throughout the course of SRK's investigations, which in turn reflect various technical-economic conditions prevailing at the date of this report. In particular, the Ore Reserves, Techno Economic Parameters (TEPs) and values of the Mineral Assets are based on expectations regarding commodity prices and exchange rates prevailing at the Effective Date of this CPR. These can change significantly over relatively short periods of time. Should these change materially, the TEPs could be materially different in these changed circumstances.

SRK has reviewed the information provided by the Company and is satisfied that the extents of the properties described in the various rights are consistent with the maps and diagrams received and reviewed.

1.1.14 Consent

SRK consents to the issuing of this report in the form and content in which it is to be included in documentation distributed to shareholders of the Company.

Neither the whole nor any part of this report nor any reference thereto may be included in any other document without the prior written consent of the CP as to the form and context in which it appears.

1.1.15 Disclaimers and Cautionary Statements

This CPR uses the terms "Mineral Resource", "Measured Mineral Resource", "Indicated Mineral Resource" and "Inferred Mineral Resource". Shareholders and investors in the Company are advised that while such terms are recognised and permitted under JORC Code and the Listing Rules, the US Securities and Exchange Commission (SEC) does not recognise them and strictly prohibits companies from including such terms in SEC filings.

1.1.16 Copyright

Copyright in all text and other matter in this document, including the manner of presentation, is the exclusive property of SRK. It is a criminal offence to publish this document or any part of the document under a different cover, or to reproduce and/or use, without written consent, any technical procedure and/or technique contained in this document. The intellectual property reflected in the contents resides with SRK and shall not be used for any activity that does not involve SRK, without the written consent of SRK.

1.1.17 Qualifications of Consultants

The CP with responsibility for the reporting of Mineral Resources is Mr. Alan Page Pr.Sci.Nat (South African Council of Natural and Scientific Professionals, Reg. No. 400022/07).

The CP with responsibility for the reporting of Ore Reserves is Mr. Jaco Van Graan PrEng (Engineering Council of South Africa, Reg. No. 20100342).

The CP with responsibility for the valuation of the assets under review is Mr. Andrew van Zyl. Mr. Van Zyl is specialized in mine and project valuation, mining conventions, economics.

The full details and qualifications and statement of independence of the CP's is provided in Section 7.

The consultants that have contributed to the CPR process are provided in Table 1.5.

Table 1.5: Consultant Contributors

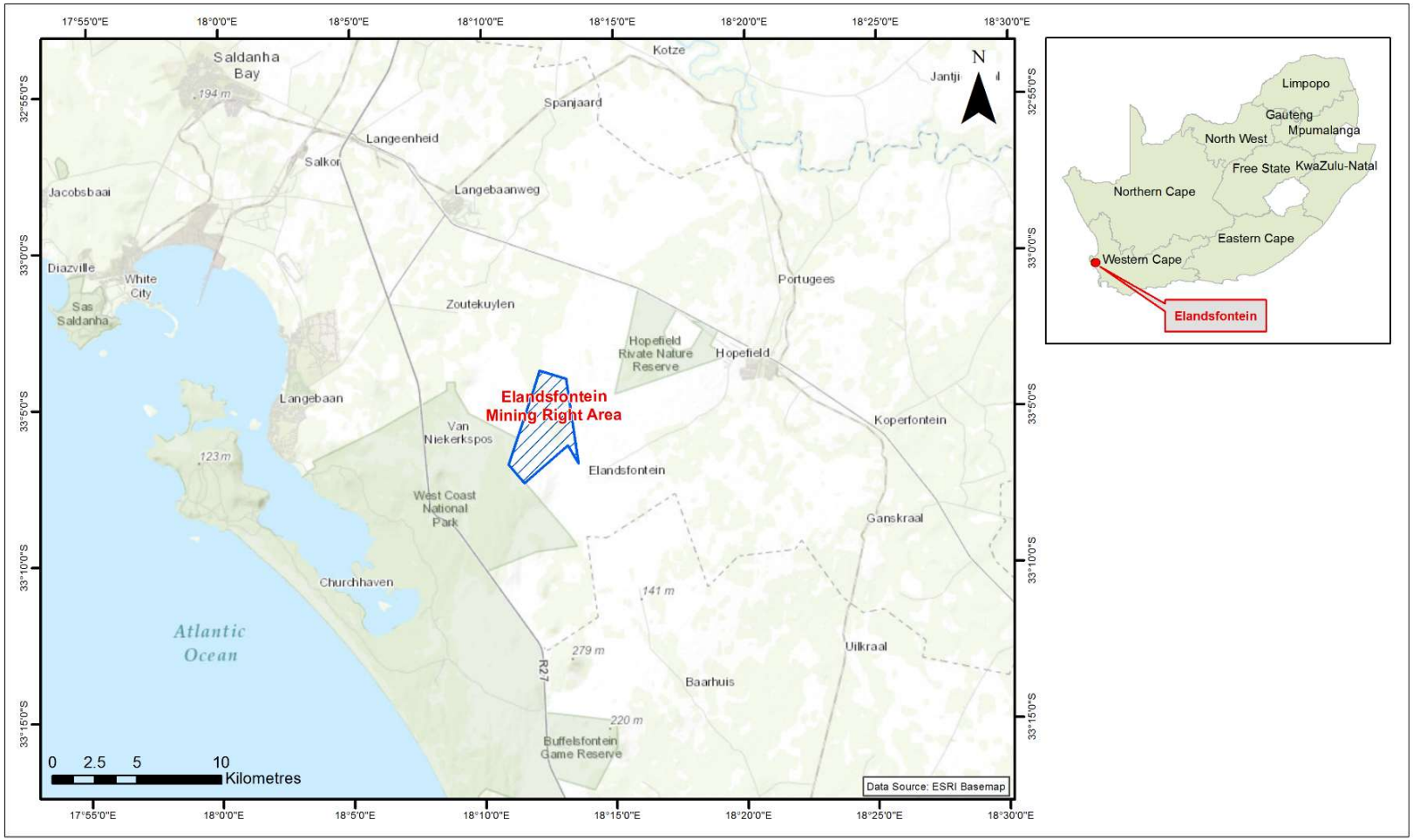
Name	Contribution
Hennie Theart, Pr.Sci.Nat, PhD, MSc (Geol), BSc Hon (Geol), FGSSA, MSEG, MAAG	Geology, Grade Control and QAQC Review
Jaco Van Graan, CertEng, B.Eng (Min), ECSA, MSAIMM	Mining, Mine Design, Ore Reserves Review
Allan Page, Pr.Sci.Nat, BSc Hon (Geol), SAIMM, MGSSA	Mineral Resources Review
Candice Maduray, Pr.Sci.Nat, MSc, BSc Hon (Eng Geol), MSAIEG	Mining Geotechnical Review
Andrew van Zyl, BEng, MCom, MSAIMM	Mineral Economics, Market Valuation Review
Victor Hills PrEng, ECSA, MSAIMM	Metallurgy, Mineral Processing Review
Chris Dalgliesh, MPhil (EnvSci), Cert Envir AP, MIAIA	Environmental permitting, Compliance, Rehabilitation Requirements, Social permitting, Compliance Review
James Lake Pr.Sci.Nat, MSc (Env Geochem), BSc Hon (Bot)	Closure and Rehabilitation Cost Review
Angus Bracken, CGeol, Pr.Sci.Nat, MSc, FGSL. MSAIEG	Tailings Disposal, Logistics Review
Chris Smythe, CertEng, HND (Mech Eng), CEI Pt 2, MSAIMM	Infrastructure, Engineering, Maintenance, Capital Review
Kenneth Mahuma, N6 (Elect Eng), MSAIMM	Electrical Engineering Infrastructure Review
Sheila Imrie, Pr.Sci.Nat, MSc (HydroGeol), BSc Hon, MGSSA	Hydrogeology Review
Mark Wanless, Pr.Sci.Nat, BSc Hon (Geol), FGSSA	Partner and Final Review
Joseph Mainama, PrEng, BSc Eng (Min), MBL, MSAIMM	Project Manager and Client liaison
Senzeni Mandava, Pr.Sci.Nat, MSc, GDE, BSc, MGSSA	CPR Compilation

All of SRK House, 265 Oxford Road, Illovo, 2196, Johannesburg and Cape Town.

1.2 Location

Elandsfontein, is located approximately 18 km east of the Atlantic shore on the West Coast of South Africa, 95 km north-northwest of Cape Town, near the town of Hopefield in South Africa's Western Cape Province. The locality plan of the mine is provided in Figure 1.5.

The mine is surrounded by private farms and borders the West Coast National Park to the south and west. The closest communities are Langebaan and Hopefield, approximately 14 km to the west and 15 km east of the mine respectively.



srk consulting	Locality Plan of the Elandsfontein Phosphate Project	Project No. 527928

Figure 1.5: Locality Plan of the Elandsfontein Phosphate Project

1.2.1 General Mine Overview

The Elandsfontein Phosphate Project has the second largest phosphate deposit in South Africa, behind Foskor's operation in Phalaborwa. The sedimentary deposit is a free-digging operation and does not involve drilling and blasting activities. Elandsfontein has the capacity to produce up to 1.2 Mtpa of rock concentrate from a shallow Mineral Resource, which will be sold on both local and international markets.

Access road construction commenced February 2015, bush clearing, and earthworks commenced in May 2015, and the mining boxcut development began in August 2016. The mine started production ramp up after the plant was commissioned, but following the combination of weak phosphate prices, water permitting delays and process plant efficiency challenges, the decision was taken to delay the commissioning and place the plant on care and maintenance in August 2017. The Company plans to bring the operation back into production in 2019.

The Langebaan Lagoon is approximately 12 km away from the mining operations. The land on which the project is located was previously zoned as agricultural land, and no communities or economic activities were displaced as part of the mine development.

1.3 History

1.3.1 Historical Development

The historical development timeline for the Elandsfontein Phosphate Project is provided in Table 1.6.

Table 1.6: Development Timeline of the Elandsfontein Phosphate Project

Key activity	Date
Prospecting right awarded	Jul 2013
Mining right application	Dec 2013
Mining right granted by Department of Mineral Resources (DMR)	Jan 2015
Environmental Management Plan approved by the DMR	Feb 2015
Construction of mine access road started	Feb 2015
Feasibility study complete	Mar 2015
Civil construction commenced	Sep 2015
Scheme departure obtained for mining from Saldanha Bay Municipality	Dec 2015
Application lodged for water use licence	Feb 2016
Application lodged for atmospheric emissions licence	Mar 2016
Power lines and substation completed	Apr 2016
Mining development begins	Aug 2016
WUL awarded	April 2017
Plant commissioning	April 2017
Mine operations put under care and maintenance	Aug 2017
Anticipated production resumption	Sep 2019

Construction of the Elandsfontein Phosphate Project commenced in February 2015.

In line with test findings, the selected process route included Reverse-Reverse (RR) flotation. By way of clarification, there are two principal modes of flotation. Direct flotation is the process in which the desirable minerals are floated and recovered to final product, while the undesirable gangue is depressed and rejected to tailings. In reverse flotation, the undesirable gangue is floated and rejected

to tailings, while the desirable minerals are depressed and recovered to final product. In the selected RR arrangement, reverse flotation was employed in both roughing and cleaning circuits.

First ore was processed through the plant on 28 March 2017. Failure of the mill motor shortly thereafter resulted in a 10 week delay in the commissioning process. Following the re-commencement of commissioning, a number of issues and challenges were experienced that prevented the continuous production of on-specification rock phosphate concentrate. On 28 July 2017, in light of these issues and the falling phosphate price at the time, the Elandsfontein management team took the decision to suspend operations and delay further commissioning efforts due to a number of key factors:

- Depressed price of rock phosphate;
- Permitting delays; and
- Operational inefficiencies.

With the assistance of experts in the field of phosphate processing, the primary causes behind the challenges experienced to upgrade the early ore to a saleable product were thoroughly interrogated. A number of key issues were identified in the installed RR circuit, which Elandsfontein now propose to address in the planned plant modifications detailed in Section 5.3.5.

1.4 Legal Aspects and Permitting

1.4.1 South African Regulatory Environment

The relevant South African regulatory framework is summarised below.

Constitution of the Republic of South Africa Act (Act No. 108 of 1996)

Section 24 of The Bill of Rights in the Constitution of the Republic of South Africa affords every citizen the right:

- To an environment that is not harmful to their health or well-being;
- To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
    - Prevent pollution and ecological degradation;
    - Promote conservation; and
    - Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The Constitution is the supreme law of the Land, all conduct and legislation inconsistent with its contents is unlawful and will be set aside.

Mineral Framework: The Minerals and Petroleum Resources Development Act

The Minerals and Petroleum Resources Development Act (MPRDA), promulgated by the South African Parliament in July 2002, came into effect on 1 May 2004. Prior to 1 May 2004, mineral rights were held in private tenure or in some instances by the State. The MPRDA repealed the status quo and transferred all mineral tenure to the State as the 'custodian of all Mineral Resources'. Transitional Provisions in the MPRDA allow mining right holders to convert their existing 'old order' rights to 'new order' rights. The provisions contemplate three categories of 'old order' rights:

- Unused 'old order' rights: mineral rights in respect of which no prospecting or mining authorisation had been granted under the Minerals Act No 50 of 1991 (the Minerals Act) or, where such an authorisation was granted, no prospecting or mining activities had taken place on or before 1 May 2004;

- 'Old order' prospecting rights: category of rights issued under the Minerals Act, with prospecting initiated on or before 1 May 2004; and
- 'Old order' mining rights: category of rights issued under the Minerals Act. Holders were required to apply for conversion of leases to mining rights and/or prospecting rights under the MPRDA within one year of 1 May 2004, i.e. on or before 30 April 2005.

'Old order' rights granted under the Minerals Act would remain valid (Schedule 2, section 6 and 7) until they expired by their term, two years for a prospecting right and five years for a mining right, or by default on 30 June 2007. To secure perpetuity, conversion applications were required on or before 30 April 2005. Under the MPRDA, prospecting rights would be granted for five years, eligible for renewal for a maximum period of three years thereafter. Mining rights would be granted for thirty years, eligible for renewal in periods of thirty years thereafter. A retention permit will be granted in circumstances where prospecting is complete, but mining is commercially unviable. Such a permit will be granted for the duration specified on the permit and/or a period not exceeding three years.

Mineral Framework: The Mining Charter

The Broad-Based Black Socio-Economic Empowerment Charter for the South African Mining and Minerals Industry (The Mining Charter) embraces a range of criteria against which prospecting and mining right applications and/or conversion applications are measured. The criteria include, amongst other things: ownership, human resources development, sustainable development of the industry, employment equity, housing and living conditions and procurement procedures – all of which are critically premised on the need to redress historical and socio-economic inequalities and to streamline the industry with other legislative instruments (Broad-Base Black Economic Empowerment Act, Employment Equity Act). The Mining Charter has been amended twice, with the status quo maintained at 26% HDSA ownership of mining assets by 1 May 2014.

In June 2017, the Minister of Mineral Resources gazetted a revised 'Charter III', a decision that was immediately taken on review and would be adjudicated in November 2017. The contention is primarily hinged on the Minister's failure to encourage robust stakeholder engagement *prior* to a decision and, in the absence thereof, failed to take into account relevant considerations pertaining to labour and ownership etc. The complementary litigation is on the issue of the increased HDSA ownership requirement and the 'once empowered, always empowered' principle – ring-fencing share transfers from one Black Person to another Black Person or category of Black Person, *only*.

1.4.2 Mineral Tenure

According to the Company, no director of Kropz, promoter or shareholder has had any current or past interests in the assets.

SRK confirms that none of the CPs and contributors to the CPR have had any past or current interest in the Company.

Table 1.7 presents a summary of Elandsfontein's permits and current legal tenure and the geographic location of Elandsfontein showing mining lease boundary, metallurgical plants and TSFs is shown in Figure 1.6.

Table 1.7: Mining Right Held by Elandsfontein

DMR Ref	Operation	Property Descriptions	Expiry Date	Licence Area

(WC) 30/5/1/2/2/10034MR	Elandsfontein Phosphate Mine	Portion 4 of the Farm Elandsfontein No.349, Magisterial District of Malmesbury, Western Cape	29 January 2030	15 km^2
		Portion of Portion 2 of the Farm Elandsfontein No.349, Magisterial District of Malmesbury, Western Cape		

Elandsfontein holds a Mining Right, granted in terms of Section 23(1) of the MPRDA, effective 30 January 2015. The Mining Right, granted (signed) by the Acting Director General on 26 November 2014, was issued to Elandsfontein Exploration and Mining (Pty) Ltd, Registration No. 201000379107, for "Portion 2, 4 of Elandsfontein 349", measuring 1 529.6711 ha in extent. The Mining Right is for (mining) phosphate and silica sand and required that the Company must commence with mining operations within a year from the date on which the mining right became effective in terms of section 23 (5) of the Act, or any later date as may, upon a written request by the Holder, be authorised by the Minister in terms of the Act, failing which this right may be cancelled or suspended".

The Mining Right granted on 26 November 2014 was appealed, but in a letter dated 14 December 2017 the Minister of Mineral Resources confirmed the decision to grant the Mining Right, effectively dismissing the appeal.

1.4.3 Surface Rights

Elandsfontein does not hold the surface rights of the area over which the Mining Right has been granted. The owners of the land, Elandsfontein Land Holdings (Pty) Ltd (ELH), has granted Elandsfontein written permission to prospect and mine on this land. ELH is owned by Kropz, Kropz SA and ARC.

1.5 Royalties

The Mineral and Petroleum Resources Royalty Act No 28 of 2008 (Royalty Act) was enacted on 1 May 2009. The Royalty Act embodies a formula-derived royalty rate regime since it provides necessary relief for mines during times of difficulties (low commodity prices or marginal mines) and allows the fiscus to share in the benefits during time of higher commodity prices. As the final product can be either refined or unrefined, two separate formulae are given. Both formulae calculate the royalty rate based on a company's Earnings before Interest and Taxes (EBIT) and its aggregate gross sales for the assessment period. While the gross sales figure used in the formulae excludes transportation and handling costs, these are taken into account in the determination of the EBIT figure.

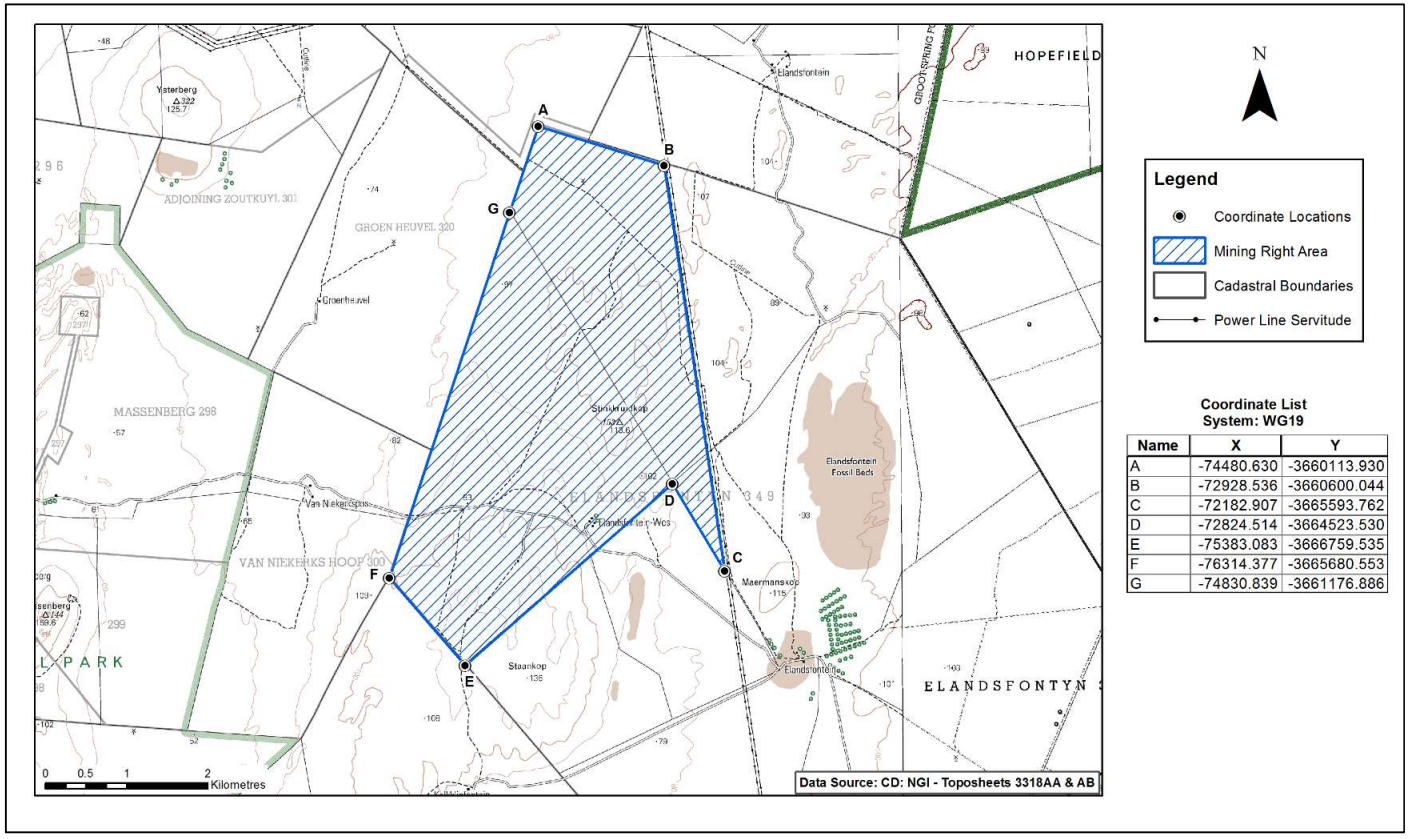
The mineral royalty percentage rate (Y%) is calculated using the following formulae:

- Refined Minerals:

$$Y(\%) = 0.5 + \frac{EBIT}{Gross\ Sales \times 12.5} \times \frac{100\%}{1}$$

- Unrefined Minerals:

$$Y(\%) = 0.5 + \frac{EBIT}{Gross\ Sales \times 9.0} \times \frac{100\%}{1}$$



srk consulting	Geographic Location of Elandsfontein, Showing Mining Lease Boundary	Project No. 527928

Figure 1.6: Geographic Location of Elandsfontein Showing Mining Lease Boundary

1.6 Liabilities

These are addressed and discussed in Section 5.6.5.

2 Geological Setting, Deposit and Mineralisation

2.1 Regional Geology

The South Western coastal region of South Africa is underlain by the Miocene and Paleocene Sandveld Group comprising of the Elandsfontyn, Varswater, Velddrif, Langebaan, Springfontein Hill and Witzand Formations. This Group is dated between the Miocene (23 Ma to 5.3 Ma) and the Pliocene (5.3 Ma to 2.6 Ma). The Sandveld Group unconformably overlies the Neoproterozoic Malmesbury Group and plutons of the Cape Granite Suite.

The Varswater Formation is formed by estuary and marine sediments, which locally overly the Elandsfontyn Formation and consists of poorly sorted angular sands and gravels grading upwards into carbonaceous clays and peaty material, known as the Langeenheid Clay Member.

The regional geological setting of the Elandsfontein Phosphate Project is shown in Figure 2.1.

2.1.1 Stratigraphy

The Varswater Formation has been subdivided into the following Members:

- The Muishondfontein pelletal phosphate member;
- The Langberg quartz sand;
- The Koningsvlei gravel; and
- The Langeenheid clayey sand.

The sedimentary succession at the Elandsfontein Phosphate project is summarised from top to bottom in Table 2.1 and illustrated in Figure 2.2.

Table 2.1: The Sedimentary Succession at Elandsfontein

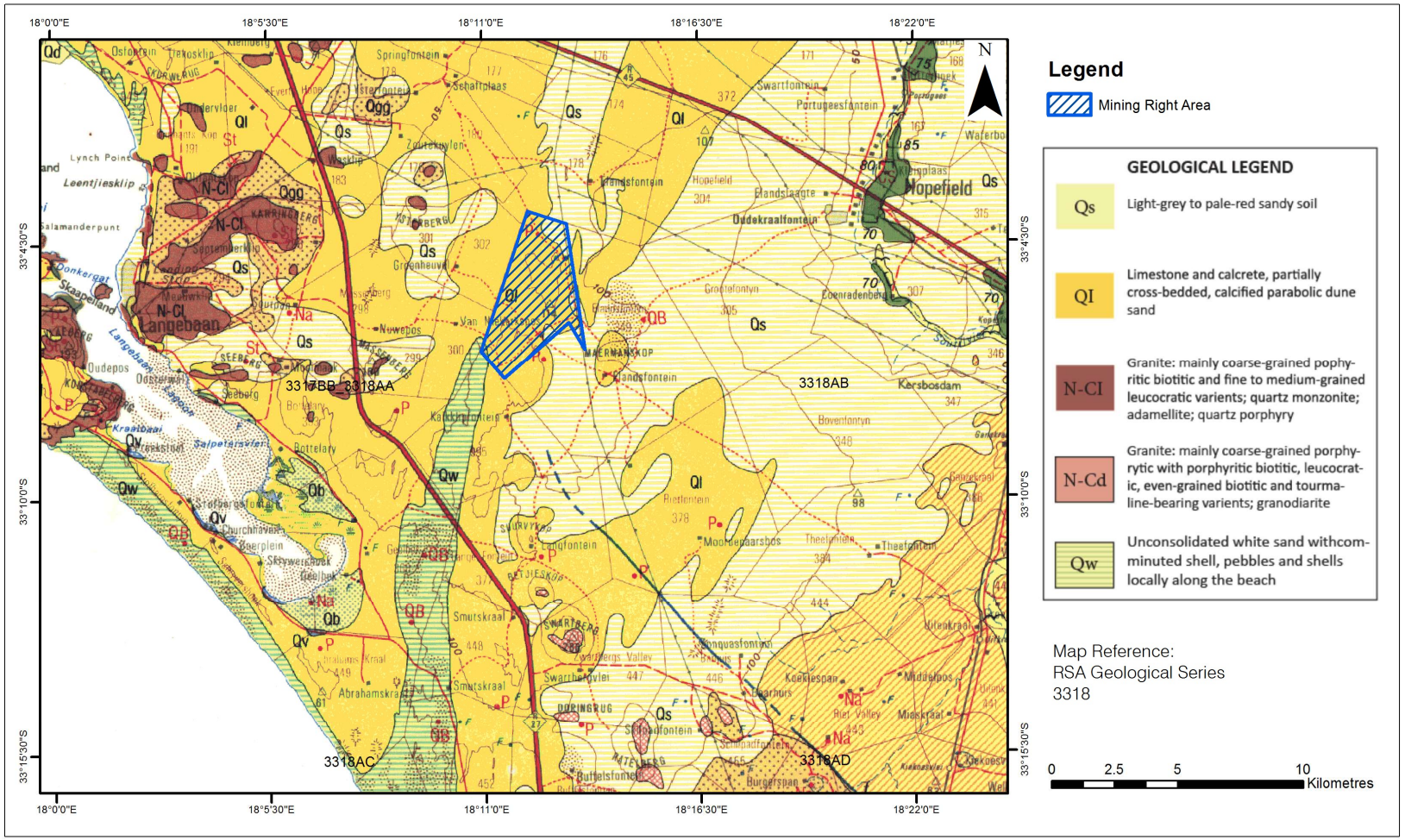
Thickness	Formation	Phosphate mineralisation
0 – 5 m	Witzand Formation	Un-mineralised
~ 16 m	Langebaan Formation(B)	Un-mineralised but with calcrete layers
~ 6 m	Langebaan Formation (C)	Un-mineralised
0 – 3 m	Varswater Formation (D)	Partially mineralised
0 – 6 m	Varswater Formation (E)	Partially mineralised
~15 m	Varswater Formation (F)	Primary ore unit
~ 4 m	Varswater Formation (G)	Primary ore unit
0 – 4 m	Varswater Formation (H)	Un-mineralised quartz dominated
~ 30 m	Langeenheid Clay Member	Un-mineralised carbonaceous

Note: ~ Approximately

2.1.2 Local Geology

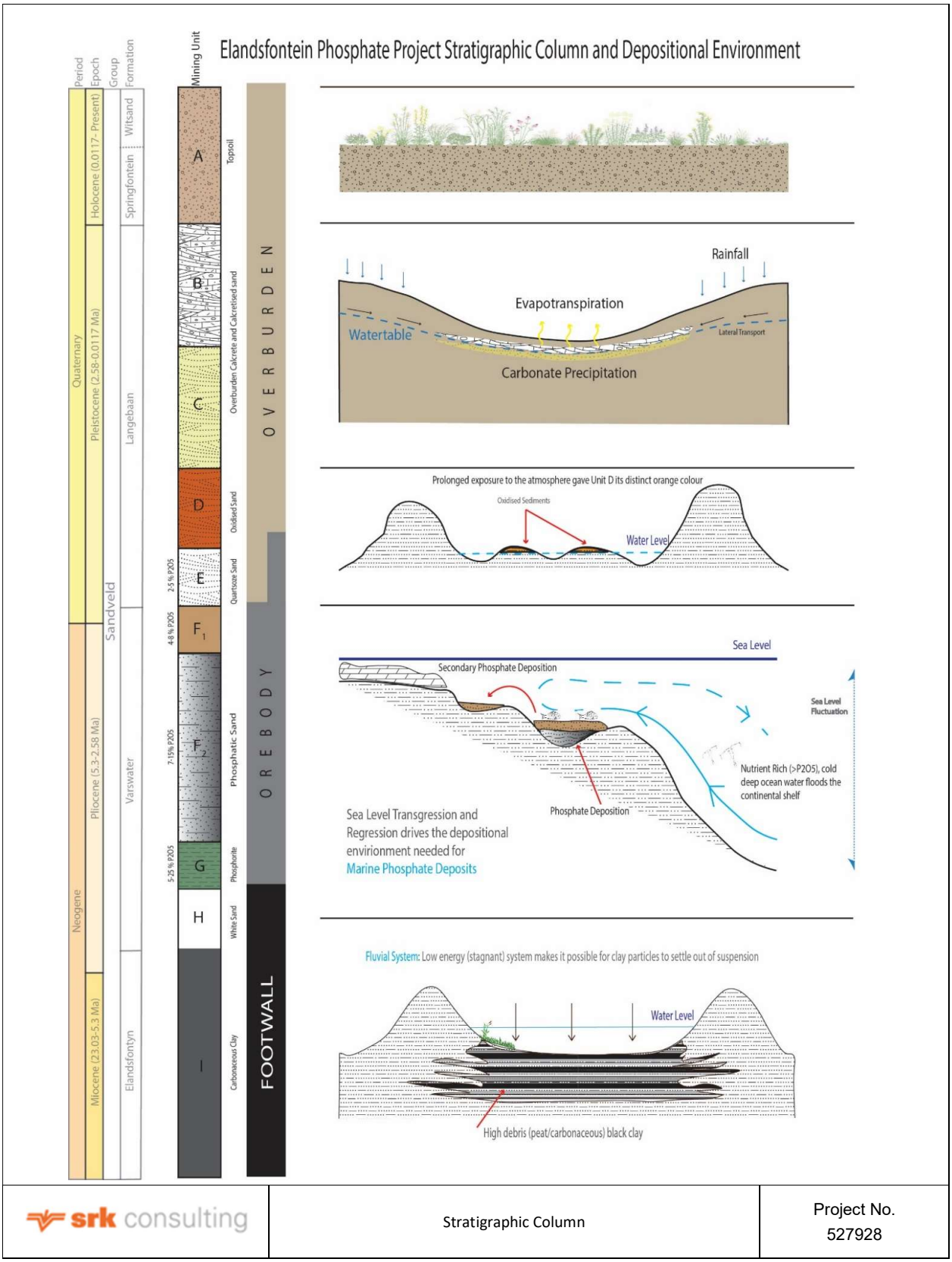
As the succession at Elandsfontein is flat lying, only Langebaan sediments can be seen on the property at surface. These sediments belong to the B and C units, consisting of sandstone with surface limestone (calcrete) lenses in the latter. A schematic section is shown in Figure 2.3.

The geological model display facies variation in response to different depositional environments illustrated in Figure 2.2 varying between the Basin and the Terrace Facies of the deposit, at different elevations.



srk consulting	Regional Geological Map	Project No. 527928

Figure 2.1: Regional Geology Showing Project Area



srk consulting	Stratigraphic Column	Project No. 527928

Figure 2.2: Stratigraphic Column and Depositional Environment

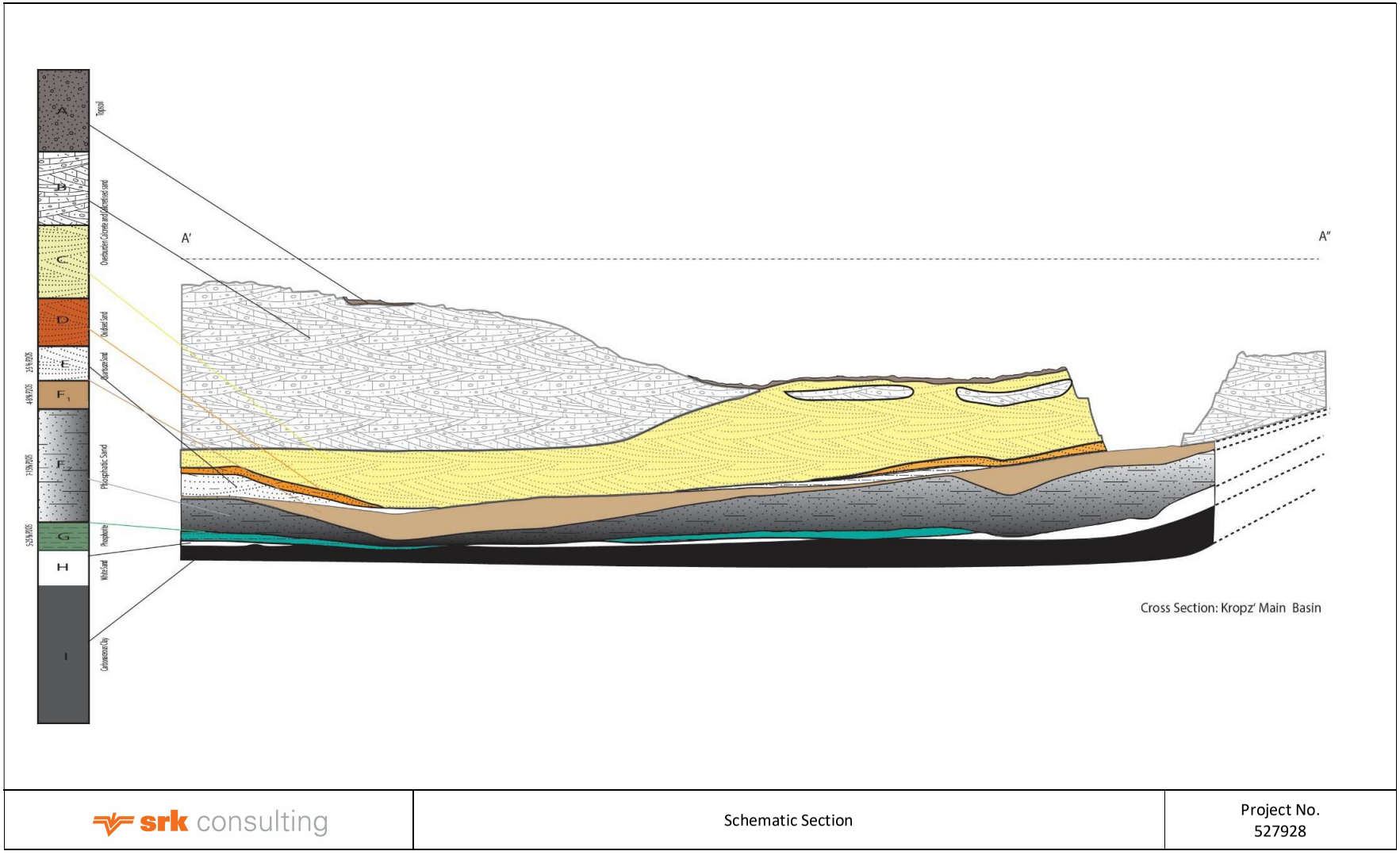


Figure 2.3: Schematic Cross Section Showing the Position of the Current Box-Cut

2.1.3 Deposit Type

The Elandsfontein phosphate deposit belongs to the sedimentary phosphate deposit type known as phosphorites. These deposits have been found on most continents and it is estimated that the world inventory of this style of deposit exceeds 200 000 Mt (Evans 1997). They range in age from the Precambrian to recent, but the commercially exploited deposits are mainly of Phanerozoic age. In South Africa, and specifically in the Western Cape Province both authogenic and diagenetically modified phosphorite deposits have been identified by Birch (1990) in the Langebaan area. In the Saldanha embayment deposits of calcium phosphate formed during the Miocene and Pliocene periods. A deposit of this type of approximately 49 Mt has been identified on the Farm Langeberg from which 24 Mt phosphate ore was produced up until 1992, averaging 10% P_2O_5 which was concentrated to between 29.2 and 30% P_2O_5 (Wilson, 1998).

2.1.4 Mineralisation

The phosphate mineralization at Elandsfontein is in the form of the calcium phosphate mineral apatite that presents itself as one of three types that may be described in situ from top to bottom as:

- Rounded reworked orange coloured phosphate grains in the terrace ores,
- A mixture of the orange grains in addition to the crystalline green apatite in the unconsolidated F and G Units; and
- As a phosphate matrix between mainly quartz grains in cemented phosphorite lenses in the F Unit but mainly in the G Unit.

2.1.5 Geology/Mineralisation of Elandsfontein

The geological succession at Elandsfontein is provided in the stratigraphic column and schematic section provided in Figure 2.2 and Figure 2.3.

The lowermost sedimentary units in this area is the Elandsfontein Formation that rests on the bedrock formed by the Cape Granite Suite. The top of this Formation is represented by the Langeenheid Clay Member, a prominent aquitard that separates the largely unconsolidated succession of sandstones from a similar succession below it. The Langeenheid Clay member is approximately 30 m thick in the Elandsfontein area.

The phosphate bearing sand deposits on top of the Langeenheid Clay Member belong to the Varswater Formation and represents a combination of marine deposits and wind-blown sand deposits probably reworked by local drainage resulting in the incision of trough like channels. The phosphate mineralization is believed to be linked to the off-shore phosphate province and resulted from the upwelling of phosphate rich groundwater and evaporation near surface at an earlier stage and probably prior to the deposition of the barren sand layers of Langebaan Formation (Unit C in terms of the mines nomenclature). Calcrete lenses (probably reflecting a higher proportion of shells in the Langebaan sand) developed in the sand succession of the Langebaan Formation closer to the current land surface due to evaporation. Such near surface calcrete has been exposed by modern erosion in places on the mining property.

3 Exploration and Drilling, Sampling Techniques and Data

3.1 Exploration

A considerable volume of work has been carried out on the resource area in the past. The South African Geological Survey (SAGS) (currently the South African Council of Geoscience (CGS) established the existence of phosphate mineralization on the farm Elandsfontein 349 in 1975 (Gilchrist, 1987). This was confirmed during the SAGS's Multidisciplinary West Coast Project to study the recent sediments on the coastal plain between Cape Town and the Oliphants River (Gilchrist et al., 1985).

Samancor, the company that operated the Langebaan Phosphate Mine, obtained an option to purchase the surface and mineral rights over Portion 3 of Elandsfontein A drilling program between 1984 and 1986, consisting of 28 air drilling boreholes on Portion 4, confirmed the presence of potentially economical phosphate mineralization. A deposit restricted to the inside of the drilled out area showed a potential resource of approximately 34.8 Mt at grade of 10.9% P_2O_5. (Trϋmpelmann, 1995).

The geological logs of these holes are available. None of the primary sample material could be sourced and the grades in these holes could not be verified and were therefore not used in the Mineral Resource estimation. However, this information was available for the planning of the subsequent drilling programme.

3.2 Drilling Techniques

Recent exploration drilling started in 2013 with diamond drilling using a triple tube core barrel design as commonly used for drilling of soil profiles for geotechnical purposes. Forty-one vertical, HQ size, holes were drilled (918 m) by Geoserve Exploration Drilling (Pty) Ltd. The water saturated unconsolidated nature of the succession resulted in core losses towards the bottom of each run and an average recovery of approximately 80% in the F and G Units. To improve on the core recovery problems, 26 vertical reverse circulation (RC) holes were drilled by DTH Exploration, from 2015 to 2017 (839 m), but uncertainty due to sample recovery was still a problem.

Much improved sample recovery was achieved with the last phase of drilling conducted in 2017 using the sonic drilling technique this resulted in an average core recovery of 90%. 11 vertical holes were drilled (567 m) by Environmental Drilling and Remediation Services (EDRS). It was demonstrated through the testing of the particle size distribution in the individual samples that the earlier drilling did not result in a preferential loss of the fines material. During 2017 an additional 13 RC holes were also drilled (427 m) in support of the pit development for the first boxcut.

3.3 Sampling Method, Collection, Capture and Storage

3.3.1 Sampling Techniques

RC samples were captured at the rig and sub split per drill string run. The sample was split using three tier riffle splitters.

The diamond drilling and sonic core was split into 1 m long intervals to allow accommodation in core trays. The core was sampled (sliced) using a “filleting” technique- i.e. a “slice” of core was manually taken.

Competent material is cut using diamond tipped core cutter.

The individual samples of the diamond drilling and sonic material were bagged sealed and submitted to the laboratory. The depth from and depth to measurements of each sample is based on the depth markers inserted by the driller. The RC sample material was split by riffle splitter and an eighth of the material was submitted to the laboratory for analysis. The average sample length for the diamond drilling samples is 0.82 m and for RC, sonic and production RC holes, it is 1 m.

All sample preparation including additional splitting crushing and pulverising was done at the laboratory.

3.3.2 Drill Sample Recovery

The average sample recovery in both the diamond drilling and RC drilling was approximately 80%, whereas a 90% core recovery was achieved in the sonic drilling.

Because of a concern that fine particles could have been preferentially lost during the diamond drilling and RC drilling programmes, particle size distribution tests were conducted on the core recovered from the sonic drilling and it was confirmed that there was no selective loss of any size fraction.

SRK is therefore of the opinion that results of the earlier diamond drilling and RC programmes may be used in combination with the sonic drilled holes in Mineral Resource estimation.

3.3.3 Logging

Core recovered in the diamond drilling and sonic drilling and the material recovered from the RC drilling were geologically logged following industry best practice standards and the data was captured in a digital database. In addition, core photos were taken. All remaining material was stored under cover at Elandsfontein.

3.3.4 Sample Laboratories

Samples from the 2014 diamond drilling programme were analysed by the ISO 17025 accredited SGS/Lakefield laboratory In Johannesburg. The umpire laboratory used for these analyses is ISO 17025 accredited Setpoint Laboratory in Johannesburg. All subsequent samples from the RC and sonic drilling programmes were analysed at the Scientific Services Geological Laboratories in Cape Town. The laboratory of ALS Global in Johannesburg was used as an umpire laboratory for the RC and sonic drilling programmes and is also ISO 17025 accredited.

3.4 Sample Preparation and Analysis

Two independent primary laboratories and two independent umpire laboratories were used for analyses of samples that are considered in the estimation of the Elandsfontein Mineral Resources. The individual Laboratories are considered separately below.

SGS Mineral Services Pty Ltd

Samples on receipt were dried, crushed (Jaw Crusher to < 2 mm), split by riffle splitter to approximately 200 g, and then milled (LM2 mill to 85% < 75 µm).

A glass disk was prepared by fusing an aliquot (0.7 g) of the sample in a lithium tetra-borate fusion. The sample was then analysed for the major element oxides by X-Ray fluorescence (XRF). Phosphorous is expressed as phosphate (P_2O_5) and the theoretical detection limit is 0.01%. This method was accredited in terms of ISO 17025.

Scientific Services CC

On receipt the samples are dried, crushed (Jaw Crusher to < 2 mm), milled (Sieb swing mill to 75% < 80 µm).

A 0.65 g sample is fused with a lithium tetra-borate flux and a glass disk is prepared. The glass disk is analysed for the major element oxides using the XRF method. The effective P_2O_5 detection limit is 0.1%.

3.4.1 Verification of Sampling and Assaying

SRK did not conduct an independent sampling exercise and is reliant on the information provided by the independent laboratories and the Quality Assurance and Quality Control review conducted by the independent firm, Snowden Consulting.

3.5 Sampling Governance

3.5.1 Sample Delivery

A sample chain of custody procedure was in place with appropriate sign-off by the responsible geologist and on receipt by the relevant laboratories duly authorised person.

3.5.2 Splitting and Storage

All primary sample splitting was done at the Elandsfontein Exploration Facilities by the Company's own competent geologists. The remaining material is stored at the storage facilities on site.

3.6 Quality Control and Quality Assurance

SRK is reliant on the Quality Assurance and Quality Control (QAQC) reviews done by the independent firm, Snowden Consulting, reported by Gasela (2014) and Evans (2018).

During all phases of drilling undertaken at Elandsfontein, independent QAQC samples including blanks, Certified Reference Materials (CRMs), and field duplicates were inserted into the sample stream. Table 3.1.

Table 3.1: Phase 1 Quality Control Sample Insertion Rate

Type of samples	Total number	Insertion rate
Drill hole samples	784	
Blanks	84	11%
CRMs	40	5%
Duplicates	40	5%
Check assays	52	7%

The insertion rates for the RC and sonic drilling programs are presented in Table 3.2 and Table 3.2.

Table 3.2: RC Drilling Quality Control Sample Insertion Rate

Type of samples	Total number	Insertion rate
Drill hole samples	549	
Blanks	50	9%
CRMs	28	5%
Duplicates	28	5%

Table 3.3: Sonic Drilling Quality Control Sample Insertion Rate

Type of samples	Total number	Insertion rate
Drill hole samples	225	
Blanks	10	4%
CRMs	7	3%
Duplicates	4	2%
Umpire	25	11%

3.6.1 Blanks

The Company initially used an uncertified blank composed of pulverised Table Mountain Sandstone from a quarry located outside Grabouw, Cape Town. Eleven samples, equating to 13%, plotted above the upper rejection limit, which was calculated as being ten times the detection for P_2O_5 of 0.01%). However, this rejection limit was very harsh given that the effective detection is approximately 0.1% P_2O_5.

The Company subsequently acquired AMIS 0484, a silica powder blank for use in the sonic drilling QAQC program.

Only one blank sample exceeded the rejection criterion of 10 times the effective detection limit and this most probably resulted from a sample swap.

SRK is satisfied that no evidence of significant contamination was found.

3.6.2 CRMs

The Company has used the following CRM's in their QAQC programme at Elandsfontein (Table 3.4).

Table 3.4 Certified Parameters of the CRMs used at Elandsfontein

Name of CRM	Certified %P_2O_5 value	Certified standard deviation	Drilling Programme
AMIS 0055	21.22	0.42%	RC
AMIS 0304	18.35	0.37%	Orientation, RC, sonic
AMIS 0185	1.74	0.01%	Orientation, RC

Company staff analysed the data on receipt and where the CRM results were reported outside the two times standard deviation limit, reported in the CRM certificate, the batch was requested to be re-analysed.

Gasela (2014) reported that most of the CRM aliquots analysed during the initial drilling programme (the orientation drilling programme) reported below the certified P_2O_5 concentrations but still within the two times standard deviation bracket.

Evans (2018) noted for the RC and sonic drilling programmes that:

- AMIS 0055: Displayed no bias (15 aliquots analysed);
- AMIS 0304: No bias observed (6 aliquots analysed);
- AMIS 0185: Consistent under reporting (5 aliquots analysed); and
- For the sonic drilling program, only AMIS 0304 was submitted in the sample stream. No bias was observed in the seven aliquots analysed, however the use of one CRM is not considered to be industry best practice.

SRK is of the opinion that the accuracy achieved, as measured by repeated analyses of aliquots of the respective CRMs during the chemical analyses, is satisfactory.

3.6.3 Independent Duplicates

Gasela (2014) reported that 40 field duplicates were submitted for the orientation drilling programme and that the correlation coefficient for these duplicate pairs is 0.99. Independent field duplicates were submitted for both the RC (28 samples) and the sonic (four samples) drilling campaigns, with a duplicate being collected per drill hole. The duplicates inserted during the RC drilling programme show good reproducibility and no material differences were detected. The duplicates have a linear correlation coefficient of 0.96, and 75% of the duplicates have a half absolute relative difference (HARD) of 5% or less.

The chemical analyses of duplicate samples inserted during the sonic drilling programme shows good reproducibility and no material differences were detected. However, the number of duplicate samples analysed is too small for a statistical comparison.

3.6.4 Umpire Analyses

Gasela (2014) reported that 52 pulps were selected from the orientation drilling programme and submitted to the independent laboratory, Setpoint. Both laboratories used the XRF method based on fused disks for analyses of the major elements. The results of the umpire laboratory correlated well with that of the primary laboratory (SGS) showing a correlation coefficient of 0.94 and no bias could be detected.

Twenty five samples were selected from the returned sample pulps received from Scientific Services of the RC and sonic drilling programmes and submitted to ALS Global for umpire analysis. Both laboratories used the XRF method of analysis of fused glass disks.

Evans (2018) reviewed the results of the umpire laboratory analysis and is satisfied that the assay results are statistically comparable but commented that no blank and duplicate samples were included in the set of samples selected for umpire analysis.

3.6.5 SRK Opinion

SRK is of the opinion that based on the QAQC reviews undertaken by Gasela (2014) and Evans (2018), the results of the chemical analyses of samples, derived from the three drill programmes and analysed at the two primary, independent, laboratories and the confirmed by the two umpire laboratories, are suitable for Mineral Resource estimation purposes.

3.7 Location of Data Points

All drill hole collar positions holes were initially surveyed by hand held GPS. The collar positions of the holes were subsequently surveyed by a qualified surveyor (African Consulting Surveyors). A Trimble Dual Frequency RTK GPS system was utilised for this survey to ensure accurate positioning of the drill holes. The trigonometric beacon, Stinkkruidkop, located on Elandsfontein

was used for the survey to tie the survey into the National Trigonometric network. The survey is tied into the National Hartebeeshoek Lo.19 coordinate system, which is based upon the WGS84 Ellipsoid. Heights are tied to the published value of the Trigonometric beacon at Stinkkruidkop.

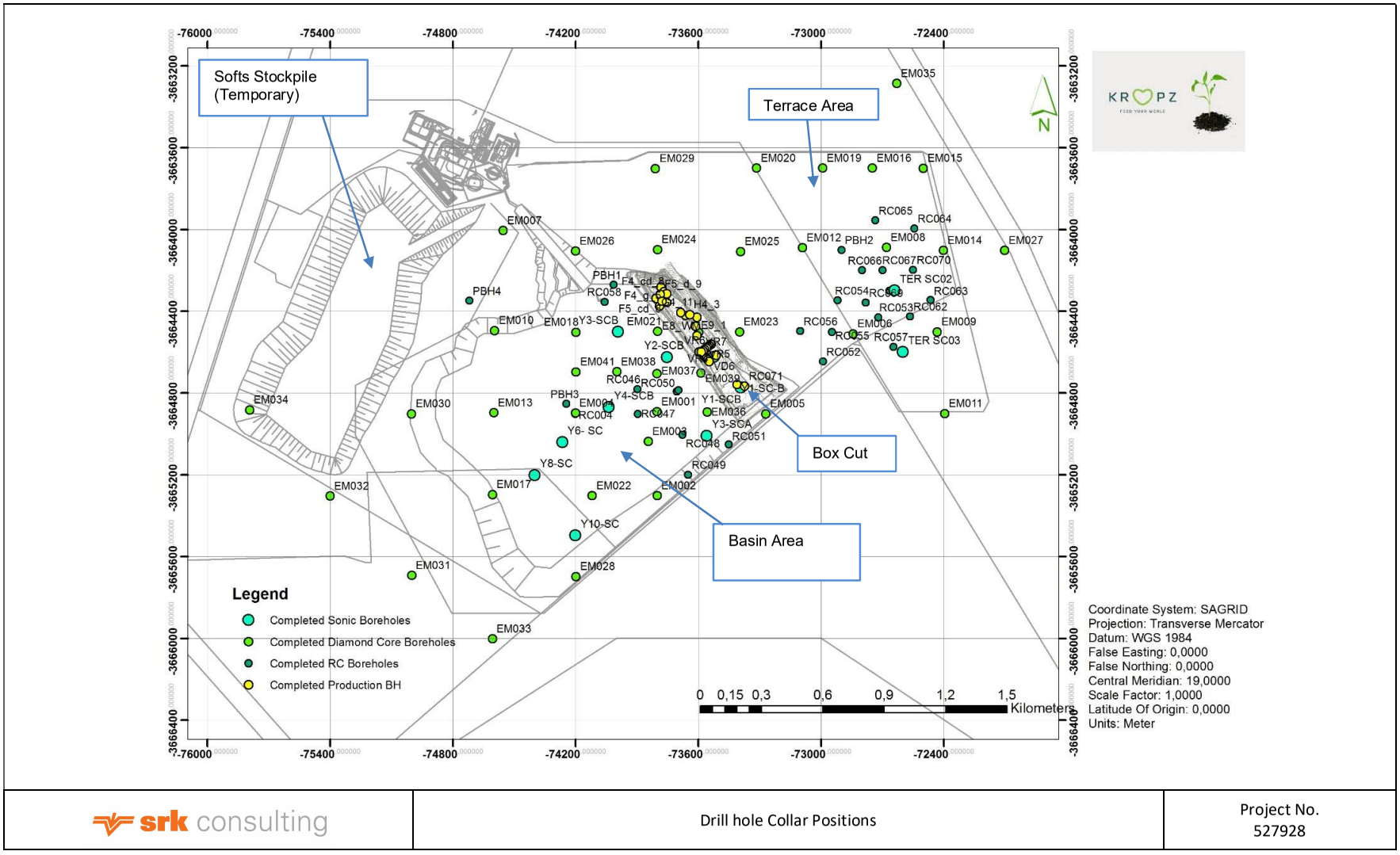
A Digital Terrain Model (DTM) based on a LIDAR survey has also been prepared for the project

Depth markers in the core or RC material were inserted by the driller based on the metres drilled at the end of each run.

3.8 Data Spacing and Distribution

The locations of all the holes used for Mineral Resource estimation purposes are shown in Figure 3.1. The appropriateness of the spacing will be considered in the section on the classification of the Mineral Resources. However, it may be stated here that the spacing was considered appropriate for the level of confidence ascribed in the classification of the Mineral Resources. In general, there is good evidence for the geological continuity of the individual Units, but large variation in the distribution of the cemented phosphorite lenses.

Samples were not composited prior to analyses.



srk consulting	Drill hole Collar Positions	Project No. 527928

Figure 3.1: Drill Hole Collar Positions with Softs Stockpile and Plant Positions

3.9 Orientation of Data in relation to Geological Structure

The phospate deposit is a sedimentary deposit hosted by horizontal sedimentary layers in such a way that the drilling of vertical drill holes provides the best intersections of the mineralisation.

3.10 Sample Security

Sample management and submittal to the laboratories met with international best practice requirements and there are no forseen posibility of contamination nor undue tampering with the samples. This is also confirmed by idependent subsequent re-submittal of umpire samples to an independent laboratory.

3.11 Relative Density

Relative densities were measured for the more competent material obtained during the diamond drilling programme. These samples were covered with wax and the density was determined with the Archimedes principal. No additional density measurements have been completed by Kropz for its subsequent drilling programs.

SRK recommended measurements of the in situ dry density, using the sand replacement method. These measurements were made within the dewatered pit at the top of the F-Unit by the Elandsfontein geologist Mr. P Serfontein and the results confirmed the results previously obtained from the same stratigraphic interval. Eight sand replacement tests were conducted to derive a dry in situ bulk density at the top of the F-Unit the average density. The average dry density is 1.88, with a range of 1.73 to 2.06 (the average moisture content recorded for these samples is 4.12%). In comparison, the density reported for the F and G-Units based on the Archimedes Bath method applied to diamond drilling samples is 1.86.

Although the sonic drilling samples would have been ideally suitable for density estimation using the calliper method, this could not be tested as the material has already been sampled for various other tests.

SRK is therefore of the opinion that the relative density measurements available are suitable for tonnage conversion and Mineral Resource estimation.

It is recommended that, when production commences, density measurements become part of the ongoing grade control and reconciliation programme.

4 Mineral Resource and Classification

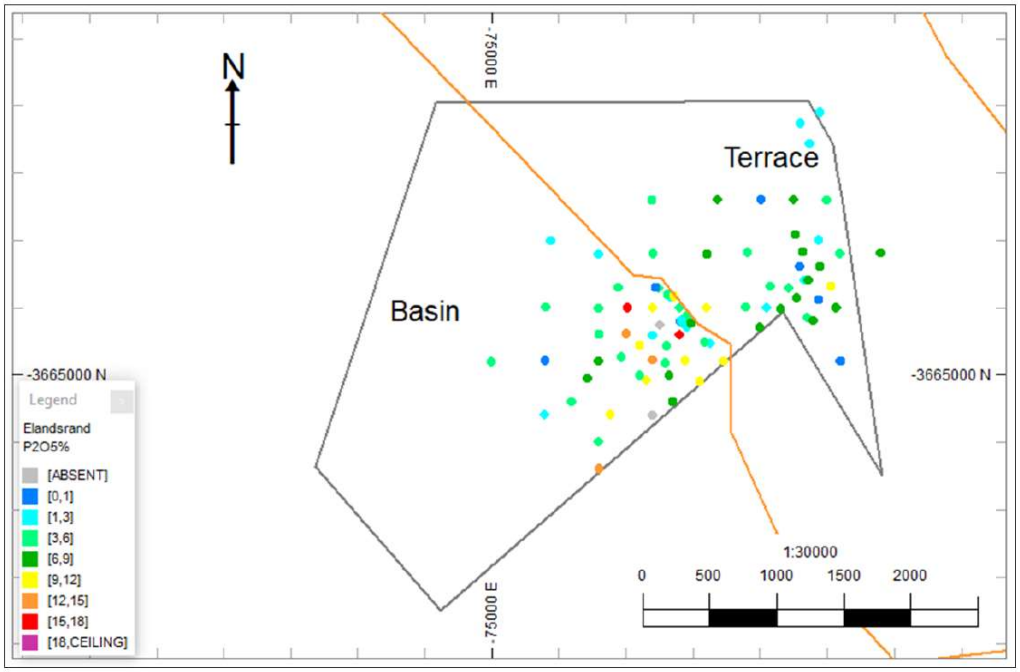
4.1 Database and Data Validation

4.1.1 Database

Eighteen holes were first drilled by Samancor in the 1980s (not used in Mineral Resource estimation) and then an additional 41 diamond drill holes (orientated) were drilled by the Company in 2014. Since the previous Mineral Resource estimate (MRE) in 2014, an additional 26 RC holes were drilled during RC Phase 1, and recently in 2017, an additional 13 production RC holes and 11 sonic holes were drilled.

The exploration holes were drilled vertically, which is perpendicular to the strata and hence reflect the true width of the mineralisation.

The data set provided for the 2014 Resource estimate comprised forty drill holes (EMM1 to EMM40). The subsequent drilling undertaken, has added an additional fifty five holes to the data set. In order to ensure compatibility of the two datasets, Snowden generated a QQ Plot in Studio RM to provide a comparison. The two data sets showed a correlation factor of 0.993 and were combined for this update. SRK concurs that the two data sets can be combined for Mineral Resource estimation purposes. The data points (drill holes) range from 100 m to 500 m apart, having a fairly regular spacing (see Figure 4.1 which includes the project boundary for reference).



srk consulting	Plan of Exploration Drill Holes Indicating $\%P_2O_5$	Project No. 527928

Figure 4.1: Plan of Exploration Drill Holes Indicating %P O in Full Composites across Units F and G

There are a few voids or holes on the grid that were not drilled, however additional exploration and infill drilling has been done in 2015 – 2017. The data does not cover the full extent of the mineral rights area. The drill holes are located in the centre and up until the eastern boundary. There is no

data present towards the north in the terrace domain and in the basin domain towards the south and west of the current drilling data, up until the boundary.

In the old drill holes, there are 27 F and G sample intervals that have no assay results in the borehole database, this is due to sample recoveries not being > 90%. In the new drill holes data, there are no F and G sample intervals that are missing assay results (F unit has 1002 samples and G unit has 26 samples). The improved recoveries obtained during the 2017 exploration programme by both RC and sonic drilling lead to an increased confidence in the primary data that was used for the Mineral Resource estimation.

4.1.2 Drill Hole Sample Recoveries

Old Drill Holes

SRK determined that in the diamond drill holes, the average recovery was 74.34% (631 samples) (see histogram hol_fg, for the diamond drill holes in Figure 4.2).

SRK's statistical analysis indicates that 90% of the samples had recoveries of above 50%. 10% had recoveries of below 50% and only 2% had recoveries below 30%. The minimum core recovery was 31%, the maximum was 89% and the average was 61.7%.

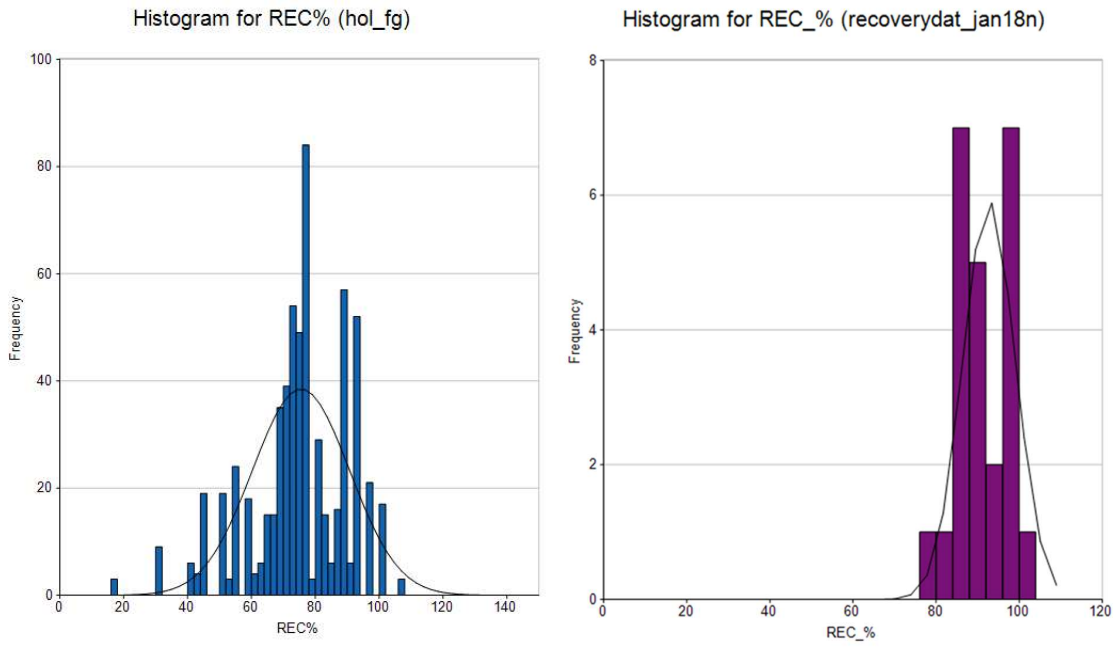
New drill holes

Snowden reported that for the new drill holes (2017) the recoveries were > 90%. SRK independently determined, that for 13 production RC holes and the 11 sonic holes drilled (a total of 24 holes) with recoveries recorded, the average recovery was 90.77%, with a minimum of 76.29%. These much improved recoveries provide samples that when sent for analysis that will more representatively depict the grades. This resulted in a higher level of confidence in the grade estimates and ultimately led to improved confidence in the Resource Classification at Elandsfontein.

4.1.3 Relative Density Measurements Taken in 2014

The same density values that were used for the 2014 estimate were again used for the 2017 estimate. Snowden recorded that 150 samples in the F Unit and 28 samples in the G Unit were submitted for relative density measurements to Soilab and Geolab. SRK observed that 240 of the 631 samples (38%) in the database had relative density results. There seems to be little variation in the relative density; it ranges from 1.566 to 2.555, with a mean value of 1.894 g/cm^3, a standard deviation of 0.146. The mean value (1.894 g/cm^3) is in line with that for a wet unconsolidated sand (1.95). The 98th percentile is 2.318 g/cm^3.

The relative density (as in 2014) was again estimated into the block model in 2017 using Inverse Power of Distance Squared (IPD^2) estimation with first pass search range of 500 m. The second search range for the density estimation was 1 000 m x 1 000 m x 10 m and the third was 5 000 m x 5 000 m x 100 m.



srk consulting	Drill hole Recovery %	Project No. 527928

Figure 4.2: Recovery % for Old and New Drill Holes for F and G Units Combined

Additional Density Measurements

Additional check dry bulk density measurements were done by the Company in 2017 using the sand replacement method. The measurements taken give an average density of 1.905 (5 measurements) and confirm the density measurement taken in 2014 for the F Unit of 1.898 g/cm (25 measurements). This confirms that the density measurements taken on the triple tube diamond drill core using the wax method were accurate. This further implies that the measurements taken for the other stratigraphic units in 2014 were also accurate and can be regarded as being acceptable for Mineral Resource estimation purposes.

Moisture

The average moisture content derived from 16 samples was 1%. Dry tonnes are reported in the Minerals Resource Statement. No additional measurements have been made since 2014.

4.1.4 Data Aggradation Methods

The data was composited downhole by Snowden with hard boundaries between the defined lithological units. The composite lengths were adjusted to include all intervals and avoid the loss of residual samples, by using variable length compositing. This however resulted in some variability in the support (volumes) of sample used for the variography and Ordinary Kriging (OK) estimation. The composite sample lengths generated by Snowden varied from 1.0 m to 2.0 m for Units F and G. The total composited sample length obtained by Snowden was 1548.95 m with 1035 composite samples (with an average sample length 1.497 m).

SRK independently composited the samples to fixed 1.5 m lengths, the total composited sample length was 1 535.93 m with 1 070 composite samples (with an average sample length 1.435 m). The difference in the total sample length was only 13.02 m and there was no reduction in the number of composited samples.

SRK consider a fixed composite length to be a more appropriate approach, however following independent examination and testing of the impact, does not regard this as having a significant effect on the estimate.

4.1.5 Capping and Outlier values

Snowden was of the opinion that top-cutting on the composited samples was not required as all variables have low coefficients of variation with no significant anomalous values. SRK previously supported this view in the light that the F and G units were treated as a combined horizon. SRK's assessment of the outliers for the individual horizons indicated the presence of a small number of outliers, however after compositing, SRK agree that no capping is required.

4.1.6 Statistics

Snowden did statistical analysis on the composited data, separating the terrace and basin domains. The data was all declustered to 250 m E by 250 m N by 1.5 m RL (terrace) and 7.5 m RL (basin) to remove bias due to clustering of the drilling data. The co-variances (ratio of the Standard Deviation to the mean) of all the variables are low, with no significant anomalous values being identified.

4.1.7 Units F and G separated and t Test applied

Snowden determined by visual examination and by applying statistics that there was no distinct hard boundary between the F and G Units. The F and G Units were therefore combined for statistical analysis and variography and estimation. SRK did their own independent statistical tests to verify this on both the individual samples and on the composited drill hole values for the separate F and G Units in the basin area, see Table 4.1. The P_2O_5 values were used to do a t Test, making use of the assumption of equal variances. The mean grades obtained for the Terrace and Basin areas and standard deviations seem reasonable, when compared by SRK, with the raw sample data.

The combination of the F and G Units for statistical analysis, variography and estimation as has been applied by Snowden is, in SRK's opinion, therefore acceptable and justified.

The results obtained previously in 2014 by SRK indicated that the F and G units can be treated as one population, as they have P values in the t Test that are greater than 0.05.

Table 4.1: SRK Statistics for the F and G Units, Old and New Individual Sample Data, and All the Composited Data Combined

Old Individual Sample Data								
Unit	**Min**	**Max**	**Range**	**Mean**	**Std Dev**	**Variance**	**Co Var**	**No_Samples**
F	0.52	24.1	4.93	10.76	4.93	24.3	0.458	324
G	0.05	26.9	26.85	11.8	8.22	67.56	0.697	56
New Individual Sample Data								
Unit	**Min**	**Max**	**Range**	**Mean**	**Std Dev**	**Variance**	**Co Var**	**No_Samples**
F	0.05	25.0	24.95	9.39	4.92	24.2	0.524	1002
G	1.36	25.75	24.39	8.87	7.616	58.01	0.858	26
All Composited Sample Data								
Unit	**Min**	**Max**	**Range**	**Mean**	**Std Dev**	**Variance**	**Co Var**	**No_Samples**
F	0.17	24.27	24.27	9.19	4.725	22.32	0.514	926
G	0.06	22.35	22.30	6.89	6.867	47.16	0.997	92

4.1.8 Geological Modelling, Domaining and Interpretation

4.1.9 Geological Interpretation

Wireframe surfaces were modelled at the top of each geological unit identified at Elandsfontein. The overburden Units A, B, and C were combined; while the rest of the layers were modelled separately.

4.1.10 Dimensions

The Mineral Resource extends over 3.6 km in the north east and 1.8 km in the north west orientations. The combined FG package varies from 3 m to 30 m, having an average thickness of 17 m.

4.1.11 Domains

Grade estimation was undertaken for the phosphate bearing horizons (Units F and G). Following a statistical review and as per the Snowden 2017 estimation methodology, where the F and G Units were combined for statistical analysis, variography and estimation. The same estimation and domaining approach used by Snowden in 2014, where the Basin and Terrace were estimated separately, was again used for the updated estimate in 2018. A comparison between the basin and the terrace areas shows a distinct change in grade distribution between the two areas; as such these areas were previously separated for estimation. This difference is still evident but following the addition of the new drilling data (2017), it is no longer as distinct as it was in 2014.

The Basin (ESTDOM 1) and Terrace (ESTDOM 2) domains exhibit distinctly different grade distributions and in SRK's opinion were correctly separated by Snowden for variography and estimation purposes. The Basin domain is higher grade and has an almost normal distribution; the Terrace domain is lower grade and exhibits a bi-modal distribution, indicating a mixed population.

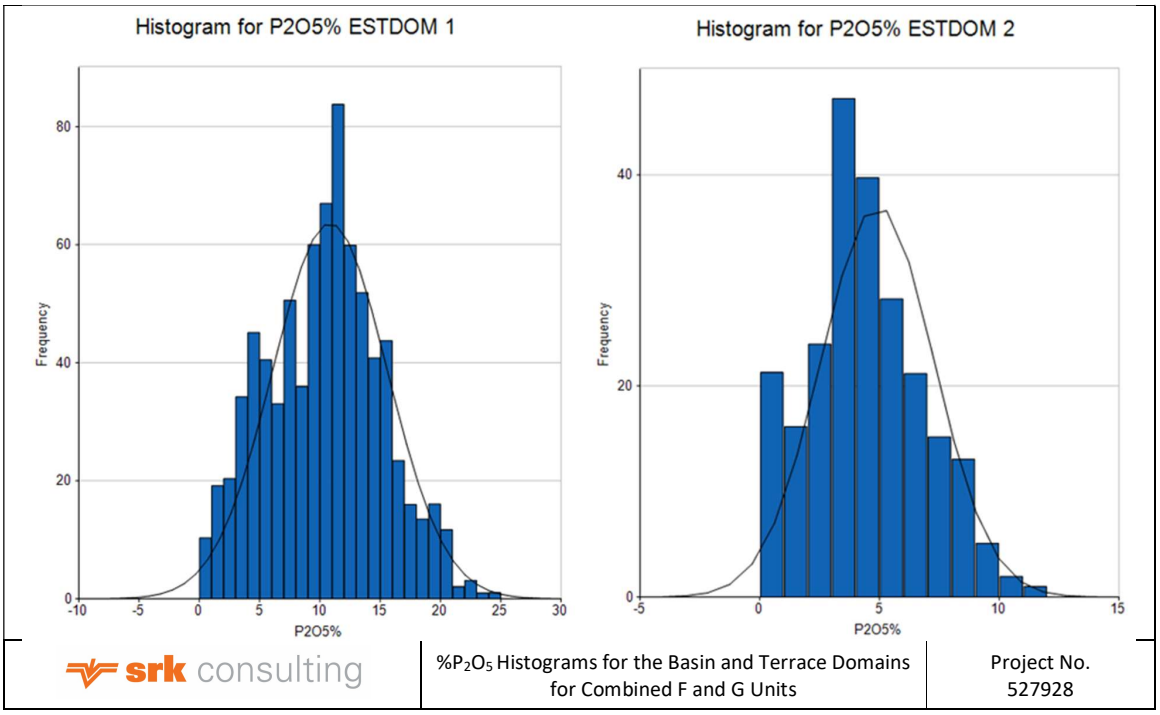


Figure 4.3: %P O Histograms for the Basin and Terrace Domains for Combined F and G Units

The Estimation Domain and domain codes were inserted into the composited sample file that was used for the estimation into the block model by OK. The lower and higher grade portions of the F

and G units were distinguished by making use of domain codes that were incorporated in the block model during the estimation (see Table 12.2 in the Snowden 2014a report). The terrace domain contains only lower grade ore and the basin domain has both low and high grade ore in the F and G Units.

4.2 Mineral Resource Estimation and Modelling Techniques

4.2.1 Estimation Methodology

Two Domains, the Basin and Terrace were used by Snowden and the combined F and G Units were estimated as parent cell estimates using OK into the three-dimensional block model for the percentage of P_2O_5, MgO, Fe_2O_3, Al_2O_3, SiO_2 and CaO.

The dry bulk densities values were previously estimated in 2014 into the block model by IPD^2 estimation and were again used in 2017 to calculate the updated tonnages in the MRE.

4.2.2 Variography

For the 2017 estimate, variograms were calculated by Snowden for each variable within the Basin. Downhole variograms were generated to determine the nugget effect, followed by the interpretation and modelling of the main orthogonal directions of continuity and these are presented in Figure 4.4 and Figure 4.5. Snowden determined that a lag distance of 150 m was the most suitable to use for the Elandsfontein dataset. Snowden modelled $\%P_2O_5$, $\%SiO_2$ and %CaO using normal variograms as they exhibited good linear correlation and $\%Al_2O_3$ and $\%Fe_2O_3$ and %MgO were modelled as normalised log variograms. $\%P_2O_5$, $\%SiO_2$, $\%Al_2O_3$, %CaO, %MgO and $\%Fe_2O_3$ were estimated into 200 m E by 200 m N by 5 m RL parent cells using OK for Units F and G. Variograms were not modelled for dry bulk density and this was estimated using inverse distance weighting.

SRK are of the opinion that the parameters used by Snowden to generate the semi variograms for the Basin were not optimal and that the ranges modelled by Snowden did not agree with the data depicted in them, see Figure 4.4 below.

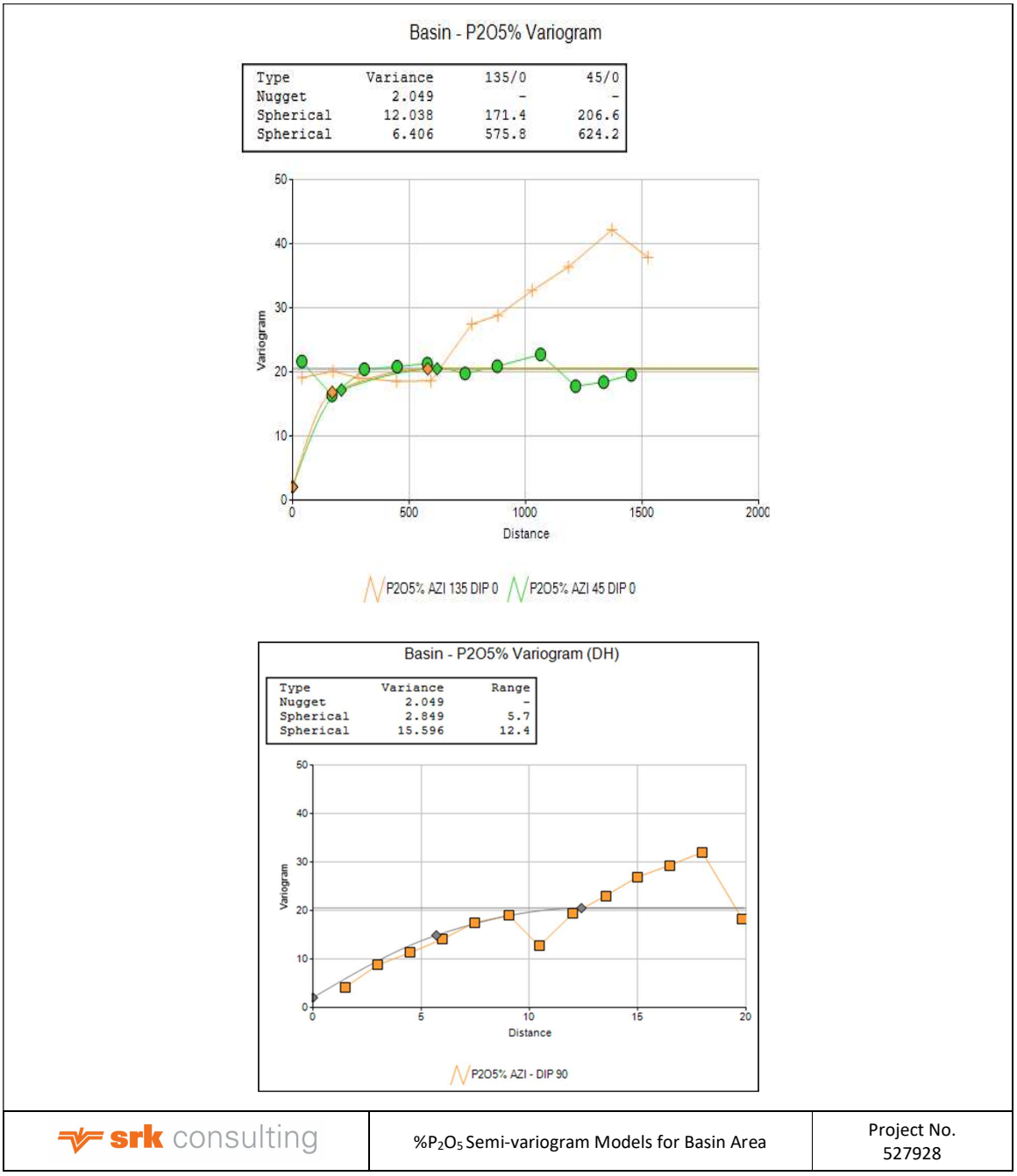
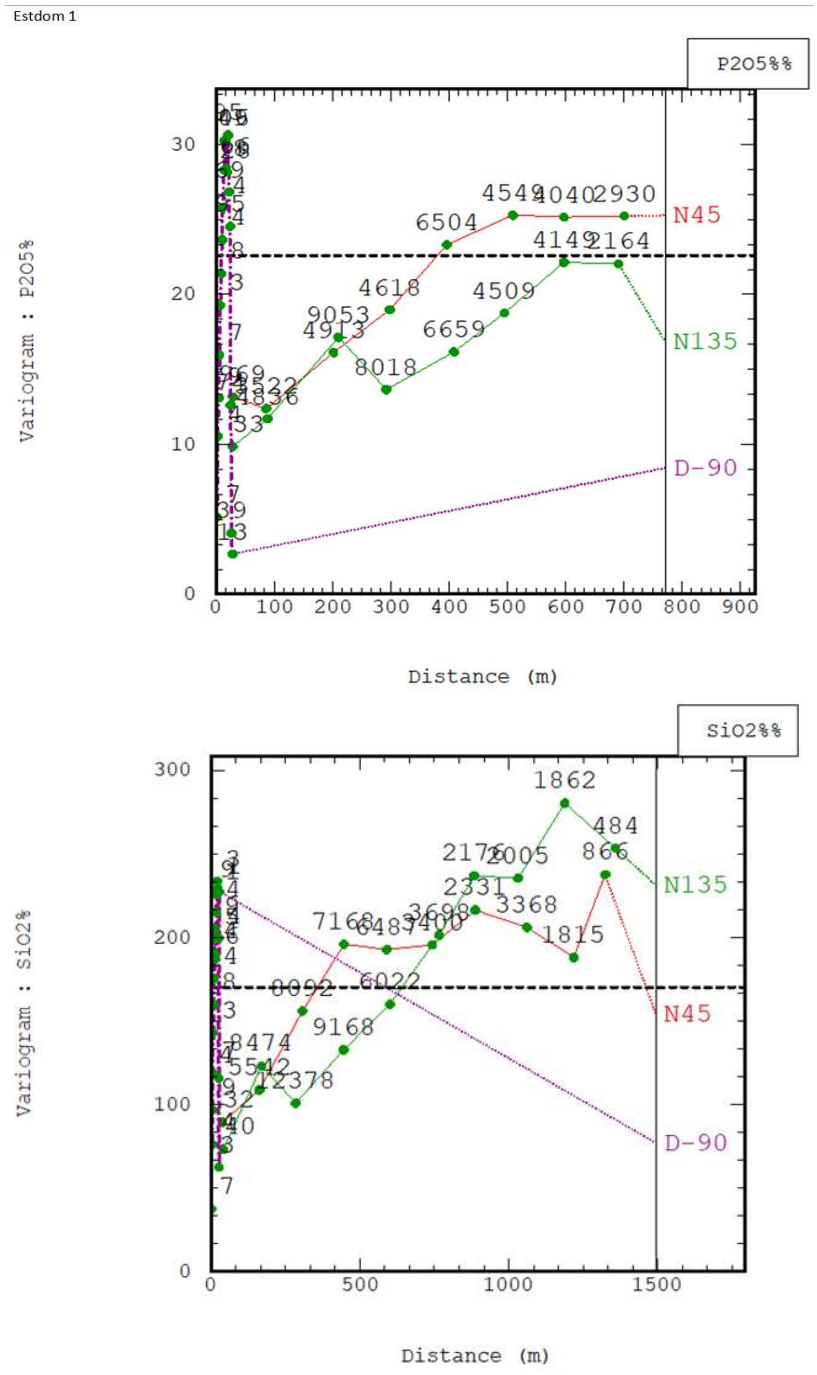


Figure 4.4: Snowden's Semi-variogram Models for Basin Area for Combined F and G Units

The %P O semi-variogram does not show a robust interpretable structure. For azimuth 135, the model is at the population variance at the first lag, and the fitted semi-variogram does not match the experimental semi variogram properly. For azimuth 45, the maximum range is approximately 350 m, and not the 624 m modelled by Snowden.

SRK is of the opinion that the variograms as modelled by Snowden do not match the experimental data well. In examining the data in the Basin Domain, which has a relatively normal distribution, SRK were able to independently generate semi-variograms for the Basin domain that showed grade continuity and gave similar ranges to those obtained by Snowden, see Figure 4.5 and Figure 4.6.

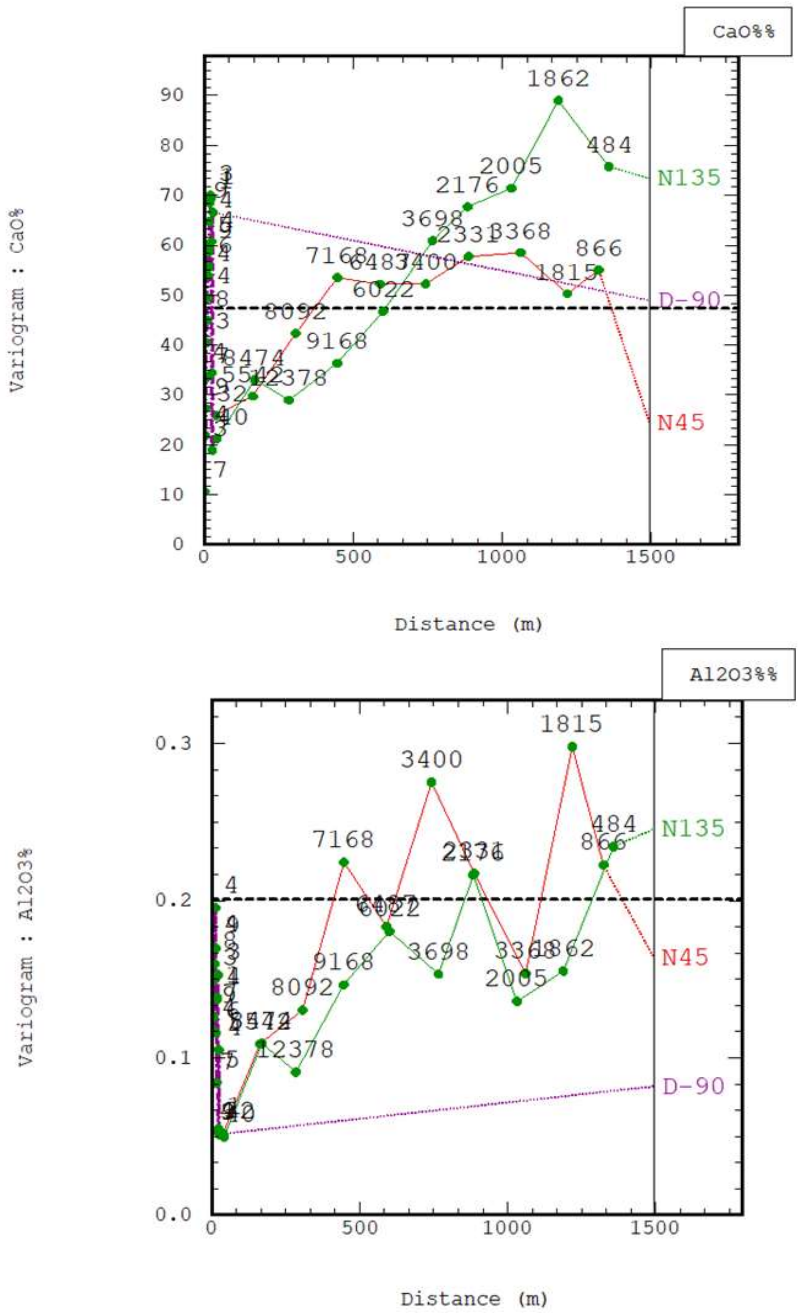
SRK are thus of the opinion that Snowden's Resource Classification in the Basin area is acceptable.



srk consulting	SRK's semi-variogram models for the Basin area for combined F and G Units for $\%P_2O_5$ and $\%SiO_2$	Project No. 527928

Figure 4.5: SRK's Semi-variogram Models for the Basin Area for Combined F and G Units for %P O and %SiO

The ranges for %P O obtained by SRK are 483 m for the 045 direction and 591 m for the 135 direction. The ranges for SiO obtained by SRK are 350 m for the 045 direction and 641 m for the 135 direction.



srk consulting	SRK's semi-variogram models for the Basin area for combined F and G Units for %CaO and $\%Al_2O_3$	Project No. 527928

Figure 4.6: SRK's Semi-variogram Models for the Basin Area for Combined F and G Units for %CaO and %Al O

The ranges for %CaO obtained by SRK are 366 m for the 045 direction and 600 m for the 135 direction. The ranges for %Al O obtained by SRK are 417 m for the 045 direction and 842 m for the 135 direction.

The ranges modelled by Snowden in 2017 for the Basin Domain are shown in Table 4.2.

Table 4.2: Snowden's Semi-variogram Model Parameters (Basin)

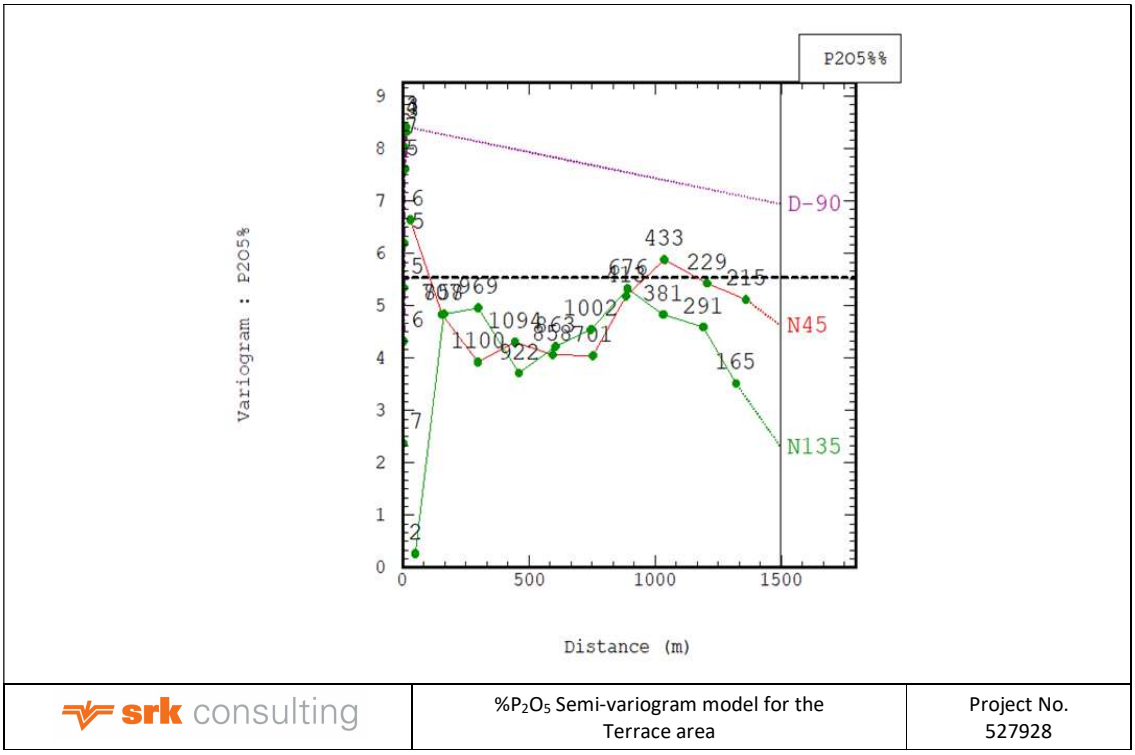
Variable	Orientation	Nugget	Structure 1		Structure 2	
			Sill	Range	Sill	Range
$\%P_2O_5$	45	2.049	12.04	171.4	6.406	575.8
	135			206.6		624.2
	-90			5.7		12.4
$\%SiO_2$	45	15.58	95.22	190.4	44.99	594.7
	135			197.1		671.5
	-90			7.1		13.1
$\%Al_2O_3$	15	0.009	0.057	265.5	0.025	765.5
	105			278.8		588.5
	-90			4.4		10.5
%CaO	30	4.30	22.24	236.1	16.43	530.1
	120			271.7		668.2
	-90			7.2		18
%MgO	30	0.001	0.002	263.6	0.003	650.0
	120			159.1		450.0
	-90			6.3		16.2
$\%Fe_2O_3$	0	0.01	0.037	333.3	0.052	858.4
	90			208.0		486.7
	-90			5		12.3

In 2014 the modelled Basin variograms were used by Snowden as common variograms for estimation in both the Basin and Terrace domains, as the variograms within the Terrace domain were too poorly structured to be used.

In 2014 the modelled Basin variograms were used by Snowden as common variograms for estimation in both the Basin and Terrace domains, as the variograms within the Terrace domain were too poorly structured to be used.

Snowden stated that due to the increased number of drill holes in 2017, sufficient sampling now exists in the Terrace area, in order to also be able to generate semi-variograms for this domain independently from the Basin domain.

SRK were however unable to generate a meaningful semi-variogram for the Terrace domain. There appears to be a bi-modal population and very little grade continuity displayed in the semi-variograms that SRK generated independently in Isatis. The best variogram that SRK were able to generate is shown below, see Figure 4.7. SRK are of the opinion that the data in the Terrace area does not show sufficient grade continuity to justify a Measured Classification in this area in this area and has therefore reclassified it to that of an Indicated Resource.



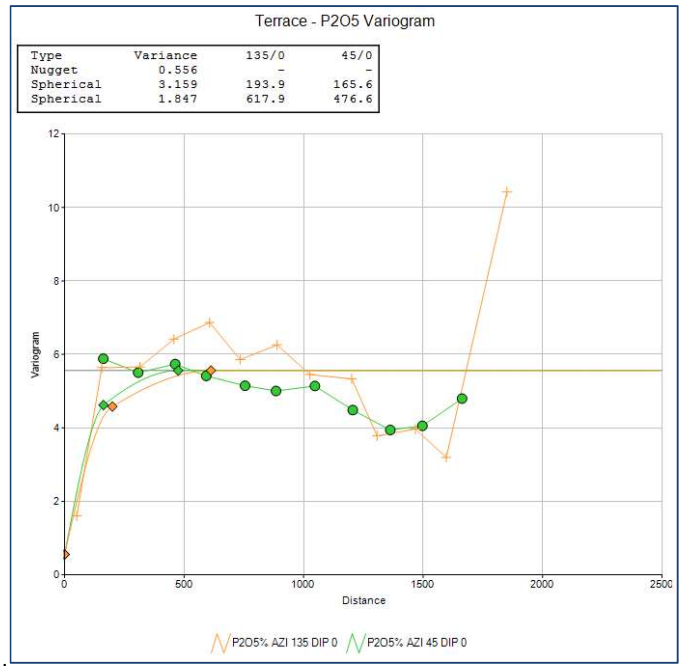
srk consulting	$\%P_2O_5$ Semi-variogram model for the Terrace area	Project No. 527928

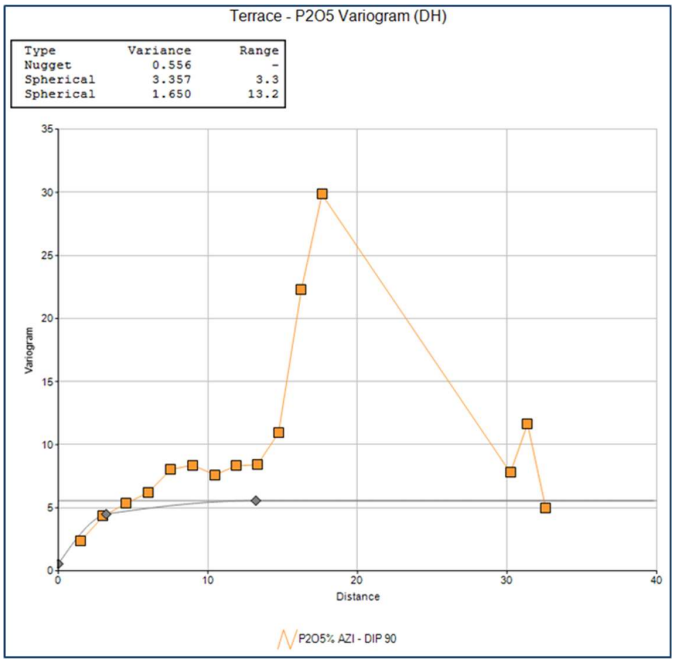
Figure 4.7: SRK's Semi-variogram Model for %P O for the Terrace Area for Combined F and G Units

The maximum ranges obtained by Snowden for the first and second structures for %P O in the Terrace (193.9 m and 617.9 m) are similar to those they obtained in the Basin area (206.6 m and 624.2 m), see Table 4.3.

Table 4.3: Snowden's Semi-variogram Model Parameters (Terrace)

Variable	Orientation	Nugget	Structure 1		Structure 2		Structure 3	
			Sill	Range	Sill	Range	Sill	Range
$\%P_2O_5$	45	0.556	3.16	193.9	1.85	617.9		
	135			165.6		476.6		
	-90			3.3		13.2		
$\%SiO_2$	30	4.74	29.58	302.9	13.06	876.4		
	120			121.2		444.3		
	-90			3.3		12		
$\%Al_2O_3$	45	0.019	0.088	143.4	0.056	393.4	0.029	868.9
	135			69.7		307.4		545.1
	-90			2.8		7.1		14.6
%CaO	45	1.121	4.12	105	3.6	306.9	1.94	686.6
	135			92.9		210		500.8
	-90			1.5		3.6		10
%MgO	45	1.1	0.001	111.8	0.001	337.8	0.002	473
	135			334.3		565.2		817.9
	-90			4.5		12.2		17.3
$\%Fe_2O_3$	30	0.012	0.074	271.5	0.03	737.0		
	120			186.9		603.0		
	-90			7.5		17.4		





srk consulting	%P_2O Semi-variogram Models for Terrace Area	Project No. 527928

Figure 4.8: Snowden's Semi-variogram Models for Terrace Area for Combined F and G Units

The nugget values were determined by Snowden from downhole variograms that were modelled. The ranges (10-18 m) correspond well with the ranges Snowden modelled in 2014. SRK only obtained down the hole ranges of 5 m based on the experimental data. In SRK's opinion it is inappropriate to model a longer range for the 135 direction, see Figure 4.8. Both the 45 and 135 directions have ranges of approximately 100 m. SRK is of the opinion that the data depicted in the semi-variograms was not correctly modelled by Snowden and the ranges obtained were not in line

with the population variance (sill). In light of this opinion, SRK reclassified previously classified Measured Resources in the Terrace Domain to the Indicated category.

4.2.3 The Block Models

Snowden used a 3D block model for grade estimation. They previously tested two block sizes (200 m and 400 m) by Quantitative Kriging Neighbourhood Analysis (QKNA) in order to determine the optimal balance between selectivity and representivity for the estimate.

Additional drilling has been done since the last estimate in 2014, increasing the drilling density. In SRK's opinion the horizontal block size of 200 m in the model is reasonable, as the drill holes are now spaced 100 m to 400 m apart and this is approximately half of the maximum drill hole spacing distance. The origin of the block model was situated on X = -76 500 and Y = -3 667 500 and Z = 0. The block model consisted of 30 blocks in the X direction, 40 in the Y direction and 50 in the Z direction. The Kriging efficiency and the slope of regression were examined by Snowden; SRK regard this as good practise. In addition, the practical considerations for mining were taken into consideration. The 5 m height increment for the block model corresponds with the selected bench height that will be used during mining. Sub-celling was allowed up to 10 times in all three directions (X, Y and Z). SRK considers the Snowden parameters to be appropriate.

4.2.4 Search and Estimation Parameters

The search distances were derived from the semi variogram analysis.

Grade estimation was run in a three-pass process, with the second and third passes using progressively larger search radii to ensure that all blocks are estimated, including those areas having limited sample data. The search parameters were derived from the variogram analysis, with the first search distances corresponding to the range of the variogram sill. The second search distance was double the variogram range, and the third search was run at 10 times the variogram range to ensure that all cells in the model were assigned estimates.

Blocks were estimated using a minimum of six and a maximum of fifteen samples for the first search pass, a minimum of four and a maximum of eight samples for the second search pass, and a minimum of two and a maximum of four samples for the third search pass. A maximum of three composites were allowed per drill hole to prevent over-smoothing in the downhole direction. SRK is of the opinion that the search and estimation parameters are appropriate for the style of mineralisation.

4.2.5 Validation of Estimates

The results were validated by Snowden using visual inspection (comparing assay results to the kriged estimate) and grade trend (swath) plots. The validation process demonstrated that the estimate is a good reflection of the input drilling data.

In addition to conducting validation checks on all stages of the modelling and estimation process, final grade estimates and models were validated by:

- Undertaking global grade comparisons with the input drill hole composites;
- Visual validation of cross sections and plan of block model grade and composite sample grades;
- In addition, the grades were also estimated into the block model using Ok together with an IPD2 check estimate; and
- Swath (grade trend) plots.

Visual validation

Visual comparison of the drill holes composite sample grade and block grade was conducted in cross section and in plan by Snowden. The model was considered to spatially reflect the composite sample grades.

IPD^2 check estimation

The grades estimated into the block model using an IPD^2 estimate correlate well with the values obtained for the kriged estimate.

Swath plots

Snowden validations of the 2018 MRE include X and Y and Z Swath Plots for both the Basin and Terrace areas, see Figure 4.9, Figure 4.10.

Sectional validation graphs were created to assess the reproduction of local means and to validate the grade trends in the model. These graphs compare the mean of the estimated grades (OK) to the mean of the input grades within model slices (bins). The graphs also show the number of input samples on the right axis which provides an indication of the support for each bin.

The graphs indicate that there is good local reproduction of the input grades in both the horizontal and vertical directions These included global comparisons of the composited mean values against the estimated block means for the terrace and basin areas independently.

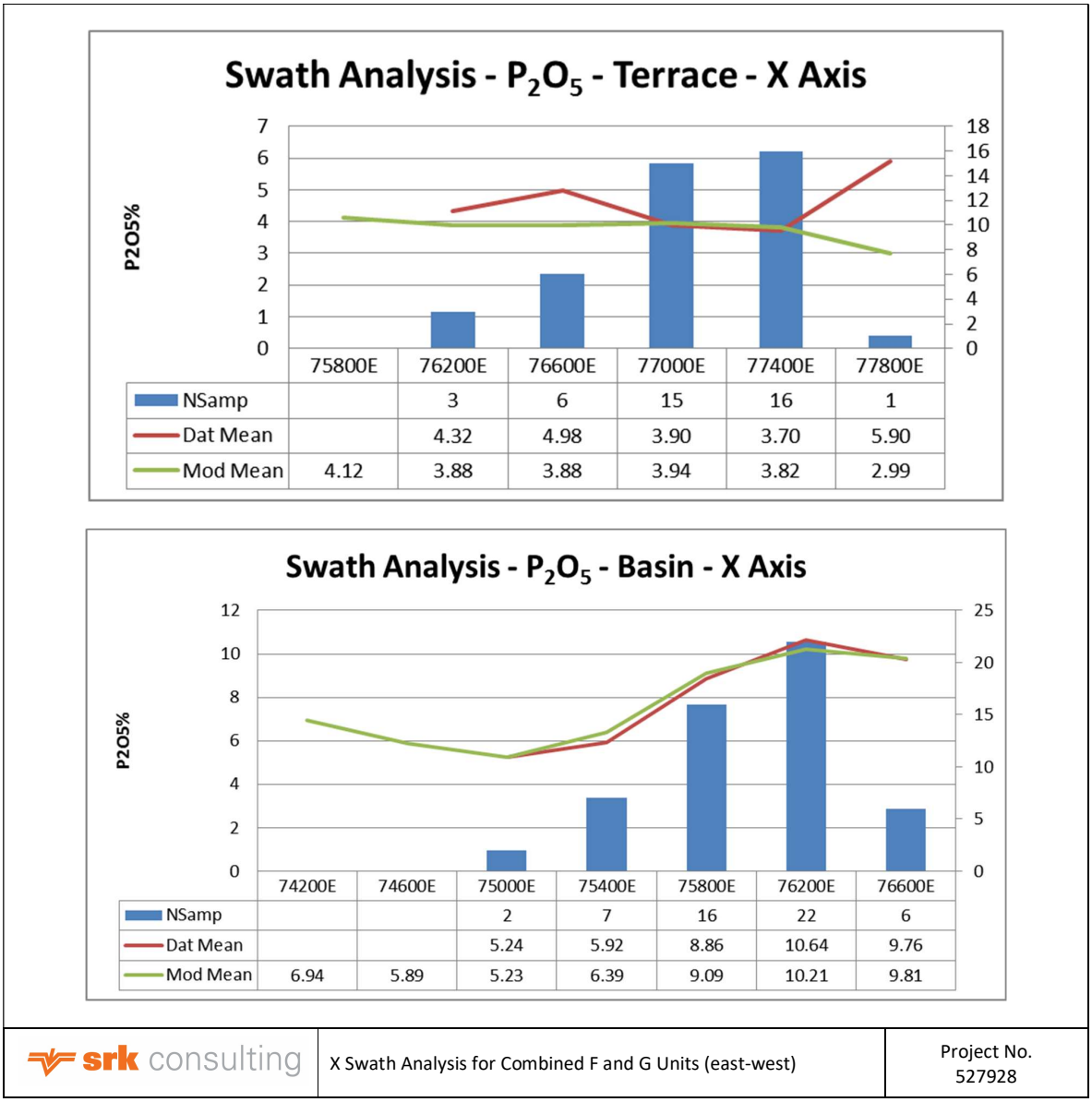


Figure 4.9: X Swath Analysis for Combined F and G Units in Basin and Terrace Domains

Snowden grouped the data into 400 m wide bins, starting at 75 800 E in the Terrace area and 74 200 E in the basin area. SRK examined the Snowden Swath plots and observed the following:

- **Terrace Swath Plot in the X direction (east-west)**

  The bin from 75 800 E to 76 200 E did not have any data to support the grades estimated into the block model. The number of samples and mean of the sample data is sufficient to estimate the bins from 76 200 E to 77 800 E and the block model grades accurately reflect the data on which they were based; and

- **Basin Swath Plot in the X direction (east-west)**

  The two bins from 74 200 E to 75 000 E did not have any data to support the grades estimated into the block model. The number of samples and mean of the sample data is sufficient to estimate bins from 75 000 E to 76 600 E and the block model grades accurately reflect the data on which they were based.

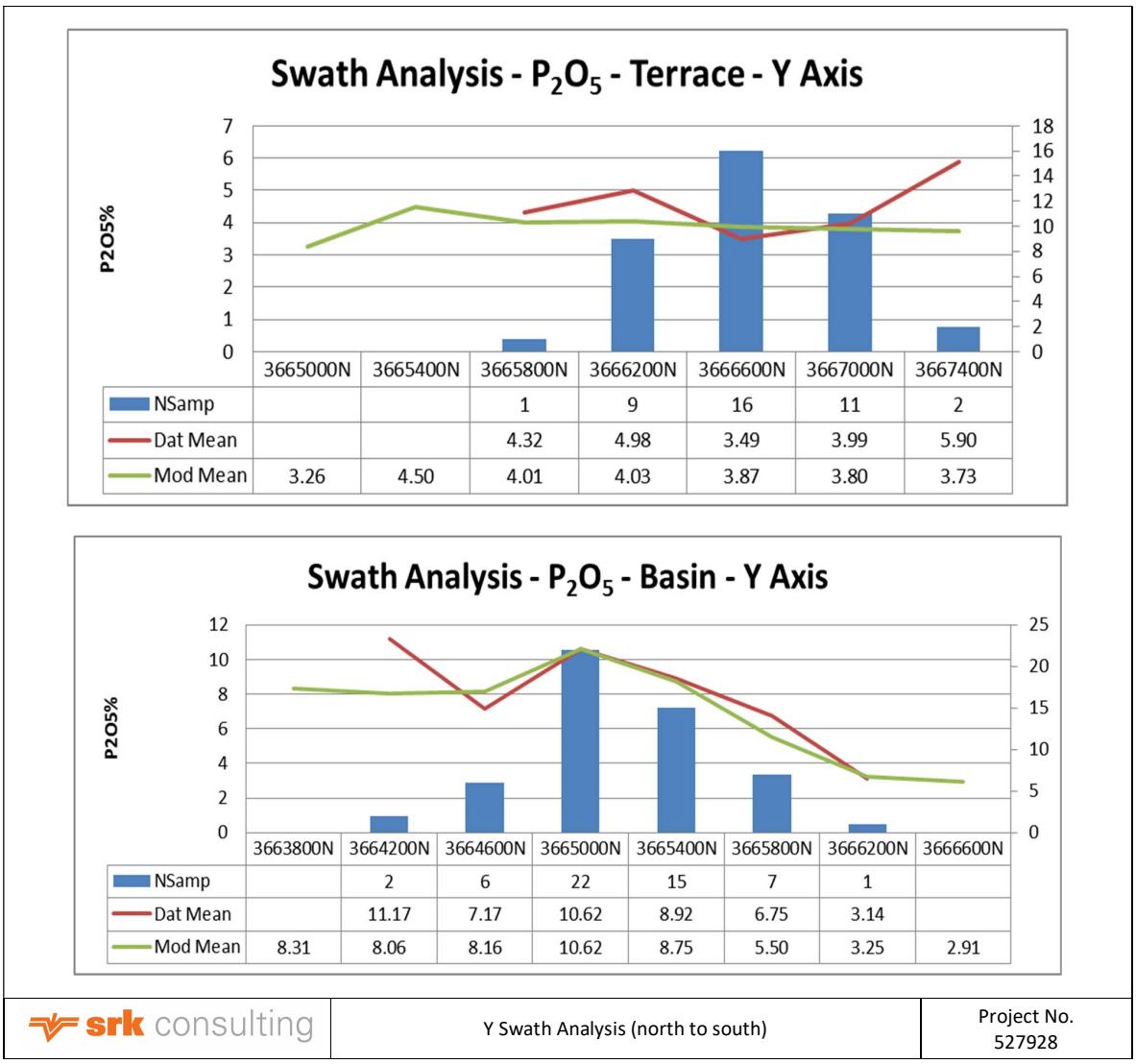


Figure 4.10: Y Swath Analysis for Combined F and G Units in Basin and Terrace Domains

Snowden grouped the data into 400 m wide bins, starting at 3 665 000 N in the Terrace area and 3 663 800 N in the basin area. SRK examined the Snowden Swath plots and observed the following:

- **Terrace Swath Plot in the Y direction (north-south)**

  The two bins from 3 665 000 N to 3 665 800 N did not have any data to support the grades estimated into the block model. The number of samples and mean of the sample data is sufficient to estimate the bins from 3 665 800 N to 3 667 400 N and the block model grades accurately reflect the data on which they were based; and

- **Basin Swath Plot in the Y direction (north-south)**

  The two bins between 3 663 800 N and 3 664 200 N and, 3 666 200 N and 3 666 600 N did not have any data to support the grades estimated into the block model. The number of samples and mean of the sample data is sufficient to estimate the bins between 3 664 200 N and 3 666 200 N and the block model grades accurately reflect the data on which they were based.

4.2.6 Independent SRK Validations

SRK did their own independent validations. SRK was satisfied that the estimates reflected the raw and composited sample data.

4.2.7 Economic Cut-Off Parameters Used

A cut-off grade of 4% P_2O_5 was used by Snowden to report the MRE. This was also the minimum grade considered in metallurgical testwork and preliminary mining studies done by Turgis Consulting (Pty) Ltd and DRA International; as reported in Section 3 of the JORC (2012) Table 1. In selecting this cut-off grade, Snowden discussed the economic parameters, however, no grade cut-off calculation showing the cut-off determination was provided in the report. SRK has independently reported out the tonnages and grades from the block model supplied by Snowden above the 4% P_2O_5 cut off used. SRK has verified them as being correctly reported in the Mineral Resource Statement in the MRE (see Table 16.1 in the Snowden 2018 report).

4.3 Reporting

The JORC Code (2012) defines a Mineral Resource as:

"A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

The "reasonable prospects for eventual economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries.

4.3.1 Mineral Resource Classification Criteria

In 2014 Snowden previously used the order of the search volume factor for the Mineral Resource classification. The 2018 model was classified by Snowden into Measured, Indicated, Inferred and unclassified Resource based on the data quality, drill spacing, geological and grade continuity, and drill hole sample recovery and the reconciliation results from the initial mining.

There were no actual reconciliation results from the initial mining presented in the 2018 Snowden MRE report for SRK to examine and undertake a grade reconciliation.

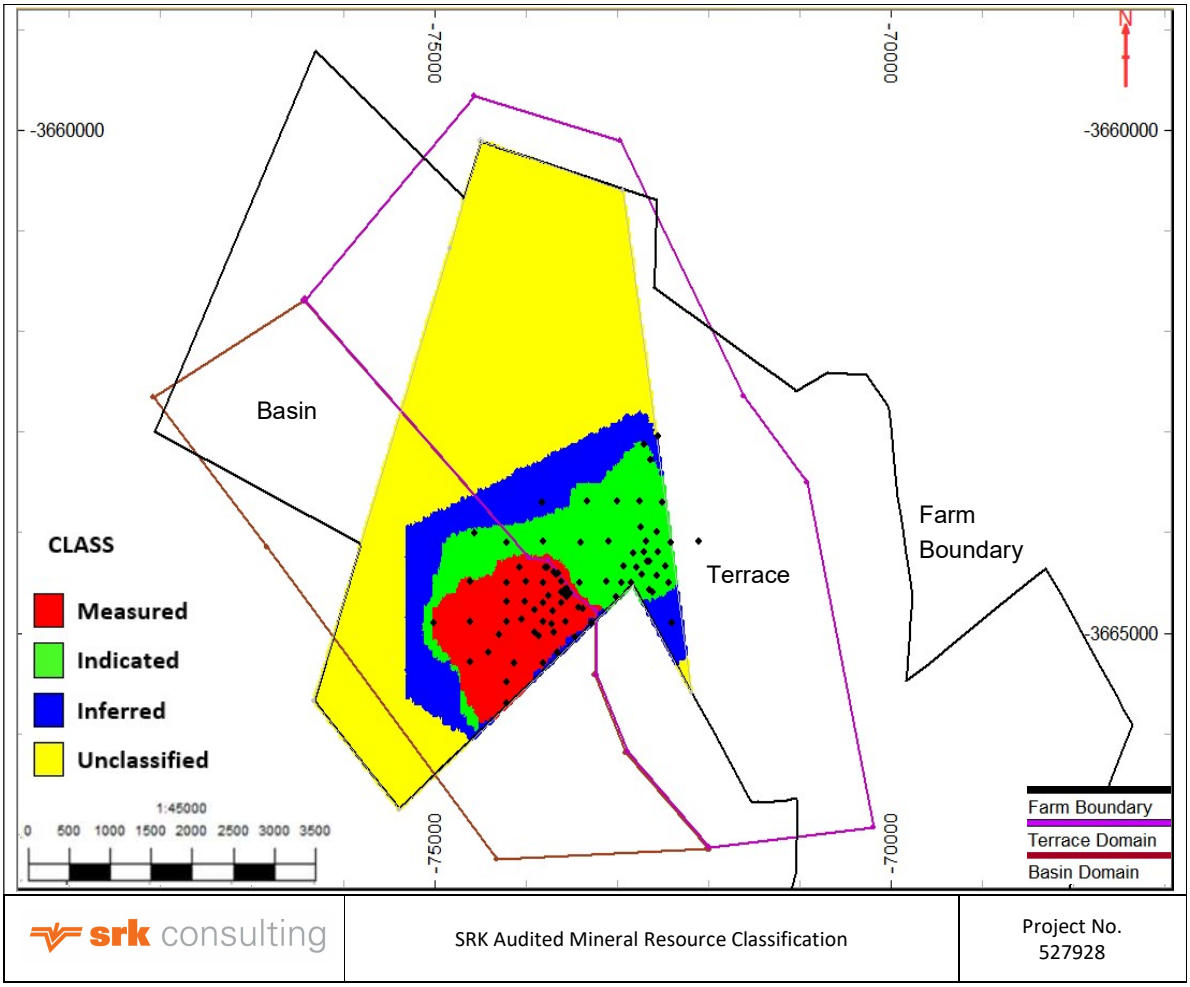


Figure 4.11 SRK Audited Mineral Resource Classification

Snowden upgraded the Resource Classification in the 2018 model to include classification of the Mineral Resource into the Measured category, whereas previously the highest level of confidence was in the Indicated category. This increase in confidence is due to the additional 50 exploration drill holes completed between 2015 and 2017, which included RC and sonic drill holes with drill recoveries above 90%; the drill holes are now more closely spaced and there was an increased quantity of data available for Mineral Resource estimation purposes. Snowden therefore reported Measured, Indicated and Inferred Resources. SRK regards Snowden's Mineral Resource classification as being acceptable in the Basin domain, however, SRK has downgraded the Measured Resource in The Terrace Domain to Indicated Resource. The percentage tonnage split for the SRK audited 2018 Resource is Measured 46.98%, Indicated 29.97% and Inferred 23.05%.

4.3.2 Mineral Resources Statement

Tonnages and Grades

SRK independently reported the tonnages and grades out of the Snowden Resource model and the results agree with those which Snowden reported for their Elandsfontein Mineral Resource dated 28 February 2018.

The Measured Resource in the Terrace Domain was downgraded by SRK to an Indicated Resource. This was done due to a lack of continuity in the data within this domain, as SRK were unable to generate meaningful semi-variograms for the Terrace Domain that could be modelled.

SRK were able to generate meaningful semi-variograms for the Basin Domain which could be modelled and gave ranges similar to those that were used for the estimation by Snowden.

The SRK 2018 Elandsfontein Mineral Resource is presented in Table 4.4 below.

Table 4.4: SRK Audited Elandsfontein Mineral Resource at 31 October 2018, (above a 4.0% P_2O_5 cut-off)

Gross								
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**Grade (%Al_2O_3)**	**Grade (%MgO)**	**Grade (%Fe_2O_3)**	**Grade (%CaO)**	**Grade (%SiO_2)**	**Contained P_2O_5 (Mt)**
Measured	47.5	10.31	1.18	0.20	0.98	14.9	69.8	4.90
Indicated	30.3	5.14	1.15	0.12	0.85	7.1	82.9	1.56
Inferred	23.3	5.48	1.15	0.13	0.95	7.5	82.5	1.28
Total	**101.1**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**7.73**
Net Attributable (74% attributable to the Company)								
Measured	35.2	10.31	1.18	0.20	0.98	14.9	69.8	3.62
Indicated	22.4	5.14	1.15	0.12	0.85	7.1	82.9	1.15
Inferred	17.2	5.48	1.15	0.13	0.95	7.5	82.5	0.94
Total	**74.8**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**5.72**

Note: All grades are reported to two significant figures. Rounding may cause minor discrepancies in this table
Source: Snowden, 2018 and modified by SRK.

The 2014 Mineral Resource and reconciliation are reported in Table 4.5 and Table 4.6 below.

Table 4.5 Snowden's Elandsfontein Mineral Resource at 31 December, 2014, (above a 4.0% P_2O_5 cut-off)

CLASS	Quantity (Mt)	Grade (%P_2O_5)	Grade (%Al_2O_3)	Grade (%MgO)	Grade (%Fe_2O_3)	Grade (%CaO)	Grade (%SiO_2)
Indicated	49.6	9.51	1.27	0.22	1.06	13.7	70.1
Inferred	50.1	6.58	1.16	0.16	1.05	9.3	78.4
Total	**99.7**	**8.04**	**1.21**	**0.19**	**1.05**	**11.5**	**74.3**

Note all numbers are reported to two significant figures. Rounding may cause minor discrepancies in this table
Source: Snowden, 2014a.

Table 4.6 Reconciliation between the SRK Audited 2018 and Snowden 2014 Mineral Resource Estimates

CLASS	Quantity (Mt)	Grade (%P_2O_5)	Grade (%Al_2O_3)	Grade (%MgO)	Grade (%Fe_2O_3)	Grade (%CaO)	Grade (%SiO_2)
Measured	47.5	10.31	1.18	0.20	0.98	14.9	69.8
Indicated	(19.3)	(4.37)	(0.12)	(0.10)	(0.21)	(6.6)	12.8
Inferred	(26.8)	(1.10)	(0.01)	(0.03)	(0.10)	(1.8)	4.1
Total	**1.6**	**(0.39)**	**(0.05)**	**(0.03)**	**(0.12)**	**(0.6)**	**1.6**

Original Source: Snowden, 2018. Rounding may cause minor discrepancies in this table.

Snowden did not apply any geological losses as there is no historical data or record of geological losses occurring on the phosphate bearing units. However, while indications from the geology are that major geological losses appear to be unlikely, this could result in a reduction of tonnage, should such losses be present and is thus a possible risk factor.

4.4 Reasonable and Realistic Prospects for Eventual Economic Extraction

4.4.1 Mineral Resource Parameters

Mining, Metallurgical and Environmental Factors or Assumptions

A processing facility, and SS has been constructed at Elandsfontein. Provision has been made for a water treatment plant. The backfilling of plant tailings and overburden, generated after the first two years of mining, will be returned to the mining area, and all for the commencement of rehabilitation concurrent with mining.

4.5 Possible Shortcomings Identified by SRK

Despite the considerable amount of work that has been done on this project to date, there is always the potential risk in any mining project that a lack of geological information, could possibly lead to unplanned geological losses during mining.

4.6 Potential Fatal Flaws

SRK did not find any potential fatal flaws in the Mineral Resource estimation.

4.7 Audits or Reviews

Mr. A Page Pr.Sci.Nat (South African Council of Natural and Scientific Professionals, Registration No. 400022/07 of SRK and the CP for the Mineral Resource has reviewed the previous (2014) and the current (2018) Snowden MREs compiled by Mr. G Evans, (Pri.Sci.Nat. No. 400015/08), BSc (Hons) Geology and an Associate Principle Consultant of Snowden. The 2018 Snowden MRE report was prepared under the supervision of Snowden's Principal Consultant, Applied Geosciences, Mr Mark Burnett, MSc (MRM), BSc (Hons), PGDTE, GCBM, GCG, CAG, Pri.Sci.Nat, FSAIMM, FGSSA. FSEG, who is the CP, and a registered Professional Natural Scientist (Pri.Sci.Nat. No. 400361/12).

5 Mining and Ore Reserve Reporting

During the commissioning phase in 2017, Elandsfontein proved the appropriateness of the mining method to gain access to the ore and to supply ore to the plant facility.

Probable Ore Reserves have been declared at this stage. Successful completion of the planned metallurgical test work will allow the declaration of Proven Resources.

5.1 Mine Infrastructure and Access

Haul roads designed and built are sufficient to remove and dump or store waste and topsoil with articulated dump trucks (ADT). Tailings from the plant are dewatered using a vacuum belt filter and hauled to the waste dump with ADTs. Ore is also removed from the pit with ADTs but is loaded directly into a conveyor system which is situated next to the pit, from where the ore is transported to the plant Run of Mine (RoM) stockpile. An overview of the mine infrastructure can be seen in Figure 5.1. Waste material will be backfilled once the first mining cut is completely mine out.

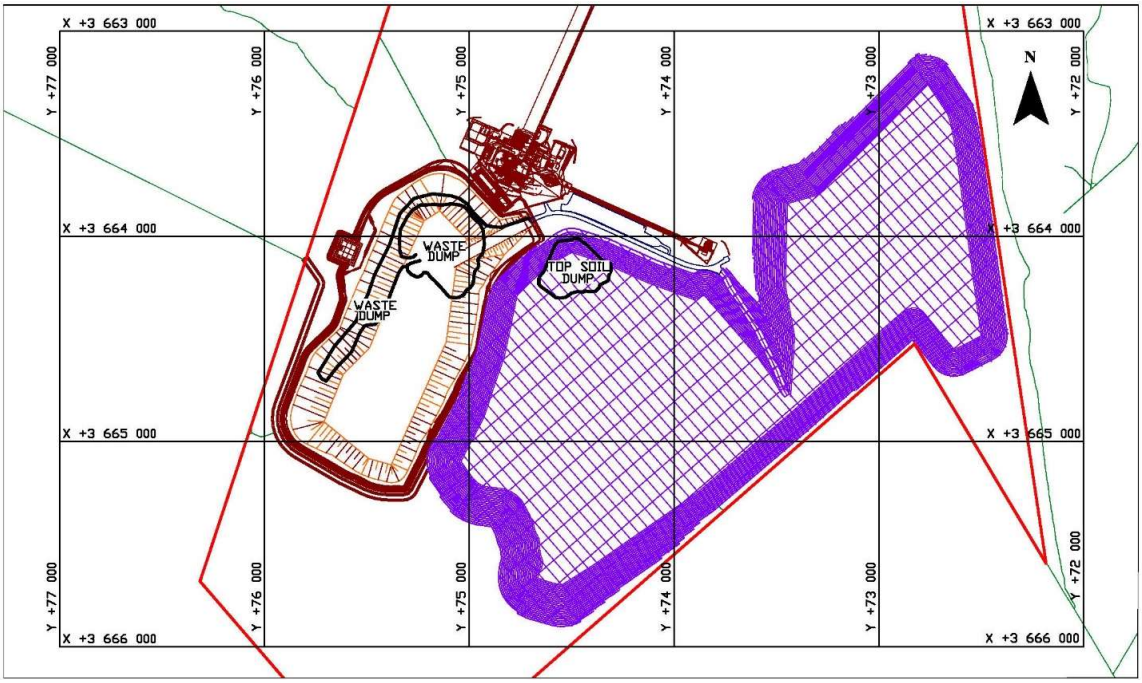


Figure 5.1: Mine Infrastructure

5.2 Life of Mine Plan and Ore Reserve

5.2.1 Life of Mine Planning Process

The mine follows a standardised methodology for the mine planning process of:

- Pit optimisation to establish the economical pit size;

- Final pit design to establish final pit boundaries for infrastructure and global inventory;
- Cut design to drive mining sequence;
- Waste dump design to provide space for waste and dewatered tailings from filtration process;
- Backfill design to ensure a safe maximum of 50 m floor exposure and dumping space for waste and dried tailings from caking process;
- Design of road infrastructure to establish access to the mining, ore dumping point, waste dump and backfill areas; and
- Design topsoil stripping area and stockpile space.

All these are included in to the mine scheduling to ensure that everything can link together in sequence, which is then costed.

The modifying factors in Table 5.1 were used for the pit optimisation process.

SRK considered these modifying factors to be appropriate at this stage. The ZAR/USD exchange rate does seem high but this has been adjusted in the financial model to ZAR14.9/USD. The concentrate price used is aligned with the financial model and is appropriate for a long term optimization process. The metallurgical product yield has been reviewed and is also in line with the latest test result data. All other modifying factors are also considered appropriate for pit optimsation.

Table 5.1: Elandsfontein Modifying Factors (Pit Optimisation)

Parameters	Unit	Value	Comments
LoM Rand/dollar Exchange Rate	ZAR/USD	15.9	(Client supplied)
Mining Cost per tonne (Waste)	ZAR/tonne	ZAR6.74/tonne	(Client supplied)
Mining Cost per tonne (Ore) RoM	ZAR/tonne	ZAR6.74/tonne	(Client supplied)
Mining Dilution	%	5	(Client supplied)
Mining Recovery	%	98.65 (i.e. 1.35 mining loss)	
		F1,Y = (1.6578X + 1.1592)	
Product Yield	%		(Client supplied)
		F2,Y = (1.898181X - 1.862656)	
Process Cost per RoM tonne	ZAR/tonne	ZAR78.42/tonne RoM	(Client supplied)
G&A Cost per RoM tonne	ZAR/tonne	ZAR30.29/tonne RoM	(Client supplied)
Total Processing Cost Applied	ZAR/tonne	ZAR108.71/tonne RoM	
Selling Cost per Product Tonne	ZAR/tonne	ZAR145.08/tonne Product	(Client supplied)
Royalties (3% of Conc. Price)	ZAR/tonne	ZAR58.37.00/tonne Product	(Client supplied)
LoM Product (Conc.) Price	ZAR/tonne	ZAR1945.524/tonne Product	(Client supplied)
LoM Product (Conc.) Price	USD/tonne	USD122.36/tonne	(Client supplied)
RoM Production Limit	tpa	5 000 000	(Client supplied)
Discount Rate per Annum	%	10	(Client supplied)
Overall Slope Angle	Degrees	29	(Client supplied)

During the pit optimisation process there was uncertainty around the recoverability and the location of contacts of the Phosphorite/G domains which are high grade phosphorite zones (Phosphorite grades > 15%) between the F1 and F2 domains. For the purpose of the exercise the grades of the

Phosphorite/G domain were downgraded to the surrounding F1 and F2 grades. This resulted in an overall grade of the optimised pit of 7.85% P_2O_5 for the pit optimisation process. The results of the pit optimisation and the sensitivities done are tabled below. Four price and exchange rate options were tested to indicate the sensitivity of the project for these factors:

- Base Case Product Price, USD122.36/tonne and exchange rate of ZAR15.9/USD;
- Option 2 Product Price, USD95/tonne and exchange rate of ZAR15.9/USD;
- Option 3 Product Price, USD122.36/tonne and exchange rate of ZAR12/USD; and
- Option 4 Product Price, USD95/tonne and exchange rate of ZAR12/USD.

Table 5.2: Elandsfontein Pit Optimisation and Sensitivity Testing Results

	Revenue Factor For Final Pit	Total Tonnage Mined (kt)	Average Grade Mined $\%P_2O_5$	Total Waste Mined (kt)	Strip Ratio Best	Mine Life Years Best	Conc. Output $\%P_2O_5$ Best
Base case Option 1	0.996	69 484	7.85	238 944	3.44	13.90	9 763
Sensitivity 1 Option 2	0.996	39 769	9.89	131 061	3.30	7.95	6 944
Sensitivity 2 Option 3	0.996	37 016	10.15	118 112	3.19	7.40	6 627
Sensitivity 3 Option 4	0.996	25 976	11.46	79 845	3.07	5.20	5 231

The final pit design was done based on the Base case option results from the pit optimisation. Changes made to the pit design to ensure practicality are within acceptable margins.

The scheduling done within the pit design includes the following modifications from the pit optimisation:

- The Phosphorite/G domains were included after assurance was provided that these could be recovered to the same extent as the F2 domain;
- The F1, F2 and Phosphorite/G domains were defined by the following cut-off grades:
  - F1, 4% < P_2O_5 < 8%;
  - F2, 8% < P_2O_5 < 15%; and
  - Phosphorite/G, P_2O_5 > 15%.

The resultant production schedule is presented in Table 5.3.

Table 5.3: Elandsfontein Production Schedule

Production Profile		Total	2 019	2 020	2 021	2 022	2 023	2 024	2 025	2 026	2 027	2 028	2 029	2 030	2 031	2 032
Tonnes ore mined	Mt	63.6	0.6	4.9	5.1	5.1	5.1	5.0	5.2	5.3	5.1	5.1	5.0	5.1	5.0	2.2
Tonnes waste mined	Mt	209.4	1.6	12.9	13.9	14.3	14.6	14.9	15.1	15.4	16.6	18.6	19.2	20.2	22.0	10.0
Strip ratio	-	3.3	2.6	2.7	2.7	2.8	2.9	3.0	2.9	2.9	3.3	3.7	3.8	4.0	4.4	4.6
P_2O_5 in RoM	Mt	6.1	0.05	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2
P_2O_5 feed grade	%	9.60	9.37	9.68	9.75	9.57	9.57	9.59	9.52	9.57	9.89	9.56	9.69	9.67	9.51	8.70

5.2.2 Ore Reserve Modifying Factors

There is adequate confidence in all modifying factors to declare a Probable Ore Reserve.

The following modifying factors were used for converting the Mineral Resource to Ore Reserve:

- Geo-losses 0%;
- Mining Recovery 1.35%; and
- Dilution 5%.

SRK has classified the planned Mineral Resources as Probable Ore Reserves that present upside potential. SRK requires the successful completion of the prescribed metallurgical test work to be completed before Proven Ore Reserves can be endorsed. The groundwater and related geotechnical risks are well managed by the Elandsfontein team.

5.2.3 Ore Reserve

The biggest risk to the mining remains the possibility of pit 'basal heave failure' below the mineralised zone and this needs to be monitored once the overburden and mineralised material has been removed from the mining area. This risk was previously identified by SRK and the mine management, and mine plan, are committed to manage this risk.

There is sufficient confidence in all modifying factors to declare an Ore Reserve, based on a Pre-Feasibility Study (PFS). The confidence in the plant recoveries and product specification being achieved will be improved through the completion of additional test work, as described in Section 5.3. The capacity of the mine being able to blend the F1, F2 and G ore horizons will also need to be proved.

SRK has classified the planned Measured and Indicated Mineral Resources to Probable Ore Reserve to cater for the levels of confidence in the modifying factors discussed above and in Section 5.3.

The Ore Reserves for Elandsfontein, based on the mine planning process above, is presented in Table 5.4.

Table 5.4: Elandsfontein Ore Reserve as at 31 October 2018, (above a 4.0% P_2O_5 cut-off)

Gross			
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**P_2O_5 Content (Mt)**
[1]Proven			
Probable	63.63	9.60	6.11
Total	**63.63**	**9.60**	**6.11**
Net Attributable (74% attributable to the Company)			
[1]Proven			
Probable	47.09	9.60	4.52
Total	**47.09**	**9.60**	**4.52**

Note:
[1]No Proven Ore Reserves declared due to the limited confidence in processing modifying factor.

5.2.4 Mining Operating Costs

The mining operating cost of Elandsfontein is based on the mining contractors cost and the owner mining management. The main function of the mining contractor is to load and haul topsoil, overburden, ore and tailings. Based on the destination the contractor is paid at a rate per tonne

transported over a certain distance. These rates are set out in the contractor schedule of rates (TZASM0401 BOQ - ANNEXURE C1 Section 3 Measured works).

The different transport routes are:

- Topsoil to topsoil stockpile;
- Overburden to the overburden stockpile or pit backfill; and
- Ore to the RoM conveyor;
- Topsoil from topsoil stockpile to rehabilitation area;
- Tailings (filtered) from plant to the overburden stockpile or pit backfill; and
- Overburden to the rehabilitation area.

The total mining cost based on these including the cost of diesel (before rebate) is ZAR21.85/tonne (USD1.46/tonne) mined. With the understanding that all capital for site establishment has already been spent, no mining capital is for the account of the mine.

5.2.5 Geotechnical Engineering

Introduction

This section focuses on the identification and assessment of geotechnical parameters that could potentially pose a risk to the operation and subsequently the evaluation of the Company's assets at their Elandsfontein phosphate operation. The report is based on all relevant geotechnical data provided by Kropz, mine designs as well as observations and impressions of geological and geotechnical conditions gained during inspection of the existing operation.

Documents Reviewed

The following documents formed the basis of the review:

- Elandsfontein CoP 2017/00 – to Combat Rockfall and Slope Instability Related Accidents;
- Open House Management Solutions (Pty) Ltd Report – Geotechnical Design for Elandsfontein Project;
- SRK Consulting (Pty) Ltd Report 493789 – Elandsfontein Geotechnical Stability – Final Letter Report;
- Associated Rock Mechanics Services (Pty) Ltd – Geotechnical Review Reports (4); and
- SRK Consulting (Pty) Ltd Report 493789_1 – Groundwater Dewatering Model Report for the Proposed Elandsfontein Phosphate Mine, Langebaan.

Site Inspection

The site visit included a meeting with the mining manager where geotechnical related topics were discussed, including the mining method employed, mine designs, CoP, site specific geotechnical concerns as well as monitoring, slope performance and geotechnical reviews. This was followed by a visit to both the existing open pit operation, and the stockpile where an understanding of the geological and geotechnical conditions at the site was gained

Geotechnical Environment

As discussed in detail in Section 2.1.1, the mining area is comprised of three formations, namely the Elandsfontein Formation, the Langebaan Formation which overlies the phosphate bearing Varswater Formation, all of which is overlain by the Witsand Formation. The Witsand Formation

comprises fine wind blown coastal dune sand, and therefore forms a loose, cohesion less layer overlying the Langebaan Formation.

The Langebaan Formation comprises calc-arenites or limestones, composed largely of quartz grains with minor calcium carbonate cementing (approximately 30%). Essentially this formation can be broken down into two sequences, namely the upper sequence comprising calcretised quartz grains at approximately 0.5 – 3.0 m depth, which is underlain by the lower unconsolidated sequence. The Langebaan and Witsand Formations, overlying the deposit, will form the highwalls of the open pit.

The Varswater formation is host to the phosphate deposit which is underlain by the Langeenheid Clay Member which is approximately 30 m thick. This is then underlain by the Elandsfontein Formation, which is approximately 40 m thick and comprises upward fining quartzose sediments. Locally the Formation is represented by white sands and some clay.

The geotechnical significance of the local stratigraphy is discussed as follows:

- The unconsolidated Witsand and poorly cemented Langebaan Formations form the highwall of the open pit operation. SRK is satisfied that the current design adequately accounts for the material strength;
- The unconsolidated quartz rich sand of the Witsand and Langebaan formations act as strong preferential pathways to groundwater flow and form the Upper Elandsfontein Aquifer. Active dewatering as discussed in detail in Section 5.2.7, is being employed at the mine. Essentially water is being extracted by dewatering boreholes ahead of the footwall and re-injected into the aquifer down gradient of the site. This is coupled with in-pit sump pumping, for remnant water infiltrating at the toe. Despite the adequate design of the groundwater dewatering system, the potential for horizontal groundwater flow through the loose sandy material cannot be completely eradicated, and the subsequent increased pore water pressure poses a risk to the stability of the slopes;
- As mentioned above, the semi-consolidated upper unit of the Langebaan formation is underlain by unconsolidated sand. Due to the strong winds in the area, wind erosion of the lower unit was observed, resulting in localised undercutting of the slopes in places – this poses a threat to the slope stability; and
- The clay horizon forming the base of the Varswater Formation acts as an aquitard between the Upper Elandsfontein Aquifer and Lower Elandsfontein Aquifer formed by the transmissive units of the Elandsfontein Formation. Basal heave failure is considered the main geotechnical risk, and this is based on the anticipated pressure head from the Lower Aquifer across the clay aquitard. A 600 kPa upward hydraulic pressure is expected. A detailed study has been conducted by SRK including numerical modelling of the pit – based on shear strength parameters supplied by the mine. The study concluded that excavations should be limited to a 50 m width in order to mitigate this risk.

Mining Method

Due to the nature of the phosphate deposit, its depth and its massive nature, strip mining has been considered the most appropriate method of extraction of the ore body. Free digging will be used to mine out all overburden, as it is predominantly soft and no blasting is required.

Mining has commenced with the excavation of a boxcut in the north western corner of the Basin Ore Reserve. Topsoil is removed and used as a berm around the pit which acts as a surface water control measure. Overburden material is then excavated in benches, as stipulated in the design criteria, and placed temporarily in stockpiles outside the pit limits. The current extent of the boxcut

is presented in Figure 5.2. Once the initial boxcut is fully established, mining will progress to steady state strip mining in north east to south westerly direction.

Overburden will be mixed with tailings and a roll over system will be used to backfill the excavation from the north eastern wall as mining progresses to the south west (Kropz, 2017).

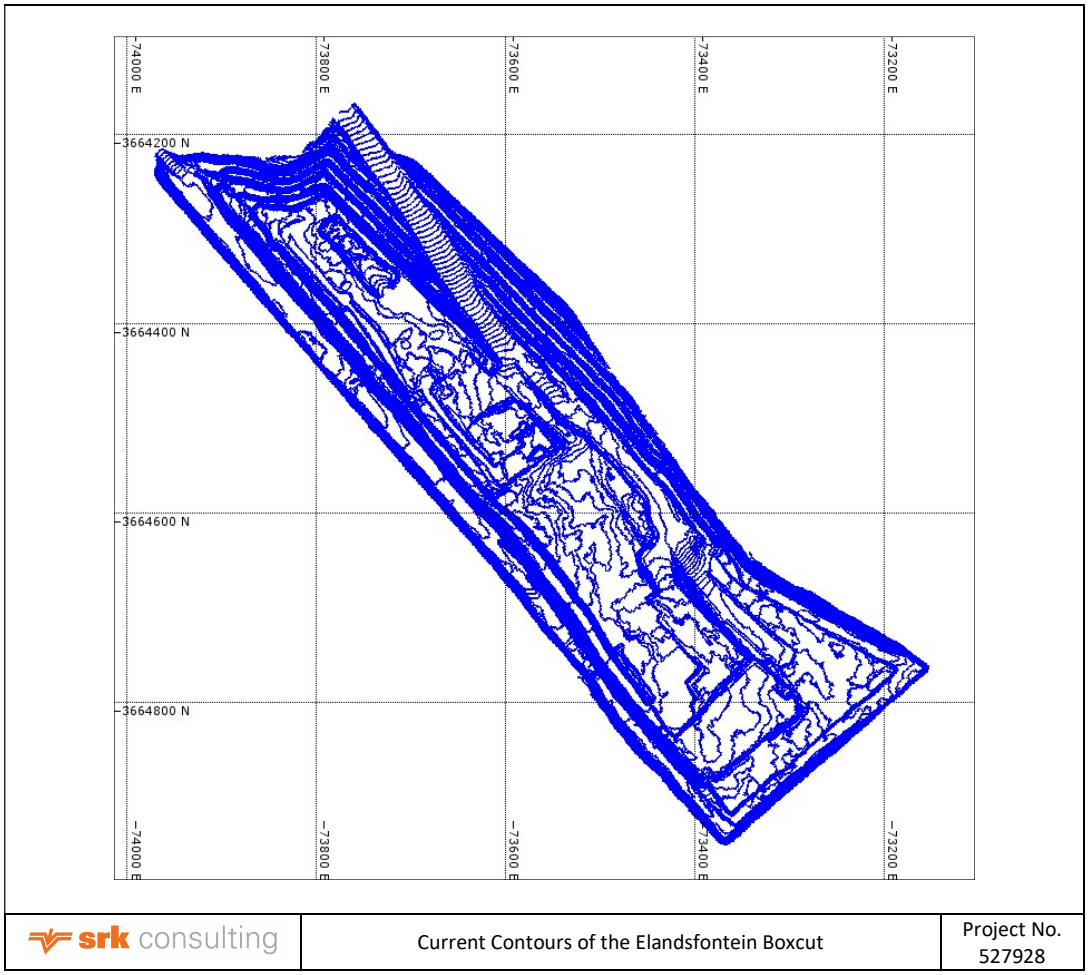


Figure 5.2: Current Contours of the Elandsfontein Boxcut

Systems and Procedures

The Code of Practice (CoP) to combat rockfalls and rockbursts forms the basis for the rock engineering strategy of South African Mines. The CoP compiled for the Elandsfontein Phosphate Project became effective in January 2017.

The CoP has been reviewed and complies with the guidelines set out in the Mine Health and Safety Act 29 of 1996 (MHSA). A comprehensive risk assessment is provided, highlighting all hazards to people, equipment and the LoM together with the associated procedures to mitigate these hazards. CoP compliance audits and reports are scheduled bi-annually which is sufficient for the scale and nature of the mining operation.

Risk assessments are carried out at the start of every shift together with daily pit inspections. This is vital for ensuring safe working conditions as well as identifying groundwater and high wall seepage or any other influences on pit wall stability, and as such can be addressed timeously.

Stockpiles

Overburden is stored in temporary stockpiles outside of the pit boundary. This material will be used for backfilling of the pit once the initial boxcut is complete. No cracking or instability has been observed and the design is conservative, as slopes are currently being pushed back to 11˚. The stockpile designs are very conservative.

Provision of Services

The Company employs the services of Associated Rock Mechanics Services (Pty) Ltd (ARMS) for ongoing geotechnical support, as the size of the operation does not warrant an in-house geotechnical team. Geotechnical reviews are carried out quarterly, and on review of the geotechnical reports. SRK is satisfied that the reviews are thorough and all aspects of geotechnical stability are adequately addressed. On-going geotechnical support for the LoM as well as compliance to recommendations outlined in the review reports is critical to ensure ongoing pit wall stability.

Geotechnical Risks

A few potential geotechnical risks have been identified, however it is important to note that the Company is aware of the risks and these are adequately addressed in their CoP and risk assessment.

- There is reasonable confidence in the geotechnical parameters of the overburden and clay materials and these have been based on some testing carried out during the original design review (OHMS, 2014), follow up testing by Kropz and sanity checked by SRK (based on back analysis and experience in similar materials). SRK is satisfied that the slope design is conservative, and that pit slope instability due to inadequate design is of low risk. Slopes should be monitored regularly to ensure no instability is observed.
- Water seepage into the pit walls, particularly the toe, has the potential to have dire consequences to their stability. This is particularly highlighted, due to the transmissive nature of the material forming the Upper Aquifer Unit. Extensive dewatering systems have been implemented and have proved effective in keeping pit walls dry. Monitoring of the toe is, and must continue to be, carried out on a daily basis to ensure the effectiveness of the dewatering system.
- Wind erosion of the uncemented sand is a result of exposure to strong wind in the area. This results in undercutting of the slopes below the partially cemented sand of the Langebaan formation. This presents a geotechnical hazard, and failure of undercut slope is possible. The mine sequencing suggests that faces will be exposed for a maximum of two months, which will limit the exposure of the faces to prevailing winds. It must be noted in this case that the slopes have been exposed since July 2017 when mining stopped, and the mine was put under care and maintenance, however, all of the exposed faces continue to appear stable and competent. Limiting exposure of the faces to prevailing winds will significantly minimise this risk. Undercut slopes must be monitored closely for any movement.
- Basal heave failure is considered the main geotechnical concern, and this is based on the anticipated pressure head from the Lower Elandsfontein Aquifer across the clay aquitard. A 600 kPa upward hydraulic pressure is expected. Excavations should be limited to a 50 m width to mitigate this risk, which has been defined as the safety limit based on modelling of existing conditions. In order to achieve this, discipline must be employed in ensuring that backfilling never lags mining and that dewatering systems remain effective.
- An additional risk is associated with the mixing of tailings with waste material, which will be used to backfill the boxcut. The tailings contain between 15 and 25% water which will naturally filter

vertically through the backfill material. The clay aquitard will prevent seepage into the lower units, and therefore this water can be expected to accumulate at the toe of the slope, which may result in slope instability. Slope toes must be monitored regularly for water seepage and sump pumping systems applied where necessary to remove this water.

5.2.6 Safety and Occupational Health

This section presents an assessment of the safety and occupational health "modifying factor". The effectiveness of risk control measures with emphasis on prevention of accidents, harmful effects on the health of employees and diseases arising from employment on the mine were assessed.

Safety

Due to the nature of mining operations, exposure exists for possible harm to employees, contractors and communities near the Elandsfontein operations.

Regulatory Requirements

Full legal compliance is a requirement for the Elandsfontein operation. Legal compliance is necessary for managing risk and developing trusted relationships with government and other stakeholders.

The mine manager is responsible for the observance and enforcement of all safety and health regulations as laid down in the MHSA.

Non-compliance can result in either a Section 54 temporary mine closure, significant penalties or loss of operating licence.

Legal appointments

In terms of the act, various legal appointments are required to assist the manager with his duties.

The legal appointments reflected in Table 5.5 are in place.

Table 5.5: Elandsfontein Legal Appointments

Legal Appointments in Terms of the Act	Designation
Section 2A (1)	Chief Executive Officer (CEO)
Section 4 (1) and 2A (2)	General Manager
Section 3 (1)	Operational Manager
Section 3 (1)	Mine Manager
Section 2.17.4	Chief Safety Officer
Section 2.13.1	Engineer
Section 2.6.1	Site Manager
Section 2.6.1	Plant Manager
Section 2.6.1	Process Superintendent
Section 17.2	Chief Surveyor
Section 2.9.2	Chief Geologist
Section 14.1 (8)	Rock Engineer
Section 12 (1)	Occupational Hygienist
Section 13 (3) (a) (1)	Occupational Medical Practitioner
Section 6.9 (a)	Safety, Health and Environment representatives
Section 5.1 (a) and (b)	Competent person to report on fire prevention
Section 16.1 (1)	Competent person to report on rescue procedures

Project Health and Safety Policy

In terms MHSA, Section 8 (1) (a), (b), (c) and (d), every manager must prepare a document that describes the organization of work, establishes a policy concerning the protection of employees' health and safety at work, establishes a policy concerning the protection of persons who are not employees but who are directly affected by mining activities and outline the arrangements for carrying out and reviewing policies.

The policy gives an indication of management commitment towards zero harm of the employees.

An updated policy (updated in 2017) is in place. The policy focuses on the following key areas:

- Risk management;
- Maintain safety, health and environmental management systems;
- Sustainable development;
- Long term social and economic development of employees and communities;
- Water management;
- Waste management; and
- Rehabilitation.

Health and Safety Committee

MHSA, Section 8(2) and (3) (b).

The manager must consult with the health and safety committee on the preparation or revision of the document and policies referred to in Section 8, subsection (1), prominently and conspicuously display a copy of the document referred to in Section 8, subsection (1) for employees to read. Each health and safety representative has to be supplied with a copy of the document.

The mine has the required health and safety committee in place.

Risk Management, Risk Identification and Controls

Section 11 (1), (2), (3), and (4) of the act requires that the employer must be able to prove risk reduction and risk control. The risk management standard should determine how risks are identified and managed.

Baseline risk assessments have been compiled. From the baseline risk assessments, risk registers are created whereby risks are listed in order of severity.

Examples of additional controls are as follows:

- OSHAS 18001 safety and health audits (external); and
- ISO 14001 environmental audits (external)

Mandatory Codes of Practice

Section 9 (1), (2), (3), (4), (5), (6), (7) (a) and (b) of the act requires that a manager must prepare and implement a code of practice on any matter affecting the health and safety of employees and other persons who may be directly affected by activities at the mine if the Chief Inspector requires it.

The following mandatory CoP should be in place:

- The prevention of mine fires (draft completed);
- Emergency preparedness and response (draft completed);

- Occupational health program on personal exposure to airborne pollutants (compilation in progress);
- Thermal stress (draft completed);
- Fatigue Management (draft completed). The West Coast Plant Operations procedure was signed off;
- Noise exposure (draft completed);
- Medical incapacitation to work (draft completed);
- Combat rock falls and slope instability in surface mines (completed and signed off);
- Right to refuse unsafe work (draft completed);
- Minimum standard for fitness to perform work at a mine (draft completed);
- Women in mining PPE (draft completed);
- Trackless mobile machinery (draft completed);
- Safe use of conveyor belt installations (draft completed);
- Safe operation of draw and tipping points (draft completed);
- Isolation, lockout and clearance to work (draft completed); and
- Mine residue deposits (Draft CoP and detailed design of the Phosphate soft stock pile completed).

Non-mandatory CoPs:

- Lifting equipment (draft completed);
- Isolation and lock-out for medium and high voltage equipment (draft completed);
- Permit to work requirements for high risk work (draft completed); and
- Working at heights (draft completed).

Most of the CoPs are currently in draft form. The mine has an agreement with the DMR that the outstanding CoPs will be reviewed for appropriateness and signed off and implemented once the mine is fully operational.

Safety Training

Section 10 (1), (2) and (3) of the act requires that an employer must provide employees with any information, instruction, training or supervision that is necessary to enable them to perform their work safely and without risk to health.

A comprehensive training procedure is in place for all new appointments. Refresher training is provided annually.

Major Incident Review during the Past Two Years

On 26 Aug 2016, a high potential incident occurred whilst installing the carrier belt on the concentrate belt filter. A brief description of the incident is listed and show in Figure 5.3 below.

After placing the uncoiled belt onto its position at the head end of the conveyor structure, the Rigger then re-positioned the sling edge protector, then the sling within a shed40 150nb x 4.7 m pipe, using a 10 m x 10 T endless round sling. The slings utilized were as per rigging study drafted and approved by Resident Engineer. The rigger then signalled the 220 tonne mobile crane operator to lift the tail

end to 8 Meters and then proceeded to uncoil and slew the belt to the north side of building to put the tail end belt in place.

Whilst performing the practice the crew did not notice the edge protector wearing through during the uncoiling of the belt, which then cut the endless sling within the conveyor which caused the sling to fail and load dropped bending the return frame for the cloth and stringer section.

srk consulting	Near Miss Incident - Concentrate Filter Belt Installation	Project No. 527928

Figure 5.3: Near Miss Incident - Concentrate Filter Belt Installation

Safety Performance to Date

The mine was in a construction phase during 2016. Construction was completed in the first quarter of 2017. Due to various challenges, production was put on hold in the third quarter of 2017.

There were zero fatalities from 2016 to date and the Lost-Time Injury Frequency Rate (LTIFR) declined from 0.26 in 2016 to zero in 2017 and 2018 to date.

There have been no DMR Section 54 mine stoppages throughout the construction and commissioning period of the mine (2016 to date).

A Section 55 notice was issued on 7 July 2016 instructing the mine to appoint an Occupational Medical Practitioner (OMP) by 22 July 2016. This was done and Dr. W van Niekerk was appointed as the mine's part time OMP. The mines Key Performance Indicators (KPIs) are shown in Table 5.6 whilst the safety statistic trends for 2016 to date are shown in Table 5.7.

Table 5.6: Key Performance Indicators (KPIs)

Safety	Mine Targets	Performance against KPIs to date
Work related fatal injuries	0	0
Lost time injury frequency (LTIFR) rate per 200 000 man hours (combined from 2016 to 2018)	≤0.4	0.187
DMR mine stoppages	0	0
Number of days lost to work stoppages	0	0

Table 5.7: Safety Statistic Trends for FY 2016 to 2018 (to date)

Category	Elandsfontein	
Lost time injuries	**Number**	**LTIFR 200 000 man hours**
FY16	3	0.26
FY17	0	0
FY18 to date	0	0
Fatalities	**Number**	
FY16	0	0
FY17	0	0
FY18 to date	0	0

SRK comments

Zero harm to employees can be maintained with the safety initiatives which are in place.

Fines imposed by DMR (if any) and reasons for fines during past two years

No fines have been imposed by the DMR to date.

Occupational Health

Occupational health is aimed at the protection and promotion of the health of workers by preventing and controlling occupational diseases and accidents by eliminating conditions hazardous to health at work. The aim is to minimize all occupational hygiene exposures to below Occupational Exposure Limits (OELs) as contemplated in all mandatory CoPs and Regulation 9.2 of the MHSA.

General Information

Mining Methods

Phosphate is mined in an opencast pit. There is no drilling and blasting. A silica sand overburden must be removed to expose the phosphate. Excavators and front-end loaders are used for ore loading in the pit. The phosphate is transported via haul roads and a conveyor system to an adjacent processing plant.

Pollution Sources

Mining operations, loading, hauling, screening, classification and flotation operations.

Silica Sand Overburden

The Elandsfontein silica sand overburden contains silicon dioxide (SiO_2) in the crystalline form.

Employees continuously exposed to dust containing SiO_2 concentration in excess of 18% are at risk of contracting the lung disease silicosis (Source: Dept. of Labour). However, an analysis (December

2017) of the Elandsfontein inhalable silica dust (dust particles of <5 µm) indicates a low SiO_2 content of 2.38%. There is limited to no risk of employees contracting silicosis.

Identification and Control of Occupational Health Risks in the Workplace

Section 11 (1) of the act requires the following:

- Hazards to health to which employees may be exposed to be identified and recorded;
- The risks to health to be identified and assessed;
- Control measures are required to eliminate or control any recorded risks at the source; and
- In so far as the risk remains, the following is required:
  - Where possible personal protective equipment to be provided; and
  - A programme to monitor the risk to which employees may be exposed has to be instituted.

An occupational health risk assessment with identified occupational health risks was compiled and is shown in Table 5.8.

Table 5.8: Identified Occupational Health Risks

Source	Health hazard	OEL	Risk
Noise	>85dB	85dB	Noise induced hearing loss (NIHL) Compensation claims
Respirable Dust	Respirable dust particles ≤ 10 µm	3.0 mg/m³	Upper respiratory diseases Chronic Bronchitis
Dust	Silicon Dioxide (SiO_2) in rock ≥ 18%	0.10 mg/m³	Silicosis Compensation claims
Diesel exhaust emissions in enclosed areas	Gases		
	Carbon Monoxide	30 ppm	Poisonous
	Nitrogen Oxide	25 ppm	Poisonous
	Nitrogen Dioxide	3 ppm	Poisonous
	Particulate Matter		
	Diesel Particulate Matter (DPM)	DMR milestone for 2018: 0.16 mg/m³	Carcinogenic (Cancer) Compensation claims
Thermal	Heat	DB≥37.0°C WB≥27.5°C	Potentially conductive to heat disorders
Thermal	Cold	ECT≤5.0°C	Severe cold. Potential risk
Welding	Metal fumes	5.0 mg/m³	Lung diseases Kidney damage
Confined gamma radiation (Troxler gauge)	Radiation	50 milli Sievert (mSv) per annum	Cancers associated with Radiation
UV radiation (environment)	Sun burn	-	Skin disorders
Power tools and TMM vehicles	Vibration	-	Musculoskeletal disorders and neurological effects
TMM vehicles	Ergonomics	-	Discomfort, fatigue and musculoskeletal disorders

Notes:
Respirable dust - dust particles less than 10µm in size which can penetrate into the lung

Irrespirable Atmospheres

Section 16.2 (2) of the act requires that if the risk assessment in terms of Section 11 shows there to be a significant risk that employees may be exposed to irrespirable atmospheres at any area of the mine, the employer must ensure that no person goes into such area without a body-worn self-contained self-rescuer which complies with the SABS 1737 specifications.

The irrespirable atmosphere risk assessment will be conducted once the plant has re-commenced operations. Although there is likely to be limited to no risk for surface operations, the risk will still need to be assessed.

Occupational Health Performance to Date

Occupational Hygiene Measurements

In terms of Section 12(1), (2) and (3) of the act, the manager must engage the part-time or full-time services of a person qualified in occupational hygiene techniques to measure exposure of health hazards at the mine.

The mine has a part-time Occupational Hygienist appointed in terms of the act.

Mandatory Reports to the Regional Principal Inspector (DMR)

In terms of Section 9.2(7) of the act, the employer must annually submit to the regional principal inspector of mines the following reports on occupational measurement results:

- 21.9(2)(a) – Airborne pollutants personal exposure;
- 21.9(2)(b) – Heat stress exposure;
- 21.9(2)(c) – Cold stress exposure; and
- 21.9(2)(d) – Personal noise exposure.

The dust exposure measurement results are reflected in Table 5.9.

Table 5.9: Dust Measurement Results

Reporting area	2017 Quarter 1	2017 Quarter 2	2017 Quarter 4
Respirable Dust			
Maximum recorded dust concentration (OEL: 3.0 mg/m³)	1.0	1.0	0.84
Silica Dust			
Maximum recorded dust concentration (OEL: 0.10 mg/m³)	0.019	0.024	0.020
% employees exposed over the OEL (OEL: 0.10 mg/m³)	0	0	0

SRK Comments

In terms of the dust measurement results, employees are not at risk of contracting occupational lung diseases.

Diesel Particulate Matter Exposure

Diesel Plant Matter (DPM) sampling will commence when the construction of vehicle workshops is complete. There is limited risk of employee exposure to DPM outside enclosed areas.

Thermal Exposure

The maximum and minimum recorded temperature at Elandsfontein are shown in Table 5.10.

Table 5.10: Maximum and Minimum Recorded Temperatures

Reporting area	2017 Quarter 1	2017 Quarter 2	2017 Quarter 4
	Maximum temperatures		
Wet bulb (WB) °C	27.0*	23.0	27.0*
Dry bulb (DB) °C	40.0	36.0	37.0
Minimum temperatures and wind speeds			
Dry bulb (DB) °C		2.0	
Maximum wind speeds (km/h)		≥35.0	
Equivalent chill temperature °C		0 to -5.0	

SRK comments

- The recorded wet bulb temperatures of 27.0°C during quarter 1 and 2 appear to be on the high side. World maximum surface wet bulb temperatures in tropical areas on rare occasions exceed 27.0°C; and
- Equivalent chill temperatures in the Langebaan area can reach lows of -5.0°C. Employees are issued with thermal clothing.

Noise Exposure

No employees were exposed to noise levels in excess of 85dB(A) over an 8 hour time weighted average.

System of Medical Surveillance

In terms of the MHSA, Section 13(1), (2), (3), (4), (5), (6), (7) and (8), the manager must establish and maintain a system of medical surveillance of employees exposed to health hazards. A record of medical surveillance for each employee exposed to health hazards must be kept. The records are to be retained until the mine closes.

The medical surveillance program should ensure that the baseline health of every employee entering the workforce is recorded, that their state of health is monitored throughout the duration of their employment. The program should diagnose early signs of ill health, which have to be treated and investigated.

A part-time Occupational Medical Practitioner (OMP), Dr. WM van Niekerk is the appointed OMP.

The mine has recently established an on-site Wellness Centre which will be utilized when equipping has been completed.

Annual Medical Report (AMR)

In terms of the MHSA, Section 16(1) and (2), every occupational medical practitioner at a mine must compile an annual report covering employees at that mine, giving an analysis of the employees' health based on the employees' records of medical surveillance, without disclosing the names of the employees.

The annual medical reports for 2016 and 2017 were compiled and submitted to the DMR. These are shown in Table 5.11.

Table 5.11: Health Surveillance Statistics

Elandsfontein	2016	2017
Total employees	2 114	953
NIHL Diagnosed cases	3	0
NIHL certified cases	0	0
Chronic obstructive airway disease diagnosed (COAD)	0	0
Silicosis Diagnosed cases	0	0
Occupational TB	0	0

SRK Comments

The three cases (contractors) of possible noise induced hearing loss in 2016 were under investigation. All diagnosed cases are thoroughly investigated to determine if the illnesses are worked related or inherited cases before the cases are certified.

Certified cases are referred to the certification board for possible compensation.

Health Incidents

No cases of certified occupational disease were reported since 2016 to date.

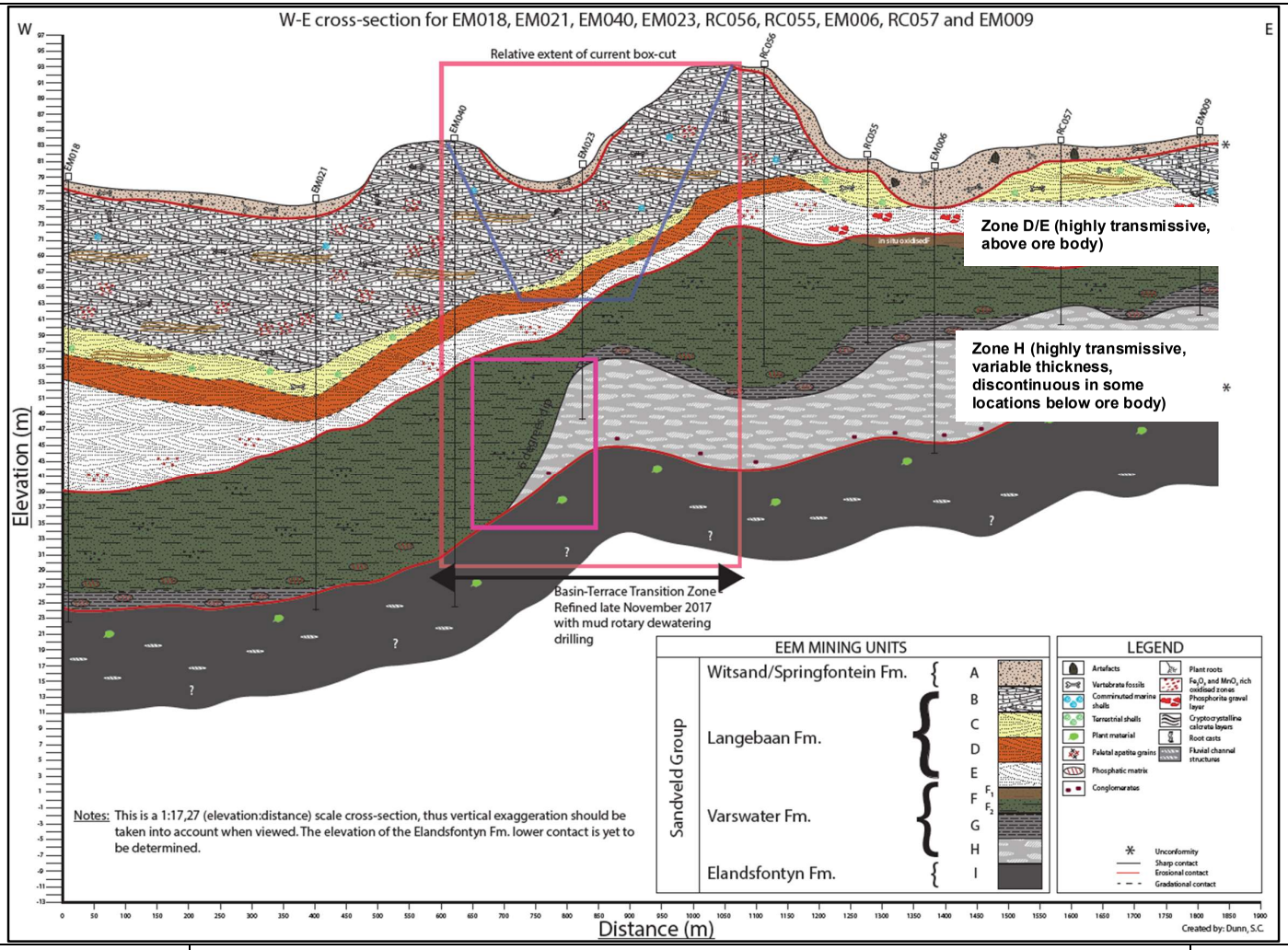
5.2.7 Hydrogeology

Site Setting

The Elandsfontein phosphate deposit is located within the Upper Aquifer Unit, comprising quartz grains from marine deposits of the Varswater Formation, as well as calcarenites of the Langebaan Formation (Figure 5.4). Unconsolidated quartzose sand horizons act as strong preferential pathways to groundwater flow. Below the phosphate deposit lies a thick (approximately 30 m locally) clay horizon acting as an aquitard, locally confining the Lower Aquifer Unit. This Lower Aquifer Unit is an alluvial aquifer, comprising basal gravels / upward fining quartz sediments of the Elandsfontein Aquifer System defined by a palaeochannel filled with multiple sand and clay horizons. Regional bedrock comprises the fractured rock aquifers of the Malmesbury Group and Cape Granite suite.

Groundwater in the Upper Aquifer Unit flows in a south-westerly direction towards Langebaan Lagoon (approximately 12 km away) and onwards to the coastline. The natural groundwater levels mostly lie between 10 and 20 mbgl at the mine site. Thus, most of the phosphate deposit is situated below the natural water table and dewatering is required to provide practical and safe mining conditions.

The natural groundwater quality of the Upper Aquifer Unit at the mine site is good, with Electrical Conductivity (EC) of less than 80 mS/m. Average groundwater recharge (from rainfall infiltration) likely ranges from approximately 4 to 20 mm/a in the region, and generally decreases from southwest to northeast (Woodford, 2003).



srk consulting	W-E Cross Section of Geological Units in Proposed Pit Area (*Image sourced from Elandsfontein Exploration & Mining (PTY) Ltd*)	Project No. 527928

Figure 5.4: W-E Cross Section of Geological Units in Proposed Pit Area

Most abstraction in the region has historically taken place at the Langebaan Road Aquifer System to the north. Previous hydrocenses undertaken in the mine area indicate negligible private groundwater use, however, this may have changed in light of the recent Western Cape drought. The Berg River is the main perennial river system in the region. Further south, and east of the study area, are the ephemeral Sout, Brak and Groen Rivers. The mine borders the WCNP and is situated approximately 12 km from the freshwater ecosystems of Geelbek and the Langebaan Lagoon, which forms part of the WCNP protected areas and is designated as a RAMSAR site. Towards the coast, the clay layer separating the Upper Aquifer Unit from the Lower Elandsfontein Aquifer Unit thins out, thus the lagoon partially intersects groundwater flow from the upper portion of the combined aquifer units, prior to most groundwater discharging directly to the coast.

On 7 April 2017, Kropz was issued with a Water Use Licence (WUL), No. 01/G10M/ABCGIJ/5296, as required in terms of the National Water Act 36 of 1998.

Groundwater Management

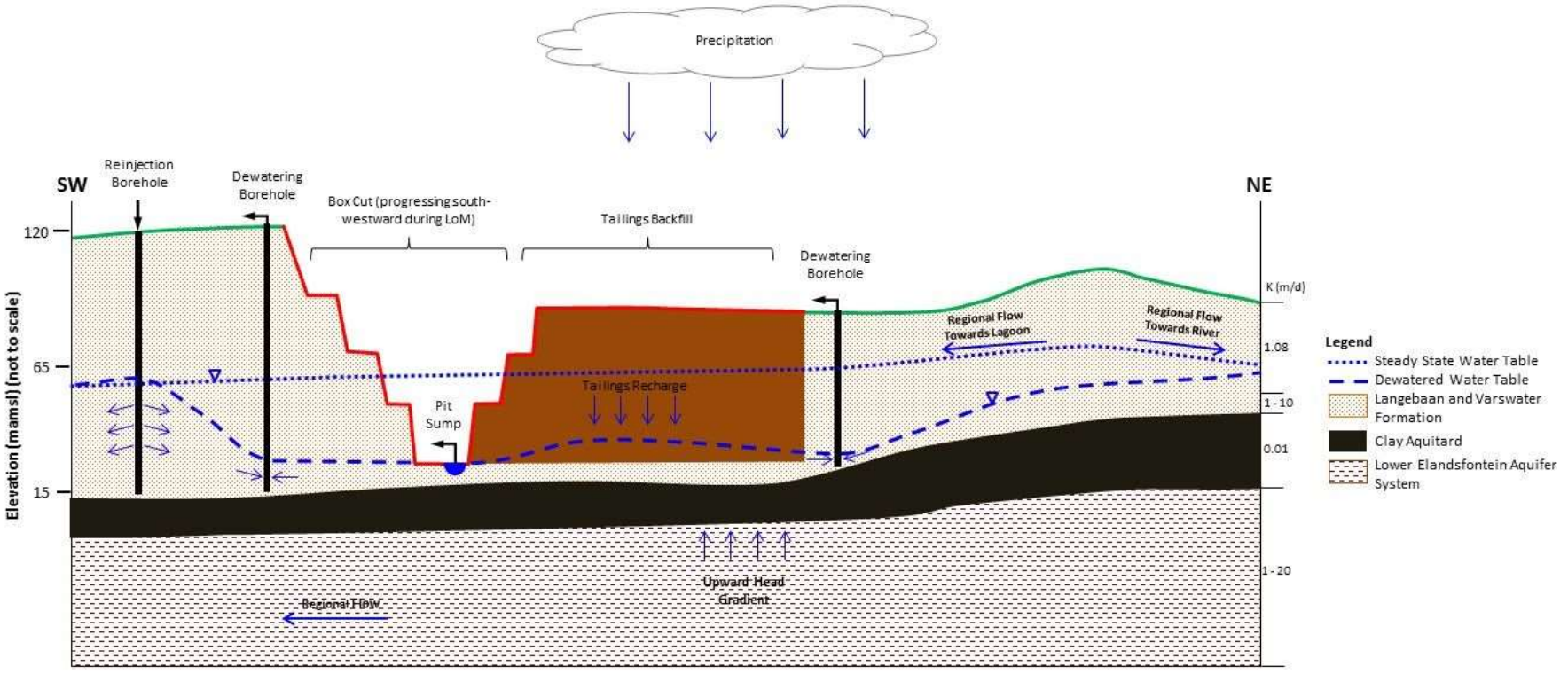
Following detailed hydrogeological studies, numerical modelling, and wellfield commissioning, active dewatering commenced around the proposed pit area in February 2017. The dewatering scheme comprises 36 boreholes drilled through the Upper Aquifer Unit down to the top of the underlying clay layer at the locations shown in Figure 5.5 (D01 to D36). These boreholes pump water into two pipe lines with an initial combined yield of approximately 370 L/s at the start up in February 2017, thereafter slowly declining to approximately 200 L/s by February 2018. This decline in yield is mainly due to aquifer dewatering resulting in naturally decreasing pressure heads as the surrounding groundwater level drops. Decreases in pump and borehole efficiency due to ingress by sand and potential line blockages, or air locks (such as the cyclic fluctuations noted in Line 2) may also contribute to a reduced yield.

Due to the borehole depth limitation, the time lag for the expansion of the drawdown zone below the mine pit area and the high water-retention characteristics of the material within the mine pit area, sump pumping from within the pit is also required. In-pit sump pumping averaged approximately 25 L/s between March 2017 and June 2017, and has since been much lower due to declining water levels around the mining pit. Water from the in-pit sump has been diverted to the plant since 4 December 2017 (Kropz, 2017). Prior to this, it was pumped to a temporary reinjection trench.

Although studies showed the dewatering drawdown zone is unlikely to expand as far as Geelbek and the Langebaan Lagoon, it was agreed to further mitigate any potential drawdown risk to these sensitive receptors by actively recharging the aquifer with the dewatering scheme water on the coastal side (south-west / hydraulically down-gradient) of the mining site. This is undertaken using 20 injection boreholes, at the locations shown in Figure 5.5 (I1 to I20). A conceptual model sketch of the dewatering scheme is shown in Figure 5.6.

srk consulting	Dewatering Scheme and Monitoring Boreholes	Project No. 527928

Figure 5.5: Dewatering Scheme and Monitoring Boreholes



srk consulting	Dewatering and Reinjection Scheme Conceptual Model (SRK, 2015)	Project No. 527928

Figure 5.6: Dewatering and Reinjection Scheme Conceptual Model

Groundwater Monitoring

Groundwater monitoring is critical to ensure groundwater drawdown is sufficient for safe mine operation, to detect any potential impact on surrounding groundwater users and/or sensitive receptors, and to ensure that requirements of the Department of Water and Sanitation (DWS) are met.

The following groundwater monitoring structures are in operation at the mine:

- *WUL Groundwater Monitoring Conditions*: The WUL prescribes requirements regarding regular groundwater level and quality monitoring via data loggers, hand-measurements and sampling. It also specifies requirements regarding detailed quarterly analysis and reporting. Although the mine is largely compliant with these conditions, some are still in the process of being implemented (e.g. regular monthly water quality samples in the first year, and loggers for continual monitoring of groundwater quality abstracted from the dewatering boreholes);
- *Groundwater Management Plan (GEOSS, 2016)*: The Groundwater Management Plan provides a framework for monitoring and management of groundwater levels and quality, including locations parameter, frequency and methodology of monitoring. However, the 2017 WUL Audit Report (Smit, 2017) recommends an update of water quality and level thresholds and incorporation of WUL conditions) which is due upon the annual review of the licence with DWS at the end of April 2018;
- *Quarterly Groundwater Monitoring Reports*: The Groundwater Management Plan specifies that the results of all the groundwater abstraction (and artificial recharge) in the area and the various monitoring networks must be collated and analysed, and results must be compared to the threshold limits set for groundwater levels and quality. The reports must be compiled to detail the findings of the monitoring activities, the compliance with the threshold values, the degree of impact the mining activities on groundwater, as well as to comment on the suitability of the threshold values and configuration of the monitoring network; and
- *Elandsfontein Water Monitoring Committee (EWMC)*: Established in October 2017 as prescribed by WUL conditions, the EWMC plans to meet every 6 months, to review the WUL mandate ("*to oversee the implementation of the monitoring programme, assess the effectiveness of applied monitoring to protect the resources and make recommendations to improve the monitoring for the consideration and approval of the Responsible Authority") as well as to "encourage interaction and communication with all stakeholders and interested and affected parties to keep them informed about the mandate, work and resolutions of the Committee*" (EWMC Draft Constitution, 2017). The committee has now had the opportunity to review almost 18 months of data collected during the mine dewatering activities, including groundwater level and associated geochemistry. All results continue to demonstrate that the activities and the associated impacts are controlled and within the ambits of the WUL.

Groundwater monitoring results, as of December 2017, show the following key attributes, none of which raise any cause for concern (i.e. constitute material risks):

- *Dewatering System Performance*: Dewatering System Performance: Most dewatering boreholes showed expected declines in groundwater levels by 10 to 20 m between February and December 2017. A small number of boreholes experienced fluctuating water levels due to pump issues. These pumps are under review for maintenance/replacement, as required, so as to optimise dewatering;
- *Monitoring of Dewatering Zone in Observation Boreholes*: PBH01/200P, within the mining area (see Figure 5.5), has shown continuous decreases in water level (approximately 1.4 m per month) and stable EC values (approximately 80 mS/m). PBH01/200P, approximately 200 m to

the west (hydraulically down-gradient) of the western dewatering boreholes, has shown gradually decreasing water levels (approximately 0.5 m per month) and slightly decreasing EC. Small decreases in groundwater level (<0.3 m per month) and stable (or slightly decreasing) EC values are also observed at PBH04/200P, PBH02/200P, SNP03 and SNP04. All other monitoring boreholes around the dewatering zone have not yet shown any dewatering impacts; and

- *Monitoring of Re-injection/Mounding Zone in Observation Boreholes*: SNP05 and SNP06, approximately 1 km to the west of the mine site, have shown gradually rising groundwater levels by approximately 2 m between February 2017 and January 2018. All other monitoring boreholes around the re-injection zone have not yet shown any re-injection impacts (including SNP07, SNP08, SNP09 and SNP10).

Surface Water Management

Storm water management in and around the process plant, office, workshop, roads, and SS terraces comprise of a network of concrete-lined channels and earth berms. This design separates the clean runoff emanating from outside the site while containing potentially contaminated water within a closed network. Uncontaminated water is diverted back to the environment, while contaminated water is contained and channelled through trapezoidal drains and silt traps towards the pollution control dam. All storm water will be contained in storm water catchment dams (Braaf, 2015) and consumed in the processing plant.

The WUL specifies that "*The polluted storm water captured in the storm water control dams shall be pumped to the process water treatment plant for reuse and recycling*". This water treatment plant has not yet been installed, but the WUL Audit (Smit, 2017) notes that it is "*planned for upon restarting of the processing plant*".

Chemicals and fuels are stored on impermeable surfaces within bounded areas together with emergency spill response equipment. The Operations Manager and Health, Safety and Environment Manager are responsible to ensure good industry practice is followed for spill prevention and clean-up, storage of fuels and chemicals, and car washing and repairs (Braaf, 2015).

The WUL for the site includes reference to Section 21(c) (impeding or diverting the flow of water in a watercourse) and Section 21(i) (altering the bed, banks, course or characteristics of a watercourse), and specifies the mine activity as "*impeding and altering the flow of two drainage lines or watercourses that are located within the mining area*". However, the 2017 WUL Audit Report (Smit,) specifies that "*The mine has applied to DWS to remove this part of the license during the next review period, based on the specialist studies indicating that this water use is not relevant to the mining site. The Auditor viewed the relevant specialist study reports and is in agreement with EPM that these water uses are not relevant to the site*".

Risks to Surface and Groundwater

The following surface and groundwater risks would need to be continually managed to mitigate any material risk to the mine:

- **Dewatering and Re-injection Scheme Maintenance:** As described above, the dewatering scheme is extensive and includes pumping at 36 boreholes, into two pipelines, feeding a balancing tank, from where water is gravity fed into the aquifer through 20 boreholes. The system includes multiple pumps, flow meters, loggers, telemetry and daily management, all of which require regular maintenance to keep the dewatering system operational. Pump maintenance includes servicing or replacement, particularly where there are potential issues of clogging due to sand ingress (or iron precipitation or bacteria growth, although this is less likely). Failure of the dewatering scheme, though highly unlikely, would result in a potentially high

impact to groundwater, the environment, safety and would halt the continuation of mining within the pit;

- **Dewatering Scheme Extension to Full Mining Area:** The current dewatering borehole locations are spread around the original '3-year' mine schedule, and thus some fall within the future pit area. Planning, numerical modelling, design and installation of dewatering boreholes around the expanded mining area (beyond the original '3-year' mine schedule) is required well in advance of mining these areas, so that dewatering can commence with appropriate lead time. Delays in commencing the dewatering scheme extension study could result in delays in mining. In addition, some of the existing boreholes within the future mining area will need to be appropriately decommissioned in preparation for being mined over;
- **Potential for Delays in Mining Progression due to In-pit Sump Pumping:** Between March 2017 and June 2017, in-pit sump pumping was required to dewater alternating sections of the base of the mine pit, prior to mining to greater depths. This resulted in a slight delay to the planned mine schedule, where it had been initially assumed the dewatering boreholes and pit sumps could together dewater the entire base area of the pit. It is unlikely this situation will resume as an issue, as the active dewatering boreholes have had a chance to 'catch up' whilst mining is suspended. However, should it re-occur, particularly given the high water-retention characteristics of the material within the mine pit area, the need for in-pit sump dewatering may delay the mining schedule to some degree. This factor has, however, been identified by the operating team and has been included into the long-term mine plan;
- **Managing Water Levels within Tailings Backfill:** The tailings backfill has a high moisture content, and vertical seepage will be restricted by the underlying clay aquitard. Horizontal flow will therefore be directed towards the open boxcut in the pit, increasing the need for in-pit sump pumping and potentially delaying mining rates and/or impacting slope stability. Previous reports, such as SRK (2015) therefore included recommendations that "under-drainage be installed below the tailings and the possibility of continued pumping from a few sumps that could be kept open within the tailings backfill area be considered." The Company's future plans regarding pit sump pumping require detailed documentation and inclusion in the updated Groundwater Management Plan;
- **Potential Changes in Chemicals in Process Plant Impacting Leachate Quality of Tailings Backfill:** The mineral processing methodology is known to be under review at the mine. Should the concentrations or chemicals used in processing change significantly then this will alter the leachate concentrations, as were previously derived from leachate testing on the tailings backfill. As the tailings backfill is a potential groundwater contaminant source, any alterations to the process water quality will require re-analysis of the potential leachate quality, and
- **Direct Rainfall Flooding of the Pit:** Periods of pit floor flooding may still occur in the event of extreme rainfall events. This would require temporarily higher in-pit sump pumping rates to resolve and may result in a temporary delay to the mining schedule. This is however unlikely in a low rainfall area such as the West Coast;
- **Intersecting Cavities during Mining:** There is a high likelihood of open, possibly water-filled, cavities within the mining area. These are a common feature in areas where calcrete lenses occur and there is the potential for dissolution of calcite. The presence of such lenses is further corroborated by observations of sudden mud losses during borehole drilling. Mining into the cavities could result in a sudden, temporary high influx of groundwater and appropriate contingency measures should be undertaken to manage this water;

- **Dewatering of Clay Layer:** Care should be taken not to dewater the clay layer. This appears to be an organic-rich layer at the site, which therefore may be high in sulphide. Oxidation of sulphides in the clay (from dewatering) could result in local acidification of groundwater and potential mobilisation of metals. In addition, dewatering of the clay layer would increase the potential for Basal Heave' as described below. Dewatering of the clay layer is highly unlikely as the dewatering boreholes do not extend into the clay;
- **Groundwater and Surface Water Monitoring Programme:** The mine is located near ecologically sensitive areas. Protection of the environment, management of public perceptions and compliance with the WUL rely on well-maintained monitoring equipment, and high quality monitoring results, analysis and reporting;
- **Storm Water System Maintenance:** Storm water maintenance is a requirement of the WUL and is also required to minimise potential flow of contaminants from 'dirty areas' to groundwater and to prevent flooding of the pit following high rainfall events;
- **Installation of Process Water Treatment Plant:** The process water treatment plant has not yet been installed. With regard to storm water management, the process water treatment plant is required as per the WUL condition stating that "The polluted storm water captured in the storm water control dams shall be pumped to the process water treatment plant for reuse and recycling". The primary risk related to the lack of a process water treatment plant is that, without treating excess water in the storm water dams, and with continued in-pit sump water being pumped into the storm water dam (along with any plant direct runoff entering the same dam), the storm water dam capacity will eventually be exceeded and it will overtop. This risk will persist until the process water treatment plant is commissioned;
- **Addressing WUL Specifications regarding Drainage Lines on Site:** The Company has requested that the 'drainage line / water course alteration' activities of the WUL (Section 21(c) and Section 21(i)) be removed. While the Company is of the view that its requests will be granted, if this is not agreed by DWS then further action will be required in terms of appropriate identification and management of the alleged drainage channels / water courses;
- **Managing Potential for Suspension of Dewatering due to WUL Appeal:** As described in more detail in Section 5.2.7, there is currently an appeal against the WUL that has been referred to the Water Tribunal and is unlikely to be decided soon. During 2017, the appeal had the potential to force suspension of dewatering, however following a response by Kropz, the DWS uplifted the suspension of the WUL, so that dewatering can continue. Although extremely unlikely, if dewatering were to be forced into suspension in the future, then the potential impact to groundwater, the environment and safety could be very high and would require detailed planning prior to implementation. Suspension of dewatering would also materially impact the ability to mine as per the current 'dry pit' scenario;
- **Groundwater Impact on Geotechnical Risks:** Geotechnical risks are described in more detail in Section 5.2.7 Many of these have a risk potential that is related (directly or indirectly) to appropriate groundwater management, including:
- **Pit Slope Stability:** Even with the active dewatering borehole scheme in place, there will still be some horizontal flow through the lower part of the pit walls towards the open box cut. The local consolidation of the ore layer adds stability, however, there are unconsolidated lenses and the risk from pore pressures on pit slope stability requires appropriate geotechnical monitoring and management;
- Additional slope stability risk is introduced by the placing of tailings with an estimated moisture content of between 15 and 25% by mass on the 'hanging wall' of the pit. Vertical seepage

through the tailings will be restricted by the underlying clay aquitard and horizontal flow will therefore be directed towards the open box cut; and

- **Basal Heave:** The groundwater pressure head ranges between 55 and 65 m above the lower confined aquifer, hence there is approximately 600 kPa hydraulic upward pressure through the confining clay aquitard. Geotechnical specialists have previously modelled the risk of pit 'basal heave failure' due to the anticipated pressure head across the confining clay layer under assumptions of clay thicknesses and hydraulic properties, and this has been used to inform the maximum width of box cut. It is important that:
  - the clay layer is not dewatered;
  - continuous monitoring is undertaken;
  - specified safety criteria are implemented; and
  - the mine is run and operated within the parameters as previously proposed by SRK.

The mine amended the mine design and operations accordingly.

5.2.8 Softs Stockpile

The latest design made available for the SS was prepared by Epoch Resources in February 2016 and is entitled Detailed Design of the Elandsfontein Phosphate Soft Stockpile.

The SS was designed to store a total of 25.5 million tonnes of material over a 25 month period. It will cover an area of approximately 87 ha and will have a maximum termination height of 42 m (116 mamsl). The facility was designed to co-dispose of 79% by mass of soft overburden and 21% by mass of filtered tailings. It is understood that the ratio may alter, however, the overall quantity of material is expected to remain the same. The current LoM plan indicates that the design capacity of the SS is adequate for its intended life of 25 months.

The facility is designed to be constructed in five phases, using dump trucks and dozers. Phase 1, which has already been completed, includes the starter access ramp and raising of the overall top surface elevation to 84 mamsl. Phase 2 will comprise a raise to 92 mamsl, Phase 3 to 100 mamsl, Phase 4 to 108 mamsl and Phase 5 to 116 mamsl.

The overall slope angle will be 1V:4H. The design report only presents results of seepage and stability analyses for 1V:3H slopes, which were carried out for a previous design. However, the analyses for the 1V:3H scenario indicated that the Factor of Safety (FOS) against failure was satisfactory in accordance with legislative requirements and international best practice. The shallower 1V:4H slopes will provide a higher FOS than the 1V:3H scenario. It will be necessary to reassess the stability and seepage assessments should the ratio of soft overburden to mass filtered tailings differ from that assumed in the design.

Concrete lined storm water collection channels, with silt traps, have been designed to accommodate the peak flow resulting from a 1 in 50 year storm event. Storm water will report to an HDPE lined storm water dam (SWD), which has been designed to store run-off resulting from the 7 day 1 in 100 year storm event, with a capacity of 30 000 m^3 and an overall footprint of ± 1 ha.

The safety classification of the SS in terms of the requirements of the SABS Code of Practice for Mine Residue Deposits (SABS 0286:1998) was documented a Low Risk based on the following:

- There are no residential areas in the vicinity of the SS;
- There are unlikely to be any workers in the vicinity of the SS other than those involved in their operation;

- There is no third-party infrastructure immediately adjacent to any of the residue disposal SS; and
- No underground mining is planned in the vicinity of the SS.

Following completion of the SS it is assumed that plant tailings and overburden material would be placed in the open pit for the remainder of the LoM. The design of the open pit backfill was not included in the Epoch design. However, it is understood that a similar deposition strategy is to be used during both SS deposition and subsequent in-pit deposition. Tailings and overburden will be disposed of congruently in a similar fashion as on the SS using the same equipment. The soft material is disposed of in sections of the pit which have already been mined. Systematic backfilling takes place throughout the remaining LoM, thereafter it is envisaged that additional material from the SS shall be required to backfill the remainder of the void and to form the final topography at closure.

The SS has been designed as a Class D landfill as described in Government Notice 636. Only material classified as a Type 4 waste according to Government Notice 635 may be disposed of on a Class D landfill. This was based on limited information available regarding geochemical characterisation of the tailings and overburden at the time of the design. Subsequently, additional geochemical characterisation has been carried out by SRK and summarised in SRK report reference number 513762/1, dated May 2017, entitled Elandsfontein Mine: Waste Rock Geochemical Assessment Report. The report indicates that although the material classifies as a Type 3 waste, the elevated concentrations of certain determinands are not considered to be enriched and the leachate concentrations are below threshold values. For this reason, a risk based approach was recommended to assess and mitigate as necessary any potential impacts on groundwater. The risks are currently not quantifiable, but are being closely monitored through the ground water management plant and geochemical ground water modelling.

5.3 Metallurgy and Mineral Processing

Initial test work undertaken by Mintek followed the Direct-Direct (DD) flotation configuration using mechanical flotation cells. Eriez promoted the use of column cells, testing DD flotation on a coarse fraction and RR flotation on a fine fraction.

The next phase of investigation by Eriez included three variability samples with feed grades in the range 9% to 13% P_2O_5. Upon introduction of the 13% sample to the column, it became evident that flotation selectivity was poor. Following successful testing of RR flotation on all of the variability samples, this mode of flotation was selected as the preferred process route for the Kropz Elandsfontein Phosphate Project.

Since operations were suspended in July 2017, further test work has been undertaken by Mintek (South Africa), Arrmaz (United States), Betachem (South Africa) and Tenova Advanced Technologies (TAT) (Israel). Arrmaz conducted bench scale reverse flotation tests on samples of F1 and F2 ore. They demonstrated the benefit of attritioning, (P_2O_5 recovery of approximately 70% for deslimed and attritioned feed versus approximately 62% for deslimed feed). Attritioning did however, result in increased slimes generation and loss. Following comprehensive investigations, TAT concluded that DR flotation achieved the targeted concentrate grade at a higher P_2O_5 recovery than RR flotation. At product grade of 31% P_2O_5 DR flotation indicated an average P_2O_5 recovery of 78.3% compared to 55.4% for the best tests of RR flotation. In both instances, grade-recovery curves dipped steeply near the target concentrate grade. Work at Mintek was originally commissioned to confirm the TAT results. Following some circuit optimisation, Mintek achieved P_2O_5 flotation recoveries of 77% for F1 and 83% for F2 in the RR configuration, which is better than

the TAT results and in line with the results achieved at Eriez during the earlier test work conducted on a blended sample.

Neither the Mintek nor TAT test programmes included reagent optimisation and various leading practitioners have suggested that specialist amines may improve flotation performance. The Company is accordingly in discussions with reagent suppliers to investigate bespoke amines. Improved flotation performance is also anticipated with the use of phosphate depressants, to be tested as part of the optimisation programme.

It is important to note that these results represent flotation performance after desliming, an upfront process in which between 20% and 25% of the P_2O_5 is presently removed to tailings ahead of flotation. Planned circuit modifications allow this material to be collected separately. There is accordingly an opportunity to develop a process to recover some of the P_2O_5 in the -20 µm fraction. This will not be without its challenges, firstly due to settlement difficulties and secondly because of technology constraints with such fine material. Notwithstanding such challenges, it is recommended that this opportunity be pursued as a secondary priority since it offers upside potential should the company be able to develop a suitable solution.

Assisted by experts in the field of phosphate processing, Elandsfontein examined the causes behind the non-performance of the installed RR flotation circuit. A number of key factors have been identified and it is now proposed to address these in a modified RR circuit.

This section of the report reviews historical and recent test programmes and the proposed plant modifications. Process operating costs of the modified circuit are also presented.

5.3.1 Previous Metallurgical Test Work

Four phases of test work were undertaken towards predicting the metallurgical performance and finalising the process design of the original Elandsfontein Phosphate Project. Initially a DD flotation route was investigated. Following poor performance of a high-grade variability sample, RR flotation was selected as the preferred process route. The first two phases also focussed on samples milled to a coarser grind than eventually selected. Limited RR flotation test work was undertaken before finalising the Feasibility Study process route and predicted performance. Subsequently two further phases of test work were undertaken on the basis of RR flotation.

Phase 1

Samples

The sample locations were selected by the Elandsfontein geology team to include high grade material from the Main Ore Body, as well as the lower grade material from the Terrace.

The Elandsfontein deposit has presented challenges for both the geological and metallurgical sampling due to the relatively low competence of the material. Metallurgical samples were largely obtained by percussion and RC drilling. Concerns were raised that RC drilling may have contributed to some element of sample grinding and hence improved flotation performance.

The FS notes that there were certain drilling complications on two of the holes. As a result, the material from these two holes, as well as a pit sample, was obtained from the upper horizon only and therefore did not represent the total mineralised package.

After extracting various sub- samples, a Master Composite was generated by blending all remaining sample material.

Mineralogy

Mintek reported on the modal mineralogy of a drill sample and the Master Composite sample, the results of which should be relevant to the project regardless of the variations in the downstream processing. The major minerals identified in the samples were quartz and apatite.

Comminution

Crusher test work was undertaken by IMS Engineering. Based on the preliminary results they concluded that the impact crusher produced the required product grading and therefore was suitable for the application.

Physical separation

Physical separation investigations including gravity concentration, magnetic separation and attritioning were undertaken by Eriez and Mintek. Based on the results it was concluded that the Elandsfontein ore was not amenable to upgrading via physical separation.

Flotation

Eriez undertook the flotation test work on 3 size fractions of the Master Composite sample:

- 2 mm x 250 µm;
- 250 x 53 µm; and
- 53 x 10 µm.

The 2 mm x 250 µm size fraction was treated using Eriez HydroFloat, fluidized-bed flotation. The tests were based on direct flotation. Using the HydroFloat, a concentrate grade of 24.7% P_2O_5 was attained, but at a low phosphate recovery of 68%. When operated more aggressively, the HydroFloat obtained a recovery of 90%, but the grade of the float product was reduced significantly. As a result, it was suggested that the HydroFloat be operated aggressively, so that the coarse float product could be re-ground. This reground concentrate could then be cleaned using column flotation technologies.

The 250 x 53 µm fraction was treated via DD flotation. A product grade in excess of 30% P_2O_5 was achieved with a single cleaning stage at a combined rougher-cleaner phosphate recovery of approximately 85%.

Due to a significant amount of colloidal material, direct flotation was not suitable for the fine 53 x 10 µm fraction. RR flotation using an amine collector achieved a product grade in excess of 30% P_2O_5 with a single cleaning stage at a combined rougher-cleaner phosphate recovery of approximately 82%.

Mintek conducted the scoping test work on the medium size fraction (-250 x 45 µm). All tests were based on direct flotation. Due to the significant difference in the results achieved at Eriez between the mechanical cell and the column cells, the fact that the Mintek mechanical cell results were very similar to the Eriez mechanical cell results and the fact that cleaner tests at Mintek were associated with a substantial loss of recovery, the flotation test work at Mintek was stopped.

Other Characteristics

ALS Inspection undertook Flow Moisture Point/Transport Moisture Limit tests on the Master Composite at their Richards Bay facilities:

- ALS Flow Moisture Point 14.31% w/w; and
- ALS transportable Moisture Limit 12.88% w/w.

Phase 2

Samples

Mintek reported on the mineralogy of the six sections of drill hole material, the results of which should be relevant to the Project regardless of the variations in the downstream processing. The principal conclusion was that the apatite was well liberated at sizes finer than 425 µm.

Subsequent investigations on the 13% P_2O_5 sample identified a higher proportion of calcite than generally found across the main ore types. The presence of fluorine (4%) in this sample was also significantly higher than the trace amounts found in other samples.

Comminution

Crusher test work was undertaken by IMS Engineering. It was observed that the impact crusher produced the required product grading and it was accordingly concluded that such equipment was suitable for the application. Larger scale test work was recommended to determine machine settings but not undertaken.

Phase 1 had indicated the need for liberation of agglomerated apatite. Due to time constraints, a target size of 425 µm was selected based on the Phase 1 test observations, but without the benefit of exploratory test results from Mintek. The potential to produce by-product sand for fracking also impacted the selected target size.

The grind mill tests were then conducted on the crushed drill sample from IMS as well as the 2 mm x 425 µm fraction of the Master Composite. These indicated that a low power requirement of approximately 5.5 kWh/t would be required to achieve a grind of 98% - 425 µm.

The milled product was also sent for mineralogical analysis.

Flotation

Due to sample constraints, Eriez restricted the test work in this phase of investigation to a coarse 425 x 53 µm fraction.

The top size was coarser than previously tested to potentially allow for the marketing of a pure silica sand reject material for the fracking sand industry.

The initial tests were based on direct flotation. Optimal rougher flotation of the coarse Master Composite sample yielded a P_2O_5 grade of 20.25%, at a recovery of approximately 85%. Comparatively, a rougher column flotation of a 250 x 53 µm feed in Phase 1, yielded an 89 - 95% recovery at a concentrate P_2O_5 grade of 21.24%. The reduced recovery was in part ascribed to the increased difficulty of floating the coarser phosphate particles. Following the reasonable response on the coarser fraction of the Master Composite, testing of the grade variability samples were undertaken after grinding to a P_{98} of a 425 µm. The first variability sample tested was the 13% P_2O_5 sample. A poor response with low selectivity was observed. This has since been ascribed to the higher proportion of calcite and fluorine in this so called “phosphorite”, as well as the coarser top size. A benchtop investigation including successful tests with amine, culminated in a fundamental process change from direct flotation (flotation of apatite, depression of siliceous and other gangue) to reverse flotation (flotation of siliceous and other gangue, depression of apatite).

Reverse flotation testing of all samples suggested that an amine dosage ranging between 250 g/t to 400 g/t was necessary to yield an approximately 20% P_2O_5 rougher concentrate with 85% to 90% rougher recovery. As a result of the aggressive rougher column operation in the select tests, the cleaner feed phosphate content was too high to promote sufficient product upgrading via a cleaner flotation phase.

Throughout the treatment of each of four feed materials, successful flotation of 437 x 355 µm phosphate and silica particles, while sustaining high P_2O_5 mineral recoveries, was difficult. As a result, an increase in feed particle top size from 250 µm to 425 µm was not considered beneficial

and further test work was suggested, using a flotation feed with a particle top-size of 325 µm to 350 µm to improve the final concentrate grade.

Other characteristics

No additional characterisation testing was undertaken in this phase.

Phase 3

Following earlier investigations, it was determined that a split-feed, RR rougher-cleaner column flotation circuit should be utilized to upgrade the bulk phosphate feed stock to minus 10% silica (SiO_2).

This phase of the test work was reported by Eriez as Stage 1 in their Final Report: SAN 18815 MTR 15- 052.

Samples

A Lower Terrace and Master Composite sample were provided separately to generate a primary feed for completion of the laboratory investigation. In contrast to the previously completed test work, the absolute top size of the coarse column flotation feed was decreased from 437 µm to 355 µm to improve flotation efficiency and maximize the concentrate grade. Each feed sample was crushed, milled and classified into 355 x 53 µm and 53 x 10 µm size fractions. Both feed size fractions were de-slimed by slowly introducing material to a teeter-bed separator before being processed individually in a rougher-cleaner column flotation circuit. Eriez considered it imperative to reduce the percentage of existing minus 10 µm particulates to less than 0.50% if possible. An increase in -10 µm fines to greater than 0.8% of the feed weight would increase reagent consumption, while an increase to 1.5% or greater of the feed mass would reduce flotation selectivity.

Flotation

Using 175 g/t amine reagent, rougher column flotation of the coarser fraction yielded a product grade of 28.0 to 29.5% P_2O_5 at an average recovery of approximately 88%. Following rougher flotation, the non-float concentrate was further upgraded in a continuous cleaner flotation stage using a cleaner amine dosage of 100 g/t, which yielded a final concentrate ranging from 31.0% P_2O_5 to 33.5% P_2O_5 and 4.0 SiO_2 to 8.8% SiO_2, at a cleaner recovery of 85 to 90%. It was recommended to recirculate cleaner tailings to the rougher feed during industrial operation to improve recovery of misplaced fine phosphate. Eriez proposed that an overall P_2O_5 flotation recovery of 80-82% could therefore be expected at a target final product grade of 31.5% P_2O_5.

The fine 53 x 10 µm fraction was subjected to continuous rougher column flotation using 125 g/t amine reagent. Under optimal operating conditions, rougher flotation yielded a 32.0 to 34.1% P_2O_5 and 7.0 SiO_2 to 8.7% SiO_2 concentrate, at an average recovery of 89%. It was accordingly not necessary to further clean the rougher concentrate, although Eriez considered it imperative to include cleaning in the plant given the expected wide range of feed SiO_2 (quartz) levels.

Phase 4

Following completion of the Phase 3 test work, a secondary feed sample, lower in P_2O_5 content, was supplied to Eriez Flotation Division for the production of a supplementary bulk concentrate to be provided to DRA South Africa.

This phase of the test work was reported by Eriez as Stage 2 in their Final Report: SAN 18815 MTR 15- 052.

Sample

The secondary feed sample was pre-classified at a 355 µm via dry screening prior to delivery to Eriez. The sample was initially screened, then crushed, milled and classified into 355 x 53 µm and 53 x 10 µm size fractions. Both feed size fractions were de-slimed by hydrocycloning before being processed individually in a rougher cleaner column flotation circuit.

Although the Phase 4 sample was considered physically comparable to the Phase 3 sample, the chemical analysis verified that the Phase 4 sample was of a lower grade (6.5% P_2O_5) and had a 10.0% to 12.0% greater SiO_2 content than the Phase 3 sample.

Flotation

Bulk column rougher flotation of the 355 x 53 µm fraction was undertaken under the same operating parameters used in Phase 3 tests. A rougher concentrate grading 26.0% P_2O_5 was produced at 80% recovery. Using 150 g/t amine reagent, the cleaner flotation upgraded the final concentrate to 31.2% P_2O_5 at a recovery of 82%. Eriez reported an expected overall flotation recovery of 78%, assuming recirculation of the cleaner tailings to the rougher feed.

The fine 53 x 10 µm fraction was subjected to continuous rougher column flotation using a 200 g/t amine dosage. The rougher flotation yielded a 27.7% P_2O_5 and a 19.4% SiO_2 concentrate, at an average recovery of 85%. The cleaner flotation was then performed on a 26.5% P_2O_5 rougher concentrate using a 125 g/t amine to achieve a 34.8% P_2O_5 final concentrate and an 80.0% recovery. Eriez proposed that an overall flotation P_2O_5 recovery of 80% could be expected on this fraction.

The following key metallurgical issues were identified and observations made pertaining to the historical test work:

- Limited value of assay-by-size results. The Phase 1 assay-by-size results are informative but probably not very useful because the samples were obtained by percussion and RC drilling, the product size distribution of which is likely to be completely different to the plant crushed size distribution. Of some importance though, was the Mintek observation that approximately 12% of the P_2O_5 mineralisation was in the -10 µm fraction, which would be lost to tailings;
- Ore hardness variability. The Phase 2 material tested at IMS differed considerably from that tested in Phase 1. The Phase 1 material crushed down to 80% passing 2.8 mm in a single pass through the primary impactor. By contrast, the Phase 2 material crushed down to 80% passing 8.0 mm in the primary impactor and 80% passing 0.8 mm in the secondary impactor. In recognition of the variable hardness, the crusher was reportedly designed to handle the more competent material;
- Flotation process development. Phase 1 flotation testing was done on the basis of DD flotation. With RR flotation having been selected, the earlier test results were not relevant to the selected process route. The following key observations however, impacted on the direction of further testing:
    - Poor recovery was achieved in the coarser fractions;
    - Column cell technology achieved improved separation efficiency relative to mechanical cell technology.
- Phase 2 flotation was initially done on the basis of DD flotation on feed with P_{98} of 425 µm. Following observation of poor performance of the high-grade variability sample, RR flotation was selected as the preferred process route. Due to the late change and sample limitations, only limited reverse flotation test work was undertaken in the balance of the Phase 2 programme. The FS process route and predicted performance was accordingly finalised on

limited information. Subsequently test work Phases 3 & 4 were undertaken on the basis of RR flotation. Results were positive, supporting the selected flotation technology;

- Impact of finer grind. One initial concern was that the Phase 2 RR flotation tests indicated the need to reduce the flotation feed size from 425 µm to 325-350 µm. This would likely impact on the milling, thickening and filtration requirements. Subsequent investigations reportedly confirmed that the size of the Vertimill would remain unchanged. Thickening and filtration tests were undertaken on the finer concentrate and tails samples and the associated equipment was accordingly re-sized;
- The identification of the optimum grind required to achieve the necessary liberation. SRK considered that this was reasonably well understood from the work conducted at that time;
- The performance of RR flotation. Considerable work was undertaken to demonstrate the amenability of the Elandsfontein ore to reverse flotation. In SRK's view however, further investigation would have been prudent to investigate the variability in the response of the various anticipated ore types (Main Ore Body Zone F1, F2 and G) to this type of technology. Elandsfontein elected not to test individual ore types but rather composite samples, as selective mining and separate processing of discrete ore types cannot be realistically achieved in practice. SRK acknowledged this rationale but considered that separate testing of the individual ore types would have improved the overall understanding of deposit metallurgy prior to initial commissioning;
- The P_2O_5 yield/feed grade relationship. Yield/feed grade relationships were developed, however there was still an element of uncertainty regarding the accuracy of these. The results of further variability testing as recommended above would have added to the confidence in such predictive relationships;
- The P_2O_5 recovery/concentrate grade relationship. Comments on the previous point are equally valid here; and
- The performance of thickeners and filters on flotation tailings, and flotation concentrates in particular. SRK considered the work completed in this area to be reasonable.

5.3.2 Recent Metallurgical Test Work

Since the suspension of operations, Elandsfontein have commissioned test programmes at Mintek (South Africa), Arrmaz (United States), Betachem (South Africa) and Tenova Advanced Technologies (TAT) (Israel). Test work at Mintek and TAT is still on-going.

Arrmaz and Betachem are potential reagent suppliers and their test programmes will be of particular benefit in optimising plant operations.

Arrmaz conducted bench scale Reverse flotation tests on samples of F1 and F2 ore. They demonstrated the benefit of attritioning, (P_2O_5 recovery of approximately 70% for deslimed and attritioned feed versus approximately 62% for deslimed feed). Attritioning did however, result in increased slimes generation and loss.

Most of the recent process development investigations were undertaken by TAT as outlined below.

Samples

Elandsfontein initiated a supplementary drilling campaign at the end of August 2017 for the purpose of upgrading the Mineral Resource model and to obtain samples for metallurgical testing. Sonic drilling was used to drill eleven holes as shown in Figure 5.7.

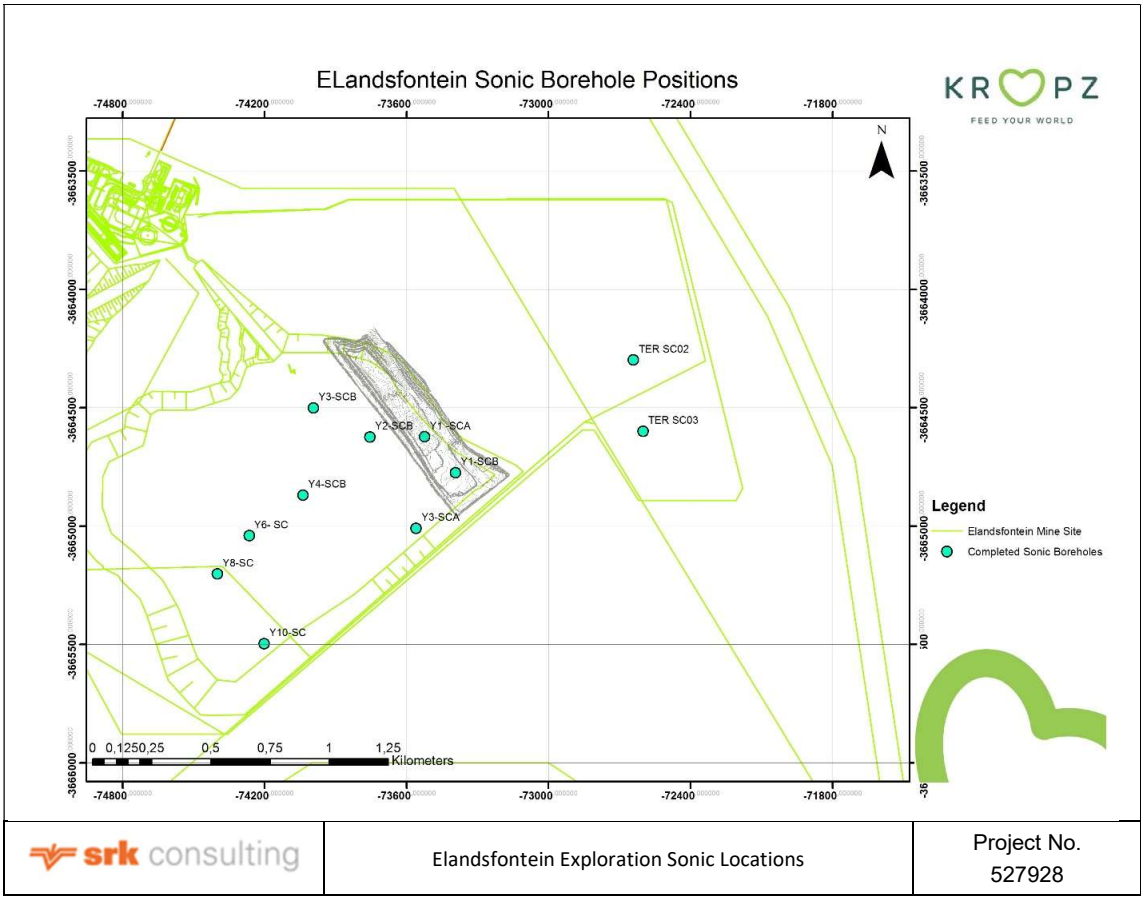


Figure 5.7: Elandsfontein Sonic Borehole Locations

Splits of five boreholes representing the first three years of mining and processing, were collected from the F1 and F2 ore horizons and sent to TAT in Israel for testing. Some of the sample bags were damaged during shipment but with the help of the Company, most samples were identified. The samples were blended into separate F1 and F2 composites for the tests. Samples submitted to Mintek were cut from the same sonic cores.

At the time of SRK's review, TAT had issued a report on F2 tests and most of the F1 flotation results were available. Mintek had recently issued a report on confirmatory laboratory flotation testwork.

TAT Investigations

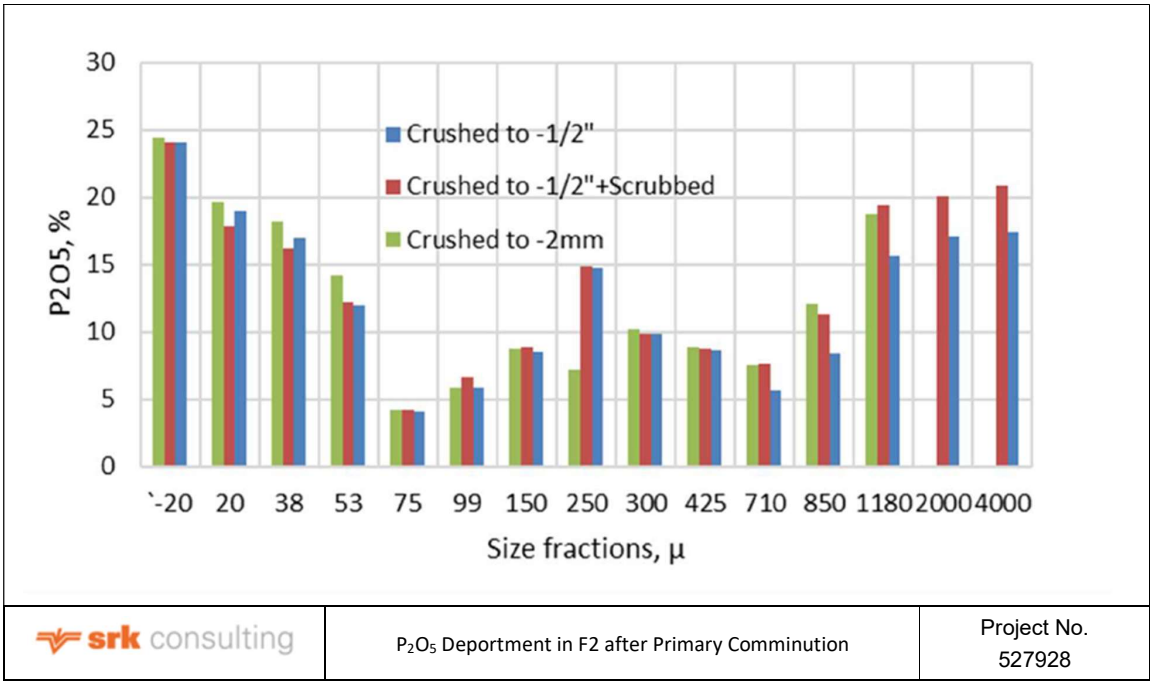
The head assay of the F2 composite is shown in Table 5.12.

Table 5.12: Head Assay of F2 Composite Sample

$\%P_2O_5$	%CaO	$\%Al_2O_3$	$\%Fe_2O_3$	%MgO	%Insolubles
10.11	15.45	0.61	0.66	0.14	66.28

Primary Comminution

The F2 composite sample was crushed to ½" (12.7 mm) and the particle size distribution determined, both as is, and after scrubbing. The particle size distribution of the F2 composite sample was also determined after crushing to 2 mm. The deportment of P O after primary comminution is shown in Figure 5.8.



srk consulting	P_2O_5 Deportment in F2 after Primary Comminution	Project No. 527928

Figure 5.8: P O Deportment in F2 after Primary Comminution

Key observations included the following:

- Particle size distribution (PSD) and chemical composition of the F2 phosphate crushed to -12.7 mm is similar to the historical test data for Elandsfontein phosphates. There is a higher P O content in the coarse and fine size fractions, lower P O in the medium size fractions with the opposite trend for insoluble matter (mainly silica);
- The overall concentration of impurities (Al2O3, Fe2O3, MgO) in the raw rock is relatively low, while the concentration in the -20 µm fines is significantly higher than in the remainder of the size fractions;
- The amount of -20µm fines in the crushed ore is about 9%, while recovery of P O to the fines is high at 21%. Removal of impurities by desliming will likely be associated with significant P O losses for this rock layer;
- No low-grade size fractions for rejecting by sizing in the crushed material were identified while at the same time no high-grade size fractions suitable for by-passing the beneficiation operations (flotation) were observed either;
- The overall character of the P O deportment was not changed significantly by scrubbing. P O losses to the fines of the scrubbed material increased to 25%; and.
- It was concluded that the F2 phosphate should be totally ground prior to further beneficiation.

Heavy Liquid Analysis

Heavy liquid analysis was undertaken in order to evaluate mineral liberation across the size fractions of crushed -2 mm material. Results indicated that a reasonable grind size for the F2 phosphate rock would be in the range from 425 µm to 250 µm.

Three portions of F2 phosphate ground to -300 µm, -250 µm and -212 µm were prepared using a wet rod mill in closed circuit with a screen.

The particle size distribution and P_2O_5 content in the size fractions of the ground phosphate are shown in Table 5.13.

Table 5.13: PSD of Ground F2 Material

Grind size	-300 µm			-250 µm			-212 µm		
Size fraction	**Weight**	**P_2O_5**	**Rec. P_2O_5**	**Weight**	**P_2O_5**	**Rec. P_2O_5**	**Weight**	**P_2O_5**	**Rec. P_2O_5**
µ	%	%	%	%	%	%	%	%	%
300	0.21	13.18	9.39						
250	7.16			0.5		14.24			
212	9.61	12.88	11.97	11.13	12.44		0.38	8.39	24.53
150	26.07	7.47	18.83	28.47	7.64	21.41	29.62		
99	30.42	6.61	19.44	32.26	6.81	21.62	33.77	8.08	26.59
75	6.6	5.6	3.58	7.41	5.63	4.11	10.51	3.73	3.82
53	2.91	12.40	6.13	2.96		6.83	4.7	12.61	
38	2.2			2.45	12.82		3.13		9.62
20	2.22	15.89	3.42	2.17	15.78	3.36	3.51	14.93	5.1
-20	12.6	22.37	27.25	12.66	22.83	28.43	14.38	21.66	30.34
Total	**100**	**10.34**	**100**	**100**	**10.16**	**100**	**100**	**10.27**	**100**

Grinding resulted in the proportion of -20 µm fines increasing from 9 - 10% in the crushed material to 13 - 14% in the ground rock. P_2O_5 losses to the -20 µm fines were in range of 27 - 30% depending on grind size. The ground material was deslimed at 20 µm (potential flotation feed) and subjected to sink-float tests in heavy liquids of 2.7 kg/l and 2.8 kg/l. The test results are shown in Table 5.14.

Table 5.14: Results of Heavy Liquid Analysis for F2 Flotation Feed Deslimed at 20µ

Size Fraction -300 + 20 µm									Recovery					
Density	**W**	**P_2O_5**	**CaO**	**Al_2O_3**	**Fe_2O_3**	**MgO**	**Ins**	**MER**	**P_2O_5**	**CaO**	**Al_2O_3**	**Fe_2O_3**	**MgO**	**Ins**
kg/l	**%**	**%**	**%**	**%**	**%**	**%**	**%**		**%**	**%**	**%**	**%**	**%**	**%**
< 2.70	77.19	1.88	3.11	0.14	0.45	0.03	93.69		16.88	16.11	36.78	55.60	18.01	98.04
> 2.70	22.81	31.38	54.71	0.82	1.22	0.48	6.35	0.08	83.12	83.89	63.22	44.40	81.99	1.96
< 2.80	80.09	3.01	4.99	0.19	0.69	0.04	89.54		27.60	26.42	50.99	69.85	26.94	98.24
> 2.80	19.91	31.76	55.90	0.72	1.21	0.48	6.44	0.08	72.40	73.58	49.01	30.15	73.06	1.76

Size Fraction -250 + 20 µm									Recovery					
Density	**W**	**P_2O_5**	**CaO**	**Al_2O_3**	**Fe_2O_3**	**MgO**	**Ins**	**MER**	**P_2O_5**	**CaO**	**Al_2O_3**	**Fe_2O_3**	**MgO**	**Ins**
kg/l	**%**	**%**	**%**	**%**	**%**	**%**	**%**		**%**	**%**	**%**	**%**	**%**	**%**
< 2.70	77.88	2.49	4.06	0.17	0.76	0.04	92.11		22.49	21.60	41.52	69.76	21.69	97.23
> 2.70	22.12	30.26	51.83	0.83	1.15	0.46	9.23	0.08	77.51	78.40	58.48	30.24	78.31	2.77
< 2.80	83.23	4.43	7.34	0.26	0.96	0.06	85.73		40.03	39.76	62.97	79.09	37.26	98.90
> 2.80	16.77	32.92	55.24	0.75	1.26	0.50	4.74	0.08	59.97	60.24	37.03	20.91	62.74	1.10

Size Fraction -212 + 20 µm									Recovery					
Density	**W**	**P_2O_5**	**CaO**	**Al_2O_3**	**Fe_2O_3**	**MgO**	**Ins**	**MER**	**P_2O_5**	**CaO**	**Al_2O_3**	**Fe_2O_3**	**MgO**	**Ins**
kg/l	**%**	**%**	**%**	**%**	**%**	**%**	**%**		**%**	**%**	**%**	**%**	**%**	**%**
< 2.70	74.93	1.91	3.13	0.14	0.57	0.03	93.67		15.93	15.93	33.69	60.14	17.62	95.81
> 2.70	25.07	30.15	49.42	0.80	1.13	0.44	12.25	0.08	84.07	84.07	66.31	39.86	82.38	4.19
< 2.80	81.57	3.60	6.00	0.20	0.56	0.06	88.69		32.55	32.19	54.45	68.49	34.94	98.86
> 2.80	18.43	33.04	55.96	0.75	1.15	0.49	4.54	0.07	67.45	67.81	45.55	31.51	65.06	1.14

The following key conclusions were reached:

- Mineral liberation in F2 phosphate does not appear ideal for beneficiation (flotation) even after grinding to -212 µm;
- Production of very high-grade concentrate (+32% P_2O_5) based on F2 phosphate will be associated with potentially high P_2O_5 losses to the tails;
- Betachem undertook a mineralogical study of F1 and F2 material, following which they concluded as follows:
    - A direct flotation process at this PSD would not produce a clean phosphate concentrate. Either a finer grind must be targeted or a regrind step of the rougher concentrate before cleaning; and
    - A reverse flotation process at this PSD would either result in high apatite losses or not complete quartz removal, due to the locking of quartz in apatite. A finer grind may reduce this locking and may make a reverse float option possible.

Given the pessimistic mineralogical view, it was decided to perform a series of flotation tests, with the objective of finding a reasonable compromise between product grade and P_2O_5 recovery to the product for these feed size.

Flotation

In preparation for flotation tests, the phosphate F2 was crushed to -2 mm by jaw crusher in closed circuit with a dry screen. Three sub-samples were ground wet in a closed-circuit rod mill to -300 µm, -250 µm and -212 µm.

The ground phosphate was then deslimed at 20 µm. The -20 µm size fraction was further deslimed at 10 µm for additional investigation into the impact of slimes on flotation.

The following alternatives flowsheets were considered for F2:

- Direct (D) single-stage flotation with anionic Fatty Acid (FA) collector for apatite;
- DD two (and more) stage flotation with rougher and cleaner; anionic collector;
- Reverse (R) single-stage and RR multi-stage flotation with rougher and cleaner; cationic amine collector for silica flotation. RR flotation is currently installed in the Elandsfontein Beneficiation Plant;
- DR flotation (DR, Crago process), including: rougher direct flotation for apatite using FA, de-oiling the rougher concentrate (acid scrubbing for FA removal), cleaner reverse flotation of any residual silica using amine collector;
- Reverse-Direct flotation (RD, reverse-Crago), including reverse rougher flotation for silica followed by direct cleaner for apatite;
- Key observations included the following:
    - DD flotation did not achieve high quality concentrate, with grades up to 19 - 24% P_2O_5 being achieved;
    - In RR flotation, attempts to increase concentrate grade beyond 29% P_2O_5 resulted in a sharp decrease of recovery P_2O_5;
    - Concentrates assaying 30.2 - 31.6% P_2O_5 are achievable by RR flotation for F2 phosphate, but with low P_2O_5 recovery of 43 - 55%. In the best test, the concentrate grade 31% P_2O_5 corresponded to P_2O_5 recovery of 55.4%;

- No real advantage of finer grinding prior to RR flotation was found. The Elandsfontein Phosphate Project grind size of -300 µm was confirmed for RR flotation of F2 phosphate;
- DR flotation results in final products assaying 31.6 - 32.3% P_2O_5 and P_2O_5 recovery in the range of 64 - 80% (depending on the test conditions);
- A product grade of 31% P_2O_5 corresponded with an average P_2O_5 recovery of 78.3% for optimal conditions;
- No real advantage for the finer 212/20 µm feed size in comparison with 300/20 µm was shown.
- Optimal Tall Oil Fatty Acid (TOFA) consumption is 1.2 - 1.3 kg/tonne of flotation feed; and
- Increase of the final product grade above 30 - 31% of P_2O_5 results in a sharp reduction of recovery P_2O_5. A target product grade of 31% P_2O_5 was recommended for evaluation related to F2 phosphate.

Attrition Tests

Attrition and desliming prior to DR flotation gave improved results in spite of increased losses to the attrition slimes:

- Final products assaying 32 - 33% P_2O_5 and recovery P_2O_5 in the range of 78 - 81% (depending on the test conditions) were obtained; and
- Concentrate assaying 31% P_2O_5 corresponded to an average P_2O_5 recovery of 80.3% for optimal conditions i.e. 2 - 4% higher than without the attrition.

Flotation Tests for Various Desliming Options

A series of DR flotation tests with -20 µm and -20+10 µm fines included in the flotation feed were performed. These tests showed lower concentrate grades associated with lower recoveries and increased reagent consumption.

Furthermore, the test results showed there to be no real advantage to desliming of flotation feed at 10 µm in comparison with desliming at 20 µm (related to mechanical flotation cell and F2 phosphate).

Final Concentrate Characterisation

The composition of the flotation concentrate produced in the tests with F2 phosphate is presented in Table 5.15.

Table 5.15: Chemical Composition of Flotation Concentrates

Test	P_2O_5	CaO	Al2O3	Fe2O3	MgO	Insolubles	MER	CaO/P_2O_5
11	32.83	58.66	1.10	0.91	0.28	7.21	0.070	1.413
59	32.98	58.36	0.69	1.25	0.45	6.89	0.073	1.443
60	32.34	56.33	0.67	1.24	0.46	6.76	0.073	1.405
61	32.78	56.16	0.66	1.27	0.44	6.25	0.073	1.414
63	29.43	52.06	0.73	1.20	0.40	13.20	0.079	1.351
64	31.70	49.55	0.74	1.26	0.41	9.60	0.076	1.338
65	32.14	56.66	0.65	1.21	0.44	7.73	0.071	1.337
66	30.19	52.46	0.71	1.24	0.39	12.53	0.077	1.386
67	32.54	55.31	0.66	1.30	0.45	8.72	0.074	1.368

Test	P_2O_5	CaO	Al2O3	Fe2O3	MgO	Insolubles	MER	CaO/P_2O_5
69	32.24	55.33	0.74	1.26	0.43	7.83	0.075	1.378
70	31.81	51.85	0.79	1.26	0.45	8.30	0.079	1.403
71	31.68	50.67	0.66	1.23	0.44	9.60	0.073	1.589
72	32.20	51.94	0.70	1.24	0.43	7.70	0.074	1.323
73	32.04	52.53	0.74	1.22	0.43	9.12	0.075	1.279
74	31.37	52.64	0.72	1.22	0.43	10.45	0.076	1.354
76	30.13	48.94	0.72	1.22	0.40	12.50	0.078	1.306
77	30.09	50.20	0.80	1.26	0.43	11.43	0.083	1.424
78	30.54	51.83	0.73	1.18	0.43	6.60	0.077	1.418
79	32.19	54.33	0.70	1.24	0.45	7.90	0.074	1.413

In the target range of the concentrate, the Minor Elements Ratio (MER) remains within the limits of the norm <0.1. Concentrate assaying 31% P O corresponds to approximately 10% insolubles. The CaO/P O ratio for the concentrate is 1.39 average, which corresponds with to the ratio of 1.47-1.56 in the raw ore.

In summary, the concentrate produced from phosphate F2 meets the usual requirements for product quality.

Mintek Investigations

Sample Preparation

Kropz delivered approximately 45kg of phosphate ore from the F2 horizon of the Elandsfontein deposit for further process development work at Mintek. The sample was initially screened at 2mm with the +2mm being crushed by jaw crusher. The -2mm sample was then screened at 300µm with the +300µm being subjected to rod milling to obtain a grind of -300µm using carbon steel grinding media. The milling was carried out in closed circuit based on procedures recommended by TAT. The -300µm was then screened/ de-slimed at 20µm to generate the flotation feed fraction of -300+20µm.

The grade of the sample was just over 12%P O , which is significantly higher than the planned life of mine grade for the F2 horizon.

Flotation Optimisation

The two stage reverse flotation route outlined by TAT was used as the basis of these investigations at Mintek. Numerous tests were done that investigated parameters such as attritioning, milling, reagent dosage, conditioning method, conditioning time, addition of more cleaning stages and the effect of slimes content.

The flowsheet ultimately recommended by Mintek included attritioning of the -300+20µm fraction for 6 minutes ahead of rougher flotation, 5 stage cleaner flotation, attritioning for a further 4 minutes, followed by a final cleaner flotation stage as shown in Figure 5.9.

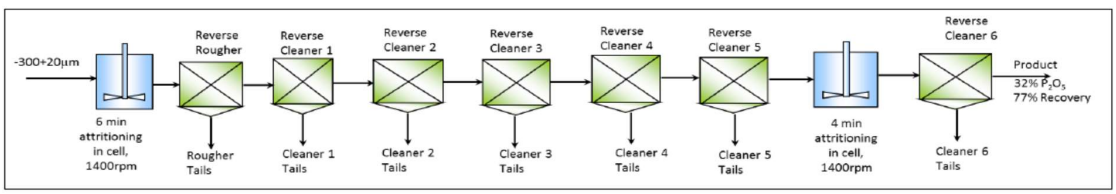


Figure 5.9: Mintek Recommended Flowsheet

Mintek achieved a slightly higher product grade than TAT (32.3% P_2O_5 as compared to 31% P_2O_5) More importantly, Mintek achieved a higher recovery of 83% as compared to 55% by TAT, both based on flotation feed. Given that there are P_2O_5 losses to natural slimes ahead of flotation, it is important to consider the overall recovery in addition to the flotation recovery. Table 5.16 presents the overall mass balance based on ROM feed, taking into account the removed of natural slimes ahead of flotation, as well as the +300µm material that is rejected.

Table 5.16: Overall Mass Balance for Recommended Flowsheet

Stream	Mass	Grade		Recovery	
	%	P_2O_5%	SiO_2%	P_2O_5%	SiO_2%
CC6	20.5	33.30	6.64	55.46	2.12
CT6	2.3	22.84	34.93	4.25	1.25
CT5	4.1	8.76	74.00	2.92	4.72
CT3	10.0	3.20	90.69	2.59	14.06
CT3	20.6	1.83	95.01	3.06	30.44
CT2	26.3	1.13	97.00	2.40	39.70
CT1	1.8	3.71	86.62	0.54	2.40
RT	1.2	5.94	78.49	0.59	1.49
Natural Slimes	12.68	27.11	16.59	27.89	3.27
O/S (+300 µm)	0.53	6.88	65.18	0.30	0.54
Feed (calc)	100.0	12.32	64.28	100.00	100.00
Feed (meas)		12.02	64.93		
Cumulative Results					
CC6	20.5	33.30	6.64	55.46	2.12
CC6+CT6	22.8	32.25	9.48	59.71	3.37
CC6+CT6+CT5	26.9	28.67	19.32	62.63	8.09
CC6+CT6+CT5+CT4	36.9	21.79	38.61	65.22	22.15
CC6+CT6+CT5+CT4+CT3	57.5	14.64	58.82	68.28	52.59
CC6+CT6+CT5+CT4+CT3+CT2	83.8	10.39	70.80	70.69	92.29
CC6+CT6+CT5+CT4+CT3+CT2+CT1	85.6	10.26	71.13	71.22	94.70
CC6+CT6+CT5+CT4+CT3+CT2+CT1+RT	86.8	10.19	71.24	71.81	96.19
CC6+CT6+CT5+CT4+CT3+CT2+CT1+RT+N Slimes	99.5	12.35	64.27	99.70	99.46
CC6+CT6+CT5+CT4+CT3+CT2+CT1+RT+N Slimes+O/S	100.0	12.32	64.28	100.00	100.00

Overall based on ROM plant feed, the recommended flowsheet obtains a product grade of 32% P_2O_5 at a mass yield and recovery of approximately 22.8% and 59.7% respectively. The mass lost to the natural slimes is around 12.7% at a P_2O_5 grade of about 2.17%, representing a P_2O_5 loss of approximately 28%. The recovery and mass loss to the +300µm fraction was negligible at 0.3% and 0.5% respectively.

Impact of Water Quality

Mintek completed one test to assess whether water quality impacted on reverse flotation performance. Results showed that pit water had a detrimental effect on product grade, achieving 29% P_2O_5 for a mass yield of 26% and a recovery of around 80%. This compared with the previously

determined optimal product grade of 32.3% P_2O_5, for a mass yield of 26% and a recovery of around 83%. It is important to highlight that these are flotation based figures, not overall figures.

Split Flotation

In order to address the challenges of floating coarse silica particles, Mintek investigated the so called split circuit route. In this route the coarser feed was treated via the direct flotation and the bulk of the mass was then treated via the reverse flotation. Target product grade and recovery was achieved in one test but Mintek advised that further work would be required to optimise this route and to confirm that it would be a robust alternative.

F1 Horizon

Mintek conducted a test on a sample of F1 material prepared by TAT and sent to Mintek. At 7.7% P_2O_5, the grade of this sample was lower than the F2 sample as one would expect.

The test circuit included 6 stages of cleaning, similar to that shown in Figure 5.9. The concentrate in the final cleaner was able to obtain a P_2O_5 grade of 33% which was not expected given the lower feed grade. Allowing for only four stages of cleaning, a product grade approximately 30% P_2O_5 was indicated at a mass yield and recovery of around 20% and 77% respectively. Mintek suggested further work however, to reduce the SiO_2 grade from 16% to less than 10%.

5.3.3 Reasons for Non-Performance of Installed Reverse-Reverse Circuit

The Company examined the causes behind the non-performance of the installed RR flotation circuit with the assistance of several leading experts in the field of phosphate processing. Various key factors were identified as outlined below, which the Company propose to address in the planned plant modifications.

Inadequate Understanding of Different Ore Types

Simply stated, the orebody comprises three distinct horizons, namely F1, F2 and G, with intermittent appearances of phosphorite/sandstone lenses. Test work was primarily conducted on composite samples representing the average expected blend of the different ore types. Testing of individual ore types was not previously undertaken and hence their individual metallurgical performance was not understood. Key aspects in this regard include feed grade (shallow ore being lower grade than full mining sequence), particle size distribution (shallow ore being coarser than full mining sequence), which subsequently affected flotation performance.

A considerable amount of additional work has already been initiated post the initial commissioning and Elandsfontein also intends to conduct added variability and pilot plant testing to further address this shortcoming.

Non-Representative Feed

Relocation of the boxcut and delayed dewatering resulted in the total ore package not being accessible. The plant was accordingly commissioned on ore that differed significantly in terms of mineralogy and was coarser and of lower grade than the composite ore samples that were tested.

Ongoing dewatering will allow access to virtually the complete ore package when the plant is recommissioned, which will allow the delivery of on-grade ore to the plant.

Impact of Slimes

Experts advised that the use of amines for reverse flotation of silica from phosphate requires water that is free of slimes and dissolved salts. It was noted that the Elandsfontein circuit included a single stage of desliming on each of the fine and coarse feeds downstream from grinding and ahead of flotation. It was considered that a second stage of dewatering may be warranted.

It was further noted that the tailings and product streams operated in closed circuit with respective thickeners and that this may result in residual reagents and flocculants impacting negatively on flotation.

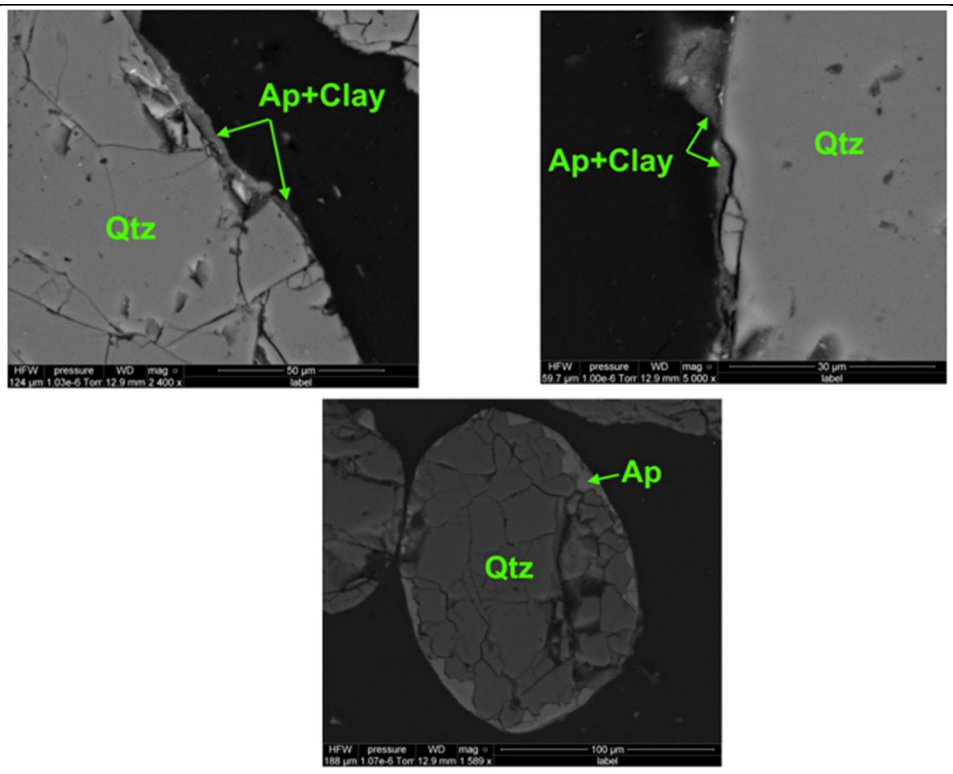
Finally, it was evident during commissioning that slimes were reporting to the tailings thickener overflow and being recycled in dirty process water to the flotation circuit. This situation was compounded by the use of a single thickener for tailings and slime settlement.

In addressing the slimes issues, a number of actions are proposed:

- The desliming cut point will be increased from 10 µm to 20 µm. This should reduce slime related problems but will result in increased mass and P O losses to slimes;
- Though not strictly related to sliming, it is planned to replace the split coarse and fine flotation circuits (325x53 µm and 53x10 µm respectively) with a single circuit (325x20 µm); and
- A new thickener and ancillary equipment will be installed to separate the slimes and tailings circuits. This should significantly reduce the impact of slimes and the effect of residual reagents and flocculant. The impact if any, of dissolved salts can only be assessed once the industrial plant and water circuits stabilize.

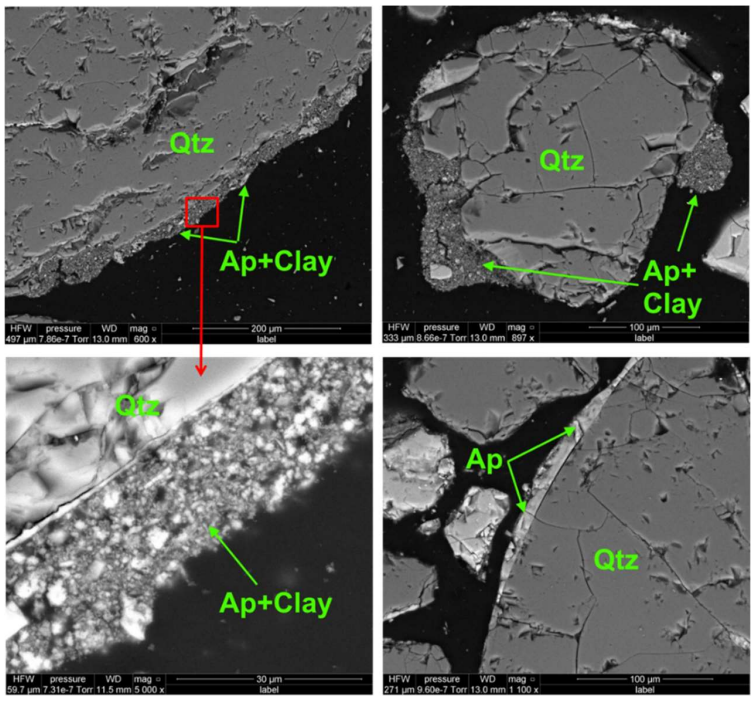
Apatite Rimming

A RoM sample taken after the last commissioning run was submitted for Scanning Electron Microscopy analysis. It was evident as shown in Figure 5.10 and Figure 5.11, that certain quartz grains have coatings of ultra-fine apatite and clay cement binding the silica particles, as well as occasional rims comprising only of apatite.



srk consulting	SEM Images for F1 Sample	Project No. 527928

Figure 5.10: SEM Images for F1 Sample



srk consulting	SEM Images for F2 Sample	Project No. 527928

Figure 5.11: SEM Images for F2 Sample

It is likely that such rimming may impact negatively on flotation performance, in that such a rimmed particle may present itself as apatite in flotation, resulting in contamination of the concentrate by silica.

There is a concern, though not substantiated, that RC drilling used to extract the metallurgical samples may have inadvertently attrited the sample, hence masking this issue.

In addressing the rimming concerns, two attrition scrubbers will be incorporated into the modified comminution circuit.

As regards concerns with RC drilling, sonic drilling was used to obtain samples used in the recent test programme and will be used for future core samples intended for metallurgical testing.

Inadequate Conditioning

The original plant design relied on in-circuit conditioning, rather than dedicated conditioning tanks. Controlled conditioning is considered to be important for optimum amine column flotation performance and efficient reagent consumption.

The modified flotation circuit will be provided with a conditioning tank and pumps.

SRK concurs that the identified technical issues very likely contributed to the non-performance of the Elandsfontein process plant. It is thus reasonable to expect that the proposed remedial actions should allow the plant to meet its targeted performance, subject to the various ore types performing in line with test results. As mentioned, Kropz plan a further programme of pilot and variability testing. It is important in this regard to understand that such testing does not remove the risk of process non-performance, it merely improves the level of confidence in its likely success.

It is also worth noting that cessation of operations during commissioning did not allow all unit processes to be tested at design capacity. The capacity of the rest of the plant has therefore still to be demonstrated but can reasonably be expected to meet design specification.

5.3.4 Future Investigations

Confirmatory Flotation

A programme of confirmatory flotation test work has been completed at laboratory scale at Mintek. Further optimisation tests are currently being undertaken in preparation for future pilot plant investigations.

Variability Test Work

A programme of variability test work is planned to be undertaken as a continuation of the beneficiation process development work that was completed by Mintek.

Pilot Plant

Elandsfontein have advised that it is currently planned to run three pilot campaigns operating under optimal conditions currently being determined, with results expected in Q4 2018. Two will process the main ore types, namely F1 and F2. The third will process a blend of ores. Elandsfontein have advised that the use of site water is planned. SRK strongly supports this proposal but cautions that careful consideration will have to be given to the composition of the bulk samples. It is further recommended that sub-samples of the pilot plant runs be subjected to variability testing to ensure a link between the pilot plant results and variability results.

5.3.5 Modified Mineral Processing Facilities

DRA have completed a concept design for the modification of the existing RR flotation plant. It is likely that further modifications will be required once the flotation configuration has been finalised following the optimisation tests currently underway. In the following diagrams, highlighted flowsheet symbols represent new or modified equipment.

Ore Receiving, Stockpiling, Screening and Crushing

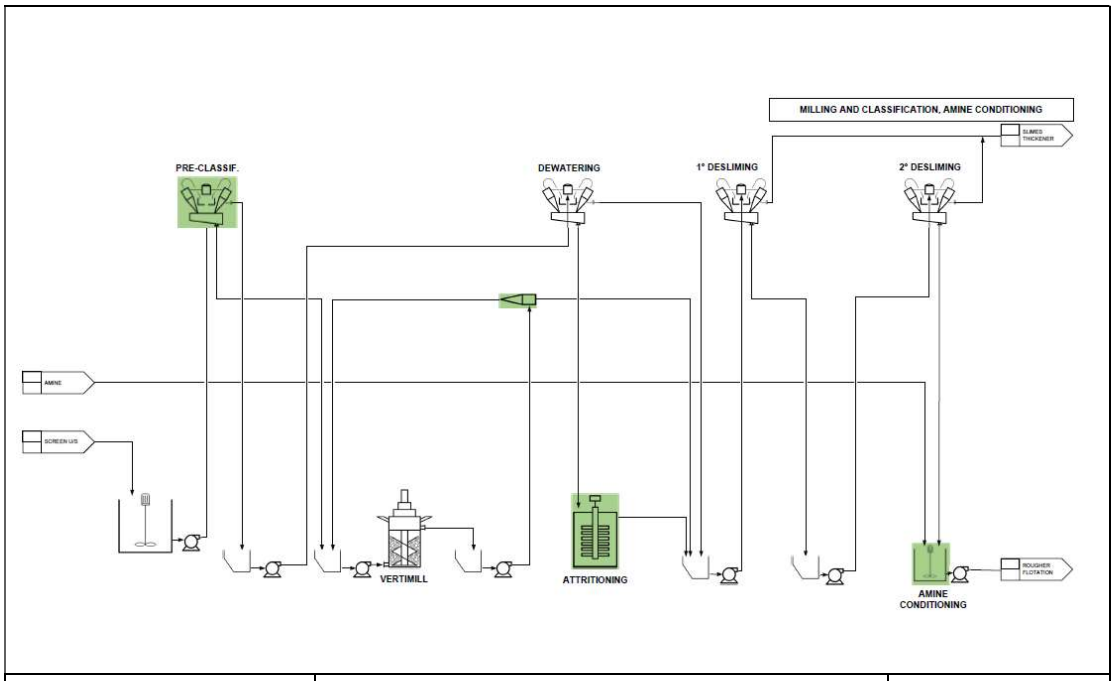
The front end of the existing circuit will remain unchanged. RoM ore is delivered to a mineral sizer via a static grizzly and belt feeder. The mineral sizer discharges onto the RoM stockpile feed conveyor. Material is withdrawn from the stockpile using belt feeders and conveyed to the primary screens via a split chute arrangement for removal of material larger than 2 mm. The screen oversize material is conveyed to a dewatering screen and into the oversize impact crusher to produce a -2 mm product. The impactor product is discharged onto the screen feed conveyor. The primary screen undersize material is pumped to the classification feed surge tank via a two-stage sample cutter, from where it is pumped to the classification circuit. A bypass is allowed ahead of the impactors, should the amount of oversize exceed the design of the impactor.

Milling and Classification, Amine Conditioning

The existing milling and classification circuit produces two size fractions for fine and coarse flotation respectively. In the proposed circuit, a single size fraction will be produced for flotation. Screened ore will be pre-classified. The coarse fraction will be milled in the existing Vertimill operating in closed circuit. The fine fraction will be de-watered ahead of a new attritioning step. Attritioned ore will be deslimed and de-watered again before reporting to conditioning and pH adjustment tanks ahead of rougher flotation.

Slime removed after attritioning will report to the existing tailings thickener. Thickened underflow will combine with the underflow of a new tailings thickener before being pumped the tailings belt filter.

New equipment in this area includes a pre-classification cyclone cluster, an additional mill circuit cyclone, two attrition scrubbers and amine conditioning equipment as shown Figure 5.12.



srk consulting	Milling and Classification, Fatty Acid Conditioning	Project No. 527928

Figure 5.12: Milling and Classification, Fatty Acid Conditioning

Reverse Rougher and Cleaner Flotation

The existing column flotation cells will be re-configured to allow the split coarse and fine flotation circuits (325x53 µm and 53x10 µm respectively) to be replaced with a single flotation circuit (325x20 µm).

Provision has been made to augment the flotation capacity by three new tank cells (rougher-scavengers), as shown in Figure 5.13.

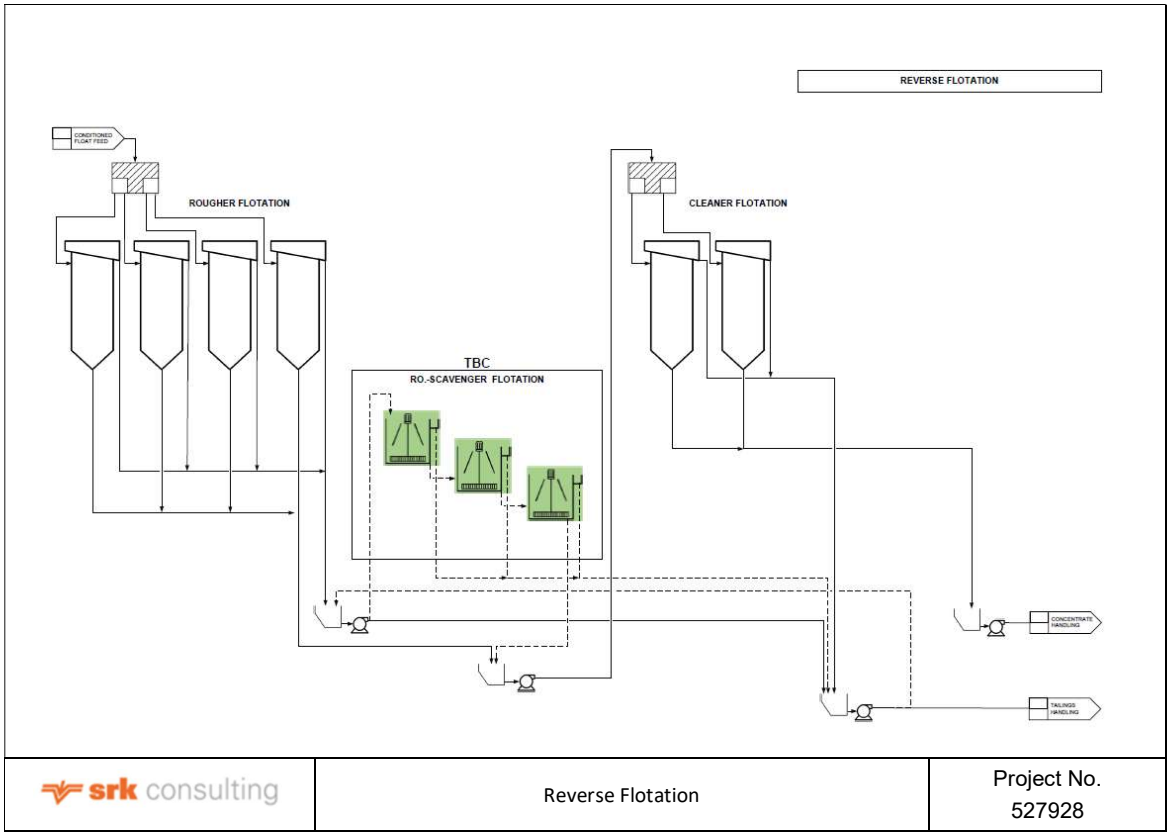


Figure 5.13: Reverse Flotation

The number of supplementary flotation cells required is currently based on revised column performance parameters for direct flotation provided by Eriez, mass pull requirements dictated by test work results and mechanical cell performance parameters, provided by equipment suppliers. Interrogation of the revised column performance parameters is still required.

Tailings Dewatering

An additional thickener has been included in the design to allow separate water circuits for slimes and flotation tailings. Amine tailings will be dewatered in a new thickener, with overflow re-used in the reverse flotation circuit. Slimes will be thickened in the existing tailings thickener, with overflow re-used in the milling and classification circuits. Tailings thickener underflow will be fed to a new surge tank ahead of the existing vacuum belt filters. Surge tanks have been included to accommodate guard cyclones ahead of the thickeners, to improve thickener performance and efficiencies.

Settlement of the very fine slimes will of course be challenging.

These circuits are shown in Figure 5.14.

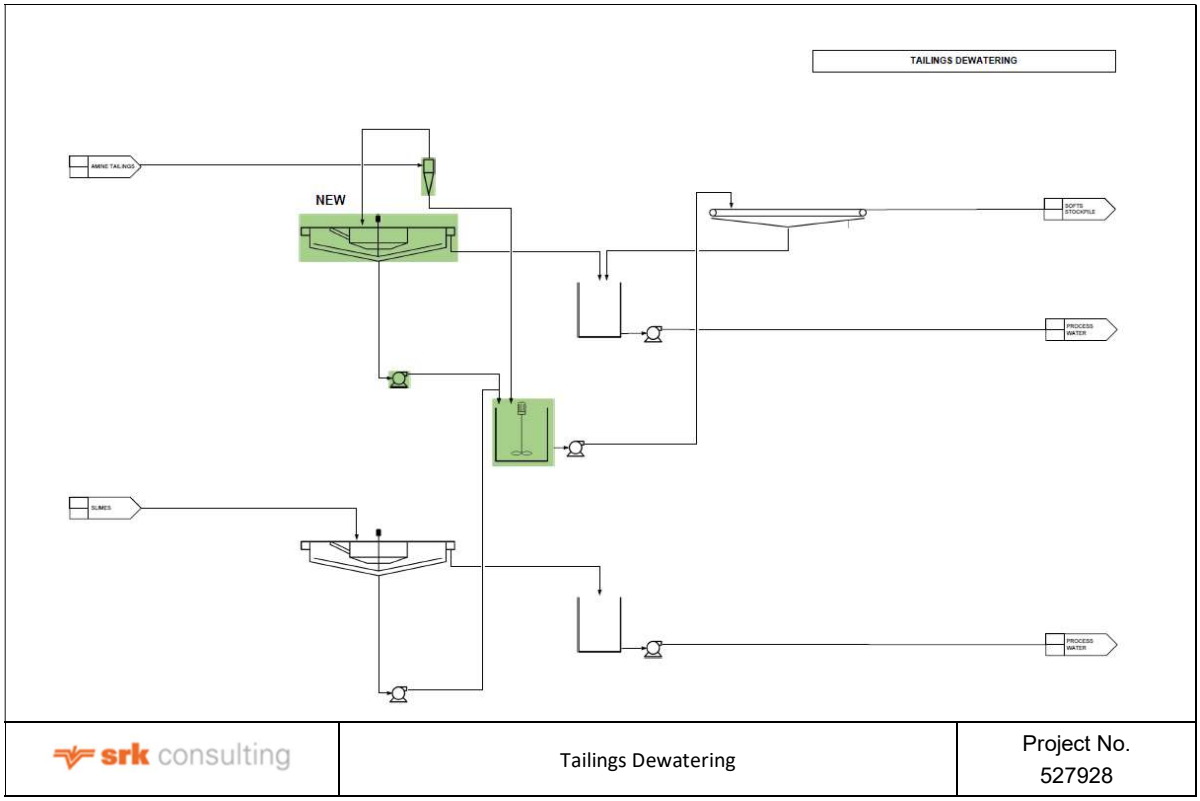


Figure 5.14: Tailings Dewatering

Concentrate Dewatering

Flotation concentrate is dewatered in the existing concentrate thickener fitted with a new guard cyclone before being reporting to a new filter surge tank ahead of the existing vacuum belt filter. Filter cake is forwarded to the concentrate dryer. Changes are shown in Figure 5.15.

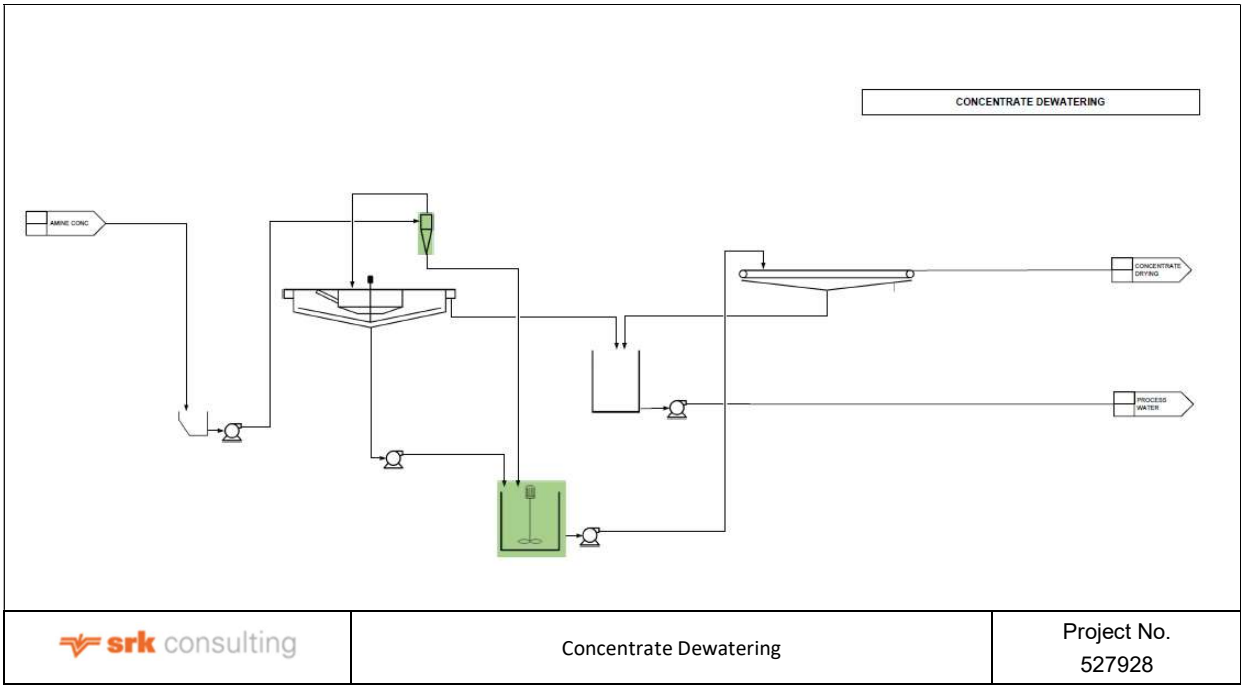


Figure 5.15: Concentrate Dewatering

5.3.6 Metallurgical Performance

In terms of projecting metallurgical performance, the Company analysed the TAT test results in order to identify correlations for the following parameters:

- The mass of -20 µm slime that would be rejected to tailings;
- The grade of -20 µm slime that would be rejected to tailings; and
- Flotation P O recovery.

Mass of Slime Rejected to Tailings

The F1 composite sample comprised 42 drill hole intervals and the F2 composite sample comprised 62 drill hole intervals as shown in Appendix B. In addition to grade, the percentage material in the -53 µm fraction was determined for each interval. Clearly further slimes will be generated during grinding and attritioning. However, in the absence of reliable information to estimate slimes generation in these processes, it was agreed to accept the proportion of -53 µm material in the as received samples as an estimate of -20 µm slime that would be rejected after grinding and attritioning. Data analysis found that there was a reasonable relationship between the sample grade (%P O) grade and the percentage of -53 µm material as shown in Figure 5.16 and Figure 5.17 for F1 and F2 material respectively.

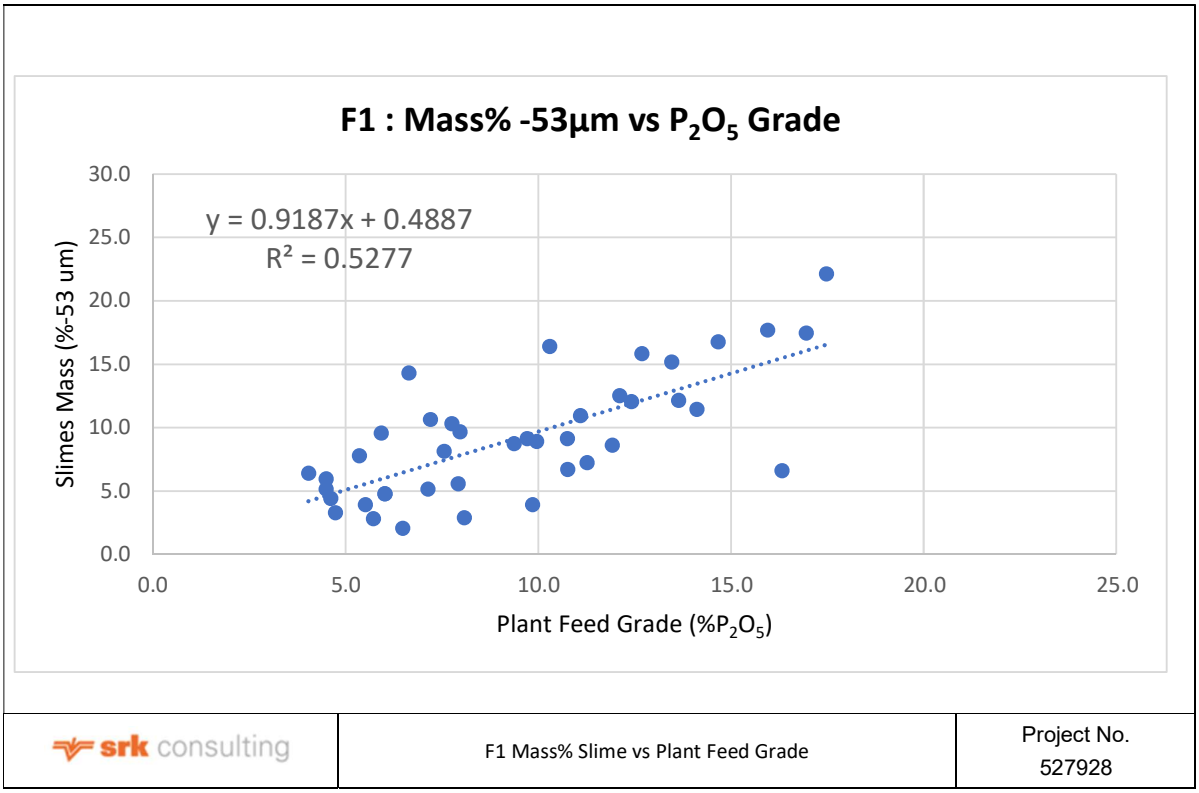
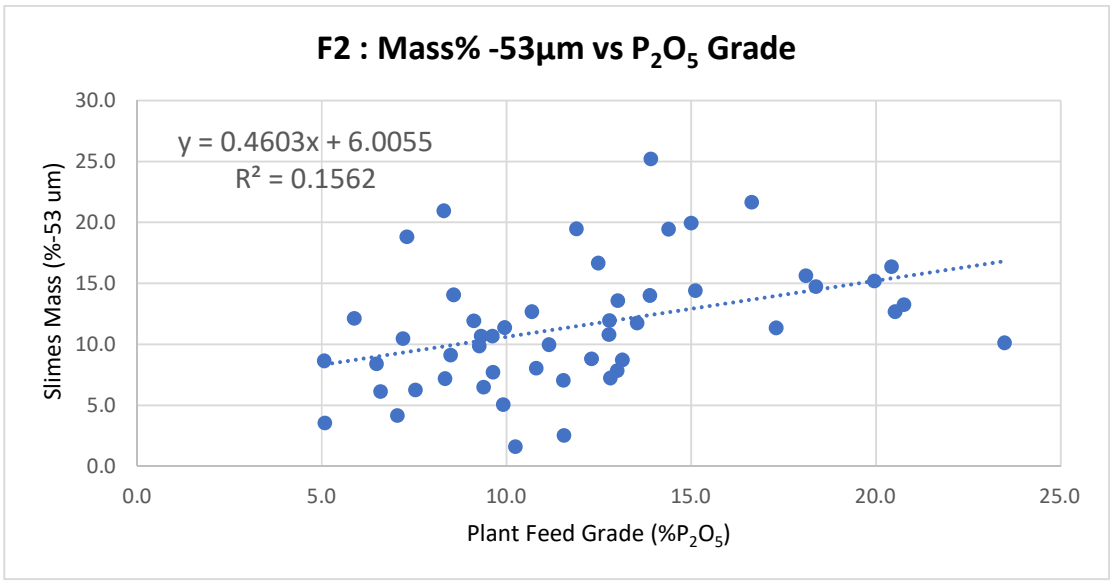


Figure 5.16: F1 Mass % -53 µm Slimes vs P O Plant Feed Grade

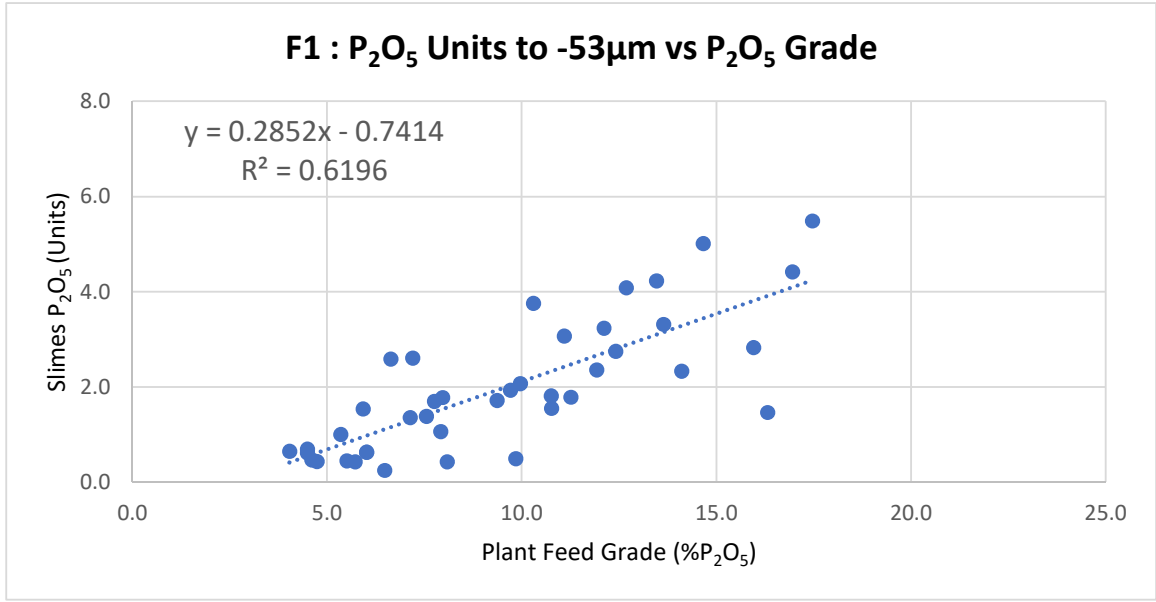


srk consulting	F2 Mass% Slime vs Plant Feed Grade	Project No. 527928

Figure 5.17: F2 Mass % -53 µm Slimes vs P O Plant Feed Grade

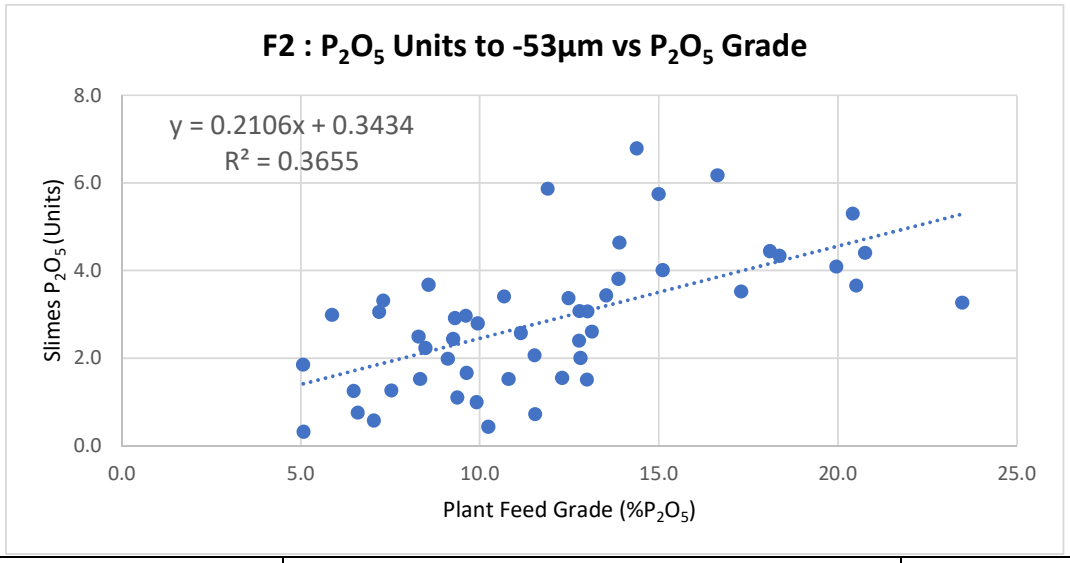
Units of P_2O_5 Rejected to Tailings

Analysis also found that there was a reasonable relationship between the sample grade (%P O) and the units of P O in the -53 µm material as shown in Figure 5.18 and Figure 5.19 for F1 and F2 material respectively.



srk consulting	F1 P_2O_5 Units in Slime vs Plant Feed Grade	Project No. 527928

Figure 5.18: F1 P O Units in -53 µm Slime vs P O Plant Feed Grade

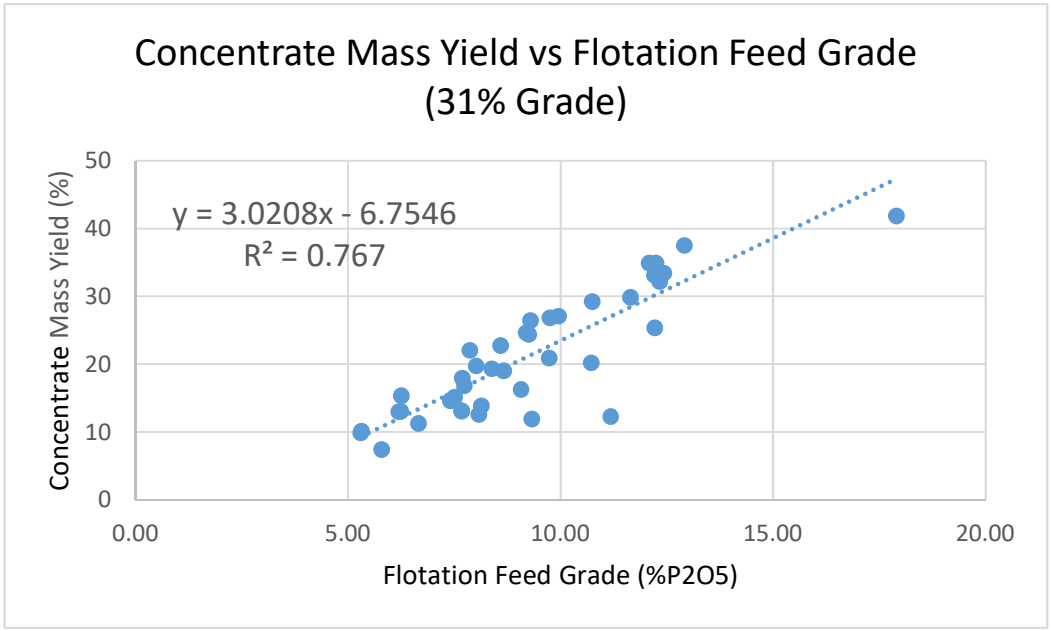


srk consulting	F2 P_2O_5 Units in Slime vs Plant Feed Grade	Project No. 527928

Figure 5.19: F2 P O Units in -53 µm Slime vs P O Plant Feed Grade

Flotation Concentrate Yield

Consolidated test results for RR flotation tests undertaken by Eriez and ArrMaz on F1 and F2 as well as the composite samples delivered to Eriez are presented in Appendix B. Results were sorted to exclude those tests that achieved less than the target product grade of 31 %P O . It was found that there was a reasonable correlation between mass yield to concentrate and the sample feed grade as shown in Figure 5.20.



srk consulting	Concentrate Mass Yield vs Flotation Feed Grade	Project No. 527928

Figure 5.20: Concentrate Mass Yield vs Flotation Feed Grade

The correlations presented above were incorporated into the LoM production schedule. LoM throughput and production are shown in Figure 5.21.

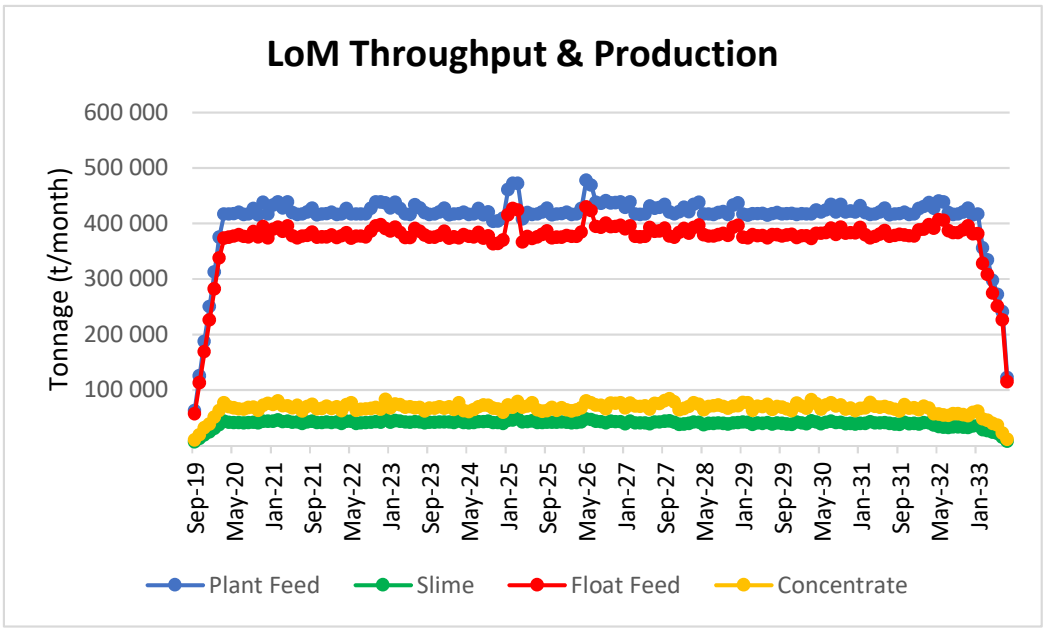


Figure 5.21: LoM Throughput and Production

LoM plant and flotation feed grades are shown in Figure 5.21.

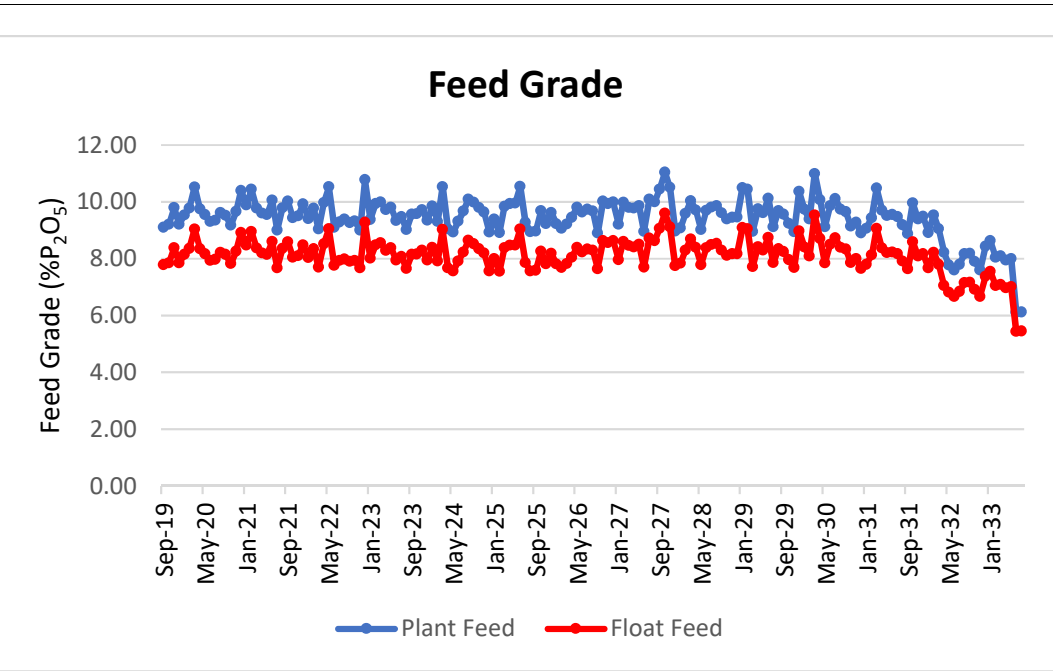


Figure 5.22: Feed Grade

5.3.7 Process Operating Costs

Process operating costs have been developed from first principles based on annual plant throughput of 5 Mtpa.

The mass and grade of slimes rejected as well as flotation recovery was based on the relationships described in Paragraph 5.3.6.

- Fixed costs were based on the service agreement with Minopex/West Coast Plant Operations Proprietary Limited (WCPO);
- Consumable stores and reagent consumptions were based on test results. Consumable and reagent costs were based on a combination of budget and confirmed prices from recognised suppliers;
- Laboratory costs were based on an order price concluded with the selected service provider,
- Maintenance costs for the process plant are scheduled as a fixed cost per annum of ZAR36.1 million (USD3 million). This is approximately 5% of the relevant portion of the process plant capital per annum, which is considered reasonable;
- Power consumption was based on estimated running loads of each Motor Control Centre. Unit power costs were based on March 2018 tariffs from the power supplier; and
- Water costs were estimated on a consumption of 0.1 m^3/tonne flotation feed tonnage at ZAR16 per m3 (USD1.33) assuming Level 3 Water Restriction charges.

Plant costs per tonne of product are summarised in Table 5.17. These costs were estimated in ZAR and converted to USD at a fixed exchange rate of ZAR15 = USD1.

Table 5.17: Plant Operating Costs

Plants	Unit	AVE/ TOT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Fixed Costs																
Minopex/WCPO	USD million	46.86	1.18	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.24
Maintenance	USD million	23.95	0.60	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.66
Laboratory	USD million	4.58	0.12	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.32
Subtotal	USD/ tonne product	*7.25*	*19.27*	*7.08*	*6.74*	*6.91*	*6.94*	*7.08*	*6.92*	*6.68*	*6.49*	*6.76*	*6.79*	*6.73*	*6.94*	*16.61*
Variable Costs																
Power	USD/ tonne product	4.52	3.88	4.48	4.45	4.57	4.59	4.58	4.65	4.58	4.30	4.48	4.41	4.43	4.53	5.40
Water	USD/ tonne product	0.58	0.60	0.57	0.57	0.58	0.59	0.59	0.59	0.58	0.55	0.58	0.57	0.57	0.58	0.70
Grinding media	USD/ tonne product	0.34	0.36	0.34	0.34	0.35	0.35	0.35	0.35	0.35	0.33	0.34	0.34	0.34	0.35	0.41
Amine	USD/ tonne product	4.99	4.18	4.25	4.34	4.57	4.70	4.81	4.99	5.04	4.87	5.22	5.26	5.42	5.69	7.03
Flocculant	USD/ tonne product	1.01	1.05	1.00	0.99	1.02	1.02	1.02	1.04	1.02	0.96	1.00	0.98	0.99	1.01	1.21
Dryer Fuel	USD/ tonne product	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55
Subtotal	USD/ tonne product	*14.00*	*12.62*	*13.20*	*13.25*	*13.65*	*13.79*	*13.90*	*14.18*	*14.12*	*13.56*	*14.17*	*14.11*	*14.30*	*14.71*	*17.31*
TOTAL	**ZAR/tonne product**	**318.74**	**478.34**	**304.20**	**299.79**	**308.40**	**311.02**	**314.72**	**316.52**	**312.00**	**300.72**	**313.89**	**313.52**	**315.50**	**324.74**	**508.76**

5.4 Engineering Infrastructure

5.4.1 Introduction

The engineering and infrastructure was visited on 22/23 February 2018 by Mr C. F. P Smythe, SRK Infrastructure Engineer, who was accompanied by Mark Maynard, General Manager and Cicil Pfister, Site Engineer. The infrastructure was found to be substantially complete and appropriate. The plant is well constructed, and the materials and equipment are high quality.

Adequate provision has been made for strategic spares and standby equipment.

The plant is being well maintained and in a condition that should ensure that re-commencement of operations is not problematic.

5.4.2 Power Supply

The Elandsfontein Phosphate Project has an agreed Notified Maximum Demand (NMD) of 15 MVA with Eskom, based on a Megaflex billing tariff. Bulk power supply to the mine is by means of a double-circuit 132 kV overhead line, with a loop in and loop out of the existing Eskom Aurora-Kersbosch 132 kV line. Two 132/11 kV 20 MVA transformers has been installed at the main incoming substation to supply power to the mine. The bulk power supply allows for redundancy, ensuring that the mine can continue operating should one line or transformer be brought out of service for repairs or maintenance. The bulk power infrastructure was successfully commissioned and energised on 28 April 2016.

The mine has been in discussion with Eskom in order to be placed on load curtailment instead of load shedding. The two 1 MW generators installed at the mine can be brought into service if required, should Eskom ask the mine to reduce the power consumption as part of load curtailment. The two generators can also be used as emergency power supply to critical equipment during Eskom power failures. The mine emergency power requirements were well planned in terms of level of priority, ranging from Level 0 (most critical equipment such as fire water and emergency lighting) to Level IV (non- critical equipment such as flocculant mixing and raw water pumps).

The electricity bills from June 2016 to January 2018 were reviewed and the highest power demand for this period was in the region of 6 MVA, which was in July 2017.

Some of the energy efficiency measures that have been implemented at the mine include the following:

- Power Factor Correction;
- Use of energy efficient lighting;
- Use of Variable Speed Drives (VSDs) where appropriate; and
- High efficiency motors used throughout the design.

A remote switching and fire detection and suppression system has been installed in the medium voltage substation. MCC 3 is also equipped with fire detection and suppression and the remaining MCCs are equipped with fire detection only. This is an acceptable arrangement, based on risk.

Generally, the electrical infrastructure installed at the mine is of new technology and has been well designed to support the power supply requirements of the site.

5.4.3 Water Supply

Raw water is supplied from the Saldanha Bay Municipality through a buried 400 mm diameter HDPE pipeline running parallel to the main access road to the mine. The HDPE pipeline is tied into the

municipal line at the junction of the mine access road and the R45 public road and the water discharges into a tank in the process plant. This pipeline is complete and operational and has sufficient capacity for the mine requirements. This water is to potable standards.

The raw water reports to the raw water tank in the process plant, which is used to feed potable water distribution, eye wash stations, safety showers, reagent make-up, fire water and mine water make-up. In addition, there is a take-off from the raw water line to top up the Clean Water Tank.

The Clean Water Tank is supplied with water from the Concentrate Thickener overflow and the raw water line. This tank supplies top-up to the plant process water reticulation, dust suppression, wash bay and workshops.

A Process Water Tank is provided to accommodate all sources of potentially contaminated water and this water is re-introduced into the process at selected points.

5.4.4 Sewage Treatment

Sewage is reticulated to a packaged sewage treatment plant, which is complete and operational.

5.4.5 Storm Water Dam, Pollution Control Dam and Silt Trap

The lined storm water dam, pollution control dam and silt trap are complete and ready for operation.

5.4.6 Plant Buildings

The completed plant buildings include:

- All motor control centres (MCC);
- Fully equipped laboratory;
- Fully equipped change house for male employees, female employees and visitors, with adequate showers, toilets and lockers. Hot water is provided by a 60 kW 5 500 litre geyser. A laundry is provided, equipped with two industrial washing machines and two tumble dryers;
- A Wellness Centre for first aid and screening is attached to the change house;
- Plant and mine offices with car park, bus turning area and helicopter landing area;
- General stores and lay down area;
- General engineering workshop;
- Seven compressors are installed (5 dedicated to plant air, 1 dedicated to Instrument air and 1 utilized as a standby for either plant or instrument air);
- Concentrate shed; and
- Plant internal roads.

Work on the following buildings and structures has commenced but is not complete. These structures are not immediately critical for final commissioning:

- Mining contractor workshop, wash bay and tyre bay are approximately 30% complete;
- The mining contractor tyre bay is not completed;
- The permanent security access control at the R45 public road is incomplete; and
- The concrete plinths for the bus shelter at the plane entrance has been completed, but the structure is not constructed.

All the buildings are built with high quality permanent materials such as brick and steel and are appropriate for a life of greater than 20 years.

The property also includes a game farm and lodge, which is used to accommodate visitors as required. ELH maintains and oversees the security of the lodge and the fencing.

5.4.7 Fuel supply

Diesel is required for mobile vehicles and for emergency generators. The diesel is stored in self-contained, self-bunded tanks, with a total capacity of 135 000 litres. The mining contractor fills a bowser from these tanks.

Heavy Fuel Oil (HFO) is used to supply fuel for the concentrate dryer. There are two storage tanks in bounded areas with a total capacity of 160 000 litres.

5.4.8 Logistics

Kropz has a current contract with Van der Merwe Vervoer (Pty) Limited (VDM) to transport concentrate from the mine to Transnet Port Terminals (TPT) port facility at Saldanha Bay for loading on to ships for export. VDM is responsible for loading the concentrate onto trucks and transporting the concentrate to covered storage warehouses at their facility at the Saldanha Industrial Development area. VDM will also arrange for loading the concentrate into skips for ship loading as directed by Kropz and transport the skips to the ship. TPT will then load the ships as required. A contract agreement is current between Kropz and TPT.

It is intended to load four trucks per hour in the concentrate shed. There is facility to load two trucks simultaneously. The trucks will be weighed before and after loading by means of a double automatic weighbridge. The trucks will be equipped with Radio Frequency Identification (RFID) transponders for access control and will have dedicated entrance and exit lanes in order to facilitate smooth uninterrupted traffic flow through a separate access route. The RFID transponders will cause the gates to open to allow entrance and exit for the trucks. The trucks will then travel on the mine access road to the R45 public road and on to the VDM depot, currently a distance of approximately 47 km.

Work has started on a new road from the R45 public road to the R27 public road near Saldanha that bypasses Langebaan and shortens the route for the concentrate transport. The road will be constructed by the Western Cape Provincial Government.

Labour is sourced by the mining and plant operations contractors from local towns, such as Hopefield, Langebaan and Saldanha. Transport is the contractors' responsibility and limited parking, a bus turning area and bus shelter is provided.

5.4.9 Safe Operating Procedures and Codes of Practice

The Company has prepared Safe Operating Procedures (SOP) and CoP in preparation for restarting the operation. These have been prepared in conjunction with and for use by Trollope Mining Services (TMS), in the case of the mining operation and WCPO, in the case of the operation of the plant.

SOPs have also been prepared for engineering, environmental and security aspects.

A random review of these SOPs and CoPs show that the content is comprehensive and appropriate.

5.4.10 Maintenance Management Systems

Maintenance management is delegated to WCPO and TMS.

WCPO will be using the On Key Work Planning & Control system to manage Key Performance indicators (KPI) on maintenance and asset control. WCPO's maintenance procedures include:

- An Asset Management Policy;
- An Asset care plan with generic equipment maintenance requirements;
- Procedure for breakdowns after hours;
- Maintenance Standards;
- Clear equipment identification tagging; and
- Work Planning Cycle and the Work Planning Procedures.

TMS has a general maintenance strategy policy. In the case of TMS, the contract requires the availability of spare mobile equipment.

The Company has established an Archive Room which contains all relevant operation and maintenance manuals for the plant equipment and associated infrastructure.

5.4.11 Care and Maintenance Regime

The Company has compiled a detailed Care and Maintenance (C&M) Plan which describes the activities required to keep the plant and property in operational readiness, so that restart can be as smooth as possible. A skeleton staff of WCPO maintenance personnel, led by the Site Engineer, is on site including a WCPO Engineering Foreman. Completed C&M log sheets indicate that the required maintenance and equipment start-ups are being done.

5.4.12 Plant Control Philosophy

Tipping at the RoM Static Grizzly is controlled by traffic lights, to ascertain that the material can only be tipped during the healthy status of the RoM tip feeder. There is also allowance for the control room operator to control these traffic lights, allowing the safe removal of oversize material blocking the grizzly by plant operators.

Pre-start sirens have been installed at critical equipment such as conveyors and crushers. This is to give an indication to personnel who might be in close proximity of such equipment that the equipment is about to start. Trip wires have also been hard wired for safety purposes. Allowance for protection such as conveyor speed switch and belt slip detection, conveyor belt alignment switch, belt tear monitoring and sequential start-up interlocking indicates that the plant was designed with safety of personnel and equipment as a priority.

5.4.13 Communications

Cell phone reception at the mine is generally good. There is also e-mail and telephone connection. There is allowance for the base station at the control room whereby selected plant personnel will be issued with hand held radios that can communicate with each other and to the base station.

Security radio will generally operate on a different radio band to the plant radios, these are supplied by the security contractor on site.

5.4.14 Contracts

Contracts are in place for:

- Water supply;
- Eskom;

- Fuel supply;
- Plant operations;
- Ship sampling and survey;
- Site laboratory services;
- Mining;
- Port handling; and
- Transportation of concentrate.

5.5 Costs

5.5.1 Project Capital

To date, the Company has spent ZAR 1 393 million (approximately USD120 million) on project Capex to construct the processing plant and infrastructure, initial mining and capitalised working costs. In order to proceed with the modifications required to restart production, the Company estimates on spending an additional ZAR 195.9 million (approximately USD16 million) capital on modifications to the plant, based on a conceptual design supplied by DRA in their document, "Plant Retrofit: Scoping Study (Interim Update)" dated 11 April 2018 and an updated schedule of costs as at 10 April 2018.

Table 5.18: Project Capital Cashflow as Provided by Kropz

ITEM	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018
Plant (ZARmillion)	1.00	2.00	1.54	4.24	7.71	9.64	11.57	15.43	11.57
Plant (USDmillion)	0.08	0.17	0.13	0.35	0.64	0.80	0.96	1.29	0.96

ITEM	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Plant (ZARmillion)	7.71	11.57	11.57	15.43	17.36	19.29	19.29	19.29	9.64
Plant (USDmillion)	0.64	0.95	0.95	1.27	1.43	1.59	1.59	1.59	0.79

Planned additional test work (at bench, pilot and on site using the existing installed infrastructure) will confirm the final design specifications and hence the Capex. This work will commence immediately upon recapitalisation of the project and has been budgeted to take place during the first six months of operations.

In the opinion of SRK, however, it is unlikely that the final capital requirements will exceed the total stated here. Table 5.19 shows a breakdown of the capital requirements by discipline.

Table 5.19: Capital by Discipline

Item	ZARmillion	USDmillion
Mechanical Equipment	50.80	4.18
Infrastructure	4.70	0.39
Civils and Earthworks	19.60	1.61
Structural, Mechanical, Platework, Piping	29.10	2.40
Electrical and Instrumentation	19.60	1.61
EPCM and Project services	18.50	1.52
Spares, Consumables, Pre-production	7.50	0.62
Contingency	43.05	3.55
Test Work	3.00	0.25
TOTAL	195.85	16.13

Although the level of engineering design done to prepare the capital costs and cash flow is at a Level 4 scoping study level, it is SRK's opinion that these are reasonably achievable to construct the proposed modifications for the following reasons provided there are no significant changes to the design:

- 32% of the process capital cost is for mechanical items and spares where recent supplier cost estimates have been obtained; and
- The bulk of the remainder of the costs are informed by the experience of DRA in the construction of the plant during 2016/2017.

On the basis of the above items, the 30% contingency applied by DRA is reasonable.

5.5.2 Sustaining Capital

Over the 14 year LoM, the process plant maintenance operating cost will include any requirements for planned replacement expenditure. The contractor is responsible for the sustaining capital cost of the mining equipment as part of his contract.

5.5.3 Softs Stockpile Cost Estimate

The operating costs for the soft overburden are estimated at ZAR161.5/tonne (USD13.4/tonne) and the tailings at ZAR31.5/tonne (USD2.6/tonne) which is seen to be market related.

The geochemical testing carried out on tailings and overburden samples to date indicate that there are potential risks to the groundwater posed by leachates emanating from the SS and open pit backfill. These risks are currently not quantifiable, but are being monitored through the on-going ground water monitoring programme. There may be additional costs associated with mitigating these risks.

5.5.4 Engineering Operating Costs

Maintenance costs for the process plant are scheduled as a fixed cost per annum of ZAR36.1 million (USD3 million). This is approximately 5% of the relevant portion of the process plant capital per annum, which is considered reasonable

5.5.5 Electrical Operating Costs

The availability of electricity supply had run well ahead of the overall programme and as such, minimal energy (kWh) was required in the initial months after energising the substation. This resulted in the fixed costs associated with network access charges becoming very high (especially when converted to a cost per unit of energy, kWh).

The average energy cost from October 2016 to February 2017 was ZAR13.19/kWh (USD1.2/kWh), then reducing to ZAR1.03/kWh (USD0.09/kWh) between March to July 2017, due to an increase in energy consumption for these five months, which averaged about 1.9 MWh. The average energy cost then increased to ZAR1.30/kWh (USD0.11/kWh) for the months of August 2017 to January 2018, due to the decrease in energy consumption to an average of 691 463 kWh.

From the above current data, it can be noticed that the lower the energy consumption, the higher the unit electricity costs due to the fixed costs that Eskom charges mostly based on the agreed NMD. The unit electricity costs will adjust once the project is in production.

5.6 Environmental Studies, Permitting and Social Impact

5.6.1 Environmental and Social Approvals

Environmental Authorisations and Licences

Consultants were appointed to undertake a Scoping and Environmental Impact Reporting (S&EIR), also referred to as an Environmental Impact Assessment (EIA) process and compile an Environmental Management Programme (EMPr) as required in terms of the MPRDA. The EMPr [(WC) 30/5/1/2/2/10043MR] was approved by the DMR on 20 February 2015 in terms of the National Environmental Management Act 107 of 1998 (NEMA) EIA Regulations, 2014. Subsequently, the DMR instructed the Company to upgrade the approved EMPr under section 12(5) of NEMA, a process initially delayed by an ultimately unsuccessful appeal against the approved EMPr. The Company suspended the upgrade of the EMPr, due to the changes in the plant that may affect the EMPr. The Company advise that they agreed verbally with Ms Kunene (DMR Regional Manager) that the Company will proceed with the EMPr upgrading after the commissioning phase.

The initial EMPr approval requires annual submission of EMPr Performance Assessment (PA) Reports as well as annual updates and reviews of the quantum of financial provision for rehabilitation. Consultants were appointed to undertake the PAs, the first in March 2016 and then a second, which was submitted to DMR on 30 June 2017. DMR acknowledged receipt on 6 July 2017. No material non-compliances were identified.

A WUL No. 01/G10M/ABCGIJ/5296, as required in terms of the National Water Act 36 of 1998 (NWA), was issued to Elandsfontein on 7 April 2017. The WUL authorises six listed water uses for a period of 15 years, to be reviewed at Year One (1), Year Two (2), Year Three (3) and thereafter at intervals no more than three years. The WUL provides, *inter alia*, for the intentional recharging of an aquifer with dewatered water by means of 20 vertical injection boreholes. The WUL also requires annual external audits assessing compliance with the conditions of the WUL, the first to be undertaken within six months of issue of the WUL and submitted to the Responsible Authority within one month of finalisation of the report.

Consultants were appointed to undertake the WUL Compliance Audit, as required in terms of section 26 of the NWA, for the period April to October 2017. The report was finalised on 24 October 2017 and submitted to DWS on 15 December 2017. Eight instances of non-compliance were found during the audit, of which four “pose a significant risk to water resource management and should be prioritised for action to comply”. These are all related to the failure to implement monthly water quality monitoring within the first 6 months of issuance, specifically, wastewater storage, wastewater discharge, recharge water and the groundwater monitoring boreholes which should be monitored.

Subsequent to this Compliance Audit, the monthly water quality monitoring program has been implemented and the monthly information, since September 2017, has both been submitted to DWS and reported on at the Water Monitoring Committee meeting. To date no concerns of significant risk to water resource management have been identified from the water monitoring program. Successful

weekly and monthly compliance inspections on site have been undertaken by DWS since January 2018. On 26 June 2017, the West Coast Environment Protection Association (WCEPA) lodged an appeal against the WUL, which had the automatic effect of suspending it. The Company responded and on 11 December 2017 DWS uplifted the suspension of the WUL, so that dewatering could continue. The WUL appeal is currently with the Water Tribunal, but may not be heard for some time, given the huge backlog of cases for the Water Tribunal. To date, the Company has received no further correspondence from the Water Tribunal since December 2017.

A Provisional Atmospheric Emission Licence (PAEL) No. AEL/WCP/ELANDSFONTEINMINE DRYER/01/24/2017-730, as required in terms of the National Environmental Management: Air Quality Act 39 of 2004 (NEM:AQA), was issued to Elandsfontein by the Department of Environmental Affairs (DEA) on 23 May 2017, with a prescribed review date of 31 March 2018. The PAEL is valid for 12 months and requires submission of annual reports (Condition 7.6) to the licensing authority DEA as well as separate compliance review and dust monitoring reports, both within six months of issue of the PAEL, i.e. by 23 November 2017. In terms of the Section 41 (1) of the National Environmental Management Air Quality Act of 2004, all atmospheric emission licences are provisionally issued for a year to enable the commissioning of a dryer/listed activity. Section 41 (3) provides that a Provisional Atmospheric Emission Licence (PAEL) is valid for a year from the date of commissioning and may be extended for an additional year. The dryer was commissioned on 12 June 2017; however commissioning was suspended on 28 July 2017. In a letter dated 8 December 2017, the Company wrote to the PAEL licensing authority (DEA) regarding (suspended) compliance requirement, and also submitted a Dust Fallout Report dated November 2017. At about the same time, an Annual Emission Inventory Report was submitted via the National Atmospheric Emission Inventory system (NAEIS). The Company informed DEA that the revised commissioning date would be in June 2019 and, on 07 May 2018, the department informed the Company on that the PAEL would remain valid for 12 months from the new commissioning date.

In a letter dated 22 January 2016, Heritage Western Cape accepted the Heritage Impact Assessment, as require in terms of the National Heritage Resources Act 25 of 1999 (NHRA).

There is no record of a Waste Management Licence (WML) issued in terms of the National Environmental Management: Waste Act 59 of 2008 (NEM:WA), and the Company has advised that a WML is not required.

A number of approvals have been publicly challenged, in large part driven by a few Non-Governmental Organisations (NGOs), attracting media publicity. To date, all challenges/appeals have been unsuccessful.

Social and Labour Plan

Elandsfontein has compiled a Social and Labour Plan (SLP), as prescribed by Section 23 of the MPRDA. On 27 November 2014, the DMR approved the SLP. Subsequently, the Company submitted the 2017 SLP Annual Report to DMR. Elandsfontein must submit annual reports relating to the SLP implementation. The DMR acknowledged receipt, the next report will be submitted in 2018. Given that the mine has not commenced operation, many of the proposed and planned aspects of the SLP have, understandably, not yet been implemented.

In a letter dated 28 August 2017, the Company issued notice to the Minerals and Petroleum Board in compliance with Section 52 (1) (b) of the MPRDA, advising that commencement of operations at Elandsfontein is (was) delayed by approximately 9 to 12 months. The notice advised that 258 of 296 staff would be retrenched and committed to a *10 Point Plan* to ameliorate the effects of retrenchment.

The SLP records the Company's intention to develop and implement a Human Resources Development (HRD) Plan, a Mine Community Development Plan, a Housing and Living Conditions Plan, Employment Equity Plan and a downscaling and retrenchment process.

The Mining Charter sets a target of 5% of payroll spend on HRD and the SLP advises that this is the proposed target for 2018 (but, by inference, has not yet been achievable). The Company advises that they will set aside 5% of payroll when the Company starts to generate an income. The SLP notes that ZAR75 000 (USD6 250) will be spent annually on Adult Based Education and Training (ABET) by 2023, while the 2017 Elandsfontein project's Bursary Plan commits to expenditure of approximately ZAR300 000 (USD25 000).

Part Three of the SLP comprises the Local Economic Development (LED) Programme, mainly focused on initiatives in the Saldanha Bay Municipality. A budget is not allocated, though ZAR1 027 288 (USD86 000) has been allocated to (the now completed) upgrade the Thusong Centre in Hopefield.

It is important that the Company sets aside and expends funds to implement the SLP, and transparently records this when the SLP is updated.

The Company established the Future Forum Stakeholder Group (FFSG). The role of the FFSG, as provided for in Regulation 46 (d) i) of the MPRDA, is to keep employees of the contractors at the mine informed regarding operations and possible matters related to downscaling. A mine plan to save jobs will be finalised and submitted to DMR after the first two years of production.

5.6.2 Environmental and Social Management Approach

Consultants were appointed to monitor compliance with the conditions of the EMPr and other licences/permits during the construction phase of the project. Monthly audit reports we compiled and high levels of compliance were recorded, with very few, (all) non-material non-compliances. WUL and EMPr PA audits were also undertaken, as noted above. The Company is preparing an Environmental Management System (EMS) for operations. It may take the form of an integrated Safety, Health and Environmental Management System (SHEMS). Progress has been delayed while mining has been put on hold. The Company may consider ISO 14001 certification once production recommences.

At present the Company employs one permanent Chief Safety Officer and contracts two environmental consultants (to audit performance/compliance). It is likely a larger SHE staff complement will be required once operations commence to ensure continual improvement of environmental management and performance, and to monitor mining activities through a typical "plan-do-check-act" cycle.

There is no evidence of a formalised Stakeholder Engagement Plan (SEP), although the relatively isolated location of the mine in a sparsely populated area, coupled with targeted LED programmes, suggests that a formalised SEP may not be essential. However, the Company has established a Hopefield Community Forum, which holds monthly meetings between the local community and the mine, providing project updates and hosting mine visits.

5.6.3 Environmental and Social Issues and Risks

The following environmental issues would need to be managed to mitigate any material risk:

- *Permitting*: The Elandsfontein Environmental Management Programme (EMPr) was approved by the DMR. The Company has been instructed to upgrade the EMPr to reflect the proposed changes to the processing facility. Approval of this EMPr is almost certainly a formality but is pending at present (subject to confirmation of final design). Other licences are in place, but the

PAEL must be converted to an AEL, while the appeal against the WUL has been referred to the Water Tribunal and is unlikely to be decided soon;

- *Environmental and Social Management*: Environmental and social management was of a high standard during construction. Kropz is preparing an EMS for operations. Progress has been delayed while mining has been put on hold. A functional EMS, and a larger Safety, Health and Environment (SHE) staff complement will be required once operations commence to ensure continual improvement of environmental management and performance, and to monitor mining activities through a typical "plan-do-check-act" cycle; and
- *Performance monitoring*: The EMPr identifies a suite of biophysical, socio-economic and cultural impacts that require management. Important vehicles to gauge and ensure compliance are the annual PA Reports, external WUL audits, PAEL reports and – most likely annual - SLP reports. Any non-compliances will need to be the subject of corrective action to avoid future risk of (DMR) directives.

Reputational risk: The Elandsfontein Phosphate Project has garnered periodic adverse, publicity, mostly linked to permitting processes and potential impacts linked to groundwater management. A coherent and expertly implemented SEP may reduce this risk.

To date, no significant environmental and social risks associated with operation of the mine have been identified, since the mine is not yet operational.

5.6.4 Legislative Framework

Historically mining operations were required to make provision for rehabilitation or management of negative environmental impacts under the Minerals and Petroleum Resources Development Act (Act 28 of 2002) (MPRDA). This section of the Act was repealed and replaced with Section 24P of NEMA. Section 24P requires that an applicant for an environmental authorisation relating to prospecting, exploration, mining or production or related activities on a prospecting, mining, exploration or production area must make provision for the prescribed financial provision, before the Minister responsible for Mineral Resources issues the environmental authorisation.

The regulation under NEMA to support Section 24 P and the estimate of the provision were promulgated in November 2015 as the *Regulations pertaining to the Financial Provision for Prospecting, Exploration, Mining or Production Operations (GN 1147).* The intent of the GN 1147 was to require mining operations to adopt a strategic approach to closure planning and financial provisioning. The intention is to require operations to undertake focussed closure planning and then actively implement rehabilitation measures during operations to reduce the liability at the end of the life of the mine. When GN 1147 was promulgated, compliance with GN 1147 was required by February 2017. However, as there are a number of technical issues with the regulations, an amendment to the regulations was promulgated in October 2016, extending the transitional arrangements for existing operations to February 2019. SRK understands that the authorities will address the technical issues with GN 1147 in the period to February 2019. During the transitional period, mines are required to assess and make provisions for liability as was required under the MPRDA.

5.6.5 Mine Closure, Planning and Financial Provision

SRK understands that the most recent estimate of the liability was that determined in 2016, where Elandsfontein appointed consultants to prepare an estimate of the liability in accordance with the requirements of GN 1147. This estimate determined that the closure liability was ZAR78 million (USD6.5 million). SRK understands that the estimate was developed using a combination of industry rates and rates escalated from the DMR Guideline Document for the Evaluation of the Quantum of

Closure-Related Financial Provision Provided by a Mine (2005). The Company has received a letter from the DMR stating that an amount of ZAR78 million (USD6.5 million) has been approved for financial provisions. The DMR is the competent authority that prescribes financial provisioning. The Company is in the process of providing a guarantee for that amount. It is, however, SRK's opinion that this estimate is insufficient to address rehabilitation requirements in the event of an unplanned closure.

SRK is of the opinion that the quantum of ZAR78 million (USD6.5 million) reflects the potential liability at the end of the life of the operation and does but reflect the current. This opinion is based on SRK's understanding that the assumptions that underpin the estimate of ZAR78 million (USD6.5 million) assume that a significant amount of rehabilitation will be undertaken operationally during roll over mining and the costs thereof are not included in this amount. Further assumptions are that the costs associated with backfilling with overburden, shaping the profile to make the area free draining, placement of growth media and establishment of vegetation will be a mining cost and will be borne in operational costs.

SRK is of the opinion that the above estimate and approach of not including items undertaken during operations, is not fully compliant with the requirements of GN 1147 or the previous requirements of the MPRDA. The intent of the legislation is to protect the State from having to fund the closure of an operation in the event that the Rights Holder is not in a position to do so. Therefore, the authorities require the assessment of liability to include all activities required to meet the closure obligations as contained in the authorised EMPr and not just those that will not be funded by operational costs.

Based on SRK's understanding of the operation and benchmarking against other operations where SRK has estimated the liability, SRK is thus of the opinion that the current liability, in the event that Elandsfontein faced unplanned closure, is in excess of ZAR200 million (USD16.7 million). One of the large contributors to the liability, would be the open pit backfilling liability, with SRK understanding that approximately 3.7 million BCM have been mined.

SRK understands that the Company raised a guarantee with a value of ZAR9.9 million (USD0.8 million) with Investec Private Bank in favour of the DMR in 2015, to cover a portion of the liability identified in the 2014 EMPr, with this being the only provision that the operation has with the DMR for its liability. The Company is currently engaging with Centriq to provide insurance for the ZAR78 million (USD6.5 million) estimated liability, with the DMR having instructed the operation that the provision has to be in place by the 31 March 2018.

Although SRK is of the opinion that the Company is not currently fully aligned with the legal requirements for closure provision, with the current estimate potentially not being a true reflection of the complete liability, SRK recognises that the DMRs letter of acceptance of the provision indicates that the DMR is satisfied that legal obligations have been met.

5.7 Market Studies and Economic Criteria

5.7.1 Introduction

A marketing study was previously carried out by the independent market analysis group, CRU. This approach was appropriate for a quasi-commodity like phosphate as consensus forecasts are generally not available and the product is not homogenous. In addition to the information on the expected supply and demand and the likely price, CRU analysed the components of the Elandsfontein rock to provide what they refer to as Value-In-Use (VIU). This provides some further assurance, as it considers the potential impact of the components of the product on its price and marketability. The CRU report is appended to this CPR.

5.7.2 Most Important Aspects

General comments from the marketing and VIU studies included:

- CRU suggests that it is likely that there will be a requirement for an off-take agreement;
- SRK notes that an off-take agreement is in place for 400 ktpa of phosphate rock;
- The price is currently being renegotiated and SRK has been informed that the price is expected to be in line with the forecast prices;
- Risk remains until the final price is confirmed as the previous off-take agreement was for a price lower than the current spot price; and
- The off-take agreement is subject to the company proving that the first batch responds similarly to the previous test work carried out at Foskor.

CRU developed a custom VIU study for Elandsfontein that considered to be the specific composition of their product and the impact the composition may have on the value and marketability. In addition, a medium and long-term price forecast was supplied to assist with the valuation:

- The VIU noted that the Elandsfontein product was a medium grade with properties that would be well suited to the production of granular diammonium phosphate (DAP) and monoammonium phosphate (MAP); and,
- The current market distribution is for about 33% - 40% of the product to be sold to Foskor and the balance to India and other markets. India is potentially the most important market for Elandsfontein as there is a freight advantage over several competitors. It was also forecast that the demand for phosphate rock in India would increase during the LoM.

The price forecast noted the following:

- The demand is predicted to grow, primarily as a result of population and income growth;
- Prices are depressed in the short term, however not to the extent that Elandsfontein would be unable to generate a positive operating profit, provided the product can be sold and prices are expected to gradually increase over the medium term;
- Phosphate rock is considered a quasi-commodity as it is not homogenous and the specific composition has impacts on a user's process and costs; and,
- SRK is not in a position to quantify the risk, that should the product not be sold under the off-take, it would attract either a lower price or not be saleable. While the Company has advised that demand for its product appears to be strong, it does appear that this could be a risk and it could still potentially place the project at risk. Sensitivities have been included to indicate the impact of a lower received price.

The price forecast used in the cashflow model is based on the August 2018 FOB Saldanha price outlook provided by CRU and appended.

5.8 Risk Analysis

5.8.1 Consolidated Risk Factors and Opportunities

Risk Factors

The technical risk factors identified by SRK for the Elandsfontein Phosphate Project are provided in Table 5.20.

SRK has identified the risk factors associated with the generation of revenue streams for the Elandsfontein Phosphate Project. These risk factors are metallurgy and process plant related and are in SRK's view, material. The recoveries applied in the LoM have not been confirmed through adequate test work and the metallurgical plant modification is based on a conceptual design.

Table 5.20: Consolidated Risk Factors for the Elandsfontein Assets

Discipline	Risk Factor	Mitigation Measure
Regulatory and Political	Elandsfontein's Environmental Management Programme (EMPr) was approved by the DMR. The Company has been instructed to upgrade the EMPr to reflect the proposed changes to the processing facility. Approval of this EMPr is probably a formality but is pending at present (subject to confirmation of final design). The appeal against the WUL has been referred to the Water Tribunal and is unlikely to be decided soon.	Ensure that requisite approvals, permits and licences are obtained. Submit revised EMPr as soon as detailed design of plant modifications are complete.
Water Management	Failure of the dewatering scheme (Low likelihood)	• Undertake regular maintenance of all dewatering, re-injection and monitoring infrastructure followed by analysis and reporting of results; and • Undertake detailed planning for future changes in the dewatering status, including consideration of seepage quality and quantity from tailings backfill, the extension of the mine pit beyond the current line of dewatering boreholes, the potential for cavity intersection (resulting in temporary high inflows) during mining, and the potential for rainfall flooding the pit.
	Mining delays due to continued requirement for a relatively high rate of in-pit sump pumping. (Medium likelihood, due to the water-retention characteristics of the material within the mine pit area, the geometry of dewatering [only down to the clay horizon from zero up to a few metres maximum thickness below the ore body] and the potential for seepage from tailings).	Regularly update the site conceptual and numerical groundwater models based on latest data, and subsequently update the groundwater management strategy.
	Overtopping of 'dirty' water in storm water dams.	Design and implement the process water treatment plant as soon as possible so that water can be cleaned and re-used.
Occupational Health	In terms of Section 16.1 (2) of the act a risk assessment is required to determine if employees may be exposed to irrespirable atmospheres at any area of the mine.	The Occupational Health risk assessment should be conducted once operations recommence.
Mineral Processing	That predicted metallurgical performance of RR flotation is not achieved: • P_2O_5 recovery is lower than predicted; and/or • Product mass yield is lower than predicted; and/or • Ore types with metallurgical characteristics that differ from those used in predicting process performance, do not produce a saleable product.	A number of factors that likely contributed to the commissioning difficulties were identified: • Non-representative plant feed; • Impact of slimes; • Inadequate liberation and apatite rimming; and • Inadequate conditioning. Plant modifications are planned to address the identified process issues: • Feed the plant with an improved blend of ore. Ongoing dewatering should allow mining access to the main ore types before the plant is re-commissioned. • Install new equipment to allow the slimes and tailings water circuits to be split. • Install two attrition scrubbers. • Install improved conditioning facilities.

Discipline	Risk Factor	Mitigation Measure
	That P_2O_5 losses in -20 µm slimes are higher than predicted.	Variability and pilot plant testing is planned in order to improve the confidence of predicting full scale RR flotation. Variability testing is planned to improve the understanding of P_2O_5 deportment by size between ore types and across the deposit. The slimes fraction will be separately collected ahead of disposal in the split slimes and tailings water circuits. This also offers the opportunity for further processing should this be technically and economically viable.
	That attritioning results in excessive slimes loss.	Optimise during re-commissioning.
	That plant feed grade and/ or product size distribution varies to the extent that it impacts negatively on plant throughput and recovery.	Develop a more detailed mine plan plus in-pit management of feed grade.
	That unit process not yet tested at full capacity do not perform according to design specifications.	Test during re-commissioning.
	That operating costs are exceeded.	Optimise key operating cost components.
Environmental and Social	Periodic adverse, visible publicity, mostly linked to permitting processes and potential impacts linked to groundwater management, with associated reputational risk.	The Company should consider compiling a coherent and expertly implemented SEP to manage reputational risk.
Mine Closure	Closure provision not yet in place to meet the DMR requirements and the closure provision is an underestimate of the liability that would be incurred in the event of unplanned closure.	Reassess the quantum of the liability using the approach required by GN 1147 and raise the required provision with the DMR.
Softs Stockpile and in-pit backfill	• The SS material properties and ratio of soft overburden to tailings may vary from the design assumptions. This may influence the stability and capacity. • Initial geochemical testing indicates that there are elevated concentrations of certain determinands in the waste materials. It is understood that additional testing is currently underway. It should be noted they may be a requirement for additional mitigation measures to manage the risk to groundwater for both the SS and in-pit backfill following analysis of the monitoring results.	• Identify and monitor variations from the design assumptions relating to the ratio of soft overburden to tailings. Reassess storage capacity, seepage and stability if significant variations from the design assumptions are identified.
Mineral Resources	• No major project risks or potential fatal flaws could be identified associated with the sampling, delineation and estimation of the Mineral Resources. However the reader is reminded that: • A lack of geological information that could possibly lead to unplanned geological losses during mining.	• Additional exploration drilling should be undertaken by the Company in the North in the Terrace domain and in the South West towards the boundaries of the Mineral Rights area; • The Company should make some provision for geological losses and try to acquire additional geological information to determine any possible geological losses.
Mining and Reserves	The risks to the mining operation are stated under the dewatering, geotechnical and processing disciplines.	

Discipline	Risk Factor	Mitigation Measure
Geotechnical	• Transmissive nature of Upper Aquifer Unit could lead to seepage into pit walls. • Slope instability may be a result of wind erosion and undercutting of exposed slopes. • Basal heave failure is a risk associated with upward pressure from the lower aquifer, acting on the clay aquitard forming the base of the pit.	• Extensive dewatering has been implemented to prevent this. Discipline is required in implementation of dewatering and daily monitoring for any visible seepage; • Roll over strip mining will ensure maximum exposure time of two months for highwalls. Discipline is required in implementing planned mining sequence and regular monitoring of undercut slopes is required; and • Excavation width is limited to 50 m based on extensive numerical modelling exercises. Backfilling must not lag mining to prevent this width being exceeded.
Capital Cost	• The design of the plant modifications is at conceptual stage and the final capital cost is uncertain. In the opinion of SRK, however, it is unlikely that the final capital requirements will exceed the total stated.	• The uncertainty can be mitigated through additional design work. This work is being conducted by the Company currently but, given the fast track approach, the risk is unlikely to be fully mitigated. The risk is however lower than typical for a conceptual design given that some of the equipment has recently been purchased and construction work was recently completed on site at rates that are known. • The Capex includes a 30% contingency which is suitable for the level of accuracy.
Operating costs	• The design of the plant modifications is at conceptual stage and the final operating cost is uncertain.	• A large portion of the operating costs are based on signed and negotiated contracts and have a high degree of confidence. • Additional test work is required to confirm the reagent consumption and mass recovery.
Market Related	• The previous off-take agreement was negotiated at a price substantially lower than the forecast price. This would negatively impact the economics of the project; • The marketing reports forecast a tightening of supply that should support the price in the future. However, the supply and demand forecasts are estimates and the price can deviate from that predicted by the supply and demand balance in the short term and a lower price than forecast cannot be ruled out and has been included in the sensitivities; and • The exchange rate remains volatile. It has strengthened recently, lowering the received price in ZAR for material that would be sold on the export market. Further strengthening is possible.	• The off-take is being renegotiated to take into account that higher prices are prevailing and the client has indicated that they expect the forecast prices to be representative of the new agreement; • This risk cannot be readily mitigated; and • Forward cover can be taken out over short periods but this is not common and generally the risk is not mitigated.

5.9 Economic Analysis – Valuation

5.9.1 Technical Review Basis

The technical review was executed based on data received from the Company. The data included the Techno-economic model as well as information providing additional detail on Capex and Operating expenditure (Opex), particularly as it pertained to the proposed plant modifications. The data was analysed to ascertain whether there are any clear omissions or risks present, with detailed reviews carried out by the various discipline engineers. Further to this, sensitivity analyses were conducted to estimate the NPV of the project and confirm economic viability. SRK notes that sunk capital was excluded as was the debt at corporate level. The analysis thus presents the economics of the project as a standalone project independent of the Capex previously invested (approximately USD120 million).

5.9.2 Techno-Economic Model Parameters

The model received from the Company was based on a mined tonnage of 63.6 Mt, which represents the current Probable Ore Reserve. The total waste to be mined in order to access the orebody is approximately 209 Mt. The effective stripping ratio is approximately 3.3 tonnes of waste per tonne of ore. The estimated weighted average price over the LoM would be USD135/tonne (USD 111 real), which translates into a total revenue of ZAR27.5 billion (USD1.4 billion). This revenue is calculated at an exchange rate of 12.73 ZAR:USD in 2019 and with depreciation thereafter as shown in Table 5.22.

The total production and revenue for Elandsfontein is summarised in Table 5.21 below. The production and revenue profile over the LoM is shown in Table 5.22. This table shows that the ore tonnes mined peaks in year 2026 at 5.25 Mt. The waste tonnes mined increases over the LoM, with the largest tonnage, 22 Mt, excavated in year 2032.

Table 5.21: Elandsfontein Production Profile and Revenue

Production Profile		
Item	**Unit**	**Total**
Tonnes ore mined	Mt	63.6
Tonnes waste mined	Mt	209
Strip ratio	-	3.3
P_2O_5 feed grade	%	9.6
Revenue		
P_2O_5 product	Mt	10.4
Market P_2O_5 price (inflated)	USD/tonne (Free on Board (FOB))	135
Phosphate revenue	ZAR billion	27.5
Phosphate revenue	USD million	1 406

Table 5.22: Production Profile and Revenue over the LoM

Production Profile																
Item	**Unit**	**Total**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
Tonnes ore mined	Mt	63.6	0.625	4.89	5.09	5.09	5.09	4.98	5.16	5.25	5.10	5.10	5.00	5.07	5.03	2.16
Tonnes waste mined	Mt	209	1.63	13.0	14.0	14.3	14.6	14.9	15.1	15.4	16.6	18.6	19.2	20.2	22.0	10.0
Strip ratio	-	3.3	2.6	2.7	2.7	2.8	2.9	3.0	2.9	2.9	3.3	3.7	3.8	4.0	4.4	4.6
P_2O_5 feed grade	%	9.6	9.37	9.68	9.75	9.57	9.57	9.59	9.52	9.57	9.89	9.56	9.69	9.67	9.51	8.70
Revenue																
P_2O_5 product	kt	10.4	98.4	804	844	822	820	803	822	851	877	842	838	845	820	314
Market P_2O_5 price (inflated)	USD/tonne (FOB)	135	96	105	113	114	119	125	131	137	143	149	154	158	163	168
Phosphate revenue	ZAR million	27 465	125	1161	1377	1419	1559	1695	1923	2208	2518	2669	2891	3170	3354	1396
Phosphate revenue	USD million	1406	9	84	95	94	98	100	108	117	125	126	129	134	134	53
Forward exchange Rate	ZAR:USD		13.15	13.75	14.42	15.16	15.98	16.88	17.87	18.93	20.07	21.25	22.44	23.70	25.03	26.43

Opex (Nominal Terms)

The Opex is divided into fixed and variable costs. The costs have been reviewed in more detail in Section 5.5. Provision has been made for a pre-feasibility level study of the revised plant design. The final parameters for plant performance are still to be confirmed by additional test work, therefore at this stage conservative assumptions have been adopted because the operating parameters remain subject to potential variation.

The Owners cost comprises both the Environmental and Owners cost. The Environmental cost makes up only 6.8% of the total ZAR721 million (USD49 million) over the LoM.

The variable costs form the bulk of the Opex. These costs will be incurred over the LoM starting from 2019 to 2032. The total fixed costs amount to ZAR2.7 billion (USD178 million) and the variable costs to ZAR9.6 billion (USD634 million). The processing costs are the largest portion of the fixed Opex. The total Opex amounts to ZAR12.4 billion (USD812 million). Opex has been inflated at 5% per annum. The range targeted by the South African Reserve Bank is between 3 and 6% but inflation has on average been higher than the mid-point of 4.5%, particularly power and labour inflation, hence the slightly higher figure used in the TEM.

The Opex for Elandsfontein is included in Table 5.23.

Table 5.23: Opex for Elandsfontein Included in the Cashflow Model

Production		
Fixed Costs	**USD**	**ZAR**
Mining (million)	27	502
Processing (million)	79	1 497
Owners (million)	40	721
Variable Costs		
Mining (million)	243	4 753
Processing (million)	162	3 085
Logistics (million)	97	1 836
Total		
Total operating cost (million)	648	12 394
Unit operating cost (/tonne RoM)	10	194
Unit operating cost (/tonne product, inflated)	62	1 190
Unit operating cost (real, 2% USD discounting)	3.4	

Capex (Nominal Terms)

The bulk of the Capex has already been spent and therefore this is included for reference in the TEM but not in the calculation of the NPV. The conceptual study estimates that ZAR72 million (USD6 million) will be spent in 2018 and ZAR123 million (USD9 million) in 2019 to complete the plant modifications if the selected process route proves effective.

The summary of the Capex required is shown in Table 5.24.

Table 5.24: Capex for Elandsfontein, Including Sunk Capital

Capital Costs	Unit	Total incl. additional	Additional
Plant	ZAR million	1 089	195
Stripping activity asset	ZAR million	46	
Access road	ZAR million	129	
Electricity sub station	ZAR million	56	
Mineral exploration asset	ZAR million	269	
Total			
Total capital	ZAR million	1 589	195
Total capital	USD million	131	15

Cashflow Calculations (Nominal Terms)

The Earnings before Interest, Taxes, Depreciation and Amortisation (EBITDA) is calculated as the revenue received through commodity sales less the Opex. As there are no depreciation or amortisation costs included in the cashflow model, the EBIT is the same as EBITDA.

The mining royalty that the mine is liable for is an average of 3.3% of the revenue. The total royalty is calculated to be ZAR1802 million (USD91 million) over the LoM. A further land use agreement cost of ZAR247 million (USD13 million) is payable. The discount rate of 8% is not calculated from first principles but considered reasonable for discounting USD cashflows in a nominal terms model.

A summary of the cashflow calculations is presented in Table 5.25.

Table 5.25: Cashflow Calculations

Cashflow Calculations	Total (USD million)	Total (ZAR million)
EBITDA	758	15 071
Capex	131	**1 589**
Land use agreement	13	**247**
Mining royalty	91	**1 802**
Pre-Tax Cashflow	523	11 432
Tax	143	**3 013**
Cashflow	406	8 912
NPV (at 8% nominal discount rate)	262	

5.9.3 Sensitivity Analyses

Sensitivity analyses were incorporated into the TEM by SRK. SRK included the following variables in the sensitivity analyses:

- *Changes in the commodity price*: The current forecast price of the commodity is taken as the base case for the NPV. Two scenarios were analysed on both the up and downside of the base case to test the NPV sensitivity. The scenarios included 80, 90, 110 and 120%;
- *Changes in the expected Opex*: The Opex associated with the modified plant is still relatively uncertain. SRK, therefore, included two sensitivity values on either side of what is considered the base case although the final cost is typically higher rather than lower. The Opex was varied between 80 and 120% of the base values;

- *Changes to the new Capex (for the plant modifications)*: The design of the modifications is fairly advanced but still at a conceptual level and the final cost remains uncertain. Elandsfontein have included a 30% contingency, which is considered reasonable. The sensitivities included in this analysis only accounts for Capex for the modifications, which are not expected to be lower than the current estimate. The percentages of the base Capex that were tested included 110, 120, 130 and 140%;
- *Mass recovery variability*: The final process mass recovery is not certain but is not expected to greatly exceed the recovery in the TEM, or to decrease by more than 20%. A range was tested between 90 and 110% of the base recovery; and
- *Changes in the discount rate*: The discount rates used to assess the NPV calculations included 6, 7, 8, 9 and 10%. The current base case discount rate is 8%.

The results of the sensitivity analyses are shown in Table 5.26 below.

The current base case NPV is USD262 million. All tested scenarios showed a positive NPV. A 20% higher price increased the base NPV to USD359 million.

A 10% lower mass yield recovery reduced the NPV from USD262 million to USD214 million, while a 10% increase in mass yield recovery produced an NPV of USD311 million. Confidence in the process recovery of the modified plant will be a key factor in confirming the viability of the project.

Changes in Capex had the smallest impact on the NPV, primarily because the bulk of the Capex has already been spent. Increasing the remaining Capex by 40% reduced NPV by approximately USD4 million.

Table 5.26: Sensitivity Analyses on the NPV (post tax)

Factor	Sensitivity analyses results					
Price sensitivity	Sensitivity scenarios	80%	90%	100%	110%	120%
	Change from base case	- 20%	- 10%	0	+ 10%	+ 20%
	NPV (USD million)	165	214	262	311	359
Opex sensitivity	Sensitivity scenarios	80%	90%	100%	110%	120%
	Change from base case	- 20%	- 10%	0	+ 10%	+ 20%
	NPV (USD million)	311	286	262	239	215
New Capex sensitivity	Sensitivity scenarios	100%	110%	120%	130%	140%
	Change from base case	0	+ 10%	+ 20%	+ 30%	+ 40%
	NPV (USD million)	262	261	260	259	258
Recovery sensitivity	Sensitivity scenarios	80%	90%	100%	105%	110%
	Change from base case	- 20%	-10%	0	+ 5%	+ 10%
	NPV (USD million)	164	214	262	287	311
Discount rate sensitivity	Sensitivity scenarios	6%	7%	8%	9%	10%
	Change from base case	- 25%	- 12.5%	0	+ 12.5%	+ 25%
	NPV (USD million)	308	284	262	242	225

The NPV is currently positive, but some degree of uncertainty remains, and the final capital cost, operating cost and recovery are yet to be accurately estimated. A Probable Ore Reserve has been declared as the proposed plant modifications still have a level of uncertainty associated. The completion of the test programme will increase the confidence in the economics prior to the initiation of the capital programme.

The recent weakening of the Rand along with other emerging market currencies and the subsequent adjustment of exchange rate forecasts has translated into an improved base NPV. NPV has been further improved by the improvement in the outlook for Phosphate in USD terms. The combined impact has led to a sharp increase in NPV (from USD 173 to USD 262). However, there is added uncertainty arising from the relatively sudden change, particularly in the exchange rate.

The long term impact of the recent events is not clear and the outlook is likely to change. The volatility is considered to increase the uncertainty associated with the NPV. In addition to the possibility of the exchange rate recovering (or the current trend establishing a new, weaker level) it is not clear how the cost forecasts may be impacted. It is likely that fuel, reagents and many other cost drivers will experience higher than forecast inflation as the primary and secondary effects of the weakening of the Rand filter through the economy.

It is also not clear whether the weakness in emerging market currencies will affect the outlook for USD prices. At the time of writing the developments are positive for the project and, despite the higher volatility and corresponding uncertainty, make the economics of the project more robust.

6 Conclusions and Recommendations

6.1 Mineral Tenure

Elandsfontein holds a Mining Right, granted on 26 November 2014 in terms of Section 23(1) of the Minerals and Petroleum Resources Development Act 28 of 2002 (MPRDA), effective 30 January 2015, for (mining) phosphate and silica sand. The Mining Right was appealed, but in a letter dated 14 December 2017 the Minister of Mineral Resources confirmed the decision to grant the Mining Right, effectively dismissing the appeal.

6.2 Geology

The Elandsfontein phosphate deposit is situated in the South Western coastal region of South Africa. This area is underlain by the Miocene and Palaeocene Sandveld Group comprising of the Elandsfontyn, Varswater, Velddrif, Langebaan, Springfontein Hill and Witzand Formations. This Group is dated between the Miocene (23 Ma to 5.3 Ma) and the Pliocene (5.3 Ma to 2.6 Ma). The Varswater Formation hosts the Elandsfontein phosphate deposit. The Sandveld Group unconformably overlies the Neoproterozoic Malmesbury Group and plutons of the Cape Granite Suite.

The Varswater Formation is formed by estuary and marine sediments, which locally overly the Elandsfontyn Formation and consists of poorly sorted angular sands and gravels grading upwards into carbonaceous clays and peaty material, known as the Langeenheid Clay Member.

6.2.1 Deposit Type

The Elandsfontein phosphate deposit belongs to the sedimentary phosphate deposit type known as phosphorites. These deposits have been found on most continents and it is estimated that the world inventory of this style of deposit exceeds 200 000 Mt. They range in age from the Precambrian to recent but the commercially exploited deposits are mainly of Phanerozoic age. In South Africa, and specifically in the Western Cape Province both authogenic and diagenetically modified phosphorite deposits have been identified by Birch (1990) in the Langebaan area. In the Saldanha embayment deposits of calcium phosphate formed during the Miocene and Pliocene periods. The Elandsfontein deposit is a diagenetically modified phosphorite deposit.

6.2.2 Mineralisation

The phosphate mineralization at Elandsfontein is in the form of the calcium phosphate mineral apatite that presents itself as one of three types that may be described in situ from top to bottom as:

- Rounded reworked orange coloured phosphate grains in the terrace ores;
- A mixture of the orange grains in addition to the crystalline dark green apatite in the unconsolidated F and G Units; and
- As a phosphate matrix between mainly quartz grains in cemented phosphorite lenses in the F Unit, but mainly in the G Unit.

The host of the apatite mineralization consists mainly of poorly sorted, angular quartz sands and gravels, alternating with fine sands and silts.

6.2.3 Exploration Drilling and Sampling

The exploration of the Elandsfontein phosphate deposit was done in three successive drilling campaigns. The initial programme commenced in 2013 with diamond drilling using a triple tube core

barrel design. Forty-one vertical, HQ size, holes were drilled (918 m). The water saturated unconsolidated nature of the succession resulted in core losses towards the bottom of each run and an average recovery of approximately 80% in the F and G Units. To improve on the core recovery problems in the subsequent programme, 26 vertical RC holes were drilled from (839 m), but uncertainties due to sample recovery was still a problem. Much improved sample recovery was achieved with the last programme of sonic drilling which resulted in an average core recovery of 90%. 11 vertical holes were drilled (567 m). It was demonstrated through the testing of the particle size distribution in the individual samples that the earlier drilling did not result in a preferential loss of the fines material. During 2017 an additional 13 RC holes were also drilled (427 m) in support of the pit development for the first box cut.

6.2.4 Sampling, Chemical Analyses and Quality of Results

Systematic samples were collected from all the drilling and submitted to two independent primary laboratories and two independent umpire laboratories. A satisfactory level of accuracy and precision was achieved and demonstrated through the insertion of independent blank, duplicate and CRM samples. Samples from the two significant drilling programmes have also been submitted to independent, accredited laboratories that confirmed the primary results. SRK is of the opinion that the chemical analytical results are suitable for Mineral Resource estimation purposes.

6.2.5 Relative Density

Relative densities were measured for the more competent material obtained during the Diamond Drilling programme. These samples were covered with wax and the density was determined using the Archimedes bath method.

SRK recommended measurements of the in situ dry density, using the sand replacement method. These measurements were made within the dewatered pit at the top of the F-Unit and the results confirmed the results previously obtained from the same stratigraphic interval.

SRK is therefore of the opinion that the relative density measurements available are suitable for tonnage conversion and Mineral Resource estimation.

6.3 Mineral Resource and Classification

6.3.1 Mineral Resource Estimation and Modelling Techniques

Snowden used variable length compositing, however SRK was of the opinion that fixed width (1.5 m) compositing would give equal support and less variability for the composites used for variography and estimation. SRK however does not regard this as having a significant effect on the estimate.

No capping was applied by Snowden, SRK was of the opinion that the high grade outliers should have been capped, however SRK do not regard this as having any material effect on the outcome.

Snowden defined two domains, the Basin and Terrace domains. SRK regards this approach as being acceptable and justified.

6.3.2 Variography

SRK are of the opinion that the parameters used by Snowden to generate the semi variograms were not optimal and that the ranges modelled by Snowden did not agree with the experimental results. SRK independently generated semi-variograms for the Basin domain that showed good grade continuity and gave similar ranges to those obtained by Snowden. Snowden stated that sufficient sampling now exists in the Terrace area, to also be able to generate semi-variograms for this domain independently from the Basin domain. SRK does not share this opinion and were unable to

generate a meaningful semi-variogram for the Terrace domain. SRK are of the opinion that the data in the Terrace area does not show sufficient grade continuity to justify a Measured Classification in this area.

6.3.3 Estimation Methodology

Snowden used a 3D block model for grade estimation. In SRK's opinion, the block model was appropriate for the spacing of the drill hole data and the proposed smallest mining unit. Snowden combined the F and G Units for estimation into parent cells within the 3D block model, using OK to estimate the percentage of P_2O_5, MgO, Fe_2O_3, Al_2O_3, SiO_2 and CaO. Grade estimation was run in a three pass process. The 2014 dry bulk density measurements were again used for the IPD[2] tonnage estimate in 2017.

SRK is satisfied with the estimation methodology used by Snowden and that the grade estimates reflect the data used for the estimate.

6.3.4 Validations

SRK is satisfied that Snowden has done sufficient validations as required by international reporting codes.

6.3.5 Mineral Resource Classification

The 2017 model was classified by Snowden into Measured, Indicated, Inferred and unclassified Resource based on the data quality, drill spacing, geological and grade continuity, and drill hole sample recovery and the reconciliation results from the initial mining. SRK validated the figures reported by Snowden for their Elandsfontein Mineral Resource dated 28 February 2018.

SRK regards Snowden's Mineral Resource classification as being acceptable in the Basin domain. However SRK downgraded the Measured Resource in the Terrace Domain to an Indicated Resource, due to a lack of demonstrable continuity of the data within this domain.

Snowden did not apply any geological losses; SRK is of the opinion that they should quantify the geological losses and make provision for them.

The SRK audited 2018 Elandsfontein Mineral Resource is presented in Table 6.1.

Table 6.1: SRK Audited Elandsfontein Mineral Resource at 31 October 2018, (above a 4.0% P_2O_5 cut-off)

Gross								
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**Grade (%Al_2O_3)**	**Grade (%MgO)**	**Grade (%Fe_2O_3)**	**Grade (%CaO)**	**Grade (%SiO_2)**	**Contained P_2O_5 (Mt)**
Measured	47.5	10.31	1.18	0.20	0.98	14.9	69.8	4.90
Indicated	30.3	5.14	1.15	0.12	0.85	7.1	82.9	1.56
Inferred	23.3	5.48	1.15	0.13	0.95	7.5	82.5	1.28
Total	**101.1**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**7.73**
Net Attributable (74% attributable to the Company)								
Measured	35.2	10.31	1.18	0.20	0.98	14.9	69.8	3.62
Indicated	22.4	5.14	1.15	0.12	0.85	7.1	82.9	1.15
Inferred	17.2	5.48	1.15	0.13	0.95	7.5	82.5	0.94
Total	**74.8**	**7.65**	**1.16**	**0.16**	**0.94**	**10.85**	**75.88**	**5.72**

Note: All grades are reported to two significant figures. Rounding may cause minor discrepancies in this table
Source: Snowden, 2018 and modified by SRK.

6.4 Mining Method and Ore Reserves

6.4.1 Ore Reserves

There is sufficient confidence in all modifying factors to declare an Ore Reserve, based on a PFS. The confidence in the plant recoveries and product specification being achieved is limited due to the level metallurgical test work as described in Section 5.3. The prescribed test work results will increase the confidence in these modifying factors. The capacity of the mine being able to blend the F1, F2 and G ore horizons will also need to be proved.

SRK has classified the planned Measured and Indicated Mineral Resources to Probable Ore Reserve to cater for the current level of confidence in the modifying factors discussed above and in Section 5.3.

The Ore Reserve was reported from the production schedule with the following modifying factors:

- Mining Recovery 1.35%; and
- Dilution 5%.

The Ore Reserves for Elandsfontein, based on the mine planning process above, is presented in Table 6.2.

Table 6.2: Elandsfontein Ore Reserve as at 31 October 2018, (above a 4.0% P_2O_5 cut-off)

Gross			
Class	**Quantity (Mt)**	**Grade (%P_2O_5)**	**P_2O_5 Content (Mt)**
[1]Proven			
Probable	63.63	9.60	6.11
Total	**63.63**	**9.60**	**6.11**
Net Attributable (74% attributable to the Company)			
[1]Proven			
Probable	47.09	9.60	4.52
Total	**47.09**	**9.60**	**4.52**

Note:
[1]No Proven Ore Reserves declared due to the limited confidence in processing modifying factor.

6.4.2 Geotechnical Consideration

The impression gained during the site inspections indicates a commitment and adherence to safe mining practice. Some geotechnical risks have been identified, however these are adequately accounted for in the design and mining strategy.

The CoP is comprehensive for the scale of mining and nature of the mining environment, and procedures are in place to comply with the required standards. The conclusion reached is that there are no geotechnical factors that could prevent the Company from achieving future production.

6.4.3 Hydrogeology

Groundwater

The current dewatering and re-injection scheme at the mine is operating successfully. The potential impacts to the mining schedule, safety (due to flooding and slope stability) and the environment are high if the dewatering scheme were to fail. There is redundancy in the system in terms of additional boreholes that are currently on standby, and there is an emergency power generator. The installed infrastructure is regularly checked and appropriately maintained, and monitoring is diligently undertaken and reported. The likelihood of failure is low provided infrastructure is regularly checked

and appropriately maintained, monitoring is diligently undertaken and reported, and appropriate planning is undertaken (including consideration of seepage quality and quantity from tailings backfill, the extension of the mine pit beyond the current line of dewatering boreholes, the potential for cavity intersection [resulting in temporary high inflows] during mining, and the potential for rainfall flooding the pit). The water-retention characteristics of the material within the mine pit area, the geometry of dewatering (only down to the clay horizon a few metres below the ore body) and the potential for seepage from tailings, result in there being a high likelihood that in-pit sump pumping will continue to be required at a rate of approximately 15 – 25 L/s. This has been factored into the mine plan and schedule.

Specialist studies, backed up by latest monitoring results have all shown insignificant groundwater impact. However, continued monitoring and appropriate reporting and stakeholder discussions are critical in this sensitive environment. The WUL is also currently subject to an appeal that has been referred to the Water Tribunal and is unlikely to be decided soon. Although unlikely to succeed, if this appeal forces suspension of dewatering, mining would be forced to halt and there would be a high risk of pit wall failure (materially affecting future mining), along with associated environmental impacts.

Surface water

Storm water management at the site is currently effective. Continued maintenance and management is required to ensure that the pit and dams do not flood, and that contamination is not spread from dirty areas to the environment. The process water treatment plant has not yet been installed. The primary risk is that continued rising levels of 'dirty' water in the storm water dams (from continued pumping of in-pit sump water and direct runoff from the plant), will result in exceedance of the storm water dam capacity which will eventually overtop. This risk will persist until the process water treatment plant is commissioned. The Company has requested that the two 'drainage line/water course alteration' activities of the WUL (Section 21(c) and Section 21(i)) be removed. However, if this is not agreed by DWS then further action will be required in terms of appropriate identification and management of the alleged drainage channels/water courses.

6.4.4 Softs Stockpile

The SS is designed to accommodate 25.5 million tonnes of concentrator tailings and mine overburden over the initial 25 month period of mine operations. This is adequate to accommodate the tonnage indicated for the LoM plan. The facility covers an area of approximately 87 ha, with a maximum termination height of 42 m and overall side slopes of 1V:4H. The facility was designed for co-disposal of 79% by mass of soft overburden and 21% by mass of filtered tailings. It is understood that the ratio may alter, however, the overall quantity of material is expected to remain the same.

The stability assessment of the SS indicates that it will have an acceptable factor of safety against failure in accordance with legislative requirements and international best practice.

Drainage facilities have been designed in accordance with required standards and include stormwater collection channels reporting to a 30 000 m^3 storm water dam. Two decant pipes have been allowed for.

The SS has a Low Risk safety classification in terms of the requirements of the SABS Code of Practice for Mine Residue Deposits (SABS 0286:1998).

The SS has been designed as a Class D landfill assuming a Type 4 waste. Subsequent testing indicates that although the material classifies as a Type 3 waste, the elevated concentrations of certain determinands are not considered to be enriched and the leachate concentrations are below threshold values in the soft overburden but are elevated in the simulated tails used for the tests. For

this reason, a risk based approach was recommended to assess and mitigate as necessary the impacts on groundwater.

The initial geochemical testing carried out on tailings and overburden samples to date indicate that there may be some potential risks to the groundwater posed by leachates emanating from the SS and open pit backfill. The risks are currently not quantifiable but are being assessed through continued leachate test work programmes and ground water modelling.

The operating costs for the soft overburden are estimated at ZAR161.5/tonne (USD13.4/tonne) and the tailings at ZAR31.5/tonne (USD2.6/tonne) which is seen to be market related.

The geochemical testing carried out on tailings and overburden samples to date indicate that there are potential risks to the groundwater posed by leachates emanating from the SS and open pit backfill. The risks are currently not quantifiable but are being closely monitored through the ground water management plant and geochemical ground water modelling.

The following recommendations are proposed, and are being considered by the Company, as the project progresses into development and production:

- Soil parameters of the tailings feed used in the design should be confirmed through laboratory testing once a representative sample is available, and further through in situ sampling during Phase 1 of the development. A sample has recently been taken to progress such testing.
- The stability assessment should be reassessed should the ratio of soft overburden to filtered tailings vary significantly and/or the soil parameters differ from the design assumptions.
- A detailed design should be developed for the in-pit backfill subsequent to completion of the SS.

6.5 Metallurgy and Mineral Processing

6.5.1 Metallurgy

Numerous metallurgical investigations have been undertaken. Further variability and pilot work has been prescribed in order to improve the level of confidence in the process recovery and provide potential opportunities for increased plant performance. Issues that need to be addressed include the following:

- The metallurgical response of individual ore types to the selected RR flotation route:
    - Mintek, TAT and Arrmaz have undertaken tests on F1 and F2 samples and shown that flotation performance can be improved with appropriate circuit configuration and operating parameters. The circuit recently proposed by Mintek however, is significantly more complex than those proposed by others. Flotation performance was also shown to be extremely sensitive to operating conditions. Mintek are accordingly undertaking further investigation into simplify their circuit and making it more robust. Further variability testing is therefore recommended to assess the performance of individual ore types once the circuit configuration and operating parameters have been finalised;
- The metallurgical response of ore blends to the selected RR flotation route:
    - Historical work completed at Eriez showed the response of blended material to RR flotation, in conventional and column cells. Mintek was able to achieve similar performance to that obtained at Eriez, on the individual ore horizons. Further variability testing is however recommended to assess the performance of ore blends under the optimised RR flotation conditions;

- The metallurgical performance of ore located spatially across the deposit:
    - Eriez samples were concentrated in Year 4 – 8 of mining and the TAT/Arrmaz represented Year 1 – 3 of mining. Notwithstanding this, further variability testing is recommended to assess the performance under the optimised RR flotation conditions, of individual ore types located spatially across the deposit; and
- The possibility that bench scale metallurgical recoveries will not be achieved in the industrial scale plant:
    - A programme of pilot testing is recommended to improve confidence in the selected flotation configuration and operating conditions.

Elandsfontein have advised that it is currently planned to run three pilot campaigns. Two will process the main ore types, namely F1 and F2. The third will process a blend of ores. Issues, such as the effect of water chemistry in closed circuits, are difficult to investigate at bench scale. Pilot plant testing would increase the level of confidence in predicting full scale plant performance, particularly if recycling of site water can be included in the layout. Elandsfontein have advised that the use of site water is planned in the pilot campaigns. SRK strongly supports this proposal but cautions that careful consideration will have to be given to the composition of the bulk samples. It is further recommended that sub-samples of the pilot plant runs be subjected to variability testing to ensure a link between the pilot plant results and variability results.

Test results have shown that up to 30% of the P_2O_5 content can report to the -20 µm fraction, depending on the grind size. On the basis of current assumptions, just over 20% of the P_2O_5 contained in plant feed reports to the -20 µm slimes fraction that is rejected to tailings. There is accordingly a risk that a higher proportion of P_2O_5 can be lost to tailings. Equally, with this fraction now collected separately, there is an opportunity to develop a process to recover some of the P_2O_5 in the -20 µm fraction. This will not be without its challenges, firstly due to settlement difficulties and secondly because of technology constraints with such fine material. Notwithstanding such challenges, it is recommended that this opportunity be pursued as a secondary priority.

6.5.2 Mineral Processing

The evolution of the process route, compounded by initial low efficiencies of the originally installed RR flotation circuit, is indicative of somewhat challenging metallurgical characteristics, often experienced with sedimentary phosphate deposits. However, analysis of the overall spectrum of historical and recent test results, plus an understanding of the causes behind initial non-performance as assisted by experts within this field, support the decision to remain with the RR flotation configuration.

Elandsfontein, with assistance of phosphate processing experts, identified a number of key technical reasons for the non-performance of the installed plant:

- Non Representative Feed:
    - Relocation of the boxcut and delayed dewatering resulted in the total ore package not being accessible for mining ahead of commissioning. The plant was accordingly commissioned on ore that differed significantly in terms of mineralogy, grade and particle size distribution from the previous composite samples that were tested. The coarser feed impacted on the froth carrying capacities of the column cells, while lower grade required increased froth carry over further challenging the circuit; and
    - It is anticipated that ongoing dewatering will allow access to virtually the complete ore package when the plant is recommissioned which should allow the mine to process material as per its original mine plan;

- Impact of Slimes:

  Experts advised that the use of amines for reverse flotation of silica from phosphate requires clean particle surfaces and water that is free of slimes and dissolved salts. It was evident during commissioning that slimes handling was inefficient and impacted negatively on flotation performance. In addressing the slimes issue, a number of actions, considered appropriate solutions by SRK subject to confirmation in the planned pilot test programme, are proposed:

  - The desliming cut point will be increased from 10 µm to 20 µm. This should reduce slime related problems but will result in increased mass and P_2O_5 losses to slimes;
  - Though not strictly related to sliming, it is planned to replace the split coarse and fine flotation circuits with a single circuit handling the composite size range; and
  - A new thickener and ancillary equipment will be installed to separate the slimes and tailings circuits. This should significantly reduce the impact of slimes and the effect of residual reagents and flocculant. The impact if any, of dissolved salts can only be assessed once the industrial plant and water circuits stabilize;

- Apatite Rimming:
  - A RoM sample taken after the last commissioning run was submitted for Scanning Electron Microscopy analysis. It was evident that certain quartz grains had coatings of ultra-fine apatite and clay cement binding the silica particles, as well as occasional rims comprising only of apatite. It is possible that such rimming may impact negatively on flotation performance, in that such a rimmed particle may present itself as apatite in flotation, resulting in contamination of the concentrate by silica;
  - Since operations were discontinued, Arrmaz demonstrated the benefit of attritioning, (P_2O_5 recovery of approximately 70% for deslimed and attritioned feed versus approximately 62% for deslimed feed). Attritioning did however, result in increased slimes generation and associated loss; and
  - In order to address this concern, two attritioners will be incorporated into the modified comminution circuit.

- Inadequate Conditioning:
  - The original plant design did not include dedicated conditioning tanks, instead relying on in-circuit conditioning. Controlled conditioning is considered to be important for optimum column flotation of silica; and
  - The modified flotation circuit will accordingly be provided with a conditioning tank and pumps.

- Extended Ramp Up:

  Given the difficulties associated with the initial start-up, a six month ramp up has been allowed for.

Subsequent to these assessments, further bench scale testwork undertaken by TAT but in particular that undertaken by Mintek, resulted in a significantly modified flotation circuit, including multiple stages of attritioning and cleaning. SRK concurs that the identified technical issues very likely contributed to the non-performance of the Elandsfontein process plant. In addition positive test results support the recommended modifications to the flotation circuit. It is thus reasonable to expect that the proposed remedial actions and circuit modifications will allow the plant to meet its baseline targeted performance, subject to the various ore types performing in line with test results. As mentioned, Kropz plan a further programme of pilot and variability testing. It is important in this

regard to understand that such testing does not remove the risk of reduced process performance, it merely improves the level of confidence in its likely success, as well as providing potential opportunities for increased plant performance.

A number of project risks were identified, of which the following are regarded as key process risks:

- That results achieved under bench scale laboratory conditions are not achieved at industrial scale;
- That plant feed grade and/ or product size distribution varies to the extent that it impacts negatively on plant throughput and recovery;
- That unit process not yet tested at full capacity do not perform according to design specifications; and
- Attritioning results in excessive fines loss.

It should finally be cautioned that process performance parameters and operating costs applied in the TEM might not be realised and this presents uncertainty to the project.

6.6 Infrastructure

The infrastructure was found to be substantially complete and appropriate. The plant and infrastructure are well constructed, and the materials and equipment are of a high quality.

Adequate provision has been made for strategic spares and standby equipment.

The plant is being maintained in a good condition, so restarting should not be problematic. Systems are in place to provide adequate maintenance when the operation restarts.

6.7 Capital Costs

To date, the Company has spent ZAR1 393 million (approximately USD120 million) on project Capex to construct the processing plant and infrastructure, initial mining and capitalised working costs. In order to proceed with the modifications required to restart production, the Company estimates to spend an additional ZAR195.9 million (approximately USD16 million) capital on modifications to the plant, based on a conceptual design supplied by DRA in their document “Plant Retrofit: Scoping Study (Interim Update)” dated 11 April 2018 and an updated schedule of costs as at 10 April 2018.

Although the level of engineering design done to prepare the capital costs and cash flow is at a scoping level, it is SRK’s opinion that the costs are reasonable to construct the proposed modifications.

Variability and pilot plant test work, amongst others, which is expected to confirm the design and hence the Capex, is ongoing. This is expected to take place in the first six months of the project cash flow.

In the opinion of SRK, however, it is unlikely that the final capital requirements will exceed the total stated here.

6.8 Environmental and Social Impacts

- *Regulatory Approvals: Conclusions*: Elandsfontein’s initial EMPr was approved by the DMR, but an upgrade to the EMPr has been requested. Approval of this EMPr is a formality, but is pending at present. The appeal against the WUL has been referred to the Water Tribunal and is unlikely to be decided soon. While the appeal is deemed by Kropz and their legal counsel (Werksmans

Attorneys) to have little chance of success, it may have significant geotechnical implications if the WUL is not upheld.

- *Environmental and Social Management: Conclusions*: Environmental and social management was of a high standard during construction. The Company is preparing an EMS for operations.
- *Recommendation:* The Company must prepare and implement a functional EMS, supported by a larger SHE staff complement once operations commence, to ensure continual improvement of environmental management and performance.
- To date, no significant environmental and social risks associated with operation of the mine have been identified, since the mine is not yet operational.

6.9 Mine Closure and Liabilities

Despite approval by the DMR for the Company's financial provision for environmental rehabilitation, SRK is of the opinion that Elandsfontein is not currently aligned with the legal requirements for closure provision, with the current estimate not being a true reflection of the current liability. Furthermore, the operation has not yet made a provision to the DMR to cover the quantum of the current liability estimate, albeit that this estimate is in SRK's opinion, insufficient to address rehabilitation requirements in the event of unplanned closure.

6.10 Economic Analysis - Valuation

SRK notes that the LoM plan along with the proposed plant modifications generates a base NPV of USD262 million. The NPV remains positive under all of the scenarios tested. It is noted that this NPV does not include sunk capital or debt held at corporate level but reflects only the project economics.

The economics are very sensitive to recovery and confidence in the forecast recovery is a key driver of the overall viability. The ability of the proposed plant modifications to produce a saleable product and achieve the baseline mass recoveries will be key.

The recent weakening of the Rand along with other emerging market currencies and the subsequent adjustment of exchange rate forecasts has translated into an improved base NPV. NPV has been further improved by the improvement in the outlook for Phosphate in USD terms. The combined impact has led to a sharp increase in NPV (from USD 173 in April to USD 262). However, there is added uncertainty arising from the relatively sudden change, particularly in the exchange rate.

The long term impact of the recent events is not clear and the outlook is likely to change. The volatility is considered to increase the uncertainty associated with the NPV. In addition to the possibility of the exchange rate recovering (or the current trend establishing a new, weaker level) it is not clear how the cost forecasts may be impacted. It is likely that fuel, reagents and many other cost drivers will experience higher than forecast inflation as the primary and secondary effects of the weakening of the Rand filter through the economy.

It is also not clear whether the weakness in emerging market currencies will affect the outlook for USD prices. At the time of writing the developments are positive for the project and, despite the higher volatility and corresponding uncertainty, make the economics of the project more robust.

In conclusion, Elandsfontein have constructed and partially completed commissioning of the majority of the project with the exception of the final plant modifications proposed to facilitate the production of a saleable product. The engineering work for the proposed process plant design is at a level between conceptual and PFS. There are no major concerns with the existing infrastructure

or equipment. Successful completion of the proposed metallurgical test programme would be a suitable basis for committing to the balance of the proposed capital programme.

6.11 Risks

The risk factors associated with metallurgy and the processing plant are regarded as material. The process recoveries applied in the TEM might not be realised and this presents uncertainty to the project.

The future plant performance may be considered as the primary project risk. A number of process modifications are planned based on the input from suitable specialists and the design and costing has been executed by appropriately qualified engineers Given the planned mitigation measures, the probability of successfully re-commissioning the upgraded Elandsfontein plant is considered to be good, subject to the metallurgical characteristics of future ore types not differing from those used in predicting process performance. The additional test work that has been commissioned, is expected to further reduce any uncertainty and it is understood that this will be completed prior to the capital programme being initiated. The pilot test work is, in particular, expected to further increase the level of confidence in the proposed modifications and may provide opportunities for Elandsfontein to further increase plant performance over time. Despite the commissioning being halted, process challenges are now better understood.

In conclusion, Elandsfontein have constructed and partially completed commissioning of the majority of the project with the exception of the final detailed design of the plant modifications proposed to facilitate the production of a saleable product. There are no major concerns with the existing infrastructure or equipment. Successful completion of the proposed metallurgical test programme would be a suitable basis for committing to the balance of the proposed capital programme.

7 Certificates of Competent Persons

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CERTIFICATE OF COMPETENT PERSON

Certificate of Competent Person
As the author of the report entitled, "Competent Persons' Report on Elandsfontein Project assets, Western Cape, South Africa". I hereby state:-

1. My name is Andrew Tobias van Zyl and I am a Partner Principal Consultant at SRK Consulting (South Africa) (Pty) Ltd, based at 265 Oxford Road, Illovo, Johannesburg.
2. I am a member of the SAIMM, membership number 705294.
3. I have a B Eng Chem (with Mineral Processing) from the University of Stellenbosch (1999) and an M Com (Financial Economics and Econometrics) from the University of Johannesburg (2006).
4. I have worked in the South African mining and engineering industries continuously since 2000 and have specialized in fields related to valuation continuously since 2008.
5. I am a 'Competent Valuator' as defined in the JORC Code.
6. I have reviewed the information pertaining to the Techno-Economic Model.
7. I did not visit the operations as part of this review.
8. I am responsible for the Valuation section of this report
9. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission of which would make the Report misleading.
10. I declare that this Report appropriately reflects the Competent Valuator's view.
11. I am independent of Kropz Elandsfontein.
12. I have read the JORC Code (2012) and the Report has been prepared in accordance with the guidelines of the JORC Code.
13. I do not have, nor do I expect to receive, a direct or indirect interest in Kropz Elandsfontein.
14. At the effective date of the Report, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.
15. I hereby provide written approval for my contribution to this report to be issued into Public Report in the form, content and context in which it appears herein.

Dated at Illovo on 10 October 2018.

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Partner and Principal Consultant

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CERTIFICATE OF COMPETENT PERSON

Certificate of Competent Person
As the author of the report entitled, "Competent Persons' Report on Elandsfontein Project assets, Western Cape, South Africa". I hereby state:-

1. My name is Alan Somerset Page and I am a Principal Consultant at SRK Consulting (South Africa) (Pty) Ltd, based at 265 Oxford Road, Illovo, Johannesburg.
2. I am a registered Natural Scientist, Pr.Sci.Nat. (South Africa) Registration Number 400022/07, Geological Science.
3. I have a B Sc. Geology from the University of Cape Town (1985) and a B Sc. Hons. Geology from the University of Natal (1986).
4. I have worked in the South African mining industry continuously since 1988 in the field of geology
5. I am a 'Competent Person' as defined in the JORC Code.
6. I have reviewed the information pertaining to Mineral Resources.
7. I did not visit the operations in my personal capacity as part of this review; the site visit to the operations was undertaken by Dr. H. F. J Theart of SRK in 2018.
8. I am responsible for the Mineral Resource section of this report
9. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission of which would make the Report misleading.
10. I declare that this Report appropriately reflects the Competent Person's view.
11. I am independent of Kropz Elandsfontein.
12. I have read the JORC Code (2012) and the Report has been prepared in accordance with the guidelines of the JORC Code.
13. I do not have, nor do I expect to receive, a direct or indirect interest in Kropz Elandsfontein.
14. At the effective date of the Report, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.
15. I hereby provide written approval for my contribution to this report to be issued into Public Report in the form, content and context in which it appears herein.

Dated at Illovo on 10 October 2018.

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Alan Somerset Page, Pr. Sci. Nat.400022/07
Principal Geological Consultant

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CERTIFICATE OF COMPETENT PERSON

Certificate of Competent Person
As the author of the report entitled, "Competent Persons' Report on Elandsfontein Project assets, Western Cape, South Africa", I hereby state:

1. My name is Jacobus Francois Van Graan and I am a Principal Mining Engineer at SRK Consulting (South Africa) (Pty) Ltd, based at 265 Oxford Road, Illovo, Johannesburg.
2. ECSA registration number 20100342.
3. I have a B.Eng Mining from the University of Pretoria (1997)
4. I have worked in the South African mining industry continuously since 1997 in the field of mining engineering.
5. I am a 'Competent Person' as defined in the JORC Code.
6. I have reviewed the information pertaining to Mining Operations and Ore Reserves.
7. I visited the operations in February 2018, as part of this review.
8. I am responsible for the Mining Operations and Ore Reserves sections of this report
9. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission of which would make the Report misleading.
10. I declare that this Report appropriately reflects the Competent Person's view.
11. I am independent of Kropz Elandsfontein.
12. I have read the JORC Code (2012) and the Report has been prepared in accordance with the guidelines of the JORC Code.
13. I do not have, nor do I expect to receive, a direct or indirect interest in Kropz Elandsfontein.
14. At the effective date of the Report, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.
15. I hereby provide written approval for my contribution to this report to be issued into Public Report in the form, content and context in which it appears herein.

Dated at Illovo on 10 October 2018.

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Principal Mining Engineer

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CERTIFICATE OF COMPETENT PERSON

Certificate of Competent Person
As the author of the report entitled, "Competent Persons' Report on Elandsfontein Project assets, Western Cape, South Africa". I hereby state:-

1. My name is Victor Wallace Hills and I am a Principal Consultant at SRK Consulting (South Africa) (Pty) Ltd, based at 265 Oxford Road, Illovo, Johannesburg.
2. ECSA registration number 890302.
3. I have a B Eng Chem (Extractive Metallurgy) from the University of Stellenbosch (1978)
4. I have worked in the South African mining industry continuously since 1979 in the field of metallurgy and mineral processing.
5. I am a 'Competent Person' as defined in the JORC Code.
6. I have reviewed the information pertaining to Metallurgy and Mineral Processing.
7. I visited the operations in 2017, and did not visit the operations as part of this review.
8. I am responsible for the Metallurgy and Mineral Processing sections of this report
9. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission of which would make the Report misleading.
10. I declare that this Report appropriately reflects the Competent Person's view.
11. I am independent of Kropz Elandsfontein.
12. I have read the JORC Code (2012) and the Report has been prepared in accordance with the guidelines of the JORC Code.
13. I do not have, nor do I expect to receive, a direct or indirect interest in Kropz Elandsfontein.
14. At the effective date of the Report, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.
15. I hereby provide written approval for my contribution to this report to be issued into Public Report in the form, content and context in which it appears herein.

Dated at Illovo on 10 October 2018.

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9 Date and Signature Page

This CPR documents the Mineral Resource and Ore Reserve statements of the Elandsfontein Phosphate Project situated on the West Coast of South Africa and located approximately 18 km east of the Atlantic shore on the West Coast of South Africa, 95 km north-northwest of Cape Town, near the town of Hopefield in South Africa's Western Cape Province, reviewed by SRK, and is effective as of 31 October 2018. The list of CPs is shown in Table 9.1.

Table 9.1: List of CPs

Author	Role	Qualifications and Affiliations	Date signed	Signature
Andrew Van Zyl	Partner and Principal Consultant CP (Valuation Review)	BEng, MCom, MSAIMM	10 October 2018	"Signed" Andrew Van Zyl
Alan Page	Principal Geologist CP (Mineral Resource Review)	BSc(Hons), MGSSA	10 October 2018	"Signed" Alan Page
Jaco Van Graan	Principal Mining Engineer CP (Ore Reserves Review)	BSc Eng, MBL, PBL, MSAIMM, MMMA	10 October 2018	"Signed" Jaco Van Graan
Vic Hills	Principal Mineral Processing Consultant CP (Mineral Processing)	BEng, MSAIMM, MMMA	10 October 2018	"Signed" Vic Hills

Reviewed by:

Mark Wanless Pr.Sci.Nat, BSc(Hons), FGSSA
Partner and Principal Geologist

Appendices

Appendix A: Security of Tenure of the Properties Mining Rights and Surface Rights

KROPZ
FEED THE WORLD

22 March 2018

The CEO
SRK Consulting (South Africa) (Pty) Ltd.
SRK House 265 Oxford Rd, Illovo 2196, South Africa
P.O. Box 55291 Northlands 2116 South Africa

Sir

KROPZ ELANDSFONTEIN: INFORMATION PROVIDED TO SRK FOR COMPETENT PERONS REPORT

1. I, the undersigned, herewith confirm that the information that was provided to SRK by Kropz Elandsfontein (Pty) Ltd reflects and relies on official documentation in the possession Kropz.
2. I've verified:
   i. original official letters from government departments,
   ii. environmental authorisations
   iii. prospecting and mining rights
   iv. deed of properties in the possession of Ellandsfontein Land Holdings (Pty) Ltd and the land use agreement between ELH and Kropz Elandsfontein (Pty) Ltd
   v. all other related documents provided to SRK to complete the Competent Persons Report.
3. Kropz has all the authorisations and rights to operate lawfully in terms of all relevant legislation in South Africa.

Dr MJ Carstens
Manager: Legal and Compliance

Kropz Elandsfontein (Pty) Ltd
Address: 3rd Floor, Matrix Building, 8 Bridgeway Boulevard, Century City, Cape Town, South Africa, 7441
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Directors: M Lawrence, RTG Nhlapo*, MJ Nunn*, P le Roux, RV Simelane*, MR Summers (*non-executive)

Appendix B: Consolidated Reverse-Reverse Flotation Test Results

GRADE (%)	31

11,053,454

Amine average (kg/t) 0.43

Amine average (kg/t) 0.34

Head Grade - Mass Yield	
R2	0.767
Slope	3.021
Intercept	-6.755
Count	42

	ALL DATA					ABOVE GRADE ONLY				
	Head	Conc	Mass Rec	P_2O_5 Rec	Amine	Head	Conc	Mass Rec	P_2O_5 Rec	Amine
EF-97, 212/20µ	16.11	26.39	42.36	69.41	0.57					
EF-100, 150/20µ	17.02	27.63	43.39	70.43	0.37					
EF-93, 300/20µ	5.43	30.29	9.75	54.43	0.59					
EF-94, 300/20µ	5.38	29.63	11.18	61.58	0.62					
EF-18, 212/20µ F1	7.41	31.00	14.64	61.20	0.43	7.41	31.00	14.64	61.20	0.43
EF-37, 212/20µ F1	7.67	31.00	13.09	52.48	0.58	7.67	31.00	13.09	52.48	0.58
EF-18, 212/20µ F1	7.41	31.00	14.64	61.20	0.43	7.41	31.00	14.64	61.20	0.43
EF-28, 250/20µ	8.08	31.00	12.60	47.88	0.72	8.08	31.00	12.60	47.88	0.72
EF-29, 212/20µ EI10	8.52	30.63	6.64	23.86	0.72					
EF-37, 212/20µ F1	7.67	31.00	13.09	52.48	0.58	7.67	31.00	13.09	52.48	0.58
EF-45, 212/10µ EI10	9.79	30.39	5.87	18.22	0.72					
EF-47, 212/20+20/10+-10	9.33	31.00	11.96	39.53	0.73	9.33	31.00	11.96	39.53	0.73
EF-52, 300/20	9.04	30.60	16.93	57.30	0.73					
EF-55, 300/20	9.06	27.66	25.76	78.66	1.32					
EF-58, 212/20	8.68	27.20	15.61	48.94	0.84					
EF-63, 300/10	9.13	29.43	15.11	48.67	0.57					
EF-66, 212/20	8.77	30.19	9.46	32.55	0.52					
EF-64, 300/20	9.07	31.00	16.26	55.40	0.72	9.07	31.00	16.26	55.40	0.72
F1-Y3-SC(B)	5.79	31.49	7.44	40.44	0.6	5.79	31.49	7.44	40.44	0.60
F1-Y1-SC(A)	6.66	31.34	11.27	53.04	0.37	6.66	31.34	11.27	53.04	0.37
F1-Y1-SC(B)	8.14	32.44	13.88	55.31	0.36	8.14	32.44	13.88	55.31	0.36
F1-Y2-SC	7.51	32.61	15.16	65.85	0.37	7.51	32.61	15.16	65.85	0.37
F1-Y3-SC(A)	7.87	31.66	22.04	88.62	0.39	7.87	31.66	22.04	88.62	0.39
F1-Y3-SC(B)	5.3	31.97	9.87	59.53	0.37	5.30	31.97	9.87	59.53	0.37
F2-Y1-SC(A)	8.38	31.85	19.34	73.52	0.36	8.38	31.85	19.34	73.52	0.36
F2-Y1-SC(B)	8.02	31.84	19.75	78.4	0.39	8.02	31.84	19.75	78.40	0.39
F2-Y2-SC	9.73	31.76	20.91	54.68	0.56	9.73	31.76	20.91	54.68	0.56
F2-Y3-SC(B)	6.19	31.36	13.01	65.97	0.18	6.19	31.36	13.01	65.97	0.18
F1-Y2-SC	7.74	32.69	16.82	70.99	0.34	7.74	32.69	16.82	70.99	0.34

Head Grade - Recovery	
R2	0.211
Slope	2.950
Intercept	44.009
Count	42

F1-Y3-SC(B)	5.32	34.23	10.16	65.39	0.41	5.32	34.23	10.16	65.39	0.41
F2-Y1-SC(B)	8.66	32.81	19.01	72	0.37	8.66	32.81	19.01	72.00	0.37
F2-Y3-SC(A)	12.22	33.67	25.35	69.85	0.52	12.22	33.67	25.35	69.85	0.52
F2-Y3-SC(B)	6.24	31.93	13.03	66.71	0.36	6.24	31.93	13.03	66.71	0.36
BC1 3"Col	7.69	31.89	17.98	74.6	0.35	7.69	31.89	17.98	74.60	0.35
BC7 3"Col	10.72	31.48	20.23	59.4	0.2	10.72	31.48	20.23	59.40	0.20
1 3"Col	12.21	33.64	33.15	90.3	0.175	12.21	33.64	33.15	90.30	0.18
2 3"Col	9.19	32.1	24.66	86.1	0.175	9.19	32.10	24.66	86.10	0.18
3 3"Col	8.59	32.63	22.77	86.5	0.175	8.59	32.63	22.77	86.50	0.18
4 3"Col	9.75	31.15	26.85	85.8	0.175	9.75	31.15	26.85	85.80	0.18
6 3"Col	10.75	31.67	29.23	86.1	0.175	10.75	31.67	29.23	86.10	0.18
7 3"Col	9.95	31.62	27.09	86.04	0.175	9.95	31.62	27.09	86.04	0.18
8 3"Col	9.29	31.23	26.44	88.91	0.175	9.29	31.23	26.44	88.91	0.18
10 3"Col	9.25	33.18	24.40	87.53	0.175	9.25	33.18	24.40	87.53	0.18
Fine 1 3"Col	12.33	33.29	33.22	89.70	0.125	12.33	33.29	33.22	89.70	0.13
Fine 2 3"Col	12.43	34.16	33.46	91.90	0.125	12.43	34.16	33.46	91.90	0.13
Fine 3 3"Col	12.91	32.75	37.51	95.20	0.125	12.91	32.75	37.51	95.20	0.13
Fine 4 3"Col	12.09	32.00	34.94	92.50	0.125	12.09	32.00	34.94	92.50	0.13
Ph4 Ro 4 3"Col	6.26	31.36	15.36	77.00		6.26	31.36	15.36	77.00	0.00
Var Ro 3-B2C	12.24	31.86	34.94	91.00	0.6	12.24	31.86	34.94	91.00	0.60
Var Ro 4-B3A	11.18	31.20	12.27	34.20	0.7	11.18	31.20	12.27	34.20	0.70
Var Ro 5-B3B	11.65	31.34	29.85	80.30	0.7	11.65	31.34	29.85	80.30	0.70
Coarse	12.34	31.30	32.24	81.80		12.34	31.30	32.24	81.80	0.00
Fines	17.90	34.60	41.85	80.93		17.90	34.60	41.85	80.93	0.00

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JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• The phosphate mineralised units were sampled continuously; • First phase: Diamond Drilling (triple tube core barrel) ¼ core was sampled and due to the soft nature of the material, it was cut with a knife. Sample length was based on lithology with a minimum of 10 cm and a maximum of 360 cm; • Second phase Reverse Circulation (RC) drilling were undertaken in order to target areas that had not been adequately drilled during the 2014 exploration campaign and samples was taken at one meter intervals and split by riffle splitter to obtain a 1.5 kg sample; • Sonic drilling: Approximately 1.5 kg of material was obtained by slicing an even depth across the length of the core; and • Samples were sent to independent laboratories. Laboratory sample preparation entailed: drying, crushing of the entire sample if necessary to less than 2 mm, splitting sample using rotary splitter to ensure homogeneity. 100 g of sample removed for milling. 60 g of the 100 g used for pressed pellet/fusion. 40 g kept as back up. Residual sample tagged and bagged in storage.
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.).*	• Phase 1: Diamond Core Drilling (HQ size, triple tube core barrel); • Phase 2: RC- RC hammer/RC bit 114 mm outer diameter; and • Phase 3: Sonic Core Drilling – 110 mm core.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• DD core recovery was achieved by measuring the length of the core drilled and comparing this with the actual core length recovered; • Recoveries of the sonic core drilling is by physically measuring the intact core and comparing it to drill hole extent; • RC recovery is measured by working out volume of rod outer diameter x relative density of sediment that is sampled subtracted by relative

Criteria	JORC Code explanation	Commentary
		moisture content (10%) (Diameter 114 mm * 1.88 - moisture = 17.27 kg) against the actual mass recovered; • The water saturated unconsolidated nature of the orebody resulted in core losses in the DD towards the bottom of each run and average recovery of approximately 80% was obtained within the F and G units with lower recoveries in the overburden; • Calculated recovery for the RC drilling programs averaged > 80%, while recoveries for the Sonic drilling program were >90 %; and • No relationship between recovery and grade is expected.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Logging was undertaken by competent company geologists following a logging standard, where attributes, including core recovery, lithology, colour, grain size, sorting, roundness and phosphate description are recorded on a standardised logging sheet and then captured in Excel. All samples have been geotechnically logged with regards to material competency; • Photographs were taken of all the core drilled and was store in the geological database and are available for auditing; • For the RC drilling a subsample was taken, washed and then logged, a sample from each one meter interval was placed in a plastic chip tray and these are available for auditing purposes and is kept in a safe storage place; • The core of all DD and Sonic holes were logged from Unit A up to until H. More detail logging was however done on Units E to G; and • The drilling entailed 2 004.7 m of DD, 1 453.6 m RC and 567.3 m sonic drilling (totaling 4 025.6 m). 100 % of the drill hole intersections were logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in*	• For DD, the core was cut by knife or harder material sawn by diamond core cutter into quarter core. One quarter was sampled; • RC samples were captured over meter intervals, the sample was then spit in a 3 tier riffle splitter to obtain a 1.5 kg subsample; • Sonic core was split into one meter long intervals to allow accommodation in core trays. The core was sampled (sliced) using a “filleting” technique- i.e. a “slice” of core was manually taken, following the 2014 procedure;

Criteria	JORC Code explanation	Commentary
	situ material collected, including for instance results for field duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Competent material is cut using diamond tipped core cutter; • Mineralization is in the form of small apatite crystals, apatite grains and as apatite cement of quartz grains are generally much smaller than 2 mm and distributed evenly throughout the mineralized units. The sample preparation methods described above therefore did not lead to any sampling bias; • Initial comparisons between quarter core and half core indicate that there are no significant difference and that the sample support is not affected by subsampling; • Initial concerns that poorer core recovery during DD drilling and even during subsequent RC drilling may result in unrepresentative samples were ruled out during Sonic drilling (up to 100% core recovery) where it was demonstrated that similar grades and particle size distributions were obtained for the different drilling methods used; and • The sampling methods used are deemed appropriate due to the small grain size of the apatite and its even distribution in the sedimentary layers.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• DD samples were analysed by the independent SGS Laboratory in Johannesburg and umpire samples were sent to the independent Setpoint Laboratory in Johannesburg. Both laboratories are accredited in terms of ISO 17025 for sample preparation and the relevant analytical method, namely XRF on fused disk. This is a total analysis method. Both independent Quality Control and Quality Assurance (QAQC) measures (based on blanks, duplicates and certified reference materials) and the umpire results indicate acceptable precision and accuracy; • Sonic and RC samples were analysed by the independent Scientific Services laboratory in Cape Town, with umpire samples being sent to ALS in Johannesburg. The latter laboratory is ISO 17025 accredited. Both independent QAQC measures and the umpire results indicate acceptable precision and accuracy; and • The chemical analytical results are considered suitable for Mineral Resource estimation purposes.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No independent sampling was undertaken. But the core, samples recovered, subsampling procedures and sample splitting was independently confirmed. In addition, the laboratory procedures, and analytical methods used are considered appropriate and in adherence with industry best practice requirements; • The different drilling programmes were of an infill nature and notwithstanding initial core recovery concerns, the results were confirmed in each successive programme. No twinned holes were drilled; • The recording of the primary information, data capturing, and data storage was done in a satisfactory manner; and • There were no subsequent adjustment to the assay results and the laboratory results were used for Mineral Resource estimation purposes.

Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*
	• *Specification of the grid system used.*
	• *Quality and adequacy of topographic control.*
		• The surface topography was surveyed, and the collar positions of drill holes were surveyed by qualified land surveyors:
		  ○ Projected Coordinate System – SAGRID;
		  ○ Projection – Transverse Mercator;
		  ○ False Easting – 0.00000000;
		  ○ False Northing – 0.00000000;
		  ○ Central Meridian – 19.00000000;
		  ○ Scale Factor – 1.00000000;
		  ○ Latitude of Origin – 0.00000000;
		  ○ Linear Unit – Meter;
		  ○ Geographic Coordinate System – GCS_WGS_1984;
		  ○ Datum – D_WGS_1984;
		  ○ Prime Meridian – Greenwich;
		  ○ Angular Unit – Degree;
		• A digital terrain model was obtained by a LIDAR survey using the same control points; and
		• The survey information and drill hole collar positions are of a quality suitable for Mineral Resource estimation and Mine planning.

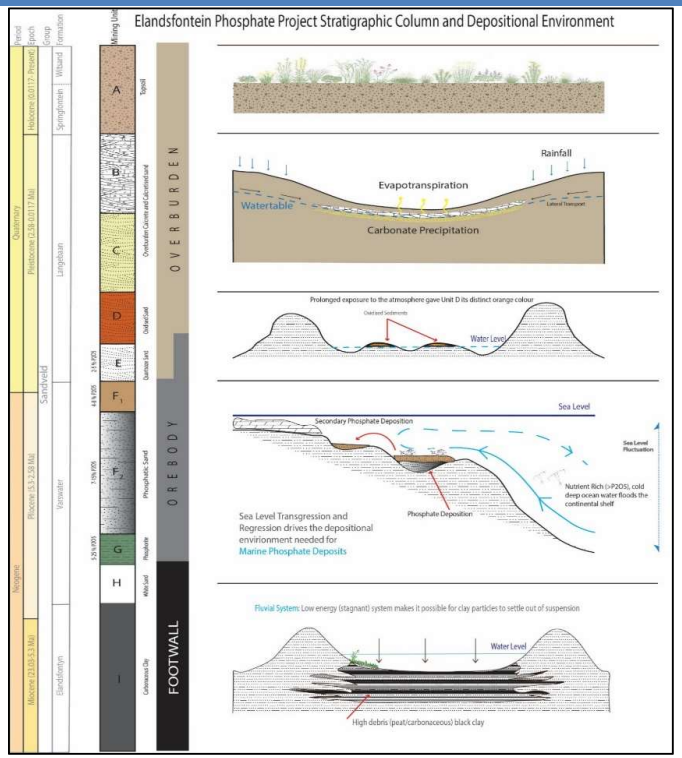
Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The original drill spacing was 200 m in the main deposit area; • Infill drilling narrowed this down to 100 m; • SRK has independently confirmed short range and long range continuity and confirms geological and grade continuity in the Basin domain through semi-variogram modelling. Geological continuity has been demonstrated for both domains. However, grade continuity has not been demonstrated in the Terrace domain; • Variogram drilling was undertaken to determine short range (10 m) grade variability as well as to upgrade the geoscientific confidence levels in the planned mining areas. This informed experimental short range variography conducted by SRK; and • No composite samples were generated. All samples are from the original sampled intervals.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The ore body is hosted by horizontal sedimentary layers and vertical drilling is appropriate. No bias is expected.
Sample security	• *The measures taken to ensure sample security.*	• The responsible geologist controlled the sampling at the rig and was at all times responsible for the sampling process; • A chain of custody with appropriate sign-off was always followed when samples were sent to any laboratory; and • Returned pulps are stored in a locked storage facility on-site. Residual intact core samples are stored in secure facility on-site.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• SRK audited the 2014 drilling programme and also the subsequent drilling programmes in 2018. Snowden audited the drilling programmes as part of the generating of the Mineral Resource estimates.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Kropz is the sole owner of the new order Mining Right ((WC) 30/5/1/2/2 10043 MR); notarially executed on 30th January 2015 in Cape Town. The mining right is for 15 years, commencing from 2015, with the option of an extension; and • Kropz has a standing agreement with Elandsfontein Land Holding's with regards to ongoing land use associated with mining activities.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Samancor conducted a drilling program on the Elandsfontein farm during the mid-1980s. Drilling was aimed at assessing known phosphate occurrences on portions 3 and 4 with an RC drilling program of 28 boreholes. A total of 18 of these boreholes are located on portion 4 which is currently held under a Mining Right. All the information relating to this program, including borehole logs and analytical data was purchased by Kropz from the Council of Geoscience in Pretoria; and • This data was only used for exploration planning and not used for resource estimation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Elandsfontein phosphate deposit is a diagenetic phosphorite deposit; • The deposit is hosted in the Varswater Formation formed by sub horizontal unconsolidated estuary and marine sediments of Miocene and Pliocene age. The phosphate mineral is apatite and the principal gangue mineral is quartz. The stratigraphic column and depositional environment is shown below;

Criteria	JORC Code explanation	Commentary

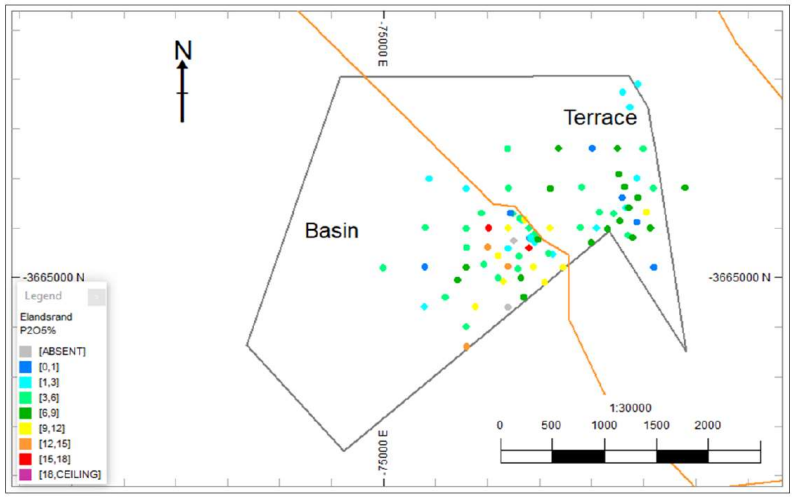


- As the succession at Elandsfontein is flat lying, only Langebaan sediments can be seen on the property at surface. These sediments belong to the B and C units, consisting of sandstone with surface limestone (calcrete) lenses in the latter. A schematic cross section showing the position of the current box-cut is shown below;

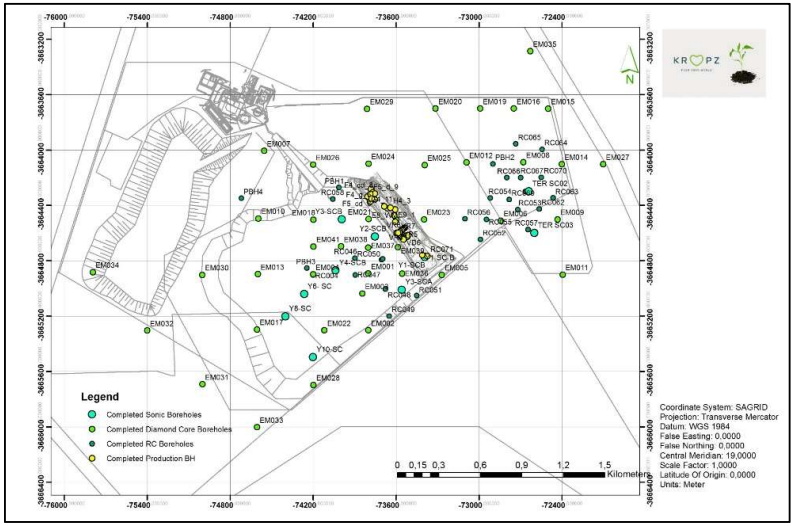
Criteria	JORC Code explanation	Commentary
		 • The geological model display facies variation in response to different depositional environments varying between the Basin and the Terrace Facies of the deposit, at different elevations; and • The phosphate mineralization at Elandsfontein is in the form of the calcium phosphate mineral apatite that presents itself as one of three types that may be described in situ from top to bottom as: o Rounded reworked orange coloured phosphate grains in the terrace ores, o A mixture of the orange grains in addition to the crystalline green apatite in the unconsolidated F and G Units; and o As a phosphate matrix between mainly quartz grains in cemented phosphorite lenses in the F Unit but mainly in the G Unit.
Drill 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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.*	• A Table of drilling information is provided in Appendix A; and • No Information is excluded.

Criteria	JORC Code explanation	Commentary
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Compositing, capping and cut-off grades are discussed in the Mineral Resource Section 3 of this Table; • The distribution of grade is also considered in the Mineral Resource Section 3 of this Table; and • No metal equivalents are used in this report.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• All holes were drilled perpendicular to the strata; interception lengths reflected the true thickness of mineralisation.
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.*	• The exploration holes were drilled vertically, which is perpendicular to the strata and hence reflect the true width of the mineralisation. The plan of exploration drill holes indicating P_2O_5% in full composites across units F and G is shown below;

Criteria	JORC Code explanation	Commentary



- The location of all the holes used for Mineral Resource estimation purposes are shown in diagram below.



Criteria	JORC Code explanation	Commentary
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.*	• A comprehensive list of all drill holes is provided in Appendix D. The sampling results were used for Mineral Resource Estimation.
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.*	• Dry bulk density and moisture content measurements were undertaken in 2014 by Soillab and Geolab in Pretoria; • Confirmatory relative density checks done in 2018 by the use of the Sand Replacement Method on F1 ore unit within the box-cut's exposed ore; and • 30 samples were also tested for As, Cd, U, Th, Pd and F that could impact the economics of the final concentrate product. In all cases the results show very low levels of these elements.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Snowden recommends close spaced drilling be undertaken to confirm local scale grade continuity and that ongoing density measurements be taken using e.g. the calliper or sand replacement methodologies; and • Resource development drilling is required for the terrace ores to improve the classification of these resources. These shallow ores may provide a good opportunity for blending in the plant to achieve constant grade feed material.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Geological and sampling information is stored in an MS Excel spreadsheet. No material issues were identified for the 2018 Resource update; • SRK is of the opinion that a proper database should be created by Kropz for data storage; • No material issues were identified by Snowden for the 2018 resource update; and

Criteria	JORC Code explanation	Commentary
		• SRK is satisfied that Snowden imported the Excel data into Datamine Studio 3 software package and performed the necessary validations, i.e. examined to ensure that there were no unexplained gaps in the data, no overlapping intervals, missing or duplicate data, unusual collar co-ordinates or elevations and there was consistency of hole names between input tables.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A single site visit was made by Mr. Mark Burnett in 2017 to review exploration and trial mining progress. The SRK Consultant, Dr. H. F. J. Theart visited the project in February 2015 after the initial phase of DD drilling and again in February 2018 after the RC and Sonic Drilling to inspect the standard of logging, geological interpretation, sampling and sample preparation, sample chain of custody, and database management and integrity.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Wireframe surfaces were interpreted at the top of each geological unit identified at Elandsfontein. Units F and G were combined for estimation purposes; • The original drill hole logging of the units A to G were used to inform the wireframes. The wireframe surfaces for the ore body were compiled from the F and G Unit intersections in the drill holes and they were also based on the interpreted geology of the deposit. SRK regard the wireframes as being accurately derived from the drill hole data, and they are acceptable; • Only the top and bottom of the F and G units will impact the interpretation, and these are supported by the assay results; • The deposit was separated into two domains, based primarily on the P_2O_5 grade. The Basin domain is situated at a lower elevation than the Terrace domain, and is higher grade for the F and G Units, exhibits good grade continuity. In the Terrace domain situated closer to surface, the ore body is much thinner and low grade, and does not exhibit good grade continuity; • There are thin high grade phosphorite lenses within the ore body that are laterally discontinuous over short distances. Their frequency and lateral extent is not regarded as having a significant effect on the overall tonnage and grade; and

Criteria	JORC Code explanation	Commentary
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Mineral Resource extends over 33.6 km in NE-SW direction and 1.8 km in NW-SE. The Resource extends beyond the planned mining depth of 100 m; however the deepest drill hole intersections are at a 78 m depth. The combined FG package varies from 3 m to 30 m having an average thickness of 17 m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• SRK are of the opinion that Snowden used the correct and appropriate estimation technique using Datamine Studio 3; • Variograms were modelled for P_2O_5, SiO_2, Al_2O_3, CaO, MgO and Fe_2O_3. P_2O_5, SiO_2, Al_2O_3, CaO, MgO and Fe_2O_3 were estimated into 200 m E by 200 m N by 5 m RL parent cells using ordinary kriging (OK) for Units F and G. Basin and Terrace domains were estimated separately with a hard boundary. The maximum distance of extrapolation was 800 m. No capping of high grades was applied; • QKNA was run to optimise the block size and number of samples used for estimation; • Grade estimation was run in a three pass process. The search parameters were derived from the variogram analysis, with the first search distances corresponding to the range of the variogram sill. The second search distance was derived by doubling the first search distances, with the third search being run to populate the low confidence areas of the estimate at ten times the original range. The first search range for P_2O_5 was 624 m, the second was 1 248 m and the third was 6 240 m; • Blocks were estimated using a minimum and maximum of six and fifteen samples respectively for the first search pass, a minimum and maximum of four and eight samples respectively for the second search pass, and a minimum of two and a maximum of four samples for the third search pass. A maximum of three composites were allowed per drill hole to prevent over-smoothing in the downhole direction; • The results were validated using visual inspection (comparing assay results to the kriged estimate) and grade trend (swath) plots. The validation shows that the estimate is a good reflection of the input data; • Density was estimated using Inverse distance squared (IPD^2), using

Criteria	JORC Code explanation	Commentary
		the 2014 model density estimates as no new samples have been collected since 2014; • No production reconciliation information is available; • Potential contaminant elements estimated are SiO_2, Al_2O_3, CaO, MgO and Fe_2O_3.; • No by products are expected to be recovered; • The block size of 200 m laterally is approximately half the widest regular drill hole spacing and approximates the densest regular drill grid spacing; • No SMU modelling was undertaken, and only large block estimates were produced; • CaO is strongly positively correlated with P_2O_5, which are both strongly negatively correlated with SiO_2. This was not accounted for in the estimation process, as these variables were estimated independently; and • The boundary of the F and G units was used to constrain the Mineral Resource estimates vertically.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Dry tonnes are reported. Moisture content was determined from 16 samples that showed an average of 1%. No additional measurements have been made since 2014.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut-off of 4% P_2O_5 was applied based on the outcome of metallurgical testwork done by Eriez and preliminary mining studies done by Turgis Consulting (Pty) Ltd and DRA International. This cut-off has not been changed since the 2014 work; and • A Whittle pit optimisation model has been run to review the current 4% P_2O_5 % economic cut-off grade.
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.*	• A roll over mining method will allow for the continuous rehabilitation of the mining voids created through traditional strip mining. Cut width is planned at 50 m wide with mining commencing in the North east of the basin pit, mining in a south westerly orientation; • A planned ore feed of 420 ktpm is to be delivered to the processing plant, at an average strip ratio of 2:1; and • Pit design is set at a maximum slope angle of 35º, mined at 5 m bench heights with 3 m catchment berms being left at each inter-bench level.

Criteria	JORC Code explanation	Commentary
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.*	• By way of clarification, there are two principal modes of flotation. Firstly, Direct flotation, in which the desirable minerals are floated and recovered to final product, while the undesirable gangue is depressed and rejected to tailings. Secondly Reverse flotation, in which the undesirable gangue is floated and rejected to tailings, while the desirable minerals are depressed and recovered to final product; • Following batch and continuous bench scale investigations at Eriez, Reverse-Reverse (reverse rougher and reverse cleaner) flotation was selected as the preferred process route that was installed at Elandsfontein. Unfortunately, a number of issues and challenges were experienced during commissioning that prevented the continuous production of on-specification rock phosphate concentrate. On 28 July 2017, the Elandsfontein management team took the decision to suspend operations; • Since the suspension of operations, Elandsfontein have commissioned test programmes at Mintek (South Africa), Arrmaz (United States), Betachem (South Africa) and Tenova Advanced Technologies (TAT) (Israel). Armaz demonstrated the benefit of attritioning, although this did result in increased slimes generation and loss. Following comprehensive investigations, TAT concluded that Direct-Reverse (DR) flotation achieved the targeted final concentrate grade at higher P_2O_5 recovery than RR flotation. At product grade of 31% P_2O_5, DR flotation achieved an average P_2O_5 recovery of 78.3% compared to 55.4% for the best tests of RR flotation, using the same amines as currently employed at Elandsfontein; • The DR flotation configuration has however been shown to have considerably higher operating and capital costs than the RR circuit and has therefore been discarded as an economic option. Further testwork at Mintek was originally commissioned to confirm the TAT results. Following some circuit optimisation, Mintek achieved P_2O_5 recoveries of 77% for F1 and 83% for F2 in the RR configuration, which is in line with the results achieved at Eriez during the earlier testwork conducted on a blended sample; • Subsequent to these technical assessments, further bench scale

Criteria	JORC Code explanation	Commentary
		testwork undertaken by TAT but in particular that undertaken by Mintek, resulted in a significantly modified flotation circuit, including multiple stages of attritioning and cleaning; and • An on-going programme of optimisation, pilot and variability testing is planned prior to recommissioning. It should be noted that such testing does not necessarily remove the risk of process non-performance, it merely improves the level of confidence in its likely success as well as identifying potential opportunities for increased plant performance. Higher recoveries could support a more positive outcome.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Elandsfontein has built a Softs Stockpile for overburden and plant tailings for the first 24 months of mining, after which the overburden and plant tailings will be filled back into the mined out area of the pit, in what has been termed 'roll-over' mining; • Processing water will be purchased from the Saldanha Bay Municipality and not drawn from the aquifer, as part of the dewatering and recharge system. Pit water will used to supplement the purchased potable water; • The use of roll over mining allows concurrent rehabilitation to commence in Year 3. Search and rescue of all Fynbos species will be carried out before top soil stripping commences, with all bulbs, cuttings and seedlings being stored at two separate off-site nurseries for safe keeping; and • These plants will be brought back to the ongoing rehabilitated areas ensuring natural recovery and progressive rehabilitation from early in the mine life.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• 211 samples were measured for bulk density at Soillab and Geolab in Kraaifontein and Pretoria, respectively. These were undertaken using a wax coated samples and the water displacement method; • No additional density measurements have been taken since the 2014 drilling exercise; and • The bulk densities are not materially different between the F and G units.

Criteria	JORC Code explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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.*	• The model was classified by Snowden into Measured, Indicated, Inferred Mineral Resources and unclassified Inventory based on data quality, drill spacing, geological and grade continuity, drilling recovery and reconciliation results from trial mining; • The input data is regarded as being reliable. There is a good distribution of data throughout the area where the Resource has been declared, and the quality of the data is acceptable for Resource estimation purposes. SRK have confidence in the grade continuity and the grade/tonnage estimation in the Basin area. There was insufficient grade continuity in the Terrace area to estimate the grade with a high degree of confidence. SRK thus downgraded Snowden's Measured Resource in the Terrace area to an Indicated Resource category; and • The result accurately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• SRK (South Africa) has reviewed the current (2018) and 2014 Mineral Resource estimates compiled by Snowden. Aside from the downgrade of a portion of the Measured Mineral Resource to Indicated Mineral Resources, SRK found the Snowden estimates to be appropriate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• SRK are of the opinion that the Mineral Resource estimate compiled by Snowden is accurate and has a relatively high confidence in the Basin area, where the grade continuity is high. In the Terrace area there is poor grade continuity, so the grades can be estimated with much less confidence. Due to the small number of density measurements used, the tonnage estimate cannot be estimated with a high degree of confidence. However the densities of the F and G units are very similar and Kropz undertook additional checks on density measurements using the sand replacement method which confirm the densities obtained from the drill holes. Swath plots indicate that the estimates compare well with the drill hole sample data; • Estimation was carried out using OK, as such each block was locally informed from the drill hole data points within the search distances applied. The check estimates were done using IPD^2 in order to verify the grades estimated by OK; and • Snowden reportedly compared the estimated grades with production

Criteria	JORC Code explanation	Commentary
		data from the initial mining of the pit. However no data with respect to the results of their comparison was included in their report. The mining has not yet intersected the high grade zones of the ore body which are situated deeper below surface and is relatively shallow so far. Only the lower grade upper portions of the ore body have been intersected.

Section 4 Estimation and Reporting of Ore Reserves

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

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Snowden 2017 model classified into Measured, Indicated, and Inferred Mineral Resources based on data quality, drill spacing, geological and grade continuity, drilling recovery and reconciliation results from trial mining with the SRK adjustment to the portion of the Measured Mineral Resources forms the basis of the Ore Reserve assessment; • The Mineral Resource consists of two major ore units F and G; and • Mineral Resources have been reported inclusive of the Ore Reserves which may be derived from them.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Site visit was conducted during 21-22 February 2018 by Mr. J. F. Van Graan; • The site visit undertaken was very positive. Unfortunately, the mine's production was put on hold due to metallurgical processing issues; • The pit is geotechnically stable; and • The mining method applied has been proven to be successful.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• The mining method has been proven to be appropriate during commissioning in 2017 before the mine was placed under care and maintenance; • Feasibility study level has been carried out for geology, mining and other specialist studies; • Processing testwork has been done to Pre-feasibility level; • Only conceptual design for new processing methodology has been completed to date; and

		• Bench scale testing has been completed.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• A cut-off of 4% P_2O_5 was applied based on the outcome of metallurgical testwork done by Eriez and preliminary mining studies done by Turgis Consulting (Pty) Ltd and DRA International. This cut-off has not been changed since the 2014 work.

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 choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*
	• *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.*
	• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*
	• *The mining dilution factors used.*
	• *The mining recovery factors used.*
	• *Any minimum mining widths used.*
	• *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*
	• *The infrastructure requirements of the selected mining methods.*
		• A roll over mining method will allow for the continuous rehabilitation of the mining voids created through traditional strip mining. Cut width is planned at 50 m wide with mining commencing the North east of the basin pit, mining in a south westerly orientation;
		• A planned ore feed of 420 ktpm is to be delivered to the processing plant, at an average strip ratio of 3.4;
		• Pit design is set at a maximum slope angle of 35º, mined at 5 m bench heights with 3 m catchment berms being left at each inter-bench level;
		• The following modifying factors were used for the reserving process:
		  ○ Geo-losses 0%;
		  ○ Mining Recovery 1.35%; and
		  ○ Dilution 5%;
		• Open pit mining method is appropriate with acceptable levels of pre-strip and gaining access to the ore;
		• Pit slopes are appropriate and have been proven by existing mining;
		• Grade control is sufficient due to visible contact zones;
		• Pre-production drilling is done to establish high grade in low grade zones in the top contact of the F1 ore unit;
		• No minimum mining width is applied, bottom of cut is limited to 50 m to protect clay floor from heaving;
		• No Inferred Resources are included in the mining study;
		• Infrastructure required to gain access to the Mineral Resource are Haul roads constructed by the mining contractor;
		• Diesel driven pumps are currently used to remove nascent water;
		• The mining contractor obtains diesel for mobile machines by means of a bowser that collects diesel from the storage tanks; and
		• Mining equipment is maintained by the contractor as part of the mining contract.

Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*
	• *Whether the metallurgical process is well-tested technology or novel in nature.*
	• *The nature, amount and representativeness of metallurgical testwork undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*
	• *Any assumptions or allowances made for deleterious elements.*
	• *The existence of any bulk sample or pilot scale testwork and the degree to which such samples are considered representative of the orebody as a whole.*
	• *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*
		• Mixed results have been achieved in metallurgical testing of Direct-Reverse and Reverse-Reverse flotation configurations;
		• The selected Reverse-Reverse flotation technology is well tested but with a few novel features compared to many sedimentary phosphate deposits;
		• Prior to commissioning, bench scale testwork was largely conducted on a Master Composite sample. Testing of individual ore types was not undertaken and hence their individual metallurgical performance was not well understood. Elandsfontein elected not to test individual ore types but rather composite samples, as selective mining and separate processing of discrete ore types could not be realistically achieved in practice. SRK acknowledged this rationale but considered that separate testing of the individual ore types would have improved the overall understanding of deposit metallurgy prior to initial commissioning;
		• Since operations were discontinued, Arrmaz, TAT and Mintek have undertaken testwork on individual ore type samples. Elandsfontein have recently initiated a further programme of variability testing to be undertaken at TAT and Mintek to assess the performance of Reverse-Reverse flotation on individual ore types. Elandsfontein have advised that it is also planned to undertake pilot plant testing of Reverse-Reverse flotation at Mintek;
		• Deleterious elements such as CaO and MgO have been considered during the testwork but the main focus has been on the P_2O_5;
		• No Pilot scale testwork has been conducted, but is planned;
		• The circuit recently proposed by Mintek however, is significantly more complex than those proposed by others. Flotation performance was also shown to be extremely sensitive to operating conditions. Mintek are accordingly undertaking further investigation into simplifying their circuit and making it more robust;
		• The key process risk is that predicted metallurgical performance of Reverse-Reverse flotation is not achieved at industrial scale:
		  ○ P_2O_5 recovery is lower than predicted;
		  ○ Product mass yield is lower than predicted;
		  ○ Product quality does not meet market specifications; and
		• The Life of Mine (LoM) scheduling production results assume that the

		mineral processing facility will be able to upgrade the Run of Mine (RoM) to the market specifications.
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.*	• Regulatory Approvals: Kropz's initial Environmental Management Programme (EMPr) was approved by the Department of Mineral Resources (DMR), but Kropz has been instructed to upgrade the EMPr. Approval of this EMPr is almost certainly a formality but is pending at present (subject to confirmation of final design). Similarly, the Social and Labour Plan (SLP) is not yet formally approved. The appeal against the WUL has been referred to the Water and is unlikely to be decided on in the near term. To date, Kropz has received no correspondence from the Water Tribunal since December 2017. The appeal does not impact Elandsfontein's water use activities, including their ability to dewater the mine; and • Environmental and Social Management: Environmental and social management was of a high standard during construction. Kropz is (or was) preparing an Environmental Management System (EMS) for operations. A functional EMS, and a larger Safety, Health and Environment (SHE) staff complement will be required once operations commence to ensure continual improvement of environmental management and performance.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The mine and its associated infrastructure has been placed under care and maintenance and are appropriately maintained; and • All the necessary infrastructure has been provided for or is in place already.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Projected capital costs are based on a study by the processing design contractor (DRA Global) contractor. The design described in the study does not meet pre-feasibility criteria; • Mining capital is included in the contactor account; • Mining operating costs are derived from contractor rates based on distance to transport material depending on the destination; • Process operating costs have been developed from first principles based on annual plant throughput of 5 Mtpa; • Maintenance operating costs have been determined on the basis of an allowance of 5% of equipment capital costs per annum; • An exchange rate of ZAR14.40 to 1 Euro has been applied to foreign

		exchange denominated items in the Capital Bill; • Costs for the transportation and ship handling of product are determined by contracts; • The price forecasts consider the Value-in-use (VIU) where the impact of deleterious elements is implicit in the estimation of the price to be received; • The exchange rate forecasts were sourced from Standard Bank and cover the first three years. Thereafter the Rand is forecast to depreciate at a rate determined by the inflation differential between South Africa and the USA; • The price received is based on a certain proportion of deleterious elements. Failure to meet the standard that is required (including these elements) will impact on sales. The plant modifications are assumed to be adequate to ensure the product meets the required specifications, but this cannot be ensured until the completion of the design and testwork and is a major factor why Probable Ore Reserves are being declared; and • The royalty varies between 1.8% and 5.7% and is based on the appropriate government royalty formula. The average is 3.22%.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• The price has been estimated based on forecasts from three reputable providers. These consider supply and demand factors and they are specialists in the forecasting of phosphate prices. The price forecasts consider the impact of the specific composition of the product from Elandsfontein, including impurities.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• The research that informs the price forecasts is the intellectual property of the companies that produced the research. SRK has not conducted a separate analysis of supply and demand factors but both are considered in the research reports. An off-take agreement was signed for approximately one third of the total product prior to production being halted at a price lower than that forecast. Kropz has informed SRK that this is currently being renegotiated and that the price is expected to be equivalent to the forecast prices. The off-take is also on the basis of the first batch being successfully blended by the customer. Failure to successfully blend will void the contract. SRK cannot be certain that the final contract price will be as per the forecast. Sales in the spot

		market also have risks associated with some uncertainty on price and liquidity.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The price forecast used was provided by a reputable specialist. Two other specialist providers were also consulted for reference. The forecasts all consider supply and demand factors. However, it is not possible to place a specific uncertainty on the price; • The received price is also dependent on the exchange rate. The South African Rand is particularly volatile and is impossible to forecast accurately. The base case includes a forecast for the first three years with depreciation according to the inflation differential for the remaining LoM. This is the correct approach but does not remove the uncertainty; • Sensitivities have been included showing a 20% range for the price and/or exchange rate. The price is not expected to vary by 20% but the exchange rate could feasibly vary by more than 20% from the forecast during the LoM; • Inflation has been assumed at 5%. This could also vary during the LoM but is less volatile than the price or exchange rate. The Reserve bank targets a range of 3 – 6% and the inflation rate has typically been slightly above the mid-point such that 5% is considered a reasonable average. Labour and power inflation can be higher and occasionally specific reagents (such as acid) can have additional associated uncertainty. Opex sensitivities of plus and minus 20% have been incorporated to test and show the impact; and • The USD 173 million NPV has been estimated using a base discount rate of 8% with a sensitivity showing the impact of varying between 6 and 10%.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Reputational risk: Elandsfontein Mine has garnered periodic adverse, visible publicity, mostly linked to permitting processes and potential impacts linked to groundwater management. A coherent and expertly implemented Stakeholder Engagement Plan (SEP) may reduce this risk; and • To date, no significant environmental and social risks associated with operation of the mine have been identified, since the mine is not yet operational. Excessive groundwater poses a potential risk.

Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• The absence of a signed off-take agreement poses a risk to the project. An off-take agreement was previously signed at a price lower than the current forecast. SRK has been informed that the contract is being renegotiated and the price is expected to reflect the prevailing forecasts. SRK cannot quantify the associated uncertainty. The previous off-take was for 300 ktpa, approximately 1/3 of production; • Sales into the spot market also have liquidity and price uncertainty that cannot readily be quantified. Sensitivities have been included showing the impact of 20% higher or lower revenue; and • The signature of the off-take agreement should preferably pre-date the Reserve so as to reduce the associated uncertainty. It is noted that the previous off-take contained a condition that the contract would only be valid if the first batch could be successfully blended.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• All Measured and Indicated Mineral Resources have been converted to Probable Ore Reserves.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• No audits or reviews have been done to date.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all*	• The Ore Reserve used as basis the Mineral Resource model for the estimate which is deemed accurate to the state of having Measured, Indicated and Inferred Mineral Resources. Based on this, the Competent Person assumes that the Ore Reserve estimation should be accurate enough for an Ore Reserve volume and grade estimation; • The accuracy of the volumes that can be extracted economically and processed to the minimum specifications are at risk due to mineral processing uncertainties. The Competent Person++ concludes that the Ore Reserve cannot be declared on a proven level, but must be declared at a probable level; • No Bulk scale testwork has been conducted, but is planned; • There is a risk of non-performance of the selected process route at industrial scale; o See comments in ***Metallurgical factors or assumptions*** section; • Based on the low confidence in the metallurgical process, all Ore

	circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Reserves have been reported at probable level; and • The accuracy of the capital cost for the process plant modifications is dependent on the confidence in the design of the modifications, which is currently not at prefeasibility level. SRK is of the opinion, however, that because the current design contains many items that are common to existing equipment recently installed in the plant, and the breakdown of the actual costs of the existing plant are well documented, a contingency of 30% is appropriate and the final cost is unlikely to exceed the current estimate in the Techno-Economic Model.

Appendices

Appendix A: Table of drilling information

DH_NO	Type	X COLLAR	Y COLLAR	Z COLLAR	EOH	ZONE	FROM	TO	LENGTH	MID - Z	ZONE	FROM	TO	LENGTH	MID - Z
EM001	DD	-73802.7	-3664891	75	54	F	29.82	47.25	17.43	36.5	G	47.25	52.1	4.85	25.4
EM002	DD	-73802.6	-3665302	74	54.9	F	35.52	50.2	14.68	31.1	G	50.2	52.64	2.44	22.5
EM003	DD	-73847.5	-3665040	78.2	54.2	F	36.65	50.65	14	34.6	G	50.65	53.9	3.25	26
EM004	DD	-74201.1	-3664899	83.3	62.9	F	45.13	58.85	13.72	31.3	G	58.85	61	2.15	23.4
EM005	DD	-73270.6	-3664900	78.6	53.7	F	27.25	50.4	23.15	39.8	G	50.4	52.95	2.55	26.9
EM006	DD	-72844.7	-3664508	80	35.6	F	7.9	18.9	11	66.6	G	18.9	22.7	3.8	59.2
EM007	DD	-74557.7	-3664007	75.1	47.4	F	33.13	44.5	11.37	36.3					
EM008	DD	-72680.1	-3664089	84.9	25.8	F	10.8	18.9	8.1	70.1	G	18.9	21.85	2.95	64.5
EM009	DD	-72431.7	-3664503	84.6	23.1	F	11.2	19.3	8.1	69.3	G	19.3	21.6	2.3	64.1
EM010	DD	-74597	-3664495	77.4	53.5	F	38.5	47.9	9.4	34.2	G	47.9	51.47	3.57	27.7
EM011	DD	-72396.9	-3664901	85.6	12.8						G	6.5	9.3	2.8	77.7
EM012	DD	-73091.2	-3664091	87	34.9	F	18.2	25.7	7.5	65.1	G	25.7	31.52	5.82	58.4
EM013	DD	-74599.5	-3664897	94.1	63.1	F	47.5	55.4	7.9	42.7	G	55.4	61.85	6.45	35.5
EM014	DD	-72402.6	-3664101	83.1	37.7	F	14.5	24	9.5	63.9	G	24	28.1	4.1	57.1
EM015	DD	-72499.6	-3663702	85.2	21.5	F	10.95	16.64	5.69	71.4	G	16.64	19.5	2.86	67.1
EM016	DD	-72749	-3663700	82.2	25.9	F	9.5	15.8	6.3	69.6	G	15.8	19.6	3.8	64.5
EM017	DD	-74605.7	-3665297	109	86.9	F	71.7	80.85	9.15	32.7					
EM018	DD	-74199.5	-3664504	79.1	56.5	F	39.9	52.42	12.52	32.9	G	52.42	54.87	2.45	25.4
EM019	DD	-72991.3	-3663699	82.6	35.1	F	5.8	19.6	13.8	69.9	G	19.6	23.5	3.9	61
EM020	DD	-73315.4	-3663698	98.6	35.6	F	21.6	32.76	11.16	71.4	G	32.76	33.6	0.84	65.4
EM021	DD	-73800.9	-3664502	75.6	52	F	29.44	48.07	18.63	36.9	G	48.07	49.02	0.95	27.1
EM022	DD	-74119.8	-3665300	88.4	64	F	59.52	61.52	2	27.9	G	61.52	62.12	0.6	26.6
EM023	DD	-73400.7	-3664501	80.7	32	F	18.5	23.7	5.2	59.6	G	23.7	28.4	4.7	54.7
EM024	DD	-73799.8	-3664100	82.5	49						G	26.42	32.52	6.1	53
EM025	DD	-73394.6	-3664108	95.6	50.1	F	22.25	26.5	4.25	71.2	G	26.5	42.8	16.3	61
EM026	DD	-74201.4	-3664108	40.3	55	F	23.32	48.02	24.7	40.3	G	48.02	49.02	1	27.4
EM027	DD	-72098.9	-3664096	85.9	27						G	16.9	19.45	2.55	67.7
EM028	DD	-74199.2	-3665699	100.9	90.5	F	64.5	78.37	13.87	29.5	G	78.37	82.6	4.23	20.4
EM029	DD	-73808.7	-3663704	93.5	42.6						G	29.9	36	6.1	60.5
EM030	DD	-75002.1	-3664903	100.1	82.6	F	68.4	78.85	10.45	26.4	G	78.85	81.1	2.25	20.1
EM031	DD	-75000.2	-3665694	109.8	89.5										

DH_NO	Type	X COLLAR	Y COLLAR	Z COLLAR	EOH	ZONE	FROM	TO	LENGTH	MID - Z	ZONE	FROM	TO	LENGTH	MID - Z
EM032	DD	-75402.3	-3665303	102.4	81.8										
EM034	DD	-75795.2	-3664881	82.9	62.4										
EM035	DD	-72628.6	-3663284	83.2	25	F	3.65	16.2	12.55	73.3					
EM036	DD	-73557.4	-3664894	77	54.2	F	28.75	45.3	16.55	39.9	G	45.3	49.6	4.3	29.5
EM037	DD	-73803.5	-3664705	76.6	52.8	F	31.5	49	17.5	36.4	G	49	51.75	2.75	26.2
EM038	DD	-74000.3	-3664695	75.6	50	F	38.8	46.67	7.87	32.9	G	46.67	48.52	1.85	28
EM039	DD	-73600.5	-3664703	79.2	54.1	F	29.89	46.5	16.61	41	G	46.5	47.1	0.6	32.4
EM040	DD	-73599.5	-3664499	83.5	59	F	29.5	55	25.5	41.3					
EM041	DD	-74199.3	-3664699	77.1	56	F	41.5	51.26	9.76	30.8	G	51.26	51.92	0.66	25.6
F4_AB_5	RC	-73783	-3664282	55.2	27.4	F	9	37	28	42.9					
F4_G_13	RC	-73754.8	-3664358	55.2	27	F	3	25	22	41.2					
F5_EF_11	RC	-73778.6	-3664352	55.6	26.7	F	2	26	24	41.6					
G4_11	RC	-73686	-3664406	59.6	36	F	5	30	25	42.1					
H4_3	RC	-73642.8	-3664417	60.5	35	F	10	28	18	41.5					
I5_G_Centre	RC	-73597.5	-3664599	59.4	35.2	F	4	34	30	40.4					
RC046	RC	-73898.7	-3664781	77.1	57	F	35	51	16	34.1	G	51	54	3	24.6
RC047	RC	-73896.8	-3665004	75.8	56	F	33	52	19	33.3					
RC048	RC	-73679.4	-3665004	74	54	F	31	50	19	33.5	G	50	53	3	22.5
RC049	RC	-73650.3	-3665201	75.2	54	F	33	49	16	34.2	G	49	53	4	24.2
RC050	RC	-73697.7	-3664785	77.9	56	F	31	49	18	37.9	G	49	52	3	27.4
RC051	RC	-73451.2	-3665052	77.7	55	F	31	52	21	36.2					
RC052	RC	-73001.4	-3664649	82.1	24	F	7	13	6	72.1					
RC053	RC	-72723.2	-3664428	81.6	25	F	10	18	8	67.6					
RC054	RC	-72921.7	-3664345	83.7	26	F	15	22	7	65.2					
RC055	RC	-72947.8	-3664501	81.6	24	F	14	21	7	64.1					
RC056	RC	-73104.2	-3664495	93.1	38	F	22	38	16	63.1					
RC057	RC	-72644.6	-3664573	83.3	23	F	18	20	2	64.3					
RC058	RC	-74058.2	-3664353	75.7	57	F	36	51	15	32.2					
RC060	RC	-72549.2	-3663050	84.1	16	F	5	15	10	74.1					
RC061	RC	-72698.8	-3663132	86.3	20	F	10	18	8	72.3					
RC062	RC	-72558	-3664441	82	21	F	4	18	14	71					

DH_NO	Type	X COLLAR	Y COLLAR	Z COLLAR	EOH	ZONE	FROM	TO	LENGTH	MID - Z	ZONE	FROM	TO	LENGTH	MID - Z
RC063	RC	-72466	-3664344	83.3	23	F	7	18	11	70.8					
RC064	RC	-72734	-3663958	85.5	19	F	6	16	10	74.5					
RC065	RC	-72558	-3664001	82.3	23	F	10	21	11	66.8					
RC066	RC	-72811	-3664215	88	27										
RC067	RC	-72700	-3664199	84.3	22	F	5	21	16	71.3					
RC068	RC	-72666	-3664299	82.5	20	F	4	19	15	71	G	19	20	1	63
RC069	RC	-72786	-3664358	84	24	F	8	23	15	68.5					
RC070	RC	-72550	-3664197	83.5	23	F	10	20	10	68.5					
RC071	RC	-73373.3	-3664767	78.1	51.5	F	21	49	28	43.1					
TER-SC02	Sonic	-72636.2	-3664297	82.2	21	F	9	18.05	9.05	68.7					
TER-SC03	Sonic	-72599.7	-3664596	82.6	21	F	9	16.66	7.66	69.7					
VD1	RC	-73578.9	-3664608	56.4	33	F	3	32	29	38.9					
VD2	RC	-73572.5	-3664615	55.8	32	F	2	29	27	40.3					
VD3	RC	-73566.1	-3664623	55.9	31	F	3	27	24	40.9					
VD4	RC	-73559.7	-3664631	56.1	30	F	3	28	25	40.6					
VD5	RC	-73553.3	-3664638	55.8	30	F	3	29	26	39.8					
VD6	RC	-73546.9	-3664646	56	30	F	3	29	26	40					
VR1	RC	-73538.9	-3664562	60.2	34	F	3	30	27	43.7					
VR2	RC	-73546.6	-3664568	60.2	34	F	4	34	30	41.2					
VR3	RC	-73554.3	-3664575	60	34	F	5	32	27	41.5					
VR4	RC	-73562.1	-3664581	59.8	34.3	F	5	32	27	41.3					
VR5	RC	-73569.8	-3664587	59.8	34	F	5	32	27	41.3					
VR6	RC	-73577.6	-3664594	59.8	35.5	F	6	32	26	40.8					
VR7	RC	-73585.3	-3664599	59.3	36	F	6	32	26	40.3					
Y10-SC	Sonic	-74199.9	-3665496	97.1	81	F	57.3	80.5	23.2	28.2					
Y1-SC-A	Sonic	-73512.6	-3664615	55.7	30.3	F	0	26.3	26.3	42.5					
Y1-SC-B	Sonic	-73410.5	-3664758	56.4	30	F	0	29.65	29.65	41.6	G	29.65	29.75	0.1	26.7
Y2-SC	Sonic	-73749.7	-3664631	77.9	60	F	28.87	51.02	22.15	38	G	51.02	54	2.98	25.4
Y3-SC-A	Sonic	-73991.5	-3664499	75.3	54	F	28.28	48.61	20.33	36.9	G	48.61	52.11	3.5	25
Y3-SC-B	Sonic	-73706.4	-3664913	75.5	54	F	30.67	50	19.33	35.2	G	50	52	2	24.5
Y4-SC	Sonic	-74038.4	-3664866	74.3	54	F	33.82	48.25	14.43	33.3	G	48.25	50.24	1.99	25.1

DH_NO	Type	X COLLAR	Y COLLAR	Z COLLAR	EOH	ZONE	FROM	TO	LENGTH	MID - Z	ZONE	FROM	TO	LENGTH	MID - Z
Y6-SC	Sonic	-74282.5	-3665028	96	75	F	59.9	74.46	14.56	28.8					
Y8-SC	Sonic	-74402	-3665201	102.6	87	F	71.05	83	11.95	25.6	G	83	83.1	0.1	19.6

SECTION B

HINDA COMPETENT PERSON'S REPORT

A COMPETENT PERSONS' REPORT ON THE HINDA PHOSPHATE PROJECT, REPUBLIC OF CONGO

Prepared For

Grant Thornton UK LLP
Mirabaud Securities Limited
H&P Advisory Limited

On Behalf of

Kropz PLC

Report Prepared by

srk consulting

SRK Consulting (UK) Limited
UK30155

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A COMPETENT PERSONS' REPORT ON THE HINDA PHOSPHATE PROJECT, REPUBLIC OF CONGO

– EXECUTIVE SUMMARY

SRK Consulting (UK) Limited ("**SRK**") has been requested by Grant Thornton UK LLP, Mirabaud Securities Limited, H&P Advisory Limited (the "**Advisors**") on behalf of Kropz plc ("**Kropz**", also referred to herein as the "**Company**") to prepare a Competent Persons' Report ("**CPR**"), on the Hinda Phosphate Project (the "**HPP**" or the "**Mineral Asset**" located in the Republic of Congo (the "**Congo**").

The HPP has a substantial Mineral Resource base totalling 675.8Mt at a grade of 10.0%P_2O_5, 3.5%MgO, 18.6%CaO and 47.3%SiO_2 which as part of this review has been audited and verified by SRK. Of the total Mineral Resource, 86% is included in the Measured and Indicated categories, consisting of 200.5Mt Measured Mineral Resources at a grade of 11.6%P_2O_5, 3.8%MgO, 21.8%CaO and 42.7%SiO_2, and 300.9Mt Indicated Mineral Resources at a grade of 9.8%P_2O_5, 3.3%MgO, 17.6%CaO and 48.5%SiO_2. The Competent Person for the reporting of the Mineral Resources is Dr Timothy Lucks, who is a full-time employee of SRK.

Mineral Resource Statement for the HPP reported on a 100% basis.

Classification	Tonnage (Mt)	P_2O_5 (%)	U_3O_8 (ppm)	MgO (%)	Fe_2O_3 (%)	Al_2O_3 (%)	SiO_2 (%)	CaO (%)	CO_2 (%)	F (ppm)	Density (t/m^3)	Content (MtP_2O_5)
Measured	200.5	11.6	75.0	3.8	1.4	3.7	42.7	21.8	6.5	9,971	1.93	23.3
Indicated	380.9	9.8	74.0	3.3	1.8	5.0	48.5	17.6	7.8	8,227	1.89	37.3
Measured + Indicated	**581.4**	**10.4**	**74.3**	**3.5**	**1.7**	**4.6**	**46.5**	**19.0**	**7.4**	**8,828**	**1.90**	**60.5**
Inferred	94.4	7.5	58.0	3.6	1.7	4.8	52.2	15.8	7.3	5,688	1.90	7.1
Total Mineral Resources	**675.8**	**10.0**	**72.1**	**3.5**	**1.7**	**4.6**	**47.3**	**18.6**	**7.3**	**8,390**	**1.90**	**67.7**

Mineral Resource Statement for the HPP reported on a attributable basis[(1)]

Classification	Tonnage (Mt)	P_2O_5 (%)	U_3O_8 (ppm)	MgO (%)	Fe_2O_3 (%)	Al_2O_3 (%)	SiO_2 (%)	CaO (%)	CO_2 (%)	F (ppm)	Density (t/m^3)	Content (MtP_2O_5)
Measured	126.3	11.6	75.0	3.8	1.4	3.7	42.7	21.8	6.5	9,971	1.93	14.7
Indicated	240.0	9.8	74.0	3.3	1.8	5.0	48.5	17.6	7.8	8,227	1.89	23.5
Measured + Indicated	**366.3**	**10.4**	**74.3**	**3.5**	**1.7**	**4.6**	**46.5**	**19.0**	**7.4**	**8,828**	**1.90**	**38.2**
Inferred	59.5	7.5	58.0	3.6	1.7	4.8	52.2	15.8	7.3	5,688	1.90	4.5
Total Mineral Resources	**425.8**	**10.0**	**72.1**	**3.5**	**1.7**	**4.6**	**47.3**	**18.6**	**7.3**	**8,390**	**1.90**	**42.6**

(1) Equity attributable interest of 63% (70% of 90%).

The HPP is supported by a substantial body of mineral processing testwork as part of the historical Pre-Feasibility and Definitive Feasibility studies ("**PFS**" and "**DFS**" respectively), which has subsequently been reviewed by independent potential 3rd party offtakers, that supports the design input parameters for the beneficiation plant design.

The feasibility of the HPP has been confirmed through the completion of a Definitive Feasibility Study in 2015 ("**2015 DFS**"), delivered under the management of the previous owners Cominco Resources Ltd ("**Cominco**"). The 2015 DFS targeted the production of 4.1Mtpa of phosphate concentrate ("**Phosrock**") at a concentrate grade of 32%P_2O_5. At the time of reporting the 2015 DFS, based on the technical and economic parameters defined, the unleveraged NPV (10% discount rate) was US$1.85bn, with an associated IRR of 38%, based on an average life of mine Phosrock price (life of mine) US$149/t, initial capital investment of US$601.3m and operating costs of US$36.6/t product for the first 5 years and US$47.9/t product thereafter.

It is however the Company's opinion that whilst the 2015 DFS reported a positive economic outcome, that in consideration of the long-term supply/demand conditions of the Phosrock market and the current economic market conditions, that an initially reduced capacity project targeting production between 1.0Mtpa and 1.2Mtpa, potentially increasing to 2Mtpa, can be developed for a significantly lower level of upfront capital investment. The company's current strategic plan is to target capital costs for the refined base case scenario for the mine, beneficiation plant and associated infrastructure at the HPP, of between US$80m and US$100m. SRK has been informed that this estimate is based on the Company's internal benchmarking against the Elandsfontein Project currently under developed in the Republic of South Africa.

For the avoidance of doubt, SRK notes that certain of the technical information pertaining to the 2015 DFS reported herein is largely included as a matter of historical fact and as such is not intended to be reported as current, specifically given the combination of:

- Current commodity price assumptions;
- That all key assumptions regarding operating and capital expenditures are effectively base dated as at Q4 2014 and as such have not been updated to the date of publication; and
- The Company's decision to pursue a differing strategic option in respect of scope and scale.

Subsequent to the completion of the 2015 DFS the Cominco team conducted an internal study to assess the potential to develop a "starter project" which focused on processing the BM ore ("**HBM**"), which is a weathered fraction of the deposit and therefore elevated in its in-situ P_2O_5 content and depleted in its MgO content, relative to the GM ore. Testwork conducted demonstrated that a saleable product grade of 31%P_2O_5 at 70% P_2O_5 recovery could be produced from Hinda BM ore by sizing and screening only. The study proposed a production rate of 900kt phosphate concentrate per annum, with a LoM of approximately 12 years.

SRK has not reviewed the HBM study details (noted herein) and therefore it has not been commented as part of this CPR, nor have its project economics be validated by SRK. It is understood that the Company intends to assess the opportunities presented by the HBM project alongside the review of the 2015 DFS, as part of the proposed Work Programme.

In support of the above opinion the Company has prepared a phased programme of work that will review and verify the underlying design parameters, conduct an option analysis to trade-off various optimisation opportunities and develop a single solution to Feasibility study level, accompanied by a +/- 15% cost estimate and updated Environmental and Social Impact Assessment ("**ESIA**"). The revised lower capital cost option envisioned by the Company will test the following opportunities associated to a reduced production rate:

- **Reduced capital costs:**
  - Reduced processing plant size and reassessment of its positioning in relation to the mine and access road.
  - Opportunity to preferentially mine the higher grade weathered BM ore, as identified by the previous owners, in the earlier phases of mine operations (the "**BM Process Option**", hereinafter the "**HBM**"), potentially deferring the requirement to implement the floatation circuit.
  - Switching from an owner operated model for mining to a contractor operating model, reducing mining equipment/fleet requirements.
  - Reconsideration of the implementation of a waste in-pit crushing and conveying ("**IPCC**") system and trading off the deferment of the ore IPCC system based on the revised plant location and mine schedule. This in turn may lead to an opportunity to reengineer the scale of the transport corridor to consider reduced load bearing requirements.
  - Deferment of substantial capital expenditure relating to the expansion of tailings and surface

water management infrastructure to later periods in the project schedule.
  - Removal of the slurry pipeline infrastructure for transport of concentrate from the mine site to the port, instead considering trucking logistics contractors, thus avoiding the capital investment associated with the infrastructure and fleet.
  - Reorganisation of the site infrastructure and facilities, to a single location, to combine the processing plant and thickening, filtration, drying (that was previously located at Point Indienne, thus avoiding capital investment for additional site offices and workshops, control room, reagent and fuel storage facilities).
  - Utilising the existing port of Pointe-Noire, rather than the construction of a purpose built facility at Port Indienne.
- **Simplified operations:**
  - Trade off the benefits of switching to solely mobile fleet for mining and removal of the IPCC components, reducing complexity of the mining and backfilling operations, crusher and conveyor infrastructure and site establishment requirements.
  - Smaller volume mine trucks, which will limit the impact of the poor trafficability conditions within the pit.
  - Reduced number of dewatering wells that require to be drilled each year.
  - Transfer of tasks from the proposed owner operated development/infrastructure support fleet to external contractors, for e.g. tailings embankments.
- **Project development:**
  - An extended Life of Mine to exceed 60 years based on a production rate of 1.2Mtpa of Phosrock.
  - The spatial coverage of the bulk samples for pilot testwork included in the 2015 DFS would be extended from the first five years to approximately 13 years.
  - Opportunity to incorporate additional climate and hydrological data to verify the FS surface water management design assumptions.
  - Transfer of operations to the existing port of Pointe-Noire, removing the requirement for further intrusive studies at the Port Indienne site and potentially reducing the requirements associated to updating the ESIA for the port as it is an operating facility.
  - A programme of additional drilling.

Notwithstanding the above the Company recognises the need to balance the stated opportunities with the following factors, which have to be considered:

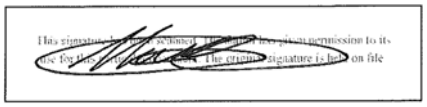
- Operational pit slopes exposed for longer periods;
- Interaction between mine scheduling, dewatering and surface water management;
- Environmental and social considerations in terms of the proposed logistics solution between the mine site and port;
- Upgrade activities required to the existing port infrastructure to support the proposed export quantities;
- Fixed capital costs which apply regardless of the scale of the project; and
- Impact on operating costs through the transfer of capital costs to 3rd party contractors and/ or reduced benefits associated to the larger scale project.

In SRK's opinion, based on the findings and the level of work previously completed on the project, there is good merit in following the proposed programme of works to consider a reduced production rate, where there may also be operational benefits of selecting a smaller scale project.

The Company has allocated a total budget of US$1,771k, with approximately US$800k to update the FS, and US$500k to update the ESIA, including the development of the resettlement action plan. The study is proposed to be completed over a 10 to 12 month period. In SRK's opinion, the programme of work as proposed contains appropriate activities to rescale the HPP and produce an updated FS, including cost estimate, and ESIA. The Company has furthermore allowed a reasonable duration for the completion of these activities and sufficient budget to conduct the base case programme. It should be noted that should the Company wish to consider the option of prioritising production of BM material, then this would require additional time and budget to complete on top of that presented, including a programme of additional drilling.

This report is addressed to Kropz plc and its Advisors. Kropz has stated its intention to secure an Admission of its shares to Trading on the AIM Market, a market operated by the London Stock Exchange plc ("**LSE**"). As such, it is the Company's intention to submit this CPR on the HPP as part of the "**Admission Document**", alongside its other, current assets. For the purposes of the AIM Rules for Companies (defined below), SRK is responsible for this report as part of the Admission Document and declares that it has taken all reasonable care to ensure that the information contained in this report is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import and as informed by the Company confirms that no material change has occurred subsequent to the Effective Date of the CPR being 30 September 2018 that would require any amendment to the CPR. SRK consents to the inclusion of this report, and reference to any part of this report, in the Admission Document.

For and behalf of SRK Consulting (UK) Limited



Dr Timothy Lucks,
Practice Leader and Principal Consultant (Geology),
SRK Consulting (UK) Limited.

27 November 2018

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A COMPETENT PERSONS' REPORT ON THE HINDA PHOSPHATE PROJECT, REPUBLIC OF CONGO

1 INTRODUCTION

1.1 Background

SRK Consulting (UK) Limited ("**SRK**") has been requested by Grant Thornton UK LLP, Mirabaud Securities Limited, H&P Advisory Limited (the "**Advisors**") on behalf of Kropz PLC ("**Kropz**", also referred to herein as the "Company") to prepare a Competent Persons' Report ("**CPR**"), pursuant to the Requirements (defined in Section 1.2.1 below) on the Hinda Phosphate Project (the "**HPP**" or the "**Mineral Asset**" subject to the exclusions noted below) located in the Republic of Congo ("**Congo**").

The HPP consists of a sedimentary hosted phosphate deposit located approximately 40km northwest of the city of Pointe-Noire. The HPP was subject to completion of a Definitive Feasibility Study in 2015 (the "**2015 DFS**"), managed by the owning party Cominco Resources Ltd ("**Cominco**") registered in the British Virgin Islands, through its 100% owned subsidiary Cominco S.A., registered in the Congo, which currently owns 100% of the HPP.

Kropz is a privately-owned company focused on exploration and development within the fertilizer sector. Kropz intends to purchase up to 100% (but no less than 70%) of Cominco (the "**Acquisition**"). Cominco is the 100% shareholder in Cominco SA, the holder of the licences and production concessions granted in respect of the HPP. Cominco SA will own 90% of HPP, with the balance being held the by the Government of the Congo.

This report is addressed to Kropz plc and its Advisors. Kropz has stated its intention to secure an Admission of its shares to Trading on the AIM Market ("**AIM**") a market operated by the London Stock Exchange plc ("**LSE**"). As such, it is the Company's intention to include this CPR on the HPP as part of the "**Admission Document**", alongside its other, current assets. For the purposes of the AIM Rules for Companies (defined below), SRK is responsible for this report as part of the Admission Document and declares that it has taken all reasonable care to ensure that the information contained in this report is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import and as informed by the Company confirms that no material change has occurred subsequent to the Effective Date of the CPR being 30 September 2018 that would require any amendment to the CPR. SRK consents to the inclusion of this report, and reference to any part of this report, in the Admission Document.

Given the timing of the historical study and anticipated future work programme by the Company, the focus of this CPR is on:

- A summary of the 2015 DFS and associated outcomes;
- Reporting of the Mineral Resource statement in accordance with the terms and definitions of the JORC Code (defined below, Section 1.2.2) as of 10 September 2018;
- A review of the mineral processing testwork completed since completion of the 2015 DFS; and
- A review of the Company's planned work programme (the "**Work Programme**") including

activities, schedules and expenditures for the update of the technical studies for the HPP post Acquisition.

Certain units of measurements, abbreviations and technical terms are defined in the glossary at the end of this CPR. Unless otherwise explicitly stated all quantitative data as reported in this CPR are reported on a 100% basis.

For the avoidance of doubt, SRK notes that certain of the technical information pertaining to the 2015 DFS reported herein is largely included as a matter of historical fact and as such is not intended to be reported as current, specifically given the combination of:

- Current commodity price assumptions;
- That all key assumptions regarding operating and capital expenditures are effectively base dated as at Q4 2014 and as such have not been updated to the date of publication ("**Effective Date**") of this CPR being 30 September 2018; and
- The Company's decision to pursue a differing strategic option in respect of scope and scale.

1.2 Reporting Compliance, Reporting Standard and Reliance

1.2.1 Reporting Compliance

SRK has been informed by the Company that an Admission Document is to be prepared in accordance with the following which together comprise the "**Requirements**":

- The AIM Rules for Companies, March 2018 published by the London Stock Exchange (the "**AIM Rules**") – specifically Rule 3 relating to Admission Documents and including the Annexes to the AIM Rules and the AIM Note for Mining and Oil & gas Companies (June 2009).

Notwithstanding the above, the Company has voluntarily mandated SRK to prepare this CPR which is published in accordance with the appropriate Reporting Standard (defined below).

1.2.2 Reporting Standard

Mineral Resources and Ore Reserves

The Reporting Standard adopted for reporting of the recent Mineral Resource and Ore Reserve Statements in this CPR is that defined by the terms and definitions given in *"The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia"* (the "**JORC Code**"). SRK confirms that the JORC Code has been aligned with the Committee for Mineral Reserves International Reporting Standards ("**CRIRSCO**") reporting template.

Technical Study Standards

SRK notes that all technical information as reported in the 2015 DFS has been compared with the following definition and standard for a Feasibility Study ("**FS**") is currently defined as follows: A comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental and other relevant factors are considered in sufficient detail so 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. For the avoidance of doubt, this would commonly ensure that the technical feasibility and economic viability of the mineral deposit has been demonstrated on a multi-disciplinary basis to what is commonly known as "**bankable standards**". In a Feasibility Study the declaration of Ore Reserves would be expected and the economic viability of the mineral deposit could be demonstrated with sole reliance on the depletion of the Ore Reserves without inclusion of Mineral Resources. In

parallel to the development of the Feasibility Study it is normally expected that an Environmental and Social Impact Study would have been completed. Typical contingencies included within the capital expenditure estimate range between 10% and 15% and accuracy ranges are typically ±15%.

Environmental Study Standards

In respect of international standards, SRK has reviewed the supporting documentation sufficient to assess reporting of Ore Reserves in accordance with the JORC Code. For the avoidance of doubt however, SRK has not undertaken a detailed assessment of the 2015 DFS in respect of the Equator Principles III (and the relevant IFC Performance Standards and relevant World Bank Group's Environmental Health and Safety guidelines). Specifically, this has not included the following: Environmental Social Management Plans ("**ESMPs**"), the Environmental and Social Management Systems ("**ESMS**") or Stakeholder Engagement process documentation; typically required in order to assist any Equator Principal Financial Institution ("**EPFI**") due diligence, and assess Equator Principle ("**EP**") compliance.

1.2.3 Reliance on SRK

The CPR is addressed to and may be relied upon by the Directors of the Company and the Advisors as appropriate, specifically in respect of compliance with the Requirements, the Reporting Standard and as appropriate the AIM Rules.

SRK declares that it has taken all reasonable care to ensure that the information contained in the CPR is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

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

SRK has no obligation or undertaking to advise any person of any development in relation to the Mineral Assets which comes to its attention after the "**Effective Date**" of this CPR, being 30 September 2018, or to review, revise or update the CPR or opinion in respect of any such development occurring after the Effective Date of this CPR.

1.3 Work Completed

In completing this CPR SRK has conducted the following activities:

- Completed a site visit to review the geological data supporting the Mineral Resource estimate which was complete by Dr Lucy Roberts during August 2018;
- Compiled a summary of the 2015 DFS and associated outcomes;
- Conducted sufficient checks and verification exercises to report the Mineral Resource statement in accordance with the terms and definitions of the JORC Code (defined below, Section 1.2.2) as of 10 September 2018;
- A review of the mineral processing testwork completed since completion of the 2015 DFS; and
- A review of the Company's planned Work Programme including activities, schedules and expenditures for the update of the technical studies for the HPP post Acquisition.

1.4 Limitations, Reliance on Information, Declaration, Consent and Cautionary Statements

1.4.1 Limitations

Mineral Resource and Ore Reserve Statements, Technical Economic Parameters ("**TEP's**"), and the Technical Information rely on assumptions regarding certain forward-looking statements. These forward-looking statements are estimates and involve a number of risks and uncertainties that could cause actual results to differ materially.

The achievability of the projections of TEPs as included in this CPR and incorporated into the Life of Mine plan ("**LoMp**") for the Mineral Assets are neither warranted nor guaranteed by SRK. The projections as presented and discussed herein have been proposed by Cominco and/or the Company's management and cannot be assured; they are necessarily based on economic assumptions, many of which are beyond the control of the Company.

Future cashflows and profits derived from such forecasts are inherently uncertain and actual results may be significantly more or less favourable.

Unless otherwise expressly stated all the opinions and conclusions expressed in this CPR are those of SRK.

1.4.2 Reliance on Information

In compiling this CPR SRK has relied of the following sources of information:

- Hinda Phosphate Project, Volume 1 and 2, Definitive Feasibility Study, Cominco, June 11, 2015, including associated dependencies;
- Phosphate Rock Market Study 16 April 2018, CRU Consulting Limited; and
- Phosphate Rock Market Study Update and Addendum 20 August 2018, CRU Consulting Limited.

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

1.4.3 Declaration

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

SRK does not have, at the date of publication of this report, and has not ever had, any shareholding in or other relationship with the Company, its' Advisors, or Cominco and consequently considers itself to be independent of the Company, its Advisors, and Cominco.

1.4.4 Consent and Copyright

SRK consents to the issuing of this CPR in the form and context in which it is to be included in the Admission Document for the offering of securities of the Company.

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

Copyright of all text and other matters in this document, including the manner of presentation, is the exclusive property of SRK. It is a criminal offence to publish this document or any part of

the document under a different cover, or to reproduce and/or use, without written consent, any technical procedure and/or technique contained in this document. The intellectual property reflected in the contents resides with SRK and shall not be used for any activity that does not involve SRK, without the written consent of SRK.

1.4.5 Disclaimers and Cautionary Statements for US Investors

This CPR uses the terms "**Mineral Resource**", "**Measured Mineral Resource**", "**Indicated Mineral Resource**" and "**Inferred Mineral Resource**". U.S. investors and shareholders in the Company are advised that while such terms are recognised and permitted under JORC Code and the Requirements, the U.S. Securities and Exchange Commission ("**SEC**") does not recognise them and strictly prohibits companies from including such terms in SEC filings.

Accordingly, U.S. investors and shareholders in the Company are cautioned not to assume that any unmodified part of the Mineral Resources in these categories will ever be converted into Ore Reserves as such term is used in this CPR.

1.5 Qualifications of Consultants

SRK is part of an international group (the SRK Group), which comprises some 1,400 professional staff offering expertise in a wide range of resource and engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project. This permits the SRK Group to provide its clients with conflict-free and objective recommendations on crucial judgment issues. The SRK Group has a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations and audits, CPR and independent feasibility studies on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs.

This CPR has been prepared by a team of consultants sourced from the SRK Group's office in the UK over a one-month period.

The Competent Person who has supervised the production of this CPR is by Dr Tim Lucks, who is a full-time employee of SRK Consulting (UK) Limited and a member and chartered professional of the Australian Institute of Mining and Metallurgy ("**MAusIMM(CP)**"). He is considered a Competent Person ("**CP**"), as defined by the JORC Code, for the style of mineralisation discussed herein.

2 COMMODITY PRICES AND MACRO ECONOMICS

2.1 Introduction

The following section includes discussion and comment on the commodity prices and macro-economic assumptions as relied on for the purpose of reporting the 2018 Mineral Resource statements noted herein and in addition providing an updated context to the historical technical studies completed to date in respect of the HPP.

The macro-economic assumptions have ben sourced from various public domain sources with the commodity price assumptions derived from various commodity market specialist reports prepared by CRU International Limited ("**CRU**") as reported in the 2015 DFS and in the 2018 CRU reports, from April and August 2018(collectively the "**CRU Reports**").

SRK has been informed that the necessary permissions and reliance have been sourced by the Company in order to both reference and as appropriate summarise the key findings of these reports in this CPR. SRK has been informed that CRU's "**2018 Report**" is appended to the Admission Document.

For the avoidance of doubt, SRK notes all references made to and sourced from the 2015 DFS report are made solely to support the assumptions as historically relied upon for authoring and publication of the 2015 DFS. SRK note that such references are a matter of historical context which are superseded by CRU's 2018 Report as referenced herein.

2.2 Phosphate Rock

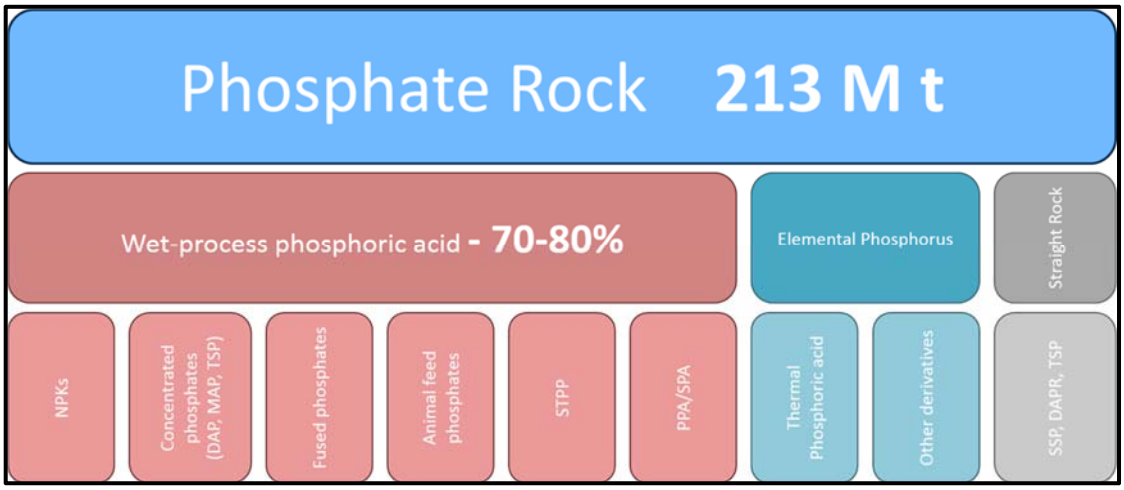
"**Phosphate Rock**" (also referred to as "**Phosphate Concentrate**" or "**Phosrock**") is a phosphorous-bearing mineral that is the building block for a range of downstream products including fertilizers, animal feeds and industrial phosphates. While an essential element for all forms of life, it represents one of the three macro-nutrients required by plants, the other two being nitrogen and potassium. As such, the main driver of Phosphate Rock demand is the production of a range of phosphate and multi-nutrient fertilizers which are critical to boosting crop yields and sustaining global food supplies to feed an expanding world population. However, phosphorous is also an important dietary supplement in animal feed, demand for which is determined by global meat production. Finally, smaller amounts of phosphorous are demanded for a wide range of industrial and food applications (Figure 2-1). As much as 80% of all phosphate rock is used in the production of wet-process phosphoric acid ("**WPA**"), which is an intermediate product used to produce a variety of downstream fertilizers and other products:

- **Concentrated phosphate fertilizers:** This is the most significant segment, including diammonium phosphate ("**DAP**"), monoammonium phosphate ("**MAP**") and triple superphosphate ("**TSP**"). These fertilizers are produced on a large scale and traded globally in high volumes;
- **Multi-nutrient fertilizers:** WPA can be used to produce a wide range of multi-nutrient "**NPK**" formulations, demand for which has been growing in recent years;
- **Animal feed:** Phosphorous-bearing animal feed supplements, such as di-calcium phosphate ("**DCP**") are produced via the WPA route; and
- **Industrial and food applications:** WPA can be purified to produce a high purity acid for use as an intermediate in the production of industrial and food phosphates. A major use of this purified acid is in the production of phosphate salts, such as sodium tripolyphosphate ("**STPP**").

The remaining 20% to 30% of phosphate rock demand is for use in production of elemental phosphorous and other fertilizers not produced via the WPA route:

- **Elemental phosphorous:** (or white phosphorous) is a raw material in thermal phosphoric acid production ("**TPA**"). TPA has the same applications as those of purified grades of WPA; and
- **Other fertilizers:** Other 'low-analysis' fertilizers including single superphosphate ("**SSP**") and direct application phosphate rock ("**DAPR**") are produced from phosphate rock. These markets are smaller and more localized compared to concentrated phosphate fertilizers.

Figure 2-1: Phosphate rock market structure and downstream products (2017)



There exists a high degree of variation in the level of integration throughout the various segments of the phosphate value chain. An important distinction to make when analysing the phosphate rock market is that between integrated (or captive) supply versus non-integrated supply.

'Integrated' Phosphate Rock production relates to Phosphate Rock mining companies which are integrated with the production of WPA or other downstream products. Conversely, 'non-integrated' Phosphate Rock production is available for sale to third parties for the onward downstream processing into derivative products.

Phosphate deposits can generally be divided into sedimentary and igneous deposits depending on their geological origin (some phosphate deposits occur as guano and metamorphic rock, but these are less common). Significant Sedimentary deposits, which are by far the most common source of phosphate rock, are found in China, North and Southern Africa, North America and the Middle East. Significant Igneous deposits, meanwhile, are found in Russia (Kola Peninsula), Southern Africa, Brazil, Finland and Canada.

Phosphate Rock is not a homogeneous commodity with sources characterised by meaningful differences in both the physical and chemical properties. This impacts the configuration of downstream operations which are also further optimised to process phosphate rock with a specific set of quality specifications. Furthermore, Phosphate Rock buyers therefore tend to have preferences for certain Phosphate Rock grades and characteristics when sourcing Phosphate Rock in the market for their specific end use.

The grade of commercial phosphate rock is usually defined in terms of its phosphorus pentoxide (P_2O_5) content, even though the P_2O_5 form does not exist in either soils or fertilisers as such. The phosphorus concentration in phosphate rock is also commonly expressed in terms of tricalcium phosphate $Ca_3(PO_4)_2$ known in the trade as Bone Phosphate of Lime ("**BPL**"). This term originated when tricalcium was thought to be the main constituent of bone and Phosphate Rock. It is now known that the phosphorus component of both bone and most phosphate rocks is substituted apatitic compounds. A grade of 68%BPL to 72%BPL, an industry standard, translates to 31%P_2O_5 to 33%P_2O_5 and is based on the following formula: BPL = 2.1852 x P_2O_5.

Generally beneficiated igneous deposits contain higher P_2O_5 content and fewer impurities (such as heavy metal content) when compared with sedimentary deposits. This is not always the case and there also exists a wide variation within sedimentary deposits in terms of P_2O_5 and other qualities.

2.2.1 Phosphate Rock Pricing

Phosphate Rock as a material is not homogenous and is classed as a quasi-commodity. As such it lends itself particularly favourably to value in use analysis ("**VIU**") where the composition of the Phosphate Rock needs to be analysed since the chemical composition of different Phosphate Rocks from different locations vary in a number of ways.

The variation in this chemical composition affects the way in which they are processed into phosphoric acid. The value-in-use approach for Phosphate Rock aims to attribute an economic value to the major chemical components of global Phosphate Rocks. The VIU approach allows products of differing specifications to be normalised and compared on a like for like basis with a global benchmark.

The specification items that are assessed in VIU analysis (Benchmark Specifications stated by CRU in August 2018 Report, Table 2 Phosphate rock specification) in order of importance relative to economic value impact are:

- **Phosphate content:** For a phosphate rock with a lower P_2O_5 content than the benchmark, the production of 1 tonne P_2O_5 phosphoric acid would require additional tonnes of rock and vice versa for rock with higher P_2O_5 content than the benchmark. As a result, high content rocks received a positive price adjustment and lower content rocks received a relative adjustment. Benchmark quality is noted as 32.00%P_2O_5;
- **Calcium Carbonate ("CaO") content:** High CaO rocks require more sulphuric acid while those with lower content require less. The additional or reduced acid requirement generates a sulphur requirement with an associated credit or penalty. This is calculated in line with the market price of sulphur. Benchmark quality is noted as 51.50%CaO indicating a CaO:P_2O_5 ratio of 1.61;
- **Minor Element Ratio ("MER")**: A high MER ratio (defined as (%Fe_2O_3+%Al_2O_3+%MgO) /%P_2O_5): requires additional ammonia consumption to bring the nitrogen grade up to the required DAP specification as the aluminium and iron content reacts with ammonia. For those phosphate rocks with MER lower than the benchmark, a credit is applied relative to the saving associated with a lower requirement of ammonia. Accordingly, a penalty is incurred for higher MER in line with the cost of additional ammonia. Benchmark quality is noted at 0.03; and
- **Reactive silica to fluorine ratio:** High fluorine levels require the addition of reactive silica in the form of kaolin to prevent HF corrosion of the facility. Phosphate rocks with a ratio higher than the benchmark require purchase of additional reactive silica and incur a penalty equating to the cost of said silica.

Due to the dominance of the OCP Group (formerly Office Chérifien Des Phosphates) in the international trade of phosphate rock, coupled with the importance of the company in all downstream phosphate markets, the benchmark price for the phosphate rock market is the Free-on-Board ("**FoB"**) Morocco 68% to 72% BPL benchmark.

Phosphate Rock prices are influenced by a number of drivers, including most importantly:

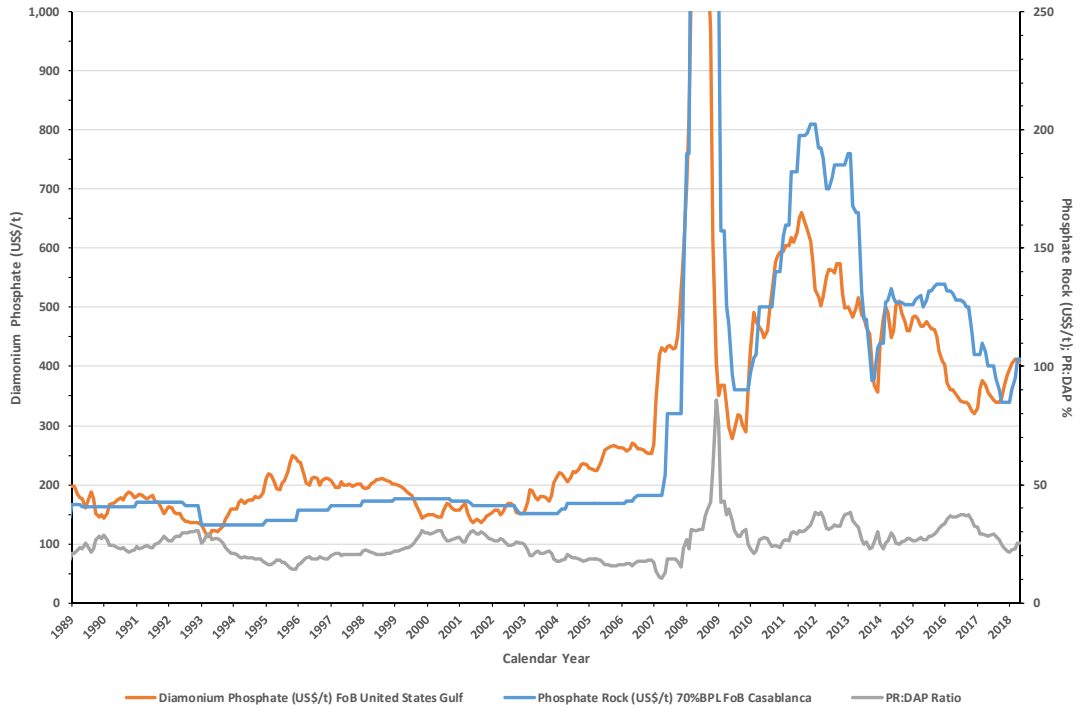
- **The Traded Market:** Phosphate Rock prices are determined by the 16% of total production that is traded via the seaborne market. The five largest exporting countries account for 75% of global trade;
- **The Dominance of Morocco:** The rock industry has long been dominated by OCP in Morocco, which accounts for 33% of the world's known phosphate resources. Morocco is a major net exporter of phosphate rock, phosphate chemicals and fertilizers. The country supplies phosphates to virtually all major importing markets and FoB Morocco is the

generally accepted benchmark for phosphate rock prices. The reported FoB Morocco price refers to a standard quality product ranging in grade from 31% to 33% P_2O_5 (68%BPL to 72%BPL);

- **Concentration of Impurities:** The presence in the beneficiated material of impurities and their impact on the conversion costs into downstream chemicals or on the marketability of downstream products;
- **Fertilizer Producer Margins:** The margins of downstream phosphate fertilizer producers, who use purchased traded rock as their feedstock; and
- **Comparative Market Relationships:** The relationship of phosphate rock to downstream P fertilizers. Downstream fertilizer prices correlated to rock prices (with the DAP North African price showing a 0.81 correlation to the Moroccan 65%BPL to 75%BPL Phosphate Rock price). DAP is responsible for driving rock prices. When DAP prices move upwards as they did between January 2007 and August 2008, rock prices are pulled upwards. The opposite is also true when DAP prices fall. Another useful way of studying the relationship between DAP and Phosphate Rock prices is to look at the ratio of both commodities (Figure 2-2). Between 2002 and 2011, the rock/DAP ratio averaged 22%, but in recent years the ratio has risen above 30%. The rise can be explained by the view (held by most major exporters) that rock prices have been undervalued relative to DAP prices for some time now. This relationship is a key determinant of pricing, and is one of the most important factors that we consider when forecasting prices.

Figure 2-2 presents a summary of the historical monthly commodity prices for Phosphate Rock (70%BPL FoB Casablanca), DAP (FoB United States Gulf) and the Phosphate Rock to DAP ratio from 1989 through 30 May 2018 and sourced from public domain data.

Figure 2-2: Historical Phosphate Rock, Diammonium Phosphate and Phosphate Rock to Diammonium Phosphate price ratio 1989 through 30 May 2018



2.2.2 2018 Report: Outlook

The key elements noted with respect to demand-supply-price assumptions as reported in

CRU's 2018 reports are:

- **Demand (April 2018):**
  - Total global Phosphate Rock demand will increase to 230.2Mt in 2022, up from 213.1Mt in 2017. This represents a 1.6% compound annual growth rate ("**CAGR**") from 2017 and significantly marks a shift in demand growth from China to other world regions.
  - The medium-term outlook represents a deceleration in demand growth from the strong 2.7% CAGR observed 2010-2017 that was driven largely by rapidly expanding Chinese demand. Phosphate rock demand reached a peak of nearly 93Mt in China in 2015, but has fallen significantly since then and is expected remain in the range of 82Mt over the medium term.
  - The MENA region (Middle East and North Africa) will replace China as the main driver of phosphate rock demand growth over the next five years. Demand for phosphate rock will increase by 6.6Mt in Morocco and nearly 4.4Mt in Saudi Arabia by 2022.
  - Significant increases in demand from non-integrated producers, however, will also contribute to medium term demand growth.
  - CRU forecasts phosphate rock long-term demand will accelerate in the period 2022-2035 to 2% CAGR. As a result, we project that total consumption will reach 297Mt in 2035, up by 67Mt from 2022;
- **Supply (April 2018):**
  - Global phosphate rock capacity will increase to 319Mt in 2022, up from 289Mt in 2017. This represents a 2.0% CAGR. Phosphate rock capacity integrated with downstream fertilizer production will continue to drive supply growth. Morocco will expand capacity by 11.9Mt over the medium-term.
  - Phosphate rock production will steadily rise to 230Mt by 2022. The increases in capacity coupled with a slowdown in Chinese capacity use will result in a slight drop in the industry average operating rate to 72% over the forecast period;
- **Trade (April 2018):**
  - Global phosphate rock trade to increase by 3.2Mt 2017-2022, reaching 35.3Mt. This represents a 1.9% CAGR and marks a significant acceleration in the phosphate rock import demand growth that has been observed since 2000; and
- **Price (August 2018):**
  - Phosphate rock prices have performed strongly in 2018; prices have increased by between 10% and 20% at major benchmarks since the start of the year. It is CRU's assessment that 2018 marks a turning point in phosphate rock prices with 2017Q4 marking the low point.
  - CRU's analysis forecasts a continued recovery in phosphate rock prices in the medium and longer terms, most significantly driven by increasing phosphate fertilizer prices.

2.2.3 HPP Value in Use Assessment

The VIU calculation takes Morocco 32%P_2O_5 rock as the global "**Industry Benchmark**" and compares it to Hinda's specifications. Morocco stands as the largest miner of Phosphate Rock, as well as having the largest reserves. Their product is seen as one most attractive to off-takers in the global marker. The specific items which are analysed have a direct impact on the cost of processing the rock to wet process phosphoric acid and then on to DAP/MAP. DAP and MAP are the two most important phosphate fertilisers produced and represent the majority of global phosphoric acid consumption. Therefore, their production is used as the global benchmark

process and the market price of phosphate rock is being set by consumers who have wet-process phosphoric acid production which they then convert into MAP/DAP.

Table 2-1 provides a summary of the concentrate quality assessment as reported in the 2015 DFS. Table 2-2 provides a comparative summary of key quality criteria for the HPP the HBM as measured against the Industry Benchmark and reported in the 2018 August Report.

Table 2-1: HPP concentrate quality assessment (2015 DFS)

Element	Units	Phosphate Rock Quality
P_2O_5	(%)	32.1
CaO	(%)	45.1
F	(%)	3.15
Al_2O_3	(%)	0.34
Al_2O_3 reactive	(%)	0.07
SiO_2 total	(%)	6.37
SiO_2 reactive	(%)	0.71
Cd	(ppm)	11.9
Cl	(ppm)	130
C total	(%)	2.18
C organic	(%)	0.82
CO_2	(%)	5
MgO	(%)	1
NA_2O	(%)	0.78
K_2O	(%)	0.1
SO_3	(%)	2.09
Th	(ppm)	12.6
Ti	(ppm)	255
Sr	(%)	0.12
As	(ppm)	6.8
Pb	(ppm)	<5
$U_3 0_8$	(ppm)	152
MER		0.06

Table 2-2: HPP and HBM comparative concentrate quality assessment (August 2018 Report)

Chemical composition	Units	Benchmark	HPP	HBM
P_2O_5 (phosphate content)	(%)	32.00	32.10	32.10
CaO (calcium)	(%)	51.50	45.10	43.61
Key ratios				
CaO:P_2O_5		1.61	1.40	1.36
MER		0.03	0.06	0.09

In the 2015 DFS a more detailed VIU assessment was undertaken and in summary, a small upward adjustment was expected due to P_2O_5 content being slightly above the benchmark specifications (32%), while the Phosphate Rock was expected to receive small penalties due to its MER and low fluorine and chlorine levels. At the time of reporting of the 2015 DFS it was not common industry practice to apply penalties against uranium and thorium and as such, and the product was not expected to incur any penalties on these elements. However, their presence may affect the rock's marketability in some specific markets. Due to the low CaO content against benchmark levels (51.2%), a lower sulphur consumption was expected, shown as a credit representing lower acid demand in the VIU derived by CRU and historically reported in the 2015 DFS.

HPP Marketability Factors as reported in the 2015 DFS

- **P_2O_5 Quality:** The 32.1%P_2O_5 product is classed as a medium-grade phosphate rock (i.e., 30%P_2O_5 to 33%P_2O_5). Over half of world rock production falls into this category, as well as over half of traded phosphate rock volumes;
- **CaO Quality:** The low CaO content leads to an expected premium, accounting for the lower volumes of sulphuric acid required;
- **Fluorine and Chlorine:** Levels are relatively low by industry standards and should therefore

foster acceptance of the product. The Chlorine level is relatively low (130ppm) compared to an industry benchmark of 200ppm along with the Fluorine level of 3.2% comparing favourable to an industry standard of 4%. However, since the material is low in reactive silica (0.7% compared to an industry reference of 2.0%), silica that is more reactive is required to be added compared to the Industry Benchmark. This leads to a penalty applied associated with the reactive silica to fluorine/chlorine ratio;

- **MgO Concentration:** A MgO level of 1% will not create marketability issues for phosphoric acid manufacturers. However, this level will exceed the acceptable limit of circa 0.25% for super phosphoric acid ("**SPA**") producers. Pilot scale acidulation tests by Prayon demonstrated that the HPP concentrate is suitable for phosphoric acid, MAP and DAP production;
- **Radiation:** Based on the uranium and thorium content, the radioactivity of the HPP concentrate is calculated at 1.95bq/gm. As it is likely that the Phosphate Rock is classed as naturally occurring radioactive materials ("**NORM**"). The International Atomic Energy Association ("**IAEA**") transport regulation threshold of 10bq/gm are not breached by HPP's specifications. However, individual markets may apply their own transport regulations in addition to the IAEA's. The 2015 DFS states that this is not the case in any of the target markets identified as part of the 2015 DFS; and
- **Moisture:** Phosphoric acid plants are generally designed to accept phosphate concentrate with a moisture level within certain boundaries. Although there is no uniformly preferred moisture level, concentrate with a moisture level of between 5% and 7% is frequently requested. Accordingly it remains key that for the HPP this should be addressed when factoring the costs of drying and transporting the concentrate.

2018 Report

For the 2018 Report CRU has undertaken a high-level VIU assessment of two Phosphate Rock specifications associated with the HPP in the Republic of Congo. The results of CRU's recent VIU analysis for these two specifications are presented in the two subsequent figures on a FoB Congo basis. The value of the concentrate derived from the HPP is estimated to be on average 7% higher than that of any option which assumes mining of the HBM principally as a result of its higher P_2O_5 content.

It should be noted that this high-level analysis takes into consideration only the key specifications presented in Table 2-2. CRU notes that the relatively high moisture content of 8% associated with the HBM specifications will require most buyers to have installed drying capabilities.

2.2.4 HPP FoB Congo (Pointe Noire) Pricing

2015 DFS

For the 2015 DFS, specified FoB Congo (Pointe Noire) pricing was established which incorporated the following elements:

- International Benchmark nominal prices for the short, medium and long term outlooks;
- Medium term and long-term outlooks in nominal terms for all of the anticipated target markets;
- Value in-use adjustments to reflect the variation in quality and impurity concentrations; and
- Development of ocean freight matrix using CRU's freight model to establish FoB price forecasts for Congo assuming the following weighted basket price assessment: FoB Morocco 68%BPL to 72%BPL (30%); FoB Morocco 80%BPL (15%); CFR India 73%BPL to

75%BPL (15%); FoB Jordan 68%BPL to 72%BPL (10%); FoB Jordan 73%BPL to 75%BPL (10%); FoB Russia 78%BPL to 87%BPL (5%) ; FoB Syria 60%BPL to 73%BPL; (5%); FoB Peru 63%BPL to 68%BPL (5%); and FoB exw China 61%BPL to 65%BPL (5%).

2018 Report

In its most recent update assessment of Phosphate Rock pricing (August 2018), CRU has developed FoB pricing for both the HPP and the HBM with annual forecasts noted in both nominal and real terms. The pricing profile is however cautioned in that it does not reflect a full update of the 2015 DFS marketing study taking due considerations of all VIU components and furthermore an updated target market analysis for the placement of 4.1Mt of Phosphate Rock as envisaged in the 2015 DFS.

Figure 2-3 provides various price history and forecasts as established for the 2015 DFS and as reported in the August 2018 Report CRU's latest VIU analyses for the HPP and the HBM:

- **Hinda Phosphate Project (HPP: R):** real terms FoB Congo price forecast;
- **Hinda Phosphate Project (HPP: N):** nominal terms FoB Congo price forecast;
- **Hinda BMO Processing Option (HBM: R):** real terms FoB Congo price forecast;
- **Hinda BMO Processing Option (HBM: N):** nominal terms FoB Congo price forecast;
- **Hinda Phosphate Project (HPP: 2015 DFS):** basket price as reported in the 2015 DFS.

Figure 2-3: HPP and HBM Phosphate Rock Price history and forecasts

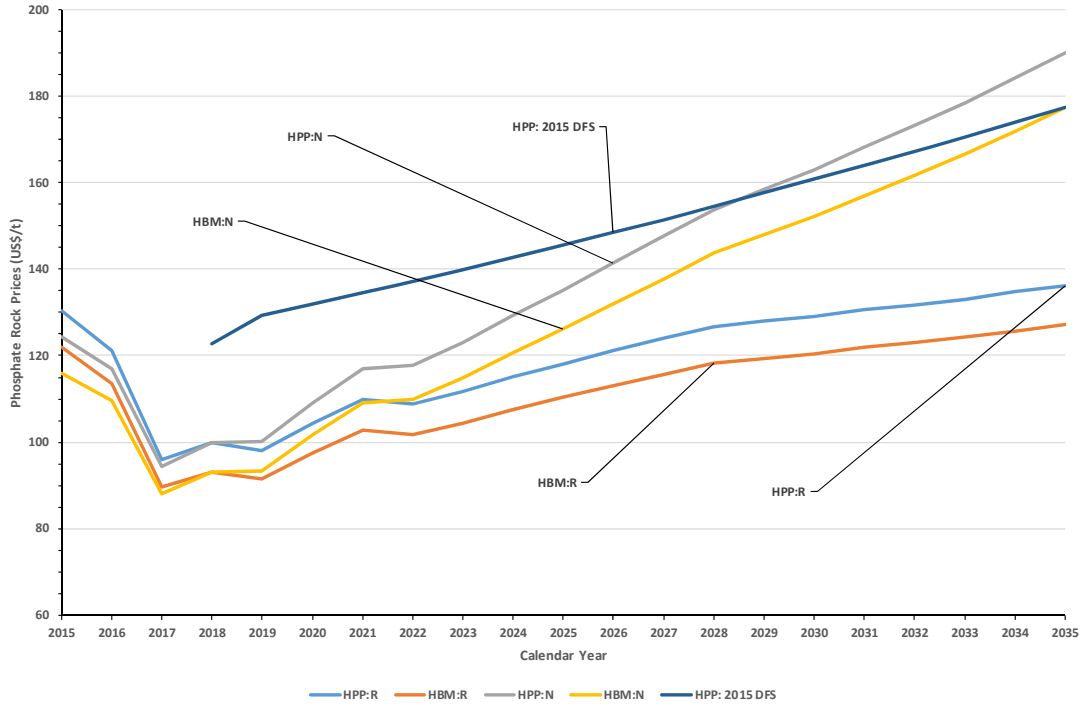


Table 2-3: HPP and HBM historical and forecast prices

Year	HPP:R	HBM:R	HPP:N	HBM:N	HPP: 2015 DFS
2015	130	122	124	116	N/A
2016	121	114	117	110	N/A
2017	96	90	94	88	N/A
2018	100	93	100	93	123
2019	98	91	100	93	129
2020	104	97	109	102	132
2021	110	103	117	109	135
2022	109	102	118	110	137
2023	112	104	123	115	140

Year	HPP:R	HBM:R	HPP:N	HBM:N	HPP: 2015 DFS
2024	115	107	129	121	143
2025	118	110	135	126	146
2026	121	113	141	132	149
2027	124	116	148	138	151
2028	127	118	154	144	155
2029	128	119	159	148	158
2030	129	120	163	152	161
2031	131	122	168	157	164
2032	132	123	173	162	167
2033	133	124	179	167	171
2034	135	126	184	172	174
2035	136	127	190	177	177

2.3 Macro Economics

The historical studies completed in respect of the HPP as well as certain other benchmark operating and capital expenditure assumptions require consideration of both exchange rate and inflationary impacts.

2.3.1 Exchange Rates

The stated effective date of all quotations ("**Quote Effective Date**") for the 2015 DFS is reported as Q4 2014 with exchange rates based on a spot forward rate determined as at 1 March 2015. The "**Principal Currencies**" assessed comprised: Australian Dollar ("**A$**"); Brazilian Real ("**BRL**"); Canadian Dollar ("**C$**); Chinese Yuan ("**CNY**"); CFA Franc BEAC ("**XAF**"); Euro ("**€**"); and South African Rand ("**ZAR**").

Table 2-4 provides a summary of the forward rates as assumed for the 2015 DFS compared against the spot rate at the Quote Effective Date, the spot rate at the date of the forward rate, and the spot rate as at 30 June 2018).

Table 2-4: Exchange Rates

Exchange Rate	Date	Australian Dollar	Brazilian Real	Canadian Dollar	Chinese Yuan	CFA Franc BEAC	Euro	South Africa Rand
Spot: Base Date	16/11/2014	1.14	2.60	1.13	6.13	524	0.80	11.07
Spot: Forward Rate Date	01/03/2015	1.28	2.84	1.25	6.27	586	0.89	11.66
Forward Rate	01/03/2015	1.29	3.46	1.25	6.38	595	0.91	12.66
Spot	30/06/2018	1.35	3.88	1.31	6.62	578	0.86	13.72

Table 2-5 presents the historical exchange rates for the Principal Currencies from 1 January 2000 through 30 June 2018.

- For the Australian Dollar for the 12-month period ending 31 December 2017 an average exchange rate of 1.30A$ to one US$ with a reported minimum and maximum of 1.24A$ and 1.39A$ respectively. For the six month period ending 30 June 2018 the daily average reported was 1.30A$ to one US$ with an end of period value of 1.35A$ to one US$;
- For the Brazilian Real for the 12-month period ending 31 December 2017 an average exchange rate of 3.19BRL to one US$ with a reported minimum and maximum of 3.06BRL and 3.37BRL respectively. For the six month period ending 30 June 2018 the daily average reported was 3.46BRL to one US$ with an end of period value of 3.88BRL to one US$;
- For the Canadian Dollar for the 12-month period ending 31 December 2017 an average exchange rate of 1.30C$ to one US$ with a reported minimum and maximum of 1.21C$ and 1.37C$ respectively. For the six month period ending 30 June 2018 the daily average reported was 1.28C$ to one US$ with an end of period value of 1.31C$ to one US$;
- For the Chinese Yuan for the 12-month period ending 31 December 2017 an average exchange rate of 6.76CNY to one US$ with a reported minimum and maximum of 6.48CNY and 6.96CNY respectively. For the six month period ending 30 June 2018 the daily average reported was 6.37CNY to one US$ with an end of period value of 6.62CNY to one US$;
- For the CFA Franc BEAC, which is pegged to the Euro, for the 12-month period ending 31

December 2017 an average exchange rate of 591XAF to one US$ with a reported minimum and maximum of 562XAF and 630XAF respectively. For the six month period ending 30 June 2018 the daily average reported was 559XAF to one US$ with an end of period value of 578XAF to one US$;

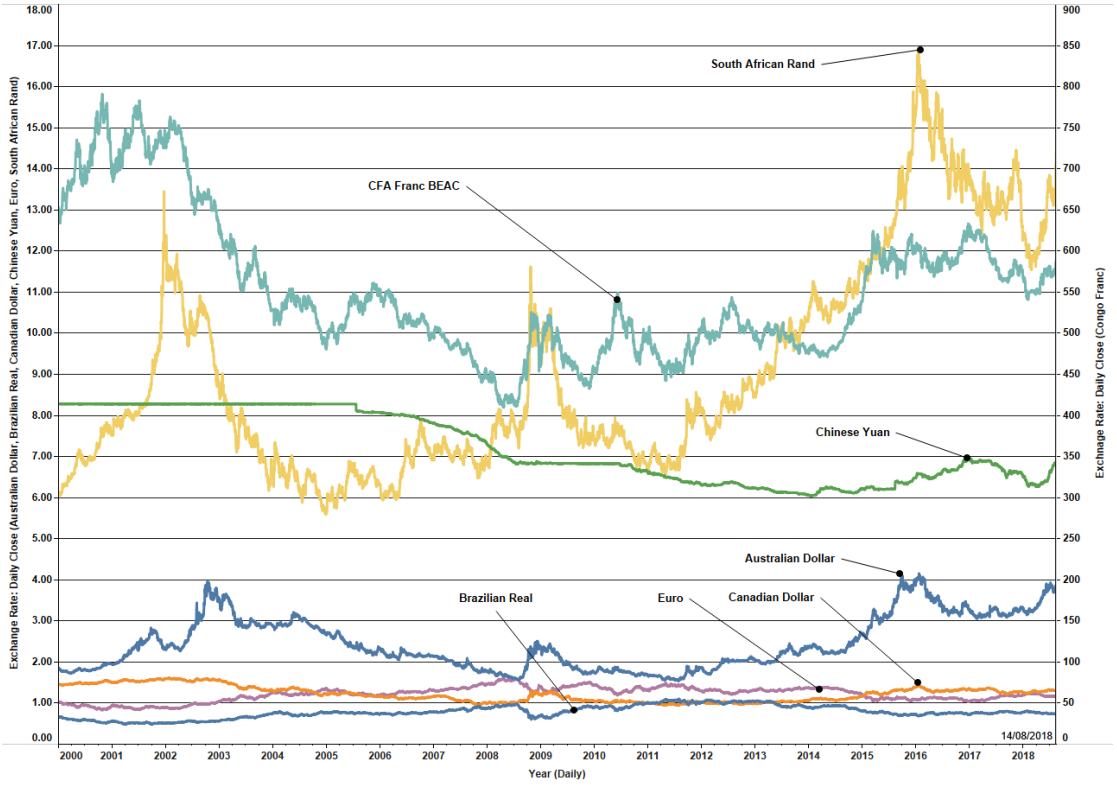
- For the Euro for the 12-month period ending 31 December 2017 an average exchange rate of 0.88€ to one US$ with a reported minimum and maximum of 0.83€ and 0.96€ respectively. For the six month period ending 30 June 2018 the daily average reported was 0.83€ to one US$ with an end of period value of 0.86€ to one US$; and
- For the South African Rand for the 12-month period ending 31 December 2017 an average exchange rate of 13.30ZAR to one US$ with a reported minimum and maximum of 12.25ZAR and 1.46ZAR respectively. For the six month period ending 30 June 2018 the daily average reported was 12.29ZAR to one US$ with an end of period value of 13.72ZAR to one US$.

Table 2-5: Historical Exchange Rates (1 January 2000 through 30 June 2018): 2015 DFS currencies to one US$ (Period Average)

Year	Period Average						
	Australian Dollar	Brazilian Real	Canadian Dollar	Chinese Yuan	CFA Franc BEAC	Euro	South Africa Rand
2000	1.72	1.83	1.48	8.28	710	1.08	6.94
2001	1.93	2.35	1.55	8.28	732	1.12	8.61
2002	1.84	2.92	1.57	8.28	693	1.06	10.47
2003	1.53	3.07	1.40	8.28	579	0.88	7.53
2004	1.36	2.92	1.30	8.28	528	0.80	6.42
2005	1.31	2.43	1.21	8.19	527	0.80	6.34
2006	1.33	2.17	1.13	7.97	522	0.80	6.75
2007	1.19	1.95	1.07	7.60	478	0.73	7.03
2008	1.17	1.84	1.07	6.95	448	0.68	8.25
2009	1.26	2.00	1.14	6.83	471	0.72	8.38
2010	1.09	1.76	1.03	6.77	495	0.75	7.30
2011	0.97	1.67	0.99	6.46	472	0.72	7.24
2012	0.97	1.95	1.00	6.31	510	0.78	8.20
2013	1.03	2.16	1.03	6.15	494	0.75	9.62
2014	1.11	2.35	1.10	6.16	495	0.75	10.83
2015	1.33	3.33	1.28	6.28	591	0.90	12.77
2016	1.34	3.48	1.32	6.64	594	0.90	14.69
2017	1.30	3.19	1.30	6.76	591	0.88	13.30
2018(1)	1.30	3.43	1.28	6.37	559	0.83	12.29

(1) Annual average to 30 June 2018

Figure 2-4: Historical Exchange Rates



2.3.2 Consumer Price Indices and Inflation

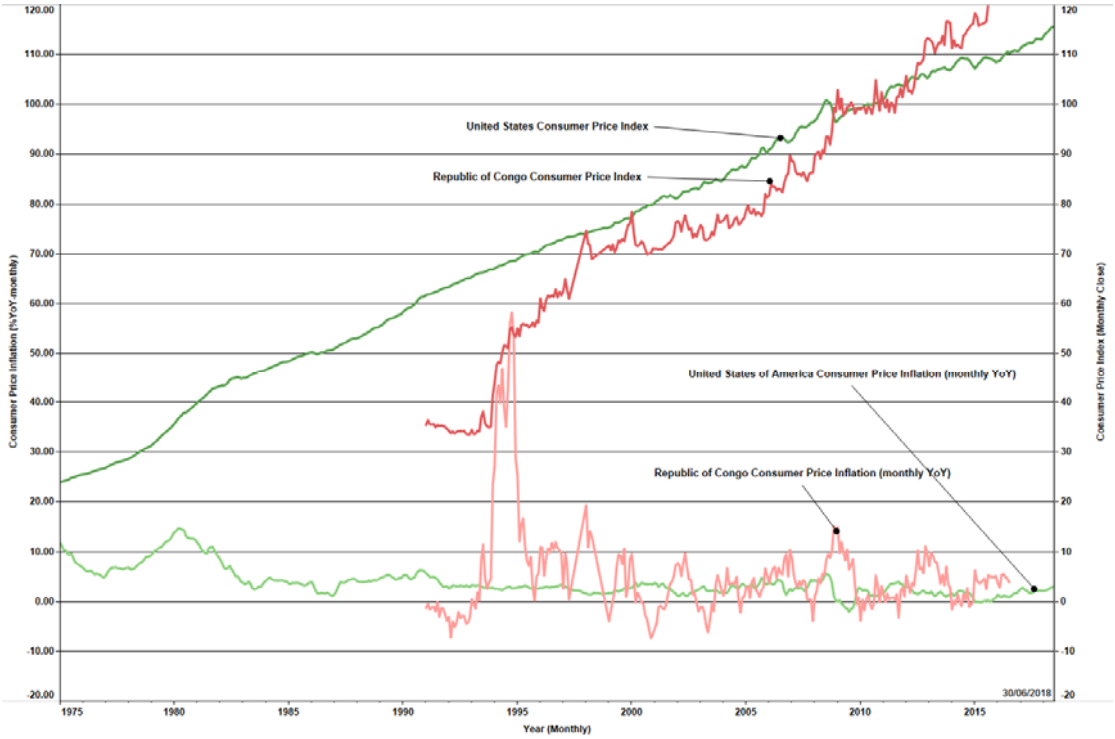
The corresponding historical consumer price inflation for all Principal Currencies are reported in Table 2-6 below for the 12 month period ended 31 December from 2000 through 2017 and for the 12 month period ended 30 June 2018.

The historical consumer price inflation and index assessments from 1975 through 31 December 2012 for the Congo (CPI) and the United States (CPI) are presented in Figure 2-5.

Table 2-6: Historical Consumer Price Inflation: Principal Currency Countries

Year	Australia (%)	Brazil (%)	Canada (%)	China (%)	Congo (%)	Euro Area (%)	South Africa (%)	United States (%)
2000	5.80	5.97	3.20	0.40	(6.55)	3.47	6.99	3.39
2001	3.12	7.67	0.72	(0.30)	7.30	3.12	4.59	1.55
2002	3.03	12.53	3.80	(0.40)	(1.97)	2.58	12.41	2.38
2003	2.37	9.30	2.08	3.20	2.31	2.31	0.33	1.88
2004	2.59	7.60	2.13	2.40	1.04	2.96	3.39	3.26
2005	2.80	5.69	2.09	1.60	5.28	2.66	3.60	3.42
2006	3.25	3.14	1.67	2.80	10.35	2.68	5.79	2.54
2007	2.96	4.44	2.38	6.50	(3.91)	4.42	8.98	4.08
2008	3.69	5.90	1.16	1.00	14.31	3.06	10.07	0.09
2009	2.11	4.31	1.32	1.90	0.82	0.34	6.34	2.72
2010	2.68	5.91	2.35	4.60	3.09	2.63	3.48	1.50
2011	2.99	6.50	2.30	4.10	1.02	3.02	6.05	2.96
2012	2.20	5.84	0.83	2.59	9.52	2.25	5.71	1.74
2013	2.75	5.91	1.24	2.42	2.71	0.56	5.40	1.50
2014	1.72	6.41	1.47	1.54	(0.21)	(0.24)	5.31	0.76
2015	1.69	10.67	1.61	1.62	5.12	0.17	5.23	0.73
2016	1.48	6.29	1.50	1.99	(0.83)	1.04	6.76	2.07
2017	1.91	2.95	1.87	1.88	2.10	1.52	4.91	2.11
06-2018	2.08	4.39	2.45	1.46	2.15	1.41	4.38	2.87

Figure 2-5: Historical Consumer Price Inflation and Index (Congo and the United States)



- For 12 month period ended 31 December 2017, the year-on-year inflation for the United States ranged from 1.63% to 2.74% with an annual average of 2.13% and an end-of-period value of 2.11%. For the six month period ended 30 June 2018, the year-on-year inflation ranged from 2.07% to 2.87% with an annual average of 2.46% and an end-of-period value of 2.87; and
- For 12 month period ended 31 December 2017, the year-on-year inflation for the Congo was reported at 2.10%. For the six month period ended 30 June 2018, the year-on-year inflation for the Congo was reported at 2.15%.

2.4 Summary Conclusions

Based on the review of available commodity price and macro-economic assumptions, SRK concludes as follows:

Commodity Price Assumptions

- **2015 DFS:** The commodity price assumptions as incorporated into the 2015 DFS follow a detailed and thorough assessment of the demand-supply-price relationships to establish profiles for recognised international benchmark prices for phosphate rock prices assumed at the dated of reporting. Through further analysis freight net-back, value in use assessments and target market distributions, the 2015 DFS reported a comprehensive forecast of the likely basket price assumptions for the sales products attributed to the HPP; and
- **August 2018 Report:** Subsequent analysis completed in 2018, provides a summarised assessment of the FoB Congo projections for both the HPP and the HBM. These however have not incorporated a similar detailed analysis as incorporated in the 2015 DFS and address a limited, but key number of VIU characteristics.

The key difference in the resulting nominal terms projections between that reported in the 2015 DFS and August 2018 Report analysis is the impact of the general reduction in commodity

prices throughout 2015, 2016 and 2017. This aside the nominal forecast for 2035 in both distances attain similar levels, however the CAGR in price increases from 2018 onwards are notably different.

It is also important to note that as part of the August 2018 Report, no detailed assessment of the full suite of VIU and offtake market assessment of neither the HPP nor the HSP has been undertaken and as such further work will be required to assess both offtake arrangements and commodity pricing assumptions following completion of the Company's planned re-assessment of the likely scope and scale of future developments of the HPP.

Accordingly whilst the HPP operating scenario continues to remain both technically feasible and economically viable, further work is required to define the appropriate scope and scale of production capacity which aligns with both the Company's revised operating strategy and medium term market conditions of traded Phosphate Rock.

2015 DFS: Capital and Operating Expenditure currency exposure

Since completion of the 2015 DFS, no specific update of the associated operating and capital cost estimates has been completed and as such the estimates reflect the assumed operating environment as of the Quote Effective Date, being Q4 2014. Based on the stated assumptions relating to currency component contributions to the capital and operating expenditures as reported in the 2015 DFS, SRK has undertaken a simplified macro-economic re-basing of the estimates to determine the equivalent values as at 30 June 2018.

Table 2-7 presents the summary of the analysis of the 2015 DFS initial project capital expenditure whereby assuming only macro-economic exposure, the initial estimate of US$601.9m would increase to US$648.0m. Alternatively and ignoring the potential impact of currency fluctuation a simple indexing by USCPI results in a revised estimate of US$645.9m reflecting a factor increase of 1.07. A detailed analysis of the exchange rate exposure of the sustaining capital was not possible, due to the limited granularity included in the 2015 DFS. This aside, the majority (93%) of the sustaining capital expenditure (US$612.8m) is directly related to mining equipment replacement which is considered to be largely exposed to the US$. In this instance a factor of 1.07 would be considered comparable thereby increasing the sustaining capital estimate to US$655.7m.

Table 2-7: 2015 DFS Initial Capital Expenditure Estimate Indexing[(1)]

Currency	2015 DFS Base			CPI	2015 DFS Indexed		
	(US$m)	(ER)	(LCUm)		(LCUm)	(ER)	(US$m)
United States Dollar	361.9	1.00	361.9	1.07	388.4	1.00	388.4
Canadian Dollar	14.8	1.25	18.6	1.07	19.9	1.31	15.2
CFA Franc BEAC	54.6	595	32,500.0	1.08	34,969.6	562	62.2
EURO	97	0.91	87.9	1.04	91.1	0.86	106.5
Brazilian Real	0.8	3.46	2.8	1.24	3.4	3.88	0.9
South African Rand	10	12.66	126.6	1.21	153.2	13.72	11.2
Chinese Renminbi Yuan	8.1	6.38	51.7	1.06	54.6	6.62	8.3
Australian Dollar	54.7	1.29	70.7	1.06	74.9	1.35	55.4
Total	**601.9**						**648.0**

(1) Local Currency Unit ("**LCU**")

Table 2-8 presents the summary of the analysis of the 2015 DFS initial project operating expenditure whereby assuming only macro-economic exposure, the initial estimate of US$40.02/$t_{conc}$ would increase to US$45.40/$t_{conc}$. Alternatively and ignoring the potential impact of currency fluctuation a simple indexing by USCPI results in a revised estimate of US$42.95/$t_{conc}$. The 2015 DFS indicates that some 92.51% of the operating expenditure is denominated in CFA Franc BEAC: national labour and on-costs (19.6%); diesel fuel (38.8%); and power (34.0%).

Table 2-8: 2015 DFS Initial Operating Expenditure Estimate Indexing

Currency	2015 DFS Base			CPI	2015 DFS Indexed		
	(US$/$t_{conc}$)	(ER)	(LCUm)		(LCUm)	(ER)	(US$/$t_{conc}$)
United States Dollar	-	1.00	-	1.07	-	1.00	-
Canadian Dollar	0.53	1.25	0.7	1.07	0.7	1.31	0.55
CFA Franc BEAC	37.02	595	22,033.3	1.08	23,707.6	562	42.16
EURO	1.63	0.91	1.5	1.04	1.5	0.86	1.79
Brazilian Real	-	3.46	-	1.24	-	3.88	-
South African Rand	0.52	12.66	6.6	1.21	8.0	13.72	0.59
Chinese Renminbi Yuan	-	6.38	-	1.06	-	6.62	-
Australian Dollar	0.31	1.29	0.4	1.06	0.4	1.35	0.32
Total	**40.02**						**45.40**

3 GEOLOGY AND MINERAL RESOURCES

3.1 Introduction

The following section includes discussion and comment on the geology, exploration and Mineral Resources aspects of the Hinda Phosphate Project. The geological support including exploration drilling and sampling, geological models and Mineral Resources as reported herein have been subject to review by SRK and is accordingly presented as current to support the intended Work Programme as generated by the Company and reported herein.

3.2 Geology and Exploration

The Hinda phosphate deposit forms part of the Lower Congo Basin, located in the Republic of Congo. The geology of the deposit has been investigated by Cominco during the development of the project. This section discusses the regional and local geology of the deposit, including the structural development of the region, the host lithologies, and the nature of the mineralisation in which the phosphate mineralisation is concentrated.

3.2.1 Regional Geology

The HPP is hosted by a segment of the Equatorial Western Africa margin sediments called the Lower Congo Basin. There are two further basins within the Equatorial Western Africa margin, namely the Gabon basin to the north, and the Kwanza basin to the south. The basins are separated by the Casamaria Arch and the Ambriz Arch, which correspond to basement highs. The costal basins are covered by Quaternary sediments, and outcropping features of the underlying basins are rare. The Lower Congo basin is known to be prospective for phosphate, potash and hydrocarbons, which is characteristic of an environment typified by continental rifting, ocean opening and the formation of deep sea sediment fans.

The deposit is a large, homogenous, structurally controlled and confined sedimentary accumulation of primary biogenic and secondary phosphate mineralisation. There are two main phosphate bearing sedimentary layers forming a contiguous series up to 65m thick. The Grey Maastrichtian (Upper Cretaceous) layer, designated GM, represents the primary phosphate rock, providing 85% of the ore, with minor post-deposition transformations.

In some areas along strike, local fault movements have resulted in the relative uplift of this GM unit, subjecting it to tropical weathering and de-carbonisation enriching them in P_2O_5 and reducing them in MgO content respectively. The resulting weathered layer is designated Beige Maastrichtian, or BM.

3.2.2 Local and Deposit Geology

Structure

The morphology and location of the phosphate bearing morphologies is strongly associated with the structural evolution of the Lower Congo basin. Sediments in the basin are part of a Cretaceous-Tertiary sequence, bounded by the Precambrian basement Mayombe Massif. The

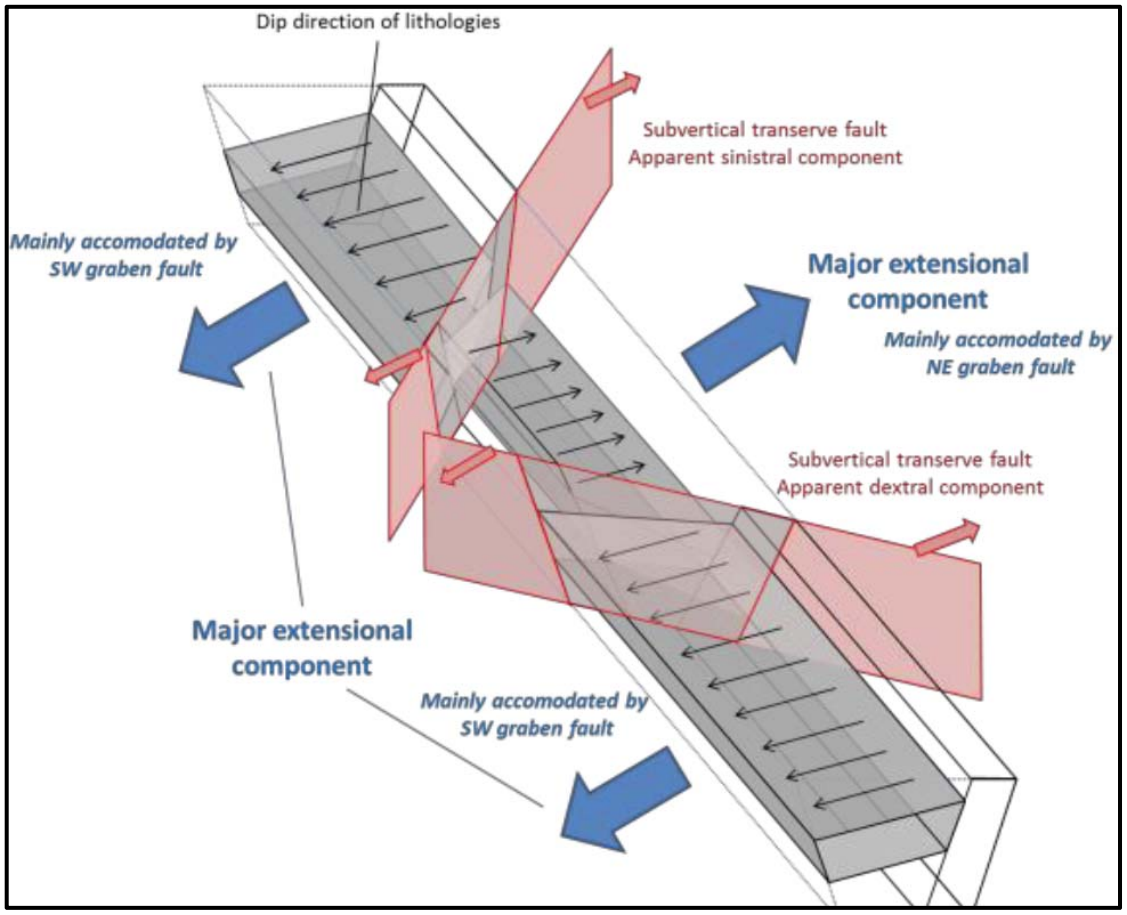
basin was generated during rifting associated with the opening of the South Atlantic in the Lower Cretaceous period. Generally, the surface topography reflects the underlying bedrock morphology. Typically, streams trend in a north-northwest to south-southeast trend, which reflect fault escarpments.

A number of structural lineaments have been identified in the region, these include:

- Highly prevalent north-northwest to south-southeast trending structures which are considered to be extensional faults and are interpreted to be a result of reactivation of pre-existing basement faults during Cretaceous rifting;
- North-northeast to south-southwest trending major faults, which occur throughout the project area. Several sub-parallel zones have been identified, with the most continuous crossing the eastern part of the project area. These are interpreted as having formed during reactivation of transverse basement faults during the rifting event;
- West-northwest and northwest trending major faults are common and a cluster of northwest to southeast faults occurs in the central part of the project area. Many of these faults are considered to have been generated due to the reactivation of basement structures; and
- Northeast and east-northeast trending major faults are the least common. A zone of east-northeast to west-southwest trending faults occurs in the northwest of the project area, and several northeast and east-northeast trending structures occur in the centre and southeast of the licence. Several northeast to southwest faults have been identified, including those interpreted to control the Loémé River valley, which extends from the central part of the project area to the coast. These faults are interpreted to be related to the reactivation of basement structures, which developed during compression, forming the Mayombe Range.

Phosphate mineralisation is structurally controlled, and hosted by a 300m to 800m wide corridor, which is interpreted to be a fault bounded graben. The corridor has an approximate orientation of 145°, or northwest - southeast. The bounding faults are typically steep with dips of around 70° towards the east and west. The faults are marked by changes in lithology, and the presence of silicification and iron stains, indicating the circulation of fluids. The structural setting of the Hinda graben is illustrated in Figure 3-1.

Figure 3-1: Current interpretation of the structural setting of the Hinda deposit



Lithology

Definition of lithologies within the project area has largely focussed on sediments within the graben. The primary phosphate mineral is carbonate-fluorapatite, often referred to as francolite. Part of the phosphate mineralisation is formed during supergene enrichment, when the upper parts of the sequence were exposed to surface process, during a period of tectonic uplift.

The phosphate mineralisation is hosted by the Upper Cretaceous (65Ma to 72Ma) Holle Formation and younger sediments situated within the Cretaceous to Quaternary terrestrial and marine succession. The sediments were deposited in an intra-continental rift setting, into a graben bounded basin. The basin is orientated southeast to northwest and is typically 750m wide, but varies between 300m and 800m. Being sedimentary in nature, the mineralisation is typically flat lying, with approximately 20km strike length currently explored sufficiently to be included in the Mineral Resource estimate.

Primary phosphate bearing units are around 70Ma in age. These are unconformably overlain by a Quaternary (0Ma to 2.8Ma) sandy overburden, called Q1, QP and Q2 units. The phosphate units lie unconformably on a clay and silt rich unit called CP, which in turn lies on TU, a carbonate rich unit. The underlying units are thought to be 70Ma to 90Ma in age. Beneath the Tu unit lie the U1 and U2 units (95Ma), but these are not typically found within the graben. The stratigraphy of the deposit is illustrated in Figure 3-2.

The M1 and M2 units which lie directly above the primary phosphate mineralisation, consist of fine sand, silt and minor clay horizons. These units have gradational contacts with the primary phosphate mineralisation below. The phosphate bearing units (called GM, BM and VM) consist of coarse and poorly sorted coprolitic quartz rich marine sediments, and typically consist of

sharks' teeth, coprolites, fish bones, pellets and some phosphate rich micrite clasts. These units are interpreted as being pristine marine sediments, which have been subjected to varying amounts of weathering. A quartz pebble conglomerate marks the footwall of the mineralisation. The BM and VM units have been altered through weathering, which took place in the upper portion of the original phosphate series.

Within the main GM unit, two facies types have been identified:

- **Facies 1:** quartz rich and slightly phosphatic, with grain sizes ranging between sand and granules, with a dolomite rich cement. The phosphatic grains are composed of coproliths, bone and teeth fragments and some phosphate rich micrite clasts, which are rich in organic matter and detrital quartz; and
- **Facies 2:** quartz and phosphate rich, with a grain size ranging from sand to pebble, with a clay to silt matrix, and rare dolomite cementation. The phosphate grains are typically coproliths, bone and teeth fragments, with some grains being oval to round carbonate rich apatite pellets.

A second phosphate horizon lies above the M1 and M2 units (CG, CB and CV), which are commonly termed the channel units or upper facies. The age of these units is unknown. The mineralisation in these units is typically fine-grained sandstones with phosphatic or quartzitic matrix. The lower facies are interpreted as being a pristine marine sequence, whereas the upper facies are considered to be a result of reworking in a deltaic environment. The stratigraphic column, as interpreted for the HPP is shown in Figure 3-2.

The lithologies are named "cycles" and occur throughout the graben structure. The lateral continuity of each of the modelled units is interrupted by steep crosscutting faults, which subdivides the graben into a series of different zones. These are called "domains".

Mineralisation

Multiple studies have been completed to determine the depositional setting and the associated mineralogy and petrology of the phosphate bearing units at Hinda. The mineralisation is stratiform, and often referred to as being a phosphorite. These are defined as marine sedimentary rocks containing stratified concentrations of calcium phosphate, mainly apatite. The main type of apatite found in primary sedimentary phosphate deposits is carbonate fluorapatite and is also known as francolite.

Mineralisation in phosphorites, as found at Hinda is thought to form in shallow water environments. The deposition of the units is considered to be controlled by the presence of:

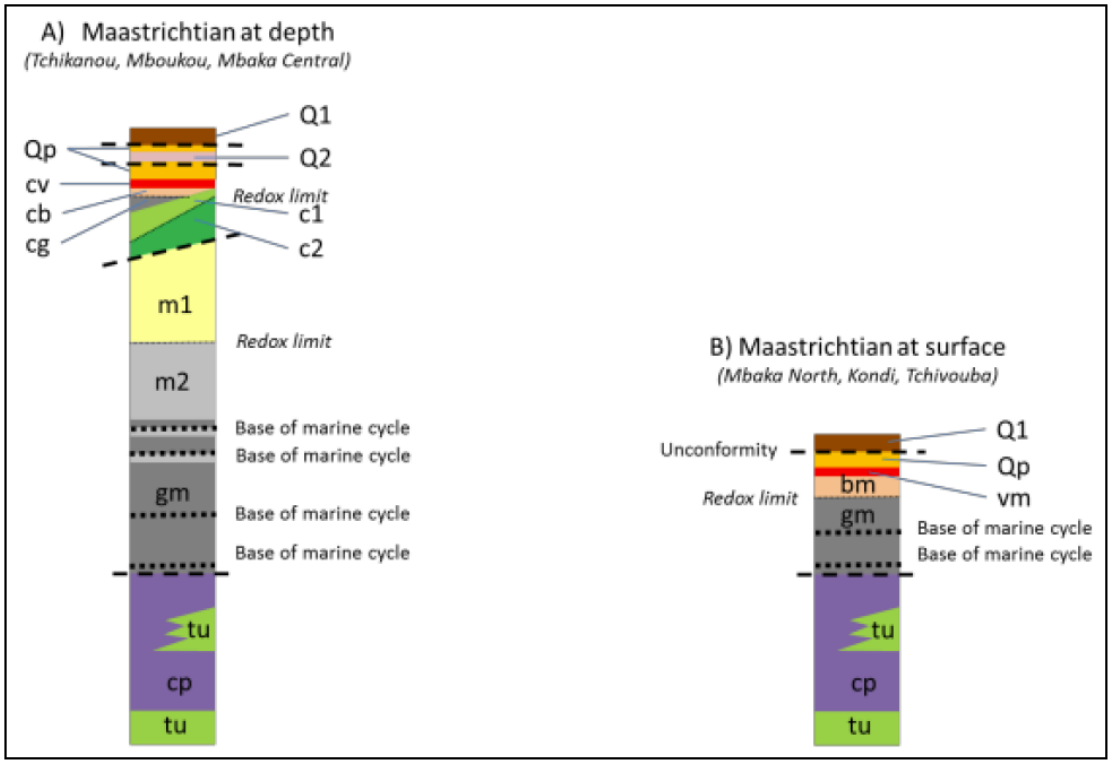
- A high degree of biological activity, which occurs close to areas of oceanic upwelling, and the restriction of oceanic currents, leading to a reduction in oxygen levels in the water column;
- A low degree of input of terrigenous sediments, allowing the phosphate accumulations to be concentrated; and
- A favourable depositional environment, meaning that weathering and potentially re-working of the sediments increases the phosphate content in the deposited sediments.

Overall mineralogy of the primary phosphate mineralisation, taken from samples at Hinda was determined to be typically composed of quartz, apatite (either francolite (carbonate fluorapatite) or fluorapatite), dolomite and calcite. K-feldspar and muscovite were also noted to be present in some samples, along with traces of pyrite, ilmenite, and albite. The historical studies consider that the mineral flagged as apatite in the GM unit is carbonate fluorapatite, although this is not supported by the mineralogical analyses completed by SGS Canada. Other phosphate

minerals, such as crandallite, wavellite, strengite and variscite are also noted.

Subsequent to their deposition, the phosphate bearing sediments have been altered by the circulation of sub-surface water and by weathering in a tropical climate. The weathering has typically affected the carbonates, where the dolomites have been weathered to calcite, decreasing the magnesium content of the rocks. Weathering also converts carbonate-fluorapatite to fluorapatite. Where this occurs, such as in the BM unit, the P_2O_5 grade increases significantly, and the MGO content is reduced.

Figure 3-2: Stratigraphic column for the Hinda deposit

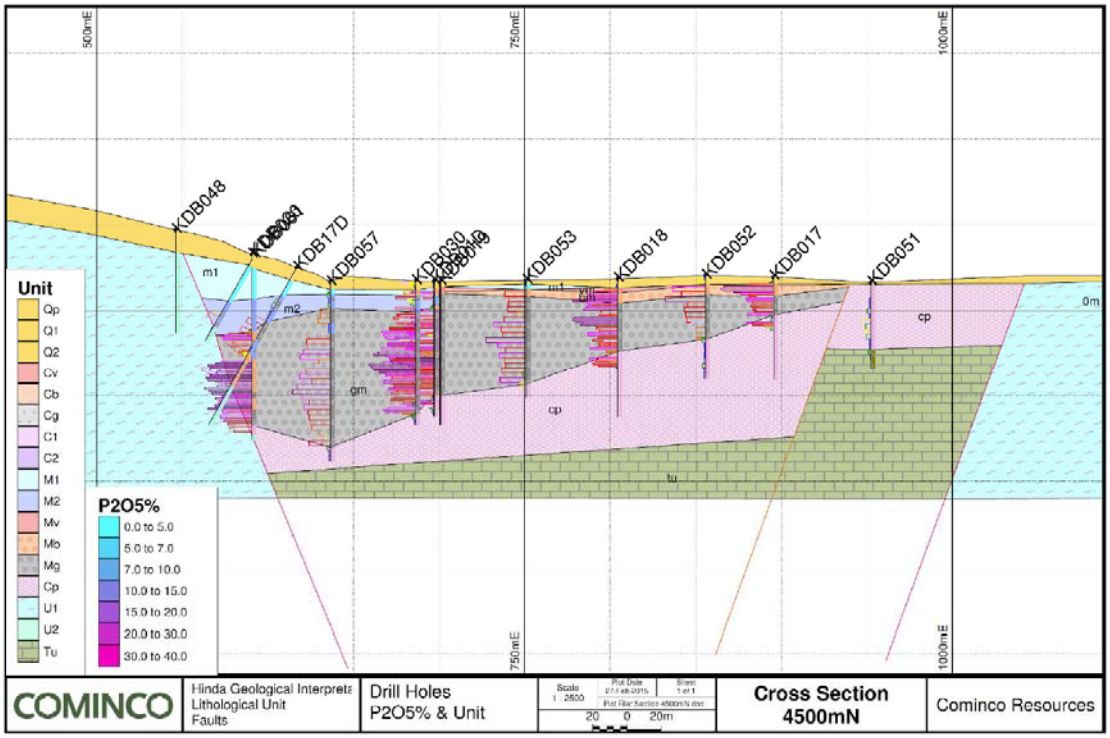


3.2.3 Deposit Description

Mineralisation is controlled by a graben structure, and as such, forms a restricted band of sediments, bounded on either side by steeply dipping faults. Mineralisation has been intersected by drilling over a total strike length of approximately 20km. The mineralisation is hosted by 300m to 800m wide corridor, with an approximate orientation of 145°. The mineralisation forms a series of flat lying, stratiform units, which are offset by faulting. There are minor changes in the dip of the lithology, depending on the location within the graben structure, and the relationship with crosscutting faults. Mineralisation has been intersected to depths of approximately 125m below the current topographic surface.

Phosphate content within the interpreted units is variable. The grade of phosphate varies both along strike and within the individual units. As phosphate is typically found in carbonate-fluorapatite (francolite) in the GM unit, and fluorapatite in the BM unit, the grade of phosphate is directly related to the deposition of these minerals within the respective units. Due to the nature of the mineralising system and depositional environment, the individual sedimentary layers are relatively uniform, and the mineralogy is typically consistent over significant strike lengths. A typical cross section through the Hinda deposit is given in Figure 3-3.

Figure 3-3: Typical cross section through the Hinda deposit, showing cycles and P_2O_5 grade



3.2.4 SRK Summary Comments

The geological understanding, as reported in the CSA 2013 MRE is sufficient for the mineralisation style, and development stage of the project. SRK considers that the understanding of the geology has been adequately captured, and is reflected in the subsequent Mineral Resource estimate.

3.3 Data Quantity and Quality

3.3.1 Introduction

Exploration by Cominco commenced at Hinda in 2010. Prior to drilling, Cominco had used several different methodologies to identify the phosphate bearing lithologies, including ground-based gamma-ray scintillometery, soil gas hydrocarbon analysis and soil sampling followed by airborne high resolution aeromagnetic and radiometric surveys. Before this, other workers are known to have been active in the area, through the presence of shafts, adits, and trenches. Drilling at Hinda began in 2011, and continued until 2014. The drilling completed including dedicated geotechnical, hydrogeological and metallurgical sampling holes.

3.3.2 Exploration

The main focus of the earliest stages of exploration (prior to 2011) conducted by Cominco was validating any historical data, which included the clearing and cleaning of the historical access points. A total of 465 50cm long channel samples were collected from historical adits and shafts in the Tchivouba and MBaka areas during 2010 and submitted for multi element analysis to OMAC Laboratory in Ireland. In addition and prior to commencement of drilling, a programme of ground-based gamma-ray scintillometery, alpha cup surveys (radon detectors), soil gas hydrocarbon analysis and soil sampling was completed. An approximate grid of 200m by 200m was used, with the main focus on identifying the methods which proved the most effective in identifying phosphate mineralisation. In addition, airborne high-resolution, low-level aeromagnetic and radiometric surveys were completed using helicopters. Base maps and

structural interpretations of the area were derived from regional LANDSAT and IKONOS imagery.

3.3.3 Drilling and Sampling

Drilling Types

Drilling commenced in 2011, with aircore and diamond holes being used to support the subsequent Mineral Resource estimate. Drilling continued in multiple phases until 2014, and included holes drilled for exploration and resource definition, dedicated geotechnical and metallurgical holes, and holes used for hydrogeological pumping testwork. In total, 929 holes were completed, for a total meterage of 66,231m. Of these holes, 617, with a total meterage of 47,331m were aircore. This constitutes approximately 70% of the database.

Diamond drilling began in 2012. Initially, drilling was completed on a large spacing, namely 400m x 100m, using a HQ3 core barrel size. In the first phase, drilling was conducted over a strike length of 20km. Subsequent drilling programmes were drilled on tighter spacings, using either HQ3 or HQ core barrel sizes. For metallurgical testwork, PQ coring was completed. In 2013 and 2014, large diameter core was drilled, for use as a bulk sample for pilot-scale beneficiation testwork. The location of the large diameter holes was based on deriving a representative sample of the relevant lithologies. All drillhole collars were surveyed using a DGPS, and checked against local surveying points.

Holes drilled for exploration and resource definition were completed on a nominal 400m spacing north-south, and 100m spacing east-west. Some infill was also completed at 200m spacing and 50m east-west. In addition, 27 holes were drilled to form a geostatistical cross, which was drilled at spacings of 25m north-south and 10m east-west. The aim of the geostatistical cross was to determine the short scale variability within the deposit, and in particular, how this influences the subsequent variography and other geostatistical analysis.

Logging, Sampling, Preparation, and Analysis

Cominco applied a systematic approach to log and sample the core. This system aimed to produce high quality data, and to prevent errors being introduced. The system utilised was as follows:

- When the core barrel is opened, the recovered length is measured and recorded. The core is wrapped in cling film, and the end of core runs marked by wooden blocks;
- Geological and geotechnical logging of the core was completed by a Cominco geologist at the drill site. Logs were recorded electronically. The core was then cleaned, and photographed. Where relevant, a handheld XRF was used to distinguish between relevant lithologies (e.g. VM / BM and BM / GM), and to provide a preliminary assay for the selected samples;
- A 10cm sample of each metre interval was taken, and coated with wax and the density measured using the Archimedes method. If the core piece was not competent enough to survive immersion in water, a regular cylinder was cut, the diameter measured and the core piece weighed to calculate volume and density; and
- The core was split using a diamond saw, or a custom splitter, and one half retained. The core was marked for sampling, into 1m lengths. Once taken, the samples were placed in appropriately labelled bags.

For the aircore drilling, the following procedures were utilised:

- At the rig site, samples are collected in 20l plastic buckets, per meter of drill advance. Samples were taken directly from the cyclone;

- The samples were then logged at the rig site by a Cominco geologist, and a representative sub-sample placed into a chip tray. If the sample was too wet, a sieve was used to remove excess moisture; and
- Sample weights were recorded, before being transferred into appropriately labelled plastic or calico bags. Samples were then transferred back to camp, to be prepared, and the sub-sample taken for assay.

Samples were prepared on site, with the aim of producing 200g sub-samples, which could be shipped to the assay laboratory for analysis. The sample preparation methodology used was as follows:

- Upon receipt at the laboratory, the samples were dried using an indirectly heated oven, set at 110°C;
- The samples were then crushed using a jaw crusher, with the aim of 90% passing 2.8mm. A barren wash material of quartz pebbles was used to clean the crusher between samples; and
- A riffle splitter was used to split the sample to the 200g sub-sample, which was sealed in a bag for dispatch.

All samples were analysed at either Set Point in South Africa, OMAC in Ireland, or ALS in Brisbane. The umpire laboratory was SGS in South Africa, or Genalysis in Perth.

Quality Control and Quality Assurance

All sampling and analysis was supported by a quality assurance and quality control ("**QAQC**") programme. The programme included blanks, standards and duplicates. In total, 10% of the samples submitted to the primary laboratory for analysis were QAQC samples. An additional 5% of the assay results were re-analysed at the umpire laboratory.

Blank and duplicate samples were inserted approximately every 20 samples. The standards used were matrix matched, with a commercial standard being used in the early exploration stages. Later, in-house standards were developed by the Set Point laboratory. The first three in-house standards were sourced from oxidised material, and collected from the underground adits. Three further standards were developed by Geostats Pty Ltd, for the un-oxidised material. Standards were inserted approximately every 20 samples.

3.3.4 Density and Moisture

Density was determined from core samples. A total of 4,143 10cm samples were taken by Cominco over the development of the project. Density values were determined using simple Archimedes principles, where the samples were dried in the oven, coated with wax, weighed in air and then water. The lithology for each sample was recorded, meaning a database of density measurements was developed. For the derivation of tonnages, average densities per lithology was coded into the block model. The density values used for the tonnage estimation of the major cycles are included in Table 3-1.

Table 3-1: Density values per lithology, as used for tonnage estimation

Cycle	Code	Density (t/m^3)	Volume of Deposit (%)
CV	1	1.74	4
CB	2	1.77	4
CG	3	1.77	1
MV	8	1.65	4
BM	9	1.84	5
GM	10	1.98	71

All density measurements were taken using dry core. The moisture content was derived from

approximately 2,000 samples, taken from diamond core. For each sample, the piece of core selected was wrapped in cling film when taken from the core barrel. The wet weights were then determined, before the samples were dried overnight and weighed again. The average moisture content determined was 12.27%, and analysis indicated that the moisture content was not correlated with the water table. Moisture is seen to decrease with depth, with the highest moisture contents being associated with near-surface overburden material. Typically, the moisture content is higher at the redox boundary. This is thought to be due to an increase in porosity related to the supergene oxidation process. Moisture content is also inversely correlated with density, as lower density rock of the same mineralogy is more porous, and so has a higher moisture content.

3.3.5 SRK Summary Comments

SRK considers the data collection processes and procedures used by Cominco during the development of the project to be suitable for the style of mineralisation. The data captured is of a sufficiently high quality, as shown by the comprehensive QAQC processes and analysis, to be used in the subsequent Mineral Resource estimate. As such, SRK considers that the quantity and quality of the data to be sufficient to support the declaration of the Mineral Resources.

3.4 Mineral Resources

3.4.1 Introduction

The Mineral Resource estimates completed for the Project between 2012 and 2014 were authored by CSA. The drillhole database was also managed by CSA during the drilling programmes. The reporting standard adopted by CSA for Mineral Resource estimates was the JORC Code. An interim Mineral Resource estimate was completed by CSA in October 2012, which was updated in May 2013 to reflect additional drilling which had been completed. In July 2013, the Mineral Resource estimate was re-stated at a cut-off grade of 5%P_2O_5, which forms the basis of the subsequent technical studies, and therefore the declaration of Ore Reserves (Section 4.7.4) in the 2015 DFS.

3.4.2 Drillhole Database

The final drilling dataset used to estimate the Mineral Resources comprised 557 holes, with a total meterage of 44,095m. Of these holes, 52 (5,127m) were diamond core, and 505 (38,968m) were drilled using aircore methods. The drillhole database was finalised as at 8 May 2013. Holes, such as those drilled for geotechnical or metallurgical testwork were excluded. The average drillhole depths were 77m for aircore and 101m for diamond. The hole lengths varied between 30m and 179m for diamond, and between 9m and 172m for aircore.

All drilling was completed on a nominal 400m north-south grid and 100m east-west grid spacing. Some infill holes were drilled at a 200 north-south and 50m east-west pattern. Also completed was a geostatistical cross, which comprised 27 holes. The spacing was 25m north-south and 10m east-west. Drillhole collars were surveyed in WGS84_33S, and then adjusted to reflect a local site grid oriented parallel to the general strike of the deposit. To convert from the survey grid to the local grid, all data are rotated 35° clockwise, with the origin at WGS 184,917.34E, 9,486,772.54N.

3.4.3 Geological Modelling and Domaining

Geological and mineralisation modelling was completed by Cominco based on the drill logs, assays, and geological cross sectional interpretations. The main driver in the geological interpretation was the structural interpretation of separate structural domains, based on the graben zones, as separated by the crosscutting steep normal faults. Within the graben zones,

the stratigraphy was modelled as a series of wireframed surfaces. The interpretation of these surfaces was driven by the understanding of the sedimentological environment, as well as the information recorded in logs. The modelled surfaces were then used to code a block model by the relevant lithology and graben zone. This included the overlying Quaternary sediments, and the underlying lithologies outside of the graben. Once completed, the wireframes were validated, and any overlapping triangles or other errors were removed. The wireframes were also validated against the digital terrain model of the topography. The drillhole collars were also adjusted to match the topography, to ensure the volume estimates of the mineralised and unmineralised lithologies were correct in relation to the current surface.

Estimation domains were based on the modelled lithology, called “cycles”, combined with the structurally defined graben zone, called “domains”. A series of numeric codes were developed, which combined the assigned cycle with the domain, to produce an ESTZONE code. The final ESTZONE code was based on the cycle code (as referred to in Table 5 1), combined with the domain code. For example, the GM cycle in structural domain 1 would be named 1010.

3.4.4 Statistics and Geostatistics

The raw assay grades were composited to 1m lengths downhole. Top cuts were applied to each of the modelled lithologies, based on statistical analysis of the composite data. Top-cuts for P2O5 varied between 20% in the QP unit, to 1.1% in the M1 unit. In the main mineralised units (CV, CB, CG, VM, BM, and GM), no top cuts for P2O5 were applied.

Statistical analysis was completed by cycle. Variograms were produced for the major cycles, using ESTZONES with the largest amount of data. ESTZONE 1010 contained the data drilled in the geostatistical cross, and so provided a model for the short scale variability of the mineralisation. Variographic analysis of the data showed typically low nugget effects of between 2% and 17%, with maximum ranges of between 329m and 1,590m. Variograms were determined for the ESTZONES with sufficient data, for P_2O_5, U_3O_8, MgO, Fe_2O_3, Al_2O_3, SiO_2, CaO, CO_2, F, Cr_2O_3, K_2O, LOI, MnO, Na_2O, and TiO_2, and applied to the relevant lithologies in the other domains, where the geological and geochemical characteristics were similar but there was insufficient data. In order to ensure that the balance of the different variables remained constant, the total variances of variograms of the minor variables were rescaled to that of the P_2O_5 variogram, for each of the relevant ESTZONES.

3.4.5 Block Modelling and Validation

A block model was created with parent blocks of 25m by 25m by 3m. Sub-celling to 12.5m by 12.5m by 1.5m was used to maintain the volumes of the modelled wireframes. The block models were coded with the relevant lithology, cycle, domain and ESTZONE codes.

Grades were estimated using Ordinary Kriging (“**OK**”). The variables estimated were as follows: P_2O_5, U_3O_8, MgO, Fe_2O_3, Al_2O_3, SiO_2, CaO, CO_2, F, Cr_2O_3, K_2O, LOI, MnO, Na_2O, and TiO_2. The search parameters used to estimate the grade used 3 passes, with the search radii increasing each time. The search ellipsoids were orientated to reflect the dip and strike of the relevant ESTZONE, which in turn, was based on the graben domain, and modelled lithological cycle. The search ellipsoid radii increased from 250m by 100m by 10m in the first pass to 1,250m by 500m by 50m in the final run. The maximum variogram range was 1,590m, indicating that the majority of blocks were filled with search ellipsoids with a radius of less than the maximum modelled variogram range. The minimum and maximum number of composites used to estimate each variable per ESTZONE and search pass also varied. In the first pass, the minimum varied between 4 and 12 composites, and the maximum, between 8 and 32. In the final pass, the minimum was set at 4 composites for all ESTZONES, and the maximum varied between 8 and 16.

In some of the thin cycles, there was insufficient data for the minor elements (U_3O_8, MgO, Fe_2O_3, Al_2O_3, SiO_2, CaO, CO_2, F, Cr_2O_3, K_2O, LOI, MnO, Na_2O, and TiO_2) for the blocks to be filled using the relevant estimation parameters. For these thin cycles, grades were assigned on to the blocks based on trend analysis, which identified a trend from south to north, and assigned grades based on this. Where modelled cycles had no, or limited minor element data, but had data to allow a P_2O_5 estimate to be completed, average grades were coded into the block model. Assigning average grades was only completed where the trend analysis proved to be unsuccessful. The blocks which were assigned grades using either of these methods comprised less than 5% of the final Mineral Resource.

Several variables, such as those used as quality parameters for export were not estimated, these include cadmium and mercury. There are limited assays for these variables included in the database, and as a consequence, block grades have not been estimated. Cominco present some limited statistical analysis of the minor elements, based on length weighted averages of the raw assay data.

The resultant block models were validated using three industry standard validation techniques. These were:

- Statistical analysis between the composite data and the block models;
- Visual comparisons between the composite data and the block model; and
- Swath plots comparing the grade trends in the block model to the composite data.

Declustering was applied to the global statistics to ensure the comparisons were meaningful. The statistical comparison between the input composite grades, and the resultant block model, for the material cycles, is shown in Table 3-2. The differences between the composite and block model mean grades are not considered to be significant, and indicate that no global biases have been introduced during estimation.

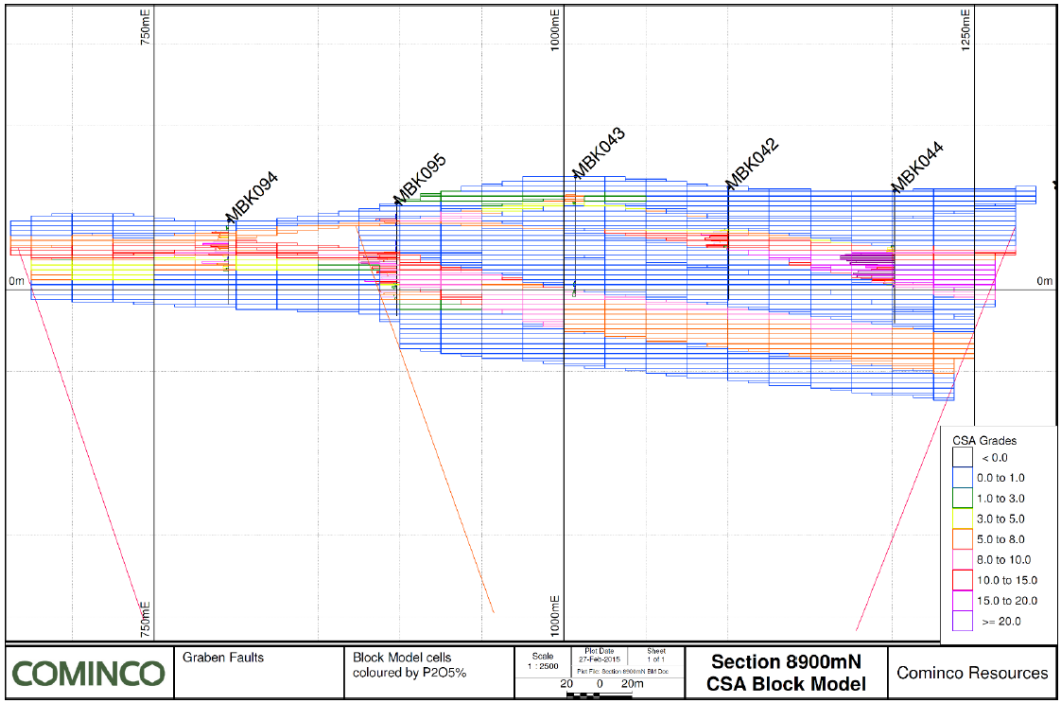
Table 3-2: Statistics comparing the declustered composite grades with the resultant block model mean grades

Cycle and code	Percentage of deposit (%)	Mean grade – composites ($\%P_2O_5$)	Mean grade – block model ($\%P_2O_5$)	Difference (%)
GM (10)	75	10.64	9.84	-7
BM (9)	5	14.70	14.74	0
QP (102)	5	6.54	6.16	-6
CP (51)	4	1.13	1.32	+17
VM (8)	4	11.55	9.96	-14

A typical cross section, which demonstrates the relationship between the estimated block model, and the composite data, is shown in Figure 3-4. This demonstrates that visually, there is a good comparison between the input data and the resultant block model on a local scale.

The validation methods, as used by Cominco are industry standard. The validation completed demonstrated that no significant biases were generated during estimation, either on a global or local scale. As such, the block model reflects the input data, which introducing a level of smoothing which is applicable, given the scale of the deposit, and the spacing of the drillholes used to estimate the blocks.

Figure 3-4: Cross section through the deposit, showing the estimated blocks compared to the composite grades



3.4.6 Mineral Resource classification and reporting

Mineral Resource classification was based on assigning areas of higher confidence based on several aspects. These included:

- Observed geological evidence for the continuity of mineralisation, particularly at the cut-off grades used in the reporting of the Mineral Resources. This includes the understanding of the mineralogy and geochemistry to define the sedimentary units, and the structural mapping, which defined the graben;
- Understanding of the grade continuity, based on the grades obtained from the appropriate drilling, logging, sampling, and analysis of the available samples. The procedures used were also supported by an industry standard QAQC programme, which provided data of sufficient quality to be used in the subsequent Mineral Resource estimate; and
- Drillhole locations were used to guide the location of the areas assigned different classifications. The Mineral Resource classification was coded into the block model, using the following nominal drillhole spacings:
  - Inferred Mineral Resources - 100m (east-west) and 800m (north-south);
  - Indicated Mineral Resources - 100m (east-west) and 400m (north-south); and
  - Measured Mineral Resources - 50m (east-west) and 100m (north-south).

The areas assigned different Mineral Resource classifications were digitised in plan view, and a 3D shape used to code the block model where relevant. No parts of the geological model were considered to be unclassified.

Mineral Resources were reported above a cut-off grade of 5%P_2O_5. No further depth or economic constraints were applied in the reporting of the Mineral Resource. The declared Mineral Resource, as reported in the 2015 DFS, by CSA, is given in Table 3-3. The Company's attributable Mineral Resources for the HPP are presented in Table 3-5 and is based on a 63% effective interest.

Table 3-3: Mineral Resource Statement, as declared by CSA on 30 May 2013

Classification	Tonnage (Mt)	P_2O_5 (%)	U_3O_8 (ppm)	MgO (%)	Fe_2O_3 (%)	Al_2O_3 (%)	SiO_2 (%)	CaO (%)	CO_2 (%)	F (ppm)	Density (t/m^3)	Content (MtP_2O_5)
Measured	200.5	11.6	75.0	3.8	1.4	3.7	42.7	21.8	6.5	9,971	1.93	23.3
Indicated	380.9	9.8	74.0	3.3	1.8	5.0	48.5	17.6	7.8	8,227	1.89	37.3
Measured + Indicated	**581.4**	**10.4**	**74.3**	**3.5**	**1.7**	**4.6**	**46.5**	**19.0**	**7.4**	**8,828**	**1.90**	**60.5**
Inferred	94.4	7.5	58.0	3.6	1.7	4.8	52.2	15.8	7.3	5,688	1.90	7.1
Total Mineral Resources	**675.8**	**10.0**	**72.1**	**3.5**	**1.7**	**4.6**	**47.3**	**18.6**	**7.3**	**8,390**	**1.90**	**67.7**

The mineral inventory, as split by modelled lithology are included in Table 3-4. As with the Mineral Resource Statement, the tonnages are reported at a cut-off grade of 5%P_2O_5.

Table 3-4: Mineral inventory reported by lithology

Lithology	Tonnage (Mt)	P_2O_5 (%)	U_3O_8 (ppm)	MgO (%)	Fe_2O_3 (%)	Al_2O_3 (%)	SiO_2 (%)	CaO (%)	CO_2 (%)	F (ppm)	Density (t/m^3)	Content (MtP_2O_5)
C1	0.4	6.4	20	7.5	1.3	3.4	28.3	24.8	0.0	357	1.85	0.0
C2	0.3	7.1	30	4.3	1.7	5.0	42.9	17.1	0.0	2,178	1.85	0.0
CB	17.5	15.7	93	1.0	2.3	5.4	43.1	22.9	2.8	8,986	1.77	2.7
CG	5.6	6.9	45	4.4	2.1	5.1	49.4	15.7	2.4	8,240	1.77	0.4
CP	50	6.9	45	2.5	1.7	5.1	57.1	14.2	3.1	3,353	1.89	3.5
CV	22.3	9.5	119	0.4	3.2	9.3	61.0	7.9	0.8	7,771	1.74	2.1
M1	0.5	6.2	89	0.7	2.0	6.6	67.2	7.7	0.6	3,156	1.65	0.0
M2	6.5	6.1	39	5.7	1.1	3.6	48.4	16.9	13.6	4,684	1.81	0.4
BM	27.8	14.8	93	0.7	1.5	4.1	49.4	21.3	4.5	11,793	1.84	4.1
GM	460.8	10.4	69	4.6	1.2	3.2	42.4	22.1	9.8	9,763	1.98	47.9
VM	21.1	11.0	140	0.3	2.1	6.4	60.7	11.5	0.9	7,114	1.65	2.3
Q1	0.6	6.8	116	0.2	3.3	8.7	69.1	1.1	0.4	786	1.73	0.0
Q2	0.1	7.3	27	0.1	3.4	14.9	63.5	0.1	0.0	50	1.72	0.0
QP	62.3	7.0	68	0.2	4.0	12.3	66.5	0.4	0.1	1,837	1.65	4.4
TU	0.1	9.8	52	4.9	1.2	3.7	41.0	21.3	0.0	357	1.85	0.0
Total	**675.9**	**10.1**	**72**	**3.5**	**1.6**	**4.6**	**47.4**	**18.6**	**7.4**	**8,389**	**1.91**	**68.0**

Table 3-5: Attributable Mineral Resource Statement, as declared by CSA on 30 May 2013[(1)]

Classification	Tonnage (Mt)	P_2O_5 (%)	U_3O_8 (ppm)	MgO (%)	Fe_2O_3 (%)	Al_2O_3 (%)	SiO_2 (%)	CaO (%)	CO_2 (%)	F (ppm)	Density (t/m^3)	Content (MtP_2O_5)
Measured	126.3	11.6	75.0	3.8	1.4	3.7	42.7	21.8	6.5	9,971	1.93	14.7
Indicated	240.0	9.8	74.0	3.3	1.8	5.0	48.5	17.6	7.8	8,227	1.89	23.5
Measured + Indicated	**366.3**	**10.4**	**74.3**	**3.5**	**1.7**	**4.6**	**46.5**	**19.0**	**7.4**	**8,828**	**1.90**	**38.2**
Inferred	59.5	7.5	58.0	3.6	1.7	4.8	52.2	15.8	7.3	5,688	1.90	4.5
Total Mineral Resources	**425.8**	**10.0**	**72.1**	**3.5**	**1.7**	**4.6**	**47.3**	**18.6**	**7.3**	**8,390**	**1.90**	**42.6**

(1) Equity attributable interest of 63% (70% of 90%).

3.4.7 SRK Summary Comments

SRK has not re-estimated the Mineral Resource statements as estimated by CSA Global for the asset. SRK has, however, undertaken sufficient check calculations to verify the stated Mineral Resources, and to provide a degree of comfort regarding the reporting of the Statement. SRK has reviewed the processes used to estimate and report the Mineral Resource Statement, which are derived using 3D computerised techniques and in SRK's opinion, are aligned with good international practice.

Notwithstanding the above, SRK makes the following comments regarding the estimation and reporting of the Mineral Resources. SRK notes that the block size used in the block model is relatively small, being 25m by 25m in plan view, when compared to a drillhole spacing of up to 800m in a north-south direction. Typically, optimal block sizes are between a half and a third of the drillhole spacing. Small blocks can lead to a block model which overstates the understanding of the local variability in areas with larger drillhole spacings. In areas classified as Measured and Indicated Mineral Resources, the drillhole spacing is between 50m and 100m in an east-west direction, and 100m and 400m in a north south direction. Although this spacing in noticeably narrower than that used to define the Inferred Mineral Resources, the block size used is still noticeable smaller than the optimal spacing, leading to uncertainty in the local block estimates.

SRK notes that the block grades estimated were limited to P_2O_5, U_3O_8, MgO, Fe_2O_3, Al_2O_3,

SiO_2, CaO, CO_2, F, Cr_2O_3, K_2O, LOI, MnO, Na_2O, and TiO_2, and so excluded deleterious variables such as arsenic (As), cadmium (Cd), Mercury (Hg), and lead (Pb). These variables were however analysed during the drilling campaign, and statistical analysis of the raw assay grades shows that grades are typically low. However, SRK notes that the highest Cd grade reported in the composite file is 68.56ppm, with a mean grade of 10ppm in the GM unit, based on a population of 1,516 samples 450 of which reported grades above detection limit. SRK considers that the grades reported are typically low, but equally notes that the sampling completed to date is restricted.

In reporting the Mineral Resource, SRK notes that Cominco has used a cut-off grade of 5% P_2O_5, and no further depth reporting constraints. SRK notes that it is general practice to distinguish between Mineral Resources which are potentially economically mineable by open-pit methods and those which are not. Accordingly, optimisation analysis is generally undertaken to determine the Mineral Resource which is potentially economic by consideration of open-pit methods, using a suitably optimistic selling price, to reflect the requirement for having *"…reasonable prospects for eventual economic extraction"* as required by the JORC Code. SRK notes that the economic assessment reported in the 2015 DFS, and the current long-term price assessment, indicates that all of the material reported in the Mineral Resource Statement meets the reporting requirements. As such, SRK considers that no further depth constraints are required, and so has not made any adjustments to the reported Mineral Resources.

SRK notes that the operational cut-off grades calculated as part of the 2015 DFS mining study, assuming a long-term Phosrock price of US$155/t, range between 1.7%P_2O_5 to 2.4% P_2O_5. The marginal processing cut-off grade ranges from 1.4%P_2O_5 to 1.9%P_2O_5. As such, SRK notes that the cut-off grade used for the derivation of the Mineral Resources is higher than that calculated during the 2015 DFS mining study, and as such, indicates that the Mineral Resources reported support the condition of a reasonable prospect for eventual economic extraction.

The SRK audited Mineral Resource Statement is provided in Table 3-6 and Table 3-7. As with the CSA Mineral Resources, the Mineral Resources are reported above a cut-off grade of 5%P_2O_5, with no further depth or economic constraints applied. The audited Mineral Resources reflect that no exploration, re-interpretation, or mining has been undertaken since the completion of the 2015 DFS, and as such, remains unchanged. The Competent Person for the reporting of the Mineral Resources is Dr Timothy Lucks, who is a full-time employee of SRK.

Table 3-6: Audited Mineral Resource Statement, as declared by SRK on 31 August 2018

Classification	Tonnage (Mt)	P_2O_5 (%)	U_3O_8 (ppm)	MgO (%)	Fe_2O_3 (%)	Al_2O_3 (%)	SiO_2 (%)	CaO (%)	CO_2 (%)	F (ppm)	Density (t/m³)	Content (MtP_2O_5)
Measured	200.5	11.6	75.0	3.8	1.4	3.7	42.7	21.8	6.5	9,971	1.93	23.3
Indicated	380.9	9.8	74.0	3.3	1.8	5.0	48.5	17.6	7.8	8,227	1.89	37.3
Measured + Indicated	**581.4**	**10.4**	**74.3**	**3.5**	**1.7**	**4.6**	**46.5**	**19.0**	**7.4**	**8,828**	**1.90**	**60.5**
Inferred	94.4	7.5	58.0	3.6	1.7	4.8	52.2	15.8	7.3	5,688	1.90	7.1
Total Mineral Resources	**675.8**	**10.0**	**72.1**	**3.5**	**1.7**	**4.6**	**47.3**	**18.6**	**7.3**	**8,390**	**1.90**	**67.7**

Table 3-7: Attributable Mineral Resource Statement, as declared by SRK on 31 August 2018[(1)]

Classification	Tonnage (Mt)	P_2O_5 (%)	U_3O_8 (ppm)	MgO (%)	Fe_2O_3 (%)	Al_2O_3 (%)	SiO_2 (%)	CaO (%)	CO_2 (%)	F (ppm)	Density (t/m³)	Content (MtP_2O_5)
Measured	126.3	11.6	75.0	3.8	1.4	3.7	42.7	21.8	6.5	9,971	1.93	14.7
Indicated	240.0	9.8	74.0	3.3	1.8	5.0	48.5	17.6	7.8	8,227	1.89	23.5
Measured + Indicated	**366.3**	**10.4**	**74.3**	**3.5**	**1.7**	**4.6**	**46.5**	**19.0**	**7.4**	**8,828**	**1.90**	**38.2**
Inferred	59.5	7.5	58.0	3.6	1.7	4.8	52.2	15.8	7.3	5,688	1.90	4.5
Total Mineral Resources	**425.8**	**10.0**	**72.1**	**3.5**	**1.7**	**4.6**	**47.3**	**18.6**	**7.3**	**8,390**	**1.90**	**42.6**

(1) Equity attributable interest of 63% (70% of 90%).

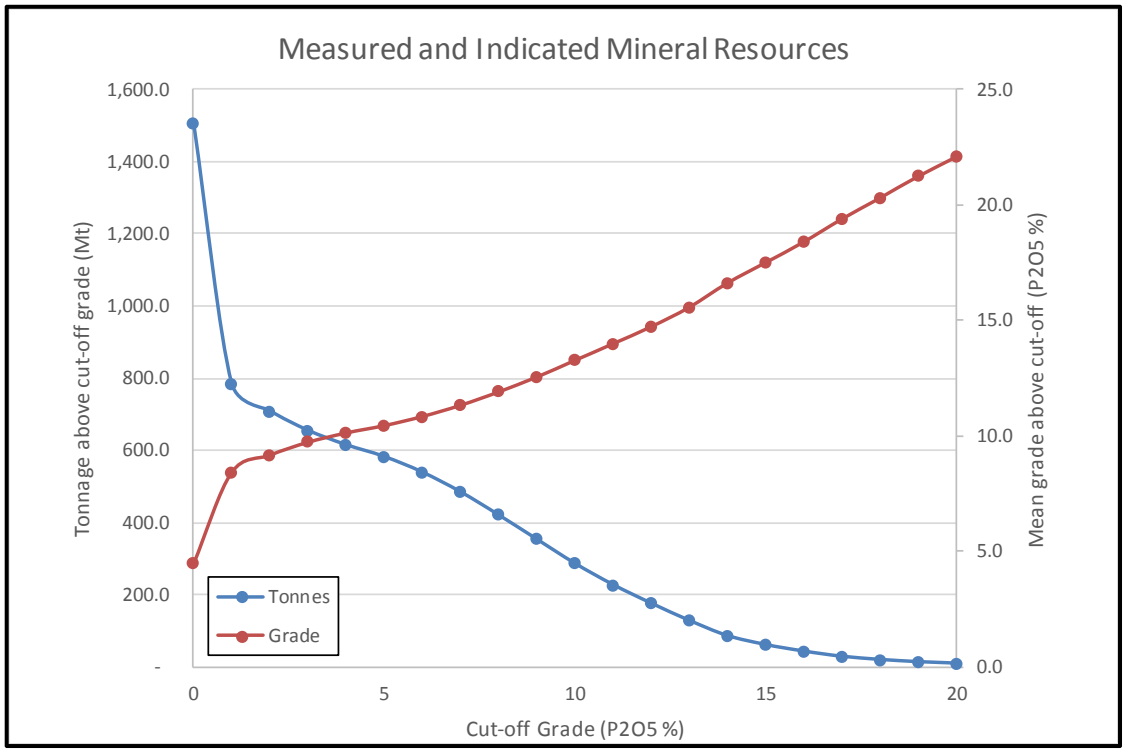
A grade-tonnage curve for the Measured and Indicated portion of the declared Mineral Resources is given in Table 3-8 and illustrated in Figure 3-5. SRK notes that this tabulation is

not a Mineral Resource Statement, and is provided here for reference, and to illustrate the sensitivity of the reported Mineral Resources to changing cut-off grade. Any differences between the declared Mineral Resources and the tabulated grade-tonnage curve is likely to be related to rounding, and as such, is not considered to be material.

Table 3-8: Grade-tonnage tabulation for the declared Measured and Indicated Mineral Resources

Cut-off Grade (P_2O_5 %)	Tonnage above cut-off grade (Mt)	Mean grade above cut-off grade (P_2O_5 %)
0	1,506.9	4.4
1	784.2	8.4
2	708.6	9.2
3	654.1	9.7
4	614.1	10.1
5	581.5	10.4
6	538.1	10.8
7	483.7	11.3
8	419.8	11.9
9	352.5	12.6
10	285.5	13.3
11	226.5	14.0
12	175.2	14.7
13	127.4	15.6
14	85.0	16.6
15	60.1	17.5
16	41.8	18.4
17	27.5	19.4
18	18.7	20.3
19	12.5	21.3
20	8.4	22.1

Figure 3-5: Grade-tonnage cure for the declared Measured and Indicated Mineral Resources



4 HINDA PHOSPHATE PROJECT

4.1 Introduction

The following section summarises the findings and outcomes of the 2015 DFS as completed by Cominco. SRK notes that as part of the Feasibility Study, SRK had signed off on the Ore Reserve statement, however the Mineral Resource statement was prepared by CSA Global (UK) Ltd ("**CSA**"). A full review of the Mineral Resource estimate has been undertaken as part of this CPR, and is presented in Section 3.

The following parties were responsible for the various sections/disciplines for the 2015 DFS:

- **Cominco:**
  - Provision of background information, primarily used throughout this introductory section,
  - Geology and Resource definition based on the works completed by Cominco and its consultants from 2007 to July 2013,
  - JORC Code compliant Mineral Resource Estimate and block model (subcontracted to CSA),
  - Marketing and price forecast (subcontracted to CRU Consulting),
  - Community relations,
  - Legal framework and title,
  - Economic analysis;
- **Ausenco:**
  - Management of the overall study, compilation of the 2015 DFS, project execution plan and construction schedule, and performing a risk, hazop and opportunities review,
  - Metallurgical testwork supervision and testing of slurry physical characteristics,
  - Geotechnical studies of the beneficiation plant site, pipeline route and port site,
  - Design and engineering of the beneficiation plant, slurry pipeline (including route reconnaissance), phosrock filtration and drying facility and product storage and reclaim, and of the export jetty and shiploader,
  - Estimation of project infrastructure costs including access roads, power lines, gas pipelines, accommodation and buildings,
  - Compilation of capital and operating costs to an accuracy of ±15% for above mentioned disciplines, plus development of the EPCM costs and the overall project contingency;
- **SRK:**
  - Hydrology and hydrogeology baseline studies,
  - Mine geotechnical studies,
  - Design of tailings storage facilities, surface water diversion facilities, pit dewatering facilities, and mine power distribution systems (the latter of which was subcontracted to WSP Electrical Engineers (UK)),
  - Selection of the mine development strategy, mine production equipment, in-pit crushing and conveying equipment (subcontracted to Sandvik Group), mine related infrastructure, mine design, ore and waste mining schedules, mine capital and operating cost estimation to an accuracy of ±15%,
  - Declaration of a JORC Code compliant Ore Reserve; and
- **Other:**
  - WSP Canada Inc.: preparation of the Environmental and Social Impact Study Assessment in line with the Equator Principals (2013), in compliance with IFC's Performance Standards,

- Mintek Laboratory: pilot scale testing of flowsheet, optimisation of flotation flowsheet, grade variation testwork and production of sample for end user marketability analysis,
- Prayon Belgium: acidulation phosphoric acid pilot tests.

Subsequent to the completion of the 2015 DFS the Cominco team conducted an internal study to assess the potential to develop a "starter project" which focused on processing the BM ore, which is a weathered fraction of the deposit and therefore elevated in its in-situ P_2O_5 content and depleted in its MgO content, relative to the GM ore. Testwork conducted (Section 5.9) demonstrated that a saleable product grade of 31%P_2O_5 at 70% P_2O_5 recovery could be produced from Hinda BM ore by sizing and screening only. The study proposed a production rate of 900kt phosphate concentrate per annum, with a LoM of approximately 12 years.

SRK has not reviewed the HBM study details and therefore it has not been commented as part of this CPR, nor have its project economics be validated. It is understood that the Company intends to assess the opportunities presented by the HBM project alongside the review of the 2015 DFS, as part of the proposed Work Programme.

For the avoidance of doubt, SRK notes that certain of the technical information pertaining to the 2015 DFS reported herein is largely included as a matter of historical fact and as such is not intended to be reported as current, specifically given the combination of:

- Current commodity price assumptions;
- That all key assumptions regarding operating and capital expenditures are effectively base dated as at Q4 2014 and as such have not been updated to the date of publication; and
- The Company's decision to pursue a differing strategic option in respect of scope and scale.

4.2 Project Location, Climate & Infrastructure

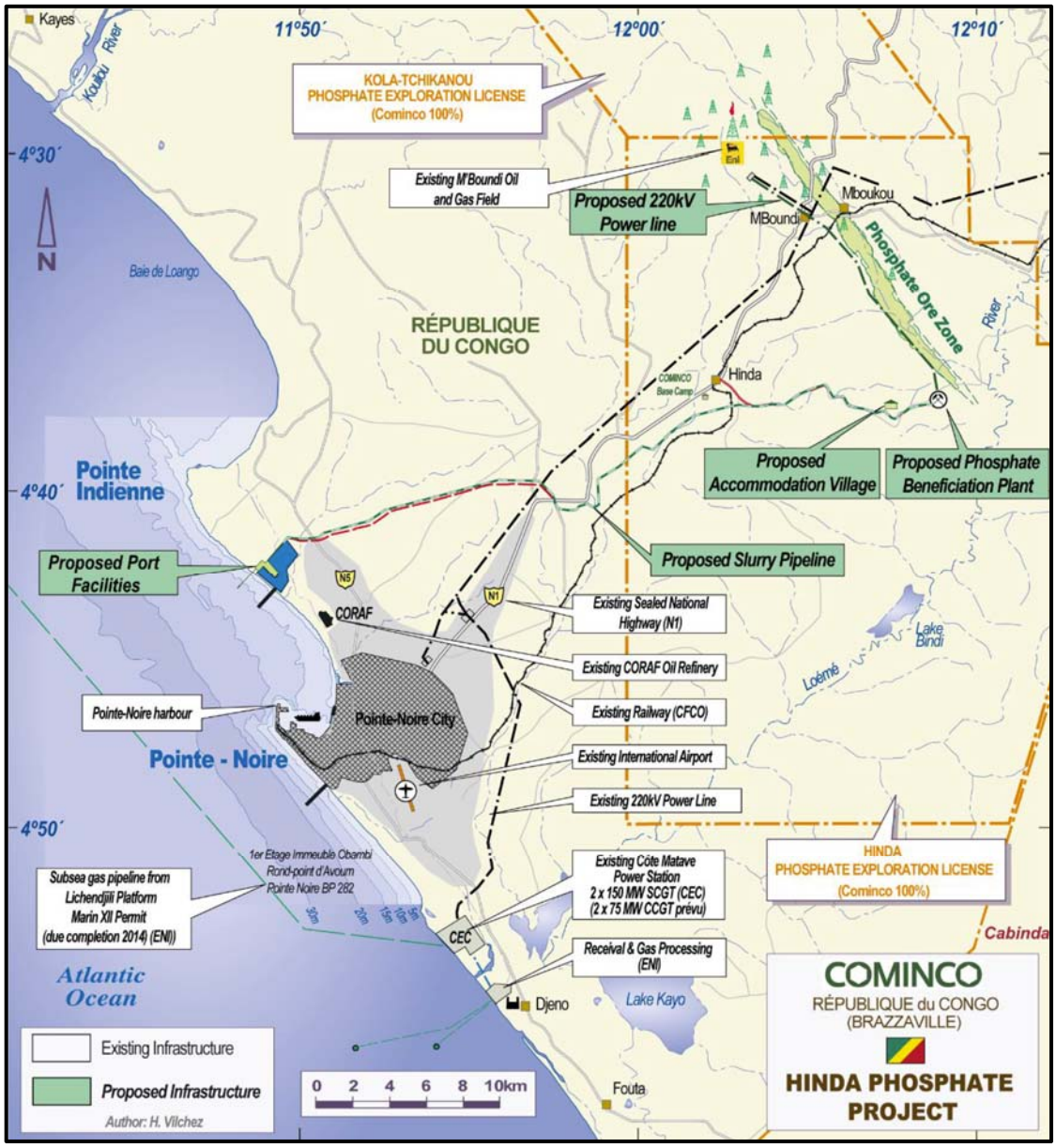
The HPP is located in the southwest of the Congo, approximately 30km northeast of Pointe-Noire, and approximately 10km northeast of Hinda village (Figure 4-1). The coastal plain of the Congo is characterised by low hills and plateaus separated by river and stream valleys of varying size. The HPP area is at an altitude of 20m amsl to 60m amsl, and lies 4° south of the equator. The climate is mild year round, with a maximum average monthly temperature of 26.5°C and minimum average monthly temperature of 20.6°C. The rainfall is relatively low for the tropics, with a mean average precipitation of 1,242mm at Pointe-Noire. The seasons are dominated by a dry, warm period from June to September and a wet, hot season from October to May, interspersed with a short dry period in December and January.

Access to the site from Pointe-Noire is via National Road, N1, a paved dual carriageway connecting Pointe-Noire with the capital, Brazzaville. N1 passes through Hinda village from where an existing 12km track connects Hinda village to the project site.

The proposed port location for the HPP is Pointe Indienne, approximately 5km northwest of Pointe-Noire. Sealed National Road N5 runs from Pointe-Noire to Madingou-Kayes and the northern coast towards Gabon, passing Pointe Indienne within 2km of the proposed port site. Pointe-Noire port is the largest deep-water port on the African west coast, and has regular container traffic, handling over 12Mt each year.

A 300MW gas-fired power station and the national oil refinery lie respectively south and north of Pointe-Noire. The nearest national grid substation is located 17km from the HPP's beneficiation plant, whilst the Mongo Kamba substation is located 15km from the Pointe Indienne port site.

Figure 4-1: Location Map (2015 DFS)



4.3 Tenure

On the 7 December 2015 to COMINCO S.A. were granted an Exploitation Permit (Table 4-1) covering an area of 263.68 km^2 defined by the permit corner points presented in Table 4-2. The exploitation permit was granted for a period of 25 years and subject conditions stipulated in a mining convention agreed which defines the rights and obligations of each party and the detailed conditions under which COMINCO S.A. shall undertake phosphate extraction, processing and export activities. The Hinda Phosphates Mining Exploitation Convention is effective since its signature date (10 June, 2018) and expires at the same time as the Hinda Phosphates Exploitation License. The exploitation permit is subject to a fixed royalty on all phosphate exports and an annual surface area royalty per km^2.

Table 4-1: Exploration Permit Details

Exploitation Permit	Licence Holder	Kropz Interest	Minerals	Status	Area
Decree No. 2015-975	Cominco S.A.	63% held through Cominco S.A.	Phosphate	Right commenced on 17 December 2015 until 16 December 2040 (renewable for periods of 15 years thereafter)	263.68km^2

An Environmental Impact Study covering all activities relating to ore production, processing and transport must also have been resented to the State before the mine comes into production. This study must be validated by the Minister in charge for the Environment. Cominco S.A. has duly conducted an ESIA for the Hinda Phosphates Exploitation License, dealing with the project's consequences on environment and local communities, which was approved by the Minister in charge of environment, through the issuance of environmental compliance certificate n° 0764/ MEFDDE/CAB/DGE/DPPN of 14 July, 2016 (PWC, 2018).

Although the law requires the holder of an exploitation license to start the development work in the mining field within 12 months from the said license's attribution date, subject to being opened to the license's withdrawal without compensation, the Republic of Congo has committed, under the Hinda Phosphates Mining Exploitation Convention, that the only legitimate cause of withdrawal of the Hinda Phosphates Exploitation License is the anticipated termination of the said Convention by the Republic of Congo due to the Company failing to pay the mining royalty for more than 6 months from reception of a default notification (PWC, 2018).

Table 4-2: Tenure Boundary Co-ordinates

COORDINATES	LONGITUDE	LATITUDE
A	12°01'48"E	04°27'54"S
B	12°08'24"E	04°27'54"S
C	12°08'24"E	04°33'36"S
D	12°10'48"E	04°33'36"S
E	12°10'48"E	04°39'36"S
F	12°04'12"E	04°39'36"S
G	12°04'12"E	04°33'36"S
H	12°01'48"E	04°33'36"S

4.4 Geology & Mineral Resource

Details of the review of the Geology and Mineral Resource estimate, including sign off by SRK on the Mineral Resource statement, are presented under Section 3.

4.5 Hydrological & Hydrogeological Characterisation

4.5.1 Baseline data and hydrological modelling

The HPP is, for the most part, located within the Tchivouba drainage catchment, an area of 110km^2, a sub-catchment of the Loémé River which is situated immediately to the south-east of the HPP area. The regional climate of the area is equatorial with winter dry savannah precipitation. A mean annual precipitation of 1,214mm has been calculated for the area, however there is strong evidence spatially for highly variable rainfall over short distances with localised storm events typical. The surface water drainage system is dominated by groundwater-fed baseflow which recedes at around the end of April/early May when the rains finish. Dry season flows are maintained by baseflow until the onset of the rains again in October.

There is typically a paucity of high-quality, long term climate datasets across the Congo region, where the 2015 DFS was reliant on regional data collected from Pointe-Noire and the Mengo weather stations, supplemented by high-resolution TRMM (5km by 5km grid) satellite rainfall data available from 1988 to 2006, where this has been applied on a relative spatial variation basis (rather than absolute values). Project specific weather stations were in operation for

periods of between 1 to 3 years prior to the 2015 DFS, and surface stream and river monitoring programmes were setup up during the Pre-Feasibility Study ("**PFS**") with individual stations commissioned in late 2012, 2013 and 2014. The cut-off date for all data sets for the climate and hydrological characterisation baseline is 31 October 2014. However, additional stage monitoring and rainfall data was collected post-baseline monitoring to support the curve fit hydrological modelling between late October 2014 and mid-January 2015.

A detailed quasi-distributed rainfall-runoff model was constructed for the purposes of estimating design flood flows, to inform flood mapping and the engineering design of both storm water management and TSF infrastructure. Whilst every effort has been made to isolate the uncertainty within the model using observed data to calibrate the rate of initial abstraction, the number of observed events from which calibration was performed is limited, both in terms of total number and in terms of the magnitude of events.

Hydrological modelling indicates approximately 2% to 5% rapid surface runoff reporting to surface water flows under average rainfall conditions, with the amount of runoff increasing during higher intensity storm events. The majority of rainfall (not lost to evapotranspiration) becomes interflow to surface waters and recharge to groundwater; the latter is estimated to be 12% of mean annual precipitation. The peak flow at the bottom of the Tchivouba catchment is estimated to be 10.7m^3/s for a 1 in 10 year storm event.

It is recommended that as part of the next stage of project development the hydrological baseline data is updated for the subsequent collection period, as well as the modelling and associated flood estimates in order to support the design of the storm water management and TSF infrastructure.

4.5.2 Baseline data and hydrogeological modelling

The primary focus of the hydrogeological baseline characterisation was the U formation either side of the phosphatic units comprising the graben-hosted orebody.

Groundwater input data included monitoring of converted exploration boreholes, high-resolution electrical resistivity tomography ("**ERT**") surveys, rising and falling head tests and large diameter pumping boreholes. The analysis of the test data, enabled hydraulic parameters to be determined, including hydraulic conductivity and specific yield/specific storativity. Detailed lithological characterisation of the U formation was also conducted through borehole log analysis, interpretation of the ERT surveys and particle size distribution ("**PSD**") analysis. Stable isotope analysis was also used, during the PFS, to investigate recharge and flow rates within the orebody and surrounding formations.

Three water bearing units were identified – the U formation, the phosphatic units within the graben and the alluvial materials close to the Loémé River. The phosphatic units demonstrate permeabilities up to two times less than the surrounding formations. The graben boundaries, in the main, act as barriers to the flow of groundwater.

Geological, geophysical and hydrogeological data shows the U formation to be a heterogeneous, layered aquifer comprised of fine to medium sands with clay and silt layers, and lenses of fine to medium sands representing paleochannels. The vertical conductivity is generally lower than the horizontal conductivity. The hydraulic testing indicates a range in hydraulic conductivity in the U formation of between 0.01m/d and greater than 10m/d, the PSD analyses similarly indicating a range of between 3 and 4 orders of magnitude. The ERT surveys proved successful at identifying paleochannels which are laterally continuous and typically orientated perpendicular to the Hinda graben. These features will act as preferential groundwater flow conduits and constitute a key target for the dewatering bores.

The complexity of the mining operation with its continuous rolling system of pre-stripping, pit excavation, mining and waste back-filling as the pod-like pit moves northwest along the graben, as well as the interaction with the surface water management system, necessitates a similarly complex dewatering solution and one that could only be addressed using sophisticated 3D numerical modelling. The information gathered from the baseline and other hydrogeological surveys provided accurate inputs on which a numerical groundwater model was developed to calculate the requirements for project wide dewatering to achieve the mining target. The model was developed using MODFLOW on a monthly time-step over 26 years, two of which precede mining operations.

The dewatering well field has been designed to ensure that the groundwater level during operational mining and waste rock deposition is below the pit floor. The numerical groundwater modelling shows that this can be achieved using a rolling programme of land clearance ahead of mining, pumping well installation, advance dewatering, partial decommissioning of 'sacrificial' wells located directly in the path of the mine after one to two years and the decommissioning of the remaining 'curtain' wells positioned on the eastern and western fringes of the pit once the waste pile at the back of the pit is passed.

4.6 Mine Geotechnical Studies

4.6.1 Geotechnical setting

The lithologies within the Hinda open pit are geotechnically characterised as either engineering soils or lie on the boundary of soil and rock. As such, these formations are some of the most complex and difficult to characterise for a mining environment. In addition to traditional methods of soil and rock characterisation, a significant amount of engineering judgement and experience is required to characterise and interpret the performance of these materials in an open pit environment.

The critical geotechnical aspects of the open pit will be:

- the generally unconsolidated nature of the predominantly fine grained lithologies forming the Hinda deposit;
- the sensitivity of the material strength to groundwater pressure;
- the variability of the material strength and hydrogeological properties over the very large strike length of the deposit;
- the presence of frequently occurring loose coarse sand layers which will easily erode as well as low shear strength clay layers of low permeability;
- the general silty fine sandy nature of the sediments which are particularly sensitive to piping failures in the slopes;
- high groundwater re-charge and high initial groundwater surface;
- potential for artesian groundwater pressure which may affect the in-pit dumping and trafficability;
- groundwater management of the in-pit waste dumps to ensure safe working conditions for the spreader; and
- the requirement of installing haul roads and conveyor ramps on the west wall which will be formed in U formation engineering soil.

The main geotechnical domains in which slopes will be formed will be U, Q CP and GM, summarised as follows:

- **U and Q Formations:** The west wall and northern portions of the east wall pit slopes will

be formed in U formation of up to 190m height. The overlying Q unit is up to 30m thick. Both units, generally consist of soil type material; and

- **CP and GM Formations:** The southern east wall and pit floor will be formed in the CP formation with slopes up to up to 75m high. Both units are composed of interbedded soil strength material and lithified rock material with more than 50% of these materials intersected being of rock strength.

4.6.2 Pit Slope Analysis and Design Criteria

The engineering characterisation was based on the logging and testing of drill core obtained principally from the DFS drilling programme and selected core from the PFS. From the results of this work, characteristic strength parameters and their variability for use in probabilistic limit equilibrium stability modelling were developed.

SRK undertook both deterministic and probabilistic limit equilibrium stability analysis to inform the development of stable slope angles for the HPP.

Based on the analyses undertaken the inter-ramp angles used for the engineered pit design vary as presented in Table 4-3. Overall slope angles are dependent on the pit design requirements in relation to the number of access or conveyor ramps required on the pit slopes where slopes in the most critical lithologies (U and Q) reach a maximum height in the western wall of 190m. Consequently, overall slope angles will be the same or lower than those quoted in Table 4-3.

Table 4-3: Slope Design Recommendation

Material	Slope Height	Bench Height (m)	Bench Face Angle (°)	Berm width (m)	Inter-Ramp Angle (°)	FoS	Pf (%)
U and Q Formation	Up to 100m	12	36	6	28	1.1	20
	Over 100m	12	32	8	24	1.3	<5
CP Formation	< 50m	12	60	5.5	44	1.2	<5
	50m to 100m	12	55	6	40	1.2	<5
	>100m	12	55	8	36	1.2	<5
GM Formation	n/a	12	60	7.5	40	n/a	n/a

In addition, it is recommended that the pit floor slope can be excavated at the dip of the GM-CP contact, however as the slope of the contact increases, it may be necessary for operational purposes to bench the slope. The approach to the mine design included leaving some GM ore at the toe of the west wall. This design allows overburden stripping in the U formation to be significantly reduced by sacrificing only a small portion of the phosphate ore. Keeping the toe of the slopes depressurised will be important and failure to achieve this would impact on stability of the GM unit left in place.

The pit floor heave assessment indicated that provided the pit perimeter dewatering system performs as designed, that is the groundwater level is drawn down below the base of the pit, pit floor heave should not be an issue.

4.6.3 Waste Dump Design Criteria

Geotechnical analysis was undertaken for the operational ex-pit and backfill waste dump slopes, this assessment demonstrates acceptable Factors of Safety ("**FoS**") for all cases considered assuming the following design geometry/criteria are not exceeded:

- Maximum overall in-pit backfill waste slope inclination of 15º.
- Maximum overall ex-pit waste slope inclination of 21º.
- Maximum bench face slope inclination of 27º.

For closure the 27° operational faces will be dozed down to achieve a continuous slope angle. The backfill waste slopes, suggested to be circa 30°, which are constructed by the spreader,

will be re-profiled to a maximum slope inclination of 18°.

4.6.4 Excavatability assessment

An excavatability assessment utilising the Kirsten method was carried using field data from rock mass logging gathered during the 2014 drilling campaign along with re-logging of selected borehole core from the PFS. A total of 800m of core data was used in the analysis. The analysis indicated that the chosen primary dig unit, a CAT6050 backhoe, has sufficient crowd force of 1,890kN to free dig all of the materials in the Kirsten Excavation Classes 1 to 6. These materials along with the soil strength Q and U formations, which are free dig materials, represent about 90% of the total pit inventory. Excavation Class 7, which represents the remaining 10% of the total pit inventory, is likely to be free dig material but may give rise to lower productivity digging particularly where thicker units are encountered.

4.6.5 Trafficability

Trafficability has been assessed and the results included in the mine scheduling. The vast majority of ore and waste haulage will take place on a combination of virgin excavated ground (poor trafficability, estimated rolling resistance >8%), on-bench haul roads (temporary, estimated 8% rolling resistance) and bench access and crusher area ramps (engineered base, estimated 3% rolling resistance). Based on this assessment, an average rolling resistance of 5% has been used when developing the haulage cycle times.

4.6.6 Summary

Through adequately characterising the rock and soil materials geotechnical properties, the 2015 DFS was able to determine optimised inter-ramp and bench/berm parameters for use in pit slope design for final pit walls and waste backfill/ dumps based on the assumption of achieving dry slope conditions. Groundwater and surface water management will be key to maintaining safe slopes, where slope dewatering and depressurisation of low permeability strata need to be monitored and managed.

A key recommendation from the 2015 DFS was the project would benefit greatly from the early excavation of a trial cut in through the Q and U formations extending to about 20m below the groundwater table, as well as further testing of the main formations forming the pit slopes of the side walls and the footwall namely the GM, CP and U formations.

Since the pit slopes at Hinda will contain infrastructure critical to mine production, the stability of the slopes will need to be ensured and an advanced warning of potential pit slope instability will be an essential part of the mine operations and management, which will need to be monitored through the implementation of surface monitoring and sub-surface monitoring.

4.7 Mining

4.7.1 Operations

Mining will be undertaken using conventional open pit truck and shovel methods, with in-pit crushing and conveying ("**IPCC**") systems installed for both free dig ore and waste. Operations are to start in the southernmost corner of the deposit and, once at full depth, will advance northwest along strike at an average annual rate of approximately 700m, allowing for continual backfill.

Mining fleet will consist of initially of two 550t hydraulic shovels in backhoe configuration, supplemented by two electric face shovels for overburden stripping in years 5 and 7 respectively. After commissioning of the electric face shovels, the backhoes will only continue operating in ore. A maximum of 32 193t haul trucks is anticipated to be required over the life of mine ("**LoM**") to support the transport ore or waste to the IPCC or waste dump positions. A

secondary development fleet of up to ten 40t articulated trucks will be used for construction works and topsoil stripping, stockpiling and rehabilitation.

The ore IPCC system will consist of a single crushing station and conveying system which initially is located on surface west of the open pit approximately 1km east of the primary crushed ore stockpile. During the third year of operations, the ore crusher will be placed in-pit, and will be relocated periodically to reduce haulage distances and release areas for backfilling. Lengthening of the overland conveying system to the processing plant will occur as required.

Initially overburden will be trucked to either in-pit or external waste dumps. When the strip ratio doubles from year 5 onwards, the waste IPCC system will be installed, and operations will be via a combination of backfilling via truck and IPCC. Relocation of the overburden crushing station and spreader and dump conveyor occurs periodically as and when required.

4.7.2 Open Pit Mine Design

Engineered mine designs have been completed for the final pit, external waste dumps and for the waste backfill. Pit optimisation studies have been undertaken, and the final pit design is based on the selected optimised pit shell relating to a product selling price of US$101/t. Modifying factors of on average 4.6% ore losses and dilution of 0% have been incorporated within the pit design.

The majority of the waste is backfilled into the pit void; however there are also four external waste dumps. The initial external waste dump is used until year 3 and is located to the south-eastern corner of the pit. There are an additional three external waste dumps used in the later years of the mine life due to mine sequencing requirements influenced by the changing orebody geometry. The waste dumps have been located and designed in locations near to the mining areas in order to minimise haulage distances.

4.7.3 Production Schedule

The LoM plan has been developed for 24 years with 3 months pre-production. The HPP LoMp assumes mining of a total of 1,489.7Mt of material moved, comprising 1,084.7Mt of waste and 405.0Mt of ore scheduled for processing. The variations in deposit geometry and characteristics over the four design stages directly influence the overburden tonnages (Figure 4-2) and beneficiation plant feed and products (Figure 4-3).

The target Phosrock production rate of 4.1Mtpa is the primary scheduling constraint for the first 12 years. Plant feed tonnages from Year 13 until the end of life are reduced to target 3.5Mtpa of product to allow for a practical mine development sequence and equipment fleet profile. The reduction of plant feed in Year 14 is related to reduced capacity of the overburden IPCC, as the spreader system is relocated from Stage 2 to Stage 3.

The mining schedule comprises of four separate phosphate ore types, specifically BM, GM, CB and CG, with GM representing over 90% by tonnage and 87% by contained P_2O_5. The average mined seam thickness for each ore lithology are: GM 38.2m (maximum of 74m); BM 6.3m (maximum of 26m); CG 4.4m (maximum of 10m); and CB 14.4m (maximum of 31m).

Figure 4-2: Life of Mine Material Movements

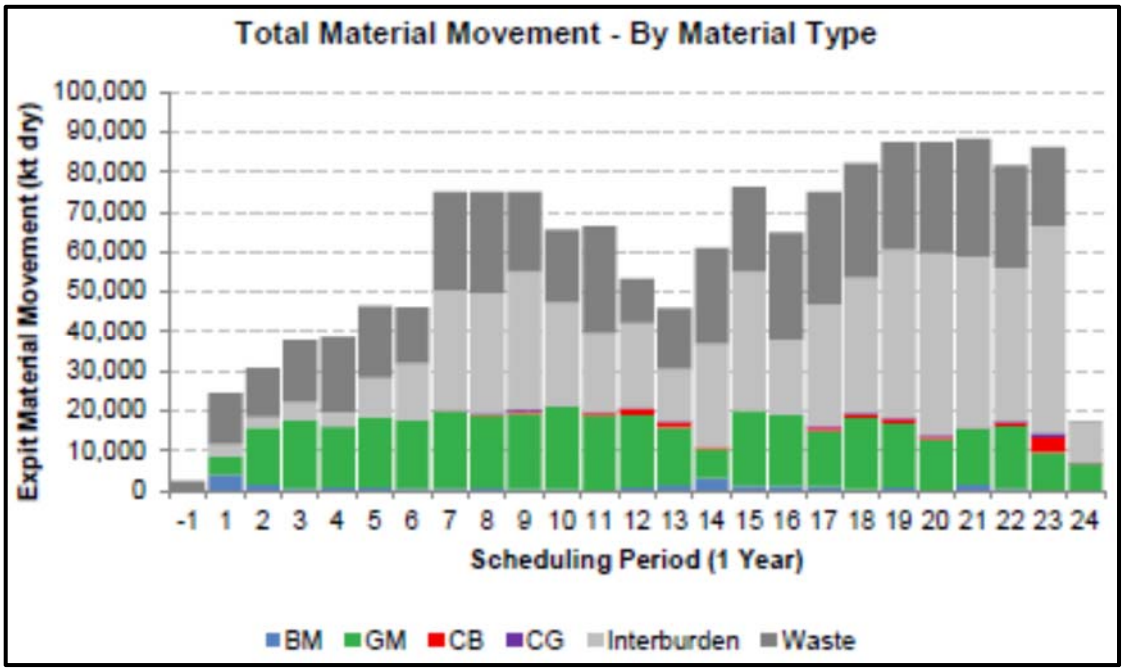
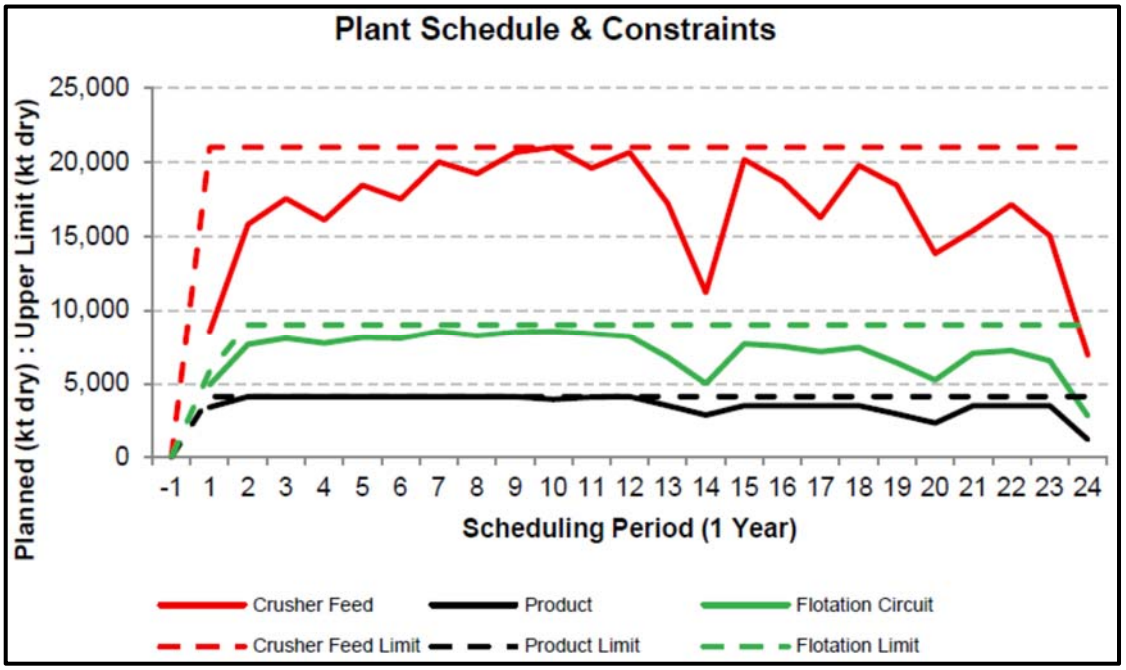


Figure 4-3: Plant Schedule and Production Constraints



4.7.4 Ore Reserve

The HPP LoM plan for the 2015 DFS includes a total of 1,489.7Mt of material, comprising 1,084.7Mt of overburden and 405.0Mt of ore (overall strip ratio of 2.68t_{waste}/t_{ore}). The Ore Reserves statement (Table 4-4) totals 404.9Mt dry, grading 11.0%P_2O_5 with the 0.1Mt of additional material scheduled derived from Inferred Mineral Resources.

SRK notes that the Ore Reserves as stated as at 1 April 2015:

- Are reported within an engineered pit design which is based on an optimised shell corresponding to a 32.0%P_2O_5 product price of US$101/t reported on a dry basis(US$3.15/dmtu P_2O_5);

- Are derived from all scheduled mining blocks contained within the geological wireframes for each seam, which are defined assuming a geological 5%P_2O_5 cut-off;
- Assume a long-term Phosrock price of US$155/t, the operating cut-off grade ranges from 1.7%P_2O_5 to 2.4%P_2O_5, and the marginal processing cut-off grade ranges from 1.4%P_2O_5 to 1.9%P_2O_5. Assumed operating expenditures are US$1.24/$t_{mined}$, US$4.91/$t_{processed}$; selling cost of USD3.17/$t_{Phosrock}$; and royalty of 3.00% of gross sales revenue;
- Are made up of the following ore type split by tonnage: BM 5.3%; GM 90.4%; CB 3.2% and CG 1.0%;
- Assume mining losses varying by ore type and seam geometry resulting in the following weighted averages: BM 18.0%; GM 3.10%; CB 14.7%; and CG 18.0%. Overall dilution is assumed at 0%;
- Assume yields and metallurgical recoveries as determined with the formulae as developed by Cominco depending on P_2O_5 grade. These have resulted in the following weighted LoM averages: BM 36.5% mass yield, 77.4% P_2O_5 recovery; GM 19.7% mass yield, 59.1% P_2O_5 recovery; CB 39.1% mass yield, 77.4% P_2O_5 recovery; CG 12.3% mass yield, 56.1% P_2O_5 recovery;
- Are reported on a dry basis and the assumed moisture content for the various lithology's are: BM 13.6%; GM 11.2%; CB 20.0%; CG 17.1%; and waste ranging from 15.0% to 16.3%; and
- The Ore reserve statement must be read in conjunction with the following additional technical disclosure commentary: Table 1 disclosures as mandated by JORC Code (2012); the risks and opportunities as included in Appendix 7-01 of the 2015 DFS; and Section 4.22.

Table 4-4: 2015 DFS Ore Reserve Statement as at 1 April 2015

Ore Reserves	Tonnage	Grade			
	(Mt)	(%P_2O_5)	(%MgO)	(%SiO_2)	(%CaO)
Proved	158.7	12.1	4.2	39.8	23.8
Probable	246.3	10.4	4.2	43.9	21.4
Total Ore Reserves	**404.9**	**11.0**	**4.2**	**42.3**	**22.3**

4.8 Surface Water Management & Pit Dewatering

4.8.1 Surface water management

The proposed open pit requires the implementation of surface water diversion as it intercepts six watercourses along the length of the pit. The proposed surface water management infrastructure, namely the dams will prevent the surface water from draining into the proposed pit area and also attenuate peak flows, lowering the peak to a more manageable quantity for pumping diversions. The first diversion is required in year 2, which occurs within the same valley as one of the tailings facilities so a combined approach for the tailings dams and surface water diversion was implemented for the catchment. The second, third and fourth diversions required for catchments intercepted along the western margin of the pit, are all required in Year 4, and in the case of the first two dams, require interaction with the infrastructure corridor design. A further two diversion structures are required to the east of the pit in year 4 directing runoff via an open channel along the east side of the pit. The dams will have capacity to route any extreme flood events into the pit due to the terrain and the extents of the proposed pit. Culverts dimensioned according to the hydraulic requirements will be used to convey the potential high flows through the corridor footprint and thus protect the dam structures themselves. Pumps will be located at each dam (except for those associated to the Tailings Storage Facilities) and berm/sumps located to transfer the attenuated water to the southern catchments and out of the system via two primary channels. Two additional channels will be required after the dams are

de-commissioned which will also form part of the closure strategy.

The catchment inside the advancing pit footprint will be subdivided in small catchments as the pit progresses towards the north. The small catchments will be managed by excavating sumps to collect water, and pumps and pipes to transport the water.

The ability of the Upper Tchivouba watercourse to continue along its existing route is lost during Year 5 of mining, consequently the entire surface water infrastructure needs to be in place once the ability to continue along the route is lost. A pit void is left near the Upper Tchivouba dam due to the mining and backfill scheduling. Tailings will be discharged into the void during Year 12 to 19. Following the tailings ceasing to backfill, the western dams can be breached/decommissioned. The water will then be routed through the infrastructure corridor with culverts, into the pit void and then discharged into the environment via the eastern channel. The approach taken for the dams decommissioning can be adopted for the closure strategy.

The pit dewatering programme will be installed one to two years in advance of mining operations in order to attain dry slope conditions and to limit further groundwater ingress. A portion of the water collected by the pit dewatering and the in-pit sumps will be pumped to a number of discharge points that will be part of the surface water management system, and as such this water has been accounted for in the surface water balance.

The proposed dams will be constructed by the development fleet and the costs of the development fleet are captured within the overall mining cost.

It is recommended that the designs are to be reviewed and updated as further data becomes available, including the hydrological baseline data and site specific ground and material conditions. The successful operation of the surface water management programme will require sufficient and appropriate monitoring be undertaken to ensure that the facility is constructed and operated as designed, supported by a suitable qualified/experienced team of operators.

4.8.2 Pit dewatering

Over the life of mine, it is estimated that 943 dewatering bores will be required, with a production rate ranging between 100,000m^3/d and 150,000m^3/d, with peak flows occurring in Years 14 16. The well field is made up of vertical dewatering bores of nominal 13” diameter and passive vertical drains (NQ diameter) filled with gravel to connect high transmissivity sections in the U formation, whilst the well field will be monitored by 200 vibrating wire piezometers positioned ahead of the pit, 130 deep standpipes located just beyond the pit boundary and 140 shallow standpipes inside the pit on the lower-most benches. It is estimated that the dewatering bores will yield between 500m^3/d to 1,000m^3/d each using a 145mm OD submersible pump. Pumps will be controlled by downhole transducers activated by the water level. Groundwater is piped to local impoundment dams where it is stored before being fed into the site wide surface water diversion network.

In pit sump pumping has been calculated using the areal average daily precipitation scaled by the relevant catchment area affected to generate a daily pumping rate for each pit area. The results show that sump inflows up to 20,000m^3/d during storm events can be effectively pumped with zero discharge to the pit floor. Sumps will accommodate a 24-hour 1 in 10-year storm event. Pit sumps will have a depth of 5m with a 1m freeboard and a footprint of 200m^2, less than 0.08% of the pit floor area. Over the LoM a maximum of two pumping units are required at any time. Sump water will be discharged along a 6” diameter pipeline at a velocity of 2m/s to 3m/s.

It is stressed in the 2015 DFS that the success of the dewatering operation depends critically on developing a deep understanding of the groundwater regime operating at the site and using

this information to monitor and maximise the performance of the dewatering scheme. Particular care needs to be taken in the drilling and construction of the dewatering wells due to the challenging ground conditions experienced at the site. The well field operation needs to be carefully synchronised with other operations, particularly so with the surface water diversion scheme. It will be essential for the operation to be conducted in a meticulous and highly organised manner. As per the surface water management programme it is recommended that there be experienced personnel permanently employed at the site to oversee and monitor the operation.

4.9 Metallurgy and Beneficiation Plant

The metallurgy and processing sections of the 2015 DFS were prepared by Ausenco, in conjunction with Cominco. Extensive metallurgical testwork resulted in the development of a processing flowsheet targeting the following key processing objectives:

- An overall P_2O_5 recovery of 61.41%, from ore of average composition 12.42%P_2O_5 and 4.24% MgO through to Phosrock product, representing the planned GM plant feed for Years 1-5; and
- The production of 4.0Mtpa of high-grade saleable Phosrock analysing 32%P_2O_5 or higher from type GM ore and 33%P_2O_5 or higher from type BM ore and containing deleterious chemical constituents within industry specifications.

4.9.1 Testwork summary

A considerable amount of metallurgical testwork was undertaken on the two major ore types, GM and BM, which together comprise approximately 96% of the Ore Reserves.

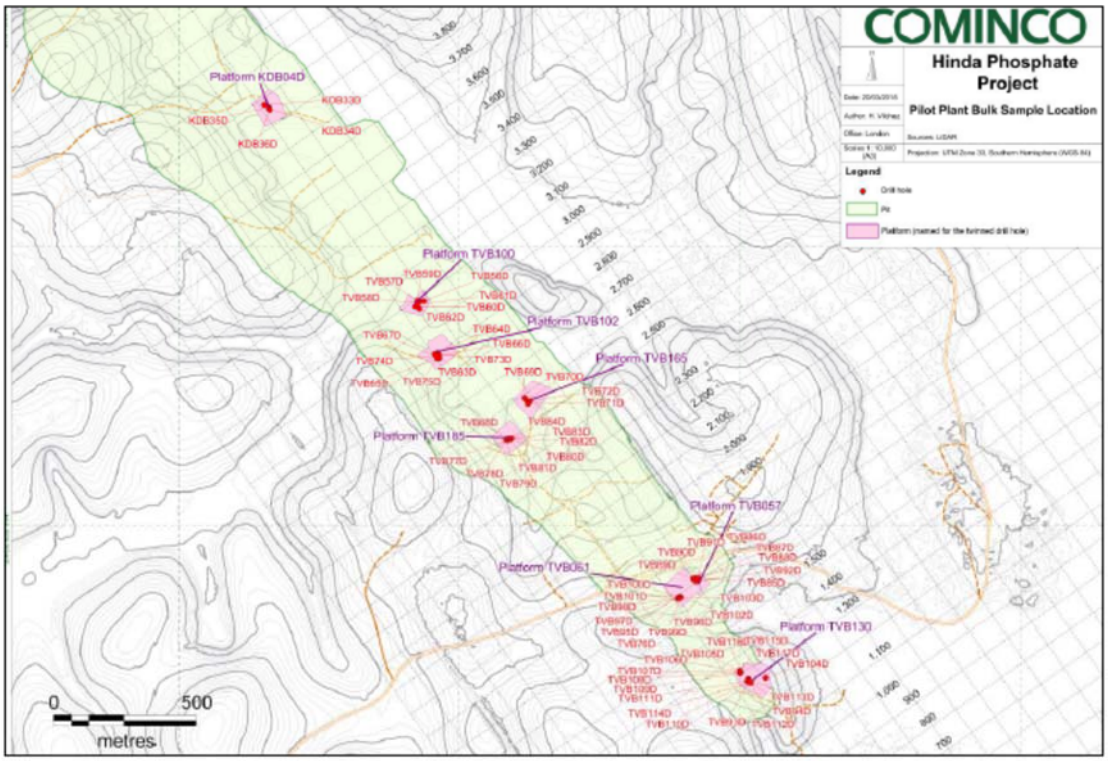
Bulk sample for 2015 DFS testwork

In order to confirm the findings of the PFS testwork, pilot scale testing was undertaken as part of the 2015 DFS scope of work.

The bulk samples for pilot testwork were sourced from a number of 200mm large diameter drillholes spaced from 1,300mN to 4,900mN. The core was taken from the full thickness of the ore zone, at seven locations from within an area to be mined and processed in the first 5 years of operation. Large diameter core was used to ensure that large unbroken pieces were available for crushing testwork. The samples were identifiable by major ore types, GM and BM, in order that specific crushing, milling and flotation tests could be undertaken on the different ore types.

The large diameter drill hole locations are shown in Figure 4-4.

Figure 4-4: Large diameter drill hole locations



A total of 57.8t of bulk sample was shipped to Mintek in Johannesburg in 2013: 47.5t of GM core in ninety-three bags, plus 10.3t of BM core in 22 bags. An additional 4t for initial comminution testing were air freighted.

2015 DFS Testwork

A bulk sample was used in nine pilot scale production runs at Mintek in Johannesburg. The pilot runs, demonstrating the ability to produce a 32%P_2O_5 product with low Minor Element Ratio (deleterious elements) and low cadmium using a double reverse flotation flowsheet. The pilot tests included crushing and screening in full-scale commercial mineral sizers of the type proposed for the HPP.

Pilot acidulation tests conducted by Prayon on P_2O_5 concentrate from the Mintek pilot plant also confirmed the suitability of Hinda Phosrock to manufacture phosphoric acid.

Crushing

A two-stage crushing and screening circuit using mineral sizers was selected at the PFS stage and further investigations to refine this choice were performed at pilot scale as part of the 2015 DFS. Large scale investigations were undertaken, using the bulk sample, to study a variety of crushing equipment types including mineral sizers, jaw crushers, impact crushers and cone crushers. Different combinations of crusher types were considered.

Testing was performed at Mintek in Johannesburg, and some tests on the mineral sizers were conducted in the supplier's facilities in Derby, UK.

The testwork demonstrated that a two-stage system consisting of a primary sizer followed by a secondary sizer in closed circuit with a 12.5mm screen achieves the desired separation of phosphate and gangue materials at full scale.

Further testwork was undertaken to assess the impacts of tooth wear rate, choke feeding, circulating load, ore compaction and wet feed on crusher performance. A secondary tooth roll

sizer was specifically engineered by MMD with respect to rotor speed and tooth design and was used in the crusher tests.

Crushing and screening tests using the MMD secondary sizer demonstrated that the apatite and dolomite minerals dis-proportionally report to different size fractions when crushed to 12.5mm, thus providing an effective means of upgrading the flotation feed P2O5 content and removing gangue material. Essentially, the P_2O_5 tends to concentrate into 5.6mm +106µm fraction while dolomite (MgO) and silica gangue minerals, tends to report to both +5.6mm and 106µm fractions. This mineral deportment allows for an upfront separation by size prior to downstream concentration utilising froth flotation.

Detailed analysis of the crushed product, in terms of particle size and distribution of P_2O_5, SiO_2 and MgO confirmed that it is viable to reject MgO as coarse, +5.6mm and fine 106µm waste streams while, at the same time, concentrating a high proportion of the P_2O_5 in the mid-size, 5.6mm +106µm fraction.

The testwork verified that a single stage MMD secondary eight-tooth mineral sizer provides the maximum deportment of P_2O_5 to the mid-size fraction compared to the other crushing configurations. However, it was also shown that a significant proportion of P_2O_5 was locked in the +5.6mm size fraction. The latter issue applied to all circuit types.

MgO deportment was favourable in terms of waste rejection to fines and coarse fractions. The majority of MgO and SiO_2 reported to the +5.6mm coarse fraction.

About 60% of the P_2O_5 was recovered in the mid-size fraction, with about 34% to 37% of the P_2O_5 in the rolls crusher product still locked in the coarser, +5.6mm fraction. 3.3% to 6.5% of the P_2O_5 reported to the 106µm fraction.

Further treatment of the +5.6mm fraction to recover locked P2O5 was evaluated as part of the grinding tests.

The abrasiveness of Hinda ore was evaluated by MMD. High abrasivity ores cause high tooth wear in the toothed type roll crushers and has a direct impact on the operating costs. The PFS testing indicated that the ores had very low abrasion indices. In general terms, GM ore is harder and more abrasive than BM ore. Five additional abrasion tests were performed by MMD on a “worst case” sample and confirmed that the ore is only “slightly abrasive”.

Attritioning testwork

The HPP flowsheet requires secondary crushed ore to be prepared for milling by removing 106µm fines and screening out the +5.6mm gravel. The +5.6mm reject fraction was observed to contain significant phosphate grades suggesting that complete liberation of phosphate and MgO had not been achieved in this fraction. Additionally, there was also some entrainment of undersize material containing P_2O_5 into the screened oversize.

Batch attritioning testwork of the coarse material demonstrated an upgrading of P2O5 into the 2.8mm +106µm size fraction for all samples tested. The P_2O_5 grade in this fraction ranged from 20.6% to 23.9%. Silica was concentrated in the 106µm size fraction and the MgO reported to both the +2.8mm and the 106µm fractions. This upgraded 2.8mm +106µm fraction, enriched in P_2O_5, could be separated by screening and cycloning and added to the mill feed. Overall an additional P_2O_5 recovery of 1.4% to 12.7% with an average of 5.6% was demonstrated. The batch tests were confirmed in pilot scale testing.

This resulted in a combined P_2O_5 recovery from the crushing and screening and the attritioning circuit ranging from 73.9% to 88.5% with an average of 82.2%.

This processing step was included in the 2015 DFS flowsheet. The 2015 DFS also notes that this unit operation also provides insurance in the event that any fines are entrained in the

+5.6mm screen oversize.

Milling

An assessment of rod mill versus ball milling was undertaken with the objective of identifying any significant difference in system performance, particularly with respect to the product particle size distribution and potential impact on flotation P_2O_5 recovery. The work showed that the particle size distributions of the ball and rod mill products are nearly identical. However, as is often the case for larger scale operations, a ball mill circuit was selected as the limitation of the maximum, practical rod mill size, meant that four parallel rod mills would be required at the 4Mtpa throughput rate.

Seven milling circuit pilot plant runs were undertaken during the 2015 DFS and these all included the milling and associated screening operations. The pilot campaigns were undertaken at targeted feed rates varying between 120kg/h and 180kg/h and largely replicated the flowsheet finally selected. The pilot runs provided feed for the flotation piloting.

Pilot milling testwork was used to determine mill specific energy input to achieve the desired flotation feed size of P80 190µm. The mill specific energy of 6.1kWh/t determined experimentally in the 2015 DFS programme, was lower than that determined in the PFS using Bond's Ball Mill Work Indices. This resulted in a slightly reduced ball mill size, from 8.4MW to 7.5MW, and a reduced mill operating power requirement.

Classification

During the pilot plant testing, Derrick Corporation (supplier of multi-stacked sizing screens) performed batch testing of different Derrick screens at the Mintek laboratory. The testing indicated that a 212µm aperture screen could be employed to achieve separation. However, the results indicated that the screen had poor cut accuracy, tending to pass coarse material to product due to screen panel flexing, and that a large number of screens would be required.

Conventional hydraulic sizing was tested, evaluated and selected for the mill classification duty. Hydraulic sizers or hydrosizers are widely used in the phosphate industry and offer advantages over vibrating screens in terms of separation efficiency, flexibility of operation in terms of classification cut-point, lower capital and operating costs. Testing was conducted by FLSmidth at their test facilities in the USA.

Flotation

The PFS flowsheet included conventional rougher flotation where flotation of the phosphate mineral is performed at an alkaline pH followed by reverse cleaner flotation where the silica and carbonates are removed from the phosphate mineralisation by flotation in acidic conditions.

- **2015 DFS laboratory flotation tests:** Some 320 bench-scale flotation tests have been undertaken at Mintek as part of the 2015 DFS test programme. Bench tests were also performed by China Bluestar Leheigh Engineering Corporation (Bluestar), Clariant (Germany), Wengfu (China) and ArrMaz Custom Chemicals USA (ArrMaz).

  A major finding of the 2015 DFS bench-scale and pilot testwork was the adoption of a neutral pH, two-stage reverse flotation circuit. This is simpler than the PFS flowsheet and provides the potential for significant capital and operating costs savings and simpler and lower risk commissioning. The 2015 DFS bench-scale testwork outcomes are summarised as follows:

  - Two-stage, roughing and cleaning, reverse flotation provides a superior and more reliable performance to the PFS Base Case direct–reverse flotation route with respect to product grade and overall P_2O_5 recovery. Bench-scale reverse flotation tests typically included sequential stages of silica and carbonate flotation. The reagents employed

were Clariant's Flotigam 3135 (amine) for flotation of silica and Flotinor 7092 (ester) for flotation of carbonates, dolomite and calcite.

- Bench testwork demonstrated that combined flotation of silica and magnesium carbonate is effective. Typically, flotation P_2O_5 recovery was 84.2% with a concentrate grade of 34.4%P_2O_5. The concentrate assayed 0.69% MgO with approximately 90% of the MgO rejected during flotation. The study notes that this concentrate quality is considered to be acceptable feed for wet process phosphoric acid production.
- The reagent consumption (and hence operating cost) of reverse–reverse flotation was shown to be significantly lower than that of the PFS direct–reverse float process. Based on the testwork the revised flotation flowsheet has resulted in a fall in the average annual consumption or reagents from approximately 113,000t to 15,000t. This has reduced the logistic challenges of transporting and storing large volumes of reagents, as well as reducing capital and operating cost. The revised reagent figures are shown in Table 4-5.
- Mintek testwork demonstrated that neutral pH was required and that while it was not necessary to acidify the flotation feed slurry ahead of reverse flotation, cleaner flotation performance was improved by utilising sodium tripolyphosphate, a phosphate depressant.

Table 4-5: Reagent requirements

Reagent		Reagent consumption (kg/t)	
Name	Description	PFS	2015 DFS[1]
Oleic Acid	Anionic collector	1.9	not required
Fuel Oil	Collector extender	1.9	not required
Sodium Silicate	Silica depressant	2.11	not required
Caustic Soda	Basic pH adjuster 1.75	1.75	not required
Flotigam 3135	Silica collector	0.52	0.56
Flotinor 7092	Carbonate collector	0.49	0.56
Sulphuric Acid	Acidic pH adjuster	6.03	not required
Sodium Tripolyphosphate Phosphate	Depressant	not required	0.88
Total reagent per tonne of float feed		**14.7**	**1.97**
Annual consumption [2]		**113,000tpa**	**15,000tpa**

[1] Based on bench Test 291.
[2] Based on average flotation feed at 7.71Mtpa

Pilot testing

Six pilot plant flotation test runs were undertaken at Mintek. The initial three pilot plant runs were conducted to commission the beneficiation plant and to establish steady operation. The last three pilot runs tested both GM and BM ore types. The key findings and conclusions from this work were:

- The product P_2O_5 grade was significantly higher in the 75µm fraction than in the +75µm fraction of the rougher product. This was a function of the efficiency of recovering coarse silica in the reverse float. The issue was directly related to the efficiency of the classification screen in milling and accordingly, improved screening coupled with improved flotation techniques for removal of SiO_2 and MgO have the potential to further improve the grade of the final product;
- The introduction of an intermediate screen between the rougher and cleaner flotation means the 75µm stream by-passes the cleaner and is sent straight to product; and
- This final product grade was addressed further in an ongoing bench testwork programme where product grades exceeding 34%P_2O_5 were achieved at P_2O_5 recoveries of approximately 83%. The concentrate MgO was low at 0.63%;

Bench-scale flotation tests by ArrMaz using their proprietary reagents gave similar float response (concentrate grade of 32.4%P_2O_5, 0.40%MgO, at 80.5% P_2O_5 recovery) reinforcing the test results obtained by Mintek using Clariant reagents.

Bench-scale flotation tests by Wengfu using their proprietary carbonate collector, also gave similar flotation response (concentrate grade of 32.6%P_2O_5, 0.71%MgO, at 78.9%P_2O_5 recovery) further reinforcing the Mintek results.

Overall Phosphate Recovery & Grade

The mine plan developed during the 2015 DFS showed that the GM/CG and BM/CB ore types represent 91.4% and 8.6% respectively of the ore to be fed to the beneficiation plant over the life of mine. The plant will be commissioned on BM ore, which will comprise approximately 50% of the first year's feed.

Testwork was largely carried out on GM ore, but nevertheless considered the behaviour of BM ore with respect to the selected process route.

The overall predicted phosphate recovery from ore to concentrate product was 61.41% for GM ore, and 78.4% for BM ore, based on the average RoM grade over the first five years, as defined in the 2015 DFS. The phosphate deportment by stream for GM ore (medium case) and BM ore are presented in Table 4-6.

Table 4-6: Phosphate deportment

Process stream	Phosphate deportment	
	GM ore	BM ore
The crushing/screening and attritioning loss	16.53%	10.42%
Desliming (-10µm) loss	8.18%	7.90%
Flotation tailings loss	13.88%	3.27%
Final Phosrock product recovery	61.41%	78.41%

Solid-Liquid Separation

Testwork for thickening and filtration of Phosrock product and thickening of tailings and slurries generated in the pilot plant was performed by Tenova Delkor and Outotec, two internationally recognised equipment suppliers.

The solid-liquid separation tests were undertaken on samples of flotation concentrate and tailings from the comminution and flotation circuits from the pilot plant. The testwork indicated that a common mildly anionic polymer (flocculant) is suitable for all thickening requirements in the beneficiation plant.

Filtration testwork carried out by Outotec confirmed that pressure filters can achieve a moisture content of 10%w/w. It is planned that a flash dryer is used to achieve the required moisture content of 7%w/w as defined by materials handling testwork. It is noted that drying testwork was not performed and would need to be completed during final design.

Acidulation Testing

Acidulation testing was conducted at Prayon, Belgium. The test samples used were taken from pilot plant operation with a product grade of 31.3%P_2O_5 and 1.10%MgO. Test findings were positive in that this material responds well to acid attack, a product acid concentration of 54% P_2O_5 was attained and the filtration rate was acceptable.

A HPP Phosrock sample, derived from GM pilot plant runs was sent to Prayon for acidulation testing. Prayon carried out a comprehensive assay of the sample and compared the key impurities to other similar Phosrock products.

- The P_2O_5 content of the sample was 31.5%, and the CaO/P_2O_5 ratio is average for a sedimentary phosphate leading to a reasonable specific consumption of sulphuric acid ($2.68t H_2SO_4/tP_2O_5$ fed during the test).
- The MgO level was relatively high at 1.25% but the viscosity of the weak and concentrated acids was not too high and the gypsum filtration rate acceptable. In addition, a mineralogy

study revealed that the MgO is not linked to apatite and can probably be removed by optimised beneficiation performance. The MER was relatively low at 0.07 because, despite MgO being high, the Al_2O_3 and Fe_2O_3 contents are relatively low at 0.34% and 0.55% respectively. This will ensure the production of MAP and DAP at the required standard specifications;

- The SiO_2 level was found to be in the medium range but the majority is insoluble, which will likely require abrasion resistant materials of construction in acidulation, potentially increasing the capital costs of the acidulation plant; and
- The low level of reactive silica and aluminium will require the use of silico-aluminous additive to reduce corrosion by free fluorine.

It should be noted that subsequent optimisation of the flowsheet and flotation conditions showed that 32%P_2O_5 and <1.0%MgO could be achieved when treating GM ore.

A BM Phosrock sample from the pilot plant run was also analysed by Prayon. This showed similar results to the GM sample, albeit that the P_2O_5 and MgO contents were better at 35.9% and 0.14%, respectively. However, the cadmium content was also higher at 34ppm, compared to 12ppm for the GM sample. Prayon therefore recommended that the BM ore be blended with the GM ore.

4.9.2 Process Plant Design

Based on the metallurgical testwork and pilot plant testing, performed during the PFS and the 2015 DFS stages, a flowsheet has been developed that employs well established process steps, employing proven equipment. The simplified process flowsheet is given in Figure 4 5. The major processing steps consist of:

- Maximum design throughput of GM RoM ore 21Mtpa;
- In-pit primary crushing of run-of-mine ore to 95% passing (P95) 200mm using a mineral sizer;
- Closed circuit secondary crushing using a mineral sizer to -12.5mm to liberate phosphate and gangue minerals for separation by screening;
- An attritioning circuit to process the +5.6mm fraction to recover locked and entrained phosphate;
- Sizing using screens and hydrocyclones to reject both the +2.8mm and -106µm size fractions containing a significant portion of the gangue minerals, predominantly dolomite and silica, while minimising phosphate losses. Based on processing GM ore and the first 5 years operation the throughput to the downstream milling circuit will be reduced by about 50% while the grade is increased from 12.4%P_2O_5 (RoM) to average of 21.0%P_2O_5 (mill feed);
- Grinding in a ball mill to a target grind size of P80 190µm and desliming at 10µm to liberate phosphate mineral suitable for further upgrading by flotation;
- Three stages of conditioning with a phosphate depressant and carbonate and silica collectors;
- Reverse rougher flotation to reject the gangue minerals. The roughers produce a sink product of 29%P_2O_5 and 1%MgO;
- Separation at 75µm: The reverse rougher sink product is separated at -75µm using hydrocyclones. The -75µm fraction is predicted to grade 32%P_2O_5 and 0.6%MgO and is routed to the final product thickener. The +75µm fraction grading 28%P_2O_5 and 0.6%MgO is pumped to the reverse cleaner float circuit;

- Reverse cleaner flotation to further remove gangue minerals and upgrade the phosphate product to >32.0%P_2O_5 and 0.7%MgO. The +75µm fraction of the reverse rougher sink product is processed in a reverse cleaner float stage to achieve a grade of 32%P_2O_5 and 0.7%MgO;
- The combined product averages 32.0%P_2O_5 and 0.64%MgO for GM ore in Years 1 to 5;
- Tailings thickening to dewater the tailings, recovering the water for re-use in the process. The underflow is pumped to the tailings storage facility;
- Concentrate thickening densifies the concentrate to 60%w/w solids for storage in the header tanks, prior to pumping the slurry by pipeline to Pointe Indienne (see Section 4.12);
- Pressure filtration of the concentrate to dewater the 60%w/w solids slurry to 10% moisture;
- Concentrate drying using a gas-fired flash dryer to reduce the moisture to a target level of 7% (or less) (also see Section 4.13);
- Concentrate storage in a covered stockpile with stacker and reclaimer providing 194,000t storage of dried concentrate prior to ship loading; and
- Jetty and shiploader. A trestle jetty and shiploader is used to load ships up to 65,000t Ultramax size at a rate of 4,000tph (also see Section 4.14).

The availabilities used to determine the design mass flow rates for the beneficiation plant are based on analysis of the operating performance of similar facilities, coupled with detailed analysis of the availabilities that can be expected from the specific equipment, including vendor recommendations. The analysis takes account of scheduled and unscheduled maintenance, power outages, labour issues, lost time for weather and in the case of the primary crusher and conveyors, periodic relocation. The availabilities used in the design are stated as:

- Primary in-pit crushing plant and overland conveyor: 62%;
- Secondary crushing and stockpiling: 85%; and
- Beneficiation plant: 90%.

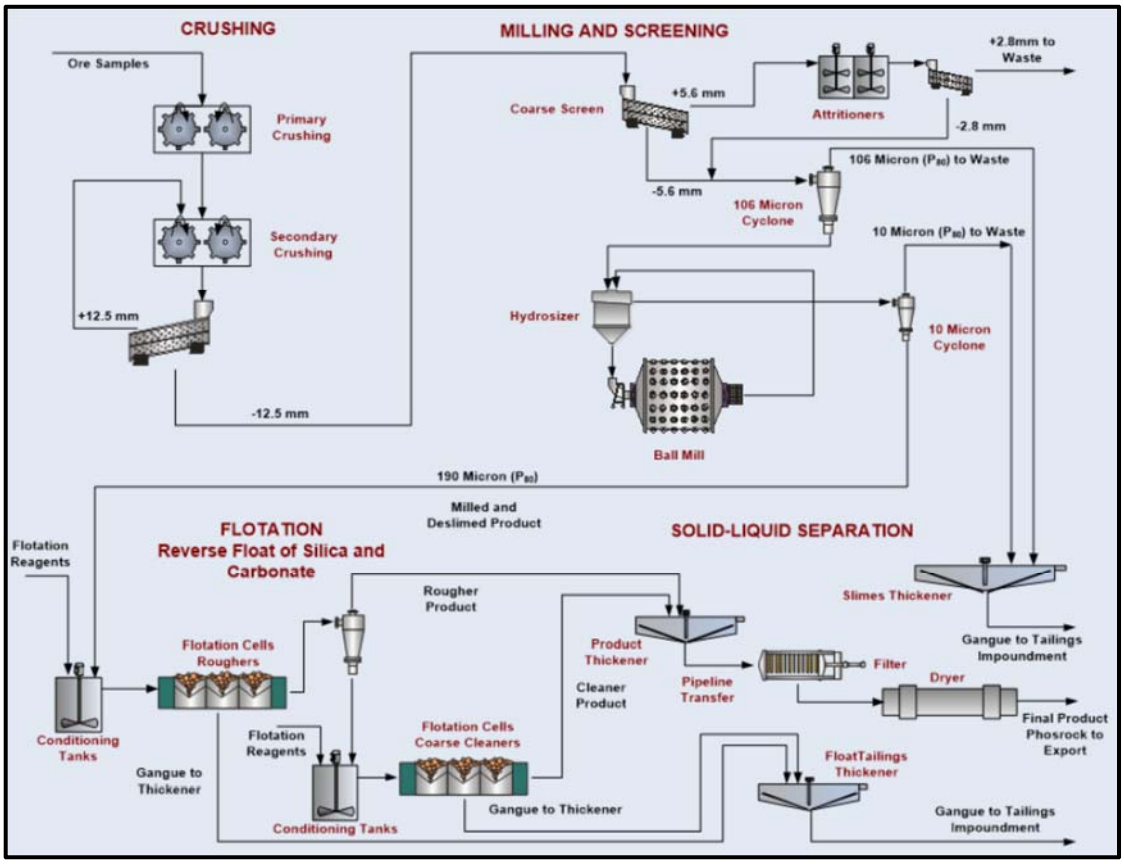
The 2015 DFS highlights the main provisions incorporated in the design to achieve these figures.

The 2015 DFS states that the beneficiation plant design has adopted a single train philosophy in order to minimise capital investment, minimise construction time, minimise spares holding, simplify operation, reduce labour levels and allow for rapid ramp up to full production. A high level of redundancy and standby of higher maintenance plant such as pumps has been provided, as are surge capacity and stockpiles, in order to maintain availability.

The single train design has resulted in no unusually large items of equipment. The mineral sizers, ball mill (7.5MW), flotation cells (70m^3 roughers and 50m^3 cleaners) and slurry/water pumps are of standard size found throughout the industry. Certain items such as hydrocyclones, hydrosizers and vibrating screens are multiple units in view of equipment capacity constraints.

A plant layout was developed as part of the 2015 DFS.

Figure 4-5: Simplified process flowsheet



4.9.3 Products

Chemical analysis of the product from the pilot plant is given in the 2015 DFS. A comparison of the projected Hinda product compared with commercially available material is presented in Table 4-7. The 2015 DFS indicates that there are no issues with the projected product quality.

Table 4-7: Hinda Product Compared to Commercial Range

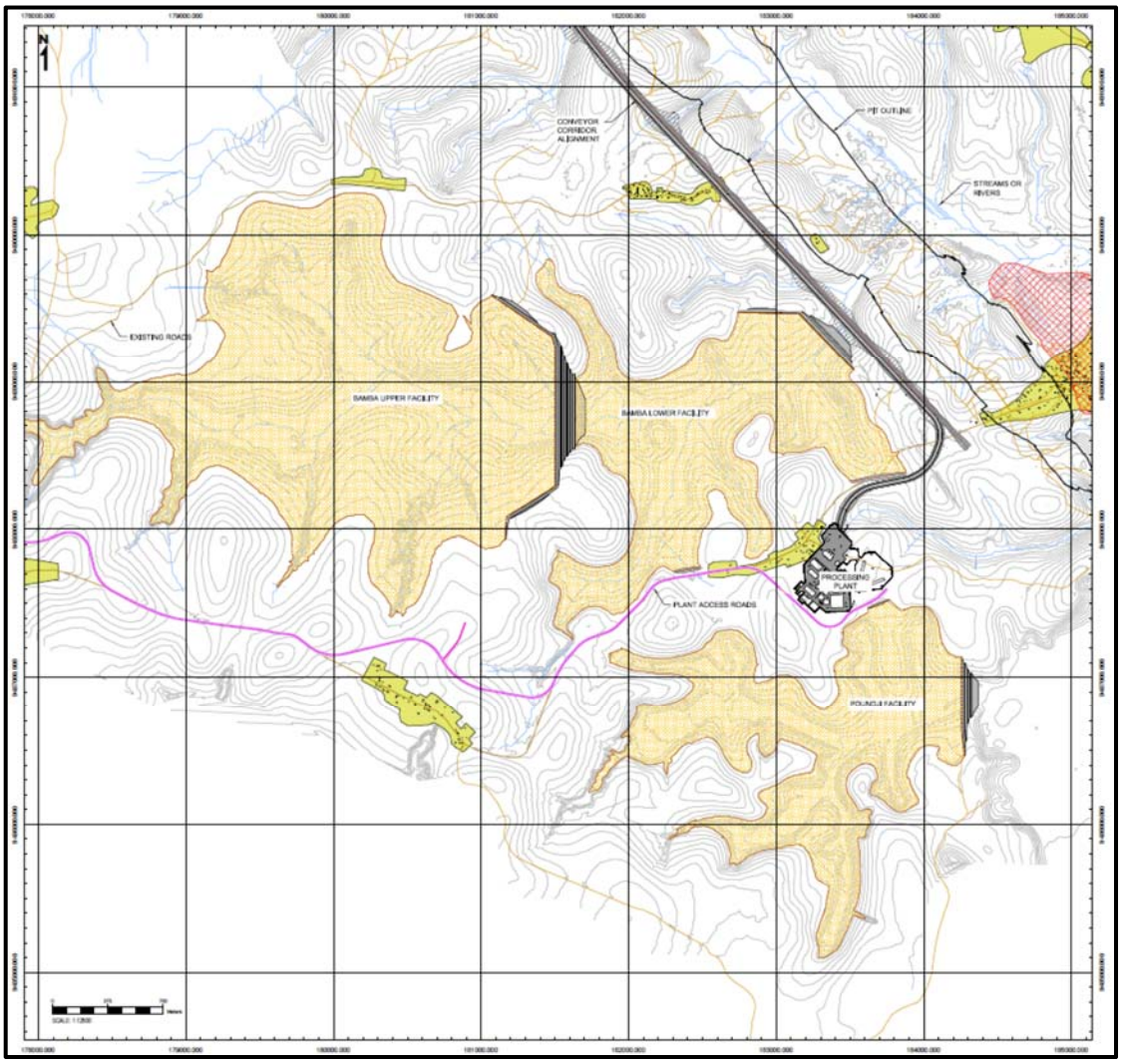
Element	Commercial Range	Hinda Product
P_2O_5	31.6% to 32.5%	32.1%
CaO	45% to 48%	45.1%
CaO/P_2O_5		1.35%
Fe_2O_3	1.8% to 1.9% max	0.0% to 1.0%
Al_2O_3	0.9% to 1.4% max	0.34%
R_2O_3	4% max	
MgO	0.2% to 0.6%	0.1%
MER Ratio	0.8 max	0.8%
F	3.5% to 3.9% max	3.2%
CO_2	0.3% to 0.5%	2.4%
Cl	0.03% to 0.30%	0.0%
Organic C	0.3% to 0.5%	0.2%
Moisture	2.5% to 3.5%	7%
Cd	EU 20ppm to 180ppm max	17.2
U_2O_3	<200 ppm	133ppm

4.10 Tailings Storage Facility

A series of upstream raised tailing storage facilities (“**TSF**”) will be constructed in naturally occurring valleys in proximity to the beneficiation plant, sufficient to capture a total of 312Mt of tailings over a period of 24 years. A series of upstream raised TSFs will be constructed in proximity to the plant site to store the majority of tailings produced. The remaining balance will be stored within an in-pit void, left in place by the mining operation.

Two tailings streams will be pumped separately to each TSF: 1) flotation and course rejects, and 2) fine tailings. Coarse reject and flotation tails will be distributed from the main containment embankment, whilst fine tailings material (sludge) will be pumped to the upstream corner of each TSF, in order to ensure that a well-drained beach is developed close to the main embankments for subsequent upstream raises.

Figure 4-6: TSF General Arrangement (2015 DFS)



The Poundji TSF will be developed first, due to its close proximity to the beneficiation plant and as its catchment area is downstream of the mine. This represents the lowest operational risk, as tailings will not be deposited above active pit zones. Full capacity is reached after approximately four years.

By this time, pit backfilling has progressed past the Bamba valley, and deposition will be switched to the Upper Bamba catchment. An advantage of this approach is that construction of the main embankment can be undertaken in the narrowest valley position, which may not be possible if the footprint was inundated with tailings and water from the adjacent Lower Bamba area.

Shallowing of the orebody in proximity to the Upper Tchivouba catchment area has resulted in the situation where it is more economical to dump pit waste outside the economic pit area, rather than stacking in-pit. As a result, a 'pit void' will be left in place from Year 12 of operations, which provides an additional storage area for tailings. SRK has assumed that tailings

deposition shall be carried out between Year 12 to 19 of operations, in order to minimise the ex-pit storage requirements over the LoM.

The Lower Bamba catchment area will initially be developed in the first year of operations as a water retaining attenuation dam, which will be developed to store excess surface water resulting from the development of the open pit operation. Tailings deposition will only commence at this location towards the end of operations, post Year 22, following closure of the other three tailings storage areas.

The target storage capacity for all four facilities is 264.4Mm^3 which is a little more than the combined total volume of the slurry tailings and coarse reject material that will produced over the LoM period of 253Mm^3 (312Mt dry).

The intrusive field investigation undertaken as part of the 2015 DFS design comprised borehole drilling, trial pit excavation, geophysical testing, in-situ testing (geotechnics and hydro) and laboratory analysis of retained samples Tailings samples generated from pilot beneficiation plant testing were used to determine the index properties, settling characteristics and shear strength properties of the tailings. In an attempt to keep operating costs to a minimum, the dam construction is to be completed by the mining and development equipment fleets.

With simultaneous deposition from the starter embankment and the back of the TSF, the supernatant pond will migrate towards to the middle of the TSF; forced away from the starter embankment by beach creation on the upstream side of the starter dam. The aim of this deposition method will be to ensure that the designated 200m beach above water zone is maintained at all times so that there is always a drained beach area adjacent to the main embankment for subsequent upstream raises. This method requires strict operating practices and monitoring.

As the proposed TSF impoundments will all be constructed using the upstream raise method, it is essential to keep ponded water away from the main embankment. In addition, as per ANCOLD guidelines, a closure spillway should be included for all TSF structures, which is capable of conveying the Peak Maximum Flood ("**PMF**") conditions arising from a peak maximum precipitation event. The designed emergency spillways include spillway raise sections (which will be installed concurrently with embankment raises) and an outlet drop structure with intermittent grass-lined channels.

Water return to the beneficiation plant will be undertaken by means of a floating barge decant system. A detailed water balance for the TSFs demonstrates the dams will be water negative due to the need to recover water for the beneficiation plant and average annual evaporation exceeding average annual rainfall. The potential for direct discharge of water is only foreseen during extreme storm events when the inflows significantly exceed the capacity of the floating barge decant, or in the event of pump failure.

The key risks associated with the tailings study relate to the failure of the embankments. Potential failure nodes may result from one or a combination of factors, and hence the key requirement to minimising risk is to ensure an appropriately designed facility for the site setting, mode of operation and required capacity. In turn, it is also necessary that sufficient and appropriate monitoring be undertaken to ensure that the facility is constructed and operated as designed and that its performance is as predicted.

The 2015 DFS recommended the completion of additional ground investigations as part of the next phase of project development to determine the depth and extents of the alluvial/organic horizons situated below the immediate footprint of the proposed tailings storage facilities. In addition, additional materials test work should be completed on potential borrow material samples, to ensure that they meet the materials specifications outlined.

4.11 Utilities

4.11.1 Energy

Cominco plans that the energy needs of the project will be sourced from electrical power, natural gas and diesel fuel. All three sources are available in-country. The planned energy requirements, by Year 3 are:

- Electrical power (grid connected) – 45.1MW;
- Natural gas – 3,661GJ/day; and
- Diesel– 49.2kL/day.

Centrale Electrique du Congo SA ("**CEC**") commissioned a 300MW single-cycle gas power station at Côte Matéve in 2010. Completion of the planned dual cycle turbines would increase output by a further 150MW, whereas the in-country power demand averaged 90MW in 2014. CEC has stated that there is sufficient capacity available for the HPP, with a high voltage tariff for power of approximately US$0.042/kW. Power will be supplied to the project by a connection to the national grid, via a 16km long 220kV overhead transmission line, linking the existing M'Boundi substation with the Hinda beneficiation plant, and a further 16km long 30kV overhead transmission line linking the Mongo Kamba substation to the Pointe Indienne port.

At site, two 2MW diesel back-up generators are planned for the beneficiation plant and a further two 80kW generators are planned for at the Pointe Indienne port. This is to mitigate the impact of potential grid power outages. In addition, natural gas will be used to power the flash dryer for drying Phosrock at Pointe Indienne. Natural gas will be delivered by a new 150mm diameter, 17km long buried off-take pipeline from Mengo. Diesel will be supplied by the Government owned Congolaise de Rafinage ("**CORAF**"), with prices being regulated by the Government. Delivered prices in the 2015 DFS, as received in quotes from Total and Puma Energy are US$0.73/L, with diesel averaging approximately 10% of the project's operating costs.

4.11.2 Roads

All transportation of materials, reagents, and consumables between Pointe-Noire and the HPP is to be completed by truck. The anticipated journey time is approximately 1.5 hours. The beneficiation plant and mine are accessed via an existing public road, which joins the paved N1 highway at Hinda. The public road is 14.6km long, and unpaved. It is planned that the road will be upgraded at the start of construction, and will continue to be a shared public road.

Pointe Indienne will be accessed via the N5 highway from Pointe-Noire, by an access road which will follow the slurry pipeline from the beneficiation plant.

4.11.3 Project Buildings

Multiple buildings are planned, and all are designed as being steel framed with cladding. These include administration buildings, workshops, warehouses, the laboratory, and other ancillary storage buildings. The design of the concentrate storage facility at Pointe Indienne is sourced from a specialist manufacturer. The design of all buildings includes fixtures and fittings, such as desks, chairs, tables, filling cabinets, shelves, fridges and microwaves, tools and equipment.

4.11.4 Site Security

Fencing around the beneficiation plant will total 2.3km, with an additional 500m around the accommodation village. A further 1.6km of fencing will be erected at the port site. Access is controlled at specific entry points, which also include a guardhouse, turnstiles for pedestrian access and gates for vehicles.

4.12 Concentrate Slurry Pipeline[1]

The 42.1km long, 300mm outside diameter carbon steel slurry pipeline is buried to a depth of 1m for protection, to remove any conflict of land use and so as not to present a barrier to people and fauna en route. The route for the slurry pipeline was selected using detailed digital terrain maps and high-resolution aerial photographs, and geotechnical investigations have been conducted along the route. The terrain is categorised as flat to rolling with light to medium vegetation.

The pipeline system includes leak detection, pressure monitoring and cathodic corrosion protection, fibre-optic telecommunications linking the mine site to Pointe Indienne, discharge end line choking and mass balance measurements. The site-wide SCADA system monitors and controls the pipeline facility from the main control room in the beneficiation plant.

Thickened phosphate concentrate slurry is stored in two agitated head tanks, which provide surge capacity of 18 hours at each end of the system. A single mainline pump station is located at the beneficiation plant. Two single stage, 1.5MW positive displacement piston pumps, with variable speed drives, pressure pulsation dampeners and pressure relief devices are provided with one pump in operation and one standby. The piston pumps are fed by one of two centrifugal charge pumps. The system is designed to operate continuously for the life of the HPP with a maximum operating pressure of 87bar.

Representative samples of Phosrock produced during pilot scale testwork were tested to establish the rheological characteristics of the product and to confirm the slurry pipeline design criteria. The pipeline design throughput is limited to the same instantaneous throughput of 507tph as the beneficiation plant, but at an availability of 91.3% as compared to the beneficiation plant's availability of 90%. The pipeline therefore has the ability to transport more product than the beneficiation plant is designed to produce.

Pressure loss calculations have been performed using Ausenco's proprietary hydraulic computer model for defining the hydraulic gradient line. A flow safety factor of 6% is included in the system design to account for operational variations in slurry properties. A 10% overpressure is allowed for during transient conditions in compliance with the relevant design codes.

A minimum safe operating velocity is required to maintain the slurry particles in suspension (pseudo-homogeneous flow behaviour) in the pipeline, which is determined to be 1.80m/s, and corresponds to a flow rate of 463m³/h.

A 150m long test loop is incorporated in the design to confirm the hydraulic characteristics of the slurry ahead of feeding the slurry stream to the pipeline. Emergency power generation is provided to ensure that the pipeline can continue to operate, while being flushed with water, should grid power fail.

4.13 Dewatering, Drying & Loading

Phosrock slurry, at an average solids concentration of 60%w/w, is received at Pointe Indienne from the slurry pipeline into two agitated stock tanks (17.5m diameter and height) having a maximum retention time of 18 hours.

Three automatic pressure filters, operating in parallel, reduce the slurry moisture content from the as-received 60%w/w solids to <13%w/w moisture. The filtered water is discharged to the ocean, after removing suspended solids with a pin-bed clarifier. Filter cake washing is not

[1] It is the Company's intention to investigate alternative concentrate transport options, and as such the revised based case followed by the Company is not expected to include the concentrate slurry pipeline.

required as the raw water employed in the beneficiation process and slurry transport is low in impurities, with negligible chloride, carbonate or other minerals present.

The dual fuel dryer (natural gas or fuel oil) is designed to reduce the moisture content of the filtered concentrate from 13%w/w to 7%w/w. This moisture content has been determined to be acceptable to a number of potential customers, and has been confirmed by testwork at Tunra to be below the level at which materials handling issues occur.

Dried concentrate is stored and recovered from a covered stockpile with a maximum capacity of 194,000t, using an automated stacker/reclaimer. Dynamic modelling undertaken has shown that this level of stock is optimal given loading frequency and measured frequency of bad weather preventing loading. Additional (uncovered) storage area is provided, and operated using a front-end loader.

4.14 Export Jetty, Dredging & Shiploader[2]

Dried Phosrock is reclaimed from across the length of the covered stockpile by a portal scraper, onto a reclaim transfer pad fitted with two weightometers, cross belt sampler and moisture analyser. An enclosed product conveyor runs to the vessel loading platform via a causeway and jetty for export to ocean going vessels. These range from 35,000dwt Handymax bulk carriers up to 65,000dwt Ultramax sized vessels. Loading is completed at a rate of 4,000tph. The jetty is an exposed berth without any breakwater protection.

A purpose built export jetty comprises of the following elements:

- **Access Trestle:** The 1,300m long trestle between the shore causeway and the loading platform will support the phosrock trestle pipe conveyor and provide an access roadway;
- **Loading Platform:** The shiploader and tripper will traverse on rails secured to the deck of the platform. Rail stops will prevent the shiploader from travelling outside its range of operation. The loading platform is constructed from steel pipe piles, with precast concrete pile caps, and concrete infill. The deck comprises precast concrete elements, with a concrete surface;
- **Spread Mooring:** A spread mooring arrangement will be used to support the 65,000dwt design vessel;
- **Shiploader:** Vessels will be loaded using a single, travelling, rail mounted, luffing and shuttling type loader, at a rate of 4,000tph. The shiploader includes a towed tripper, fabric belts, tail end drive, on-board control room, shiploader boom conveyor, a cartridge dust collector, and a Cleveland Cascade spout;
- **Dredge Channel:** The channel has been designed following the design recommendations and guidelines established by the Permanent International Association of Navigational Congresses in 2014. The dredged navigation channel and berth pocket are designed to accommodate the anticipated 65,000dwt vessels. Based on the side scan sonar and seismic geophysical information, the volume of dredged material is estimated to be 350,000m^3, which comprises 35% soft material, 64% hard material and 1% rock. All dredged material will be disposed of at a site 10km offshore from the southwest limit of the dredge channel; and
- **Navigational Aids:** The port will operate 24 hours per day; therefore, night and day navigational aids are required. Initially, berthing will only take place during daylight hours.

[2] It is the Company's intention to investigate the opportunity to export concentrate from the existing port of Pointe-Noire, and as such the development of the Port Indienne facility is not expected to be included in the updated FS.

The dredged channel will be marked with navigational marker buoys in gated pairs at regular intervals along the length of the channel.

Numerical wave modelling was completed to assess the operational and extreme wave climate conditions at the proposed berth location. Other relevant elements such as wind, currents, water levels and sediments were also assessed. For bathymetry and off shore geotechnical aspects, the completed analysis was based on publicly available information, and site specific investigations were not completed.

A simulation model of the export terminal was created to confirm that the target throughput of 4.0Mtpa could be achieved and to determine the required storage capacity for the stockpile. The terminal can deliver the target throughput with an average total time in port of 2.1 days per week and a berth commitment of 51%. Cominco notes that adverse weather events may cause delays to vessels, especially during the summer months. This is mitigated by the low berth commitment anticipated. Time in port for each ship can reach as high as ten days during May to September. The recommended capacity for the Phosrock stockpile is a minimum of 194,000t to ensure that shiploading operations are separate from the mining and beneficiation operations.

Dynamic mooring analysis of a representative bulk carrier was undertaken to determine the maximum wave height that the loading operation can sustain. This, together with a long-term time series of hindcast wave conditions at the berth, were used to estimate berth downtime. Average annual wave-induced downtime at the berth is estimated to be just over 1%, which represents an overall annual duration of 4 days per year. Downtime at the berth is governed primarily by surge motions, which are parallel to the berth, as the majority of the time the waves are bow-on.

Construction of the facility will begin at the shoreline, and progress seaward. A specially designed platform is used to support the construction crane and used to advance the equipment forward over the permanent structures. The construction duration is estimated to be 495 days.

4.15 Human Resources

4.15.1 Workforce

The proposed organisation structure and employee numbers meet the technical and administrative demands of mining and processing operations, as well as the subsequent transportation, drying and shipping of the concentrate. Cominco has committed to providing opportunities to the local community and will give preference at all levels to Congolese nationals with sufficient qualifications and experience. The low-skill workforce will be sourced mainly from the local communities, and skilled and technical staff will be sourced nationally and internationally, as required. Cominco plans that relevant skills will be transferred to specific local staff through formal and on-the-job training programmes. By the end of Year 5, Cominco aims to replace the majority of expatriate workers with those from the local area. In Year 1, 12.6% of the workforce is expatriate, falling to 3.3% in Year 6.

From Year 6 onwards, the workforce required for the full 2015 DFS operation of the project is approximately 900 employees. The number of employees in the areas of administration, the beneficiation plant, the pipeline and port are fixed from Year 6, but the number of employees at the mine fluctuates over the life of the operation, to accommodate the mining schedule.

4.15.2 Organisational Structure

The organisational structure proposed for HPP is typical of modern mining projects and has been adjusted to reflect the specific requirements of the project. The organisation is structured into the following departments:

- Legal and Compliance;
- Finance and Administration;
- Human Resources;
- Health, Safety, Environment and Community;
- Mining Operations;
- Beneficiation Plant (including pipeline operations); and
- Port Operations.

Each department will have a Departmental Manager, who will report to the General Manager. Each department will comprise multiple teams, which will be responsible for an operational function or geographical area of the project. Staffing requirements have been defined by assuming each area of the operation is standalone, with dedicated personnel. All operational areas (the mine, plant, and port) are anticipated to operate 24 hours per day. Sufficient personnel have been planned to account for rotational leave, annual leave, training, and to cover night shift and other call out requirements.

4.15.3 National Employees

As part of their salary package, Congolese employees will receive an accommodation allowance, which subsidises the cost of accommodation within the local community. Congolese employees will also receive a travel allowance to cover travel to designated bus pick up points in Pointe-Noire, as required. A dedicated bus service will transport employees to and from the mine site. Applicable labour rates were developed using two key documents:

- Global Remuneration Services' Republic of Congo Compensation & Benefits Survey, 2012, covering a survey of 27 companies including the established oil and gas and related service industries; and
- The Convention Collective des Entreprises Minières (2013), which is a collective agreement of mineral prospecting, exploration and exploitation enterprises which includes several provisions with respect to minimum employee qualifications, employee pay and conditions.

4.15.4 Expatriate Employees

Expatriate salaries are based on actual salary rates obtained for an operating iron-ore mine in West Africa, with a six-week-on, two-week-off fly-in-fly-out ("**FIFO**") roster. A 15% discount was applied to the base salaries to allow for the typical salary differential between metalliferous and non-metalliferous mining as well as the recent downturn in the mining industry.

In addition to the base salaries, the total cost of employment for expatriate labour includes an end of contract bonus, a site-wide performance bonus for workers and supervisor level employees, expatriate flights, and multi-entry visas. For personnel employed on a residential contract, additional costs for private schooling per child per year, and overseas medical insurance per person per year are included.

4.15.5 Work Roster

For Congolese employees, there are three separate roster patterns. These cater for varying project requirements and the applicable labour regulations:

- Roster A is a five-day-on, two-day-off (Monday to Friday) roster, where employees work eight hours per day, on a day shift only. This roster is typically assigned to staff in administration support roles;
- Roster B is a two-week-on, two-week-off roster, where employees work 12 hours per day, on a day shift only. This roster is for staff required to provide operational coverage, but are

not required for night shifts. Employees on Roster B are paid a 15% shift allowance; and

- Roster C is a two-week-on, two-week-off roster, where employees work 12 hours per day, on day or night shift. This roster is typically assigned to employees that are required to provide operational and maintenance coverage around the clock. Employees on Roster C are paid a 30% shift allowance.

Expatriate employees will work one of two roster patterns:

- Roster D is a six-week-on, two-week-off roster, where employees work 12 hours per day. All expatriate staff, not at Department Manager level and above, are engaged on a FIFO basis and will work Roster D. Where there is an operational need, these employees may have to work night shifts. Flights are provided from and to the employee's point of hire and accommodation provided in the project village.
- Roster E is a five-day-on, two-day-off (Monday to Friday) roster, where employees work 10-12 hours per day. Expatriates at Department Manager level and above are engaged on a residential basis on this roster. The labour cost includes an allowance in the salary package for family accommodation, and two return trips per year to the employee's point of hire.

4.15.6 Accommodation

The project village provides accommodation, recreational facilities, laundry services, kitchen and eating facilities, cleaning services and ablution areas. Communications and ancillary services will be provided. The IFC recommendations on accommodation standards relating to food safety, water, sanitation and accommodation density will be adhered to.

National employees are assumed to live in nearby communities or Pointe-Noire, and will be transported to and from the project by bus. On-site accommodation will be provided for those Congolese employees who are critical in maintaining continuity of the operation. This includes employees who are on a call out roster or the security teams.

Expatriate employees, with the exception of Department Managers, will be engaged on a FIFO basis and stay at the project village. The Department Managers will be provided with housing in Pointe-Noire.

4.16 Environmental, Social & Community

4.16.1 Setting

Cominco conducted baseline studies for climate and air quality, geochemical characterisation, soils and land, biodiversity (terrestrial and marine), noise, socio-economics, ecosystems services, cultural heritage, landscape and traffic for the area south of the Mboukou settlement and nearby road and rail infrastructure. The key findings are summarised in this section.

Terrestrial

The area has a tropical climate, with a hot rainy season between November and April and a drier, colder season between June and September. Temperatures average between 22°C and 28°C. The prevailing wind direction is from the south west and the south east. Ambient air quality has been measured to be within international standards.

The deposit is located along the Tchivouba river basin, a tributary of the Loémé River. Several tributaries to the Tchivouba will require damming and diversion before deposit exploitation. Groundwater is recharged during the rainy season and primarily discharges to rivers and surface water courses. Shallow groundwater is acidic and unsuitable for consumption.

Baseline studies identified 39 plant and animal species within the HPP area that are protected under Congolese Law, and 12 listed on the International Union on the Conservation of Nature

"**red list**". 0.1% of the HPP area (38ha) is considered very highly sensitive habitat (predominantly the lakes, rivers, sandy forest and swamp forest habitats) with 5% (1,314ha) considered highly sensitive. The Loémé River catchment supports partially flooded riparian habitats including the Caya-Loufoualeba Ramsar site downstream of the project. The site is a key habitat for many bird species that are reliant on the Guinea-Congolese forest biome. Degradation of habitats is under threat from land clearance, logging and bushmeat hunting.

Marine

The proposed port facility will be constructed north of the established Pointe-Noire port town. Sedimentation in the area is enhanced by discharge from the Congo river, 150km south. The seawater has been found to have high background concentrations of cobalt, copper, mercury and hexavalent chromium, either from human activities or from naturally occurring strata.

Seventy species of fish and 39 species of marine mammals are known to be present in the region including endangered baleen whales, as well as Humpback Whales protected under Congolese Law. The beach is a known breeding location for two vulnerable turtle species also protected under Congolese Law. Monitoring of spawning sites has been proposed in the ESIA and specialists appointed by Cominco for the work.

Human Environment

Employment in the HPP area is primarily from eucalyptus and pine forestry, although nearby Pointe- Noire supports diverse industries. Industries present locally include oil extraction, but subsistence activities such as farming, fishing, gathering forest products and charcoal production contribute significantly to the support of the population.

Water sources for domestic supply in the HPP area primarily comes from community wells. There is no centralised sanitation, waste disposal or electricity supply, with charcoal and oil used for cooking and light respectively.

Land is typically owned via ancestral claim, although urban expansion from Pointe-Noire has generally led to an increase in land sales rather than inheritance. Sacred forest of cultural significance has been identified within the Project area. Sacred areas may be relocated by means of one or more rituals with the aid of traditional leaders.

4.16.2 Approvals and Environmental and Social Management

Prior to exploitation, certain permissions must be granted by the Congolese authorities as listed in Table 4-8.

Table 4-8: Required Permissions prior to Exploitation

Permit	Responsible authority
Permit for the development and operation of classified facilities	Ministry of Tourism and the Environment
Permission for land occupation	Ministry of Land Affairs and Public Domain
Approval of the ESIA[(1)]	Ministry of Tourism and the Environment
Authorisation for the use of water and its discharge to the environment	Ministry of Tourism and the Environment and the Ministry of Energy and Hydraulics
Permit for cutting wood	Ministry of the Forest Economy and Sustainable Development
Authorisation for deforestation	Ministry of the Forest Economy and Sustainable Development

(1) The final ESIA report was submitted April 2016 and approved by the Minister of Forestry, Economy, Sustainable Development and the Ministry of Tourism and the Environment on 14 July 2016

Where Congolese standards are absent, Environmental Design Criteria ("**EDC**") are taken from standards established by recognised international organisations. Key principles which underline EDC include minimisation of footprint, disturbance of habitat and emissions, as well as rehabilitation and stakeholder engagement. Cominco proposes to establish an

Environmental and Social Management System ("**ESMS**") to manage impacts, and have committed to engagement with local communities and their leaders, and to be a good corporate citizen.

Cominco has reportedly obtained a Social Licence to Operate ("**SLO**") and states community development initiatives have been well received by the HPP area communities and government, including public training sessions on health including testing and treatment for HIV/AIDS, malaria and cholera.

Up to 200 households are likely to need physical and economic relocation at an estimated cost of USD2m. Cominco has established a Land Commission to evaluate usage requirements but the 2015 DFS does not report on progress towards land acquisition. It is reported that relocation will be conducted in line with International Finance Corporation ("**IFC**") standards and at the time of the study Cominco had reportedly engaged the services of an international specialist in this field. A poorly executed resettlement strategy has been identified as a risk. Impacts on homes, economic activities and heritage sites have been identified as having the potential to lead to conflict in the area. A Community Development Strategy has been developed to facilitate skill development, sustainable development, livelihood diversification, health and education improvement and the promotion of equality.

4.16.3 Closure

The Congolese Mining Code requires that a Mining Closure and Rehabilitation Plan be submitted as part of the ESIA and a reclamation fund be established for the project. The approved ESIA commits to open a bank account to cover the rehabilitation of the mine in line with Law No. 4-2005 and to rehabilitating the mine areas as exploitation progresses.

The plan includes management measures to reduce the impact on people and the environment of the activities undertaken to close the HPP, e.g. noise control, dust suppression, soil, surface water and groundwater protection, as well as management of the loss of employment intrinsic in the closure of a mine. The cost for closure, dismantling of equipment and rehabilitation of the site is estimated in the ESIA as US$22.7m.

4.16.4 Key Risks

Biodiversity

- Habitat loss caused by humans is already an issue in the region. Further reduction in habitat due to mining activities is a risk;
- Due to the location of the mine upstream of a Ramsar wetland, any change to the water quality to this area may impact the associated habitat; and
- Any degradation of the turtle breeding beach habitat on the beach proposed for the port facility may attract negative attention from NGOs and other interested parties.

Social and stakeholder

- A poorly executed resettlement plan may lead to delays and additional cost to the HPP;
- The impact on homes, economic activities and heritage sites have been identified as a risk; and
- The removal or relocation of sacred sites within the HPP area may cause conflict with elder members of the community who are key to facilitating the movement.

Primary Environmental and Social Approvals

- The ESIA has been approved (post the 2015 DFS) providing the management measures described in it are executed;

- A Social Licence to Operate, although not a legal requirement, has been obtained; and
- The timely issue of remaining approvals has been cited as a risk by Cominco.

4.17 Project Execution

A Project Execution Plan ("**PEP**") has been developed as part of the 2015 DFS that defines the execution strategy, schedule and specific actions proposed to develop the HPP from the completion of the 2015 DFS, through detailed engineering, early works, construction, commissioning and ramp-up. The 2015 DFS allows for the delivery of the IPCC, beneficiation plant, and onshore port processing facilities using an EPCM execution approach. The Owner's Team will directly manage the tender, award and delivery of the equipment items, fabrication and site works contracts in the development of these facilities.

The project implementation schedule will be developed in three phases:

- **Phase 1 – Pre-Finance Early Works:** Works associated with conducting advanced package engineering and critical vendor data prior to project financing to minimise the schedule. Conducted over a 16-week period;
- **Phase 2 – Project Execution:** Continuation of engineering and development of the remaining packages. As funds are released this will transition from procurement and contract works, to construction and commissioning up to and including ore commissioning. Commissioning will be undertaken with assistance of the respective contractors and suppliers. Priority is given to the power and gas supply, tailings impoundment preparation and the slurry pipeline system. The commissioning will run through dry and wet commissioning in a sequential manner through the flowsheet. Phase 2 will commence at the conclusion of Phase 1 and will last for 92 weeks.
- **Phase 3 – Operational Ramp-up:** Operational readiness will commence in advance of the hand-over to the operations team through the following activities:
  - Engagement and training of operations personnel,
  - Establishment of safe working procedures and practices for facilities operation,
  - Finalisation of appropriate levels of reagent inventories, as well as critical, commissioning and operating spare parts,
  - Establishment of the maintenance strategy and appropriate levels of preventative maintenance and monitoring.

  Operational ramp-up is associated with a steady ramp-up in process, pipeline and port facilities over a 30-week (seven-month) period tied to a target of consistently meeting a 4.1Mtpa production for the full pit to port facilities. The process and concentrate handling is preceded by a 13-week (three-month) mining ramp-up.

  The Owner's Team will drive the preparedness for operations, as part of the implementation schedule through to final achievement of 4.1Mtpa production.

The envisaged programme runs for an overall duration from completion of the 2015 DFS to completion of construction (commencement of ore commissioning) totalling 29 months.

4.18 Capital Expenditure

The capital estimate in the 2015 DFS includes the design and construction of the HPP, encompassing mining development and equipment, the beneficiation plant, regional infrastructure, tailings storage facility and water recovery, the product slurry transport system, and the Pointe Indienne port facilities and infrastructure.

The capital cost estimate is presented in United States Dollars and has a base date of Q4 2014, to an accuracy of ±15% for the scope indicated.

A Work Breakdown Structure ("**WBS**") was developed detailing all project capital expenditure, a "level 1" summary is presented in Table 4-9 below.

Table 4-9: Project Capital Cost Estimate 2015 DFS

Cost Area	(US$m)
Total Direct Costs	**463.1**
Mining	103.0
Secondary crushing	34.2
Beneficiation plant	76.7
Tailings handling & storage	5.9
Hinda region infrastructure	47.4
Slurry concentrate storage & transport	45.3
Pointe Indienne dewatering, drying, storage and port	137.4
Pointe Indienne region infrastructure	13.1
Total Indirect Costs	**112.5**
Temporary facilities	3.3
Cranage	2.0
EPCM costs	41.2
Commissioning support	1.0
First fill & spares	13.0
Contingency	52.0
Total Owners Costs	**26.2**
Owners costs	23.8
Owners contingency	2.4
Total Project Capital Cost 2015 DFS	**601.3**

The main inputs to the estimate have been developed as follows:

- Major equipment (85% of the total by value) has been sized and selected based on budgetary pricing received from vendors;
- Material take-offs (steel, concrete, piping, cable, etc.) have been determined from civil, structural, mechanical, electrical and instrument discipline engineering designs;
- Regional infrastructure (roads, power and accommodation) requirements, including reconnaissance of routes, were identified and supply and installation costs based on budgetary pricing provided by vendors;
- The concentrate slurry transport system, including the pumping station, pipeline and Pointe Indienne port terminal design and construct cost has been based on budgetary pricing received from vendors;
- Construction gang rates are based on a budget enquiry to a local construction company;
- Engineering design of the jetty and berth, along with the dredging requirements, for the design and construct cost have been benchmarked against other similar projects in the region and the Congo;
- Labour productivity is based on advice from major local engineering groups; and
- Unit rates for the site works, earthworks, concrete and steel were developed from budgetary pricing received from local contractors.

A contingency allowance has been included based on analysis of each WBS area. The estimate of US$52m equates to 11.7% of total project capital. The capital expenditure estimate includes costs quoted in currencies other than United States dollars, and exchange rates appropriate at the time were applied for converting into US$ (Section 2.4).

4.19 Operating Expenditure

The operating cost estimate is presented in US$ and uses prices obtained in, or escalated to, Q1 2015. The estimate has an accuracy of ±15%.

For economic modelling, the operating cost structure has been broken down into the following five major project areas:

- **Mining operations:** includes mining operations (inclusive of pit dewatering and surface water management), in-pit crushing and conveying (primary crushing), maintenance, mining support and technical services, operations and maintenance of the tailings storage facility and Hinda fuel storage and dispensing;
- **Beneficiation plant operation:** includes stockpiling, crushing and screening, grinding, flotation, thickening and associated utilities;
- **Pipeline operations:** includes interfaces at both the Hinda and Pointe Indienne sites;
- **Port operations:** includes maintenance and operations of the filtration, drying, storage, shiploading and associated utilities; and
- **General and administration (site-wide):** includes management, warehousing, logistics and health, safety, environment and community.

The unit operating costs per tonne of Phosrock produced, split into the above categories, is presented in Table 4-10, the first five years presented separately from the remainder of the LoM.

Table 4-10: Weighted average operating expenditure 2015 DFS

Cost Area	Average Years 1-5 (US$/$t_{Phosrock}$)	Average Years 6-end of mine life (US$/$t_{Phosrock}$)
Mine Operations	14.45	23.74
Beneficiation Plant Operations	17.08	19.05
Pipeline Operations	0.40	0.46
Point Indienne Operations	3.04	3.10
G&A and Infrastructure	1.64	1.55
Total	**36.57**	**47.90**

The top five cost drivers for the 2015 DFS operating cost estimate are:

- Beneficiation plant reagents and consumables (flotation reagents and milling consumables);
- Mine consumables;
- Site wide labour;
- Beneficiation plant power consumption (milling); and
- Mine maintenance materials.

Mining unit costs increase over time due to the higher strip ratio when mining progresses northwards. Longer term beneficiation plant unit costs increase due to the anticipated drop in feed grade, resulting in a higher throughput rate, to still achieve the target 4.1Mtpa of product.

4.20 Marketing

CRU were commissioned in 2014 to prepare a Phosphate Rock Market Study of the Hinda Project including a Phosphate Rock Market Outlook.

The market for Cominco's Phosrock is phosphoric acid and other downstream product streams manufactured in plants located outside of Congo.

In terms of the supply and demand setting at the time of the 2015 DFS, CRU estimated that global phosphate rock production would increase by 1.4% in 2014 to a total of 196.4Mt. This increase was predominantly in China and the Middle East. Significant year on year losses were experienced in North America, mostly as a result of mine and plant closures in the United States and Canada. This decline in production of phosphate in the United States is a global issue, threatening supplies of food at affordable prices and underlining the need for new mines to be developed.

The main determinant of Phosrock prices is phosphate content. Commercial grades of phosphate rock vary from about 27.5%P_2O_5 to 36.6%P_2O_5. The levels of various deleterious

elements are also important. Phosrock grades have steadily fallen from 1976 to 2010, as higher grade deposits are depleted around the world. Integrated producers in USA and China make do with 28% to 29% material, whilst the high-grade benchmark of 31% to 33% material is set by Morocco's OCP. High quality Phosrock of 32%P_2O_5 will be produced by the HPP, confirmed by the concentrate produced from Hinda testwork at Mintek in South Africa and Bluestar in China. The grade achieved for Hinda Phosrock is saleable to fertiliser producers. The Minor Element Ratio ("**MER**" = (%Fe2O3 + %Al2O3 + %MgO)/%P_2O_5) is within the limits that make Hinda Phosrock suited to acid production and the CaO/P_2O_5 ratio is well within industry limits. All other potentially deleterious elements such as Hg, Cd, Cl and Pb were stated as very low. In addition, acidulation testwork undertaken by Prayon in Belgium confirms the suitability of Hinda concentrate for phosphoric acid production. Cominco anticipated that up to 2021 Hinda Phosrock may need to win market share by displacing others, which was proposed to be achievable because of the high grade of the Hinda rock concentrate and the ability to take advantage of favourable freight rates to key target markets like Brazil.

The Phosrock pricing assumptions used in the 2015 DFS economic model were derived from CRU's estimated long run marginal cost of production and as such more a price guide showing a forward price curve around which CRU expects the Phosrock price to oscillate. Cominco expects to sell 4.1Mtpa of high-grade Phosrock through its Pointe Indienne port facilities on a FoB basis. Cominco anticipated that at the commencement of construction approximately 75% of planned annual production will be subject to long-term off-take arrangements leaving at most 25% of production to be sold into the spot market. This approach was intended to satisfy financing needs whilst retaining some flexibility of supply through the spot market.

4.21 Economic Analysis

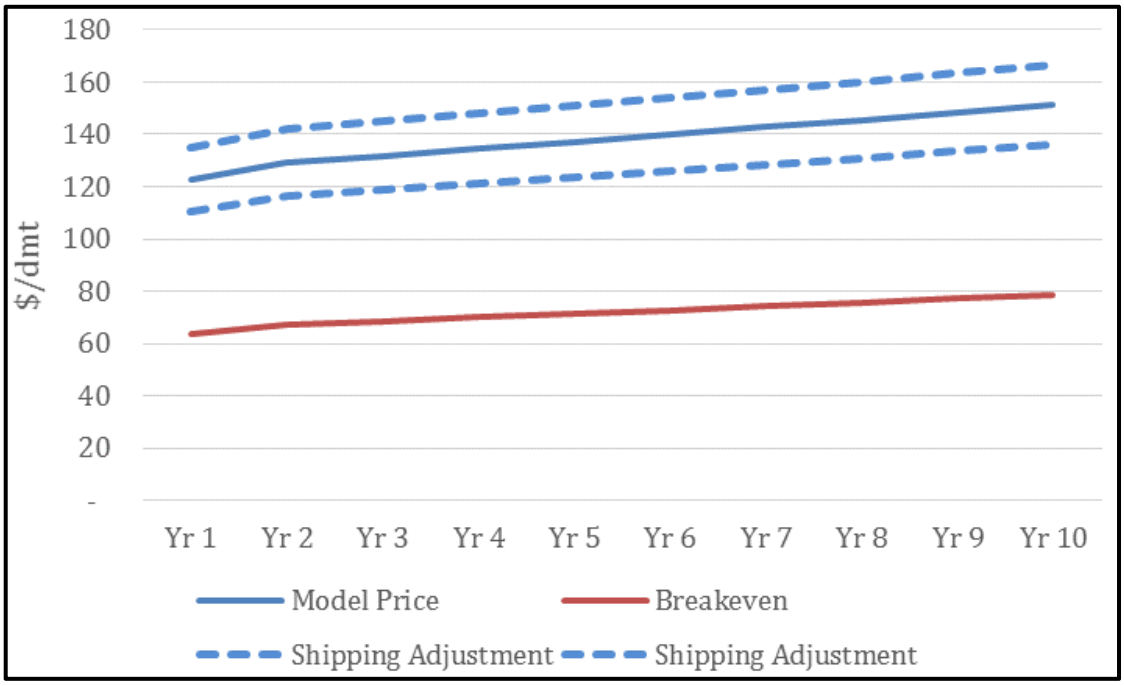
The post-tax, pre-finance Net Present Value ("**NPV**") and Internal Rate of Return ("**IRR**") are determined by discounting the future free cash flow ("**FCF**"). All cash flows are on a real (excluding inflation) basis.

4.21.1 Product Pricing Assumptions and Phosrock Production

It is assumed that all production will be according to long-term off-take contracts and based on prices realised FoB Pointe-Noire. The Hinda discounted cash flow ("**DCF**") model has used the long-term pricing curve as provided by CRU and illustrated in Figure 4-7.

A constant production of Phosrock of 4.1Mtpa is achieved until Year 12 after which production starts to decline as a result of less ore (due to mine scheduling limitations), and at a lower grade ore delivered to the beneficiation plant. Total life of mine Phosrock production is 86Mt.

Figure 4-7: Phosrock Price applied in Economic Model



4.21.2 Capital Cost Allocation

The construction period is two years, and project capital expenditures have been allocated across the 24-month construction period using a standard S curve.

In addition to the project capital cost, the economic model includes US$597.8m of sustaining capital expenditure over the life of mine. This is primarily the replacement of the mining fleet, the purchase of overburden IPCC equipment and the installation of dewatering and surface water management facilities.

The peak working capital commitment over the 24-month construction period is estimated to be approximately US$65m, circa 11% of total development capital. Working capital is comprised of changes in accounts receivable and changes in inventory from one period to the next. Changes in inventory are based on the total operation expense over a 30-day period (Inventory is calculated as the change in production multiplied by the total cash cost of production apportioned to 30 days). The accounts receivable are based on a 30-day delay between shipment and cash received.

4.21.3 Operating Costs

The average operating cost per tonne of Phosrock for the first five years of production is US$36.57/t and the following five years is US$41.91/t.

4.21.4 Tax, Depreciation & Royalties

The Congo provides for a Mining Convention to be entered into with the State, which details the rights and obligations of each party and in particular guarantees specific tax and customs benefits, as well as technical, financial and economic conditions for the development of the project. This convention is passed into law by an Act of Parliament and becomes a State guarantee.

Corporate tax is based on net earnings and levied at a rate of 0% during the first five years of production, 7.5% for Years 5-10 and 15% thereafter. VAT and Import duties are exempted.

The depreciation basis incorporated into the DCF model is based on the 100% reducing balance methodology over the assets useful lives, estimated at 10 years for financial modelling.

Capital allowances of 100% of capital depreciation have been incorporated into the corporation tax calculations. Tax losses have been carried forward and offset against tax payable. Tax paid is calculated as 50% of tax incurred from the current period with the remaining 50% paid in the following year.

Section 157 of the Congo mining code sets out that mineral or fossil substances other than ores shall be subject to a 3% fixed rate mining fee (royalty). The cost of beneficiation and transport is deducted from the sales revenue to determine mine head value.

Based on the 2015 project it was estimated that the HPP will pay the Government of the Congo US$405m in royalties and US$967m in taxes over life of mine.

4.21.5 Economic Results

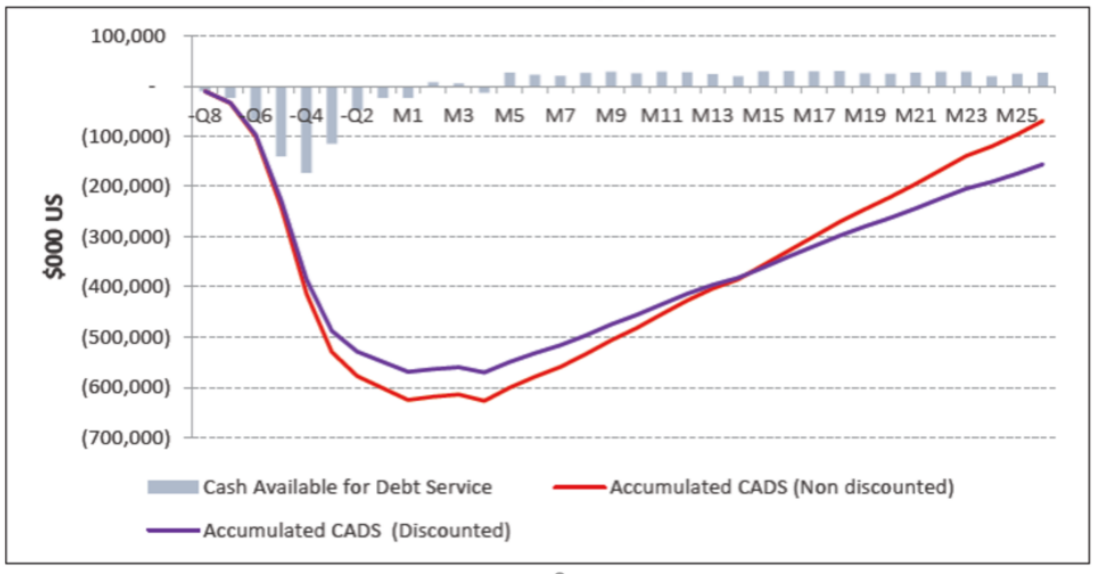
The 2015 DFS shows a post-tax pre-finance NPV (at 10% real discount factor) of US$1.85bn with an IRR of 38%. The payback period is 18 months on a non-discounted basis, and 26 months on a discounted basis. The entire mine life of 24 years, and the mining and production schedule are based on Proved and Probable Ore Reserves. Inferred Resources may provide an additional year of production. The key financial results are set out in Table 4-11 below.

Table 4-11: 2015 DFS Key Financial Results

Metric	Unit	Value
Unleveraged NPV (10% discount rate)	(US$m)	1,846
Unleveraged IRR	(%)	38
Average Phosrock price (life of mine)	(US$/t)	148.8
Capital payback period (Discounted)	(months)	26
Project capital	(US$m)	601.3
Total Phosrock produced	(Mt)	85.63
Operating costs FoB – Years 1-5	(US$/t)	36.57
Operating costs FoB – Years 6-LoM	(US$/t)	47.90

The net project cash flow (pre-finance) (also referred to as Cash Available for Debt Service ("**CADS**")) is shown in Figure 4-8. The Project's NPV is most sensitive to movements in Phosrock price, with a breakeven point equal to a price drop of 50% for an average long-term price of US$74.4/t.

Figure 4-8: Monthly Net Free Cash Flow (Up to Year End 2)



With respect to the original 2015 DFS, the price forecast incorporates and assumed real terms increase of 2% from 2019 onwards which underlies the assumed post-tax pre-finance NPV of US$1.86bn at a 10% real terms Discount Factor. Exclusion of this real terms increase results in an NPV of US$1.27bn.

4.22 Risks & Opportunities

The methodology applied to the risk and opportunity assessments reported in the 2015 DFS was to assess the type of risk or opportunity based on both the likelihood of its occurrence and the potential magnitude of the risk. The risks and opportunities were then ranked as either major or minor depending on the magnitude of the impact, and grouped under the most likely area of impact. The risks and opportunities defined during the FS for the HPP are described below.

4.22.1 HPP Development Schedule

Works associated with conducting advanced package engineering and critical vendor data will commence prior to project financing to minimise impact on the schedule. Works will be focused on long-lead package works including: marine geotechnical works, tendering of jetty works, and tendering of dredging, where the construction schedule for the jetty and associated materials handling solution (including shiploader) is on the critical path.

The HPP development schedule will be dependent on obtaining the necessary licences and permits, and delays in such a process may impact the project schedule.

A poorly executed resettlement strategy, even though acceptable in terms of national standards, could result in inability to meet IFC standards and delay potential funding. Cominco was aware of the requirements under the Equator Principles and IFC standards and proposed a resettlement action plan in consultation with local Congolese authorities, which is stated as meeting the required standards.

4.22.2 Project Design and Construction

The 2015 DFS recommended the completion of additional ground investigations to determine the depth and extents of the alluvial/organic horizons situated below the immediate footprint of the proposed tailings storage facilities, and therefore further validate the excavation depth extents defined.

The collection of hydrological baseline should be continued to be collected e.g mean annual precipitation, base flows and storm water flows in order to further calibrate the hydrological model and associated hydrographs and feed in to the design of the dewatering and surface water management systems.

Completion of additional geological investigations should be performed to confirm the available volumes of borrow material (laterite and clay) required to facilitate construction requirements area available.

Sufficient project planning and detailed design will be required during the early engineering phase of the project to ensure that upon funding, the project can move rapidly to the detailed design and procurement phase for critical equipment. For the 2015 project, this later phase would include tendering and critical vendor data purchase for the jetty, shiploader, ball mill, MMD sizers, as well as the in-pit crusher and conveying facilities.

4.22.3 Capital Costs

Mine planning costs include the construction of a 54.5m wide infrastructure corridor, to accommodate heavy mining vehicles as well as allowing for a maintenance road for light vehicles and cranes to service the conveying system, the bore water pipes, and the ore and overburden conveyors. Should the overburden IPCC not be implemented, there would be a substantial reduction in the cost of the infrastructure corridor.

The current mining and support vehicle fleet are all new prices. There are a number of vehicles, such as water trucks, which can be sourced second hand. Additionally, there is also the opportunity to acquire large earthmoving fleets second-hand, which may provide savings.

The 2015 DFS[3] engineering designs and associated capital expenditure estimates for the offshore facilities are reliant on bathymetric data digitised from a 2012 survey map published by a subsidiary of Zanaga Iron Ore Company Limited ("**ZIOC**") as part of its pre-feasibility study and soil conditions inferred from seismic transects undertaken by a subsidiary of ZIOC for the Zanaga Iron Ore Project. The absence of site specific marine boreholes directly impacts the ability to physically confirm either depths to bedrock and soil/rock properties which in turn directly impact on dredging costs and pile designs.

Accordingly, there remains a risk that the capital expenditure estimates, contingency applied, and the associated construction schedules included in the 2015 DFS may be understated.

The FS design and cost includes the construction of a standalone purpose built jetty and shiploader for the export of 4.1Mtpa of Phosrock. This facility will be used on average only two cargoes per week. Modelling shows that the jetty and shiploader as designed could export up to 8Mtpa. At the time of the completion of the FS, a number of other mining companies were proposing to build export facilities within 2km of the port site. There is opportunity to reduce capital cost significantly if joint use facilities can be agreed upon.

4.22.4 Operating Costs

The agreement for the supply of natural gas has yet to be implemented. There is a risk of price increases if the infrastructure is not in place in time to align with the project schedule. The design of the drier allows for both gas and diesel fuel to be used. If diesel is required, then the operating costs will be higher.

Through adequately characterising the rock and soil materials geotechnical properties, the DFS was able to determine optimised inter-ramp and bench/berm parameters for use in pit slope design for final pit walls and waste backfill/ dumps based on the assumption of achieving dry slope conditions. Groundwater and surface water management will be key to maintaining safe slopes, where slope dewatering and depressurisation of low permeability strata need to be monitored and managed. Cominco considered there to be an opportunity to steepen the overall pit slope angles and to develop a mine plan that allows for localised wall failure.

The long, narrow shape of the Hinda deposit, which extends to a strike length of over 20km, allows for the optimisation of the slope behaviour as mining proceeds.

Stabilisers, screening gravel and dynamic compactors would be a cost-effective way to ensure optimum haul road conditions, which could reduce truck cycle time.

4.22.5 Mine Design and Operation

The principal risks associated with the mining operation are directly related to the effectiveness of the de-watering programme, specifically in attaining the assumed reduced pore water pressure and ultimately dry slopes. In the event that this is not achieved it is likely that the overall slope angles will require to be softened. In the worst case scenario overall slope angles would need to reflect wet slope conditions which would most likely significantly increase the overall stripping ratio.

The assumed operating efficiencies of the mining system, specifically the load and haul assumptions (equipment efficiency and availability, rolling resistance) are reflective of best operating practice, defined as the upper quartile when benchmarked against current international definitions. Accordingly there remains a risk that not achieving these parameters

[3] As stated in Section 4.14 it is the Company's intention to investigate the opportunity to export concentrate from the existing port of Pointe-Noire, and as such the development of the Port Indienne facility is not expected to be included in the updated FS, as a consequence the related risk statements would fall away in this respect.

may result in reduced operating efficiencies and increased unit operating expenditure.

The assumed mining operating strategy is complex with multiple inter dependent components which vary over the operating life (dewatering, surface water management, mine and infrastructure scheduling). Accordingly, management focus and capacity is critical to ensure effective execution of the mine plan specifically with respect to attaining the assumed production rates and unit operating costs.

The possibility of optimising the project by utilising a total trucking option for waste should be evaluated. As the waste IPCC system does not start until the fifth year of production, there is sufficient time to evaluate the benefit of the waste IPCC system. The removal or scaling down of the waste IPCC system will significantly decrease the capital costs as well as the complexity and risks associated with materials handling. Trade-off studies determined that the IPCC system was NPV neutral with a truck only system. After removal of the hidden costs, it is likely that a truck only system would be more cost effective.

The 2015 DFS recommended that a trial mining cut into GM ore be undertaken to confirm the validity of the estimated as mined particle size distribution and swell factor as well as allowing for collation of geotechnical data and monitoring of slope stability to facilitate calibration of assumed geotechnical parameters and back analysis of slope stability assessments. The Project should also re-assess the requirement for in-fill drilling, specifically to increase the confidence in the seam end-wall contacts in order to establish improved final pit crest positions, along with the establishment of a grade control/reconciliation strategy to accurately determine mined ore volumes and grade,

4.22.6 Engineering – Process

External to the southern section of the orebody, metallurgical testwork for BM and GM ore is limited to bench scale testwork and has been completed for the entire remaining strike length of the orebody. CB and CG ores represent some 4% of the LoMp and is only present in areas to the north of the southern section, furthermore no pilot scale nor bench scale testwork has been undertaken on this material. The currently assumed metallurgical performance parameters for CB and CG ores are based on comparative mineralogical analyses with BM and GM ores respectively. It is noted that this is based on the geological assumption that CB and CG are identical in their critical properties as their “parent” ores, namely Mb and Mg respectively.

There is risk that the secondary crushing circuit will not achieve the required performance as the teeth in the sizer wear down, and that the circulating load will increase when treating wet material. This could be partially offset, however, by increasing the size of closing screens from the planned 12.5mm.

There is potential for further fines generation during milling. To reduce the likelihood of overgrinding, the grinding circuit incorporates hydraulic sizers instead of Derrick screens. Testwork has confirmed that a sharper cut is possible; however, further testwork is required.

Filtration tests have been undertaken on the fine material. Testwork is advocated on product generated from feed milled to 190µm. This could reduce the size of the filters, reducing capital and operating costs as well as operational complexity.

The supply costs for the flotation collectors, from reagents to remove silica and carbonates, are based on budget pricing from a single supplier. Bench-scale tests have been conducted with alternative suppliers. There is potential to seek a more competitive supply cost during the development phase of the Project.

4.22.7 ESIA

The ESIA planned for completion in Q2 2015 comprised detailed baseline data and broader regional data as well as an assessment of the potential impacts of the project. The geographic scope of the ESIA, specifically in respect of the collation of detailed base line data and impact assessment is limited to the areas immediately to the south of the Mboukou settlement and nearby road and rail infrastructure. The 2015 DFS notes that the current mine designs extend over the entire length of the deposit and as such mining activities encroach the geographic limit of the ESIA in Year 14 with mining faces reaching this point in Year 17.

With respect to the ESIA at the time of reporting the 2015 DFS there remained a number of outstanding issues specifically:

- An assessment of the potential impact of mining activities including pit dewatering and other related infrastructure on the following areas: (1) The Tchivouba and Kondi-Mbaka 4 settlements and current road alignment located at the southern end of the deposit, specifically that which will be covered by the current waste rock dump and mined out by the open pit; (2) the settlements Pk-Bili located between the two tailings storage facilities; (3) the settlements (Mboukou), national railway line, and roads located in the northern section of the open pit; and (4) the settlements (Tchikanou) in the northern section of the pit, beyond Mboukou;
- An assessment of the time-lines (data collation, negotiation, implementation) and expenditures associated with relocation of the impacted settlements and infrastructures to a minimum of Pre-Feasibility Study Level;
- An assessment of the potential impacts on the current gas extraction operations of Eni S.p.A ("**Eni**") which comprise operational wells located to the south of Mboukou settlement (Year 12) and continue northwards towards the northern boundary of the deposit. The wells access and extract gas from reservoirs located in excess of 500m below surface; and
- Completion of kinetic testing on representative samples to establish the rates of reaction and rates of release of the key constituents.

4.22.8 2018 Escalated Project Capital and Operating Costs

SRK has escalated the project capital and operating as provided in the 2015 DFS up to the end of June 2018, by applying US escalation to give an indication of these values in today's terms, presented in Table 4-12 and Table 4-13 respectively.

Table 4-12: Project Capital Cost Estimate 2015 DFS and 2018 escalation (US CPI)

Cost Area	2015 (US$m)	2018 (US$m)
Total Direct Costs	**463.1**	**497.0**
Mining	103.0	110.6
Secondary crushing	34.2	36.7
Beneficiation plant	76.7	82.3
Tailings handling & storage	5.9	6.3
Hinda region infrastructure	47.4	50.9
Slurry concentrate storage & transport	45.3	48.6
Pointe Indienne dewatering, drying, storage and port	137.4	147.5
Pointe Indienne region infrastructure	13.1	14.1
Total Indirect Costs	**112.5**	**120.8**
Temporary facilities	3.3	3.5
Cranage	2.0	2.1
EPCM costs	41.2	44.2
Commissioning support	1.0	1.1
First fill & spares	13.0	14.0
Contingency	52.0	55.8
Total Owners Costs	**26.2**	**28.1**
Owners costs	23.8	25.5
Owners contingency	2.4	2.6
Total Project Capital Cost 2015 DFS	**601.3**	**645.8**

Table 4-13: Weighted average operating expenditure 2015 DFS

Cost Area	2015 DFS		2018 Escalated	
	Average Years 1-5 (US$/t $_{Phosrock}$)	Average Years 6-end of mine life (US$/t$_{Phosrock}$)	Average Years 1-5 (US$/t$_{Phosrock}$)	Average Years 6-end of mine life (US$/t$_{Phosrock}$)
Mine Operations	14.45	23.74	15.51	25.48
Beneficiation Plant Operations	17.08	19.05	18.33	20.45
Pipeline Operations	0.40	0.46	0.43	0.49
Point Indienne Operations	3.04	3.10	3.26	3.33
G&A and Infrastructure	1.64	1.55	1.76	1.66
Total	**36.57**	**47.90**	**39.30**	**51.41**

5 METALLURGICAL TESTWORK COMPLETED POST 2015 DFS

5.1 Introduction

Additional metallurgical testwork, mostly post completion of the 2015 DFS, has been undertaken by Cominco and third parties. The various documents provided and their relevance, are briefly discussed below.

5.2 Independent Testwork Reports

Bluestar performed two flotation tests during 2015 using a similar flowsheet to the double reverse flotation flowsheet tested at Mintek and selected for the 2015 DFS. The samples tested were lower grade than the Mintek feed and the phosphate grade and recoveries were better (81.85% and 90.09% recovery at 32.4%P_2O_5) and the MgO level acceptable (0.87%) although slightly higher, than achieved by Mintek.

Bluestar reagent requirements presented a cheaper option than those incorporated in the 2015 DFS.

5.3 Review of feasibility study comminution and flotation flowsheet (Hatch)

Hatch looked at the proposed comminution flowsheet for the main project during early 2015. Hatch concurred that the two-stage sizer flowsheet was appropriate, and identified a number of potential improvements: rejection of coarser RoM ore which is barren and the introduction of an attritioner in to the circuit to process the -12.5 +5.6mm fraction in order to recover entrained P_2O_5.

Hatch looked at the pilot plant flotation test 8FR on GM material, which is the dominant ore type in the mine plan. Hatch concurred with the flowsheet selected but noted a number of issues:

- Final grind size needs to be optimised;
- Reagent dosages varied significantly depending on plant conditions which may impact operating costs;
- Inclusion of the attritioning circuit in comminution increased the P_2O_5 feed to flotation and resulted in a 2 to 3% increase in recovery.
- The cleaner circuit may be undersized and should be checked at the final design stage.

5.4 Reverse phosphate flotation, Clariant October 2015

Objective of the work undertaken by Clariant was to verify the flotation result of test 291 from the Mintek lab in South Africa. The feed received was 22.7%P_2O_5 and was deslimed at 10µm prior to flotation. The average P_2O_5 grade of the flotation feed was 22.48%. The flotation test was conducted at neutral pH and reverse-reverse flotation was used.

The tests produced a concentrate grade slightly above 32%P_2O_5 with 90% to 92% recovery. No assessment of MgO rejection or final MgO in concentrate was made (target was 0.8%MgO).

The conclusion from the tests performed at Wu Han University showed that the flowsheet and reagent suite of Test No 291 from Mintek is suitable to meet the concentrate specification in terms of phosphate grade and recovery.

5.5 ArrMaz Laboratory Flotation Test November 2015

These tests undertaken by ArrMaz used an alternative double reverse flotation flowsheet using ArrMaz reagents. The carbonate and silica reverse flotation stages were conducted at acidic pH. The flotation feed was coarser (-250µm) than the Mintek test 291. The feed was deslimed. Phosphate product of over 32%P_2O_5 was achieved at 70% to 75% recovery, worse than the Mintek and Clariant results. The tests were not optimised and finer grinding may have been beneficial with better liberation of phosphate minerals. The calculated reagent costs were similar to those used in the 2015 DFS.

5.6 Flotation Cost Verification, January 2016

Internal verification exercise undertaken by Cominco, to compare the reagent costs used in 2015 DFS with those costs derived from the additional flotation tests by Clariant at the Wu Han University (Section 5.3) and by ArrMaz, Florida, USA (Section 5.4).

Conclusion was that both suppliers can achieve the required phosphate product specification and the costs for either the Clariant or ArrMaz reagents are similar to those applied in the 2015 DFS. The Clariant reagents give a slightly better performance and were favoured by Cominco.

5.7 Verification of Product Grades & Addition Rates March 2016

This internal report by Cominco clarifies the reagent addition dosage or consumption rates used in the 2015 DFS.

Flotation tests using the double reverse flotation and recycled flotation water demonstrated that the reagents in the recycle will result in an overall reduced addition rate. The 2015 DFS does not account for this so the reagent usage and the corresponding reagent operating costs are probably overstated.

Cominco has highlighted that the reagent operating costs in the financial model are probably overstated based on the following.

- the predicted GM flotation feed grade for the first 5 years is better than the material tested in the laboratory and in the pilot plant. The planned feed contains 19.8P_2O_5 to 22.1%P_2O_5 and 1.8MgO to 2.8%MgO. The testwork sample contained 19P_2O_5 to 21%P_2O_5 and around 3.8%MgO. The implication of this difference is that addition rate for the carbonate collector (Flotinor) is probably overstated;
- the reduced additions in the early years is likely to have a positive effect on the phosphate recovery;
- the flotation phosphate recovery used in the economic model of 81.57% is considered conservative in comparison to the flotation results, which demonstrated recoveries in the high 80% range; and
- the cost model does not distinguish BM from GM ore types in terms of flotation reagent addition rates and that during treatment of BM ore reagent additions are likely to be lower as the phosphate feed grade is lower resulting in lower mass pulls and a lower amount of carbonated and dolomite material in the BM ore.

5.8 Yara Acidulation Tests June 2017

Yara Brasil Fertilizantes S.A undertook some laboratory acidulation testing of the Hinda phosphate product. The results indicate that there are no issues with producing phosphoric

acid/fertilisers but Hinda should ensure that the heavy metals in the concentrate are below that required according to MAPA (Brazilian legislation).

5.9 Beneficiation Testwork - 350kg October 2017

This internal report by Cominco details test work of a higher grade BM feed sample with the objective to produce a 32%P_2O_5 product by crushing with a pilot scale mineral sizer and screening only.

A bulk BM ore sample of 350kg was collected from 4 locations in 2 adits at the HPP. Six samples across the grade range to be mined were crushed and screened. Post crushed size-by-assay showed that it is possible to consistently make >30%P_2O_5 product by exploiting the bimodal particle size distribution between the apatite minerals and quartz.

Attritioning tests also showed that additional P_2O_5 could be recovered from the coarse size fraction, as demonstrated in the DFS test work program.

The tests demonstrated that a saleable product grade of 31%P_2O_5 at 70% recovery could be produced from Hinda BM ore by sizing and screening only, without milling and flotation.

Tests confirmed that all of the phosphate in the samples is associated with fluorapatite.

Further crushing and screening testing with samples of lower feed grades showed similar results.

6 WORK PROGRAMME

6.1 Introduction

On completion of the acquisition of the HPP, the Company plans to embark on a 10 to 12 month programme of works to rescale the production capacity of the project and update the technical assumptions and costs such that it will form an updated Feasibility Study, accompanied by an updated ESIA and a resettlement action plan.

The Company has presented the programme of works as a phased approach, albeit with some activities overlapping. The different phases of work can be summarised as follows:

- confirmatory activities;
- option analysis study;
- feasibility study and external review; and
- update to the ESIA and resettlement action plan.

The following sections present: a summary of the salient points relating to the revised project base case; the scope per phase of work; culminating in a schedule and cost estimate for the programme of work. This summary has been prepared by SRK based on documents provided by the Company, and associated discussions with the Company's management team.

6.2 Revised Base Case

It is the Company's opinion that whilst the 2015 DFS reported a positive economic outcome, that in consideration of the long-term supply/demand conditions of the Phosphate Rock market and the current economic market conditions, that an initially reduced capacity project targeting the production between 1.0Mtpa and 1.2Mtpa, potentially increasing to 2Mtpa, can be developed for a significantly lower level of upfront capital investment. The Company's current strategic plan is to target capital costs for the refined base case scenario for the mine, beneficiation plant and associated infrastructure at the HPP, of between US$80m and US$100m. SRK has been informed that this estimate is based on the Company's internal benchmarking against the "**Elandsfontein Project**" currently under development in the

Republic of South Africa ("**South Africa**"). The Company reports that the Elandsfontein Project has a number of similarities to the HPP, namely open cast mining operations requiring external borehole dewatering and in pit pumping, primary size reduction using a mineral sizer, crushing, milling, reverse flotation, concentrate thickening, filtration, drying and storage for road transport to port, designed with a front end capacity of 5.0Mtpa Run of Mine ("**RoM**").

Based on the testwork conducted as part of the 2015 DFS, the Company considers that the HPP will require mining and in-pit crushing of between 5.3Mtpa and 5.8Mtpa at a grade of 11.0%P_2O_5 to 12.0%P_2O_5, feeding the beneficiation plant, comprising of comminution, classification, desliming, and reverse rougher and cleaner flotation, to produce 1.2Mtpa of Phosrock at a target grade of 32%P_2O_5.

It is the Company's intention to mine in line with the approach set out in the 2015 DFS, whereby the full sequence (depth) of ore is mined in one area prior to progressing laterally along the length of the orebody, thereby maximising the opportunity for backfilling waste, the effective and responsible management of ground and surface water, and the earliest possible commencement of mining rehabilitation, commensurate with the Company's sustainable mining objectives.

Following completion of the 2015 DFS alternatives to flotation were investigated for a significant decrease in scale, cost and complexity. Cominco conducted internal studies for the preferential mining and processing of the weathered high-grade BM material, the HBM. Cominco is of the opinion that up to 900ktpa of saleable Phosrock can be produced from the BM material, which as a consequence of the weathering, is naturally decarbonated and depleted in MgO and does not require grinding or floatation. Based on the results of the internal conceptual study, Cominco assumes that the HBM can be constructed for a capital cost of US$40m and achieve an operating cost of US$34.06/t product.

The Company recognises from the conceptual study the opportunity to preferentially mine the weathered high-grade BM material, provided that a viable low cost mining and beneficiation process can be followed, and if it can be demonstrated that the mining of the BM does not negatively impact on the full scale mining project or violate the Company's commitment to responsible mining. This scenario will be considered further under the option analysis study.

In support of the above the Company has prepared a phased programme of work that will review and verify the underlying design parameters, conduct an option analysis to trade-off various optimisation opportunities and develop a single solution to Feasibility study level, accompanied by a +/- 15% cost estimate and updated Environmental and Social Impact Assessment ("**ESIA**"). The revised lower capital cost option envisioned by the Company will test the following opportunities associated to a reduced production rate:

- **Reduced capital costs:**
  - Reduced processing plant size and reassessment of its positioning in relation to the mine and access road.
  - Opportunity to preferentially mine the higher grade weathered BM ore in the earlier phases of mine operations, potentially deferring the requirement to implement the floatation circuit.
  - Switching from an owner operated model for mining to a contractor operating model, reducing mining equipment/fleet requirements.
  - Reconsideration of the implementation of a waste in-pit crushing and conveying ("**IPCC**") system and trading off the deferment of the ore IPCC system based on the revised plant location and mine schedule.

This in turn may lead to an opportunity to reengineer the scale of the transport corridor to consider reduced load bearing requirements.

- Deferment of substantial capital expenditure relating to the expansion of tailings and surface water management infrastructure to later periods in the project schedule.
- Removal of the pipeline infrastructure for transport of concentrate from the mine site to the port, instead considering trucking contractors, thus avoiding the capital investment associated with the infrastructure and fleet.
- Reorganisation of the site infrastructure and facilities, to a single location, to include the processing plant and thickening, filtration, drying (that was previously located at Point Indienne, thus avoiding capital investment for additional site offices and workshops, control room, reagent and fuel storage facilities).
- Utilising the existing port of Pointe-Noire, rather than the construction of a purpose built facility at Port Indienne;

- **Simplified operations:**
  - Trade off the benefits of switching to solely mobile fleet for mining and removal of the IPCC components, reducing complexity of the mining and backfilling operations, crusher and conveyor infrastructure and site establishment requirements;
  - Smaller volume mine trucks, which will limit the impact of the poor trafficability conditions within the pit.
  - Reduced number of dewatering wells that require to be drilled each year;
  - Transfer of tasks from the proposed owner operated development/infrastructure support fleet to external contractors, for e.g. tailings embankments; and
- **Project development:**
  - An extended Life of Mine to exceed 60 years based on a production rate of 1.2Mtpa of Phosrock. The coverage of the bulk samples for pilot testwork included in the DFS would be extended from the first five years to approximately 13 years.
  - Opportunity to incorporate additional climate and hydrological data to verify the FS surface water management design assumptions
  - Transfer of operations to the existing port of Pointe-Noire, removing the requirement for further intrusive studies at the Port Indienne site and potentially reducing the requirements associated to updating the ESIA for the port as it is an operating facility.

Notwithstanding the above the Company recognises to balance the stated opportunities the following factors have to be considered:

- Operational pit slopes exposed for longer periods;
- Interaction between mine scheduling, dewatering and surface water management.
- Environmental and social considerations in terms of the proposed logistics solution between the mine site and port;
- Upgrade activities required to the existing port infrastructure to support the proposed export quantities;
- Fixed capital costs which apply regardless of the scale of the project; and
- Impact on operating costs through the transfer of capital costs to 3rd party contractors and/ or reduced benefits associated to the larger scale project.

6.3 Scope of Work

The programme of works is described below.

6.3.1 Confirmatory Activities

On acquisition of the HPP, the Company will perform a selection of confirmatory activities, entailing:

- **Verification of the drillcore:** The Company will mobilise a geologist to site to verify the grade and lithology of 10 random boreholes across the Hinda deposit. This will be limited to re-logging, resampling, and assaying of core, and will not include any intrusive works (such as twin drilling); and
- Verification of hydrogeological and hydrological data: Groundwater elevations will be checked on all available boreholes, to compare against the historical groundwater data and associated models. The Company will also collate and analyse all hydrological (stream flow rates, climatic data) data collected by Cominco subsequent to the completion of the 2015 DFS.

6.3.2 Option Analysis Study

In parallel with the confirmatory exercises, the Company will conduct an option analysis study consisting of the following tasks:

- Review of all existing project information;
- Review of the supply and demand outlook for Phosphate Rock to confirm the capacity of the non-integrated Phosphate Rock market, as a tool in confirming the optimal production capacity of the Project;
- Trade-off studies/technical investigations for various mine, plant, and infrastructure optimisation opportunities conducted to a scoping level of detail, including but not limited to the following:
  - Mine scheduling: starting location, phased development (including consideration of BM material), and various throughput scenarios (in light of the port capacity and market outlook),
  - Plant location,
  - Tailings management strategy,
  - Concentrate transport options to Pointe-Noire,
  - Port expansion options analysis (should optimal capacity exceed existing port constraints),
  - Overall development strategies;
- Development of an overall dynamic techno-economic model for mine to port, along with risk/uncertainty analysis, based on factored and escalated 2015 DFS study information and data. Analysis will consider:
  - various conceptual mine schedule options identified,
  - cost models (capital and operating) for mine through to port export,
  - financial modelling using risk adjusted DCF methodologies; and
- Recommendations for subsequent study and engineering phases.

Should the option analysis study identify an acceptable approach to mining the BM material, the Company will then consider the requirement to conduct additional drilling and sampling to further refine the distribution and variability within the BM unit. The requirements for this work have not been included in the programme of works as reported herein; therefore, if deemed beneficial to the HPP, the additional budget and impact on the schedule will be assessed.

6.3.3 Updated Feasibility Study and External Review

Following completion of the options analysis study phase, the Company will progress to develop an updated FS. The scope of the study would focus on the required level of engineering to deliver ±15% capital and operating cost estimates, implementation schedule, and scope definition required for the subsequent execution of the HPP. The FS will be conducted to meet the definitions stated in the JORC Code and be supported by an updated Ore Reserve estimate. The FS will consider the following elements:

- Implementation of value engineering opportunities identified in the option analysis;
- Pit optimisation, mine design, and schedule, including mine waste management strategy and scheduling;
- Water management design and scheduling;
- Process design and equipment selection;
- Tailings strategy, production profile, and design;
- Mine site infrastructure and utilities design;
- Transport of concentrate to port and associated logistics studies;
- Port and associated infrastructure design;
- Development of a project execution plan;
- HSE and environmental sections of the FS report;
- Operating strategy;
- Capital and operating costs (±15% accuracy);
- Financial model;
- Development of design basis memorandum; and
- Finalisation of business case and recommended way forward.

In completing the above, the Company recognises the high degree of interconnectivity between the technical disciplines. For example, the water management strategy and mining schedule, whereby an update to the mining schedule would likely require an updated surface water management schedule and updated dewatering schedule.

As part of the final stages of the FS, the Company has included an allowance for the high-level review of final design philosophy, if required.

6.3.4 Updated ESIA

The 2015 ESIA will be updated based on any modifications to mine, processing facility, or infrastructure design or operating philosophy. The updated ESIA will be compliant with both national legislation, and international IFC and Equator Principle requirements.

An allowance of three months has been made for any amendments required for the compliance documents. To date, the Company has only reviewed the summary of the ESIA (the remaining volumes are currently only available in French), hence further refinement to this schedule may be required.

Particular focus will be required for the potential transport options for concentrate to the port at Pointe-Noire, where, for example, a road haul option based on existing infrastructure would require the trucking of concentrate through densely populated areas.

6.4 Approach

The initial option analysis study will be conducted by a small team of senior professionals and

internal consultants, appointed to work alongside the Company's team to form an integrated team aiming to identify options aligned to the Company's development strategy. As the programme transitions to the updated FS, the Company will engage the services of an engineering company ("**the Engineer**") to provide the overall project management of the FS. In a similar approach, the ESIA will also be managed and updated by a third party consultancy/engineering firm.

6.5 Schedule

The different phases of work and associated timings can be summarised as follows:

- Confirmatory activities: completed within 1 month from commencement of the programme of works;
- Option analysis study: three-month duration from commencement of the programme of works;
- Feasibility study and external review: six-month duration following completion of the option analysis study; and
- Updated ESIA: three-month programme overlapping with the completion of the updated FS, to commence once the design elements of the project have been completed and the FS has moved in to the cost estimation phase.

Table 6-1 presents a summary Gant chart of the proposed scheduling of the activities. As planned, the activities are scheduled to be completed over a 10 month period; however, the Company has acknowledged the need for contingency in this estimate and anticipates the overall work programme will be completed with a period of 10 to 12 months.

In SRK's opinion, the proposed durations and sequencing of the activities are appropriate for the proposed tasks. SRK notes, however, that whilst the ESIA update is scheduled at the end of the timeline, where there are material changes to the project description, the proposed design solutions should be considered and reviewed in real time as part of the FS by a party representing the Environment and Social discipline, to minimise any unnecessary or inflated risk mitigation actions.

Table 6-1: High Level Gant Chart of Programme of Works

Item	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Confirmation activities												
Option analysis study												
Feasibility study												
Feasibility Study External Review												
Updated ESIA												

6.6 Budget

The Company has allocated a total budget of US$1,771k, with approximately US$800k to update the FS, and US$500k to update the ESIA. The budget split by activity is presented in Table 6-2 below.

The budget incorporates all tasks presented in the scope of work and includes an allocation for contingency of approximately 20%.

In SRK's opinion, the budget allocated to the programme of works is appropriate to the tasks presented and includes a fitting degree of contingency to account for variations to the technical and design studies cost overruns, excluding any requirement for further exploratory/intrusive works.

Table 6-2: Programme of Works budget estimate

Item	Expenditure (US$k)
Confirmation activities	5
Market capacity study	10
Option analysis study	155
Feasibility study	800
Feasibility Study External Review	8
Updated ESIA	500
Contingency	293
TOTAL	**1,771**

6.7 Summary SRK Comments

In SRK's opinion, based on the findings and the level of work previously completed on the project, there is good merit in following the proposed programme of works considering a reduced production rate, where there may also be operational benefits of selecting a smaller scale project.

The programme of work as proposed contains appropriate activities to rescale the HPP and produce an updated FS, including cost estimate, and ESIA. The Company has furthermore allowed a reasonable duration for the completion of these activities and sufficient budget to conduct the base case programme.

As detailed above, should the Company wish to consider the option of prioritising production of BM material, then this would require additional time and budget to complete on top of that presented, including a programme of additional drilling.

7 RISKS AND OPPORTUNITIES

The risks and opportunities presented in this section focus on the Mineral Resource estimate as reported and the Company post acquisition work program. A summary of the risks associated to the historical 2015 DFS are presented in Section 4.22.

7.1 Mineral Resource Estimate

Risks

The key risks to the geological interpretation and Mineral Resources can be summarised as follows:

- various deleterious elements which directly impact on the quality of the product have not been estimated into the block model. These include variables such as As, Cd, Hg, and Pb. The grades of the assays from the in-situ material and resulting concentrate are typically low, but limited assaying has been completed. As such, there is a risk that individual lithologies, or geographical areas of the deposit may be higher in deleterious elements, but this is not sufficiently understood;
- the distribution of the BM unit is directly related to the location of the weathering surface. There is currently a risk associated with the modelling of the BM unit that the drillhole spacing in some areas may not be sufficient to adequately characterise the variability of the weathering surface. As such, the geospatial location and tonnages of the BM unit may be more variable than currently anticipated in the Mineral Resource model; and
- 86% of the current resource base is classified as Measured or Indicated, with the remainder 14% classified as Inferred. Accordingly, whilst also presenting an opportunity for upgrading the Inferred Mineral Resources, there is a risk that any programme may be unsuccessful. Specifically, there is a risk that additional drilling or exploration may lead to revised interpretations of the lithological or structural wireframes, which would impact on the definition of the various lithological units in the block model, and therefore impact on the

subsequent mine plan where this has been included.

Opportunities

As stated previously, the principal geological and Mineral Resource opportunity is around the potential to upgrade the Inferred Mineral Resources through additional exploration and drilling.

In addition, there is considerable potential for exploration along strike of the project, towards the northwest. To date, no exploration has been conducted in this area, but the potential for a continuation of the phosphate mineralisation is considered to be significant.

7.2 Work Programme

Risks

The risks relating to completing the work programme are primarily related to the complexity of the project itself. There is a degree of risk relating to delays in completing the updated FS, as any technical studies need to consider multi-disciplinary interdependencies and are therefore potentially iterative in nature.

Furthermore, the ESIA will need to be updated, in order to reflect the change in focus of the project, whilst also feeding into the updated FS itself. There is a risk that as the ESIA will be ongoing while the updated FS is being completed, and as such, design decisions made may not be able to be adequately reflected in the Scope of Work for the updated ESIA and or any design decisions made at an earlier point in the FS programme may not constituent the optimum solution from an environmental and social perspective.

As with all large scale technical studies, such as envisaged with the updated FS, there is the for potential cost and schedule overruns. Due to the nature of the project, the technical studies required may need to be completed iteratively to account for the design process. In recognition of this observation, to mitigate for unknowns the Company has included a degree of contingency in the budget and schedule.

Opportunities

The main opportunity associated to the Work Programme is to build on the unchanged Mineral Resource base and associated mineral processing testwork completed to realise a design that results in a lower initial capital requirement, by taking advantage of a number of the opportunities stated in Section 6 including but not limited to, utilising the existing port, removal of the pipeline, and second processing site for thickening, filtration and drying.

In terms of the Work Programme delivery there is the opportunity to complete the updated FS in a shorter period of time, which would also likely lead to a cost saving. This opportunity may be achieved as a result of being able to utilise significant portions of the existing 2015 DFS designs in the preparation of the update.

8 CONCLUSIONS AND RECOMMENDATIONS

The HPP consists of a sedimentary hosted phosphate deposit, for which a DFS was completed in 2015 with accompanying Mineral Resource and Ore Reserve estimates reported in line with the JORC Code (2012). Given the timing of the historical study and anticipated future work programme by the Company, the focus of this CPR has been:

- A summary of the 2015 DFS and associated outcomes;
- Reporting of the Mineral Resource statement in accordance with the terms and definitions of the JORC Code as of 31 August 2018;
- A review of the mineral processing testwork completed since completion of the 2015 DFS;

and

- A review of the Company's planned Work Programme including activities, schedules and expenditures for the update of the technical studies for the HPP post Acquisition.

The HPP has a substantial Mineral Resource base totalling 675.8Mt at a grade of 10.0%P_2O_5, 3.5%MgO, 18.6%CaO and 47.3%SiO_2. Of the total Mineral Resource, 86% is included in the Measured and Indicated categories, consisting of 200.5Mt Measured Mineral Resources at a grade of 11.6%P_2O_5, 3.8%MgO, 21.8%CaO and 42.7%SiO_2, and 300.9Mt Indicated Mineral Resources at a grade of 9.8%P_2O_5, 3.3%MgO, 17.6%CaO and 48.5%SiO_2.

SRK has not re-estimated the Mineral Resource statements as estimated by CSA Global for the project. SRK has, however, undertaken sufficient check calculations to verify the stated Mineral Resources, and to provide a degree of comfort regarding the reporting of the Statement. SRK has reviewed the processes used to estimate and report the Mineral Resource Statement, which are derived using 3D computerised techniques and in SRK's opinion, are aligned with good international practice.

SRK has produced an audited Mineral Resource Statement for the HPP. The Mineral Resources are reported above a cut-off grade of 5%P_2O_5. The audited Mineral Resources reflects that no exploration, re-interpretation, or mining has been undertaken since the completion of the 2015 DFS, and as such, remains unchanged.

The HPP is supported by a substantial body of mineral processing testwork as part of the historical PFS and DFS, which has subsequently been reviewed by independent potential 3rd party offtakers, that supports the design input parameters for the beneficiation plant design.

The feasibility of the HPP has been confirmed through the completion of the 2015 DFS, delivered under the management of the previous owners Cominco. The 2015 DFS targeted the production of 4.1Mtpa of Phosrock at a concentrate grade of 32%P_2O_5. At the time of reporting the 2015 DFS, based on the technical and economic parameters defined, the unleveraged NPV (10% discount rate) was US$1.85bn, with an associated IRR of 38%, based on an average life of mine Phosrock price (life of mine) 149US$/t, initial capital investment of US$601.3m and operating costs of 36.6US$/t for the first 5 years and 47.9US$/t thereafter.

For the avoidance of doubt, SRK notes that certain of the technical information pertaining to the 2015 DFS reported herein is largely included as a matter of historical fact and as such is not intended to be reported as current, specifically given the combination of:

- Current commodity price assumptions, specifically in the changed assumptions from that assumed in the 2015 DFS and reported in the August 2018 Report;
- That all key assumptions regarding operating and capital expenditures are effectively base dated as at Q4 2014 and as such have not been updated to the date of publication. Notwithstanding this aspect, SRK at the request of the Company has based on the currency exposures quoted in the 2015 DFS provided an assessment of the potential increase in operating and capital expenditures should these to subject solely to macro-economic adjustments; and
- The Company's decision to pursue a differing strategic option in respect of scope and scale.

It is however the Company's opinion that whilst the 2015 DFS reported a positive economic outcome, that in consideration of the long-term supply/demand conditions of the Phosrock market and the current economic market conditions, that an initially reduced capacity project targeting the production between 1.0Mtpa and 1.2Mtpa, potentially increasing to 2Mtpa, can be developed for a significantly lower level of upfront capital investment. The company's current strategic plan is to target capital costs for the refined base case scenario for the mine,

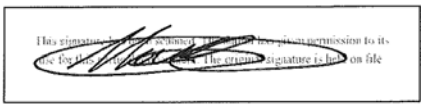
beneficiation plant and associated infrastructure at the HPP, of between US$80m and US$100m. SRK has been informed that this estimate is based on the Company's internal benchmarking against the Elandsfontein Project currently under developed in the South Africa.

In support of the above opinion the Company has prepared a phased programme of work that will review and verify the underlying design parameters, conduct an option analysis to trade-off various optimisation opportunities and develop a single solution to Feasibility study level, accompanied by a +/- 15% cost estimate and updated ESIA. The revised lower capital cost option envisioned by the Company will test the following opportunities associated to a reduced production rate:

In SRK's opinion, based on the findings and the level of work previously completed on the project, there is good merit in following the proposed programme of works considering a reduced production rate, where there may also be operational benefits of selecting a smaller scale project.

The Company has allocated a total budget of US$1,771k, with approximately US$800k to update the FS, and US$500k to update the ESIA and prepare the resettlement action plan. The study is proposed to be completed over a 10 to 12 month period. In SRK's opinion, the programme of work as proposed contains appropriate activities to rescale the HPP and produce an updated FS, including cost estimate, and ESIA. The Company has furthermore allowed a reasonable duration for the completion of these activities and sufficient budget to conduct the base case programme. It should be noted that should the Company wish to consider the option of prioritising production of BM material, then this would require additional time and budget to complete on top of that presented, including a programme of additional drilling.

For and behalf of SRK Consulting (UK) Limited



Dr Timothy Lucks, 27 November 2018
Practice Leader and Principal Consultant (Geology),
SRK Consulting (UK) Limited.

Glossary

Glossary – Technical Studies

Feasibility Study

A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.

Preliminary Feasibility Study

A Preliminary Feasibility Study (Pre-Feasibility Study) is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Competent Person, acting reasonably, to determine if all or part of the Mineral Resources may be converted to an Ore Reserve at the time of reporting. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.

Scoping Study

A Scoping Study is an order of magnitude technical and economic study of the potential viability of Mineral Resources. It includes appropriate assessments of realistically assumed Modifying Factors together with any other relevant operational factors that are necessary to demonstrate at the time of reporting that progress to a Pre-Feasibility Study can be reasonably justified.

Glossary – Mineral Resources and Ore Reserves

Mineral Resource

A ‘Mineral Resource’ is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Indicated Mineral Resource

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.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

Inferred Mineral Resource

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.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Measured Mineral 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.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

Ore Reserve — An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

Probable Ore Reserve — A 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

Proved Ore Reserve — A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

Glossary – Terms

Active pit dewatering — The process whereby pit dewatering is achieved through pumping to lower the water table and ensure dry mining conditions and to lower the pore water pressure of pit slopes.

Admission Document — The regulatory document in which this CPR is included.

Advisors — Grant Thornton UK LLP, Mirabaud Securities Limited, H&P Advisory Limited.

Agglomeration — A concentration process based on the adhesion of pulp particles to water. Loosely bonded associations of particles and bubbles are formed that are heavier than water; flowing-film gravity concentration is used to separate the agglomerates from non-agglomerated particles. Agglomeration also refers to briquetting, nodulizing, sintering.

AIM Rules — The AIM Rules for Companies, March 2018 published by the London Stock Exchange – specifically Rule 3 relating to Admission Documents and

	including the Annexes to the AIM Rules and the AIM Note for Mining and Oil & gas Companies (June 2009).
Anisotropy	The condition of having different properties in different directions.
Acquisition	Kropz plc's intention to purchase up to 100% (but no less than 70%) of Cominco.
CRU 2018 Report	CRU International Limited report published in August 2018.
Azimuth	Direction of a horizontal line as measured on an imaginary horizontal circle, the horizontal direction reckoned clockwise from the meridian plane of the observer, expressed as the angular distance between the vertical plane passing through the point of observation and the poles of the Earth and the vertical plane passing through the observer and the object under observation.
Bankable Standards	A Feasibility Study in which the technical feasibility and economic viability of a mineral deposit has been demonstrated on a multi-disciplinary basis and in accordance with appropriate reporting standards.
Bedding	The arrangement of a sedimentary rock in beds or layers of varying thickness and character; the general physical and structural character or pattern of the beds and their contacts within a rock mass, such as cross-bedding and graded bedding; a collective term denoting the existence of beds.
Bedrock	Solid rock exposed at the surface of the Earth or overlain by unconsolidated material, weathered rock, or soil.
Bench	A ledge that, in open-pit mine and quarries, forms a single level of operation above which minerals or waste materials are excavated from a contiguous bank or bench face. The mineral or waste is removed in successive layers, each of which is a bench, several of which may be in operation simultaneously in different parts of, and at different elevations in, an open-pit mine or quarry.
Block modelling	The process of generating a three dimensional model of a mineral deposit where individual parent blocks are equally sized and ascribed certain physical properties and qualities (tonnage, density, volume, grade etc.).
BM Process Option	Project focused on the opportunity to preferentially mine the higher grade weathered BM ore.
Bulk Earthworks	The removal, moving or adding of large quantities of soil or rock from a particular area to another. They are done in order to make an area a suitable height and level for a specific construction purpose.
Bulk Sample	The process of taking very large samples, is part of the general procedure for the exploration and evaluation of a mineral deposit. Often the bulk sample will be a composite of material from development drifts, raises, trenches or open-pits.
Capital Expenditure	An amount spent to acquire or upgrade productive assets (such as buildings, machinery and equipment, vehicles) in order to increase the capacity or efficiency of a company for more than one accounting period: initial capital expenditure is normally referred to as project capital; capital expenditure associated with subsequent non-recurring activities are defined as deferred capital; and capital expenditure associated with recurring activities (periodic maintenance, tailings dam lifts) are defined as sustaining capital.
Carriage Insurance and Freight	A basis for pricing of delivery of iron ores where the seller must contract for and pay the costs and freight necessary to bring the goods to the named port of destination.
Certified reference materials	Controls or standards used to check the quality and metrological traceability of products, to validate analytical measurement methods, or for the calibration of instruments. A certified reference material is a particular form of measurement standard.
Cleaner Stage	In flotation a secondary cell for the retreatment of the concentrate from a primary cell.

Closure Cost	The expenditures relating to the bio-physical and social costs associated with closure, rehabilitation and remediation of a mine site inclusive of all associated infrastructure. This may also include post-closure monitoring and/or water treatment costs for a defined period.
Coarse reject	Coarse material rejected form a mineral processing or sampling process.
Coefficient of Variance	A measure of relative variability. It is the ratio of the standard deviation to the mean (average).
Collar	The mouth or opening of a borehole or the process of starting to drill a borehole.
Cominco	Cominco Resources Ltd.
Company	Kropz plc.
Competent Person	A minerals industry professional who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy, or of the Australian Institute of Geoscientists, or of a 'Recognised Professional Organisation', as included in a list available on the JORC and ASX websites. These organisations have enforceable disciplinary processes including the powers to suspend or expel a member.
Composite sample	The procedure by which the values of adjacent samples from boreholes are combined so that the value of the longer down-hole intervals can be assessed. The grade of each new interval is calculated on the basis of the weighted average of the original sample grades. These are usually weighted by length and possibly by specific gravity and core recovery.
Concentrator	A plant where ore is separated into values (concentrates) and rejects (tails). An appliance in such a plant, e.g., flotation cell, jig, electromagnet, shaking table.
Concentrate	The clean product recovered in froth flotation. The ore is usually ground finely in various comminution operations and gangue (waste) is removed, thus concentrating the metal component.
Congo	Republic of Congo.
Consumer Price Index	A measure of changes in the price level of market basket of consumer goods and services purchased by households. The CPI is a statistical estimate constructed using the prices of a sample of representative items whose prices are collected periodically.
Consumer Price Inflation	Consumer Price Index reflected as a percentage change between stated timelines, monthly, annual (end of period, average).
Core	The long cylindrical piece of rock, about an inch in diameter, brought to surface by diamond drilling.
Core recovery	The amount of the drilled rock withdrawn as core in core drilling, generally expressed as a percentage of the total length of the interval cored.
CRIRSCO	Committee for Mineral Reserves International Reporting Standards.
CRU Reports	Various reports published by CRU in respect of the HPP and included in the 2015 DFS, and April 2018 and August 2018 reports.
Crushing	Size reduction into relatively coarse particles by stamps, crushers, or rolls.
Cross-cutting	Cross-cutting relationships is a principle of geology that states that the geologic feature which cuts another is the younger of the two features. It is a relative dating technique in geology.
Cross-section	The area of a surface cut by a plane passing through the body and perpendicular to the long axis of the body if one exists. If not, any such area cut by a plane.
Cut-off-Grade	The lowest grade of mineralized material that qualifies as ore in a given deposit; rock of the lowest assay included in an ore estimate.
Deleterious elements	Minerals or elements present in ore and/or concentrates which are considered to reduce the value in use of iron ore, typically, silica, phosphorous, alumina.

Dewatering	The removal of water from a specific geological domain through pumping or drainage as a safety measure or as a preliminary step to commencement of dry mining operations.
Dilutant	The grade and/or quality of the diluting material.
Dilution	Rock that is, by necessity, removed along with the ore in the mining process, subsequently lowering the grade of the ore.
Dip	The angle of a slope, vein, rock stratum, or borehole is measured from the horizontal plane downward.
Domaining	The process whereby geological zones/units are domained into discrete areas for further analysis.
Drillhole	Technically, a circular hole drilled by forces applied percussively; loosely and commonly, the name applies to a circular hole drilled in any manner.
Drill and Blast	The process by which in-situ rock is fragmented through introduction of explosive material into drill holes.
Drill rig	A drill machine complete with all tools and accessory equipment needed to drill boreholes.
Dry metric tonne unit	The internationally agreed-upon unit of measure for iron ore pricing. It has the same mass value as a metric tonne, but the material has been dried to decrease the moisture level. A dry metric ton unit consists of 1% of iron (Fe) contained in a tonne of ore, excluding moisture.
Dynamic Anisotropy	An interpolation technique in which sub-domains are auto-computed from user supplied Dynamic Anisotropy Surface(s) which can be created either automatically given a traditional wireframe or manually from cross sections.
Economic Potential	A measure by which the reasonable prospects of eventual economic extraction are determined.
Environmental and Social Impact Study	A process for predicting and assessing the potential environmental and social impacts of a proposed project, evaluating alternatives and designing appropriate mitigation, management and monitoring measures.
Environmental and Social Management Plans	A plan which includes measures and controls to decrease the potential for environmental degradation during all phases of the Project and to provide clearly defined action plans and emergency response procedures to account for human and environmental health and safety.
Environmental and Social Management Systems	A set of policies, procedures, tools and internal capacity to identify and manage a financial institution's exposure to the environmental and social risks of its clients/investees.
Equator Principal Financial Institution	A financial institution which has formally adopted the Equator Principals as part of its standard operating investment criteria and policies.
Equator Principle	A risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making.
Equator Principles III	A major revision of the IFC Performance Standards on Environmental & Social Sustainability in 2012.
Exploration	The search for coal, mineral, or ore by (1) geological surveys; (2) geophysical prospecting (may be ground, aerial, or both); (3) boreholes and trial pits; or (4) surface or underground headings, drifts, or tunnels. Exploration aims at locating the presence of economic deposits and establishing their nature, shape, and grade, and the investigation may be divided into (1) preliminary and (2) final.
Exploration Target	A statement or estimate of the exploration potential of a mineral deposit in a

	defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.
Factor of Safety	In the analysis of slope stability to determine whether a slope is safe, potential slip surfaces are postulate on a slope cross-section. The factor of safety (FOS) is determined from the ratio of resisting forces to driving forces. The lowest FOS is the critical stability of the slope.
Fault	A break in the continuity of a body of rock. It is accompanied by a movement on one side of the break or the other so that what were once parts of one continuous rock stratum or vein are now separated.
Flotation	A milling process in which valuable mineral particles are induced to become attached to bubbles and float as others sink: selectively separating hydrophobic materials from hydrophilic.
Flowsheet	A diagram showing the progress of material through a preparation or treatment plant. It shows the crushing, screening, cleaning, or refining processes to which the material is subjected from the run-of-mine state to the clean and sized products. The size range at the various stages may also be shown.
Fold	A curve or bend of a planar structure such as rock strata, bedding planes, foliation, or cleavage. A fold is usually a product of deformation, although its definition is descriptive and not genetic and may include primary structures
Foliation	Repetitive layering in metamorphic rocks.
Free on Board	Term of sale under which the price invoiced or quoted by a seller includes all charges up to placing the goods on board a ship at the port of departure specified by the buyer. Also called collect freight, freight collect, or freight forward. Used in shipping to indicate that there is no charge to the buyer for goods placed on board a carrier at the point of shipment. Typically followed by the name of a port or city.
Fresh	Said of a rock or rock surface that has not been subjected to or altered by surface weathering, such as a rock newly exposed by fracturing.
Gangue	The valueless minerals in an ore; that part of an ore that is not economically desirable but cannot be avoided in mining. It is separated from the ore minerals during concentration.
Geochemical analysis	The process through which scientists discover and unravel the chemical compounds that make up the earth, its atmosphere, and its seas.
Geochemistry	The study of the relative and absolute abundances of the elements and their nuclides (isotopes) in the Earth; the distribution and migration of the individual elements or suites of elements in the various parts of the Earth (the atmosphere, hydrosphere, lithosphere, etc.), and in minerals and rocks, and also the study of principles governing this distribution and migration. Geochemistry may be defined very broadly to include all parts of geology that involve chemical changes, or it may be focused more narrowly on the distribution of the elements.
Geophysical anomalies	Area where geophysical properties (e.g. radiometric, magnetic, electromagnetic, gravity) differ from surrounding areas and which may be the result of mineralisation.
Geophysical survey	The exploration of an area in which geophysical properties and relationships unique to the area are mapped by one or more geophysical methods.
Geotechnics	The application of scientific methods and engineering principles to the acquisition, interpretation, and use of knowledge of materials of the Earth's crust for the solution of engineering problems; the applied science of making the Earth more habitable. It embraces the fields of soil mechanics and rock mechanics, and many of the engineering aspects of geology, geophysics, hydrology, and related sciences.
Geostatistics	A methodology for the analysis of spatially correlated data. The characteristic feature is the use of variograms or related techniques to quantify and model

	the spatial correlation structure. Also includes the various techniques such as kriging, which utilize spatial correlation models.
Grab sample	A single sample collected at a particular time and place which represents the composition of the water only at that time and place.
Grade	The relative quantity or the percentage of ore-mineral or metal content in an orebody.
Grinding	Size reduction into fine particles; comminution.
Hydrothermal	Of or pertaining to hot water, to the action of hot water, or to the products of this action, such as a mineral deposit precipitated from a hot aqueous solution, with or without demonstrable association with igneous processes; also, said of the solution itself. Hydrothermal is generally used for any hot water but has been restricted by some to water of magmatic origin.
Hydrogeology	Branch of geology that deals with the distribution and movement of groundwater in the soil and rocks.
Hydrogeological characterisation	The process by which a hydrogeological system/domain is characterised in respect of physical properties governing the flow of water.
Hydrology	The branch of science concerned with the properties of the earth's water, and especially its movement in relation to land.
Inductively Coupled Plasma	A type of plasma source in which the energy is supplied by electric currents which are produced by electromagnetic induction, that is, by time-varying magnetic fields.
Inductively Coupled Plasma Mass Spectrometry	A type of mass spectrometry which is capable of detecting metals and several non-metals at concentrations as low as one part in 10^{15} (part per quadrillion, ppq) on non-interfered low-background isotopes.
IFC Performance Standards	Standards which define IFC clients' responsibilities for managing their environmental and social risks. The 2012 edition of IFC's Sustainability Framework, which includes the Performance Standards, applies to all investment and advisory clients whose projects go through IFC's initial credit review process after January 1, 2012.
Industry Benchmark	FoB Morocco 32%P_2O_5.
In-situ	Ore or waste material in its original unmined state.
International Finance Corporation	An international financial institution that offers investment, advisory, and asset-management services to encourage private-sector development in developing countries.
Inter-ramp angle	The interramp slope angle is measured from toe to toe or crest to crest exclusive of any ramps.
Kriging	In the estimation of Mineral Resources by geostatistical methods, the use of a weighted, moving-average approach both to account for the estimated values of spatially distributed variables, and also to assess the probable error associated with the estimates.
Kropz	Kropz plc.
Life-of-Mine	The time in which, through the employment of the available capital, the ore reserves-or such reasonable extension of the ore reserves as conservative geological analysis may justify-will be extracted.
Life-of-Mine Plan	The production plan which provides physical details in monthly, quarterly or annual time increments in respect of mined waste and ore through to processed material, recovered saleable products and waste materials from a processing facility. The duration of the plan typically reflects the Life-or-Mine, and normally limited to depletion of ‘Ore Reserves’.

Load and Haul	the process by which mined ore or waste is loaded and transported to either a waste rock dump or the run of mine pad or the processing plant.
Loss on Ignition	A test used in inorganic analytical chemistry, particularly in the analysis of minerals. It consists of strongly heating a sample of the material at a specified temperature, allowing volatile substances to escape, until its mass ceases to change.
Manganese	The chemical element of atomic number 25, a hard grey metal of the transition series. Manganese is an important component of special steels and magnetic alloys.
Mass Yield	The amount of material (concentrate) derived from the processing of mined ore expressed as a percentage of ore delivered to the processing plant and expressed on a dry basis.
Metallurgical testwork	The result of the metallurgical testwork has a defining influence on all the process units of a mineral processing plan. Testwork is necessary from the plant development phase through to the end of life of the mine. Sighter testwork establishes if the metals can be extracted from the ore easily or if not possible.
Metamorphism	The process by which rocks are changed in composition, texture, or structure by extreme heat and pressure.
Micron	A unit of length equal to one millionth of a metre, used in many technological and scientific fields.
Mill	A mineral treatment plant in which crushing, wet grinding, and further treatment of ore is conducted. Also, separate components, such as ball mill, hammer mill, and rod mill.
Milling	The grinding or crushing of ore. The term may include the operation of removing valueless or harmful constituents and preparation for market.
Mine Design	The process of developing an engineered solution for the extraction of ore and waste from a mineral deposit and the host rock.
Mineral Asset	the HPP.
Net Acid Production Potential	A measure of acid forming potential determined by subtraction of an acid neutralising capacity from a maximum potential acidity of a sample expressed as units of kgH_2SO_4/t.
Net Acid Generation	The balance between the acid producing and acid consuming components of tailings/waste rock samples.
Neutralising capacity	Also known as Acid Neutralising capacity
Nominal terms	Expenditures or revenues expressed in nominal terms are unadjusted from the date in which they are recorded, specifically they will include inflationary aspects as determined form a specified reference date.
Normal distribution	Also known as the Gaussian or standard normal distribution, is the probability distribution that plots all of its values in a symmetrical fashion, and most of the results are situated around the probability's mean. Values are equally likely to plot either above or below the mean.
Nugget	Theoretically, at zero separation distance (lag = 0), the semivariogram value is 0. However, at an infinitesimally small separation distance, the semivariogram often exhibits a nugget effect, which is some value greater than 0. For example, if the semivariogram model intercepts the y-axis at 2, then the nugget is 2.
Off-highway	Rigid dump trucks specifically engineered for use in high-production mining and heavy-duty construction environments.
Open Pit	A mine that is entirely on surface. Also referred to as open-cut or open-cast mine.
Optimisation analysis	Determining the optimum ultimate pit of a mine is the base of mine planning. The optimum ultimate pit of a mine is defined as the "pit shell contour", which is the result of extracting the volume of material that provides the total

	maximum profit while satisfying the operational requirements of safe wall slopes.
Ordinary Kriging	Geostatistical estimation is a two stage process: (i) studying the gathered data to establish the predictability of values from place to place in the study area; this study results in a graph known as a semi-variogram which models the difference between a value at one location and the value at another location according to the distance and direction between them; (ii) estimating values at those locations which have not been sampled. This process is known as kriging. The basic technique ordinary kriging uses a weighted average of neighbouring samples to estimate the unknown value at a given location. Weights are optimized using the semi-variogram model, the location of the samples and all the relevant inter-relationships between known and unknown values. The technique also provides a standard error which may be used to quantify confidence levels.
Ore	A naturally occurring solid material from which a metal or valuable mineral can be extracted profitably.
Outcrop	The part of a rock formation that appears at the surface of the ground.
Overburden	Designates material of any nature, consolidated or unconsolidated, that overlies a deposit of useful materials, ores, or coal--esp. those deposits that are mined from the surface by open cuts.
Overall slope angle	The angle between the lowest toe and the highest crest inclusive of any haul roads.
Oxide	Term used to define geological unit which has been subject to oxidation and weathering.
Phosphorous	A non-metallic element of the nitrogen group. Symbol, P. Never found free in nature, but is widely distributed in combination with minerals. In iron and steel making Phosphorous has four major effects on iron: increased hardness and strength, lower solidus temperature, increased fluidity, and cold shortness.
Phosrock	Phosphate concentrate or Phosphate Rock.
Pit daylight	The point at which the pit limits intersect with the surface topography.
Principal Currencies	Australian Dollar, Brazilian Real, Canadian Dollar, Chinese Yuan, CFA Franc BEAC, Euro, and South African Rand.
Quality Assurance and Quality Control	
	The combination of quality assurance, the process or set of processes used to measure and assure the quality of a product, and quality control, the process of ensuring products and services meet consumer expectations.
Quote Effective Date	Q4 2014
Ramp	A roadway or haul-road by which access is gained to an open-pit mining operation.
Real Terms	Values which has been adjusted to remove the impact of inflation, e.g. where nominal values have been adjusted to determine values which are base dated to a specific date.
Recovery	A measure of the efficiency of the extraction of saleable products from the initial ore expressed as a percentage.
Reduction disintegration index	
	A quantitative measure of the disintegration of the sinter that could occur in the upper part of the blast furnace after some reduction.
Reporting Standards	Mineral Resource and Ore Reserve reporting codes which have been mapped against the CRIRSCO template and duly recognised as such.
Rock chip	A regular series of ore chips or rock chips taken either in a continuous line across an exposure or at uniformly spaced intervals.
Rougher-Scavenger	the first stage of flotation is termed roughing to produce a rougher concentrate which is followed by a scavenger stage to recover any of the target minerals that were not recovered during the initial roughing stage.

Run-of Mine	Mined ore which has been blasted and excavated for delivery to the process plant.
samples	Representative fraction of body of material; removed by approved methods; guarded against accidental or fraudulent adulteration; and tested or analysed to determine the nature, composition, percentage of specified constituents, etc., and possibly their reactivity. Bulk samples are large (several tonnes), so taken as to represent the ore for the purpose of developing a suitable treatment. Channel samples, cores, chips, grab, pannings, stope samples, etc., are represented by smaller volumes/mass.
Screening	The separation of solid materials of different sizes by causing one component to remain on a surface provided with apertures through which the other component passes.
Search ellipse	The volume which defines how far out to search for data to support a particular kriged estimate.
Sedimentary	Rock that has formed from sediment deposited by water or air.
Selective Mining	The process of mining selectively through application of grade control techniques and/or visual distinction of ore categories.
Selectivity	A measure of the degree by which selective mining can practically be attained.
Scavenger	A stage in a flotation circuit that treats the tailings from previous stages.
Shear Zone	A zone of strong deformation (with a high strain rate) surrounded by rocks with a lower state of finite strain. It is characterised by a length to width ratio of more than 5:1.
Sill	The semivariance value at which the variogram levels off. Also used to refer to the “amplitude” of a certain component of the semivariogram.
South Africa	Republic of South Africa
Specific gravity	The weight of a substance compared with the weight of an equal volume of pure water at 4 degrees C. Specific gravity is numerically equal to density given in grams per cubic centimeter or millilitre.
Standard deviation	The square root of the variance. A measure of dispersion of a set of data from its mean.
Standards	A small portion of a substance that conforms to the specification for that particular material.
Strike	The course or bearing of the outcrop of an inclined bed, vein, or fault plane on a level surface; the direction of a horizontal line perpendicular to the direction of the dip.
Stripping ratio	The volume of overburden (or waste material) required to be handled in order to extract some tonnage of ore. For example, a 3:1 stripping ratio means that mining one tonne of ore will require mining three tonnes of waste rock.
Sulphur	The chemical element of atomic number 16, a yellow combustible non-metal. that occurs widely in nature, especially in volcanic deposits, minerals, natural gas, and petroleum. It is used to make gunpowder and fertilizer, to vulcanize rubber, and to produce sulfuric acid.
Syncline	A trough or fold of stratified rock in which the strata slope upwards from the axis.
Synform	A fold whose limbs close downward in strata for which the stratigraphic sequence is unknown.
Tailings Storage Facility	A man made structure (dam) for the storage of residue from a mineral processing facility.
Technical-Economic Parameters	All technical and economic assumptions as reported in the 2017 FS and incorporated into the Company’s Financial Model, inter alia: physical statistics for all mining, processing, tailings deposition, transportation, saleable products; sales revenue; operating expenditure; and capital expenditure.

Trench	In geological exploration, a narrow, shallow ditch cut across a mineral deposit to obtain samples or to observe character.
True thickness	The width or thickness of a vein, stratum, etc., as measured perpendicular or normal to dip and strike. The true width is always the width of the vein, etc., at its narrowest point.
Validation	A process whereby the accuracy of estimates are validated typically against known points in resource estimation.
Value in Use	Value that an asset generates for a specific owner under a specific use. In the case of iron ore this relates to how much steel can be produced from the ore, at what quality, and at what cost.
Variability Testwork	Process testwork undertaken to assess the impact of process efficiencies and other aspects to variation in the nature of ore feed e.g. grade/quality, particle size, mineralogy, weathering etc.
Variance	The mean square deviation of the variable around the average value. It reflects the dispersion of the empirical values around its mean.
Variogram	A plot of the variance (one-half the mean squared difference) of paired sample measurements as a function of the distance (and optionally of the direction) between samples. Typically, all possible sample pairs are examined, and grouped into classes (lags) of approx. equal distance and direction. Variograms provide a means of quantifying the commonly observed relationship that samples close together will tend to have more similar values than samples far apart.
Variogram range	The range is the distance after which the variogram levels off. The physical meaning of the range is that pairs of points that are this distance or greater apart are not spatially correlated. The sill is the total variance contribution, or the maximum variability between pairs of points.
Waste	The part of an ore deposit that is too low in grade to be of economic value at the time of mining, but which may be stored separately for possible treatment later or alternatively contains no economic minerals and must be mined in order to expose the mineralised material of economic interest.
Waste Rock Dump	A facility for the storage of waste material mined from open-pit.
Water Balance	A measure of the flow of water in and out of a system.
Wireframe	A method of three dimensional subsurface mapping commonly employed for the preparation of digital elevation models in surveying, hydrology, geology, and mining.
Work Programme	The Company's proposed work programme in respect of the HPP.
World Bank Group's Environmental Health and Safety Guidelines	Technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). They contain the performance levels and measures that are normally acceptable to the World Bank Group, and that are generally considered to be achievable in new facilities at reasonable costs by existing technology.
X-Ray Fluorescence	a non-destructive analytical technique used to determine the elemental composition of materials. XRF analysers determine the chemistry of a sample by measuring the fluorescent (or secondary) X-ray emitted from a sample when it is excited by a primary X-ray source.
Yield	Mass yield measured as the mass of the product divided by the processed mass and expressed as a percentage
2015 DFS	the 2015 Definitive Feasibility Study in respect of the Hinda Phosphate Project

Abbreviations

A$	Australian Dollar
AIDS	Acquired immune deficiency syndrome
AIM	AIM Market

Al_2O_3	Aluminium Oxide
ANCOLD	Australian National Committee on Large Dams
AP	Acid Potential
ARD	Acid Rock Drainage
As	Arsenic
BM	BM Ore formation
BPL	Bone Phosphate of Lime
BRL	Brazilian Real
C$	Canadian Dollar
CADS	Cash Available for Debt Service
CAGR	Compound annual growth rate
CaO	Calcium Oxide
$Ca_3(PO_4)_2$	Calcium Phosphate is the calcium salt of phosphoric acid
$CaO:P_2O_5$	Ratio of calcium oxide to Phosphorous pentoxide
Cd	Cadmium
CEC	Centrale Electrique du Congo SA
C.Eng	Chartered Engineer
C.Geol	Chartered Geologist
CFR	Carriage and Freight
CIF	Carriage Insurance and Freight
Cl	Chlorine
CNY	Chinese Yuan
CO_2	Carbon Dioxide
Company	Kropz plc
CORAF	Congolaise de Rafinage
C organic	the organic form of Carbon
CoV	Coefficient of Variance
CP	Competent Person
CP	Chartered Professional
CPI	Consumer Price Index or Consumer Price Inflation
CPR	Competent Persons Report
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CRM	certified reference material
CSA	CSA Global (UK) Ltd
Cr_2O_3	Chromium Oxide
CRU	CRU International Limited
C total	a measure of the total amount of carbon contained in any substance
DAP	Diammonium phosphate
DAPR	direct application phosphate rock
DCP	Di-calcium phosphate
DCF	Discounted Cash Flow
DFS	Definitive Feasibility Study
E	East
€	Euro
EDC	Environmental Design Criteria
EPCM	Engineering Procurement and Construction Management
EPFI	Equator Principal Financial Institution
ESIA	Environmental and Social Impact Assessments

ESMP	Environmental Social Management Plans
ESMS	Environmental and Social Management Systems
EP	Equator Principle
ERT	Electrical resistivity tomography
F	Fluorine
FCF	Free Cash Flow
Fe_2O_3	Iron Oxide
FGS	Fellow of the Geological Society
FIFO	Fly-in-fly-out
FIMMM	Fellow of the Institute of Materials, Minerals and Mining
FoB	Free on Board
FoS	Factor of Safety
FS	Feasibility Study
GM	GM Ore formation
H_2SO_4	Sulfuric acid
Hg	Mercury
HIV	Human immunodeficiency virus
HBM	the Hinda BM Ore Project
HPP	Hinda Phosphate Project
IFC	International Finance Corporation
IPCC	in-pit crushing and conveying
IRA	Inter ramp angle
IRR	Internal Rate of Return
ISOCOG	In-situ Operating Cut-off Grade
ISMCOG	In-situ Marginal Cut-off Grade
JORC Code (2012)	The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
K_2O	Potassium Oxide
LCU	Local Currency Unit
LOI	Loss on ignition
LoM	Life of Mine
LoMp	Life of Mine plan
LSE	London Stock Exchange
LTP	Long Term Price
MAP	Monoammonium Phosphate
MAusIMM	Member of the Australasian Institute of Mining and Metallurgy
MENA	Middle East and North Africa
MER	Minor Elements Ratio
MIMMM	Member of the Institute of Materials, Minerals and Mining
MgO	Magnesium Oxide
MnO	Manganese Oxide
MRE	Mineral Resource Estimate
MTO	Material Take-Offs
N	North
NA_2O	Sodium Oxide
NORM	Naturally occurring radioactive materials

NPK	Nitrogen, Phosphorous and Potassium
OEM	Original Equipment Manufacturer
OK	Ordinary Krigging
NPV	Net Present value
P	Phosphorous
Pb	Lead
P_2O_5	Phosphorous pentoxide, the common form of phosphate in phosphate rock concentrate
PEP	Project Execution Plan
PFS	Pre-Feasibility Study
PhD	Doctorate of Philosophy
PMF	Peak Maximum Flood
Pr.Eng	Professional Engineer
PSD	Particle size distribution
QAQC	Quality Assurance and Quality Control
QKNA	quantitative Kriging neighbourhood analysis
RoM	Run-of-Mine
RQD	rock quality designation
S	South
SEC	Securities and Exchange Commission
SG	Specific Gravity
SiO_2	The chemically resistant dioxide of silicon, SiO_2; occurs naturally as five crystalline polymorphs: trigonal and hexagonal quartz, orthorhombic and hexagonal tridymite, tetragonal and isometric cristobalite, monoclinic coesite, and tetragonal stishovite.
SLO	Social Licence to Operate
SPA	Super phosphoric acid
SO_3	Sulphur Trioxide
Sr	Strontium
SRK	SRK Consulting (UK) Limited
SRK Group	SRK Consulting (Global) Limited
SSP	Single superphosphate
Stakeholder Engagement	Stakeholder engagement is the process used by an organisation to engage relevant stakeholders for a purpose to achieve accepted outcomes.
STPP	Sodium tripolyphosphate
TEP	Technical-Economic Parameter
Th	Thorium
Ti	Titanium
TiO_2	Titanium dioxide
TPA	Thermal phosphoric acid production
TSF	Tailings Storage Facility
TSP	Triple superphosphate
U	Uranium
U_2O_3	Uranium oxide
U_3O_8	Triuranium octoxide
VIU	Value In Use
WBS	Work Breakdown Structure
WPA	Wet-process phosphoric acid

WRD	Waste Rock Dump
XAF	CFA Franc BEAC
XRF	X-Ray Fluorescence
ZAR	South African Rand
ZIOC	Zanaga Iron Ore Company Limited

Units

amsl	above mean sea level
bar	a metric unit of pressure, but is not approved as part of the International System of Units (SI). It is defined as exactly equal to 100,000Pa, which is slightly less than the current average atmospheric pressure on Earth at sea level.
bq	becquerel (Bq) is the SI derived unit of radioactivity. One becquerel is defined as the activity of a quantity of radioactive material in which one nucleus decays per second.
cm	a centimetre
dmtu	dry metric tonne unite (typically a %)
dwt	deadweight tonnage: a measure of how much weight a ship can carry.
€	a Euro
g	a gramme
Ga	a billion years ago
GJ/day	a Gigajoule per day
GWh	a billion watt hours
ha	hectare
kg/h	a kilogramme per hour
kL/day	a thousand litres per day
km	a kilometre
km^2	a square kilometre
kt	a thousand tonnes
kV	a thousand volts
kWh	a thousand watt hours
kWh/t	a thousand watt hours per tonne
LCUm	Local currency units million
M1-12	Month 1 to Month 12
m^2	a square metre
m^3	a cubic metre
m	a metre
Ma	a million years ago
mabsl	meters above sea level
m/d	metre per day
mm	a millimetre
m^3/d	a cubic metre per day
m/s	a metre per second
m^3/s	a cubic metre per second
Mt	a million tonnes
MtP_2O_5	a million tonnes of phosphorus pentoxide
Mtpa	a million tonnes per annum
MW	a million watts
MWh	a million watt hours

Q1,2,3,4	Quarter 1, Quarter 2, Quarter 3, Quarter 4
ppm	parts per million
t	a metric tonne
t/m^3	a metric tonne per cubic metre
tpa	a metric tonne per annum
tph	a metric tonne per hour
$t_{waste}:t_{ore}$	ratio of tonnes of waste to tonnes of ore
US$	a United States Dollar
US$bn	a billion United States Dollars
US$/dmtu	a United States Dollar per dry metric tonne unit
US$k	a thousand United States Dollars
US$/kW	a United States Dollar per thousand watts
US$m	a million United States Dollars
US$/t	United States dollars per tonne
US/t_{conc}$	United States dollars per tonne of concentrate
US/t_{dry}$	United States dollars per dry tonne
US/t_{mined}$	United States dollar per tonne mined
US/t_{milled}$	United States dollars per tonne milled
US/t_{ore}$	United States dollars per tonne of ore
US/t_{Phosrock}$	United States dollars per tonne of Phosrock
US/t_{Product}$	United States dollars per tonne of product
US/t_{waste}$	United States dollars per tonne of waste
US/t_{wet}$	United States dollar per wet tonne
V	volts
°	a degree
°C	a degree Celsius
‘	a minute
%	percentage
$\%Al_2O_3$	percentage Aluminium Oxide
%BPL	percentage Bone Phosphate of Lime
%CaO	percentage Calcium Oxide
$\%Fe_2O_3$	percentage iron oxide
$\%P_2O_5$	percentage of phosphorus pentoxide
%MgO	percentage of Magnesium oxide
%w/w	weight by weight, the proportion of a particular substance within a mixture, as measured by weight or mass.
µm	a micron or $1x10^{-6}$

SECTION C

AFLAO COMPETENT PERSON'S REPORT

Kropz plc
Competent Persons Report on
Aflao Phosphate Project
Project Number JB10057
November 2018

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This report has been prepared by Snowden Mining Industry Consultants Pty Ltd (Snowden) for Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited, pursuant to the Scope of Services contemplated and agreed between Snowden and Kropz plc.

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1 EXECUTIVE SUMMARY

1.1 Setting

First Gear Exploration Limited (FGE), a 50% + 1 share owned subsidiary of Kropz plc, (Kropz or the Company) is currently undertaking exploration work on the Aflao Phosphate Project located in the Ketu South District, in the south eastern part of Ghana, near the town of Aflao and the Togo border (the Project). The Project is situated approximately 180 km east of Accra.

Snowden Mining Industry Consultants (Snowden) has been requested by the Company to prepare a Competent Persons Report (CPR) of the Project tenement (131.93 km^2). Snowden understands that this CPR is to be used for an Admission of Kropz shares to trading on AIM.

The CPR has been prepared in accordance with the AIM Guidance Note for Mining, Oil and Gas Companies (June 2009) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves or JORC (2012) Reporting Code or the JORC Code.

Excluded from this CPR is Kropz SA (Pty) Limited and the associated Elandsfontein Project in South Africa.

Snowden has prepared a CPR, with Effective Date 31 July 2018 and Report Date 27 November 2018.

1.2 Independence

Snowden is an independent firm providing specialist mining industry consultancy services in the fields of geology, exploration, resource estimation, mining engineering, geotechnical engineering, risk assessment, mining information technology, and corporate services. The company, which operates from offices in Perth, Brisbane and Johannesburg (South Africa), has prepared independent technical reviews and CPRs on a variety of mineral commodities in 60 countries for more than 25 years.

The Snowden consultants involved in preparing this CPR are specialists in the fields of exploration geology, and mining and are internationally accredited by virtue of their membership of international professional associations.

As at the Effective Date of this CPR, Snowden and its employees are independent of the applicant, its directors, senior management and advisers and holds no interest in the securities of FGE or Kropz, which could be regarded as affecting the ability to give an independent unbiased opinion.

Snowden charges a fee for providing reports, including this CPR. These fees are negotiated and agreed with the client and are not contingent on the results or outcome of the CPR. Snowden is not a sole practitioner.

Snowden's Regional Manager – Europe, Middle East and Africa, Bill McKechnie is the Snowden consultant responsible for compilation of this report and overall project management. In compiling this report, Snowden has relied on the independent opinion of the CPs listed in Section 2.8.4 of this report that, by virtue of their education, experience and professional association, are considered CPs as defined in the JORC Code, and are members in good standing of appropriate professional institutions. CP certificates/basis of opinion are presented in Section 12.

1.3 Legal tenure/summary of assets

For the purposes of preparing this CPR Snowden has relied on the accuracy and completeness of the tenure documentation supplied to it by Kropz and a letter provided by the legal firm Bentsi-Enchill, Letsa & Ankomah of Accra Ghana, dated 26 October 2018 (Bentsi-Enchill, Letsa & Ankomah, 2018) and other related email correspondence. Snowden has made all reasonable enquiries to this effect.

Snowden has sighted a soft copy of the Prospecting Licence Agreement between the Government of the Republic of Ghana and FGE, pertaining to the Aflao Project (the Licence), which confirms that FGE is the 100% holder of the Licence with exclusive rights to prospect for phosphate minerals which are the subject of this report. The Licence was issued on 12 October 2018 for a period of three (3) years from date of issue (Table 1.1).

Kropz owns a 50% + 1 share of FGE, with Kropz International SARL (Kropz International) owning a 25% - 1 share of FGE.

Table 1.1 Summary table of assets

Asset	Holder	Interest (%)	Status	Licence expiry date	Application area (km^2)	Comments
Aflao Project	Kropz plc	50%+1 share of FGE	Prospecting Licence File No.: PL.4/15 Issued on 12 October 2018	11 October 2021 Renewable for two years subject to relinquishment provisions	131.93	MMI undertaken; sampling, surveys and mapping to be undertaken in FY2018. FGE holds 100% of the Prospecting Licence.

Source: Kropz, 2018b

The Company may, no less that ninety days prior to expiration of the Licence period, apply for an extension of the term of the Licence. If not in default, at that time, in the performance of any of its obligations under the Licence or any laws, the Company may, subject to the provisions of the law, be granted an extension for a period not exceeding two (2) years upon such terms and conditions as the parties may agree, subject to applicable laws. Prior to the expiration of the initial term the Company is required to surrender not less than half the number of blocks of the Licensed Area so long as a minimum of one hundred and twenty-five blocks remain subject to the Licence. (see Section 4.2).

If exploration is successful, FGE has first option to acquire a lease for the purpose of mining, and participate in a mining project in the Licensed Area subject to the relevant Act.

1.4 Geology and mineralisation

Phosphates have been mined since 1961 in the Keta basin in the southern parts of Togo by the State owned company Société Nouvelle des Phosphates du Togo (SNPT), near the capital city, Lomé. Following the commencement of mining it was considered that these deposits may extend westwards into Ghana and this was confirmed by preliminary investigations undertaken by the Geological Survey of Ghana (GSG) in the 1960's (Anan-Yorke, 1974).

The GSG sampled phosphate bearing calcareous horizons intersected in a series of water wells drilled in the Keta Basin, near the town of Aflao, Ketu South District. The assay results obtained from the water drill holes were considered to be low at the time, with intersections ranging from 5 m to 11 m in thickness and P_2O_5 % values ranging from 14 to 22 wt. %; however these results were not followed up and all data relating to the GSG work have been lost.

Adjacent deposits

In 2011, Mining Associates (Pty) Limited (MAL) and Sterling Mining Group undertook work on the Togo Phosphate Project or TPP, near Lake Togo (MAL, 2011); the TPP is approximately 30 km north east of the Project. The following TPP attributes have been reported:

- Overall deposit length of 35 km to 36 km
- Maximum width of 2.5 km
- Thickness of 4 m to 6 m
- Phosphate formation dips 1° south east
- Overburden of 7 m to 40 m
- Back-calculated density of 2.0 t/m^3

- Total polygonal resource estimate of 1.74 billion tonnes phosphate mineralisation, grading at 14.94% P_2O_5

MAL reports that the 2011 polygonal resource estimate is not compliant with the JORC Code.

1.5 Current and planned project exploration

The Project is an early stage exploration project. No Mineral Resource and/or Ore Reserve have been estimated for the Project.

FGE completed a Mobile Metal Ion (MMI™) geochemistry study in the target area and determined that phosphate and other indicator element anomalies are present. The anomalies detected were similar in nature to those observed from work undertaken in Togo, where phosphate bearing units are being mined by SNPT.

FGE intends to undertake a detailed exploration program with the intention of delineating a phosphate resource for sale as an independent product. Opportunities to blend this product will also be considered given that the SNPT product is known to contain medium cadmium and low silica levels.

According to the proposed FGE shareholders agreement, all work up to the completion of the Scoping Study, will be proportionately funded by Kropz International and Kropz plc in the ratios of 25/75 and 50/75, respectively. Thereafter all parties will fund project development proportionate to shareholding. Table 1.2 sets out a summary of FGE's planned three year exploration programme and budgets.

Table 1.2 Planned exploration programme and annual budgets

Planned exploration programme details	Annual budgets in US$ (unescalated, no contingency)		
	FY2018	FY2019	FY2020
MMI™ sampling; geophysical survey; geological mapping; permitting; Scoping study; salaries, wages, legal, accounting and travel	400,000		
Drilling; sample analysis; surveying; bench and pilot scale testwork; permitting; Pre-feasibility study; salaries, wages, legal, accounting and travel		900,000	
Drilling; sample analysis; surveying, pilot scale testwork; permitting; Feasibility study; salaries, wages, legal, accounting and travel			1,220,000

In Snowden's opinion, based on observations from its site visit, and discussions with FGE's exploration team, the specified amounts are considered sufficient to achieve the outlined programme of works. Snowden however recommends that a contingency of 10% of the total estimated budget be included in the proposed budget to account for unplanned eventualities.

The Licence area is considered to be prospective for phosphate mineralisation similar to that found in Togo.

1.6 Project conclusions and recommendations

Snowden acknowledges that the information available to FGE is limited; however on review of the programme logic, discussions with FGE team members and review of historical information and work undertaken to date, Snowden is of the opinion that the logic applied is sound and the risks have been adequately considered.

If exploration drilling confirms the continuation of potentially economic phosphate bearing deposits into Ghana, FGE's exploration work will be directed towards assessing the potential for development of a phosphate mining operation with a similar production profile, processing methodology and product specification (Table 1.3) to the Hahotoé-Kpogamé-Kpémé (HKK) operation in Togo.

The HKK operation in Togo produces approximately 1.5 million tonnes per annum of phosphate rock, with an in-situ grade of between 10 and 25% P_2O_5 (Van Kauwenbergh, S.J.,2006) – the ore is easily exploited using shovels and bucket wheels, due to the unconsolidated nature of the deposit. HKK processing includes washing, concentrating and drying prior to shipping, with no flotation required (Van Kauwenbergh, S.J.,2006).

Table 1.3 Characteristics of SNPT's phosphate product

Impurity	Practical levels for phosphoric acid production	Target levels	SNPT
P_2O_5	28-40% P_2O_5	32% P_2O_5	36.7%
Al_2O_3	0.2–2.0% Al_2O_3	Fe_2O_3+ Al_2O_3 <2–3%	1%
FeO	0.1–2.0% Fe_2O_3	Fe_2O_3+ Al_2O_3 <2–3%	1%
MgO	0.2–2.0% MgO	<1.5% preferred, <1% ideal	0.1%
MER ratio	0.05–0.12 (AL_2O_3+Fe_2O_3+Mgo)/ P_2O_5	<0.1 preferred	0.06
CaO/P_2O_5 ratio	1.30–1.65 CaO:P_2O_5	1.32–1.55:1 preferred, <1.6:1 generally accepted	1.4
Fluorine	2–4% F	<4%	3.8%
Silica	1–10% SiO_2	<5% preferred	4.5%
Chlorine	0.00–0.05% Cl	<300 ppm, preferred, <500 ppm acceptable	0.1%
Organics	0.1–1.5% C	<1% preferred, <0.2% ideal	0.02%
Cadmium	up to 250 ppm Cd	<5 ppm is premium	53ppm

Source: SNPT, undated

Snowden recommends that social and environmental base line studies be commenced as soon as the exploration project is initiated in order to assess likely resettlement and restitution liabilities. As part of this programme, community discussions should be entered in to as a number of interment sites (Christian and Moslem) were noted during Snowden's site visit.

Sourcing of stores and material from Togo should be considered due to the proximity of Lomé to the Project area, however time delays at the border will need to be considered against the time taken to source locally or/ and transport material from Accra.

When the drilling program commences, a similar independent QAQC program should be initiated as was undertaken for the initial exploration undertaken by Kropz at Elandsfontein Mine.

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Tables

2 INTRODUCTION

2.1 Terms of reference and purpose of the Competent Persons Report (CPR)

First Gear Exploration (Pty) Ltd (FGE), a 50% + 1 share owned subsidiary of Kropz plc, (Kropz or the Company) is currently undertaking exploration work on the Aflao Phosphate Project located in the Ketu South District, in the south eastern part of Ghana, near the town of Aflao and the Togo border (the Project). The Project is approximately 180 km east of Accra.

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The CPR has been prepared in accordance with the AIM Guidance Note for Mining, Oil and Gas Companies (June 2009) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves or JORC (2012) Reporting Code or the JORC Code.

This CPR is intended for use by Kropz and its advisors subject to the terms and conditions of its contracts with the Consultants and relevant securities legislation. This CPR is to be included in the Kropz Admission Document.

Snowden has relied on the accuracy and completeness of the technical documentation supplied to it by Kropz and has made all reasonable enquiries into the material aspects of the Project, and makes no warranty or representation as the accuracy or completeness of the information provided. Furthermore, Snowden accepts no responsibility for the information or statements, opinions, or matters expressed or implied arising out of, contained in, or derived from information contained in this report, unless specifically disclosed by Snowden.

The quality of information, conclusions and estimates contained herein are consistent with the level of effort involved in the Consultant's services, based on

- Information available at the time of preparation;
- Data supplied by external sources; and
- The assumptions, conditions, and qualifications set forth in this CPR.

Snowden did not undertake any independent enquiries or audits to verify that the assumptions are correct and gives no representation that they are correct. Snowden has not carried out any type of audit of Kropz's records to verify that all material documentation has been provided.

Snowden has endeavoured, by making reasonable enquiry of Kropz and its agents to ensure that all material information in their possession has been fully disclosed to Snowden. Kropz has agreed to indemnify Snowden from any liability arising from Snowden's reliance upon information provided or not provided to it.

Excluded from this CPR is Kropz SA (Pty) Limited and the associated Elandsfontein Project in South Africa.

2.2 Sources of information

Snowden has reviewed the following public and/or technical reports during the preparation of this CPR:

- Anan-Yorke, K. 1974. Phosphate Evaluation Project, Director of the Geological Survey of Ghana Report for 1966-69, pp. 15-16.
- FDC. 2006. Fertiliser Raw Material Resources of Africa, presented Africa Fertiliser Summit, 9-13 June 2006, Abuja, Nigeria, pp 217-222.
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Other documents reviewed include various Kropz internal reports and other sources as referenced in Section 9 of this CPR.

This CPR uses the definitions, classifications system and guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition (the JORC Code).

2.3 Kropz plc (Kropz)

Kropz is an exploration company, which is currently developing the Elandsfontein Mine on the West Coast of South Africa. The Company plans to become a vertically integrated fertilizer manufacturer, producing plant nutrients for the sub-Saharan African agricultural industry.

Kropz was incorporated on 10 January 2018 with a registered office at Suite 4F Easistore Building, North Farm Estate, Tunbridge Wells, United Kingdom, TN2 3EY.

2.4 First Gear Exploration Limited (FGE)

FGE is a private company, incorporated under the Companies Act, 1963 (Act 179) on 24 February 2017 (company registration: CS066302017), with address No. 9 and 11 Adonai Lane, Adjiringanor, East Legon, Accra, Ghana, authorized by its regulations to explore, develop and exploit phosphate.

Kropz owns a 50% + 1 share of FGE, with Kropz International SARL (Kropz International) owning a 25% - 1 share of FGE.

2.5 Site visit

The JORC Code recommends a site visit to accompany a CPR, in order to fully inform investors, particularly if the report will be in the public domain.

Mark Burnett (Principal Geologist), a Snowden employee as at the Effective Date of this CPR, undertook a site visit to the Project over the period 26 February 2018 to 1 March 2018.

Mr Burnett has 25 years' experience in the exploration and mining sector and is considered a Competent Person (CP) in terms of the JORC Code.

2.6 Report Date and currency

Snowden has prepared a CPR, with Effective Date 31 July 2018 and Report Date 27 November 2018.

The opinions expressed and conclusions drawn with respect to this CPR are appropriate at the Effective Date of this report. No Mineral Resource has been estimated for the Project.

No material changes have occurred between the Report Date and Effective Date of the CPR.

2.7 Units of measure

The metric system has been used throughout this CPR; tonnes are metric of 1,000 kilograms (kg), or 2,204.6 pound (lb); all currency is in US dollars (US$) unless otherwise stated.

2.8 Snowden

2.8.1 Legal matters

Snowden has not been engaged to comment on any legal matters. Snowden is not qualified to make legal representations in regards to the ownership and legal standing of the mineral tenements and applications that are the subject of this CPR. Snowden has not attempted to confirm the legal status of the Project with respect to joint venture agreements, local heritage or potential environmental or land access restrictions.

Snowden has relied on the accuracy and completeness of the tenure documentation supplied to it by Kropz and a letter provided by the legal firm Bentsi-Enchill, Letsa & Ankomah of Accra Ghana, dated 26 October 2018 (Bentsi-Enchill, Letsa & Ankomah, 2018). Snowden has made all reasonable enquiries to this effect.

2.8.2 Exploration results

Mark Burnett (Competent Person or CP) has signed off on the planned exploration programme; and regional, local and Project geology. Bill McKechnie (Regional Manager, EMEA for Snowden), has signed off as CP, for Section 7.5: FGE Orientation sampling. No Mineral Resource and/or Ore Reserve have been estimated for the Project.

2.8.3 Independence

Snowden is an independent firm providing specialist mining industry consultancy services in the fields of geology, exploration, resource estimation, mining engineering, geotechnical engineering, risk assessment, mining information technology, and corporate services. The company, which operates from offices in Perth, Brisbane and Johannesburg (South Africa), has prepared independent technical reviews and CPRs on a variety of mineral commodities in 60 countries for more than 25 years.

The Snowden consultants involved in preparing this technical report are specialists in the fields of exploration, geology, and mining and are internationally accredited by virtue of their membership of international professional associations.

At the Effective Date of this CPR, Snowden and its employees are independent of the applicant, its directors, senior management and advisers and hold no interest in the securities of FGE or Kropz, which could be regarded as affecting the ability to give an independent unbiased opinion. Snowden charges a fee for providing reports, including this CPR. These fees are negotiated and agreed with the client and are not contingent on the results or outcome of the CPR. Snowden is not a sole practitioner. Except for the fees referred to above, neither Snowden, nor any of its directors, employees or related entities, receive any pecuniary benefit or other benefit, directly or indirectly, for or in connection with the provision of the report.

Bill McKechnie is the Snowden consultant responsible for compilation of this report and overall project management. In compiling this report, Snowden has relied on the independent opinion of the CPs listed in Section 2.8.4 of this report that, by virtue of their education, experience and professional association, are considered CPs as defined in the JORC Code, and are members in good standing of appropriate professional institutions. CP certificates/basis of opinion are presented in Section 12.

2.8.4 Qualifications and experience of Consultants

The Snowden persons responsible for the final preparation of this report are Mark Burnett (Pr.Sci.Nat., FSAIMM, FGSSA, FSEG), Principal Consultant. Mr Burnett is a full-time employee of Snowden as at the Effective Date of this CPR and is responsible for sections 1 to 3, and 5 to 8 of this CPR, except Section 7.5 of the CPR. Mark Burnett's CV summary is reported in Section 2.5 and Section 12.

Bill McKechnie (FGSSA, MSAIMM) is responsible for Section 7.5: FGE Orientation sampling. In addition, Bill McKechnie undertook a peer review of the report to ensure compliance with the guidelines and/or minimum requirements of the JORC Code.

3 GHANA

3.1 Geographical setting

The Republic of Ghana is situated in West Africa, immediately north of the equator and on the Greenwich meridian. Ghana is bordered to the west by Côte d'Ivoire (Ivory Coast), to the north and northwest by Burkina Faso, to the east by Togo and to the south by the Atlantic Ocean (Figure 3.1). Formerly a British colony known as the Gold Coast, Ghana was the first nation in sub-Saharan Africa to achieve independence in 1957.

Figure 3.1 Ghana locality map

Source: United Nations, 2005

Ghana covers a total area of 238,533 km^2. Its capital city is Accra, while other major cities include Kumasi, Tema, Tamale and Sekondi-Takoradi. Ghana experiences a tropical climate, with conditions warm and comparatively dry along the southeast coast, hot and humid in the southwest and hot and dry in the north. The terrain generally comprises mostly low plains with dissected plateaux in the south and central areas.

3.2 Demographics

Ghana's population is estimated at approximately 27 million (2016 estimate). English is the official language of the country and is used in schools, but several Ghanaian languages, in addition to French, are also spoken. Christianity has been adopted by approximately 71% of the population, Islam by about 17%, with traditional religions adhered to by 5% of the population. Other religions make up the total.

3.3 Political and financial status

Following independence in 1957, Ghana has seen four republics with intermittent military rule. The current president is Nana Addo Dankwa Akufo-Addo, who was elected on 7 December 2016. Ghana has a market-based economy with relatively few policy barriers to trade and investment in comparison with other countries in the region. Ghana reports roughly twice the per capita output of the poorer countries of West Africa. Ghana's gross domestic product (GDP) amounted to US$46.6 billion in 2017, with the services sector accounting for about half of GDP. Ghana's industries are dominated by mining, timber processing, light manufacturing, fishing, aluminium production and tourism. Gold, timber and cocoa production are major sources of foreign exchange.

One of the largest economic hurdles facing Ghana is the lack of consistent electricity. Ghana has received an extended credit facility with the International Monetary Fund (IMF) to help it address its growing economic crisis.

Ghana's fiscal consolidation programme is broadly on track. Ghana aims to narrow its government debt further; with this debt now estimated at 62% of GDP (2014: 72%). Nevertheless, in July 2016, Ghana revised its budget to reflect the expected shortfall in domestic revenue as a result of unanticipated technical problems in the Jubilee oil field and weaker than expected oil prices.

Ghana is well-endowed with natural resources, which include gold, timber, industrial diamonds, bauxite, manganese and petroleum while agricultural productions include cocoa, rubber, coconuts, coffee, pineapples, cashews, pepper and other food crops.

3.4 Mining industry

Gold and petroleum represent Ghana's major export commodities. Ghana is the world's tenth and Africa's second largest producer of gold. According to the Ghana Revenue Authority (GRA), gold accounts for approximately 97% of all mineral receipts. According to the Minerals Commission (MinCom), the regulatory body for all mining in the country, total gold output in Ghana increased to 3.8 million ounces (Moz) in 2016, compared with 3.6 Moz in 2015. This 5% increase in gold production was as a result of increased purchases of gold from small-scale producers (20% increase year on year), which offset the reduction in gold production from large-scale mines. In 2016, large-scale producers represented approximately 68% of Ghanaian gold production.

According to GRA, the mining and quarrying sector in 2016 resumed its position as the leading source of direct domestic revenue after being supplanted by the financial and insurance sector in 2015. Total fiscal receipts attributable to the mining and quarrying sector increased by 22%, from approximately US$320 million in 2015, to US$392 million in 2016. The contribution of the mining sector constitutes about 16% of direct domestic revenue.

The Bank of Ghana (BoG) indicates that the minerals sector continues to be the leading export earner and improved its share in gross merchandise exports from 32% in 2015 to 46% in 2016 whereas cocoa and crude oil contributed 22% and 13% respectively.

The expansion of Ghana's nascent oil industry has boosted economic growth, but the recent medium term decrease in oil prices has reduced Ghana's oil revenue significantly. Production at the Jubilee oil field began in mid-December 2010 and currently produces less than 100,000 barrels per day (planned steady state of 120,000 barrels per day). The country's first gas processing plant at Atubao is also producing natural gas from the Jubilee field, providing power to several of Ghana's thermal power plants.

In January 2017, the BoG's Monetary Policy Committee reported that for the first time since 2011, the provisional balance of payments in 2016 recorded a surplus. This largely reflected an improvement in the trade balance driven by a rise in gold export receipts and a fall in oil import prices.'

At the end of 2016 the total workforce employed by mining companies was 11,628 as compared to 9,939 for 2015, indicating an increase of 16%, of which less than 2% are expatriates.

Total investments in the mining sector within the past 10 years have exceeded US$10 billion. These investments came from companies engaged in gold production, exploration and support services.

3.5 Socio-economy of the Volta region

The Aflao Phosphate Project is located within the Volta region. Eight major ethnic groups are represented in the Volta region and approximately 62 sub-groups speak 56 dialects. The classification of ethnic groups is based on that of the Bureau of Ghana Languages. The main ethnic group is the Ewe (69%), followed by the Guan (9%), the Akan (9%) and the Gurma (7%). The Guan is made up of over 18 sub-groups while the Akan comprises over 19 sub-groups. The Gurma has about 8 sub-groups and accounts for about 6.5% of the region's population.

The Volta region accounts for 9% of the country's population and the majority of its population (73%) lives in rural areas. The most urbanized parts of the region are in the south; these include Keta, the most urbanized district with more than half (53%) of the district's population living in urban areas. The Ketu district is relatively urbanized (35% of population living in urban areas), mainly as a result of the land port of Aflao.

4 MINERAL RIGHTS

4.1 Legislation

The mining industry in Ghana is overseen by the Ministry of Lands and Natural Resources and regulated by MinCom under the *Minerals and Mining Act, 2006 (Act 703)* and *Minerals Commission Act 1993 (Act 450)*.

The Minerals and Mining Act grants mineral rights, specifies conditions for dealing with mineral rights, change of control of mining companies and reporting requirements of companies involved in reconnaissance, exploration and mining. There are separate laws governing environmental obligations and taxation.

Both Ghana's Constitution and its Minerals and Mining Law states that all minerals are the property of the country and the President holds these in trust for the people. There are seven types of mineral rights granted under the Minerals and Mining Act, 2006 9Act 703):

- **Reconnaissance Licence**, which provides for the right to carry on reconnaissance for a specific mineral (or commodity) by geochemical or photo-geological survey or other remote sensing techniques, but does not allow drilling, excavation or other sub-surface techniques
- **Prospecting Licence**, which provides for the exclusive right to carry on prospecting and exploration for specific minerals to determine their extent and economic value, including the drilling of boreholes and the digging of excavations
- **Mining Lease**, which provides for the extraction and processing of minerals
- **Restricted Prospecting Licence**, which provides the right to prospect for industrial minerals such as basalt, clay, granite, gravel, gypsum, laterite, limestone, marble, rock, sand, sandstone, slate, talc and salt
- **Restricted Reconnaissance Licence**, which provides the right to search for industrial minerals by reconnaissance
- **Restricted Mining Lease**, which provides the right to mine for industrial minerals
- **Small-Scale Mining Licence** which authorizes the holder to win, mine and produce minerals in respect of an area not exceeding 25 acres (10 hectares).

A licence is issued by the Minister acting on the recommendation of the MinCom. The granting of a mining lease is required to be ratified by Ghana's Parliament. Future gold production will be subject to a government statutory gross royalty of 3% to 12% depending on the operating ratio.

The Ghanaian Government is entitled to a free carried 10% interest in any Mining Licence in the country, and has no obligation to contribute to development or operating expenses and has the right to purchase up to a further 20% interest upon such terms as may be agreed where minerals are discovered in commercial quantities.

4.2 Project mineral tenure

For the purposes of this CPR Snowden has relied on the accuracy and completeness of the tenure documentation supplied to it by Kropz and an independent legal letter provided by the legal firm, Bentsi-Enchill Letsa & Ankomah, based in Accra, Ghana, dated 26 October 2018 (Bentsi-Enchill Letsa & Ankomah, 2018). Snowden has made all reasonable enquiries to this effect. Snowden makes no other assessment or assertion as to the legal title of the tenements and is not qualified to do so.

Snowden has sighted a soft copy of the Prospecting Licence Agreement between the Government of the Republic of Ghana and FGE, pertaining to the Aflao Project (the Licence), which confirms that FGE is the 100% holder of the Licence with exclusive rights to prospect for phosphate minerals which are the subject of this report. The Licence was issued on 12 October 2018 for a period of three (3) years from date of issue (Table 4.1).

Table 4.1 Aflao Project mineral tenure status

Project	Holder	Interest (%)	Status	Licence expiry date	Application area (km^2)
Aflao Project	Kropz plc	50%+1 share of FGE	Prospecting Licence File No.: PL.4/15 FGE holds 100%	11 October 2021 Renewable for two years subject to relinquishment provisions	131.93

Source: Kropz, 2018b

FGE may, no less that ninety days prior to expiration of the Licence period, apply for an extension of the term of the Licence. If not in default at that time in the performance of any of its obligations under the Licence or any laws, the Company may be granted an extension for a period not exceeding two (2) years upon such terms and conditions as the parties may agree, subject to applicable laws. Prior to the expiration of the initial term the Company is required to surrender not less than half the number of blocks of the Licensed Area so long as a minimum of one hundred and twenty-five blocks remain subject to the licence.

If exploration is successful, FGE has first option to acquire a lease for the purpose of mining, and participate in a mining project in the Licensed Area subject to the relevant Act.

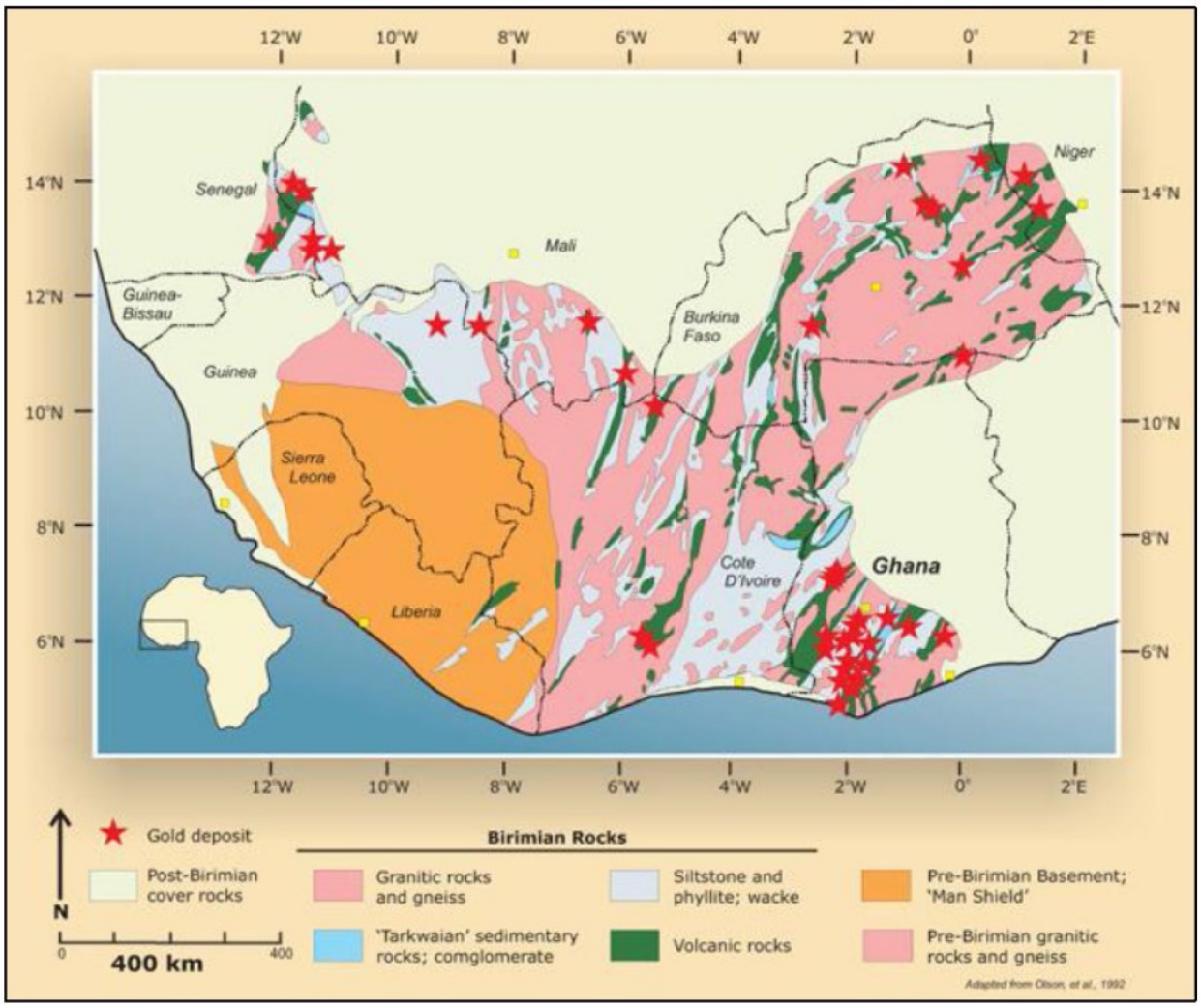
5 GEOLOGY

5.1 Regional geology

5.1.1 West African regional geology

The geology of West Africa comprises of a number of geological terranes with a complex structural history. Extending across a number of West African nations, the West African Graton has an Archean core surrounded by younger Precambrian and Phanerozoic greenstone sequences (Figure 5.1). The southern part of this Craton, the Man Shield, has both Archean and Proterozoic portions. The oldest Precambrian rocks are older than 2,500 Ma and this Archean core extends across western Côte D'Ivoire through Liberia, Sierra Leone and into southern Guinea. The highly metamorphosed mafic to felsic gneissic units represent the oldest basement. A continental-scale feature is the north-south striking Sassandra Fault, which separates the Archean units (to the west) from the younger Proterozoic sequences (to the east).

Figure 5.1 Simplified geology of West Africa



Source: Modified after the BRGM SAG Afrique map (Milesi et al., 2004)

The Birimian Supergroup throughout the region comprises relatively narrow (20 km to 60 km wide) volcanic belts that extend along strike for hundreds of kilometres, separated by wider basins of mainly marine clastic sediments. Gold mineralisation, particularly in Ghana, is generally concentrated in narrow

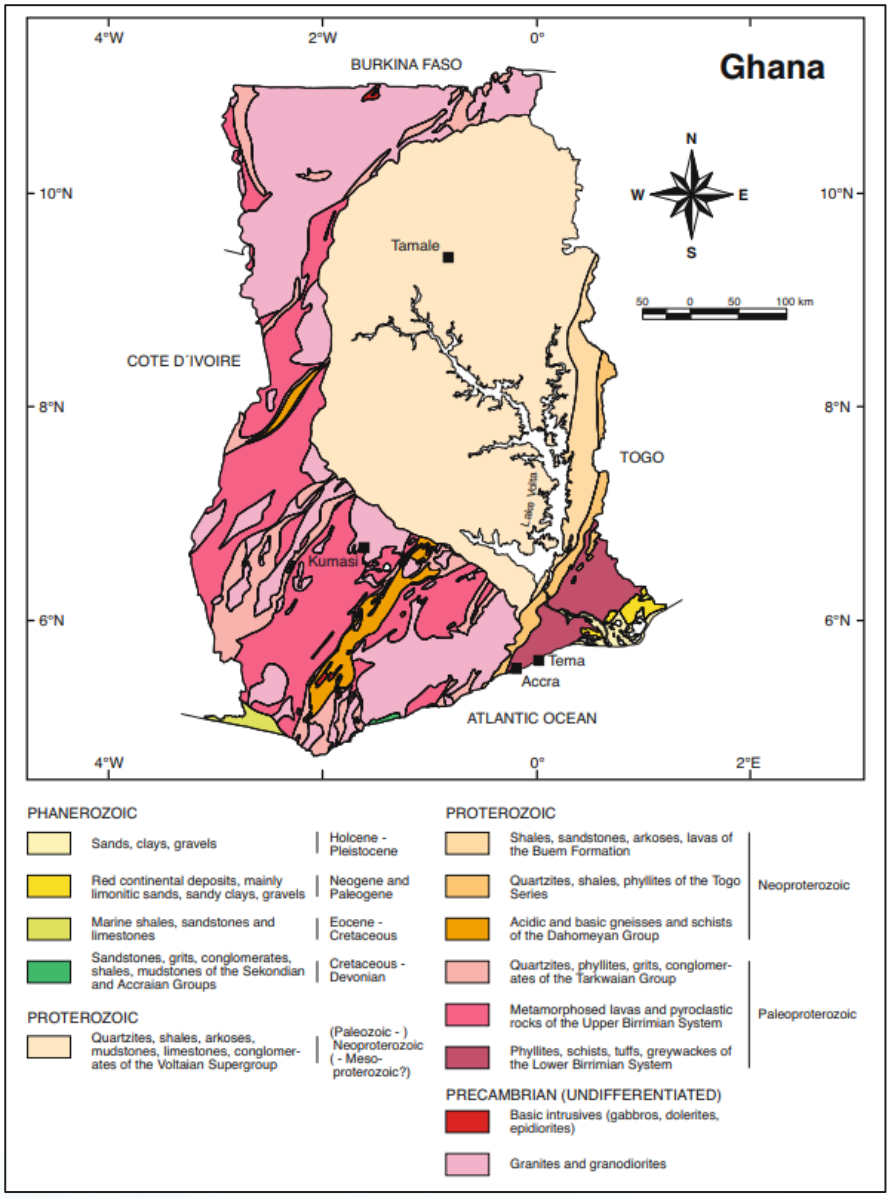
structural corridors of 10 km to 15 km width in the transition zone between the volcanic belts and the sedimentary basins. However, major gold deposits occur within the intervening sedimentary basins.

The Birimian Supergroup has been extensively deformed and metamorphosed up to amphibolite facies grade. This deformation resulted from the Eburnean orogenic event, which peaked at approximately 2,100 Ma. The latter phases of this event correspond to widespread granitoid intrusions primarily within the highly deformed sedimentary basins. This type of metamorphism is characteristic of greenstone terrain, including the late stage granitic intrusions.

5.1.2 Ghana geology

Geologically, Ghana can be subdivided into three different major units: Paleo-proterozoic rocks predominate in the southwestern and north-western part of the country, whereas gneisses and supracrustal rocks of mostly Neo-proterozoic age occur in the southeast and east of the country. Flat-lying shelf/marine sediments of very late Precambrian to Paleozoic age are found in the central and north-eastern part of the country. Mostly Cenozoic sediments occur in a small strip along the south eastern coast.

Figure 5.2 Ghana Geology



Source: Schluter, 2006; Ghana. In: Geological Atlas of Africa. Springer, Berlin, Heidelberg

The geology of Ghana is dominated by Birimian and Tarkwaian Paleo-proterozoic supracrustal rocks. The older Birimian successions comprise sedimentary and volcaniclastic rocks separated into five northeast-trending volcanic belts. Most gold deposits are located within or about the margins of the volcanic belts, particularly the Ashanti and Sefwi-Bibiani Belts in the south of Ghana. The younger Tarkwaian units comprise coarse clastic sedimentary rocks of fluvio-deltaic origin and host paleo-placer gold mineralisation in the Ashanti Belt. Birimian and Tarkwaian rocks were deformed and metamorphosed under greenschist to amphibolite facies conditions during the Eburnean tectono-thermal event.

Two major suites of granites occur in the region: the Dixcove (or belt-type) granitoids, within the volcanic belts and the Cape Coast (or basin-type) granitoids that intrude the sedimentary basins.

The Volta Basin contains a package of sedimentary rocks located in the central-eastern part of Ghana, which cover the Paleo-proterozoic greenstone belts.

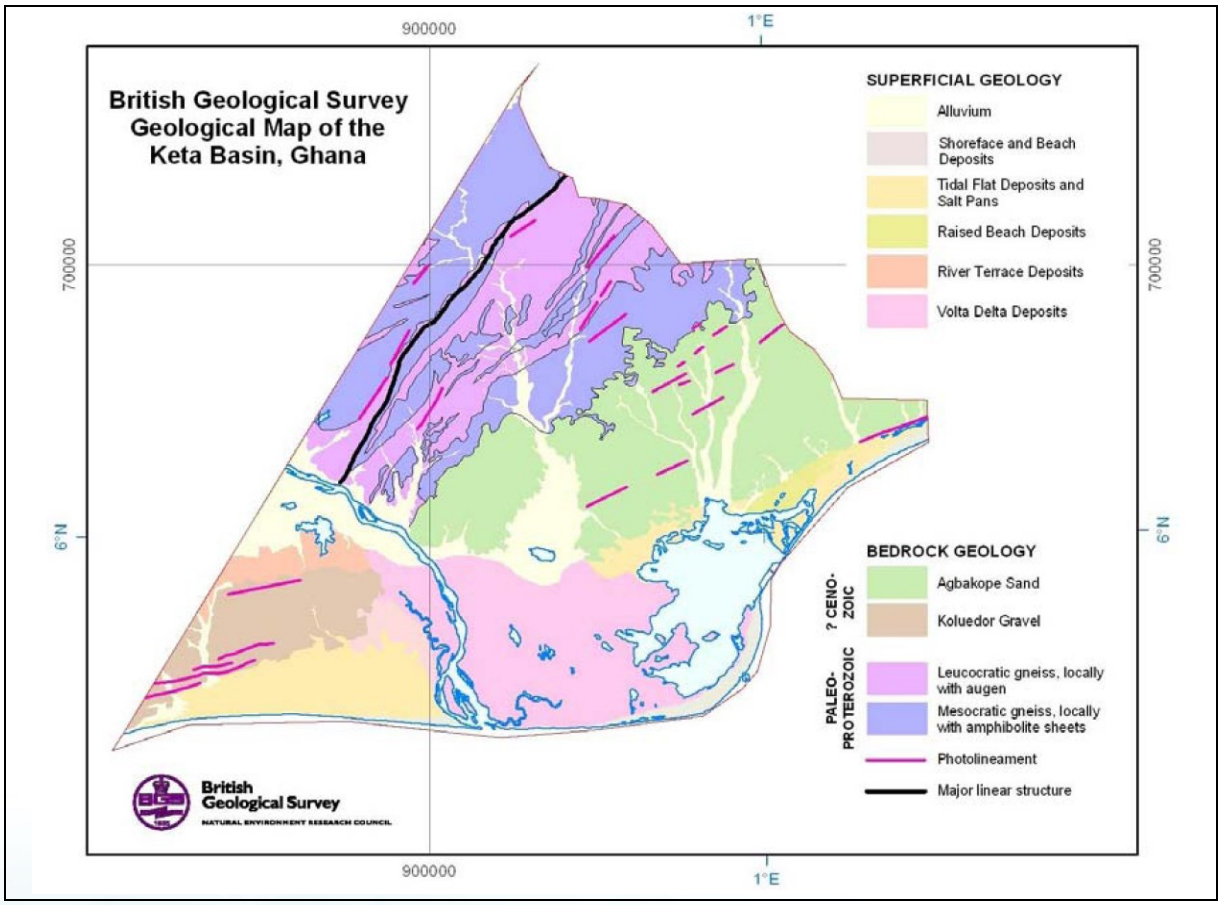
Phanerozoic rock units occur at several places along the coast and include the Early or Middle Devonian Accraian Series, the Middle Devonian to Lower Cretaceous Sekondian Series, the Upper Jurassic to Lower Cretaceous Amisian Group, the Upper Cretaceous Apollonian Group and Tertiary to Recent unconsolidated, marine, lagoonal and fluvial deposits (Schlüter, 2006).

Off shore exploration for oil and gas has been undertaken in the Keta basin, one of a series of Mesozoic and Tertiary age sedimentary basins found in the Gulf of Guinea. The onshore portion of the Keta basin in the south eastern part of the country is also believed to host sedimentary beds that may contain economically viable phosphate deposits.

5.1.3 Keta Basin regional geology

The most recent work undertaken on the Keta Basin was by the British Geological Survey (BGS) in 2009 (Jordan et. al., 2009).

Figure 5.3 Geological map of the Keta Basin, Ghana



Source: Jordan et. al., 2009

The Keta Basin, also referred to as the Eastern or the Keta Togo Benin (KTB) Basin, is a modified, pull-apart basin structurally bounded by two north east – south west trending fault systems, the Chain Fracture Zone in the east and the Romanche Fracture Zone in the west. It covers an area of approximately 33,900 km^2, of which 1,900 km^2 are located onshore (Figure 5.3).

The strata comprising the onshore part of the Keta Basin represents the attenuated, northern margin of a larger and deeper depositional basin that, in part, reflects differential subsidence related to the Mesozoic break-up of Gondwana (Jordan *et. al*., 2009). Limited geological mapping and data exists for this area.

The Ghanaian onshore portion of the Keta Basin lies at the extreme south east corner of the country, adjoining Togo. The rocks of the southern half of the Keta Basin comprise Cenozoic and Quaternary sediments dipping at a shallow angle to the south east overlying Paleo-proterozoic rocks of the Birimian Supergroup (Dahomeyan Complex) that occur in the northern part of the Basin (Figure 5.3).

5.2 Local geology

This Project area represents the westernmost extremity of the coastal sediments that extend westward from the Niger delta into eastern Ghana. Surface exposures comprise mainly Cenozoic and Quaternary sands, gravels, siltstones, shales, and clays with layers of fossiliferous limestone that are expected to overlie the phosphate bearing horizons. Near the surface, these sediments have a gentle dip of approximately 2° towards the south east. Jordan et. al., (2009) describe some informally named stratigraphical units for the sediments occurring in the coastal areas, (Table 5.1).

Table 5.1 Informal stratigraphy for the Project area

Age	Keta basin in local area
Quaternary (Holocene)	Alluvium Volta Delta Deposits Tidal Flat Deposits & Salt Pans Shoreface & Beach Deposits Raised Tidal Flat Deposits Raised Beach Deposits River Terrace Deposits
Cenozoic to Pleistocene	Agbakope Sand Koluedor Gravel
Cenozoic	Laterite and cemented gravels Possible phosphate bearing horizons (to be confirmed)

Source: Adapted from Jordan et. al., 2009

It can be expected that the descriptions of the nature and potential characteristics of phosphate bearing horizons derived from descriptions of the Société Nouvelle des Phosphates du Togo (SNPT) mining areas in Togo (section 6) may be applicable in this area but this needs to be confirmed during the planned exploration phase.

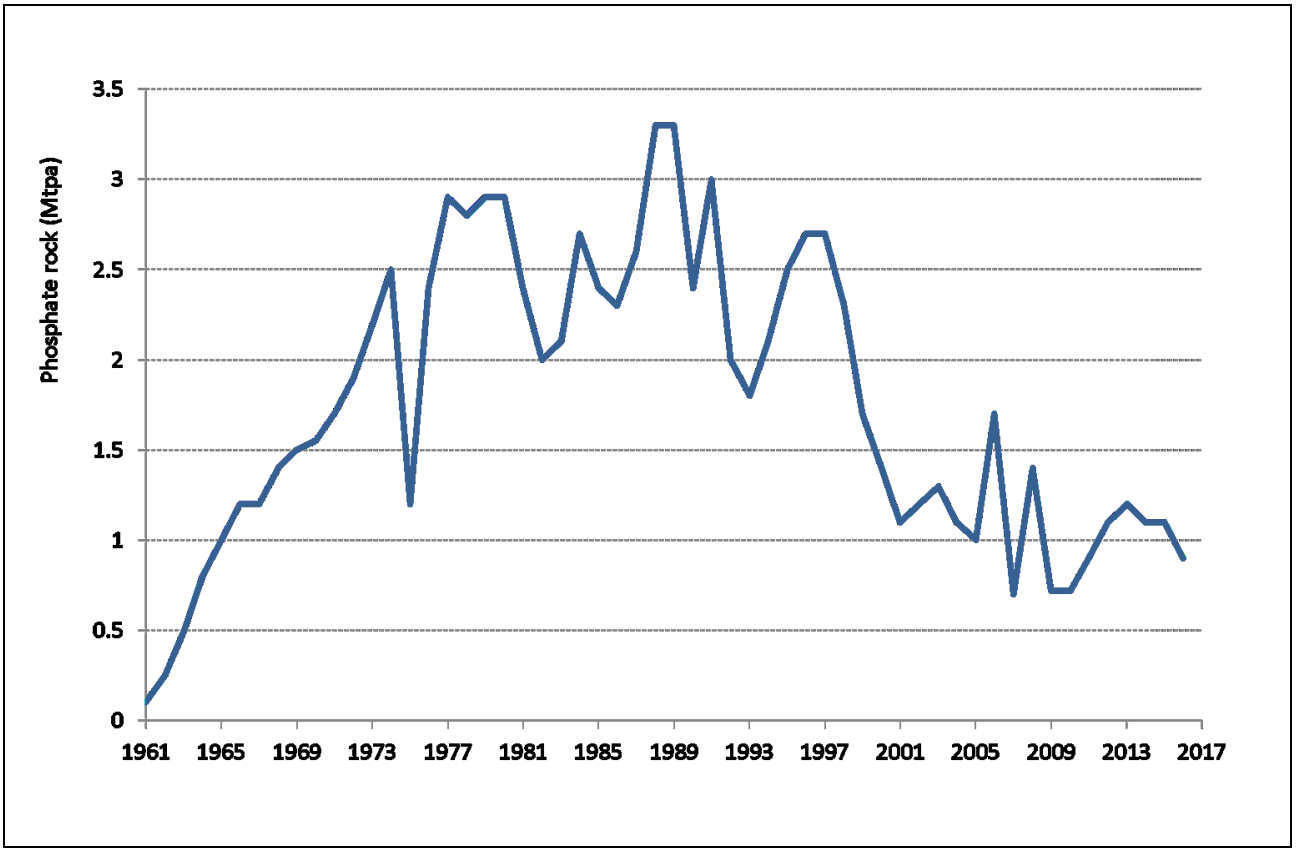
6 PHOSPHATE MINERALISATION

Phosphates have been mined since 1961 in the Keta basin in the southern parts of Togo by the State-owned company SNPT, near the capital city, Lomé (Figure 6.2). Following the commencement of mining it was considered that these deposits may extend westwards into Ghana and this was confirmed by preliminary investigations undertaken by the Geological Survey of Ghana (GSG) in the 1960's (Anan-Yorke, 1974).

6.1 Togo phosphate deposits

The mineral industry of Togo is dominated by the government-owned, phosphate producer, SNPT. Phosphate mining started in 1961. The export of phosphates remains Togo's principal source of foreign earnings but production during the life of the mine has been erratic (Figure 6.1). Erratic production has been attributed to a lack of capital investment, poor management, inadequate blending facilities and protracted strikes.

Figure 6.1 Phosphate production from SNPT's HKK mine (Togo)



Source: Snowden, 2018; USGS, 2018

The sale of phosphates by SNPT to EU and other Western countries has reduced considerably, partially due to technical problems (Palut, 2000), but also as a result of environmental concerns related to the relatively high cadmium (Cd) content in the phosphate rock concentrate.

Recently, SNPT recapitalised its Hahotoé-Kpogamé-Kpémé (HKK) phosphate mining operations, situated north east of Lomé, in order to allow it to achieve a production rate of 3 Mtpa of P_2O_5.

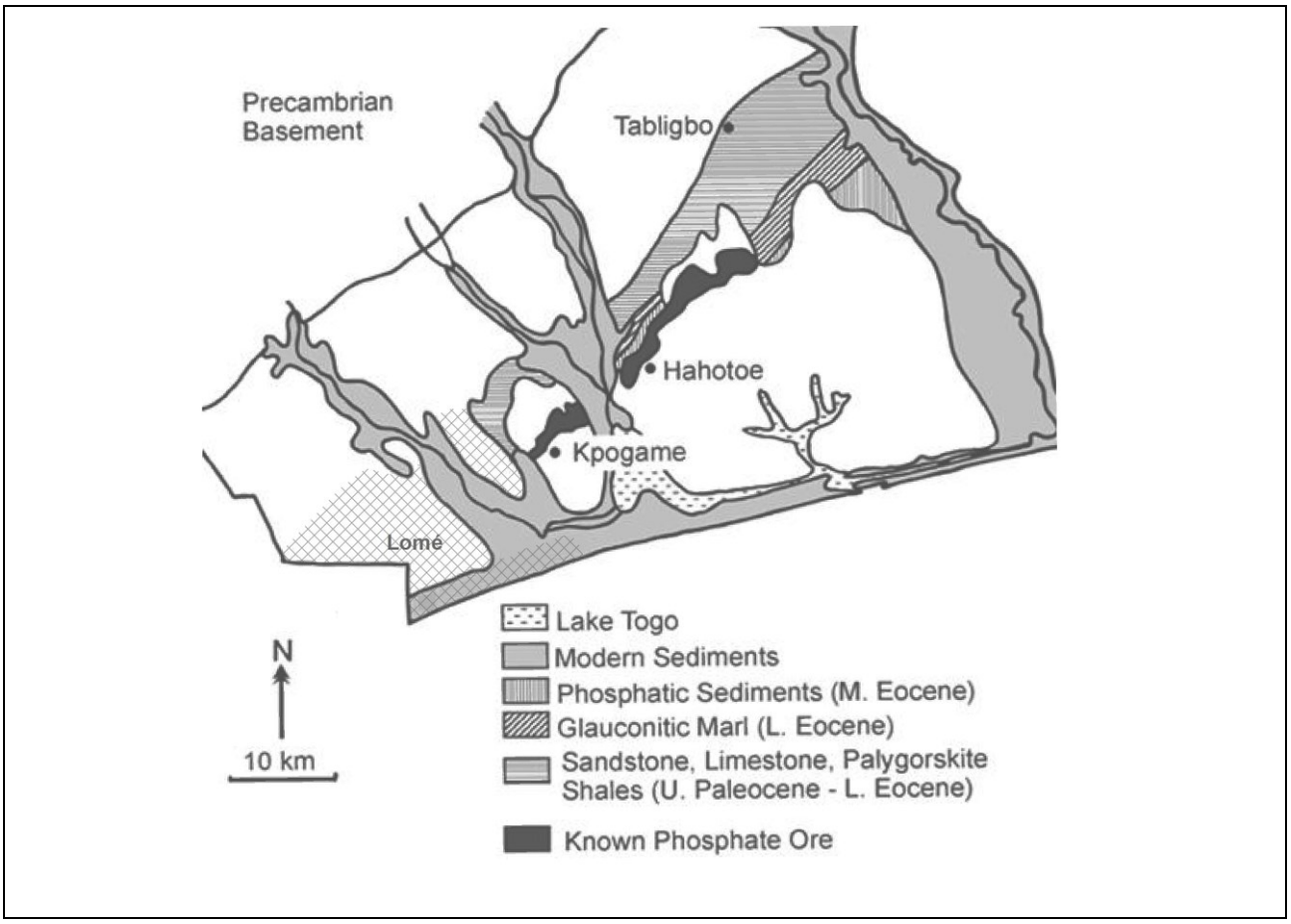
The Eocene age HKK phosphate deposits (Figure 6.2) are located in the southern part of Togo, approximately 25 km by rail from Képmé and 35 km northeast of Lomé (MacDonald and Bovard, 2011). The phosphate bearing horizon is contained within a series of shale horizons associated with minor limestones and sandstones. This sequence is known as the Serie de la Lama (de la Lama). The beds dip at one to two degrees toward the southeast and thicken in the same direction.

The current HKK operations exploit an unconsolidated sedimentary deposit that has been partially affected by post-depositional leaching (decarbonation), which resulted in the creation of an enriched zone (the Mobile layer). This zone has traditionally been regarded as being a separate geological unit, overlying the Carbonate layer, but work by Johnson *et al*, (2000), demonstrated that the two layers are the same geological unit.

Exploration drilling has been carried out in the carbonate layer and although this unit is not currently exploited by SNPT, it represents the long-term future phosphate resource base of SNPT's operations.

The city of Lomé now extends almost to the edge of the HKK mining area and this encroachment has effectively sterilised any south-western extensions to the existing mining areas between Kpogame and the Ghanaian border.

Figure 6.2 Geology of the Togo coastal basin



Source: Source: Van Straaten, 2002

The Togo phosphates comprise a sedimentary ore composed of a mixture of several fine grained components, including phosphate rich minerals. The main phosphate rich mineral in the Togolese phosphate deposits is attapulgites formed when phosphorus, dissolved in continental and marine waters, precipitated around particles, taking a micro-crystalline structure called "colophane". This material is formed on the seabed and is then carried to the coast by ascending currents.

The high grade phosphate layers at Togo were deposited in four or five successions on a base of shallow shelly chalk. Thirty to forty per cent of the formation is mainly kaolin rich clay which was deposited simultaneously. This rock is called "sandy-clayey phosphate". Coprolites are typical and abundant in the deposit. Iron, in the form of oxide and anhydride, is ubiquitous in the deposit, with iron oxide staining being clearly visible at excavation sites. Silica is disseminated as quartz particles.

The HKK ore mined to date only included the high grade (between 10% to 25% P_2O_5) C1 – phosphatic ore (Van Kauwenbergh, S.J.,2006). This ore is easily exploited using shovels and bucket wheels, due to the unconsolidated nature of the deposit. Processing of the HKK material is relatively simple,

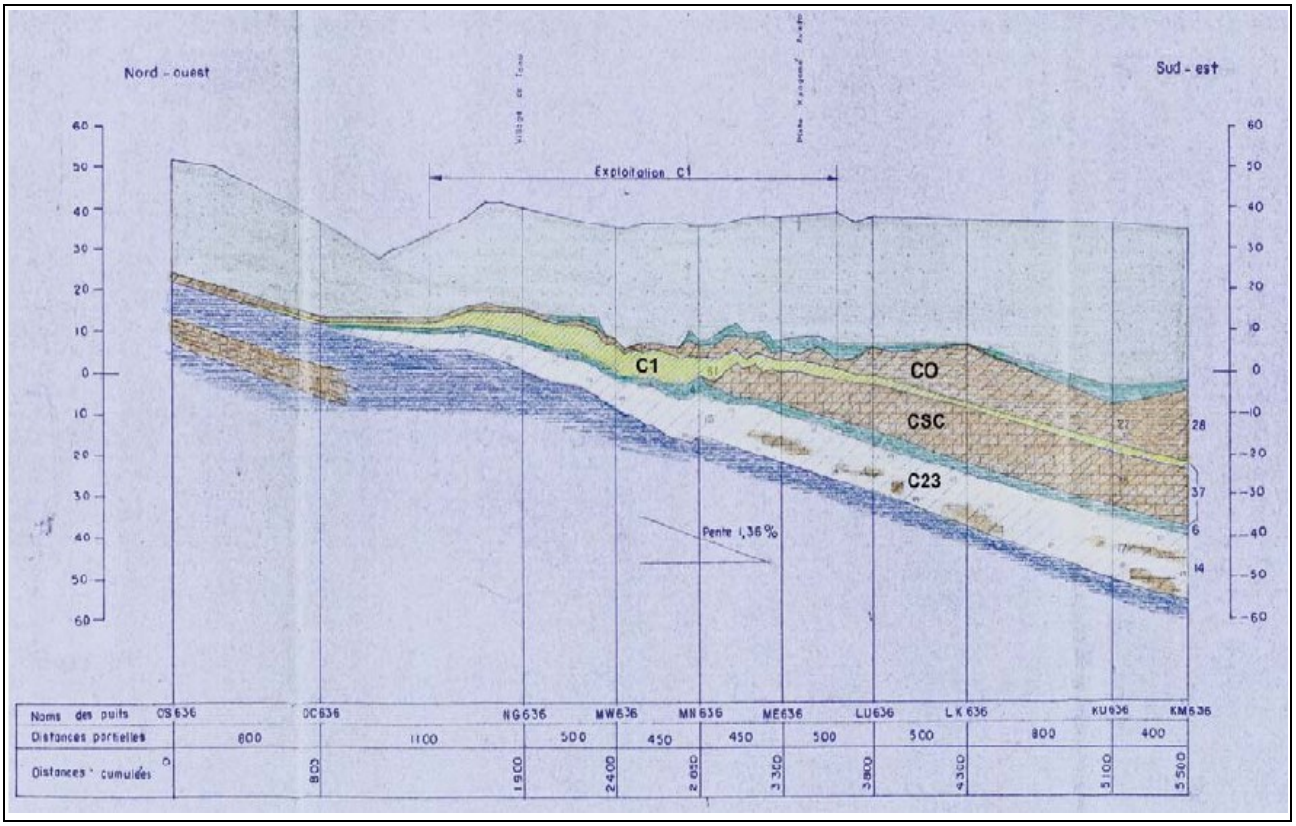
comprising washing, concentrating and drying prior to shipping, and no flotation is required (MacDonald and Bovard, 2011). The concentrate is highly favourable from a chemical point of view as it is adaptable to a range of phosphoric acid processing options (Van Kauwenbergh, S.J.,2006).

Four phosphate bearing horizons are recognised in HKK's mining area. The HKK phosphate complex comprises three main zones (MacDonald and Bovard, 2011):

- C1 – Phosphatic ore (+22% P_2O_5)
- CO – Phosphatic clays
- CSC – A middle Eocene phospharenite, containing bonebeds (BBM and BBR), approximately; 1 to 8 m thick; grading laterally into calcareous phosphates (+14% P_2O_5)
- C23 – A lower Eocene marl-phosphate unit

A section through the HKK deposits is shown in Figure 6.3.

Figure 6.3 Typical geological cross section through the HKK Togo phosphate deposit



Notes: C1 = phosphate ore; CO = phosphatic clays; CSC = phosphatic carbonate; C23 = phosphatic marl

Source: MacDonald and Bovard, 2011.

6.1.1 Adjacent deposits

In 2011, Mining Associates (Pty) Limited (MAL) and Sterling Mining Group undertook work on the Togo Phosphate Project or TPP, near Lake Togo (MAL, 2011); the TPP is approximately 30 km north east of the Project. The following TPP attributes have been reported:

- Overall deposit length of 35 km to 36 km
- Maximum width of 2.5 km
- Thickness of 4 m to 6 m
- Phosphate formation dips 1° south east
- Overburden of 7 m to 40 m

- Back-calculated density of 2.0 t/m^3
- Total polygonal resource estimate of 1.74 billion tonnes phosphate mineralisation, grading at 14.94% P_2O_5

MAL reports that the 2011 polygonal resource estimate is not compliant with the JORC Code.

6.2 Ghana phosphates

It was considered that the Togolese deposits may extend westwards into Ghana and preliminary investigations were undertaken by the GSG in the late 1960's.

The Report of the Director of the Geological Survey of Ghana for the period 1st April 1966 to 31st March 1969, Anan-Yorke (1974), reported on phosphate mineralisation identified in south eastern Ghana as follows:

"Sheet 109:Aflao SW, and Sheet 72: Keat NW

The above project was initiated when it was discovered that the phosphatic limestone beds of Eocene age occurring in neighbouring Togo extend into the Keta basin. As a result of this discovery, 114 samples from the Water Supplies boreholes in the Aflao/Denu area (Ref. AFLAO S.VIf, sheets 109 and 72: AFLAO K41 BHS. 219; KpOGLO K46 BHS. 218; WUDOABA K47 DBS. 211; KUKOR K44 BHS. 192; NOGOKPO K45 BHS. 19J: AGBOSOMe K43 190) were analysed for P205 content. The results showed small, but analytically significant increases in P_2O_5 content with depth in various samples. The most significant values were found at Aflao K41 BHS 219 where the computed mean through the richest zone, was 14.53% P_2O_5 (equivalent to 31.72% BPL, i.e. Bone Phosphate Lime).

For a preliminary assessment of phosphate ore deposit in the Afloa/ Denu area, grid lines on a bearing N40W and at 3.2 km intervals were cut with the Ho-Denu motor road as the base line. Continuous core samples were taken from the "A" Limestone horizon and the clays and the marls overlaying the above limestone at the intersections of the grid lines using Joy Sullivan Diamond rigs and a truck mounted rig. Sludge samples from the top unconsolidated sand and gravel deposits were collected and analysed for P_2O_5 content. The P_2O_5 values were converted to per cent BPL

The BPL values for the clays, marls and the "A" Limestone analysed were below 5% with very occasional values in a few samples ranging between 23-55% BPL. Considering the standard BPL value of 65% as being economic cut off for phosphate rocks, the value recorded in the samples from Aflao / Denu area were too low to warrant any economic consideration."

In a more recent report Van Straaten, (2002), reported that although, so far, no large phosphatic resources had been delineated in Ghana the potential for finding local phosphate resources was considered good. He considered that the best indications of good quality phosphatic sediments are in Eocene sediments of the Keta Basin, in the extreme southeastern corner of Ghana, in the on-strike continuation of the Togo phosphate beds. However, no follow-up surveys of the BGS results had been carried out by that time.

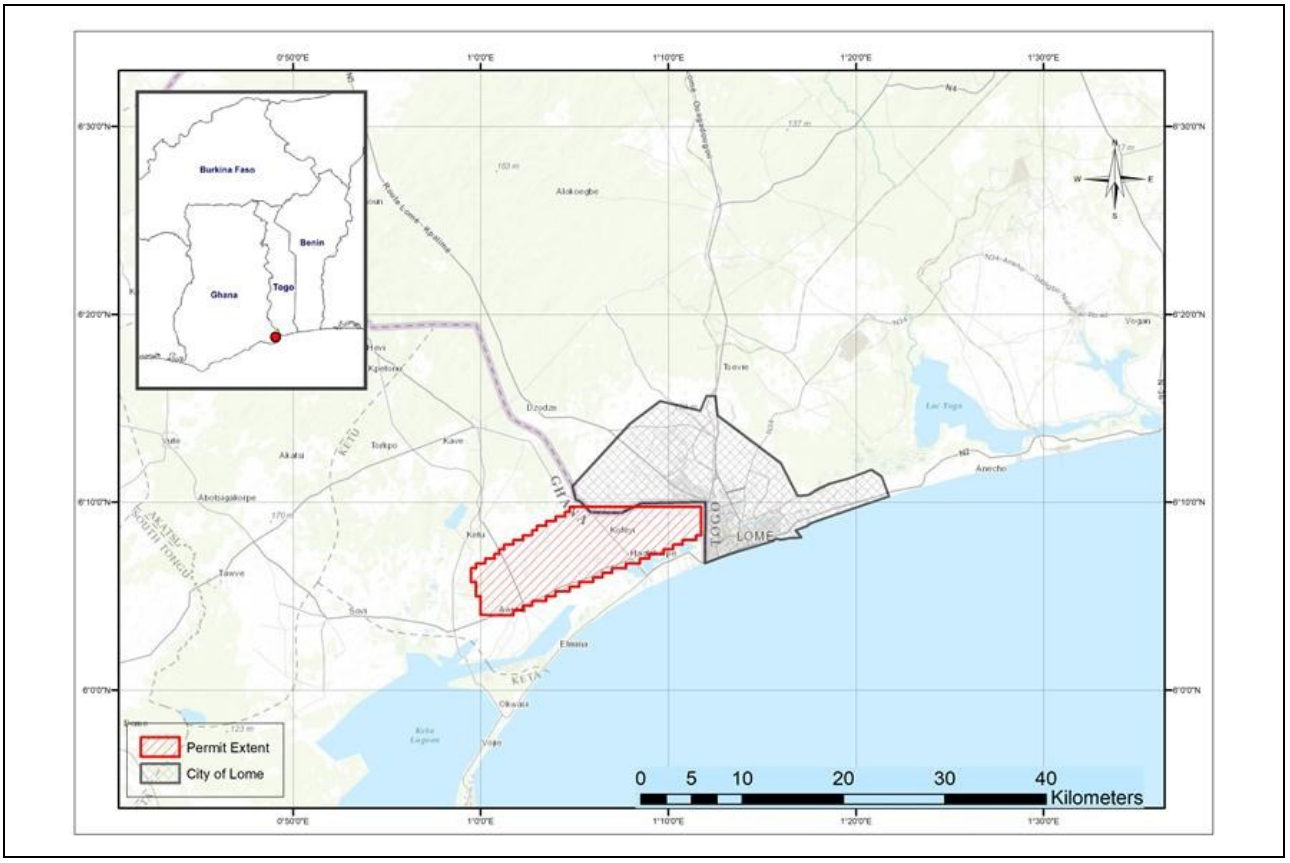
Van Straaten also noted that another report by Sheldon (1986) concluded that these Eocene beds form the most attractive prospect for finding extensive sedimentary phosphates, which could be excavated easily on various scales. Also, according to Sheldon, the phosphate bearing Aflao bed (mean 14.53% P_2O_5) described by Annan Yorke (1974) is most likely the unweathered equivalent of the phosphate ore bed of the Hahotoe deposits in neighbouring Togo. The total amount of phosphate in the 20 ft. ore bed at the Hahotoe deposit in Togo (which is currently mined) and the 35 ft. sequence drilled at Aflao (Ghana) are essentially the same' (Sheldon 1986).

7 AFLAO PHOSPHATE PROJECT

7.1 Project location

The exploration target is located in the Keta Basin (Prospecting Licence centre at 6° 08'48.28" N; 1° 10'28.59" E), in the Aflao/Denu area (Figure 7.1). The town of Aflao is located 2 km south of the tenement, on the eastern coast of Ghana, and is the major border town with Togo (Lomé).

Figure 7.1 Location of First Gear Exploration Limited Prospecting Licence



Source: FGE, 2018b

7.2 General infrastructure

The target area has a relatively low population density away from the main access roads. Figure 7.1 shows the centre of the exploration target in relation to the border between Ghana and Togo.

Access to the exploration area is via the, single lane, tarred N1 from Accra, then via a series of gravel roads into the prospecting area. The N1 is the primary trucking route to Togo and can become severely congested, resulting in excessive travel time to site from Accra. The N1 connects Ghana with Togo, Benin and Nigeria.

An alternative route is the Ho-Denu road, which bisects the tenement north-south on the western part of the tenement and links up with the N1. A network of smaller dirt roads exists throughout the tenement area. The road infrastructure is adequate for the early exploration phase of the programme.

A large cement factory (Diamond Cement Pty Ltd) is located within the tenement area on the eastern boundary. A large substation is located on the Togolese side of the border, which is anticipated to be the primary power source if a mine is developed.

The closest police station and health and educational facilities to the Project are located in the town of Aflao.

Communication is via mobile phones exclusively within the Project area, a 3G network is also available.

A field camp will be established in Aflao; no structures will be erected on site. During prospecting, FGE will use generator power. Water would be abstracted from rivers flowing through the tenement. If the Project advances to a large scale operation, FGE would then access ground water, with permission from local authority.

Adequate water supply should not be a problem for phosphate processing; however the dumping of tailings at sea, as currently performed by SNPT will probably be prohibited, necessitating the construction of tailings dams and a comprehensive rehabilitation program.

The Kotoka International Airport (Accra) receives direct flights from South Africa and major cities in Europe on a daily basis. To reach Lomé (Togo), a connecting flight through Addis Ababa (Ethiopia) or Paris (France) would be required.

The Lomé port could be considered as a port for shipment. The border between Ghana and Togo is a free trade zone assisting in the movement of goods between the two countries. For example, limestone is mined in Togo and then transported to Ghana and processed at the Blue Diamond Cement facility located within the tenement area.

7.3 Climate, vegetation and topography

Vegetation in the area includes coastal grassland and mangrove swamps, replete with sandy beaches, and guinea savannah. The Denu Lagoon is located south of the tenement. Two streams bisect the tenement, one in central part of the concession and the other on the western part, flowing in a north to south direction, discharging into the Denu Lagoon. The tenement area is generally very flat, and lies approximately 15 m to 20 m above mean sea level.

The climate is a tropical climate, characterised by moderate temperatures, 21°C to 32 for most of the year. Two rainfall regimes are reported for the region, from March to July; and from mid-August to October. The maximum average annual rainfall value is 2,103 mm and minimum 1,168 mm. More than half of the land area of the region falls within the Volta River Basin.

7.4 Exploration history

Phosphate bearing, Eocene age, marine sediments have been exploited in Togo since 1961. The presence of possible similar deposits in Ghana has been suspected since the late 1960's when the Geological Survey of Ghana (GSG) sampled phosphate bearing calcareous horizons intersected in a series of water wells drilled in the Keta Basin, near the town of Aflao, Ketu South District (Annan-Yorke,1974).

The assay results obtained from the water drill holes were considered to be low at the time, with intersections ranging from 5 m to 11 m in thickness and P_2O_5 % values ranging from 14 to 22 wt. %. Follow up work was not undertaken (Van Straaten, 2002); the reasons for this are not documented and all data from the period has been lost. Limited descriptions are recorded in various GSG reports, however the locations of the sampled water wells are not provided.

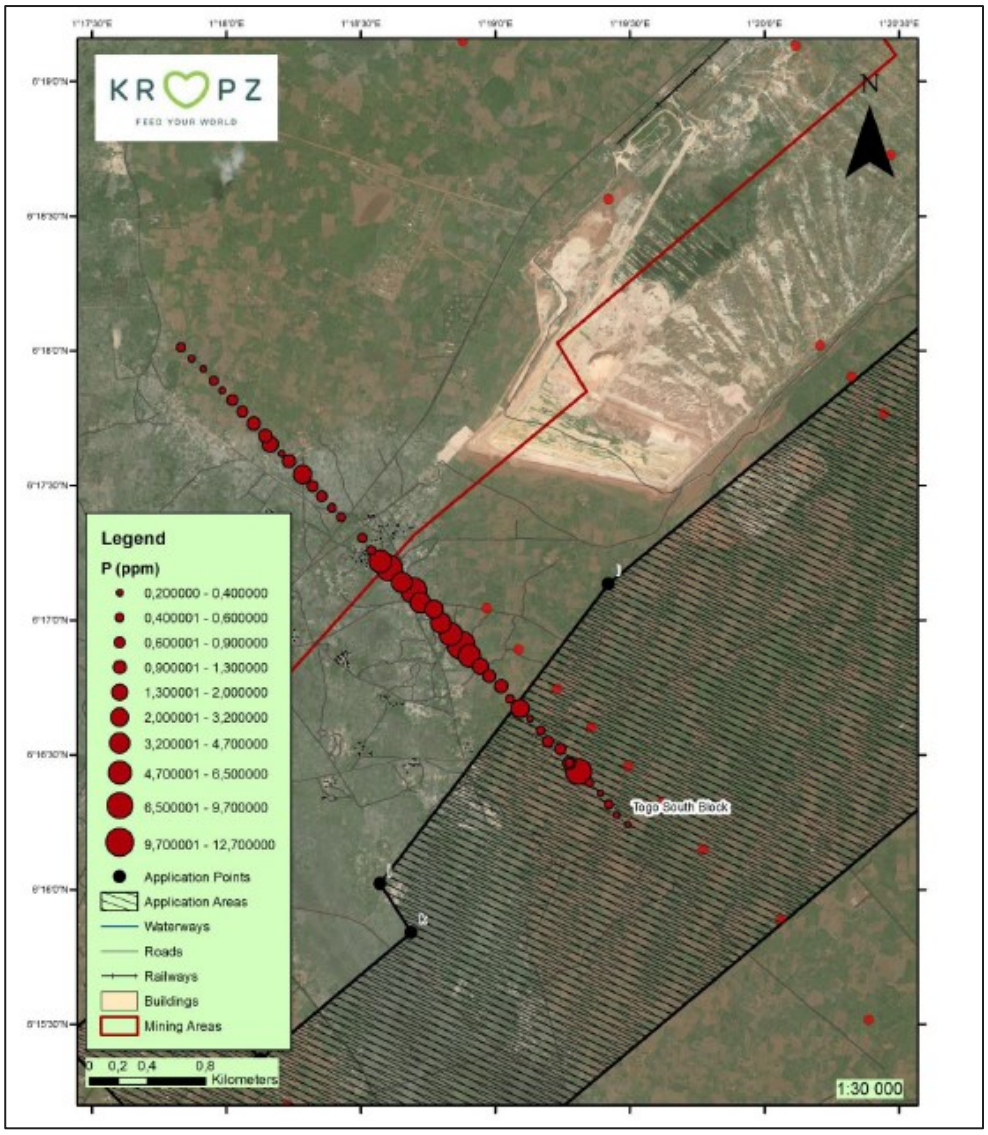
7.5 FGE orientation sampling

FGE determined that Mobile Metal Ion (MMI™) geochemistry would be an appropriate preliminary exploration technique to test whether or not the phosphate bearing beds present at SNPT's HKK operations extend into Ghana. The method measures for the presence of metal ions that travel upward from mineralisation to unconsolidated surface materials such as soil, till and sands and is a-well established technique for exploration of buried mineral deposits. The MMI™ analytical process is a proprietary technology provided by SGS Mineral Services (SGS) and involves weak partial extraction of mobile ions using a multi component solution and ICP-MS ultra trace element analysis to improve the conventional geochemical response in samples.

7.5.1 Togo sampling

FGE obtained permission to undertake some orientation sampling immediately south-west of the HKK mining area in Togo and a single line traverse of MMI™ samples, comprising 50 samples collected at 100 m intervals was undertaken in July 2017. Samples were collected from depths of approximately 30 cm below surface and sent to SGS in Lomé for preparation and analysis for elemental phosphorus and cadmium. The sampling positions and results for elemental phosphorous are shown in Figure 7.2 below.

Figure 7.2 Togo phosphate deposit – MMI™ sampling and results for phosphorous



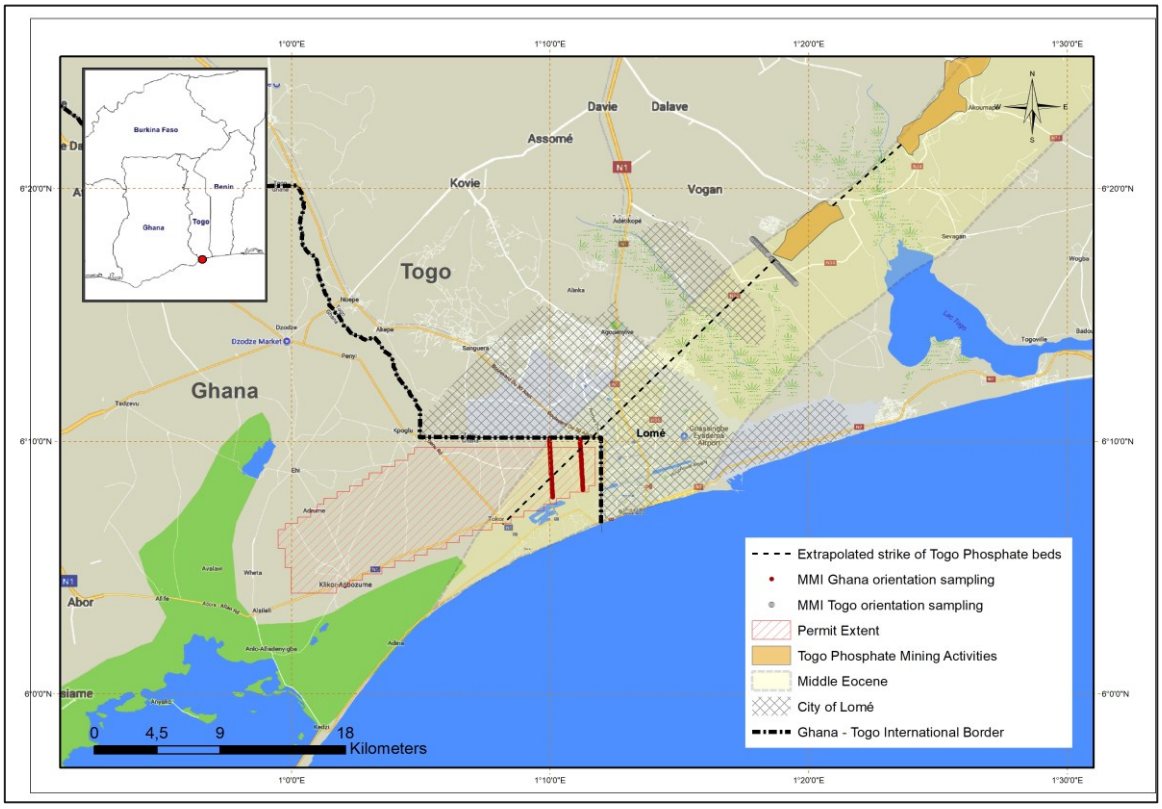
Source: FGE, 2018a

An anomalous concentration is evident along strike from the existing mining area which gave encouragement to the concept of using MMI™ to test for the presence of phosphate bearing beds in Ghana. Results for cadmium mirrored those for elemental phosphorous.

7.5.2 Ghana sampling

Based on these results FGE undertook further orientation sampling in Ghana in December 2017. Two roughly north-south trending MMI™ lines were sampled, each 3.5 km in length, and approximately 3 km apart (Figure 7.3). A total of 82 samples were collected at 100 m intervals to a depth of 30 cm below surface.

Figure 7.3 Geological interpretation along strike from the Togo phosphate operations

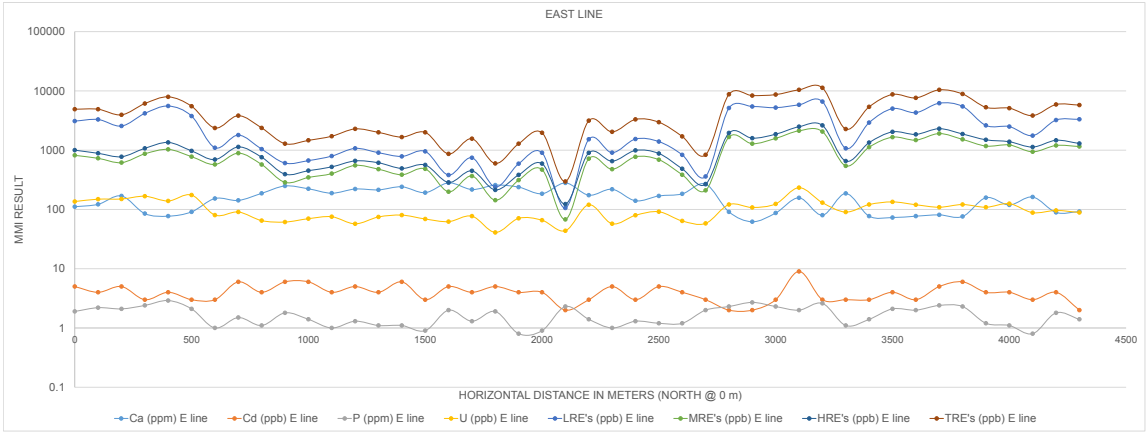


Source: FGE, 2018a

Samples were submitted to SGS offices in Ghana for onward shipment to SGS Canada in Vancouver.

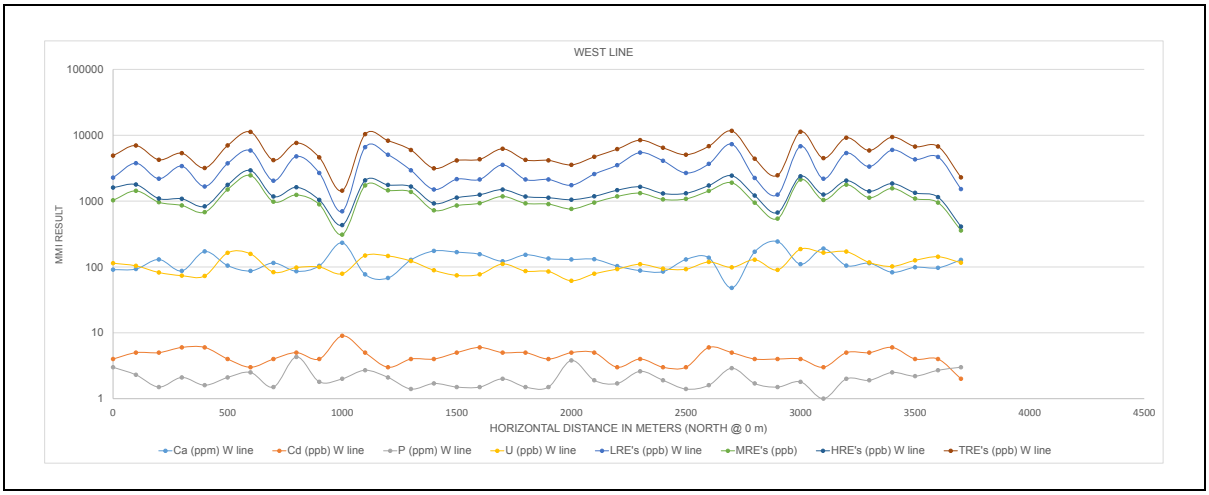
Results from the Ghana orientation sampling are shown in Figure 7.4 and Figure 7.5 below.

Figure 7.4 MMI™ sampling results from the Ghana orientation sampling – East line



Source: FGE, 2018a

Figure 7.5 MMI™ sampling results from the Ghana orientation sampling – West line



Source: FGE, 2018a

Anomalous concentrations of phosphorous and cadmium are noted on both MMI™ sampling lines in Ghana lines but peak counts are more subdued when compared to the Togo MMI™ results. This may be due to the depth or type of cover in this area; however the CP considers the results to be sufficiently encouraging to justify further work.

7.6 Planned future exploration

It is intended that the work programme will be conducted in three phases (Figure 7.6).

Figure 7.6 Planned FGE exploration programme

Phase 1												
Months (Year 1)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Activity												
Site Establishment												
MMI Regional Sampling												
MMI Infill Sampling												
Geophysical Survey												
Geological Mapping												
Desktop Study												
Update Database												
Report												
Future Exploration Planning												

Phase 2												
Months (Year 2)	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Activity												
Drilling												
Sample Analyses												
Bulk Sampling												
Pilot Scale Test Work												
Pre-feasibility Study												

Phase 3												
Months (Year 3)	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Activity												
Drilling												
Sample Analyses												
Bulk Sampling												
Pilot Scale Test Work												
Feasibility Study												

Source: FGE, 2018a

- Phase 1 will include non-invasive exploration (MMI™ soil sampling and geophysical surveys) and a detailed desktop study to delineate potential phosphate bearing horizons for subsequent evaluation and drilling. The primary target will be deposits similar to C1 in Figure 6.3; secondary targets will be units similar to CO, CSC and C23 shown in Figure 6.3.
- In Phase 2 exploration targets will be drilled to confirm the presence of mineralised horizons and delineate a resource (volume and grade); bulk samples will then be taken for metallurgical and pilot plant test work.
- The resource delineation and metallurgical results will be used as the basis of a pre-feasibility study (PFS)
- Phase 3, if justified by earlier phases of work, will include additional drilling, and implementation of a bulk sampling programme

The full timeframe for this exploration programme is expected to be three years at a current proposed budget of US$ 2.6 million. This programme and budget may vary depending on the outcomes of the various exploration phases.

According to the proposed FGE shareholders agreement, all work up to the completion of the Scoping Study, will be proportionately funded by Kropz International and Kropz plc in the ratios of 25/75 and 50/75, respectively. Thereafter all parties will fund project development proportionate to shareholding. Table 7.1 sets out a summary of FGE's planned three year exploration programme and budgets.

Table 7.1 Planned exploration programme and annual budgets

Planned exploration programme details	Annual budgets in US$ (unescalated, no contingency)		
	FY2018	FY2019	FY2020
MMI™ sampling; geophysical survey; geological mapping; permitting; Scoping study; salaries, wages, legal, accounting and travel	400,000		
Drilling; sample analysis; surveying; bench and pilot scale testwork; permitting; Pre-feasibility study; salaries, wages, legal, accounting and travel		900,000	
Drilling; sample analysis; surveying, pilot scale testwork; permitting; Feasibility study; salaries, wages, legal, accounting and travel			1,220,000

Source: FGE, 2018a

7.6.1 Phase 1 – Non-invasive exploration (Year 1)

The non-invasive work programme will involve acquisition of historical data, recruitment of staff, non-invasive exploration activities (MMI™ geochemical soil sampling, geological mapping and a geophysical survey), preparation and laboratory analysis of samples, statistical analysis of sampling results, and the interpretation and integration of laboratory, and other field and historical data acquired. All data will be captured in an Arcview GIS database. Work undertaken during this period will be compiled into a report for submission to Mincom at the end of the period.

FGE will provide all geological equipment, including GPS, compasses, geological hammers, handheld XRF, geological field books, sample bags and tags, sample carrier bags, satellite phones, all safety and protective equipment, first aid kit and a field laptop. The field team will be provided with hard copies of Ghana survey topographic maps for the area and printed maps showing planned and actual sample locations, concession area infrastructure, etc. Exploration vehicles will be rented during Phase 1. A base camp will be setup in Aflao for the duration of the field programme.

Kropz will have access to registered licences of Arcview (GIS) software and Micromine (3D modelling and contouring) software and two laptops to facilitate planning, interpretation and management of the Project.

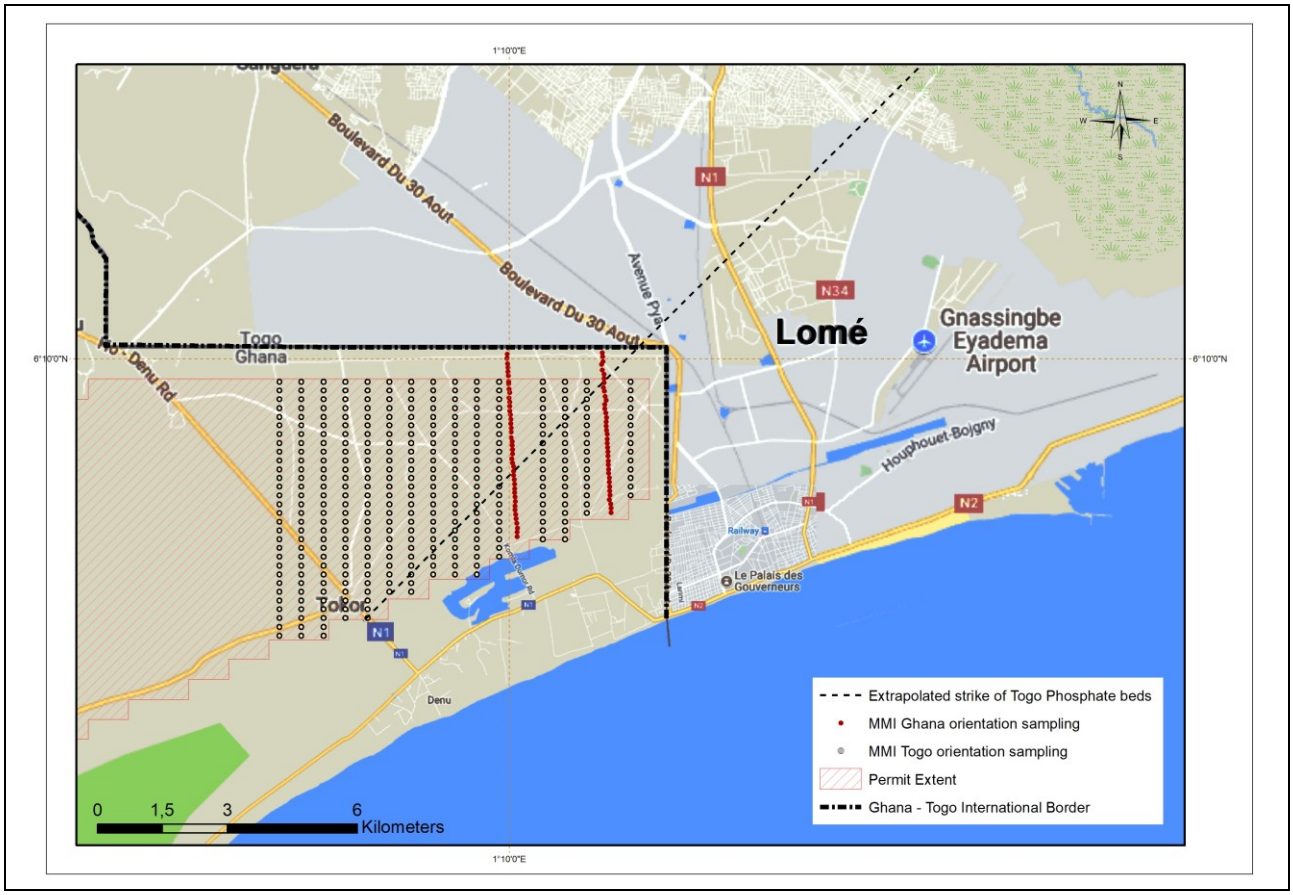
The first sampling grid, located in the eastern portion of the Project area, will be on a 100 m by 1,000 m grid spacing (5 lines) and a 100 m by 2,000 m grid spacing (3 lines) over the western portion of the Project area. This will total approximately 450 samples, including blanks and duplicates.

Based on the outcome of this phase, an infill MMI™ sampling programme will be undertaken on a 20 m by 200 m grid in areas where anomalies are reported; an estimated 1,000 samples are expected to be taken during this phase (Figure 7.7).

All samples will be sent to SGS (Tarkwa) for preparation. The resultant pulps will be exported to SGS (Toronto) for MMI™ analysis.

Environmental and social base line studies will commence during Phase 1.

Figure 7.7 Location of proposed MMI™ sampling points in the Project area



Source: FGE, 2018a

Uranium is considered to be an important signature element in phosphate mineralisation/ deposits. Ground spectrometry surveys may be undertaken in anomalous areas identified by the first phase MMI™ sampling.

Detailed geological mapping of the Project area will be undertaken to identify geological lithologies and outcrops that may be present.

7.6.2 Phase 2 – Drilling/ bulk sampling and PFS (Year 2)

Although soft sediments are reported within the Project area, FGE intends to use core drilling in its follow up programme. FGE has access to a core drilling method developed by its parent company that has a +85% core recovery for soft material; this methodology will be applied during the Phase 2 drilling exercise and will add confidence to any Mineral Resource estimation undertaken.

HQ sized core will be drilled to allow recovery of sufficient material for analysis; one quarter of the core will be analysed; one quarter will be used for metallurgical test work; the remaining half will be stored as reference material.

The expected depth of drilling is not anticipated to be greater than 60 m per hole, which is governed by the following FGE constraints: the phosphate layers are not expected to be more than 10 m thick; and

any deposit with an overburden stripping ratio of more than 6:1 would probably be uneconomic at the grades assumed.

Phase 2 drilling will be conducted on a 400 m grid that should allow the resource to be classified at an Indicated level of confidence. Twenty five holes are planned, totalling 1,500 m of exploration drilling.

All drill core will be sampled through the mineralised zone, with samples being sent to SGS (Tarkwa) for XRF analyses. The following major elements will be analysed; P_2O_5, SiO_2, CaO, MgO, FeO and Al_2O_3. Composite samples will be made up and sent to SGS (Johannesburg) for minor element analysis; F, Cd, U, Th and C.

All drill core will be stored in a secure location for third party inspection and verification.

Processing test work will include bench scale test work on the quarter core samples derived from the exploration drilling programme. A sample of least 2 tonnes will be required to complete the pilot scale test work.

Depending on the depth of overburden, 10 large diameter drillholes will be sunk; alternatively trenching will be completed in order to provide a sample large enough for plant test work.

Information from the pilot scale test work will be used in a PFS. If the PFS provides sufficient justification, the Owners Team will advance the Project to Phase 3.

7.6.3 Phase 3 – Drilling/bulk sampling/Bankable Feasibility Study (BFS) – Year 3

Infill drilling will be undertaken on a 400 m grid and 200 m grid. Thirty holes, with a planned depth of 60 m (totalling 1,800 m of core) are planned.

An additional 5 tonne sample will be required for test work analysis. This sample will also be obtained by means of large diameter drilling or trenching.

7.7 Site visit observations

7.7.1 Introduction

Mark Burnett (Principal Geologist), a Snowden employee as at the Effective Date of this CPR, undertook a site visit to the Project over the period 26 February 2018 to 1 March 2018. During this period and orientation site visit was undertaken as well as meetings with relevant stakeholders and government officials.

7.7.2 Local mining

No mining is currently being undertaken in the area. The closest mining activity is that being undertaken in Togo on the HKK deposit.

7.7.3 Exploration and drilling

Early stage MMI™ exploration has been undertaken. Phase 1 exploration will comprise additional MMI™ sampling to identify target areas for drilling during Phase 2 and Phase 3.

Snowden was not present during the orientation MMI™ sampling programmes, but based on discussions with FGE staff that undertook the work, is satisfied that the sample collection and preparation procedures were appropriately applied in terms of professional work practices.

Snowden has reviewed the proposed exploration program and is of the opinion that it is appropriate and fit for purpose. FGE staff are experienced exploration for phosphate deposits.

7.7.4 Site visit conclusions and recommendations

It is noted that no suitable control standards area available for assessing the analytical accuracy of the MMI™ method but an indication of analytical precision can be estimated from the results of multiple insertions of a field B horizon soil field standard (Cook and Dunn, 2006). Snowden recommends that FGE discusses this with SGS before commencing its full MMI™ exploration sampling programme.

Snowden recommends that environmental base line studies and community engagement and information programs be commenced as possible in the exploration period.

8 PROJECT CONCLUSIONS AND RECOMMENDATIONS

Snowden acknowledges that the information available to FGE is limited; however on review of the programme logic, discussions with FGE team members and review of historical information and work undertaken to date, Snowden is of the opinion that the logic applied is sound and the risks have been adequately considered.

If exploration drilling confirms the continuation of potentially economic phosphate bearing deposits into Ghana, FGE's exploration work will be directed towards assessing the potential for development of a phosphate mining operation with a similar production profile, processing methodology and product specification (Table 8.1) to the HKK operation in Togo.

The HKK operation in Togo produces approximately 1.5 million tonnes per annum of phosphate rock, with an in-situ grade between 10% and 25% P_2O_5 – the ore is easily exploited using shovels and bucket wheels, due to the unconsolidated nature of the deposit. HKK processing includes washing, concentrating and drying prior to shipping, with no flotation required (Van Kauwenbergh, S.J.,2006).

Table 8.1 Characteristics of SNPT's phosphate product

Impurity	Practical levels for Phosphoric Acid production	Target levels	SNPT
P_2O_5	28-40% P_2O_5	32% P_2O_5	36.7%
Al_2O_3	0.2–2.0% Al_2O_3	Fe_2O_3+ Al_2O_3 <2–3%	1%
FeO	0.1–2.0% Fe_2O_3	Fe_2O_3+ Al_2O_3 <2–3%	1%
MgO	0.2–2.0% MgO	<1.5% preferred, <1% ideal	0.1%
MER ratio	0.05–0.12 (AL_2O_3+Fe_2O_3+Mgo)/ P_2O_5	<0.1 preferred	0.06
CaO/P_2O_5 ratio	1.30–1.65 CaO:P_2O_5	1.32–1.55:1 preferred, <1.6:1 generally accepted	1.4
Fluorine	2–4% F	<4%	3.8%
Silica	1–10% SiO_2	<5% preferred	4.5%
Chlorine	0.00–0.05% Cl	<300 ppm, preferred, <500 ppm acceptable	0.1%
Organics	0.1–1.5% C	<1% preferred, <0.2% ideal	0.02%
Cadmium	up to 250 ppm	<5 ppm is premium	53ppm

Source: SNPT, undated

Snowden recommends that social and environmental base line studies be commenced as soon as the exploration project is initiated in order to assess likely resettlement and restitution liabilities. As part of this programme, community discussions should be entered in to as a number of interment sites (Christian and Moslem) were noted during the site visit.

Sourcing of stores and material from Togo should be considered due to the proximity of Lomé to the Project area, however time delays at the border will need to be considered against the time taken to source locally or/ and transport material from Accra.

When the drilling program commences, a similar independent QAQC program should be initiated as was undertaken for the initial exploration undertaken at Elandsfontein Mine.

9 RISKS

Early stage exploration, by its nature, contains higher levels of risk. Project specific risks include the following:

- the possibility of geological features, including dissolution zones
- a geologically more complex environment than that predicted by MMI geochemical sampling
- local, vertical and grade variability.
- lower than expected P_2O_5 grade and higher impurities, which may affect economic viability.

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11 GLOSSARY, UNITS AND ABBREVIATIONS

%	per cent
3D	Three dimensional
Al_2O_3	aluminium oxide
BFS	Bankable feasibility study
BGS	British Geological Survey
BoG	Bank of Ghana
BPL	Bone Phosphate Lime
BSc	Bachelor of Science degree
C	carbon
C1	phosphatic ore
C23	Lower Eocene marl-phosphate unit
CaO	calcium oxide
Cd	cadmium
Cl	chlorine
Cm	centimetre
CO	phosphatic clays
Company	Kropz plc
CP	Competent Person
CPR	Competent Persons Report
CSC	Middle Eocene phospharenite
EMEA	Europe Middle East and Africa
F	Fluorine
FeO	Iron (II) oxide
Fe_2O_3	Iron (III) oxide
FGE	First Gear Exploration Limited
FGSSA	Fellow of Geological Society of South Africa
FSAIMM	Fellow of Southern African Institute of Mining and Metallurgy
FSEG	Fellow of Society of Economic Geologists
ft	foot
FY	financial year
Geo	geology
GDP	gross domestic product
GIS	geographic information system
GPS	global positioning system
GRA	Ghana Revenue Authority
GSG	Geological Survey of Ghana
Hons	Honours
HKK	Hahotoé-Kpogamé-Kpémé
ICP-MS	inductively coupled plasma mass spectrometry
IMF	International Monetary Fund
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves or JORC (2012) Reporting Code

kg	kilograms
km	kilometre(s)
km^2	square kilometres
Kropz	Kropz plc
Kropz International	Kropz International SARL
KTB	Keta Togo Benin
m	metre
Ma	million years
MAL	Mining Associates (Pty) Limited
MgO	magnesium oxide
MGSSA	Member of Geological Society of South Africa
Min Econ	mineral economics
Mincom	Minerals Commission of Ghana
mm	millimetre
MMI	Mobile Metal Ion
Moz	million ounces
MRM	Mineral Resource Management
MSAIMM	Member of Southern African Institute of Mining and Metallurgy
MSc	Magister Scientiae / Master of Science degree
N1	National road
P_2O_5	phosphorus pentoxide
lb	pound
PFS	pre-feasibility study
ppm	parts per million
Pr. Sci. Nat	Professional Natural Scientist
QAQC	quality assurance and quality control
SAIMM	Southern African Institute of Mining and Metallurgy
SGS	SGS Mineral Services
SiO_2	silicon dioxide
Snowden	Snowden Mining Industry Consultants (Pty) Limited
SNPT	Société Nouvelle des Phosphates du Togo
t/m^3	tonnes per cubic metre (density)
Th	thorium
TPP	Togo Phosphate Project
U	uranium
US$	United States dollar
wt. %	weight per cent
XRF	X-ray fluorescence

12 CERTIFICATES

CERTIFICATE of COMPETENT PERSON:

PHOSPHATE EXPLORATION

I, Mark Jason Burnett, Principal Consultant, Applied Geoscience of Snowden Mining Industry Consultants (Pty) Limited (Snowden) of Technology House, Greenacres Complex, cnr Victory and Rustenburg Rds, Victory Park, do hereby certify that:

(a) I have reviewed the document titled CPR on Aflao Phosphate Project, Project Number JB10057, November 2018

(b) I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.

(c) I am a graduate of The University of the Witwatersrand in South Africa and hold a B.Sc. (Hons) Geology (1992) and Master's Degree in Mineral Resource Management from the University of the Free State.

(c) I am a registered with South African Council for Natural Scientific Professions (SACNASP) as a Scientific Professional (*Pr.Sci.Nat.),* Reg.No. 400361/12. I am a Fellow of the Southern African Institute of Mining and Metallurgy, a Fellow of the Geological Society of South Africa and a Fellow of the Society of Economic Geologists (SEG).

(d) I am a geologist and have worked in the minerals industry for 26 years with specific involvement in mine production and Mineral Resource estimation, mainly for gold. I have worked as a geological consultant for 10 years in a technical and advisory capacity for clients covering development and mine production for a number of different mineral commodities.

(e) I have read the definition of 'Competent Person' as set out in the AIM rules of the London Stock Exchange and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a 'Competent Person' for the purposes of those Rules.

(f) I have undertaken a site visit to the Aflao deposit over the period 26 February 2018 to 1 March 2018.

(g) I am the Competent Person, responsible for sections 1 to 3, and 5 to 8 of this CPR, except Section 7.5: FGE Orientation sampling of the CPR.

(h) I am independent of the issuer and have no present or prospective interest in either the company or the subject property.

(i) I have had no prior involvement with the property that is the subject of this CPR

(j) I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition) and AIM rules, and the CPR has been prepared in compliance with these

(k) As of the effective date of the CPR, to the best of my knowledge, information and belief, the CPR contains all the scientific and technical information that is required to be disclosed to make the Report not misleading.

Dated at Johannesburg, South Africa on 31 July 2018.

Original signed

Mr MJ Burnett

CERTIFICATE of COMPETENT PERSON:

PHOSPHATE EXPLORATION

I, William ("Bill") Frederick McKechnie, Regional Manager – EMEA of Snowden Mining Industry Consultants (Pty) Limited (Snowden) of Technology House, Greenacres Complex, cnr Victory and Rustenburg Rds, Victory Park, do hereby certify that:

(a) I have reviewed the document titled CPR on Aflao Phosphate Project, Project Number JB10057, November 2018

(b) I am a Competent Person as defined by the JORC Code, 2012 Edition, having more than five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.

(c) I am a graduate of the University of Aberdeen in the United Kingdom and hold a B.Sc. (Hons, First Class) in Geology (1974).

(c) I am a registered with South African Council for Natural Scientific Professions (SACNASP) as a Scientific Professional (*Pr.Sci.Nat.),* Reg. No. 400122/87. I am a Member of the Southern African Institute of Mining and Metallurgy and a Fellow of the Geological Society of South Africa.

(d) I am a geologist and have worked in the minerals industry for 43 years with specific involvement in the exploration, evaluation and exploitation of diamond deposits, as well as exploration for gold and base metals. I have worked as a geological consultant for 12 years in a technical and advisory capacity for clients covering evaluation, development and mine production for a number of different mineral commodities, including phosphate.

(e) I have read the definition of 'Competent Person' as set out in the AIM rules of the London Stock Exchange and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a 'Competent Person' for the purposes of those Rules.

(f) I have not undertaken a site visit to the Aflao deposit.

(g) I am the Competent Person, responsible for Section 7.5 of this CPR: FGE Orientation sampling of the CPR.

(h) I am independent of the issuer and have no present or prospective interest in either the company or the subject property.

(i) I have had no prior involvement with the property that is the subject of this CPR

(j) I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition) and AIM rules, and the CPR has been prepared in compliance with these

(k) As of the effective date of the CPR, to the best of my knowledge, information and belief, the CPR contains all the scientific and technical information that is required to be disclosed to make the Report not misleading.

Dated at Johannesburg, South Africa on 31 July 2018.

Original signed

Mr WF McKechnie

13 JORC (2012) Table 1

Table 13.1 Section 1 of the JORC (2012) Table 1 for the Aflao Exploration Project

Section 1: Sampling Techniques and Data	
Criteria	**Explanation**
Sampling techniques	Two MMI™ geochemical sampling lines of 3.5 km in length, located 3 km apart were run. Soil sampling was undertaken, with samples being collected every 100m, to a depth of 30cm below surface. These samples were bagged and forwarded to SGS Tarkwa for sample preparation and sub splitting.
Quality of assay data and laboratory tests	Previous MMI™ orientation geochemical samples were assayed by SGS Canada. Future MMI™ samples will follow the same analytical procedures.
Drilling techniques	No drilling has yet been undertaken by FGE. When drilling commences, triple tube core (HQ) will be drilled to a depth of 60 metres below surface.
Drill sample recovery	N/A, drilling has not commenced
Logging	N/A, FGE will employ the same methodologies and procedures used employed for the Elandsfontein Project exploration, however these will be adapted for local conditions and variability.
Sub-sampling techniques and sample preparation	Drill core will be split in half. Following this, the remaining half core will be subsplit, with quarter core being sent to SGS Tarkwa for preparation and sub sampling. The remaining quarter will be used for metallurgical testing.
Quality of assay data and laboratory tests	N/A. Samples will be sent to SGS Tarkwa for sample preparation and then to either SGS Johannesburg or SGS Toronto for further analytical analysis.
Verification of sampling and assaying	N/A. FGE will implement and independent QAQC program, including density measurements to ensure that the assay results will be acceptable for Mineral Resource estimation.
Location of data points	N/A. Collar positions will be initially determined by DGPS. Following completion of the hole, the final collar position will be surveyed in by a qualified land surveyor.
Data spacing and distribution	Phase 2 drilling is planned to be completed on a 400 metre (m) x 400 m grid. Phase 2, infill drilling, is to be undertaken on a planned 400 m x 200 m grid.
Orientation of data in relation to geological structure	Exploration drill holes are currently planned to be drilled vertically, as regional geological data indicates a very shallow dip (One to two degrees southeast).
Sample security	N/A. FGE has indicated that it will follow the same procedure and protocols developed for the Elandsfontein Project. .As drilling [progresses, these guidelines will be revised to take local conditions into account.
Audits or reviews	N/A. As the Project progresses, FGE will commission internal and external audits to review project progress as well as data quality and reliability.

Table 13.2 Section 2 of the JORC (2012) Table 1 for the Aflao Exploration Project

Section 2: Reporting of Exploration Results	
Criteria	**Explanation**
Mineral tenement and land tenure status	FGE is the 100% holder of a Prospecting Licence for the Aflao Project, issued on 12 October 2018 for a period of three (3) years from date of issue
Exploration done by other parties	Regional exploration for phosphate and uranium has been undertaken by the British Geological Survey, as a part of a regional orientation program for the Volta basin; however, local, systematic exploration has not been undertaken in the area. Phosphate bearing, Eocene age, marine sediments have been exploited in Togo since 1961. The presence of similar deposits in Ghana has been known since the late 1960's when the Geological Survey of Ghana (GSG) sampled phosphate bearing calcareous horizons intersected in a series of water wells drilled in the Keta Basin, near the town of Aflao, Ketu South District. The assay results obtained from the water drill holes were considered to be low at the time, with intersections ranging from 5 m to 11 m in thickness and P_2O_5 % values ranging from 14 to 22 wt. %. Follow up work was not undertaken, the reasons for this are not documented and all data from the period has been lost. Limited descriptions are recorded in various Geological Survey reports, however the locations of the sampled water wells are not provided.
Geology	The descriptions of the nature and potential characteristics of phosphate bearing horizons are dependent on that derived from the Hahotoé-Kpogamé-Kpémé (HKK) deposits located in Togo The Keta Basin also referred to as the Eastern or the Keta Togo Benin (KTB) Basin, is a modified, pull-apart basin structurally bounded by the Chain Fracture Zone in the east and the Romanche Fracture Zone in the west. It covers an area of approximately 33,900 square kilometres (km^2), of which 1,900 km^2 are located onshore. The strata comprising the onshore part of the Keta Basin represents the attenuated, northern margin of a larger and deeper depositional basin that, in part, reflects differential subsidence related to the Mesozoic break-up of Gondwana for this area. The Eocene age HKK phosphate deposits are contained within a series of shale horizons associated with minor limestones and sandstones. This sequence is known as the Serie de la Lama (de la Lama). The beds dip at one to two degrees toward the southeast and thicken in the same direction.
Drill hole information	N/A. No exploration drilling has been undertaken by FGE. Historical water well drilling data and records have been lost.
Data aggregation method	NA – no exploration results reported
Relationship between mineralisation widths and intercept lengths	N/A. It is currently assumed that any phosphate bearing horizons intersected in the planned exploration area will have similar characteristics to those found in the HKK deposits.
Diagrams	N/A. No diagrams are currently available for the planned exploration area. These will be developed as the exploration program continues.
Balanced reporting	NA. No exploration results reported to date

Section 2: Reporting of Exploration Results	
Other substantive exploration data	N/A. The earlier results derived from water hole drilling are no longer available.
Further work	FGE plans to complete a three phase exploration program on the prospecting licence area viz: Phase 1: MMI™ sampling to target anomalies. Phase 2: Exploration drilling on a 400 m x 400m grid Phase 3: Infill drilling on a 200 x 400m grid. .

Table 13.3 Section 3 of the JORC (2012) Table 1 for the Aflao Exploration Project

Section 2: Reporting of Exploration Results	
Criteria	**Explanation**
Database Integrity	N/A. All data is planned to be captured in an industry standard database.
Site visit	An initial site visit was undertaken by Mr Mark Burnett. Additional site visits will be undertaken when drilling commences.
Geological Interpretation	FGE is currently using the model developed for HKK as the basis for drilling. Once exploration commences, this will be revised based on information obtained from the initial drillhole intersections.
Dimensions	Drilling will be used to define the extent of any phosphate bearing horizons present in the target area.
Estimation and modelling techniques	Following completion of the drilling program, FGE will model and estimate the target area using industry accepted procedures i.e. a 3D model, using Ordinary Kriging as the estimation technique of choice.
Moisture	In situ moisture content will be measured as part of the exploration drilling program.
Cut-off parameters	N/A, these will be determined following completion of the Phase 3 exploration drilling and subsequent scoping and feasibility Studies.
Mining factors and assumptions	N/A, these will be determined following completion of the Phase 3 exploration drilling and subsequent scoping and feasibility Studies
Metallurgical factors	N/A, these will be determined following completion of the Phase 3 exploration drilling and subsequent scoping and feasibility Studies
Environmental factors	Environmental base line studies will be undertaken when exploration commences
Bulk density	N/A. Bulk density measurements will be gathered as part of the exploration program.
Classification	N/A. This will be determined following completion of the Mineral Resource estimation process.
Audits or reviews	N/A. These will be undertaken during the course of the exploration program.

PART VII

SECTION A

ACCOUNTANTS' REPORT ON THE AGGREGATED HISTORICAL FINANCIAL INFORMATION OF THE SUBSIDIARIES OF KROPZ PLC

Kropz plc (the "**Company**") was incorporated and registered in England and Wales on 10 January 2018. Kropz SA (Pty) Ltd and First Gear Exploration Limited became subsidiaries of the Company following the completion of Share Purchase Agreements on 27 November 2018 and 4 June 2018 respectively as part of a wider group reorganisation. Details of the group reorganisation are set out in paragraph 4 of Part X of this document.

Section A of Part VII contains the aggregated financial information of Kropz SA (Pty) Ltd and its subsidiaries, Elandsfontein Land Holdings (Pty) Ltd, Kropz Elandsfontein (Pty) Ltd, West Coast Fertilizers (Pty) Ltd, Xsando (Pty) Ltd and SA Lithium (Pty) Ltd, and First Gear Exploration Limited (together the "**Subsidiaries**") for the years ended 31 December 2015, 31 December 2016 and 31 December 2017 (the "**Aggregated Historical Financial Information**"). The Subsidiaries were under common control of the same ultimate beneficial owners and effectively operated as a group under common management throughout the period covered by the Aggregated Historical Financial Information although they did not comprise a group as defined by International Financial Reporting Standards.

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The Directors
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United Kingdom

27 November 2018

Dear Sirs

ACCOUNTANTS' REPORT ON THE AGGREGATED HISTORICAL FINANCIAL INFORMATION OF THE SUBSIDIARIES OF KROPZ PLC

We report on the aggregated historical financial information of Kropz plc's subsidiaries, being those entities listed in note 1.1 to the aggregated historical financial information (the "**Group**") for the years ended 31 December 2015, 2016 and 2017. All financial information has been prepared for the purpose of its inclusion in the Company's AIM admission document dated 27 November 2018 ("**Admission Document**") on the basis of the accounting policies set out in note 1 to the aggregated historical financial information. This report is required by paragraph (a) of Schedule Two to the AIM Rules for Companies (the "**AIM Rules**") and is given for the purposes of complying with the AIM Rules and for no other purpose.

Responsibilities

The directors of Kropz plc (the "**Directors**") are responsible for preparing the aggregated historical financial information on the basis of preparation set out in note 1 to the financial information. The

aggregated historical financial information has been prepared in accordance with International Financial Reporting Standards as adopted by the European Union (''**IFRS**''), except that certain accounting conventions, commonly used for the preparation of historical financial information for inclusion in investment circulars, as described in the Annexure to Standard for Investment Reporting 2000 issued by the Financial Reporting Council in the United Kingdom, have been applied.

It is our responsibility to form an opinion as to whether the aggregated historical financial information included in the Admission Document gives a true and fair view of the aggregated financial position of the Group and to report our opinion to you.

Save for any responsibility arising under the AIM Rules to any person as and to the extent there provided, to the fullest extent permitted by law we do not assume any responsibility and will not accept any liability to any person other than the addressees of this letter for any loss suffered by any such person as a result of, arising out of, or in connection with this report or our statement, required by and given solely for the purposes of complying with the AIM Rules, consenting to its inclusion in the Admission Document.

Basis of opinion

We conducted our work in accordance with the Standards for Investment Reporting Applicable to Public Reporting Engagements on Historical Financial Information issued by the Financial Reporting Council in the United Kingdom. Our work included an assessment of evidence relevant to the amounts and disclosures in the aggregated historical financial information. It also included an assessment of the significant estimates and judgements made by those responsible for the preparation of the aggregated historical financial information and whether the accounting policies are appropriate to the Group's circumstances, consistently applied and adequately disclosed.

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

Opinion

In our opinion the aggregated historical financial information gives, for the purposes of the Admission Document, a true and fair view of the aggregated financial position of the Group as at the dates stated and of its aggregated statements of comprehensive income, aggregated statements of changes in equity and the aggregated statements of cash flows for the years ended 31 December 2015, 2016 and 2017 in accordance with the basis of preparation set out in note 1 to the financial information and in accordance with IFRS.

Declaration

For the purposes of paragraph (a) of Schedule Two of the AIM Rules we are responsible for this report as part of the Admission Document and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import. This declaration is included in the Admission Document in compliance with Schedule Two of the AIM Rules.

Yours faithfully

Mazars LLP

AGGREGATED HISTORICAL FINANCIAL INFORMATION OF THE SUBSIDIARIES OF KROPZ PLC

AGGREGATED STATEMENT OF FINANCIAL POSITION

at 31 December

	Notes	2015 US$	2016 US$	2017 US$
ASSETS				
Non-Current Assets				
Property, plant and equipment	***2***	7,774,370	18,403,020	116,366,667
Exploration asset	***3***	2,644,275	3,010,538	3,337,255
Mine under construction	***4***	13,505,480	69,240,001	—
Loans receivable	***6***	690,599	2,611,659	3,629,172
Other financial assets	***7***	1,168,110	1,723,448	1,897,630
Deferred tax	***8***	—	—	2,755,559
		25,782,834	**94,988,666**	**127,986,283**
Current Assets				
Assets held for disposal	***5***	—	—	645,642
Inventories	***9***	—	—	900,456
Trade and other receivables	***10***	978,668	3,373,903	544,546
Cash and cash equivalents	***11***	1,253,071	5,161,905	318,469
		2,231,739	**8,535,808**	**2,409,113**
TOTAL ASSETS		**28,014,573**	**103,524,474**	**130,395,396**
EQUITY & LIABILITIES				
Equity				
Share capital	***12***	28	28	2,354
Accumulated loss		(9,171,975)	(5,706,534)	(9,142,920)
Foreign currency translation reserve		2,102,111	1,397,291	631,217
Owners' equity		(7,069,836)	(4,309,215)	(8,509,349)
Non-controlling interest		(1,411,293)	27,679	(1,710,082)
		(8,481,129)	**(4,281,536)**	**(10,219,431)**
Non-Current Liabilities				
Shareholder loan payable	***14***	32,173,628	57,304,934	64,129,332
Other financial liabilities	***15***	—	35,653,341	45,376,330
Deferred tax	***8***	—	134,663	17,249
Provisions	***16***	—	556,501	4,758,148
		32,173,628	**93,649,439**	**114,281,059**
Current Liabilities				
Trade and other payables	***17***	4,322,074	12,387,626	11,333,768
Other financial liabilities	***15***	—	1,768,945	15,000,000
		4,322,074	**14,156,571**	**26,333,768**
TOTAL EQUITY & LIABILITIES		**28,014,573**	**103,524,474**	**130,395,396**

AGGREGATED STATEMENT OF COMPREHENSIVE INCOME

for the years ended 31 December

	Notes	2015 US$	2016 US$	2017 US$
Revenue		—	—	—
Other income	***20***	61,669	6,643,526	9,316,365
Operating expenses		(7,441,554)	(1,689,869)	(13,792,967)
Operating (loss) / profit	***21***	**(7,379,885)**	**4,953,657**	**(4,476,602)**
Finance income		148,024	436,133	603,701
Finance expense	***22***	(14)	(280,822)	(3,837,668)
(Loss) / profit before taxation		**(7,231,875)**	**5,108,968**	**(7,710,569)**
Taxation	***23***	—	(129,030)	2,665,166
(Loss) / profit after taxation		**(7,231,875)**	**4,979,938**	**(5,045,403)**
Other comprehensive (loss) / income				
Items that are or may be reclassified subsequently to profit or loss				
Foreign currency translation reserve		1,820,974	(704,820)	(766,074)
Other comprehensive income / (loss) for the period		**1,820,974**	**(704,820)**	**(766,074)**
Total comprehensive (loss) / income for the period		**(5,410,901)**	**4,275,118**	**(5,811,477)**
(Loss) / profit attributable to:				
Owners of the Company		(5,666,387)	3,465,441	(3,436,386)
Non-controlling interest		(1,565,488)	1,514,497	(1,609,017)
		(7,231,875)	**4,979,938**	**(5,045,403)**
Total comprehensive (loss) / income attributable to:				
Owners of the Company		(3,845,413)	2,760,621	(4,202,460)
Non-controlling interest		(1,565,488)	1,514,497	(1,609,017)
		(5,410,901)	**4,275,118**	**(5,811,477)**
Basic and diluted earnings per share	***24***	**(24,106)**	**16,600**	**(16,818)**

AGGREGATED STATEMENT OF CHANGES IN EQUITY

for the years ended 31 December

	Share Capital US$	Accumulated Loss US$	Foreign Currency Translation Reserve US$	Total US$	Non-controlling Interest US$	Total Equity US$
Balance at 31 December 2014	**28**	**(3,505,588)**	**281,137**	**(3,224,423)**	**(164,217)**	**(3,388,640)**
Share issue	—	—	—	—	—	—
Total comprehensive loss for the year	—	(5,666,387)	1,820,974	(3,845,413)	(1,565,488)	(5,410,901)
Foreign currency translation	—	—	—	—	318,412	318,412
Balance at 31 December 2015	**28**	**(9,171,975)**	**2,102,111**	**(7,069,836)**	**(1,411,293)**	**(8,481,129)**
Share issue	—	—	—	—	15	15
Total comprehensive income for the year	—	3,465,441	(704,820)	2,760,621	1,514,497	4,275,118
Foreign currency translation	—	—	—	—	(75,540)	(75,540)
Balance at 31 December 2016	**28**	**(5,706,534)**	**1,397,291**	**(4,309,215)**	**27,679**	**(4,281,536)**
Share issue	2,326	—	—	2,236	4	2,330
Total comprehensive loss for the year	—	(3,436,386)	(766,074)	(4,202,460)	(1,609,017)	(5,811,477)
Foreign currency translation	—	—	—	—	(128,748)	(128,748)
Balance at 31 December 2017	**2,354**	**(9,142,920)**	**631,217**	**(8,509,349)**	**(1,710,082)**	**(10,219,431)**

AGGREGATED STATEMENT OF CASH FLOWS

for the years ended 31 December

	Notes	2015 US$	2016 US$	2017 US$
Cash flows from operating activities	***25***	**2,456,581**	**3,172,005**	**(12,003,463)**
Tax paid		—	—	—
Net cash from / (used in) operating activities		**2,456,581**	**3,172,005**	**(12,003,463)**
Cash flows from investing activities				
Purchase of property, plant and equipment	***2***	(7,042,649)	(7,467,346)	(2,650,516)
Disposal of property, plant and equipment	***2***	—	3,402	822
Purchase of exploration assets	***3***	(820,271)	—	—
Development of mine under construction	***4***	(14,640,038)	(48,383,915)	(10,231,917)
Finance income received		135,421	377,402	343,274
Net cash used in investing activities		**(22,367,537)**	**(55,470,457)**	**(12,538,337)**
Cash flows from financing activities				
Finance costs paid		(14)	—	(294,774)
Shareholder loan payable		24,102,522	21,458,418	3,996,430
Other financial liabilities		(1,222,124)	36,484,181	16,289,455
Issue of loans receivables		(41,602)	(1,818,329)	(443,999)
(Payment) / receipt of guarantees		(1,418,843)	(364,663)	11,863
Net cash from financing activities		**21,419,939**	**55,759,607**	**19,558,975**
Net cash movement for the year		**1,508,984**	**3,461,155**	**(4,982,825)**
Cash at the beginning of the year		14,414	1,253,071	5,161,905
Foreign exchange effect on cash		(270,327)	447,679	139,389
Total cash at the end of the year	***11***	**1,253,071**	**5,161,905**	**318,469**

NOTES TO THE AGGREGATED HISTORICAL FINANCIAL INFORMATION

for the years ended 31 December

1. Accounting policies

1.1. Basis of preparation

Reporting overview

Kropz plc (the "**Company**") was incorporated and registered in England and Wales on 10 January 2018. Kropz SA (Pty) Ltd and First Gear Exploration Limited became subsidiaries of the Company following the completion of Share Purchase Agreements on 27 November 2018 and 4 June 2018 respectively as part of a wider group reorganisation. The Company is now the parent holding company of the Subsidiaries (together the "**Group**"). Prior to the group restructuring the Subsidiaries were controlled by Kropz International SARL, a company incorporated in Luxembourg.

This aggregated historical financial information includes the results of Kropz SA (Pty) Ltd and its subsidiaries, Elandsfontein Land Holdings (Pty) Ltd, Kropz Elandsfontein (Pty) Ltd, West Coast Fertilizers (Pty) Ltd, Xsando (Pty) Ltd and SA Lithium (Pty) Ltd, and First Gear Exploration Limited (together the "**Subsidiaries**") for the years ended 31 December 2015, 31 December 2016 and 31 December 2017 (the "**Aggregated Historical Financial Information**") and is prepared for the purposes of the admission of the ordinary shares of Kropz plc, the parent company of the Subsidiaries, to the AIM market operated by London Stock Exchange plc.

Aggregation of financial information

The Subsidiaries were under common control of the same ultimate beneficial owners and effectively operated as a group under common management throughout the period covered by the Aggregated Historical Financial Information although they did not comprise a group as defined by International Financial Reporting Standards. In order to assist readers of this Aggregated Historical Financial Information in understanding the trading performance and financial position of the Subsidiaries, the assets, liabilities and results of the individual companies have been aggregated (with intercompany transaction and balances eliminated) to present the results and balances that would have been shown had the Subsidiaries been under the control of a single common parent throughout the financial periods presented.

The Aggregated Historical Financial Information of the Subsidiaries of Kropz plc has been prepared on the going concern basis in accordance with, and in compliance with, International Financial Reporting Standards ("**IFRS**") and International Financial Reporting Interpretations Committee ("**IFRIC**") interpretations as adopted by the European Union and effective at the time of preparing the Aggregated Historical Financial Information, except as described below.

IFRS as adopted by the European Union does not provide for the preparation of aggregated financial information and accordingly in preparing the Aggregated Historical Financial Information certain accounting conventions commonly used for the preparation of historical financial information for inclusion in investment circulars as described in the Annexure to SIR 2000 (Investment Reporting Standard applicable to public reporting engagements on historical financial information) issued by the Financial Reporting Council in the UK have been applied. The application of these conventions results in a material departure from IFRS as adopted by the European Union. In all other respects, IFRS as adopted by the European Union have been applied. The accounting policies applied and disclosed below are consistent with those to be used by the Company in its next financial statements. These policies have been applied consistently to all periods presented, unless otherwise stated. In line with the transition provisions of IFRS 9 Financial Instruments the Group has elected to apply on transition on 1 January 2018 a limited retrospective approach. Applying a limited retrospective approach on adoption of IFRS 9 in 2018 results in no restatement of comparative periods with the cumulative effect of any changes in accounting policies being recognised in opening retained earnings on 1 January 2018. Consistent with this policy election, this financial information has been prepared on the basis of policies that will apply to the comparatives periods presented in the 2018 financial statements and, as a result, there have been no classification, measurement or recognition adjustments relating to application of this new standard in this

financial information. Refer to the section of the note 1.20 'Standards, amendments and interpretations adopted in the current financial year' for further information about the expected impact of IFRS 9 on its adoption in 2018.

The Aggregated Historical Financial Information reflects the aggregation of the financial information of:

- Kropz SA (Pty) Ltd and its subsidiaries, prepared on a consolidated basis, as described in accounting policy 1.3; and
- First Gear Exploration Limited.

First Gear Exploration Limited was incorporated in February 2017.

Entities included in the Aggregated Historical Financial Information

The entities reflected in the Aggregated Historical Financial Information are:

Entity:	Immediate Parent company at the date of the Admission Document	% ownership of Kropz plc at the date of the Admission Document	Country of incorporation
Kropz SA (Pty) Ltd	Kropz plc	100%	South Africa
Elandsfontein Land Holdings (Pty) Ltd	Kropz SA (Pty) Ltd	70%	South Africa
Kropz Elandsfontein (Pty) Ltd	Kropz SA (Pty) Ltd	74%	South Africa
West Coast Fertilizers (Pty) Ltd	Kropz SA (Pty) Ltd	70%	South Africa
Xsando (Pty) Ltd	Kropz SA (Pty) Ltd	70%	South Africa
SA Lithium (Pty) Ltd	n/a*	Nil*	South Africa
First Gear Exploration Limited	Kropz plc	50% + 1 share	Ghana

** On 5 March 2018 the Group disposed of its interest in SA Lithium (Pty) Ltd. During the periods reflected in the Aggregated Historical Financial Information, the Group owned 74% of the ordinary share capital of SA Lithium (Pty) Ltd through Kropz SA (Pty) Ltd. The results, assets and liabilities of this entity are reflected in the Aggregated Historical Financial Information to the date of disposal.*

Going concern

To date, the Group has spent approximately US$120 million on its Elandsfontein Phosphate Project to construct the processing plant and infrastructure, initial mining and capitalised working costs. In April 2017 the Group substantially completed development activity of its mining assets and plant commissioning commenced. However, a number of technical challenges were identified during the initial commissioning phase and a decision was taken by the Directors to place the mine under care and maintenance from August 2017.

Assisted by experts in the field of phosphate processing, the Group examined the causes behind the initial challenges experienced in the plant. A number of key factors have been identified and it is now proposed to address these, including an additional water thickener and attritioning circuit and to re-commission a modified reverse-reverse circuit. Further capital expenditure will be required to upgrade the processing plant, in order to address the challenges identified. However, at 31 December 2017 the Group did not have sufficient available resources to undertake this work. Kropz plc is seeking admission to AIM in order to raise the funds required to complete the commissioning of the Elandsfontein Phosphate Project and secure working capital through to first production.

The development of the Group's mine has been financed through shareholder and bank loans. The bank loan was repayable in quarterly instalments from 31 March 2018 under the terms of the loan applicable at 31 December 2017. The classification of loan repayments of US$15 million within current liabilities, along with trade and other payables in connection with the development of the mine, resulted in net current liabilities of US$23.9 million at 31 December 2017.

The Group was unable to fund the instalment payments on the bank loan as they fell due and consequently, under the terms of the facility agreement, was in default from 1 April 2018. On 20 September 2018 the Group and BNP Paribas conditionally agreed a waiver of the breach and restructure of the facility under which the first capital repayment has been deferred to 2020. In addition, BNP Paribas provided all the necessary consents required to facilitate all the contemplated transactions leading up to the admission of Kropz plc to AIM. The waiver and restructured facility are contingent on the admission of Kropz plc's shares to trading on AIM by 30 November 2018.

In anticipation of the admission of Kropz plc's shares to trading on AIM, the Group has completed a restructuring process which included a share-for-share exchange between the shareholders and Kropz plc, the consolidation and set-off of various shareholder loans and the capitalisation of a portion of shareholder loans. The consolidation, set-off and capitalisation of various loans has resulted in the significant reduction of the Group's debt position.

The Directors have prepared cash flow forecasts for the Group which include assumed net placing proceeds of US$32 million and the effects of the restructuring of the shareholder and bank loans, the wider group reorganisation, and capital expenditure in order to re-commission the Group's Elandsfontein Phosphate Project by September 2019. The cash flow forecasts indicate that the Group will be able to meet its liabilities as they fall due for the foreseeable future.

On the basis of the forecasts, the Directors have concluded that it is appropriate to prepare the Group's Aggregated Historical Financial Information on a going concern basis.

1.2 Functional and presentational currencies

The Aggregated Historical Financial Information is presented in US Dollars.

The functional currency of Kropz SA (Pty) Ltd and its subsidiaries (as shown above) is South African Rand, being the currency in which the majority of the companies' transactions are denominated.

In order to satisfy the requirements of IAS 21 with respect to presentation currency, the financial information has been translated from Rand into US Dollars using the procedures outlined below:

- Assets and liabilities where the functional currency is other than US Dollars were translated into US Dollars at the relevant closing rates of exchange;
- Non-US Dollar trading results were translated into US Dollars at the relevant average rates of exchange;
- Differences arising from the retranslation of the opening net assets and the results for the year have been taken to the foreign currency translation reserve; and
- Share capital has been translated at the historical rates prevailing at the dates of transactions.

The exchange rates used were as follows:

Rand/dollar exchange rate:	**2014**	**2015**	**2016**	**2017**
Average rate	0.09256	0.07828	0.06799	0.07508
Closing rate	0.08642	0.06445	0.07338	0.08134

The functional and presentation currency of First Gear Exploration Limited is US Dollars.

1.3. Basis of consolidation of Kropz SA (Pty) Limited and its subsidiaries

The consolidation of Kropz SA (Pty) Ltd incorporates the balances and results of Kropz SA (Pty) Limited and its subsidiaries (as shown in accounting policy 1.1).

The subsidiaries are all entities in which Kropz SA (Pty) Ltd has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether Kropz SA (Pty) Limited controls another entity.

The Kropz SA (Pty) Ltd subsidiaries are fully consolidated from the date on which control is transferred to Kropz SA (Pty) Ltd. They are de-consolidated from the date that control ceases.

The results of subsidiaries are included in the consolidation from the effective date of acquisition to the effective date of disposal. All intragroup transactions, balances, income and expenses are eliminated.

Non-controlling interests in the net assets of consolidated subsidiaries are identified and recognised separately from the Group's interest therein, and are recognised within equity.

The difference between the fair value of consideration paid or received and the movement in non-controlling interest for such transactions is recognised in equity attributable to the owners of the parent.

1.4. Property, plant and equipment

Property, plant and equipment includes buildings and infrastructure, machinery, plant and equipment, mineral exploration, site preparation and development and essential spare parts that are held to minimise delays arising from plant breakdowns, that are expected to be used during more than one period.

Assets that are in the process of being constructed, which include capitalised development and mineral exploration and evaluation costs, are measured as cost less accumulated impairment and are not depreciated.

All other classes of property, plant and equipment is stated at historical cost less accumulated depreciation and accumulated impairment. Land is not depreciated.

Historical cost includes expenditure that is directly attributable to the acquisition of the items, including:

- The estimated costs of decommissioning the assets and site rehabilitation costs to the extent that they related to the asset
- Capitalised borrowing costs
- Capitalised pre-production expenditure
- Topsoil and overburden stripping costs

The cost of items of property, plant and equipment are capitalised into its various components where the useful life of the components differ from the main item of property, plant and equipment to which the component can be logically assigned. Expenditure incurred to replace a significant component of property, plant and equipment is capitalised and any remaining carrying value of the component replaced is written off as an expense in the income statement.

Direct costs incurred on major projects during the period of development or construction are capitalised. Subsequent expenditure on property, plant and equipment is capitalised only when the expenditure enhances the value or output of the asset beyond original expectations, it is probable that future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably. Costs incurred on repairing and maintaining assets are recognised in the income statement in the period in which they are incurred.

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in profit or loss.

Capitalised borrowing costs comprise interest paid on shareholder loans incurred pre-production in Kropz Elandsfontein (Pty) Ltd and is currently charged at the 1 month US Libor interest rate plus 3% on US Dollar denominated loans and at the 3 month JIBAR interest rate plus 3% on South African Rand denominated shareholder loans.

Depreciation

All items of property, plant and equipment are depreciated on either a straight line method or unit of production method at cost less estimated residual values over their useful lives as follows:

Item	Depreciation method	Average useful life
Building and Infrastructure		
Buildings	Units of production	Life-of-mine*
Roads	Straight line	15 years
Substation	Straight line	15 years
Machinery, Plant & Equipment		
Fixed plant and equipment	Units of production	Life-of-mine*
Rehabilitation provisions	Units of production	Life-of-mine*
Critical Spare Parts	Straight line	2-15 years
Furniture & Fittings	Straight line	6 years
Motor vehicles	Straight line	5 years
Computer equipment	Straight line	3 years
Mineral exploration, site preparation	Units of production	Life-of-mine*
Stripping Activity	Units of production	Life-of-mine*

* Depreciation of mining assets is computed principally by the units-of-production method over life-of-mine based on estimated quantities of economically recoverable proved and probable reserves, which can be recovered in future from known mineral deposits.

Research, mineral and evaluation costs

Research, development, mineral exploration and evaluation costs are expenses in the year in which they are incurred until they result in projects that:

- Are evaluated as being technically or commercially feasible
- Has sufficient resources to complete development
- Can demonstrate that it will generate future economic benefits

Once these criteria are met, all directly attributable development costs and ongoing mineral exploration and evaluation costs are capitalized within property, plant and equipment. During the development of mine, before production commences, stripping expenses are capitalised as part of the investment in construction of the mine. Capitalisation of pre-production expenditure ceases when the mining property is capable of commercial production.

Useful lives and residual values

The asset's useful lives and residual values are reviewed and adjusted if appropriate, at each reporting date.

Impairment

An asset's carrying amount is written down to its recoverable amount if the assets carrying amount is greater than its recoverable amount.

Capitalisation of borrowing costs

Interest cost and foreign exchange differences which adjust interest costs on borrowings to finance the construction of property, plant and equipment that are considered to be qualifying assets are capitalised during the period of time that is required to complete and prepare the asset for its intended use. Other borrowing costs and foreign exchange gains are recognised in profit or loss.

Stripping activity asset

The costs of stripping activity which provides a benefit in the form of improved access to ore is recognised as a non-current asset where the following criteria are met:

- it is probable that future economic benefit in the form of improved access to the ore body will flow to the entity
- The component of the ore body for which access has been improved can be identified
- The cost of the stripping activity can be reliably measured

The stripping activity is initially measured at cost and subsequently carried at cost less depreciation and impairment losses.

1.5. Mine under construction

Mine under construction assets are initially recognised at cost and subsequently at cost less accumulated amortisation and accumulated impairment losses.

Research and development costs are recognised as an expense in the period incurred.

Development costs previously recognised as an expense are not recognised as an asset in subsequent period.

Amortisation is provided to write down the asset as follows:

Item	Write down method
Capitalised development costs	Units of production method

The residual value, amortisation period and amortisation method for mine under construction assets are reviewed and adjusted if appropriate, at each reporting date.

1.6. Exploration costs

All costs incurred prior to obtaining the legal right to undertake exploration and evaluation activities on a project are written off as incurred. Following the granting of a prospecting right, general administration and overhead costs directly attributable to exploration and evaluation activities will be expensed and all other costs are capitalised and recorded at cost on initial recognition.

The following expenditures are included in the initial and subsequent measurement of the exploration and evaluation assets:

- Acquisition of rights to explore
- Topographical, geological, geochemical or geographical studies
- Exploratory drilling
- Trenching
- Sampling
- Activities in relation to the evaluation of both the technical feasibility and the commercial viability of extracting minerals
- Exploration staff related costs
- Equipment and infrastructure

Exploration and evaluation costs that have been capitalised are classified as either tangible or intangible according to the nature of the assets acquired and this classification is consistently applied.

The tangible assets are subsequently classified as property, plant and equipment and carried at cost.

The intangible assets are subsequently carried at cost and amortised to their residual value over their economic useful life.

As the capitalised exploration and evaluation expenditure asset is not available for use, it is not depreciated.

All capitalised exploration and evaluation expenditure is monitored for indications of impairment in accordance with IFRS 6.

1.7. Game animals

Game animals are wild animals that occur on the farm properties owned by the Group. These animals are managed in terms of a game management plan and excess animals are either sold as live animals or harvested as and when required based on estimated stocking levels and vegetation conditions.

Game animals are measured at their fair value less estimated point-of-sale costs, fair value being determined upon the age and size of the animals and relevant market prices. Market price is determined on the basis that the animal is either to be sold to be slaughtered or realised through sale to customers at fair market value.

Fair market value of game animals is determined by using average live game animal selling prices achieved at live game animal auctions during the relevant year and published from time to time on game animal auctioneering websites.

1.8. Financial instruments

Classification

The Group classifies financial assets and financial liabilities into the following categories:

- Loans and receivables
- Financial liabilities measured at amortised cost

Classification depends on the purpose for which the financial instruments were obtained/ incurred and takes place at initial recognition. Classification is re-assessed on an annual basis.

Initial recognition and measurement

Financial instruments are recognised initially when the Group becomes a party to the contractual provisions of the instruments.

The Group classifies financial instruments, or their component parts, on initial recognition as a financial asset, a financial liability or an equity instrument in accordance with the substance of the contractual arrangement.

Financial instruments are measured initially at fair value.

Subsequent measurement

Loans and receivables are subsequently measured at amortised cost, using the effective interest method, less accumulated impairment losses.

Financial liabilities at amortised cost are subsequently measured at amortised cost, using the effective interest method.

Impairment of financial assets

At each reporting date the Group assesses all financial assets, other than those at fair value through profit or loss, to determine whether there is objective evidence that a financial asset or group of financial assets has been impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have occurred that have a negative effect on the estimated future cash flows of the asset.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced directly or through an allowance account. The impairment loss is recognised in profit or loss.

Where financial assets are impaired through use of an allowance account, the amount of the loss is recognised in profit or loss within operating expenses. When such assets are written off, the write off is made against the relevant allowance account. Subsequent recoveries of amounts previously written off are credited against operating expenses.

Loans to/(from) related party companies

Loans to related party companies are classified as loans and receivables.

Loans from related party companies, including the Shareholder, are classified as financial liabilities measured at amortised cost.

Trade and other receivables

Trade and other receivables are classified as loans and receivables.

Appropriate allowances for estimated irrecoverable amounts are recognised in profit or loss when there is objective evidence that the asset is impaired. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments (more than 30 days overdue) are considered indicators that the trade receivable is impaired. The allowance recognised is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the effective interest rate computed at initial recognition.

The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in profit or loss within operating expenses. When a trade receivable is uncollectable, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against operating expenses in profit or loss.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are classified as loans and receivables.

Trade and other payables

Trade and other payables are classified as financial liabilities at amortised cost.

Interest bearing borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings using the effective interest method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

1.9. Taxation

Current tax assets and liabilities

Current tax for current and prior periods is, to the extent unpaid, recognised as a liability. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset.

Deferred tax assets and liabilities

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

A deferred tax liability is recognised for all taxable temporary differences, except to the extent that the deferred tax liability arises from the initial recognition of an asset or liability in a transaction which at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

A deferred tax asset is recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised. A deferred tax asset is not recognised when it arises from the initial recognition of an asset or liability in a transaction at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Tax expense

Tax expense is recognised in the same component of total comprehensive income (i.e. continuing operations, discontinued operations, or other comprehensive income) or equity as the transaction or other event that resulted in the tax expense.

1.10. Impairment of assets

The Group assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the Group estimates the recoverable amount of the asset.

If there is any indication that an asset may be impaired, the recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the recoverable amount of the cash-generating unit to which the asset belongs is determined.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. That reduction is an impairment loss.

An impairment loss of assets carried at cost less any accumulated depreciation or amortisation is recognised immediately in profit or loss.

An entity assesses at each reporting date whether there is any indication that an impairment loss recognised in prior periods for assets other than goodwill may no longer exist or may have decreased. If any such indication exists, the recoverable amounts of those assets are estimated.

The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss of assets carried at cost less accumulated depreciation or amortisation other than goodwill is recognised immediately in profit or loss. Any reversal of an impairment loss of a revalued asset is treated as a revaluation increase.

1.11. Inventories

Inventories are measured at the lower of cost and net realisable value.

Plant spares and consumables stores are capitalised to the balance sheet and expense to the income statement as they are utilised.

Spares and consumables are valued at the lower of cost and net realisable value. Cost is determined using the weight average method.

Obsolete, redundant and slow-moving items of spares and consumables are identified on a regular basis and written down to their net realisable value.

Inventories are included in current assets, unless the inventory will not be used within 12 months after the end of the reporting period.

1.12. Provisions and contingencies

Environmental Rehabilitation

The provision for environmental rehabilitation is recognised as and when an obligation to incur rehabilitation and mine closure costs arises from environmental disturbance caused by the development or ongoing production of a mining property. Estimated long-term environmental rehabilitation provisions are measured based on the Group's Environmental policy taking into account current technological, environmental and regulatory requirements. Any subsequent

changes to the carrying amount of the provision resulting from changes to the assumptions applied in estimating the obligation are recognised in the statement of profit or loss and other comprehensive income.

The provisions are based on the net present value of the estimated cost of restoring the environmental disturbance that has occurred up to the reporting date, using the risk free rate and the risk adjusted cash flows that reflect current market assessments and the risks specific to the provisions. Increase due to the additional environmental disturbances are capitalised and amortised over the remaining life of the mine.

Ongoing rehabilitation expenditure

Ongoing rehabilitation expenditure incurred is offset against the recognised provision in the statement of profit or loss on other comprehensive income.

Decommissioning Provision

The estimated present value of costs relating to the future decommissioning of plant or other site preparation work, taking into account current environmental and regulatory requirements, is capitalised as part of property, plant and equipment, to the extent that it relates to the construction of and asset, and the related provisions are raised in the statement of financial position, as soon as the obligation to incur such costs arises.

These estimates are reviewed at least annually and changes in the measurement of the provision that result from the subsequent changes in the estimated timing or amount of cash flows, or a change in discount rate, are added to, or deducted from, the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the income statement. If the asset value is increased and there is an indication that the revised carrying value is not recoverable, an impairment test is performed in accordance with the accounting policy on 'Impairment of nonfinancial assets' above.

1.13. Share capital and equity

Ordinary shares are classified as equity and are recorded at the proceeds received net of issue costs.

1.14. Interest income

Interest is recognised, in the income statement, using the effective interest method.

1.15. Borrowing costs

Interest on borrowings directly related to the financing of qualifying capital projects under development is added to the capitalised cost of those projects during the development phase, until such time as the assets are substantially ready for their intended use or sale which, in the case of mining properties, is when they are capable of commercial production. Where funds have been borrowed specifically to finance the project, the amount capitalised represents the actual borrowing costs incurred. Where the funds used to finance a project forming part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the period.

Qualifying assets are assets that necessarily take a substantial period of time (more than 12 months) to get ready for their intended use or sale. Borrowing costs are added to the cost of these assets, until the assets are substantially ready for their intended use or sale.

Capitalisation is suspended during extended periods in which active development is interrupted.

Capitalisation ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

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

1.16. Leases

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership to the lessee. All other leases are operating leases.

Operating leases – lessee

Operating lease payments are recognised as an expense on a straight-line basis over the lease term unless:

- another systematic basis is representative of the time pattern of the benefit from the leased asset, even if the payments are not on that basis, or
- the payments are structured to increase in line with expected general inflation (based on published indexes or statistics) to compensate for the lessor's expected inflationary cost increases.

Any contingent rents are expensed in the period they are incurred.

1.17. Employee benefits

The cost of short-term employee benefits, such as leave pay and sick leave, bonuses, and non-monetary benefits such as medical care), are recognised in the period in which the service is rendered and are not discounted.

1.18. Foreign currency transactions (Kropz SA (Pty) Ltd and its subsidiaries)

A foreign currency transaction is recorded, on initial recognition in Rand, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

At the end of the reporting period foreign currency monetary items are translated using the closing rate.

Cash flows arising from transactions in a foreign currency are recorded in Rand by applying to the foreign currency amount the exchange rate between the Rand and the foreign currency at the date of the cash flow.

1.19. Significant judgements and sources of estimation uncertainty

The preparation of financial statements in conformity with IFRS requires management, from time to time, to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. These estimates and associated assumptions are based on experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Critical judgements in applying accounting policies

The critical judgements made by management in applying accounting policies, apart from those involving estimations, that have the most significant effect on the amounts recognised in the financial statements, are outlined as follows:

Decommissioning and rehabilitation provisions

Quantifying the future costs of these obligations is complex and requires various estimates to be made, as well as interpretations of and decisions regarding regulatory requirements, particularly with respect to the degree of rehabilitation required, with reference to the sensitivity of the environmental area surrounding the sites. Consequently, the guidelines issued for quantifying the future rehabilitation cost of a site, as issued by the Department of Mineral Resources, have been used to estimate future rehabilitation costs.

In determining the environmental rehabilitation liability, an inflation rate of 6% (2016: 6%) was assumed to increase the rehabilitation liability for the next 15 years, and a rate of 8.59% (2016: 8%) to discount that amount to present value. The assumed discount rate of 8.59% is a risk-free rate.

Key sources of estimation uncertainty

Impairment testing

The Group reviews and tests the carrying value of assets when events or changes in circumstances suggest that the carrying amount may not be recoverable. When such indicators exist, management determine the recoverable amount by performing value in use and fair value calculations. These calculations require the use of estimates and assumptions. When it is not possible to determine the recoverable amount for an individual asset, management assesses the recoverable amount for the cash generating unit to which the asset belongs.

Property, plant and equipment

The depreciable amount of property, plant and equipment is allocated on a systematic basis over its useful life. In determining the depreciable amount management makes certain assumptions with regard to the residual value of assets based on the expected estimated amount that the Group would currently obtain from disposal of the asset, after deducting the estimated cost of disposal, if the asset were already of the age and in the condition expected at the end of its useful life. If an asset is expected to be abandoned the residual value is estimated at zero.

In determining the useful lives of property, plant and equipment that is depreciated, management considers the expected usage of assets, expected physical wear and tear, legal or similar limits of assets such as mineral rights as well as obsolescence.

This estimate is further impacted by management's best estimation of proved and probable iron ore reserves and the expected future life of each of the mines within the Group. The forecast production could be different from the actual phosphate mined. This would generally result from significant changes in the factors or assumptions used in estimating phosphate reserves. These factors include:

- Changes in proved and probable ore reserves
- Differences between achieved ore prices and assumptions
- Unforeseen operational issues at mine sites
- Changes in capital, operating, mining, processing, reclamation and logistics costs, discount rates and foreign exchange rates

Any change in management's estimate of the useful lives and residual values of assets would impact the depreciation charge. Any change in management's estimate of the total expected future life of each of the mines would impact the depreciation charge as well as the estimated rehabilitation and decommissioning provisions.

Taxation

Judgement is required in determining the provision for income taxes due to the complexity of legislation. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business.

The Group recognises the net future tax benefit related to deferred income tax assets to the extent that it is probable that the deductible temporary differences will reverse in the foreseeable future. Assessing the recoverability of deferred income tax assets requires the Group to make significant estimates related to expectations of future taxable income. Estimates of future taxable income are based on forecast cash flows from operations and the application of existing tax laws in each jurisdiction. To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Group to realise the net deferred tax assets recorded at the end of the reporting period could be impacted.

Life of mine

Life of mine is defined as the remaining years of production, based on proposed production rates and ore reserves and will be assessed as soon as additional exploration drilling has been performed and further reserves proven based on additional test results.

1.20. New standards

Standards, amendments and interpretations adopted in the current financial year

In the current year, the Group has adopted the following standards, amendments and interpretations that are effective for the current year and that are relevant to its operations:

Standard/Interpretation	Effective date: Years beginning on or after	Expected impact:
IAS 7 Statement of Cash Flows: Amendment in respect of the disclosure initiative	1 January 2017	This change resulted in additional disclosure (see note 26)
IAS 12 Income Taxes: Amendment in relation to the recognition of deferred tax assets for unrealised losses	1 January 2017	No material impact
Annual Improvements to IFRSs (2014 – 2016): Clarification of the scope of IFRS 12 Disclosure of Interests in Other Entities	1 January 2017	No material impact

Standards, amendments and interpretations in issue but not yet effective

Standard/Interpretation	Effective date: Years beginning on or after	Expected impact:
IFRS 16 Leases	1 January 2019	Unlikely there will be a material impact
IFRS 9 Financial Instruments	1 January 2018	Unlikely there will be a material impact
IFRS 15 Revenue from Contracts with Customers	1 January 2018	Unlikely there will be a material impact
Amendments to IFRS 15: Clarifications to IFRS 15 Revenue from Contracts with Customers	1 January 2018	Unlikely there will be a material impact

2. Property, plant and equipment

	2015 Cost US$	2015 Depreciation US$	2015 Carrying value US$	2016 Cost US$	2016 Depreciation US$	2016 Carrying value US$
Buildings and Infrastructure						
Land	1,555,216	—	**1,555,216**	1,770,632	—	**1,770,632**
Buildings	386,700	—	**386,700**	1,036,591	(1,401)	**1,035,190**
Capitalised road costs	5,731,089	—	**5,731,089**	9,492,439	(316,415)	**9,176,024**
Capitalised sub station	—	—	**—**	4,106,567	(45,629)	**4,060,938**
Machinery, Plant and Equipment						
Plant and Machinery	61,662	(61,662)	**—**	70,203	(70,203)	**—**
Furniture and fittings	41,505	(32,119)	**9,386**	164,277	(52,528)	**111,749**
Geological equipment	44,219	(20,209)	**24,010**	50,343	(32,937)	**17,406**
Office equipment	1,717	(396)	**1,321**	2,299	(777)	**1,522**
Other fixed assets	877	(460)	**417**	998	(724)	**274**
Motor vehicles	105,707	(43,722)	**61,985**	148,361	(69,304)	**79,057**
Computer equipment	9,308	(5,062)	**4,246**	35,143	(12,366)	**22,777**
Stripping activity costs	—	—	**—**	2,127,451	—	**2,127,451**
Total	**7,938,000**	**(163,630)**	**7,774,370**	**19,005,304**	**(602,284)**	**18,403,020**

	2017 Cost US$	2017 Depreciation US$	2017 Carrying value US$
Buildings and Infrastructure			
Land	1,962,789	—	**1,962,789**
Buildings	13,623,424	(4,633)	**13,618,791**
Capitalised road costs	10,522,601	(1,052,260)	**9,470,341**
Capitalised sub station	4,565,386	(354,939)	**4,210,447**
Machinery, Plant and Equipment			
Critical Spare Parts	1,419,078	—	**1,419,078**
Plant and Machinery	59,579,607	(77,822)	**59,501,785**
Furniture and fittings	185,301	(81,567)	**103,734**
Geological equipment	55,807	(47,518)	**8,289**
Office equipment	43,343	(5,850)	**37,493**
Other fixed assets	1,106	(1,023)	**83**
Motor vehicles	152,260	(96,157)	**56,103**
Computer equipment	43,951	(26,734)	**17,217**
Mineral exploration & development	21,900,572	—	**21,900,572**
Stripping activity costs	3,729,186	—	**3,729,186**
Game animals	330,759		**330,759**
Total	**118,115,170**	**(1,748,503)**	**116,366,667**

Included within the carrying value of property, plant and equipment are finance charges and capitalised depreciation (stated at the balance sheet exchange rates) of:

	2015 US$	2016 US$	2017 US$
Finance charges	—	—	8,038,409
Depreciation	—	—	946,393

Reconciliation of property, plant and equipment – 2015

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Depreciation US$	Foreign exchange gain / loss US$	Closing balance US$
Buildings and Infrastructure							
Land	2,085,270	—	—	—	—	(530,054)	**1,555,216**
Buildings	518,497	—	—	—	—	(131,797)	**386,700**
Capitalised road costs	—	6,961,261	—	—	—	(1,230,172)	**5,731,089**
Machinery, Plant and Equipment							
Furniture and fittings	21,860	—	—	—	(8,402)	(4,072)	**9,386**
Geological equipment	43,886	—	—	—	(10,593)	(9,283)	**24,010**
Office equipment	1,173	872	—	—	(330)	(394)	**1,321**
Other fixed assets	882	—	—	—	(293)	(172)	**417**
Motor vehicles	13,064	76,729	—	—	(13,274)	(14,534)	**61,985**
Computer equipment	4,711	3,786	—	—	(2,896)	(1,355)	**4,246**
Total	**2,689,343**	**7,042,648**	**—**	**—**	**(35,788)**	**(1,921,833)**	**7,774,370**

Reconciliation of property, plant and equipment – 2016

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Depreciation US$	Foreign exchange gain / loss US$	Closing balance US$
Buildings and Infrastructure							
Land	1,555,216	—	—	—	—	215,416	**1,770,632**
Buildings	386,700	552,567	—	—	(1,298)	97,221	**1,035,190**
Capitalised road costs	5,731,089	2,749,753	—	—	(293,194)	988,376	**9,176,024**
Capitalised sub station	—	2,025,070	—	1,780,136	(42,280)	298,012	**4,060,938**
Machinery, Plant and Equipment							
Furniture and fittings	9,386	115,200	(3,087)	—	(18,467)	8,717	**111,749**
Geological equipment	24,010	—	—	—	(9,200)	2,596	**17,406**
Office equipment	1,321	319	—	—	(302)	184	**1,522**
Other fixed assets	417	—	—	—	(185)	42	**274**
Motor vehicles	61,985	29,698	—	—	(21,836)	9,210	**79,057**
Computer equipment	4,246	23,411	(315)	—	(6,470)	1,905	**22,777**
Stripping activity costs	—	1,971,327	—	—	—	156,124	**2,127,451**
Total	**7,774,370**	**7,467,345**	**(3,402)**	**1,780,136**	**(393,232)**	**1,777,803**	**18,403,020**

Reconciliation of property, plant and equipment – 2017

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Depreciation US$	Foreign exchange gain / loss US$	Closing balance US$
Buildings and Infrastructure							
Land	1,770,632	—	—	—	—	192,157	**1,962,789**
Buildings	1,035,190	13,547	—	11,450,207	(2,843)	1,122,690	**13,618,791**
Capitalised road costs	9,176,024	—	—	—	(647,472)	941,789	**9,470,341**
Capitalised sub station	4,060,938	16,361	—	—	(285,134)	418,282	**4,210,447**
Machinery, Plant and Equipment							
Critical Spare Parts	—	1,309,772	—	—	—	109,306	**1,419,078**
Plant and Machinery	—	—	—	54,918,585	—	4,583,200	**59,501,785**
Furniture and fittings	111,749	2,950	—	—	(21,541)	10,576	**103,734**
Geological equipment	17,406	—	—	—	(10,159)	1,042	**8,289**
Office equipment	1,522	37,652	—	—	(4,604)	2,923	**37,493**
Other fixed assets	274	—	—	—	(204)	13	**83**
Motor vehicles	79,057	—	(822)	—	(28,281)	6,149	**56,103**
Computer equipment	22,777	4,954	—	—	(12,368)	1,854	**17,217**
Mineral exploration & development	—	—	—	20,213,653	—	1,686,919	**21,900,572**
Stripping activity costs	2,127,451	1,265,263	—	—	—	336,472	**3,729,186**
Game animals	—	305,282	—	—	—	25,477	**330,759**
Total	**18,403,020**	**2,955,781**	**(822)**	**86,582,445**	**(1,012,606)**	**9,438,849**	**116,366,667**

Transfers

During the year ended 31 December 2017 the Group completed development activity on its mining assets. Accordingly, the capitalised development costs were transferred to property, plant and equipment during the year.

During the year a decision was made by the Board of Directors to actively market the Group's head office property for disposal. Accordingly, the property has been allocated to ''assets held for disposal'' at its historical cost. See note 5 for further details.

Game animals

Fair value of hierarchy

Game animal assets are carried at fair value.

The different levels are defined as follow:

- Level 1: Quoted unadjusted prices in active markets for identical assets or liabilities that the Group can access as measurement date.
- Level 2: Inputs other than quoted prices included in level 1 that are observable for the asset or liability either directly or indirectly.
- Level 3: Unobservable inputs for the asset or liability.

Levels of fair value measurements – Level 3.

3. Exploration asset

	2015 Cost US$	2015 Amort-isation US$	2015 Carrying value US$	2016 Cost US$	2016 Amort-isation US$	2016 Carrying value US$
Exploration assets	2,644,275	—	**2,644,275**	3,010,538	—	**3,010,538**

	2017 Cost US$	2017 Amort-isation US$	2017 Carrying value US$
Exploration assets	3,337,255	—	**3,337,255**

Mineral resources acquired are not subject to amortisation until they are included in the life-of-the-mine plan and production has commenced.

All assets, liabilities, income and expense and operating and investing cash flows arise from the exploration for and evaluation of mineral resource.

Reconciliation of exploration assets

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Amort-isation US$	Foreign exchange gain / loss US$	Closing balance US$
2015							
Exploration assets	2,627,947	820,271	—	10,942	—	(814,885)	**2,644,275**
2016							
Exploration assets	2,644,275	—	—	—	—	366,263	**3,010,538**
2017							
Exploration assets	3,010,538	—	—	—	—	326,717	**3,337,255**

4. Mine under construction

	2015 Cost US$	2015 Amort-isation US$	2015 Carrying value US$	2016 Cost US$	2016 Amort-isation US$	2016 Carrying value US$
Capitalised development costs	13,505,480	—	**13,505,480**	69,240,001	—	**69,240,001**

	2017 Cost US$	2017 Amort-isation US$	2017 Carrying value US$
Capitalised development costs	—	—	—

Development costs are not subject to amortisation until they are included in the life-of-the-mine plan and production has commenced.

During the year ended 31 December 2017 the Group completed development activity on its mining assets. Accordingly, the capitalised development costs were transferred to property, plant and equipment during the year.

Included within the carrying value of capitalised development costs are finance charges and capitalised depreciation (stated at the balance sheet exchange rates) of:

	2015 US$	2016 US$	2017 US$
Finance charges	1,444,712	4,263,880	—
Depreciation	16,879	381,260	—

Reconciliation of mine under construction asset

	Opening balance US$	Additions US$	Provision US$	Transfers US$	Amort-isation US$	Foreign exchange gain / loss US$	Closing balance US$
2015 Capitalised development costs	—	16,415,358	—	(10,942)	—	(2,898,936)	**13,505,480**
2016 Capitalised development costs	13,505,480	51,175,513	515,662	(1,780,136)	—	5,823,482	**69,240,001**
2017 Capitalised development costs	69,240,001	13,284,398	3,101,546	(87,228,087)	—	1,602,142	**—**

5. Assets classified as held for sale

	2015 US$	2016 US$	2017 US$
Property held for sale	—	—	595,911
Foreign exchange gain	—	—	49,731
Total	**—**	**—**	**645,642**

During the year ended 31 December 2017 the Directors decided to dispose of the Group's former head office, which was no longer utilised. The property was carried at its acquisition cost and had not been depreciated. No impairment loss was recognised on reclassification of the property as held for sale nor as at 31 December 2017 as the Directors of the Group expected that the fair value (estimated based on the recent market prices of similar properties in similar locations) less costs to sell would be higher than the carrying amount.

The property was actively marketed for sale and was disposed of subsequent to the balance sheet date for consideration of US$660,000 (R8,200,000).

The property is presented as part of the South African reporting segment.

6. Loans receivables

	2015 US$	2016 US$	2017 US$
Loan Anyaspex (Pty) Ltd	162,099	—	—
Loan Vaxoscan (Pty) Ltd	162,208	183,523	203,439
Loan Xsando (Pty) Ltd	1,540	—	—
Loan Tiestabyte (Pty) Ltd	1,244	1,892,896	2,366,585
Loan Adistra CC	—	115,063	141,448
Other loans receivable	363,508	420,177	917,700
Total	**690,599**	**2,611,659**	**3,629,172**

Loan Anyaspex (Pty) Ltd

The Anyaspex (Pty) Ltd loan is unsecured and bears interest at the prime interest rate and is repayable on demand subject to a 12-month notice period.

Loan Vaxoscan (Pty) Ltd

The Vaxoscan (Pty) Ltd loan is unsecured and bears interest at the prime interest rate and is repayable on demand subject to a 12-month notice period.

Loan Tiestabyte (Pty) Ltd

The Tiestabyte (Pty) Ltd loan is unsecured and bears interest at 1 month JIBAR plus 5% and is repayable on demand subject to a 12-month notice period.

Other loans

The other loans are unsecured, bear interest at varying rates and are repayable on demand subject to a 12-month notice period. Amounts receivable from related parties are disclosed in note 27.

Fair value of loan receivables

The carrying value of the loans approximate their fair value.

7. Other financial assets

	2015 US$	2016 US$	2017 US$
DMR guarantee	648,180	738,945	813,405
Eskom guarantee (1)	115,971	132,161	145,472
Eskom guarantee (2)	339,509	386,907	425,875
Eskom guarantee (3)	—	392,058	431,538
Heritage Western Cape Trust	64,450	73,377	81,340
Total	**1,168,110**	**1,723,448**	**1,897,630**

DMR guarantee

Guarantee in favour of the Department of Mineral Resources for R 9,866,655 in respect of a ‘‘financial guarantee for the rehabilitation of land disturbed by prospecting/mining’’.

Eskom guarantee (1)

Guarantee issued to Eskom Holdings SOC Limited in the amount of R 1,788,433 in respect of a ‘‘contract works security guarantee’’.

Eskom guarantee (2)

Guarantee issued to Eskom Holdings SOC Limited in the amount of R5,235,712 in respect of 'supply agreement (early termination) guarantee''.

Eskom guarantee (3)

Guarantee issued to Eskom Holdings SOC Limited in the amount of R5,305,333 in respect of an ''electricity accounts guarantee''.

Heritage Western Cape Trust

R1,000,000 settlement agreement trust fund held in trust by attorneys on behalf of the Heritage Western Cape Trust until Elandsfontein Exploration & Mining (Pty) Ltd lodges a heritage impact assessment. The heritage impact assessment was lodged during this year and the Group is waiting for the return of the guarantee.

Fair value of other financial assets

The carrying value of other financial assets approximate their fair value.

8. Deferred tax

	2015 US$	2016 US$	2017 US$
Deferred tax asset			
Assessed loss	—	22,278,106	33,704,745
Dismantling costs	—	155,820	1,113,638
Provisions	—	—	218,643
Capital loss	—	—	12,091
Total	**—**	**22,433,926**	**34,901,590**
Deferred tax liability			
Property, plant and equipment	—	(2,214,812)	(2,382,769)
Mining asset	—	(20,114,252)	(27,841,133)
Foreign exchange adjustments on loans	—	(239,525)	(2,086,905)
Total	**—**	**(22,568,589)**	**(32,310,807)**
		—	
Total deferred tax asset	**—**		**2,755,559**
Total deferred tax liability	**—**	**(134,663)**	**(17,249)**

	2015 US$	2016 US$	2017 US$
Reconciliation of net deferred tax (liability) / asset			
At beginning of year	—	—	(134,663)
Increases in tax loss available for set off against future taxable income – gross of valuation allowance	—	22,278,106	8,957,085
Deductible temporary difference movement on tangible fixed assets	—	(2,214,812)	72,404
Deductible temporary difference movement on development costs	—	(20,114,252)	(5,543,992)
Deductible temporary difference movement on foreign exchange adjustment on loans	—	(239,525)	(1,769,552)
Taxable temporary difference on provision for dismantling costs	—	155,820	1,159,551
Capital loss	—	—	12,091
Foreign exchange gain / loss	—	—	(14,614)
Total		**(134,663)**	**2,738,310**

All movements in deferred tax balances reported during the years ended 31 December 2016 and 31 December 2017 were recognised in profit or loss for the year.

9. Inventories

	2015 US$	2016 US$	2017 US$
Consumables	—	—	452,405
Spare parts	—	—	448,051
Total	**—**	**—**	**900,456**

10. Trade and other receivables

	2015 US$	2016 US$	2017 US$
Other receivables	214,413	20,899	153,982
Deposits	—	95,108	53,844
VAT	764,255	3,257,896	336,720
Total	**978,668**	**3,373,903**	**544,546**

Credit quality of trade and other receivables

The credit quality of trade and other receivables are considered recoverable due to management's assessment of debtors' ability to repay the outstanding amount.

Credit risk

The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable mentioned above.

Trade and other receivables past due but not impaired

None of the trade and other receivables were past due at the end of the reporting dates.

Trade and other receivables impaired

None of the trade and other receivables were considered impaired. Trade and other receivables have not been discounted as the impact of discounting is considered to be insignificant.

Fair value of trade and other receivables

The carrying value of trade and other receivables approximate their fair value.

11. Cash and cash equivalents

	2015 US$	2016 US$	2017 US$
Bank balances	1,253,071	5,159,478	317,564
Cash on hand	—	2,427	905
Total	**1,253,071**	**5,161,905**	**318,469**

Credit quality of cash at bank and short term deposits, excluding cash on hand

The Group only deposits cash and cash equivalents with reputable banks with good credit ratings.

Fair value of cash at bank

Due to the short-term nature of cash and cash equivalents the carrying amount is deemed to approximate the fair value.

12. Share Capital

Kropz SA (Pty) Ltd

	2015 US$	2016 US$	2017 US$
Authorised			
1 000 ordinary shares of R1 each, converted at the exchange rate as at the reporting date.	64	73	81
Issued			
300 ordinary shares of R1 each, converted at the exchange rate as at the share issued date (R1 = USD 0.0933)	28	28	28

First Gear Exploration Limited

	2015 US$	2016 US$	2017 US$
Authorised			
10,000,000 ordinary shares of GHS1 each, converted at the exchange rate as at the reporting date	—	—	2,212,145
Issued			
10,000 ordinary shares of GHS1 each, converted at the exchange rate as at the share issued date (GHS1 = USD 0.2326)	—	—	2,326

13. Reserves

Nature and purpose of reserves

Foreign Currency Translation Reserve

The foreign currency translation reserve comprises all foreign currency differences arising from the translation of the assets, liabilities and equity of the entities included in these aggregated financial statements from their functional currencies to the presentational currency.

14. Shareholder loan payable

	2015 US$	2016 US$	2017 US$
Kropz International SARL	32,173,628	57,304,934	64,129,332

This loan is unsecured, bears interest at 1 month US Libor plus 3%, is repayable over 15 years from the first drawdown and is US Dollar denominated. This loan has been subordinated in favour of other creditors until such time as the Group's assets are in excess of its liabilities.

As part of the wider group reorganisation the shareholder loan was reduced subsequent to the balance sheet date through the issue of new shares in certain subsidiaries. The remaining loan balance was novated to Kropz plc at its book value in exchange for shares in Kropz plc.

Details of the group reorganisation are provided in note 31.

Fair value of the shareholder loan

The carrying value of the loan approximates its fair value.

15. Other financial liabilities

	2015 US$	2016 US$	2017 US$
BNP Paribas	—	12,084,254	29,280,528
African Rainbow Capital (Pty) Ltd	—	22,156,883	27,146,416
Tiestabyte (Pty) Ltd	—	3,181,123	3,901,970
M Nunn	—	—	47,416
Nuland Limited	—	26	—
Total	**—**	**37,422,286**	**60,376,330**
Non-current financial liabilities	—	35,653,341	45,376,330
Current financial liabilities	—	1,768,945	15,000,000
Total	**—**	**37,422,286**	**60,376,330**

BNP Paribas

A US$30,000,000 facility has been secured from BNP Paribas. Interest is charged at three months LIBOR plus 4.5% and is repayable quarterly over 2 years. The first repayment was due on 31 March 2018.

Subsequent to the balance sheet date, the terms of the BNP Paribas loan were amended. Further details of the amendments are provided in note 31.

African Rainbow Capital (Pty) Ltd

The above loan bears interest at 1 month JIBAR plus 3% and is to be repaid in accordance with the Shareholders Agreement, subject to the Memorandum of Incorporation, subject to adequate cash resources available in the Group to make repayments.

Subsequent to the balance sheet date African Rainbow Capital (Pty) Ltd acquired Tiestabyte (Pty) Ltd's equity and loan interests in the Group. As part of the wider group reorganisation the African Rainbow Capital (Pty) Ltd loan was reduced through the issue of new shares in certain subsidiaries.

Details of the group reorganisation are provided in note 31.

Tiestabyte (Pty) Ltd

The above loan bears interest at 1 month JIBAR plus 3% and is to be repaid in accordance with the Shareholders Agreement, subject to the Memorandum of Incorporation, subject to adequate cash resources available in the Group to make repayments.

Subsequent to the balance sheet date African Rainbow Capital (Pty) Ltd acquired Tiestabyte (Pty) Ltd's equity and loan interests in the Group.

M Nunn

The above loan is unsecured, bears interest at varying rates and has no fixed terms of repayment.

Nuland Limited

The above loan is unsecured, bears interest at varying rates and has no fixed terms of repayment.

Fair value of other financial liabilities

The carrying value of the loans approximate their fair value.

16. Provisions

Reconciliation of provisions – 2015	Opening balance US$	Additions US$	Foreign exchange differences US$	Closing balance US$
Provision for dismantling costs	—	—	—	—
Provision for rehabilitation costs	—	—	—	—
Onerous contract	—	—	—	—
Total	**—**	**—**	**—**	**—**

Reconciliation of provisions – 2016	Opening balance US$	Additions US$	Foreign exchange differences US$	Closing balance US$
Provision for dismantling costs	—	556,501	—	556,501
Provision for rehabilitation costs	—	—	—	—
Onerous contract	—	—	—	—
Total	**—**	**556,501**	**—**	**556,501**

Reconciliation of provisions – 2017	Opening balance US$	Additions US$	Foreign exchange differences US$	Closing balance US$
Provision for dismantling costs	556,501	51,230	64,669	672,400
Provision for rehabilitation costs	—	3,050,317	254,563	3,304,880
Onerous contract	—	720,721	60,147	780,868
Total	**556,501**	**3,822,268**	**379,379**	**4,758,148**

Dismantling and rehabilitation provisions

All environmental rehabilitation and dismantling provisions at year-end have been reviewed by management and adjusted as appropriate for changes in legislation, technologic and other circumstances. The expected timing of any outflows of these provisions will be on the closure of the respective mines. Estimates are based on costs that are reviewed regularly and adjusted as appropriate for new circumstances.

Future cash flows are appropriately discounted. A discount rate of 8.59% (2016: 8.0%) was used. During 2017, the Group appointed Braaf Environmental Practitioners to conduct an Independent Specialist Update of the Dismantling and Rehabilitation Plan of the mine site.

Onerous contract

The Group has entered into a contract with Transnet SOC whereby it is obligated to provide 200,000 metric tonnes to be handled through the terminal at the Saldanha Bay Port during the period 2 September 2017 to 31 March 2018. The 200,000 metric tonnes will be handled by Transnet SOC at a price of R48 per tonne.

The plant did not commence production in the 2017 year, as previously anticipated by management. As a result no tonnes were delivered to the Saldanha Port. The first payment of the transport contract, valid until March 2022, is due on 1 March 2018 for US$780,869. At the year end the Directors assessed this contract to be onerous and therefore recognised a provision for the contractual costs payable.

17. Trade and other payables

	2015 US$	2016 US$	2017 US$
Trade payables	4,315,179	12,364,669	11,247,499
Other payables	1,313	13,923	2,574
Deposits	—	4,177	4,630
VAT	5,582	4,857	79,065
Total	**4,322,074**	**12,387,626**	**11,333,768**

Fair value of trade and other payables

Trade and other payables are carried at amortised cost, with their fair value being approximated by the carrying value.

18. Commitments

	2015 US$	2016 US$	2017 US$
Guarantees	17,208	19,592	21,718

Guarantees

A guarantee was supplied by Nedbank Limited to the Department of Mineral Resources on behalf of Elandsfontein Exploration and Mining (Pty) Ltd. The guarantee is in respect of environmental rehabilitation and expires in July 2016. For details of other guarantees, refer to note 7. The Group is in the process of cancelling the guarantee with the DMR as exploration activities were concluded in 2015.

19. Key management personnel

	2015 US$	2016 US$	2017 US$
Emoluments – In connection with the affairs of the Kropz SA (Pty) Limited Group	237,177	279,567	254,841

20. Other income

	2015 US$	2016 US$	2017 US$
Foreign exchange gain	—	6,635,192	8,866,189
Settlement discount	—	7,479	3,509
Fair value gains on game animals	—	—	305,282
Loan written off	51,951	—	26
Insurance proceeds	—	—	120,339
Game hunting sales	9,718	855	21,020
Total	**61,669**	**6,643,526**	**9,316,365**

21. Operating profit/(loss)

Operating profit/(loss) for the year is stated after accounting for the following:

	2015 US$	2016 US$	2017 US$
Foreign exchange loss / (gain)	5,841,783	(6,635,192)	(8,866,189)
Fair value gain on game	—	—	(305,282)
Impairment on plant and machinery	—	—	487,632
Depreciation on property, plant and equipment	21,242	28,492	529,158
Employee costs	135,468	151,384	588,282
Electricity and water – mine operations	—	190,613	1,249,212
Loan written off	(51,951)	—	(26)
Loan impaired	51,951	—	—
Fuel	—	—	1,101,120
Mining costs	—	—	3,877,252
Plant operating costs and recoveries	—	68,599	2,443,944
Onerous contract (see note 16)	—	—	720,721

22. Finance charges

	2015 US$	2016 US$	2017 US$
Bank	14	—	294,745
Shareholder loans	—	204,882	1,332,809
Other financial liabilities	—	75,940	2,210,114
Total	**14**	**280,822**	**3,837,668**

23. Taxation

Major components of the tax expense / (income)	2015 US$	2016 US$	2017 US$
Current			
Marketable Securities Transfer tax	—	4,250	—
Deferred			
Originating and reversing temporary differences	—	124,780	(2,665,166)
Total	**—**	**129,030**	**(2,665,166)**

Reconciliation of tax expense	2015	2016	2017
Applicable tax rate	28%	28%	28%
Tax (income) / expense at applicable tax rate	(2,024,925)	1,430,511	(2,158,959)
Less:			
Disallowable charges	808,524	63,351	48,426
Deferred tax not recognised	1,216,401	(1,357,332)	(554,633)
Effect of change in CGT rate	—	(11,750)	—
Transfer tax	—	4,250	—
Total	**—**	**129,030**	**(2,665,166)**

24. Earnings per share

The calculations of basic and diluted earnings per share have been based on the following (loss) / profit attributable to ordinary shareholders and weighted average number of ordinary shares outstanding:

	2015 US$	2016 US$	2017 US$
(Loss) / profit attributable to ordinary shareholders	(7,231,875)	4,979,938	(5,045,403)
Weighted average number of ordinary shares in Kropz SA (Pty) Ltd	300	300	300
Basic and diluted earnings per share	**(24,106)**	**16,600**	**(16,818)**

There were no dilutive instruments in issue in any period presented.

25. Notes to the statement of cash flows

Reconciliation of net (loss)/profit before taxation to cash flows from/(used in) operations:

	2015 US$	2016 US$	2017 US$
(Loss)/profit before taxation	**(7,231,875)**	**5,108,968**	**(7,710,570)**
Finance income	(148,024)	(436,133)	(603,701)
Finance costs	14	280,822	3,837,669
Operating (loss)/profit	**(7,379,885)**	**4,953,657**	**(4,476,602)**
Depreciation	21,242	28,492	529,158
Loan written off	(51,951)	—	(26)
Loans impaired	51,951	—	—
Impairment	—	—	487,632
Fair value gains on game animals	—	—	(305,282)
Provision for onerous contracts	—	—	720,721
Foreign exchange (profit) loss	5,841,783	(6,635,192)	(8,866,189)
Operating cash flow before changes in working capital	**(1,516,860)**	**(1,653,043)**	**(11,910,587)**
Increase in inventories	—	—	(831,097)
(Increase) / decrease in receivables	(960,088)	(2,093,868)	2,951,539
Increase / (decrease) in payables	4,933,529	6,918,916	(2,213,318)
Total	**2,456,581**	**3,172,005**	**(12,003,463)**

26. Net debt reconciliation

Year ended 31 December 2015	Opening balance	Cashflows	Other non-cash movements	Foreign exchange gain / loss	Closing balance
Cash and cash equivalents	14,414	1,508,983	—	(270,326)	**1,253,071**
Shareholder loan payable	(7,989,439)	(24,102,522)	—	(81,667)	**(32,173,628)**
Other financial liabilities – current	—	—	—	—	**—**
Other financial liabilities – non-current	(1,349,075)	1,222,124	—	126,951	**—**
Total	**(9,324,100)**	**(21,371,415)**	**—**	**(225,042)**	**(30,920,557)**

Year ended 31 December 2016	Opening balance	Cashflows	Other non-cash movements	Foreign exchange gain / loss	Closing balance
Cash and cash equivalents	1,253,071	3,461,155	—	447,679	**5,161,905**
Shareholder loan payable	(32,173,628)	(21,458,418)	—	(3,672,888)	**(57,304,934)**
Other financial liabilities – current	—	—	(1,768,945)	—	**(1,768,945)**
Other financial liabilities – non-current	—	(36,484,181)	1,768,945	(938,105)	**(35,653,341)**
Total	**(30,920,557)**	**(54,481,444)**	**—**	**(4,163,314)**	**(89,565,315)**

Year ended 31 December 2017	Opening balance	Cashflows	Other non-cash movements	Foreign exchange gain / loss	Closing balance
Cash and cash equivalents	5,161,905	(4,982,825)	—	139,389	**318,469**
Shareholder loan payable	(57,304,934)	(3,996,430)	—	(2,827,968)	**(64,129,332)**
Other financial liabilities – current	(1,768,945)	—	(13,231,055)	—	**(15,000,000)**
Other financial liabilities – non-current	(35,653,341)	(16,289,455)	13,231,055 —	(664,589)	**(45,376,330)**
Total	**(89,565,315)**	**(25,268,710)**	**—**	**(9,353,168)**	**(124,187,193)**

27. Related parties

Kropz SA (Pty) Ltd and its subsidiaries

The ultimate parent company at 31 December 2017 is Kropz International SARL, incorporated in Luxembourg.

The following parties are related to Kropz SA (Pty) Ltd:

Name	Relationship
M Summers	Director
M Nunn	Director
Elandsfontein Land Holdings (Pty) Ltd	Subsidiary
Kropz Elandsfontein (Pty) Ltd	Subsidiary
West Coast Fertilizers (Pty) Ltd	Subsidiary
Xsando (Pty) Ltd	Subsidiary
SA Lithium (Pty) Ltd	Subsidiary
First Gear Exploration Limited	Common ownership
African Rainbow Capital Ltd	Minority shareholder in certain subsidiaries
Tiestabyte (Pty) Ltd	Minority shareholder in certain subsidiaries

The following transactions were carried out with related parties:

Related party balances ***Loan accounts – Owed (to) / by related parties***	**2015** **US$**	**2016** **US$**	**2017** **US$**
Kropz International SARL	(32,173,628)	(57,304,934)	(64,059,332)
African Rainbow Capital Ltd	—	(22,156,883)	(27,146,416)
Tiestabyte (Pty) Ltd		(3,181,123)	(3,901,970)
Tiestabyte (Pty) Ltd	1,244	1,892,896	2,366,585
P Le Roux	—	1,396	1,547
M Nunn	363,508	399,822	712,802
Related party transactions ***Interest paid to/ (received from) related parties***			
Kropz International SARL	—	1,430,552	1,320,357
African Rainbow Capital Ltd	—	843,161	2,384,106
Tiestabyte (Pty) Ltd	—	84,930	346,309
Tiestabyte (Pty) Ltd	—	(54,101)	(247,599)
Management fees paid to related parties			
Kropz International SARL	485,716	479,615	479,060

First Gear Exploration Limited

The ultimate parent company at 31 December 2017 is Kropz International SARL, incorporated in Luxembourg.

The following parties are related to First Gear Exploration Limited:

Name	Relationship
T Amoah	Director
P Le Roux	Director
Kropz SA (Pty) Ltd	Common ownership
Elandsfontein Land Holdings (Pty) Ltd	Common ownership
Kropz Elandsfontein (Pty) Ltd	Common ownership
West Coast Fertilizers (Pty) Ltd	Common ownership
Xsando (Pty) Ltd	Common ownership
SA Lithium (Pty) Ltd	Common ownership
Russell Brooks Limited	Minority shareholder
M Nunn	Other related party

The following transactions were carried out with related parties:

Related party balances ***Loan accounts – Owed (to) / by related parties***	**2015 US$**	**2016 US$**	**2017 US$**
Kropz International SARL	—	—	(70,000)
M Nunn	—	—	(47,416)
Related party transactions			
Management fees paid to related parties			
T Amoah	—	—	10,041

28. Categories of financial instruments

Financial assets by category

The accounting policies for financial instruments have been applied to the line items below:

	2015 US$	**2016 US$**	**2017 US$**
Loans and receivables			
Trade and other receivables	214,413	116,007	207,826
Loans receivable	690,599	2,611,659	3,629,172
Other financial assets	1,168,110	1,723,448	1,897,630
Cash and cash equivalents	1,253,071	5,161,905	318,469

Financial liabilities by category

The accounting policies for financial instruments have been applied to the line items below:

	2015 US$	**2016 US$**	**2017 US$**
Financial liabilities at amortised cost			
Shareholder loan payable	32,173,628	57,304,934	64,129,332
Trade and other payables	4,316,492	12,382,769	11,254,703
Other financial liabilities	—	37,422,286	60,376,330

29. Financial risk management objectives

Capital risk management:

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The capital structure of the Group consists of shareholder and external debt, which includes loans and borrowings (excluding derivative financial liabilities) disclosed in notes 14 and 15 and equity as disclosed in the statement of financial position

Shareholder and external third-party loans from foreign entities to South African companies are subject to the foreign exchange controls as imposed by the South African Reserve Bank ("**SARB**"). All inward loans into South Africa require approval by the SARB and all loans in the current capital structure have been approved by the SARB and all entities in the Group are compliant with the SARB approvals relevant to the entity concerned and the approvals granted by the SARB.

Liquidity risk:

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, Group treasury maintains flexibility in funding by maintaining availability under committed credit lines.

The Group's risk to liquidity is a result of obligations associated with financial liabilities of the Group and the availability of funds to meet those obligations. The Group manages liquidity risk through an ongoing review of future commitments and credit facilities.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

	Less than 1 year US$	Between 1 and 2 years US$	Between 2 and 5 years US$	Over 5 years US$
At 31 December 2015				
Shareholder loan payable	—	—	32,173,628	—
Trade and other payables	4,316,492	—	—	—
Other financial liabilities	—	—	—	—
Total	**4,316,492**	**—**	**32,173,628**	**—**
At 31 December 2016				
Shareholder loan payable	—	—	57,304,934	—
Trade and other payables	12,382,769	—	—	—
Other financial liabilities	1,768,945	35,653,341	—	—
Total	**14,151,714**	**35,653,341**	**57,304,934**	**—**
At 31 December 2017				
Shareholder loan payable	—	—	64,129,332	—
Trade and other payables	11,254,703	—	—	—
Other financial liabilities	15,000,000	45,376,330	—	—
Total	**26,254,703**	**45,376,330**	**64,129,332**	**—**

Credit risk:

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group's financial assets include trade and other receivables, loans receivable, other financial assets and cash and cash equivalents.

Ongoing credit evaluation is performed on the financial conditions of the counterparties to the trade and other receivables, loans receivable and other financial assets. The Group only deposits cash with major banks with high quality credit standing and limits exposure to any one counter-party.

No credit limits were exceeded during the reporting period, and management does not expect any losses from non-performance by these counterparties.

Interest rate risk:

As the Group has no significant interest-bearing assets, the Group's income and operating cash flows are substantially independent of changes in market interest rates.

At 31 December 2017, if interest rates on Rand-denominated borrowings for the Group had been 1% higher/lower with all other variables held constant, post-tax profit and equity for the year would have been US$160,619 (2016: US$49,275; 2015: US$8,755) lower/higher, mainly as a result of higher/lower interest expense on floating rate borrowings.

Foreign currency risk:

Most of the Group's transactions are carried out in Rand. Exposures to currency exchange rates arise from the Group's loans from Kropz International SARL and BNP Paribas, refer to note 14 and 15.

At 31 December 2017, if the Rand/US Dollar exchange rate had changed by 1% with all other variables held constant, post-tax profit and equity for the year would have been US$612,114 (2016: US$381,669; 2015: US$122,473) lower/higher mainly as a result of loss/profit on foreign exchange differences on the US Dollar denominated loan from Kropz International SARL.

30. Segment information

Operating segments

Up to the date of approval of the financial information for the year ended 31 December 2017, the Board of Directors considered that the Group had one operating segment, being that of phosphate mining. Accordingly, all revenues, operating results, assets and liabilities are allocated to this activity.

Geographical segments

Since the incorporation of First Gear Exploration Limited in February 2017, the Group has operated in two principal geographical areas – South Africa and Ghana.

The Group's revenue from continuing operations from external customers by location of operations and information about its non-current assets by location of assets are detailed below. In 2015 and 2016 all activities were attributable to the South African business.

	2017 South Africa US$	2017 Ghana US$	2017 Group US$
Revenue	—	—	—
Total non-current assets	127,986,283	—	127,986,283

31. Material subsequent events

Group re-organisation

On 10 January 2018 Kropz plc was incorporated in England and Wales as a wholly owned subsidiary of Kropz International SARL.

Under a series of Share Purchase Agreements, a re-organisation of the Kropz Group has been completed, including:

- the acquisition by Kropz plc of a 50% plus 1 share interest in First Gear Exploration Limited from Kropz International SARL on 4 June 2018;
- a share-for-share exchange whereby Kropz International SARL sold 100% of its equity and loan interests in Kropz SA (Pty) Ltd to Kropz plc on 27 November 2018;

- the acquisition by African Rainbow Capital (Pty) Ltd of Tiestabyte (Pty) Ltd's 5% equity and loan interests in Kropz Elandsfontein (Pty) Ltd on 27 November 2018;
- the acquisition by Kropz plc of Kropz International SARL's 32% interest in Kropz Elandsfontein (Pty) Ltd on 27 November 2018;
- the acquisition by Kropz plc of Kropz International SARL's 23% interest in Elandsfontein Land Holdings (Pty) Ltd on 27 November 2018;
- the sale by African Rainbow Capital (Pty) Ltd of a further 4% of its interest in Kropz Elandsfontein (Pty) Ltd to Kropz plc in exchange for the issue of Kropz plc Shares on 27 November 2018.

Following completion of the re-organisation, Kropz plc owns, directly and indirectly, 100% of the issued share capital of Kropz SA (Pty) Ltd, 74% of the issued share capital of Kropz Elandsfontein (Pty) Ltd and 70% of the issued share capital of Elandsfontein Land Holdings (Pty) Ltd.

Loan restructuring

As part of the wider group reorganisation certain shareholder loans in Kropz SA (Pty) Ltd, Kropz Elandsfontein (Pty) Ltd and Elandsfontein Land Holdings (Pty) Ltd were consolidated and set-off against various other loans receivable and payable. The consolidation and set-off of various loans was completed in order to simplify the debt structure of the Group.

In addition, loans payable to Kropz International SARL and African Rainbow Capital (Pty) Ltd were reduced through the issue of new share capital in Kropz SA (Pty Ltd, Kropz Elandsfontein (Pty) Ltd and Elandsfontein Land Holdings (Pty) Ltd.

The remaining loans payable to Kropz International SARL were novated to Kropz plc on 27 November 2018 in exchange for new shares in Kropz plc. Following the debt restructuring, there are no loans payable to Kropz International SARL by the Kropz Group.

Renegotiation of BNP Paribas loan terms

The Group was unable to fund the instalment payments on the bank loan as they fell due and consequently, under the terms of the facility agreement, was in default from 1 April 2018. On 20 September 2018 the Group and BNP Paribas conditionally agreed a waiver of the breach and restructure of the facility under which the first capital repayment has been deferred to 2020. In addition, BNP Paribas provided all the necessary consents required to facilitate all the contemplated transactions leading up to the admission of Kropz plc to AIM. The waiver and restructured facility are contingent on the admission of Kropz plc's shares to trading on AIM by 30 November 2018.

Offer for the acquisition of Cominco Resources Limited

On 10 August 2018 Kropz plc entered into an exclusivity agreement with Cominco Resources Limited (''**Cominco**'') for proposed acquisition by Kropz plc of Cominco. Cominco is the licence holder for a phosphate asset in the Republic of Congo.

Under the terms of the agreement, Kropz plc must pay Cominco US$100,000 non-refundable working capital contributions for each month commencing 20 July 2018 until the first to occur of the agreement being terminated by Kropz plc or the completion of the share purchase.

Kropz plc has made an offer to acquire the share capital of Cominco at the date of Admission of Kropz plc's shares to trading on AIM.

SECTION B

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION OF THE COMINCO GROUP

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The Directors
Mirabaud Securities Limited
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27 November 2018

Dear Sirs

ACCOUNTANTS' REPORT ON THE HISTORICAL FINANCIAL INFORMATION OF COMINCO RESOURCES LIMITED AND ITS SUBSIDIARIES

We report on the historical financial information of Cominco Resources Limited ("**Cominco**") and its subsidiaries, being those entities listed in note 1 to the historical financial information (the "**Cominco Group**") for the years ended 31 December 2015, 2016 and 2017. All financial information has been prepared for the purpose of its inclusion in Kropz plc's AIM admission document dated 27 November 2018 ("**Admission Document**") on the basis of the accounting policies set out in notes 2 and 3 to the historical financial information. This report is required by paragraph (a) of Schedule Two to the AIM Rules for Companies (the "**AIM Rules**") and is given for the purposes of complying with the AIM Rules and for no other purpose.

Responsibilities

The directors of Cominco (the "**Directors**") are responsible for preparing the historical financial information on the basis of preparation set out in notes 2 and 3 to the financial information and in accordance with International Financial Reporting Standards as adopted by the European Union ("**IFRS**").

It is our responsibility to form an opinion as to whether the historical financial information included in the Admission Document gives a true and fair view of the financial position of the Cominco Group and to report our opinion to you.

Save for any responsibility arising under the AIM Rules to any person as and to the extent there provided, to the fullest extent permitted by law we do not assume any responsibility and will not accept any liability to any person other than the addressees of this letter for any loss suffered by any such person as a result of, arising out of, or in connection with this report or our statement, required by and given solely for the purposes of complying with the AIM Rules, consenting to its inclusion in the Admission Document.

Basis of opinion

We conducted our work in accordance with the Standards for Investment Reporting Applicable to Public Reporting Engagements on Historical Financial Information issued by the Financial Reporting Council in the United Kingdom. Our work included an assessment of evidence relevant to the amounts and disclosures in the historical financial information. It also included an assessment of

the significant estimates and judgements made by those responsible for the preparation of the historical financial information and whether the accounting policies are appropriate to the Cominco Group's circumstances, consistently applied and adequately disclosed.

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

Opinion

In our opinion the historical financial information gives, for the purposes of the Admission Document, a true and fair view of the financial position of the Cominco Group as at the dates stated and of its statements of comprehensive income, statements of changes in equity and the statements of cash flows for the years ended 31 December 2015, 2016 and 2017 in accordance with the basis of preparation set out in notes 2 and 3 to the financial information and in accordance with IFRS.

Declaration

For the purposes of paragraph (a) of Schedule Two of the AIM Rules we are responsible for this report as part of the Admission Document and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import. This declaration is included in the Admission Document in compliance with Schedule Two of the AIM Rules.

Yours faithfully

Mazars LLP

HISTORICAL FINANCIAL INFORMATION OF THE COMINCO GROUP

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

at 31 December

	Notes	2015 US$'000	2016 US$'000	2017 US$'000
ASSETS				
Non-Current Assets				
Exploration and evaluation assets	***4***	38,868	37,961	43,614
Property, plant and equipment	***5***	85	31	18
Available-for-sale investments	***6***	5	—	—
Other receivables	***7***	66	56	—
		39,024	**38,048**	**43,632**
Current Assets				
Other receivables	***7***	231	47	150
Cash and cash equivalents	***8***	476	100	523
		707	**147**	**673**
TOTAL ASSETS		**39,731**	**38,195**	**44,305**
EQUITY & LIABILITIES				
Equity				
Share capital	***9***	48,946	48,946	50,750
Share-based payments reserve	***22***	125	—	—
Foreign currency translation reserve		(4,546)	(5,933)	(634)
Accumulated loss		(5,503)	(5,864)	(6,195)
		39,022	**37,149**	**43,921**
Non-Current liabilities				
Provisions	***10***	264	144	164
		264	**144**	**164**
Current liabilities				
Trade and other payables	***11***	445	192	220
Loans and borrowings	***12***	—	710	—
		445	**902**	**220**
TOTAL EQUITY AND LIABILITIES		**39,731**	**38,195**	**44,305**

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the years ended 31 December

	Notes	2015 US$'000	2016 US$'000	2017 US$'000
Continuing operations				
Administrative expenses		(1,265)	(423)	(277)
Operating loss	***16***	**(1,265)**	**(423)**	**(277)**
Finance expense	***17***	(591)	(54)	(54)
Loss before taxation		**(1,856)**	**(477)**	**(331)**
Taxation	***18***	(2)	(9)	—
Loss after taxation		**(1,858)**	**(486)**	**(331)**
Other comprehensive (loss) / income				
Items that are or may be reclassified subsequently to profit or loss				
Foreign currency translation reserve		(2,191)	(1,387)	5,299
Other comprehensive (loss) / income for the period		**(2,191)**	**(1,387)**	**5,299**
Total comprehensive (loss) / income for the year attributable to equity shareholders of the parent		**(4,049)**	**(1,873)**	**4,968**
Basic and diluted earnings per share (cents)	***19***	**(0.06)**	**(0.01)**	**(0.01)**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the years ended 31 December

	Share capital US$'000	Share-based payments reserve US$'000	Convertible Loan Reserve US$'000	Accumulated loss US$'000	Foreign Currency Translation Reserve US$'000	Total US$'000
Balance at 31 December 2014	**28,964**	**278**	**107**	**(3,916)**	**(2,355)**	**23,078**
Share issue	—	—	—	—	—	—
Total comprehensive loss for the year	—	—	—	(1,858)	(2,191)	(4,049)
Shares options forfeited in the year	—	(153)	—	153	—	—
Equity component of Loan Note	—	—	11	—	—	11
Conversion of Loan Note	19,982	—	(118)	118	—	19,982
Balance at 31 December 2015	**48,946**	**125**	**—**	**(5,503)**	**(4,546)**	**39,022**
Share issue	—	—	—	—	—	—
Total comprehensive loss for the year	—	—	—	(486)	(1,387)	(1,873)
Shares options forfeited in the year	—	(125)	—	125	—	—
Balance at 31 December 2016	**48,946**	**—**	**—**	**(5,864)**	**(5,933)**	**37,149**
Share issue	1,804	—	—	—	—	1,804
Total comprehensive income for the year	—	—	—	(331)	5,299	4,968
Balance at 31 December 2017	**50,750**	**—**	**—**	**(6,195)**	**(634)**	**43,921**

CONSOLIDATED STATEMENT OF CASH FLOWS

for the years ended 31 December

	Notes	2015 US$'000	2016 US$'000	2017 US$'000
Cash flows from operating activities	***20***	**(2,064)**	**(554)**	**(316)**
Tax paid		(2)	(9)	—
Net cash used in operating activities		**(2,066)**	**(563)**	**(316)**
Cash flows from investing activities				
Purchase of exploration and evaluation assets	***4***	(4,319)	(466)	(413)
Purchase of property, plant and equipment	***5***	(35)	—	(2)
Sale of listed securities	***6***	—	13	—
Net cash used in investing activities		**(4,354)**	**(453)**	**(415)**
Cash flows from financing activities				
Share issue proceeds	***9***	—	—	1,804
Receipt of borrowings	***12***	2,820	664	137
Repayment of borrowings	***12***	—	—	(938)
Net cash from financing activities		**2,820**	**664**	**1,003**
Net cash movement for the year		**(3,600)**	**(352)**	**272**
Cash at the beginning of the year		4,317	476	100
Foreign exchange effects on cash		(241)	(24)	151
Total cash at the end of the year	***8***	**476**	**100**	**523**

NOTES TO THE CONSOLIDATED FINANCIAL INFORMATION

for the years ended 31 December

1. Reporting entity

Cominco Resources Limited ("**Cominco**") is a company incorporated and domiciled in the British Virgin Islands ("**BVI**") with Company Number BV No 1416753.

Cominco Resources Limited is the parent company of the Cominco Group, which includes the following subsidiaries in the consolidated financial information:

Name	Country of incorporation	Percentage controlled at 31 December 2017	Principal activity	Consolidation method
Cominco S.A	Republic of Congo	100%	Development	Full
Cominco Resources (UK) Ltd	England and Wales	100%	Service Company	Full

During the year ended 31 December 2017, two inactive companies formerly owned 100% by Cominco, Cominco Potash SA and Cominco Potash Limited, were deregistered as they had not traded since incorporation.

The Cominco Group operates solely in the Republic of Congo ("**ROC**") and Cominco S.A holds the licences for the Cominco Group's natural resource interests in ROC. The details of these including date of grant, renewal, duration and expenditure commitments are given in Note 4 to the financial information.

2. Basis of preparation

2.1. Statement of compliance

The consolidated financial information has been prepared in accordance with International Financial Reporting Standards ("**IFRS**") as adopted by the EU. The accounting policies applied by the Cominco Group and disclosed below are consistent with those to be used by Cominco in its next financial statements. These policies have been applied consistently to all periods presented, unless otherwise stated. In line with the transition provisions of IFRS 9 Financial Instrument Cominco has elected to apply on transition on 1 January 2018 a limited retrospective approach. Applying a limited retrospective approach on adoption of IFRS 9 in 2018 results in no restatement of comparative periods with the cumulative effect of any changes in accounting policies being recognised in opening retained earnings on 1 January 2018. Consistent with this policy election, this financial information has been prepared on the basis of policies that will apply to the comparatives periods presented in the 2018 financial statements and, as a result, there have been no classification, measurement or recognition adjustments relating to application of these two new standards in this financial information. Refer to the section of the note 2.1 'Standards, amendments and interpretations adopted in the current financial year' for further information about the expected impact of IFRS 9 on its adoption in 2018.

Standards, amendments and interpretations adopted in the current financial year

The Cominco Group has adopted all of the new and revised Standards and Interpretations that are relevant to its operations and effective for accounting years beginning 1 January 2017. The adoption of these new and revised Standards and Interpretations had no material effect on the profit or loss or financial position of the Cominco Group.

The Cominco Group has not adopted any standards or interpretations in advance of the required implementation dates. It is not expected that adoption of the standards or interpretations which have been issued by the International Accounting Standards Board but have not been adopted will have a material impact on the financial information.

Standard/Interpretation	Effective date: Years beginning on or after	Expected impact:
IAS 7 Statement of Cash Flows: Amendment in respect of the disclosure initiative	1 January 2017	This change resulted in additional disclosure – see note 21
IAS 12 Income Taxes: Amendment in relation to the recognition of deferred tax assets for unrealised losses	1 January 2017	No material impact
Annual Improvements to IFRSs (2014 – 2016): Clarification of the scope of IFRS 12 Disclosure of Interests in Other Entities	1 January 2017	No material impact

Standards, amendments and interpretations in issue but not yet effective

Standard/Interpretation	Effective date: Years beginning on or after	Expected impact:
IFRS 16 Leases	1 January 2019	Unlikely there will be a material impact
IFRS 9 Financial Instruments	1 January 2018	Unlikely there will be a material impact
IFRS 15 Revenue from Contracts with Customers	1 January 2018	Unlikely there will be a material impact
Amendments to IFRS 15: Clarifications to IFRS 15 Revenue from Contracts with Customers	1 January 2018	Unlikely there will be a material impact

2.2. Going concern

The Cominco Group is at an early stage of development and as such does not have profitable operations. At 31 December 2017 the Cominco Group had a cash balance of US$523,000. During the year, Cominco completed a share entitlement issue raising US$1,804,000 which was used to repay debt and fund working capital requirements including the due diligence costs associated with potential investors.

The Cominco Group completed a definitive feasibility study for the US$605m 4.1Mtpa Hinda phosphate Project in June 2015 and in December 2015, Cominco SA was awarded the 25-year renewable mining exploitation permit by the ROC Government. The Environmental and Social Impact Assessment was completed in late 2015 and a Certificate of Environmental Compliance issued by the ROC Government on 14 July 2016. In January 2016 (updated in May 2018) the Cominco Group completed an internal pre-feasibility study for a ''starter project'' with a significantly lower capital cost of US$34.5m to produce 900 ktpa of phosphate concentrate.

Extensive negotiations were held with the Congolese Government in September and October 2017 and the terms of a comprehensive Mining Investment Agreement (''**MIA**'') agreed. The MIA was signed on 10 July 2018 by the Minister for Mines and Energy, Minister for Transport and Minister for Finance on behalf of the Government, and by Patrick Stevenaert for Cominco SA and by Roderick Smith for Cominco. The MIA grants extensive tax concessions and guarantees that all permits, licences and approvals necessary for development, operation of the Hinda mine and export of product will be granted. The MIA is enforceable under international World Bank rules.

On 10 August 2018 the exclusivity agreement described in Note 25 was entered into with Kropz plc (''**Kropz**''). Under the terms, Kropz must pay Cominco US$100,000 non-refundable working capital contribution for each month commencing 20 July 2018 until the first to occur of the Agreement being terminated by Kropz or the Completion of the share sale. The first working capital payment of US$100,000 was received on 17 August 2018.

The Directors have prepared cash flow forecasts for the Cominco Group which indicate that the Cominco Group will require further funding within the next six months, once the working capital contributions from Kropz come to an end. Kropz has advised that they have taken steps to ensure that Kropz is admitted to trading on AIM and their working capital budget includes US$2.8 million to meet Cominco's proposed working capital and Project development requirement through to 31 December 2020.

The Directors have therefore concluded that it is appropriate to prepare the Cominco Group's consolidated financial statement on a going concern basis. However, if the Kropz transaction does not proceed, and in the absence of the additional funding being in place for working capital for the next twelve months these conditions indicate the existence of a material uncertainty which may cast significant doubt over the Cominco Group's ability to continue as a going concern and, therefore, that it may be unable to realise its assets and discharge its liabilities in the normal course of business. The financial information does not include the adjustments that would result if the Cominco Group was unable to continue as a going concern.

2.3. Use of estimates and judgement

The preparation of financial information in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the year in which the estimate is revised.

Information about such judgements and estimates is contained in the accounting policies and/or the notes to the consolidated financial information. Areas of judgement that have the most significant effect on the consolidated financial information:

- Going concern – Note 2.2
- Capitalisation and impairment of exploration and evaluation costs – Note 3.6, Note 4
- Convertible Loan Note – determining the market rate for the date – Note 3.8
- Provisions and contingent liabilities – Note 10, Note 13

2.4. Functional and presentational currency

The consolidated financial information is presented in US Dollars as the directors believe it to be the most appropriate and meaningful currency for investors.

The functional currencies of Cominco and its subsidiaries are:

- Cominco Resources Limited: Euros
- Cominco S.A: Central African Francs
- Cominco Resources (UK) Ltd: British Pounds Sterling

being the currency in which the majority of the companies' transactions are denominated.

In order to satisfy the requirements of IAS 21 with respect to presentation currency, the financial information has been translated from these functional currencies into US Dollars using the procedures outlined below:

- Assets and liabilities where the functional currency is other than US Dollars were translated into US Dollars at the relevant closing rates of exchange;
- Non-US Dollar trading results were translated into US Dollars at the relevant average rates of exchange;
- Differences arising from the retranslation of the opening net assets and the results for the year have been taken to the foreign currency translation reserve; and
- Share capital has been translated at the historical rates prevailing at the dates of transactions.

The exchange rates used were as follows:

Euro / US Dollar exchange rate:	2014	2015	2016	2017
Average rate	n/a	1.1540	1.1069	1.1291
Closing rate	1.0925	1.0925	1.0536	1.1979

The Central African Franc is pegged to the Euro at an exchange rate of XAF 655.957 to €1.

3. Significant accounting policies

The accounting policies set out below have been applied consistently to all years presented in the consolidated financial information and have been applied consistently by Cominco Group entities.

3.1. Basis of consolidation

Subsidiaries

Subsidiaries are entities controlled by Cominco. Control exists when Cominco has the power, directly or indirectly, to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that are currently exercisable or convertible are taken into account. The financial information of subsidiaries is included in the consolidated financial information from the date that control is obtained.

Transactions eliminated on consolidation

Intra-group balances and any unrealised gains, losses, income or expenses arising from intra-group transactions are eliminated in preparing the consolidated financial information.

3.2. Foreign currency

The assets and liabilities of operations, including fair value adjustments arising on consolidation, are translated to US Dollars at exchange rates ruling at the date of the consolidated statement of financial position. The revenues and expenses of operations and net investments in subsidiaries are translated to US Dollars at rates approximating to the exchange rates ruling at the dates of the transactions.

Foreign exchange differences arising on retranslation are recognised in other comprehensive income. They are reclassified to profit or loss upon disposal.

Further foreign exchange differences arise from the translation required for the presentation of the financial information in US Dollars. This is recognised in other comprehensive income.

3.3. Finance income and expenses

Finance income comprises interest income on funds invested and related foreign currency gains. Interest income is recognised as it accrues, using the effective interest method. Finance expenses comprise interest expense on borrowings and related foreign currency losses. All borrowing costs are recognised in profit or loss using the effective interest method.

3.4. Income tax expense

Income tax expense comprises current and deferred tax. Income tax expense is recognised in profit or loss except to the extent that it relates to items recognised in other comprehensive income, in which case it is also recognised in other comprehensive income. Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised using the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amount used for taxation purposes. Deferred tax is not recognised for the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit, and differences relating to investments in subsidiaries that will not reverse in the foreseeable future. Deferred tax is measured at the tax rates that are expected to be applied to the

temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

3.5. Share-based payment transactions

The Cominco Group issues equity-settled share-based payments to certain employees. Equity settled share-based payments are measured at fair value (excluding the effect of non-market based vesting conditions) at the date of grant. The fair value determined at the grant date for each tranche of the equity-settled share-based payments is expensed on a straight-line basis over the vesting year, based on the Cominco Group's estimate of shares that will eventually vest. At the end of each reporting year, the Cominco Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in statement of comprehensive income such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the share-based payments reserve.

Failure by an employee to meet a service condition (whether due to voluntary departure or involuntary redundancy) is accounted for as forfeiture. Previously recognised expenses in respect of forfeited share-based payments are reversed through the statement of comprehensive income.

The fair value of equity share-based payments is measured using the Black-Scholes-Merton Model. The expected life used in the models has been adjusted, based on management's best estimate, for the effects of non-transferability, exercise restrictions, and behavioural considerations.

3.6. Exploration and evaluation assets

These comprise costs directly incurred in exploration and evaluation as well as the cost of mineral licences. They are capitalised pending the determination of the feasibility of the project. When the decision is taken to develop a mine the related assets are transferred to property, plant and equipment and the exploration and evaluation costs are amortised over the estimated life of the project. Where a project is abandoned or is determined not economically viable, the related costs are written off.

The recoverability of deferred exploration and evaluation costs is dependent upon a number of factors common to the natural resource sector. These include the extent to which a company can establish mineral reserves on its properties, the ability of the company to obtain necessary financing to complete the development of such reserves and future profitable production or proceeds from the disposition thereof.

Projects are tested for impairment in accordance with IFRS 6 whenever events or changes in circumstances indicate that the carrying amount of the asset may exceed its fair value less costs to sell or value in use. When a project is considered to be impaired, the associated exploration expenditure is written off to the consolidated statement of comprehensive income.

3.7. Property, plant and equipment

Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for its intended use, and the estimated costs of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Subsequent costs

The Cominco Group recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied with the item will flow to the Cominco Group and the cost of the item can be measured reliably. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Depreciation

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Land is not depreciated. The estimated useful lives for the current and comparative years are as follows:

Item	Depreciation method	Average useful life
Property improvements	Straight line	5 years
Furniture & Fittings	Straight line	3 years
Plant & equipment	Straight line	3 years
Motor vehicles	Straight line	3 years

The residual value, if not insignificant, is reassessed annually.

Impairment

The carrying amounts of the Cominco Group's assets are reviewed at the date of each consolidated statement of financial position to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

3.8. Financial instruments

Compound instruments-convertible loan note

The component parts of compound instruments (convertible Loan Notes and loans) issued by Cominco in 2014 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 Cominco'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.

Valuation of the convertible Loan Note financial liability

The financial liability element of a convertible loan is estimated using the prevailing market interest rate for similar non-convertible instruments. Establishing the market interest rate to be used is somewhat subjective due to the lack of available direct comparisons available in the oil and gas exploration market.

After a review of comparable AIM quoted entities, management concluded that 15% was an appropriate market interest rate to be applied to the non-equity element of the Loan Notes issued.

A different interest rate used for this valuation would result in a corresponding change in the valuation of the equity element of the Loan Notes and additionally alter the interest charge recognised on the Loan Note liability using the effective interest method.

Borrowing costs

Interest incurred on the Loan Note used to fund the Cominco Group's Hinda Project office in ROC is being capitalised as part of its cost, net of interest received on cash drawn down yet to be expended. The Cominco Group does not incur any other interest costs that qualify for capitalisation.

Non-derivative financial instruments

Non-derivative financial instruments comprise trade and other receivables, cash and cash equivalents, trade and other payables, available for sale financial assets and financial assets at fair value through profit or loss.

Non-derivative financial instruments are recognised initially at fair value plus, for instruments not at fair value through profit or loss, any directly attributable transaction costs. Subsequent to initial recognition, non-derivative financial instruments are measured as described below.

A financial instrument is recognised if the Cominco Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognised if the Cominco Group's contractual rights to the cash flows from the financial assets expire or if the Cominco Group transfers the financial asset to another party without retaining control or substantially all risks and rewards of the asset. Regular purchases and sales of financial assets are accounted for at trade date, i.e. the date that the Cominco Group commits itself to purchase or sell the asset. Financial liabilities are derecognised if the Cominco Group's obligations specified in the contract expire or are discharged or cancelled.

Trade and other receivables

Trade and other receivables that are short term in nature are stated at cost less any impairment provision.

Financial liabilities

Financial liabilities include current borrowings and trade and other payables that are short term in nature and are stated at amortised cost.

Cash and cash equivalents

Cash and cash equivalents represent bank balances and call deposits.

Available-for-sale investments

Available-for-sale financial assets comprise equity investments which, subsequent to initial recognition, are stated at fair value. Movements in fair values are recognised in other comprehensive income with the exception of impairment losses which are recognised in profit or loss. Fair values are based on prices quoted on the active market.

Share capital – Common shares

Incremental costs directly attributable to the issue of common shares and share options are recognised as a deduction from equity.

4. Exploration and evaluation assets

Exploration and evaluation assets relate entirely to deferred exploration costs incurred on the continued exploration and development of the principal asset of the Cominco Group, a 100% interest in the Hinda Phosphate Project (''**Hinda**'' or the ''**Project**''), located in the ROC.

	2015 US$'000	2016 US$'000	2017 US$'000
At cost			
Balance at beginning of the year	36,348	38,868	37,961
Additions	4,319	466	413
Capitalised depreciation	76	38	15
Capitalised finance costs	2,150	—	—
Foreign exchange (loss) / gain	(4,025)	(1,411)	5,225
At end of the year	**38,868**	**37,961**	**43,614**

Included within the carrying value of exploration and evaluation assets are finance charges and capitalised depreciation (stated at the balance sheet exchange rates) of:

	2015 US$'000	2016 US$'000	2017 US$'000
Depreciation	1,822	1,793	2,054
Finance charges	2,886	2,784	3,165

On 15 December 2015 Hinda Permis d'exploitation (Exploitation or Mining Licence) 2015-975 was granted for an initial term of 25 years, renewable upon expiry in 2040 in accordance with the Mining Code 2005. Article 61 of the Code provides that an Exploitation Licence shall be renewed at the request of the bearer, under the same conditions as it was granted, for periods not to exceed 15 years each, if the mineable reserves require a mining period that is longer than the term initially anticipated.

The Exploitation Licence covers an area of 263.6km^2, of which 216.2km^2 fell within the Hinda Exploration Licence and 47.4km^2 within the Kola-Tchikanou Exploration Licence. The Exploitation Licence covers all of the Mineral Resources identified, the known extensions and Infrastructure requirements for the proposed project, such as tailings storage, overburden dumps and plant sites. The Kola-Tchikanou exploration licences were therefore allowed to lapse during the year, and the Hinda exploration licences subsequent to year end.

The details of the current Exploitation Licence and four former Exploration Licences, dates of grant and duration are as follows:

Tenement Number	Tenement Name	Tenement Type	Resource Type	Date Granted / (Expired)	Term (years)	Area km^2	Expenditure commitment (Euros)
2015-975	Permis-Hinda	Exploitation Permit	Phosphate	07/12/2015	25+15	263.6	N/A
2016-139	Permis Hinda	Exploration Permit	Phosphate	25/04/2016 / (25/04/2018)	—	918	N/A
2016-138	Permis Hinda	Exploration Permit	Uranium	25/04/2016 / (25/04/2018)	—	918	N/A
2015-111	Kola-Tchikanou	Exploration Permit	Phosphate	13/01/2015 / (13/01/2017)	—	694	171,000 over 2 years
2015-110	Kola-Tchikanou	Exploration Permit	Uranium	13/01/2015 / (13/01/2017)	—	694	171,000 over 2 years

The exploration licences have now been allowed to lapse. Further information is given in Note 25.

The Cominco Group will need to raise funds to take the Hinda Project through to development. If insufficient funds are raised, some assets may require impairment in the financial information.

5. Property, plant and equipment

	Office Equipment, Fixtures & Fittings & Property improvements US$'000	Motor Vehicles US$'000	Project & Drilling Assets US$'000	IT equipment US$'000	Total US$'000
Cost					
As at 1 January 2015	542	558	728	36	**1,864**
Additions	10	—	24	—	**34**
Disposals	—	—	—	—	**—**
Foreign exchange losses	(42)	(56)	(78)	(4)	**(180)**
As at 31 December 2015	**510**	**502**	**674**	**32**	**1,718**
Additions	—	—	—	—	**—**
Disposals	(8)	—	—	—	**(8)**
Foreign exchange losses	(18)	(18)	(24)	(1)	**(61)**
As at 31 December 2016	**484**	**484**	**650**	**31**	**1,649**
Additions	—	—	2	—	**2**
Disposals	(40)	—	—	—	**(40)**
Foreign exchange gains	60	66	89	5	**220**
As at 31 December 2017	**504**	**550**	**741**	**36**	**1,831**
Depreciation					
As at 1 January 2015	(438)	(485)	(679)	(36)	**(1,638)**
Charge for the year	(87)	(36)	(45)	—	**(168)**
Disposals	—	—	—	—	**—**
Foreign exchange gains	47	51	71	4	**173**
As at 31 December 2015	**(478)**	**(470)**	**(653)**	**(32)**	**(1,633)**
Charge for the year	(30)	(21)	(1)	—	**(52)**
Disposals	6	—	—	—	**6**
Foreign exchange gains	19	18	23	1	**61**
As at 31 December 2016	**(483)**	**(473)**	**(631)**	**(31)**	**(1,618)**
Charge for the year	(1)	(11)	(6)	—	**(18)**
Disposals	40	—	—	—	**40**
Foreign exchange losses	(60)	(66)	(86)	(5)	**(217)**
As at 31 December 2017	**(504)**	**(550)**	**(723)**	**(36)**	**(1,813)**
Net Book Value					
At 31 December 2015	**32**	**32**	**21**	**—**	**85**
At 31 December 2016	**1**	**11**	**19**	**—**	**31**
At 31 December 2017	**—**	**—**	**18**	**—**	**18**

6. Available-for-sale investments

	2015 US$'000	2016 US$'000	2017 US$'000
Opening market value	7	5	—
Decrease in market value	(1)	—	—
Disposal of investments	—	(6)	—
Foreign exchange (loss) / gain	(1)	1	—
Closing market value	**5**	**—**	**—**

All shares in European Metal Holdings (EMH) were sold during the year ended 31 December 2016 generating a profit on sale of financial investments of US$8,523 for the Cominco Group.

7. Other receivables

	2015 US$'000	2016 US$'000	2017 US$'000
Non-current			
Other receivables	66	56	—
Current			
Prepayments and accrued income	27	20	2
Other receivables	204	27	148
Total	**231**	**47**	**150**

Non-current receivables include a rent deposit of US$nil (2016: US$56,000; 2015: US$66,000) in respect of the UK office.

8. Cash and cash equivalents

	2015 US$'000	2016 US$'000	2017 US$'000
Cash at bank and in hand	426	52	468
Restricted cash subject to charges and guarantees	50	48	55
Total	**476**	**100**	**523**

9. Share capital and reserves

Authorised:	2015 Number	2016 Number	2017 Number
50,000,000 ordinary shares of no par value	50,000,000	50,000,000	50,000,000
Issued and outstanding:	**Number**	**Number**	**Number**
Opening balance	31,148,238	40,155,339	40,155,339
Issued in the year	9,007,101	—	6,809,805
Closing balance	**40,155,339**	**40,155,339**	**46,965,144**
	US$'000	**US$'000**	**US$'000**
Opening balance	28,964	48,946	48,946
Issued in the year	19,982	—	1,804
Closing balance	**48,946**	**48,946**	**50,750**

Shares issued:

On 10 April 2017 Cominco made a non-renounceable entitlement offer to all existing shareholders of one new share for every six shares held at an issue price of €0.25 each. A shortfall facility was provided where any shareholder could apply for additional shares should there be a shortfall. The issue was fully subscribed raising US$1,804,000 for the issue of 6,809,805 shares, and all applications for shares and for shortfall shares were met.

In December 2015, 9,007,101 new ordinary shares were issued in respect of the conversion of the Loan Notes. These shares were issued at an issue price of €2. Further details are provided in Note 12.

Reserves:

The following is a description of each of the reserve accounts that comprise equity shareholders' funds:

Share capital

The share capital comprises the issued ordinary shares of Cominco at no par value.

Convertible loan reserve

The convertible loan reserve records the equity component of the Loan Notes.

Equity settled share-based payment reserve

Cumulative fair value of options charged to the statement of comprehensive income net of transfers to the profit and loss reserve on exercised and cancelled / lapsed options.

Accumulated loss

Accumulated loss comprises the Cominco Group's cumulative accounting profits and losses since inception.

10. Provisions

	2015 US$'000	2016 US$'000	2017 US$'000
Opening balance	294	264	144
Additional provisions	—	—	—
Unused amounts reversed	—	(116)	—
Foreign exchange differences	(30)	(4)	20
Total	**264**	**144**	**164**

A provision relating to a 2010 to 2012 tax audit in the ROC has been recognised. The Cominco Group has been awaiting a formal summary from the Congolese tax authorities. However the Cominco Group has not received any further correspondence from the tax authorities regarding these matters since March 2015.

The provision has not been discounted.

11. Trade and other payables

	2015 US$'000	2016 US$'000	2017 US$'000
Trade and other payables	269	27	35
Other taxes and social security	15	31	3
Accruals and deferred income	161	134	182
Total	**445**	**192**	**220**

12. Loans and borrowings

Loan Notes

Cominco issued 6,565,062 Loan Notes of €2 each to shareholders during October 2014 pursuant to a Convertible Loan Note Instrument dated 1 October 2014 for total consideration of US$15,959,000 (€13,130,000). The conversation date for the Loan Notes was 30 June 2015, or such later date determined by the Noteholders. Interest accrued on the outstanding balance at a rate of 14% per annum.

In January and March 2015, a total of a further 1,221,996 €2 Loan Notes were issued for total consideration of US$2,820,000 (€2,444,000). All terms of the Loan Notes were the same as those issued in 2014. As part of the issue, a total of US$11,000 was classified as equity.

During 2015, the conversion date for the Loan Notes was extended by resolution of the Noteholders from 30 June 2015 to 31 December 2015.

The interest charged for the year ended 31 December 2015 on Loan Notes was US$2,763,000, of which US$2,150,000 was capitalised as part of the cost of exploration and evaluation assets. The balance of US$613,000 was included within finance costs within the income statement.

On 31 December 2015, 9,007,102 shares were issued to settle the principal amount plus accrued interest in accordance with the terms of the October 2014 Convertible Loan Note Instrument.

Other borrowings

In April 2016, each of the three directors provided a loan of US$221,300 (€200,000) (for a total of US$644,000) to Cominco to meet short term funding requirements. The loans were unsecured, repayable within 1 year, bearing an interest rate of 18% per year calculated daily. An interest expense of US$82,000 had been accrued at 31 December 2016.

Between February and April 2017 Mr Smith provided an additional unsecured loan of US$137,000 (€121,059) to Cominco.

Upon closing the entitlement offer in April 2017 the total loans from Directors of US$815,000 plus accumulated interest of US$124,000 were repaid from the proceeds of the share entitlement issue.

13. Contingencies and contractual commitments

Capital Commitments

At 31 December 2017, there were no material contingencies or contractual commitments (2016: nil; 2015: nil).

Other contractual commitments

In order to maintain the Cominco Group's exploration permits in good standing, the Cominco Group is committed to meet the conditions under which the permits were granted. The timing and the amount of expenditure commitments and obligations of the Cominco Group are subject to the work programmes required as per the permit commitments. This may vary significantly from the forecast programmes based upon the results of the work performed. Drilling results in any of the permit areas may also result in variation of the forecast programmes and resultant expenditure. Such activity may lead to accelerated or decreased expenditure.

Lease commitments

The Cominco Group is committed to make the following payments under non-cancellable operating lease arrangements:

	2015 US$'000	2016 US$'000	2017 US$'000
Land and buildings			
Within one year	99	68	62
Between two and five years	35	13	—
Total	**134**	**81**	**62**

A total operating lease cost of US$30,000 has been capitalised as part of the cost of exploration and evaluation assets in respect of operating leases in the ROC (2016: US$40,000; 2015: US$29,000).

Contingent liabilities – Contractor dispute

In 2015 Cominco entered into a dispute with the contractor responsible for the delivery of the DFS over a claim for additional costs, delay and expenses which amount to approximately US$707,000 (2016: US$622,000; 2015: US$645,000).

Cominco counterclaimed against the contractor for delay and additional costs incurred by it. The claim and counter claim have not been pursued by the contractor or by Cominco and the Directors are of the opinion that no amount is payable by Cominco, and no amount is likely to be recovered from the contractor.

No provision or receivable has therefore been made in respect of the disputed amounts.

14. Segment reporting

IFRS 8 requires operating segments to be identified on the basis of internal reports about components of the Cominco Group that are regularly reviewed by the Chief Operating Decision Maker, the Board, in order to allocate resources to the segments and to assess their performance.

The Cominco Group operations relate to the exploration, evaluation and development of phosphate deposits in the ROC with support provided from the British Virgin Islands and the United Kingdom. As such the Cominco Group has only one reportable segment. All non-current assets are located in the ROC.

15. Staff numbers and costs

The average number of persons employed by the Cominco Group (excluding Directors) during the year and analysed by category was as follows:

	2015 Number	2016 Number	2017 Number
Finance and administration	6	4	4
Technical	17	3	3
Total	**23**	**7**	**7**

The aggregate staff costs (excluding directors' remuneration) were as follows:

	2015 US$'000	2016 US$'000	2017 US$'000
Finance and administration	529	389	229
Technical	711	—	—
Total	**1,239**	**389**	**229**

Remuneration of Directors and key management personnel

	2015 US$'000	2016 US$'000	2017 US$'000
Executive Directors			
R J H Smith	140	—	—
P Stevenaert	—	—	140
D J Lunt	30	—	—
Non-executive Directors			
C R Ikin	143	—	—
Total	**313**	**—**	**140**

16. Operating loss

The operating loss is stated after charging / (crediting):

	2015 US$'000	2016 US$'000	2017 US$'000
Gain on disposal of investments	—	(9)	—
Depreciation on property, plant and equipment	91	14	3
Employee costs	1,552	389	369
Operating lease payments – property	61	63	84
Trade payables written off	—	(81)	—

17. Finance charges

	2015 US$'000	2016 US$'000	2017 US$'000
Loan Notes interest	613	—	—
Other borrowings interest	—	82	40
Bank charges	14	5	5
Foreign exchange (gain) / loss	(36)	(33)	9
Total	**591**	**54**	**54**

18. Taxation

Major components of the tax expense	2015 US$'000	2016 US$'000	2017 US$'000
Current			
Income tax	2	9	—
Total	**2**	**9**	**—**

Reconciliation of tax expense	2015	2016	2017
Applicable tax rate	0%	0%	0%
Tax expense at applicable tax rate	—	—	—
Foreign tax	2	9	—
Total	**2**	**9**	**—**

The Cominco Group provides for taxes based on the statutory tax accounts maintained and prepared in accordance with the respective countries' tax legislation.

The current tax expense calculations of the companies within the Cominco Group are based on taxable profits for the year and are computed in accordance with the legislation of the respective countries of incorporation.

There is an unrecognised deferred tax asset that relates to unrelieved tax losses. It is not currently possible to reliably estimate the potential deferred tax asset relating to these losses as there is uncertainty as to whether future taxable profits will be available against which the temporary difference can be utilised, particularly as the Mining Investment Agreement referred to in Note 25 provides exoneration of taxes in respect of the Cominco Group's Hinda phosphate project, although it is considered any such asset will not be material.

19. Earnings per share

The calculations of basic and diluted earnings per share have been based on the following loss attributable to ordinary shareholders and weighted average number of ordinary shares outstanding:

	2015 US$'000	2016 US$'000	2017 US$'000
Loss attributable to ordinary shareholders	(1,858)	(486)	(331)
Weighted average number of ordinary shares in issue	31,172,915	40,155,339	45,098,585
Basic and diluted loss per share (cents)	**(0.06)**	**(0.01)**	**(0.01)**

20. Notes to the statement of cash flows

Reconciliation of net loss before taxation to cash flows used in operations:

	2015 US$'000	2016 US$'000	2017 US$'000
Loss before taxation	**(1,856)**	**(477)**	**(331)**
Finance expense	591	54	54
Operating loss	**(1,265)**	**(423)**	**(277)**
Depreciation	91	14	3
Trade payables written off	—	(81)	—
FV adjustment of investments	1	—	—
Bank charges	(14)	(5)	(5)
Realised foreign exchange gain / (loss)	36	33	(9)
Operating cash flow before changes in working capital	**(1,151)**	**(462)**	**(288)**
(Increase) / decrease in receivables	(2)	191	(30)
(Decrease) / increase in payables	(911)	(283)	2
Total	**(2,064)**	**(554)**	**(316)**

21. Net debt reconciliation

Year ended 31 December 2015	Opening balance US$'000	Cashflows US$'000	Other non-cash movements US$'000	Foreign exchange gain / loss US$'000	Closing balance US$'000
Cash and cash equivalents	4,317	(3,600)	—	(241)	476
Loan Notes payable	(16,399)	(2,820)	17,219	2,000	—
Total	**(12,082)**	**(6,420)**	**17,219**	**1,759**	**476**

Year ended 31 December 2016	Opening balance US$'000	Cashflows US$'000	Other non-cash movements US$'000	Foreign exchange gain / loss US$'000	Closing balance US$'000
Cash and cash equivalents	476	(352)	—	(24)	100
Other borrowings	—	(664)	(82)	36	(710)
Total	**476**	**(1,016)**	**(82)**	**12**	**(610)**

Year ended 31 December 2017	Opening balance US$'000	Cashflows US$'000	Other non-cash movements US$'000	Foreign exchange gain / loss US$'000	Closing balance US$'000
Cash and cash equivalents	100	272	—	151	523
Other borrowings	(710)	801	(40)	(51)	—
Total	**(610)**	**1,073**	**(40)**	**100**	**523**

22. Share options

On 26 March 2013 the Board approved the institution of an Enterprise Management Incentive ("**EMI**") based scheme (the "**Scheme**") for certain senior employees. EMI schemes are United Kingdom tax authority approved schemes and create a tax efficient mechanism to operate an Option Scheme for employees of the Cominco Group based in the United Kingdom.

Following the formal implementation of the Scheme Cominco is required, under the requirements of IFRS 2, to account for the fair value of committed options. Therefore, the fair value of the options has been debited as a cost to the Statement of Comprehensive Income and Expenditure with a corresponding credit to an equity reserve in the Consolidated Statement of Financial Position.

	Year ended 31 December 2015		Year ended 31 December 2016		Year ended 31 December 2017	
	Weighted average exercise price €	Number	Weighted average exercise price €	Number	Weighted average exercise price €	Number
Outstanding at 1 January	3.17	150,000	1.35	50,000	2.00	150,000
Issued during the year	—		2.00	150,000	—	—
Forfeited during the year	(4.00)	(100,000)	(1.35)	(50,000)	—	—
Expired during the year	—	—	—	—	(2.00)	(150,000)
Outstanding at 31 December	**1.35**	**50,000**	**2.00**	**150,000**	**—**	**—**

All options in issue vest immediately on issue and therefore no charge was recognised in any year in respect of these options.

In 2015 share options previously granted to two employees were forfeited following their departure from the Cominco Group. Cominco therefore reversed the previously recognised fair value of these options from the equity settled share-based payment reserve through accumulated losses.

Options with an exercise price €1.35 were forfeited during the year ended 31 December 2016 following the departure of an employee from the Cominco Group.

During 2016, 50,000 12 month options exercisable at €2.00 were granted to each of three former senior technical employees (150,000 options in total) as part of a services agreement to provide services to the Cominco Group. These options expired on 7 October 2017 and were cancelled during the year ended 31 December 2017.

There were no options outstanding at 31 December 2017.

No directors have been granted options.

23. Related party transactions

In the opinion of the Board, at 31 December 2017 there was no ultimate controlling party of Cominco. Cominco and its subsidiaries have a related party relationship with their Directors. At 31 December 2017 the Directors of Cominco and entities controlled by or in which they had an interest controlled approximately 69.0% per cent of the voting shares of the Company.

During the year ended 31 December 2017 Cominco made a non-renounceable share entitlement issue. The Directors of Cominco and entities controlled by or in which they had an interest subscribed for their full entitlement.

In April 2016, each of the three directors provided loans of €200,000 (for a total of €600,000) to Cominco to meet short term funding requirements. The loans were unsecured, repayable in 1 year, bearing an interest rate of 18% per year calculated daily. Between February and April 2017 Mr Smith provided an additional unsecured loan of €121,059 to Cominco. Upon closing the entitlement offer the total loans from Directors was €721,059 plus accumulated interest of €109,900 was set off against the subscription otherwise payable in respect of the share entitlement issue.

Entities associated with Mr Smith and Mr Ikin were parties to the Exclusivity Agreement described in Note 2.2 and Note 25.

The Cominco Group has also entered into the following transactions with key management personnel:

	2015 US$'000	2016 US$'000	2017 US$'000
Remuneration and reimbursement of expenses			
R J H Smith remuneration	140	—	—
D Lunt remuneration	30	—	—
C Ikin remuneration	143	—	—
R J H Smith expenses	7	—	—
P Stevenaert remuneration	—	—	140

No balances were outstanding to key management personnel at the balance sheet dates.

24. Financial instruments

Financial assets by category

The accounting policies for financial instruments have been applied to the line items below:

	2015 US$'000	2016 US$'000	2017 US$'000
Available-for-sale investments	5	—	—
Other receivables	269	83	147
Cash and cash equivalents	476	100	523

The carrying value of financial assets approximate their fair value.

Valuation hierarchy

The carrying amount of the available-for-sale investment stated above is based on its unadjusted quoted price.

Financial liabilities by category

The accounting policies for financial instruments have been applied to the line items below:

	2015 US$'000	2016 US$'000	2017 US$'000
Financial liabilities at amortised cost			
Other borrowings	—	710	—
Trade and other payables	284	58	37

The carrying value of financial liabilities approximate their fair value.

There were no derivative instruments outstanding at 31 December 2017 (2016: nil; 2015: nil).

The main financial risks arising from the Cominco Group's activities are liquidity, credit, interest rate and foreign currency risk.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk for the Cominco Group comprises two main types of risk: currency risk and interest risk. An assessment of the Cominco Group's exposure is given below.

Foreign currency risk

The Cominco Group's exploration expenditure is made in the ROC and head office expenses are predominantly made in the UK in Pounds Sterling. The Cominco Group is not currently exposed to movements in exchange risk between its functional currency, the Euro, and the Central African Franc. These rates are fixed and do not fluctuate.

At the year-end the majority of the Cominco Group's cash resources were held in Euros. The Cominco Group therefore also has downside exposure to any strengthening of Pound Sterling against the Euro as this would increase expenses in Euro terms and accelerate the depletion of the Cominco Group's cash resources.

Any weakening of Pound Sterling against the Euro would, however, result in a reduction in expenses in Euro terms and preserve the Cominco Group's cash resources. There is not considered to be any material exposure in respect of other monetary assets and liabilities of the Cominco Group as these are of a short-term nature.

The table below shows an analysis of cash and cash equivalents denominated by currency.

	2015 US$'000	2016 US$'000	2017 US$'000
Cash held			
Euros	390	—	411
Pounds Sterling	28	42	36
Central African Franc	58	58	77

Sensitivity analysis

The Cominco Group holds cash in Euros arising from fund raising. The main risk is through foreign exchange fluctuations and how these move in companies where the cash balances are held in a currency that is different to the functional currency. The level of cash and cash equivalents held in currencies different to the functional currency are kept at a minimum level to mitigate this risk.

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument or cash flows associated with the instrument will fluctuate due to changes in the market interest rates. Interest rate risk arises from interest-bearing financial assets and liabilities that are used by the Cominco Group.

Interest-bearing assets comprise cash and cash equivalents which are considered to be short-term liquid assets. The Cominco Group's policy is to retain its surplus funds on short-term deposits, usually between one week and three months' duration, at prevailing market rates. Given that the directors do not consider that interest income is significant in respect of the Cominco Group's operations no sensitivity analysis has been provided in respect of any potential fluctuations in interest rates.

Liquidity risk

The Cominco Group's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. As at 31 December 2017, the Cominco Group had unrestricted cash of US$468,000 (2016: US$52,000; 2015: US$426,000) to settle trade and other payables (excluding provisions) of US$220,000 (2016: US$192,000; 2015: US$445,000).

Most of these accounts payable have contractual maturities of less than 30 days and are subject to normal trade terms.

As the Cominco Group has finite cash resources and no material income, the liquidity risk is significant and is managed by controls over expenditure and cash resources. Full disclosure of the going concern status of the Cominco Group is provided in the basis of preparation.

Credit risk

Credit risk is the risk of loss associated with a counter-party's inability to fulfil its payment obligations. The Cominco Group's maximum exposure to credit risk is limited to the carrying value of its cash and cash equivalents and trade and other receivables.

The credit risk on cash is limited because the Cominco Group invests its cash in deposits with well-capitalised financial institutions with strong credit ratings.

Capital management

The Cominco Group's objective when managing capital is to safeguard the Cominco Group's ability to continue as a going concern and have access to adequate funding for its exploration and development projects, so that it can provide returns for shareholders and benefits for other stakeholders. The Cominco Group manages the capital structure and makes adjustments in the light of changes in economic conditions and risk characteristics of the underlying assets. In order to maintain or adjust the capital structure the Cominco Group may issue new shares, acquire debt, or sell assets. Management regularly review cash flow forecasts to determine whether the Cominco Group has sufficient cash reserves to meet future working capital requirements and to take advantage of business opportunities.

25. Material subsequent events

Mining Investment Agreement

Extensive negotiations were held with the Congolese Government in September and October 2017 and the terms of a comprehensive Mining Investment Agreement (''MIA'') agreed. The MIA was signed on 10 July 2018 by the Minister for Mines and Energy, Minister for Transport and Minister for Finance on behalf of the Government, and by Patrick Stevenaert for Cominco SA and by Roderick Smith for Cominco.

The MIA grants extensive tax concessions and guarantees that all permits, licences and approvals necessary for development, operation of the Hinda mine and export of product will be granted. The MIA is enforceable under international World Bank rules.

Exclusivity Deed and working capital funding

On 10 August 2018 Cominco and key shareholders representing approximately 70% of Cominco's shares entered into an exclusivity deed with Kropz plc (''**Kropz**'').

Under this agreement, the key shareholders, Cominco and Kropz agree to negotiate in good faith definitive documentation for the sale of their shares in Cominco for US$85.17 cents per share (amounting to a US$40 million enterprise value), satisfied by the issue of Kropz shares upon Kropz shares being admitted to trading on the AIM market of the London Stock Exchange.

During the term, Kropz must pay Cominco non-refundable working capital contributions as described in Note 2.2 and the key shareholders must not continue or participate in any negotiations with a third party to sell their shares, facilitate evaluation of Cominco, or enter into any agreement to deal in their shares with any third party.

Kropz has appointed joint brokers and advisors with the intention of admission to trading on AIM to raise sufficient funds to complete construction and commissioning of their Elandsfontein phosphate mine in South Africa.

Expiry of Exploration Licenses

Cominco's Hinda Phosphate Exploitation License described in Note 4 covers an area of 263.6km^2, of which 216.2km^2 fell within the Hinda Exploration License and 47.4km^2 within the Kola-Tchikanou Exploration License. The Exploitation License covers all of the Mineral Resources identified, the known extensions and Infrastructure requirements for the proposed project, such as tailings storage, overburden dumps and plant sites.

The Kola-Tchikanou exploration licenses were therefore allowed to lapse during 2017, and the Hinda exploration licenses were allowed to lapse in 2018.

PART VIII

SECTION A

INDEPENDENT REVIEW REPORT ON THE AGGREGATED INTERIM FINANCIAL INFORMATION OF THE SUBSIDIARIES OF KROPZ PLC

Kropz plc (the "**Company**") was incorporated and registered in England and Wales on 10 January 2018. Kropz SA (Pty) Ltd and First Gear Exploration Limited became subsidiaries of the Company following the completion of Share Purchase Agreements on 26 November 2018 and 4 June 2018 respectively as part of a wider group reorganisation. Details of the group reorganisation are set out in paragraph 4 of Part X of this document.

Section A of Part VIII contains the aggregated interim financial information of Kropz SA (Pty) Ltd and its subsidiaries, Elandsfontein Land Holdings (Pty) Ltd, Kropz Elandsfontein (Pty) Ltd, West Coast Fertilizers (Pty) Ltd, Xsando (Pty) Ltd and SA Lithium (Pty) Ltd, and First Gear Exploration Limited (together the "**Subsidiaries**") for the six months ended 30 June 2018 (the "**Aggregated Interim Financial Information**"). The Subsidiaries were under common control of the same ultimate beneficial owners and effectively operated as a group under common management throughout the period covered by the Aggregated Interim Financial Information although they did not comprise a group as defined by International Financial Reporting Standards.

MAZARS

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27 November 2018

Dear Sirs

INDEPENDENT REVIEW REPORT TO KROPZ PLC, GRANT THORNTON UK LLP. H&P ADVISORY LIMITED AND MIRABAUD SECURITIES LIMITED

We have been engaged by the Directors of Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited to review the aggregated interim financial information of Kropz plc's subsidiaries, being those entities listed in note 1.1 to the aggregated interim financial information (the "**Group**"). The interim financial information comprises the aggregated statement of comprehensive income, the aggregated statement of changes in equity and the aggregated statement of cash flow for the six months ended 30 June 2017 and 30 June 2018, and the aggregated statement of financial position as at 31 December 2017 and 30 June 2018 (the "**Aggregated Interim Financial information**").

This report is made solely to the Directors of Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited in accordance with International Standard on Review Engagements (UK and Ireland) 2400 issued by the Financial Reporting Council. Our work has been undertaken so that we might state to the Directors those matters we are required to state to them in an independent review report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Kropz plc, Grant Thornton UK

LLP, H&P Advisory Limited and Mirabaud Securities Limited, for our review work, for this report, or for the conclusions we have formed.

Responsibilities

The aggregated interim financial information is the responsibility of, and has been approved by, the directors of Kropz plc. The directors of Kropz plc are responsible for preparing the aggregated interim financial information in accordance with the accounting policies set out in note 1 of the aggregated interim financial information.

The annual financial statements of Kropz plc are prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("**IFRS**"). The aggregated interim financial information has been prepared in accordance with the accounting policies the Company intends to use in preparing its next annual financial statements, except that certain accounting conventions, commonly used for the preparation of historical financial information for inclusion in investment circulars, as described in the Annexure to Standard for Investment Reporting 2000 issued by the Financial Reporting Council in the United Kingdom, have been applied.

Our responsibility is to express to the Directors of Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited a conclusion on the aggregated interim financial information based on our review.

Save for any responsibility arising under the AIM Rules to any person as and to the extent there provided, to the fullest extent permitted by law we do not assume any responsibility and will not accept any liability to any person other than the addressees of this letter for any loss suffered by any such person as a result of, arising out of, or in connection with this report or our statement, required by and given solely for the purposes of complying with the AIM Rules, consenting to its inclusion in the Company's AIM admission document dated 27 November 2018 ("**Admission Document**").

Scope of review

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2400, 'Engagements to Review Historical Financial Statements' issued by the Financial Reporting Council for use in the United Kingdom. A review of aggregated interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK and Ireland) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the aggregated interim financial information is not prepared, in all material respects, in accordance with the accounting policies set out in note 1 of the aggregated interim financial information.

Declaration

For the purposes of paragraph (a) of Schedule Two of the AIM Rules, we are responsible for this report as part of the Admission Document and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import. This declaration is included in the Admission Document in compliance with Schedule Two of the AIM Rules for Companies.

Yours faithfully

Mazars LLP

AGGREGATED INTERIM FINANCIAL INFORMATION OF THE SUBSIDIARIES OF KROPZ PLC

AGGREGATED STATEMENT OF FINANCIAL POSITION
at 30 June

	Notes	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
ASSETS				
Non-Current Assets				
Property, plant and equipment	*2*	20,266,368	116,366,667	103,531,931
Exploration asset	*3*	3,136,306	3,337,255	2,985,346
Mine under construction	*4*	83,314,665	—	—
Loans receivable	*6*	3,079,321	3,629,172	4,026,838
Other financial assets	*7*	1,783,368	1,897,630	1,697,529
Deferred tax	*8*	884,616	2,755,559	7,689,064
		112,464,644	**127,986,283**	**119,930,708**
Current Assets				
Assets held for disposal	*5*	—	645,642	—
Inventories	*9*	1,855,969	900,456	912,706
Trade and other receivables	*10*	723,492	544,546	300,473
Cash and cash equivalents	*11*	448,821	318,469	39,832
		3,028,282	**2,409,113**	**1,253,011**
TOTAL ASSETS		**115,492,926**	**130,395,396**	**121,183,719**
EQUITY & LIABILITIES				
Equity				
Share capital	*12*	2,354	2,354	2,354
Accumulated loss		(6,248,024)	(9,142,920)	(20,288,161)
Foreign currency translation reserve		1,198,614	631,217	2,684,159
Owners' equity		(5,047,056)	(8,509,349)	(17,601,648)
Non-controlling interest		(277,070)	(1,710,082)	(5,516,270)
		(5,324,126)	**(10,219,431)**	**(23,117,918)**
Non-Current Liabilities				
Shareholder loan payable	*14*	62,036,650	64,129,332	65,351,967
Other financial liabilities	*15*	44,777,474	45,376,330	49,428,996
Deferred tax	*8*	—	17,249	—
Provisions	*16*	579,750	4,758,148	4,256,409
		107,393,874	**114,281,059**	**119,037,372**
Current Liabilities				
Trade and other payables	*17*	5,923,178	11,333,768	10,264,265
Other financial liabilities	*15*	7,500,000	15,000,000	15,000,000
		13,423,178	**26,333,768**	**25,264,265**
TOTAL EQUITY & LIABILITIES		**115,492,926**	**130,395,396**	**121,183,719**

AGGREGATED STATEMENT OF COMPREHENSIVE INCOME

for the six months ended 30 June

	Notes	Year ended 31 December 2017 US$	Six months ended 30 June 2017 US$	Six months ended 30 June 2018 US$
Revenue		—	—	—
Other income	*20*	9,316,365	3,869,043	19,576
Operating expenses		(13,792,967)	(5,853,058)	(18,077,595)
Operating loss	*21*	**(4,476,602)**	**(1,984,015)**	**(18,058,019)**
Finance income		603,701	371,809	196,125
Finance expense	*22*	(3,837,668)	(246,845)	(3,576,394)
Loss before taxation		**(7,710,569)**	**(1,859,051)**	**(21,438,288)**
Taxation	*23*	2,665,166	1,014,566	5,849,803
Loss after taxation		**(5,045,403)**	**(844,485)**	**(15,588,485)**
Other comprehensive (loss) / income				
Items that are or may be reclassified subsequently to profit or loss				
Foreign currency translation reserve		(766,074)	(198,677)	2,052,942
Other comprehensive income / (loss) for the period		**(766,074)**	**(198,677)**	**2,052,942**
Total comprehensive loss for the period		**(5,811,477)**	**(1,043,162)**	**(13,535,543)**
Loss attributable to:				
Owners of the Company		(3,436,386)	(541,490)	(11,145,241)
Non-controlling interest		(1,609,017)	(302,995)	(4,443,244)
		(5,045,403)	**(844,485)**	**(15,588,485)**
Total comprehensive loss attributable to:				
Owners of the Company		(4,202,460)	(740,167)	(9,092,299)
Non-controlling interest		(1,609,017)	(302,995)	(4,443,244)
		(5,811,477)	**(1,043,162)**	**(13,535,543)**
Basic and diluted earnings per share	*24*	**(16,818)**	**(2,815)**	**(51,962)**

AGGREGATED STATEMENT OF CHANGES IN EQUITY

for the six months ended 30 June

	Share Capital US$	Accumulated Loss US$	Foreign Currency Translation Reserve US$	Total US$	Non-controlling Interest US$	Total Equity US$
Balance at 31 December 2016	**28**	**(5,706,534)**	**1,397,291**	**(4,309,215)**	**27,679**	**(4,281,536)**
Share issue	2,326	—	—	2,326	4	2,330
Total comprehensive loss for the year	—	(541,490)	(198,677)	(740,167)	(302,995)	(1,043,162)
Foreign currency translation	—	—	—	—	(1,758)	(1,758)
Balance at 30 June 2017	**2,354**	**(6,248,024)**	**1,198,614**	**(5,047,056)**	**(277,070)**	**(5,324,126)**
Share issue	—	—	—	—	—	—
Total comprehensive income for the year	—	(2,894,896)	(567,397)	(3,462,293)	(1,306,022)	(4,768,315)
Foreign currency translation	—	—	—	—	(126,990)	(126,990)
Balance at 31 December 2017	**2,354**	**(9,142,920)**	**631,217**	**(8,509,349)**	**(1,710,082)**	**(10,219,431)**
Share issue	—	—	—	—	—	—
Total comprehensive loss for the year	—	(11,145,241)	2,052,942	(9,092,299)	(4,443,244)	(13,535,543)
Foreign currency translation	—	—	—	—	637,056	637,056
Balance at 30 June 2018	**2,354**	**(20,288,161)**	**2,684,159**	**(17,601,648)**	**(5,516,270)**	**(23,117,918)**

AGGREGATED STATEMENT OF CASH FLOWS

for the six months ended 30 June

	Notes	Six months ended 30 June 2017 US$	Year ended 31 December 2017 US$	Six months ended 30 June 2018 US$
Cash flows from operating activities	*25*	**(11,807,992)**	**(12,003,463)**	**(2,715,096)**
Tax paid		—	—	—
Net cash used in operating activities		**(11,807,992)**	**(12,003,463)**	**(2,715,096)**
Cash flows from investing activities				
Purchase of property, plant and equipment	*2*	(1,342,951)	(2,650,516)	(1,997)
Disposal of property, plant and equipment	*2*	—	822	666,158
Purchase of exploration assets	*3*	—	—	—
Development of mine under construction	*4*	(7,714,088)	(10,231,917)	—
Finance income received		45,673	343,274	93,612
Net cash (used in)/from investing activities		**(9,011,366)**	**(12,538,337)**	**757,773**
Cash flows from financing activities				
Finance costs paid		(246,845)	(294,774)	(1,404,241)
Shareholder loan payable		3,594,400	3,996,430	291,132
Other financial liabilities		12,815,785	16,289,455	2,762,881
Issue of loans receivables		(234,953)	(443,999)	21,012
(Payment) / receipt of guarantees		11,958	11,863	12,837
Net cash from financing activities		**15,940,346**	**19,558,975**	**1,683,622**
Net cash movement for the year		**(4,879,011)**	**(4,982,825)**	**(273,702)**
Cash at the beginning of the year		5,161,905	5,161,905	318,470
Foreign exchange effect on cash		165,927	139,389	(4,936)
Total cash at the end of the year	*11*	**448,821**	**318,469**	**39,832**

NOTES TO THE AGGREGATED INTERIM FINANCIAL INFORMATION

for the six months ended 30 June

1. Accounting policies

1.1. Basis of preparation

Reporting overview

Kropz plc (the "**Company**") was incorporated and registered in England and Wales on 10 January 2018. Kropz SA (Pty) Ltd and First Gear Exploration Limited became subsidiaries of the Company following the completion of Share Purchase Agreements on 27 November 2018 and 4 June 2018 respectively. The Company is now the parent holding company of the Subsidiaries (together the "**Group**"). Prior to the group restructuring the Subsidiaries were controlled by Kropz International SARL, a company incorporated in Luxembourg.

This aggregated interim financial information includes the results of Kropz SA (Pty) Ltd and its subsidiaries, Elandsfontein Land Holdings (Pty) Ltd, Kropz Elandsfontein (Pty) Ltd, West Coast Fertilizers (Pty) Ltd, Xsando (Pty) Ltd and SA Lithium (Pty) Ltd, and First Gear Exploration Limited (together the "**Subsidiaries**") for the six months ended 30 June 2017 and 30 June 2018 (the "**Aggregated Interim Financial Information**") and is prepared for the purposes of the admission of the ordinary shares of Kropz plc, the parent company of the Subsidiaries, to the AIM market operated by London Stock Exchange plc.

Aggregation of financial information

The Subsidiaries were under common control of the same ultimate beneficial owners and effectively operated as a group under common management throughout the period covered by the Aggregated Interim Financial Information although they did not comprise a group as defined by International Financial Reporting Standards. In order to assist readers of this Aggregated Interim Financial Information in understanding the trading performance and financial position of the Subsidiaries, the assets, liabilities and results of the individual companies have been aggregated (with intercompany transaction and balances eliminated) to present the results and balances that would have been shown had the Subsidiaries been under the control of a single common parent throughout the financial periods presented.

The Aggregated Interim Financial Information of the Subsidiaries of Kropz plc has been prepared on the going concern basis in accordance with, and in compliance with, IAS 34 'Interim Financial Reporting', except as described below.

IFRS as adopted by the European Union does not provide for the preparation of aggregated financial information and accordingly in preparing the Aggregated Interim Financial Information certain accounting conventions commonly used for the preparation of historical financial information for inclusion in investment circulars as described in the Annexure to SIR 2000 (Investment Reporting Standard applicable to public reporting engagements on historical financial information) issued by the Financial Reporting Council in the UK have been applied. The application of these conventions results in a material departure from IFRS as adopted by the European Union. In all other respects, IFRS as adopted by the European Union have been applied.

The Aggregated Interim Financial Information reflects the aggregation of the financial information of:

- Kropz SA (Pty) Ltd and its subsidiaries, prepared on a consolidated basis, as described in accounting policy 1.3; and
- First Gear Exploration Limited.

First Gear Exploration Limited was incorporated in February 2017.

Entities included in the Aggregated Interim Financial Information

The entities reflected in the Aggregated Interim Financial Information are:

Entity:	Immediate parent company at the date of the Admission Document	% ownership of Kropz plc at the date of the Admission Document	Country of incorporation
Kropz SA (Pty) Ltd	Kropz plc	100%	South Africa
Elandsfontein Land Holdings (Pty) Ltd	Kropz SA (Pty) Ltd	70%	South Africa
Kropz Elandsfontein (Pty) Ltd	Kropz SA (Pty) Ltd	74%	South Africa
West Coast Fertilizers (Pty) Ltd	Kropz SA (Pty) Ltd	70%	South Africa
Xsando (Pty) Ltd	Kropz SA (Pty) Ltd	70%	South Africa
SA Lithium (Pty) Ltd	n/a*	Nil*	South Africa
First Gear Exploration Limited	Kropz plc	50% + 1 share	Ghana

* On 5 March 2018 the Group disposed of its interest in SA Lithium (Pty) Ltd. During the periods reflected in the Aggregated Interim Financial Information up to that date, the Group owned 74 per cent. of the ordinary share capital of SA Lithium (Pty) Ltd through Kropz SA (Pty) Ltd. The results, assets and liabilities of this entity are reflected in the Aggregated Interim Financial Information to the date of disposal.

Going concern

To date, the Group has spent approximately US$120 million on its Elandsfontein Phosphate Project to construct the processing plant and infrastructure, initial mining and capitalised working costs. In April 2017 the Group substantially completed development activity of its mining assets and plant commissioning commenced. However, a number of technical challenges were identified during the initial commissioning phase and a decision was taken by the Directors to place the mine under care and maintenance from August 2017.

Assisted by experts in the field of phosphate processing, the Group examined the causes behind the initial challenges experienced in the plant. A number of key factors have been identified and it is now proposed to address these, including an additional water thickener and attritioning circuit and to re-commission a modified reverse-reverse circuit. Further capital expenditure will be required to upgrade the processing plant, in order to address the challenges identified. However, at 30 June 2018 the Group did not have sufficient available resources to undertake this work. Kropz plc is seeking admission to AIM in order to raise the funds required to complete the commissioning of the Elandsfontein Phosphate Project and secure working capital through to first production.

The development of the Group's mine has been financed through shareholder and bank loans. The bank loan was repayable in quarterly instalments from 31 March 2018 under the terms of the loan applicable at 30 June 2018. The classification of loan repayments of US$15 million within current liabilities, along with trade and other payables in connection with the development of the mine, resulted in net current liabilities of US$24.0 million at 30 June 2018.

The Group was unable to fund the instalment payments on the bank loan as they fell due and consequently, under the terms of the facility agreement, was in default from 1 April 2018. On 20 September 2018 the Group and BNP Paribas conditionally agreed a waiver of the breach and restructure of the facility under which the first capital repayment has been deferred to 2020. In addition, BNP Paribas provided all the necessary consents required to facilitate all the contemplated transactions leading up to the admission of Kropz plc to AIM. The waiver and restructured facility are contingent on the admission of Kropz plc's shares to trading on AIM by 30 November 2018.

In anticipation of the admission of Kropz plc's shares to trading on AIM, the Group has completed a restructuring process which included a share-for-share exchange between the shareholders and Kropz plc, the consolidation and set-off of various shareholder loans and the capitalisation of a portion of shareholder loans. The consolidation, set-off and capitalisation of various loans has resulted in the significant reduction of the Group's debt position.

The Directors have prepared cash flow forecasts for the Group which include assumed net placing proceeds of US$32 million and the effects of the restructuring of the shareholder and bank loans, the wider group reorganisation, and capital expenditure in order to re-commission

the Group's Elandsfontein Phosphate Project by September 2019. The cash flow forecasts indicate that the Group will be able to meet its liabilities as they fall due for the foreseeable future.

On the basis of the forecasts, the Directors have concluded that it is appropriate to prepare the Group's Aggregated Interim Financial Information on a going concern basis.

1.2 Functional and presentational currencies

The Aggregated Interim Financial Information is presented in US Dollars.

The functional currency of Kropz SA (Pty) Ltd and its subsidiaries (as shown above) is South African Rand, being the currency in which the majority of the companies' transactions are denominated.

In order to satisfy the requirements of IAS 21 with respect to presentation currency, the financial information has been translated from Rand into US Dollars using the procedures outlined below:

- Assets and liabilities where the functional currency is other than US Dollars were translated into US Dollars at the relevant closing rates of exchange;
- Non-US Dollar trading results were translated into US Dollars at the relevant average rates of exchange;
- Differences arising from the retranslation of the opening net assets and the results for the year have been taken to the foreign currency translation reserve; and
- Share capital has been translated at the historical rates prevailing at the dates of transactions.

The exchange rates used were as follows:

Rand/dollar exchange rate:	**31 Dec 2016**	**31 Dec 2017**	**30 Jun 2017**	**30 Jun 2018**
Average rate	0.06799	0.07508	0.07567	0.08124
Closing rate	0.07338	0.08134	0.07644	0.07276

The functional and presentation currency of First Gear Exploration Limited is US Dollars.

1.3. Basis of consolidation of Kropz SA (Pty) Limited and its subsidiaries

The consolidation of Kropz SA (Pty) Ltd incorporates the balances and results of Kropz SA (Pty) Limited and its subsidiaries (as shown in accounting policy 1.1).

The subsidiaries are all entities in which Kropz SA (Pty) Ltd has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether Kropz SA (Pty) Limited controls another entity.

The Kropz SA (Pty) Ltd subsidiaries are fully consolidated from the date on which control is transferred to Kropz SA (Pty) Ltd. They are de-consolidated from the date that control ceases.

The results of subsidiaries are included in the consolidation from the effective date of acquisition to the effective date of disposal. All intragroup transactions, balances, income and expenses are eliminated.

Non-controlling interests in the net assets of consolidated subsidiaries are identified and recognised separately from the Group's interest therein, and are recognised within equity.

The difference between the fair value of consideration paid or received and the movement in non-controlling interest for such transactions is recognised in equity attributable to the owners of the parent.

1.4. Property, plant and equipment

Property, plant and equipment includes buildings and infrastructure, machinery, plant and equipment, mineral exploration, site preparation and development and essential spare parts that are held to minimise delays arising from plant breakdowns, that are expected to be used during more than one period.

Assets that are in the process of being constructed, which include capitalised development and mineral exploration and evaluation costs, are measured as cost less accumulated impairment and are not depreciated.

All other classes of property, plant and equipment is stated at historical cost less accumulated depreciation and accumulated impairment. Land is not depreciated.

Historical cost includes expenditure that is directly attributable to the acquisition of the items, including:

- The estimated costs of decommissioning the assets and site rehabilitation costs to the extent that they related to the asset
- Capitalised borrowing costs
- Capitalised pre-production expenditure
- Topsoil and overburden stripping costs

The cost of items of property, plant and equipment are capitalised into its various components where the useful life of the components differ from the main item of property, plant and equipment to which the component can be logically assigned. Expenditure incurred to replace a significant component of property, plant and equipment is capitalised and any remaining carrying value of the component replaced is written off as an expense in the income statement.

Direct costs incurred on major projects during the period of development or construction are capitalised. Subsequent expenditure on property, plant and equipment is capitalised only when the expenditure enhances the value or output of the asset beyond original expectations, it is probable that future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably. Costs incurred on repairing and maintaining assets are recognised in the income statement in the period in which they are incurred.

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in profit or loss.

Capitalised borrowing costs comprise interest paid on shareholder loans incurred pre-production in Kropz Elandsfontein (Pty) Ltd and is currently charged at the 1 month US Libor interest rate plus 3 per cent. on US Dollar denominated loans and at the 3 month JIBAR interest rate plus 3 per cent. on South African Rand denominated shareholder loans.

Depreciation

All items of property, plant and equipment are depreciated on either a straight line method or unit of production method at cost less estimated residual values over their useful lives as follows:

Item	Depreciation method	Average useful life
Building and Infrastructure		
Buildings	Units of production	Life-of-mine*
Roads	Straight line	15 years
Substation	Straight line	15 years
Machinery, Plant & Equipment		
Fixed plant and equipment	Units of production	Life-of-mine*
Rehabilitation provisions	Units of production	Life-of-mine*
Critical Spare Parts	Straight line	2-15 years
Furniture & Fittings	Straight line	6 years
Motor vehicles	Straight line	5 years
Computer equipment	Straight line	3 years
Mineral exploration, site preparation	Units of production	Life-of-mine*
Stripping Activity	Units of production	Life-of-mine*

* Depreciation of mining assets is computed principally by the units-of-production method over life-of-mine based on estimated quantities of economically recoverable proved and probable reserves, which can be recovered in future from known mineral deposits.

Research, mineral and evaluation costs

Research, development, mineral exploration and evaluation costs are expenses in the year in which they are incurred until they result in projects that:

- Are evaluated as being technically or commercially feasible
- Has sufficient resources to complete development
- Can demonstrate that it will generate future economic benefits

Once these criteria are met, all directly attributable development costs and ongoing mineral exploration and evaluation costs are capitalized within property, plant and equipment. During the development of mine, before production commences, stripping expenses are capitalised as part of the investment in construction of the mine. Capitalisation of pre-production expenditure ceases when the mining property is capable of commercial production.

Useful lives and residual values

The asset's useful lives and residual values are reviewed and adjusted if appropriate, at each reporting date.

Impairment

An asset's carrying amount is written down to its recoverable amount if the assets carrying amount is greater than its recoverable amount.

Capitalisation of borrowing costs

Interest cost and foreign exchange differences which adjust interest costs on borrowings to finance the construction of property, plant and equipment that are considered to be qualifying assets are capitalised during the period of time that is required to complete and prepare the asset for its intended use. Other borrowing costs and foreign exchange gains are recognised in profit or loss.

Stripping activity asset

The costs of stripping activity which provides a benefit in the form of improved access to ore is recognised as a non-current asset where the following criteria are met:

- it is probable that future economic benefit in the form of improved access to the ore body will flow to the entity
- The component of the ore body for which access has been improved can be identified
- The cost of the stripping activity can be reliably measured

The stripping activity is initially measured at cost and subsequently carried at cost less depreciation and impairment losses.

1.5. Mine under construction

Mine under construction assets are initially recognised at cost and subsequently at cost less accumulated amortisation and accumulated impairment losses.

Research and development costs are recognised as an expense in the period incurred.

Development costs previously recognised as an expense are not recognised as an asset in subsequent period.

Amortisation is provided to write down the asset as follows:

Item	Write down method
Capitalised development costs	Units of production method

The residual value, amortisation period and amortisation method for mine under construction assets are reviewed and adjusted if appropriate, at each reporting date.

1.6. Exploration costs

All costs incurred prior to obtaining the legal right to undertake exploration and evaluation activities on a project are written off as incurred. Following the granting of a prospecting right, general administration and overhead costs directly attributable to exploration and evaluation activities will be expensed and all other costs are capitalised and recorded at cost on initial recognition.

The following expenditures are included in the initial and subsequent measurement of the exploration and evaluation assets:

- Acquisition of rights to explore
- Topographical, geological, geochemical or geographical studies
- Exploratory drilling
- Trenching
- Sampling
- Activities in relation to the evaluation of both the technical feasibility and the commercial viability of extracting minerals
- Exploration staff related costs
- Equipment and infrastructure

Exploration and evaluation costs that have been capitalised are classified as either tangible or intangible according to the nature of the assets acquired and this classification is consistently applied.

The tangible assets are subsequently classified as property, plant and equipment and carried at cost.

The intangible assets are subsequently carried at cost and amortised to their residual value over their economic useful life.

As the capitalised exploration and evaluation expenditure asset is not available for use, it is not depreciated.

All capitalised exploration and evaluation expenditure is monitored for indications of impairment in accordance with IFRS 6.

1.7. Game animals

Game animals are wild animals that occur on the farm properties owned by the Group. These animals are managed in terms of a game management plan and excess animals are either sold as live animals or harvested as and when required based on estimated stocking levels and vegetation conditions.

Game animals are measured at their fair value less estimated point-of-sale costs, fair value being determined upon the age and size of the animals and relevant market prices. Market price is determined on the basis that the animal is either to be sold to be slaughtered or realised through sale to customers at fair market value.

Fair market value of game animals is determined by using average live game animal selling prices achieved at live game animal auctions during the relevant year and published from time to time on game animal auctioneering websites.

1.8. Financial instruments

Classification and measurement

The Group classifies its financial assets and financial liabilities into the following categories:

- Financial assets measured at amortised cost
- Financial liabilities measured at amortised cost.

Classification of financial assets depends on the business model for managing the financial assets and the contractual terms of the cash flows. Management determines the classification of financial assets at initial recognition. Generally, the Group does not acquire financial assets for the purpose of selling in the short term. The Group's business model is primarily that of ''hold to collect'' (where assets are held in order to collect contractual cash flows).

Financial assets held at amortised cost

This classification applies to debt instruments which are held under a hold to collect business model and which have cash flows that meet the ''solely payments of principal and interest'' (SPPI) criteria.

At initial recognition, trade and other receivables that do not have a significant financing component are recognised at their transaction price. Other financial assets are initially recognised at fair value plus related transaction costs. They are subsequently measured at amortised cost using the effective interest method. Any gain or loss on de-recognition or modification of a financial asset held at amortised cost is recognised in the income statement.

Impairment of financial assets

A forward looking expected credit loss (ECL) review is required for debt instruments measured at amortised cost or held at fair value through other comprehensive income, financial guarantees not measured at fair value through profit or loss and other receivables that give rise to an unconditional right to consideration.

As permitted by IFRS 9, the Group applies the ''simplified approach'' to other receivables and the ''general approach'' to all other financial assets. The general approach incorporates a review for any significant increase in counterparty credit risk since inception. The ECL reviews include assumptions about the risk of default and expected loss rates.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are classified as financial assets at amortised cost.

Trade and other payables

Trade and other payables are classified as financial liabilities at amortised cost.

Interest bearing borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings using the effective interest method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

Impact of transition to IFRS 9 Financial Instruments as at 1 January 2018

The Group adopted IFRS 9 Financial Instruments on 1 January 2018, which resulted in changes in accounting policies. The standard replaced the provisions of IAS 39 that relate to recognition, classification and measurement of financial assets and financial liabilities, de-recognition of financial instruments, impairment of financial assets and hedge accounting. The new accounting policies relating to financial instruments are set out above.

For transition, the Group has elected to apply the limited exemption in IFRS 9 relating to the classification, measurement and impairment requirements for financial assets and accordingly has not restated comparative periods.

The transition to IFRS 9 has not resulted in an impact on the Group's opening retained earnings as at 1 January 2018.

Financial assets have been classified as financial assets measured at amortised cost in accordance with IFRS 9. Previously the Group's financial assets were classified as ''loans and other receivables''.

1.9. Taxation

Current tax assets and liabilities

Current tax for current and prior periods is, to the extent unpaid, recognised as a liability. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset.

Deferred tax assets and liabilities

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

A deferred tax liability is recognised for all taxable temporary differences, except to the extent that the deferred tax liability arises from the initial recognition of an asset or liability in a transaction which at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

A deferred tax asset is recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised. A deferred tax asset is not recognised when it arises from the initial recognition of an asset or liability in a transaction at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Tax expense

Tax expense is recognised in the same component of total comprehensive income (i.e. continuing operations, discontinued operations, or other comprehensive income) or equity as the transaction or other event that resulted in the tax expense.

1.10. Impairment of assets

The Group assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the Group estimates the recoverable amount of the asset.

If there is any indication that an asset may be impaired, the recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the recoverable amount of the cash-generating unit to which the asset belongs is determined.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. That reduction is an impairment loss.

An impairment loss of assets carried at cost less any accumulated depreciation or amortisation is recognised immediately in profit or loss.

An entity assesses at each reporting date whether there is any indication that an impairment loss recognised in prior periods for assets other than goodwill may no longer exist or may have decreased. If any such indication exists, the recoverable amounts of those assets are estimated.

The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss of assets carried at cost less accumulated depreciation or amortisation other than goodwill is recognised immediately in profit or loss. Any reversal of an impairment loss of a revalued asset is treated as a revaluation increase.

1.11. Inventories

Inventories are measured at the lower of cost and net realisable value.

Plant spares and consumables stores are capitalised to the balance sheet and expense to the income statement as they are utilised.

Spares and consumables are valued at the lower of cost and net realisable value. Cost is determined using the weight average method.

Obsolete, redundant and slow-moving items of spares and consumables are identified on a regular basis and written down to their net realisable value.

Inventories are included in current assets, unless the inventory will not be used within 12 months after the end of the reporting period.

1.12. Provisions and contingencies

Environmental Rehabilitation

The provision for environmental rehabilitation is recognised as and when an obligation to incur rehabilitation and mine closure costs arises from environmental disturbance caused by the development or ongoing production of a mining property. Estimated long-term environmental rehabilitation provisions are measured based on the Group's Environmental policy taking into account current technological, environmental and regulatory requirements. Any subsequent changes to the carrying amount of the provision resulting from changes to the assumptions applied in estimating the obligation are recognised in the statement of profit or loss and other comprehensive income.

The provisions are based on the net present value of the estimated cost of restoring the environmental disturbance that has occurred up to the reporting date, using the risk free rate and the risk adjusted cash flows that reflect current market assessments and the risks specific to the provisions. Increase due to the additional environmental disturbances are capitalised and amortised over the remaining life of the mine.

Ongoing rehabilitation expenditure

Ongoing rehabilitation expenditure incurred is offset against the recognised provision in the statement of profit or loss on other comprehensive income.

Decommissioning Provision

The estimated present value of costs relating to the future decommissioning of plant or other site preparation work, taking into account current environmental and regulatory requirements, is capitalised as part of property, plant and equipment, to the extent that it relates to the construction of and asset, and the related provisions are raised in the statement of financial position, as soon as the obligation to incur such costs arises.

These estimates are reviewed at least annually and changes in the measurement of the provision that result from the subsequent changes in the estimated timing or amount of cash flows, or a change in discount rate, are added to, or deducted from, the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the income statement. If the asset value is increased and there is an indication that the revised carrying value is not recoverable, an impairment test is performed in accordance with the accounting policy on 'Impairment of nonfinancial assets' above.

1.13. Share capital and equity

Ordinary shares are classified as equity and are recorded at the proceeds received net of issue costs.

1.14. Interest income

Interest is recognised, in the income statement, using the effective interest method.

1.15. Borrowing costs

Interest on borrowings directly related to the financing of qualifying capital projects under development is added to the capitalised cost of those projects during the development phase, until such time as the assets are substantially ready for their intended use or sale which, in the case of mining properties, is when they are capable of commercial production. Where funds have been borrowed specifically to finance the project, the amount capitalised represents the actual borrowing costs incurred. Where the funds used to finance a project forming part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the period.

Qualifying assets are assets that necessarily take a substantial period of time (more than 12 months) to get ready for their intended use or sale. Borrowing costs are added to the cost of these assets, until the assets are substantially ready for their intended use or sale.

Capitalisation is suspended during extended periods in which active development is interrupted.

Capitalisation ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

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

1.16. Leases

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership to the lessee. All other leases are operating leases.

Operating leases – lessee

Operating lease payments are recognised as an expense on a straight-line basis over the lease term unless:

- another systematic basis is representative of the time pattern of the benefit from the leased asset, even if the payments are not on that basis, or
- the payments are structured to increase in line with expected general inflation (based on published indexes or statistics) to compensate for the lessor's expected inflationary cost increases.

Any contingent rents are expensed in the period they are incurred.

1.17. Employee benefits

The cost of short-term employee benefits, such as leave pay and sick leave, bonuses, and non-monetary benefits such as medical care), are recognised in the period in which the service is rendered and are not discounted.

1.18. Foreign currency transactions (Kropz SA (Pty) Ltd and its subsidiaries)

A foreign currency transaction is recorded, on initial recognition in Rand, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

At the end of the reporting period foreign currency monetary items are translated using the closing rate.

Cash flows arising from transactions in a foreign currency are recorded in Rand by applying to the foreign currency amount the exchange rate between the Rand and the foreign currency at the date of the cash flow.

1.19. Significant judgements and sources of estimation uncertainty

The preparation of financial statements in conformity with IFRS requires management, from time to time, to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. These estimates and associated assumptions are based on experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Critical judgements in applying accounting policies

The critical judgements made by management in applying accounting policies, apart from those involving estimations, that have the most significant effect on the amounts recognised in the financial statements, are outlined as follows:

Decommissioning and rehabilitation provisions

Quantifying the future costs of these obligations is complex and requires various estimates to be made, as well as interpretations of and decisions regarding regulatory requirements, particularly with respect to the degree of rehabilitation required, with reference to the sensitivity of the environmental area surrounding the sites. Consequently, the guidelines issued for quantifying the future rehabilitation cost of a site, as issued by the Department of Mineral Resources, have been used to estimate future rehabilitation costs.

In determining the environmental rehabilitation liability, an inflation rate of 6% (2016: 6 per cent.) was assumed to increase the rehabilitation liability for the next 15 years, and a rate of 8.59 per cent. (2016: 8 per cent.) to discount that amount to present value. The assumed discount rate of 8.59 per cent. is a risk-free rate.

Key sources of estimation uncertainty

Impairment testing

The Group reviews and tests the carrying value of assets when events or changes in circumstances suggest that the carrying amount may not be recoverable. When such indicators exist, management determine the recoverable amount by performing value in use and fair value calculations. These calculations require the use of estimates and assumptions. When it is not possible to determine the recoverable amount for an individual asset, management assesses the recoverable amount for the cash generating unit to which the asset belongs.

Property, plant and equipment

The depreciable amount of property, plant and equipment is allocated on a systematic basis over its useful life. In determining the depreciable amount management makes certain assumptions with regard to the residual value of assets based on the expected estimated amount that the Group would currently obtain from disposal of the asset, after deducting the estimated cost of disposal, if the asset were already of the age and in the condition expected at the end of its useful life. If an asset is expected to be abandoned the residual value is estimated at zero.

In determining the useful lives of property, plant and equipment that is depreciated, management considers the expected usage of assets, expected physical wear and tear, legal or similar limits of assets such as mineral rights as well as obsolescence.

This estimate is further impacted by management's best estimation of proved and probable iron ore reserves and the expected future life of each of the mines within the Group. The forecast production could be different from the actual phosphate mined. This would generally result from significant changes in the factors or assumptions used in estimating phosphate reserves. These factors include:

- Changes in proved and probable ore reserves
- Differences between achieved ore prices and assumptions
- Unforeseen operational issues at mine sites
- Changes in capital, operating, mining, processing, reclamation and logistics costs, discount rates and foreign exchange rates

Any change in management's estimate of the useful lives and residual values of assets would impact the depreciation charge. Any change in management's estimate of the total expected future life of each of the mines would impact the depreciation charge as well as the estimated rehabilitation and decommissioning provisions.

Taxation

Judgement is required in determining the provision for income taxes due to the complexity of legislation. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business.

The Group recognises the net future tax benefit related to deferred income tax assets to the extent that it is probable that the deductible temporary differences will reverse in the foreseeable future. Assessing the recoverability of deferred income tax assets requires the Group to make significant estimates related to expectations of future taxable income. Estimates of future taxable income are based on forecast cash flows from operations and the application of existing tax laws in each jurisdiction. To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Group to realise the net deferred tax assets recorded at the end of the reporting period could be impacted.

Life of mine

Life of mine is defined as the remaining years of production, based on proposed production rates and ore reserves and will be assessed as soon as additional exploration drilling has been performed and further reserves proven based on additional test results.

1.20. New standards

Standards, amendments and interpretations adopted in the current financial year

The Group has adopted all of the new and revised Standards and Interpretations that are relevant to its operations and effective for accounting years 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. It is not expected that adoption of the standards or interpretations which have been issued by the International Accounting Standards Board but have not been adopted will have a material impact on the financial information.

2. Property, plant and equipment

	30 June 2017 Cost US$	30 June 2017 Depreciation US$	30 June 2017 Carrying value US$	31 Dec 2017 Cost US$	31 Dec 2017 Depreciation US$	31 Dec 2017 Carrying value US$
Buildings and Infrastructure						
Land	1,844,604	—	**1,844,604**	1,962,789	—	**1,962,789**
Buildings	1,093,691	(2,907)	**1,090,784**	13,623,424	(4,633)	**13,618,791**
Capitalised road costs	9,888,994	(659,266)	**9,229,728**	10,522,601	(1,052,260)	**9,470,341**
Capitalised sub station	4,288,364	(190,551)	**4,097,813**	4,565,386	(354,939)	**4,210,447**
Machinery, Plant and Equipment						
Critical Spare Parts	—	—	**—**	1,419,078	—	**1,419,078**
Plant and Machinery	73,136	(73,136)	**—**	59,579,607	(77,822)	**59,501,785**
Furniture and fittings	173,178	(65,744)	**107,433**	185,301	(81,567)	**103,734**
Geological equipment	52,447	(39,485)	**12,962**	55,807	(47,518)	**8,289**
Office equipment	40,733	(4,204)	**36,529**	43,343	(5,850)	**37,493**
Other fixed assets	1,040	(858)	**182**	1,106	(1,023)	**83**
Motor vehicles	154,558	(86,598)	**67,961**	152,260	(96,157)	**56,103**
Computer equipment	40,174	(19,227)	**20,948**	43,951	(26,734)	**17,217**
Mineral exploration & development	—	—	**—**	21,900,572	—	**21,900,572**
Stripping activity costs	3,504,637	—	**3,504,637**	3,729,186	—	**3,729,186**
Game animals	252,788	—	**252,788**	330,759	—	**330,759**
Total	**21,408,344**	**(1,141,975)**	**20,266,368**	**118,115,170**	**(1,748,503)**	**116,366,667**

	30 June 2018 Cost US$	30 June 2018 Depreciation US$	30 June 2018 Carrying value US$
Buildings and Infrastructure			
Land	1,755,817	—	**1,755,817**
Buildings	12,186,855	(5,523)	**12,181,333**
Capitalised road costs	9,413,008	(1,255,068)	**8,157,941**
Capitalised sub station	4,083,973	(453,644)	**3,630,329**
Machinery, Plant and Equipment			
Critical Spare Parts	1,269,439	—	**1,269,439**
Plant and Machinery	53,297,026	(69,616)	**53,227,411**
Furniture and fittings	46,108	(41,427)	**4,681**
Geological equipment	49,922	(47,002)	**2,920**
Office equipment	36,543	(6,157)	**30,386**
Other fixed assets	990	(990)	**—**
Motor vehicles	136,205	(98,586)	**37,618**
Computer equipment	39,823	(28,786)	**11,037**
Mineral exploration & development	19,591,190	—	**19,591,190**
Stripping activity costs	3,335,949	—	**3,335,949**
Game animals	295,881	—	**295,881**
Total	**105,538,729**	**(2,006,798)**	**103,531,931**

Included within the carrying value of property, plant and equipment are finance charges and capitalised depreciation (stated at the balance sheet exchange rates) of:

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Finance charges	—	8,038,409	7,190,771
Depreciation	—	946,393	846,597

Reconciliation of property, plant and equipment – 30 June 2017

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Depreciation US$	Foreign exchange gain / loss US$	Closing balance US$
Buildings and Infrastructure							
Land	1,770,632	—	—	—	—	73,972	**1,844,604**
Buildings	1,035,190	13,655	—	—	(1,433)	43,372	**1,090,784**
Capitalised road costs	9,176,024	—	—	—	(326,308)	380,012	**9,229,728**
Capitalised sub station	4,060,938	10,137	—	—	(141,574)	168,312	**4,097,813**
Machinery, Plant and Equipment							
Furniture and fittings	111,749	2,017	—	—	(10,911)	4,578	**107,433**
Geological equipment	17,406	—	—	—	(5,120)	676	**12,962**
Office equipment	1,522	37,951	—	—	(3,360)	416	**36,529**
Other fixed assets	274	—	—	—	(103)	11	**182**
Motor vehicles	79,057	—	—	—	(14,253)	3,157	**67,961**
Computer equipment	22,777	3,875	—	—	(6,628)	924	**20,948**
Stripping activity costs	2,127,451	1,275,315	—	—	—	101,871	**3,504,637**
Game animals	—	250,238	—	—	—	2,550	**252,788**
Total	**18,403,020**	**1,593,188**	**—**	**—**	**(509,690)**	**779,850**	**20,266,368**

Reconciliation of property, plant and equipment – 31 December 2017

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Depreciation US$	Foreign exchange gain / loss US$	Closing balance US$
Buildings and Infrastructure							
Land	1,844,604	—	—	—	—	118,185	**1,962,789**
Buildings	1,090,784	—	—	11,450,207	(1,422)	1,079,222	**13,618,791**
Capitalised road costs	9,229,728	—	—	—	(323,736)	564,349	**9,470,341**
Capitalised sub station	4,097,813	6,303	—	—	(144,676)	251,007	**4,210,447**
Machinery, Plant and Equipment							
Critical Spare Parts	—	1,309,772	—	—	—	109,306	**1,419,078**
Plant and Machinery	—	—	—	54,918,585	—	4,583,200	**59,501,785**
Furniture and fittings	107,433	948	—	—	(10,716)	6,068	**103,734**
Geological equipment	12,962	—	—	—	(5,079)	407	**8,289**
Office equipment	36,529	—	—	—	(1,271)	2,234	**37,493**
Other fixed assets	182	—	—	—	(102)	3	**83**
Motor vehicles	67,961	—	(822)	—	(14,141)	3,106	**56,103**
Computer equipment	20,948	1,110	—	—	(5,792)	951	**17,217**
Mineral exploration & development	—	—	—	20,213,653	—	1,686,920	**21,900,572**
Stripping activity costs	3,504,637	—	—	—	—	224,549	**3,729,186**
Game animals	252,788	57,016	—	—	—	20,955	**330,759**
Total	**20,266,368**	**1,375,149**	**(822)**	**86,582,445**	**(506,934)**	**8,650,462**	**116,366,667**

Reconciliation of property, plant and equipment – 30 June 2018

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Depreciation US$	Foreign exchange gain / loss US$	Closing balance US$
Buildings and Infrastructure							
Land	1,962,789	—	—	—	—	(206,972)	**1,755,817**
Buildings	13,618,791	—	—	—	(1,538)	(1,435,920)	**12,181,333**
Capitalised road costs	9,470,341	—	—	—	(350,315)	(962,085)	**8,157,941**
Capitalised sub station	4,210,447	—	—	—	(151,989)	(428,129)	**3,630,329**
Machinery, Plant and Equipment							
Critical Spare Parts	1,419,078	—	—	—	—	(149,639)	**1,269,439**
Plant and Machinery	59,501,785	—	—	—	—	(6,274,374)	**53,227,411**
Furniture and fittings	103,734	—	(97,614)	—	(764)	(675)	**4,681**
Geological equipment	8,289	—	—	—	(5,019)	(350)	**2,920**
Office equipment	37,493	—	(1,232)	—	(2,288)	(3,587)	**30,386**
Other fixed assets	83	—	—	—	(83)	—	**—**
Motor vehicles	56,103	—	—	—	(14,033)	(4,452)	**37,618**
Computer equipment	17,217	2,017	(1,064)	—	(5,826)	(1,307)	**11,037**
Mineral exploration & development	21,900,572	—	—	—	—	(2,309,382)	**19,591,190**
Stripping activity costs	3,729,186	—	—	—	—	(393,237)	**3,335,949**
Game animals	330,759	—	—	—	—	(34,878)	**295,881**
Total	**116,366,667**	**2,017**	**(99,911)**	**—**	**(531,855)**	**(12,204,987)**	**103,531,931**

Transfers

During the year ended 31 December 2017 the Group completed development activity on its mining assets. Accordingly, the capitalised development costs were transferred to property, plant and equipment during the year.

During the year ended 31 December 2017 a decision was made by the Board of Directors to actively market the Group's head office property for disposal. Accordingly, the property has been allocated to ''assets held for disposal'' at its historical cost. See note 5 for further details.

Game animals

Fair value of hierarchy

Game animal assets are carried at fair value.

The different levels are defined as follow:

- Level 1: Quoted unadjusted prices in active markets for identical assets or liabilities that the Group can access as measurement date.
- Level 2: Inputs other than quoted prices included in level 1 that are observable for the asset or liability either directly or indirectly.
- Level 3: Unobservable inputs for the asset or liability.

Levels of fair value measurements – Level 3.

3. Exploration asset

	30 June 2017 Cost US$	30 June 2017 Amort-isation US$	30 June 2017 Carrying value US$	31 Dec 2017 Cost US$	31 Dec 2017 Amort-isation US$	31 Dec 2017 Carrying value US$
Exploration assets	3,136,306	—	**3,136,306**	3,337,255	**—**	**3,337,255**

	30 June 2017 Cost US$	30 June 2017 Amort-isation US$	30 June 2017 Carrying value US$
Exploration assets	2,985,346	**—**	**2,985,346**

Mineral resources acquired are not subject to amortisation until they are included in the life-of-the-mine plan and production has commenced.

All assets, liabilities, income and expense and operating and investing cash flows arise from the exploration for and evaluation of mineral resource.

Reconciliation of exploration assets

	Opening balance US$	Additions US$	Disposals US$	Transfers US$	Amort-isation US$	Foreign exchange gain / loss US$	Closing balance US$
30 June 2017							
Exploration assets	3,010,538	—	—	—	—	125,768	**3,136,306**
31 December 2017							
Exploration assets	3,136,306	—	—	—	—	200,949	**3,337,255**
30 June 2018							
Exploration assets	3,337,255	—	—	—	—	(351,909)	**2,985,346**

4. Mine under construction

	30 June 2017 Cost US$	30 June 2017 Amort-isation US$	30 June 2017 Carrying value US$	31 Dec 2017 Cost US$	31 Dec 2017 Amort-isation US$	31 Dec 2017 Carrying value US$
Capitalised development costs	83,314,665	—	**83,314,665**	—	—	**—**

	30 June 2017 Cost US$	30 June 2017 Amort-isation US$	30 June 2017 Carrying value US$
Capitalised development costs	—	**—**	**—**

Development costs are not subject to amortisation until they are included in the life-of-the-mine plan and production has commenced.

During the year ended 31 December 2017 the Group completed development activity on its mining assets. Accordingly, the capitalised development costs were transferred to property, plant and equipment during the year.

Included within the carrying value of capitalised development costs are finance charges and capitalised depreciation (stated at the balance sheet exchange rates) of:

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Finance charges	6,985,938	—	—
Depreciation	846,597	—	—

Reconciliation of mine under construction asset

	Opening balance US$	Additions US$	Provision US$	Transfers US$	Amort-isation US$	Foreign exchange gain / loss US$	Closing balance US$
30 June 2017 Capitalised development costs	69,240,001	11,069,305	—	—	—	3,005,359	**83,314,665**
31 December 2017 Capitalised development costs	83,314,665	2,302,341	3,101,546	(87,228,087)	—	(1,490,465)	**—**
30 June 2018 Capitalised development costs	—	—	—	—	—	—	**—**

5. Assets classified as held for sale

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Property held for sale	—	595,911	—
Foreign exchange gain	—	49,731	—
Total	**—**	**645,642**	**—**

During the year ended 31 December 2017 the Directors decided to dispose of the Group's former head office, which was no longer utilised. The property was carried at its acquisition cost and had not been depreciated. No impairment loss was recognised on reclassification of the property as held for sale nor as at 31 December 2017 as the Directors of the Group expected that the fair value (estimated based on the recent market prices of similar properties in similar locations) less costs to sell would be higher than the carrying amount.

The property was actively marketed for sale and was disposed of during the six months ended 30 June 2018 for consideration of US$660,000 (R8,200,000).

The property is presented as part of the South African reporting segment.

6. Loans receivables

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Loan Vaxoscan (Pty) Ltd	191,189	203,439	181,987
Loan Tiestabyte (Pty) Ltd	2,093,185	2,366,585	2,202,290
Loan Adistra CC	126,248	141,448	133,092
Other loans receivable	668,699	917,700	1,509,469
Total	**3,079,321**	**3,629,172**	**4,026,838**

Loan Vaxoscan (Pty) Ltd

The Vaxoscan (Pty) Ltd loan is unsecured and bears interest at the prime interest rate and is repayable on demand subject to a 12-month notice period.

Loan Tiestabyte (Pty) Ltd

The Tiestabyte (Pty) Ltd loan is unsecured and bears interest at 1 month JIBAR plus 5 per cent. and is repayable on demand subject to a 12-month notice period.

Other loans

The other loans are unsecured, bear interest at varying rates and are repayable on demand subject to a 12-month notice period. Amounts receivable from related parties are disclosed in note 27.

Fair value of loan receivables

The carrying value of the loans approximate their fair value.

7. Other financial assets

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
DMR guarantee	764,427	813,405	727,633
Eskom guarantee (1)	136,713	145,472	130,132
Eskom guarantee (2)	400,232	425,875	380,967
Eskom guarantee (3)	405,554	431,538	386,033
Heritage Western Cape Trust	76,442	81,340	72,763
Total	**1,783,368**	**1,897,630**	**1,697,529**

DMR guarantee

Guarantee in favour of the Department of Mineral Resources for R9,866,655 in respect of a ''financial guarantee for the rehabilitation of land disturbed by prospecting/mining''.

Eskom guarantee (1)

Guarantee issued to Eskom Holdings SOC Limited in the amount of R1,788,433 in respect of a ''contract works security guarantee''.

Eskom guarantee (2)

Guarantee issued to Eskom Holdings SOC Limited in the amount of R5,235,712 in respect of 'supply agreement (early termination) guarantee''.

Eskom guarantee (3)

Guarantee issued to Eskom Holdings SOC Limited in the amount of R5,305,333 in respect of an ''electricity accounts guarantee''.

Heritage Western Cape Trust

R1,000,000 settlement agreement trust fund held in trust by attorneys on behalf of the Heritage Western Cape Trust until Elandsfontein Exploration & Mining (Pty) Ltd lodges a heritage impact assessment. The heritage impact assessment was lodged during this year and the Group is waiting for the return of the guarantee.

Fair value of other financial assets

The carrying value of other financial assets approximate their fair value.

8. Deferred tax

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Deferred tax asset			
Assessed loss	28,575,284	33,704,745	33,644,682
Dismantling costs	162,330	1,113,638	1,023,375
Provisions	—	218,643	168,419
Capital loss	11,363	12,091	65,114
Foreign exchange adjustments on loans	113,033	—	—
Total	**28,862,010**	**35,049,117**	**34,901,590**
Deferred tax liability			
Property, plant and equipment	(3,056,439)	(2,382,769)	(26,190,508)
Mining asset	(23,939,512)	(27,841,133)	(835,597)
Foreign exchange adjustments on loans	(981,443)	(2,086,905)	(186,421)
Total	**(27,977,394)**	**(32,310,807)**	**(27,212,526)**
Total deferred tax asset	**884,616**	**2,755,559**	**7,689,064**
Total deferred tax liability	**—**	**(17,249)**	**—**

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Reconciliation of net deferred tax (liability) / asset			
At beginning of year	(134,663)	(134,663)	2,738,310
Increases in tax loss available for set off against future taxable income – gross of valuation allowance	5,312,357	8,957,085	3,772,963
Deductible temporary difference movement on tangible fixed assets	(741,545)	72,404	11,981
Deductible temporary difference movement on development costs	(2,954,858)	(5,543,992)	—
Deductible temporary difference movement on foreign exchange adjustment on loans	(612,636)	(1,769,552)	1,876,159
Taxable temporary difference on provision for dismantling costs	—	1,159,551	(851,509)
Capital loss	—	12,091	116,001
Foreign exchange gain / loss	15,961	(14,614)	25,159
Total	**884,616**	**2,738,310**	**7,689,064**

All movements in deferred tax balances reported during the periods presented above were recognised in profit or loss for the year.

9. Inventories

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Consumables	717,136	452,405	409,398
Spare parts	1,138,833	448,051	503,308
Total	**1,855,969**	**900,456**	**912,706**

10. Trade and other receivables

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Other receivables	13,898	153,982	143,865
Deposits	51,519	53,844	44,006
VAT	658,075	336,720	112,602
Total	**723,492**	**544,546**	**300,473**

Credit quality of trade and other receivables

The credit quality of trade and other receivables are considered recoverable due to management's assessment of debtors' ability to repay the outstanding amount.

Credit risk

The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable mentioned above.

Trade and other receivables past due but not impaired

None of the trade and other receivables were past due at the end of the reporting dates.

Trade and other receivables impaired

None of the trade and other receivables were considered impaired. Trade and other receivables have not been discounted as the impact of discounting is considered to be insignificant.

Fair value of trade and other receivables

The carrying value of trade and other receivables approximate their fair value.

11. Cash and cash equivalents

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Bank balances	446,306	317,564	38,544
Cash on hand	2,515	905	1,288
Total	**448,821**	**318,469**	**39,832**

Credit quality of cash at bank and short term deposits, excluding cash on hand

The Group only deposits cash and cash equivalents with reputable banks with good credit ratings.

Fair value of cash at bank

Due to the short-term nature of cash and cash equivalents the carrying amount is deemed to approximate the fair value.

12. Share Capital

Kropz SA (Pty) Ltd

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Authorised			
1,000 ordinary shares of R1 each, converted at the exchange rate as at the reporting date.	76	81	73
Issued			
300 ordinary shares of R1 each, converted at the exchange rate as at the share issued date (R1 = US$0.0933)	28	28	28

First Gear Exploration Limited

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Authorised			
10,000,000 ordinary shares of GHS1 each, converted at the exchange rate as at the reporting date	2,212,145	2,212,145	2,212,145
Issued			
10,000 ordinary shares of GHS1 each, converted at the exchange rate as at the share issued date (GHS1 = US$0.2326)	2,326	2,326	2,326

13. Reserves

Nature and purpose of reserves

Foreign Currency Translation Reserve

The foreign currency translation reserve comprises all foreign currency differences arising from the translation of the assets, liabilities and equity of the entities included in these aggregated financial statements from their functional currencies to the presentational currency.

14. Shareholder loan payable

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Kropz International SARL	62,036,650	64,129,332	65,351,967

This loan is unsecured, bears interest at 1 month US Libor plus 3 per cent., is repayable over 15 years from the first drawdown and is US Dollar denominated. This loan has been subordinated in favour of other creditors until such time as the Group's assets are in excess of its liabilities.

As part of the wider group reorganisation the shareholder loan was reduced subsequent to the balance sheet date through the issue of new shares in certain subsidiaries. The remaining loan balance was novated to Kropz plc at its book value in exchange for shares in Kropz plc.

Details of the group reorganisation are provided in note 31.

Fair value of shareholder loan

The carrying value of the loan approximates its fair value.

15. Other financial liabilities

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
BNP Paribas	24,503,287	29,280,528	29,907,227
African Rainbow Capital (Pty) Ltd	24,251,941	27,146,416	30,261,906
Tiestabyte (Pty) Ltd	3,485,434	3,901,970	3,607,489
Other loans	36,812	47,416	652,374
Total	**52,277,474**	**60,376,330**	**64,428,996**
Non-current financial liabilities	44,777,474	45,376,330	49,428,996
Current financial liabilities	7,500,000	15,000,000	15,000,000
Total	**52,277,474**	**60,376,330**	**64,428,996**

BNP Paribas

A US$30,000,000 facility has been secured from BNP Paribas. Interest is charged at three months LIBOR plus 4.5 per cent. and is repayable quarterly over 2 years. The first repayment was due on 31 March 2018.

Subsequent to the balance sheet date, the terms of the BNP Paribas loan were amended. Further details of the amendments are provided in note 31.

African Rainbow Capital (Pty) Ltd

The above loan bears interest at 1 month JIBAR plus 3 per cent. and is to be repaid in accordance with the Shareholders Agreement, subject to the Memorandum of Incorporation, subject to adequate cash resources available in the Group to make repayments.

Subsequent to the balance sheet date African Rainbow Capital (Pty) Ltd acquired Tiestabyte (Pty) Ltd's equity and loan interests in the Group. As part of the wider group reorganisation the African Rainbow Capital (Pty) Ltd loan was reduced through the issue of new shares in certain subsidiaries.

Details of the group reorganisation are provided in note 31.

Tiestabyte (Pty) Ltd

The above loan bears interest at 1 month JIBAR plus 3 per cent. and is to be repaid in accordance with the Shareholders Agreement, subject to the Memorandum of Incorporation, subject to adequate cash resources available in the Group to make repayments.

Subsequent to the balance sheet date African Rainbow Capital (Pty) Ltd acquired Tiestabyte (Pty) Ltd's equity and loan interests in the Group.

Other loans

Other loans are unsecured, bears interest at varying rates and has no fixed terms of repayment.

Fair value of other financial liabilities

The carrying value of the loans approximate their fair value.

16. Provisions

Reconciliation of provisions – 30 June 2017

	Opening balance US$	Additions US$	Foreign exchange differences US$	Closing balance US$
Provision for dismantling costs	556,501	—	23,249	579,750
Provision for rehabilitation costs	—	—	—	—
Onerous contract	—	—	—	—
Total	**556,501**	**–**	**23,249**	**579,750**

Reconciliation of provisions – 31 December 2017

	Opening balance US$	Additions US$	Foreign exchange differences US$	Closing balance US$
Provision for dismantling costs	579,750	51,230	41,420	672,400
Provision for rehabilitation costs	—	3,050,317	254,563	3,304,880
Onerous contract	—	720,721	60,147	780,868
Total	**579,750**	**3,822,268**	**356,130**	**4,758,148**

Reconciliation of provisions – 30 June 2018

	Opening balance US$	Additions US$	Foreign exchange differences US$	Closing balance US$
Provision for dismantling costs	672,400	—	(70,904)	601,496
Provision for rehabilitation costs	3,304,880	—	(348,495)	2,956,385
Onerous contract	780,868	—	(82,341)	698,527
Total	**4,758,148**	**—**	**(501,739)**	**4,256,409**

Dismantling and rehabilitation provisions

All environmental rehabilitation and dismantling provisions at year-end have been reviewed by management and adjusted as appropriate for changes in legislation, technologic and other circumstances. The expected timing of any outflows of these provisions will be on the closure of the respective mines. Estimates are based on costs that are reviewed regularly and adjusted as appropriate for new circumstances.

Future cash flows are appropriately discounted. A discount rate of 8.59 per cent. (2016: 8.0 per cent.) was used. During 2017, the Group appointed Braaf Environmental Practitioners to conduct an Independent Specialist Update of the Dismantling and Rehabilitation Plan of the mine site.

Onerous contract

The Group has entered into a contract with Transnet SOC whereby it is obligated to provide 200,000 metric tonnes to be handled through the terminal at the Saldanha Bay Port during the period 2 September 2017 to 31 March 2018. The 200,000 metric tonnes will be handled by Transnet SOC at a price of R48 per tonne.

The plant has not commenced production as previously anticipated by management. As a result no tonnes have been delivered to the Saldanha Port. The first payment of the transport contract, valid until March 2022, was due on 1 March 2018 for US$780,869. At 30 June 2018 the Directors assessed this contract to be onerous and therefore recognised a provision for the contractual costs payable.

17. Trade and other payables

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Trade payables	5,809,878	11,247,499	10,243,786
Other payables	30,895	2,574	20,479
Deposits	4,352	4,630	—
VAT	78,053	79,065	—
Total	**5,923,178**	**11,333,768**	**10,264,265**

Fair value of trade and other payables

Trade and other payables are carried at amortised cost, with their fair value being approximated by the carrying value.

18. Commitments

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Guarantees	—	21,718	—

Guarantees

A guarantee was supplied by Nedbank Limited to the Department of Mineral Resources on behalf of Elandsfontein Exploration and Mining (Pty) Ltd. The guarantee is in respect of environmental rehabilitation and expires in July 2016. For details of other guarantees, refer to note 7. The Group is in the process of cancelling the guarantee with the DMR as exploration activities were concluded in 2015.

19. Key management personnel

	Year ended 31 December 2017 US$	Six months ended 30 June 2017 US$	Six months ended 30 June 2018 US$
Emoluments – In connection with the affairs of the Kropz SA (Pty) Limited Group	254,841	101,014	152,802

20. Other income

	Year ended 31 December 2017 US$	Six months ended 30 June 2017 US$	Six months ended 30 June 2018 US$
Foreign exchange gain	8,866,189	3,613,067	—
Settlement discount	3,509	3,537	—
Fair value gains on game animals	305,282	250,238	—
Loan written off	26	—	—
Insurance proceeds	120,339	—	—
Game hunting sales	21,020	2,200	19,576
Total	**9,316,365**	**3,869,043**	**19,576**

21. Operating loss

Operating loss for the periods is stated after accounting for the following:

	Year ended 31 December 2017 US$	Six months ended 30 June 2017 US$	Six months ended 30 June 2018 US$
Foreign exchange loss / (gain)	(8,866,189)	(3,613,067)	14,534,451
Fair value gain on game	(305,282)	(250,238)	—
Impairment on plant and machinery	487,632	—	—
Depreciation on property, plant and equipment	529,158	22,435	531,855
Loss on disposal of property, plant and equipment	—	—	78,588
Employee costs	588,282	130,190	442,688
Electricity and water – mine operations	1,249,212	492,292	439,246
Loan written off	(26)	—	—
Fuel	1,101,120	948,976	—
Mining costs	3,877,252	1,659,505	173,513
Plant operating costs and recoveries	2,443,944	1,212,001	268,427
Onerous contract (see note 16)	720,721	—	—
Gain on disposal of subsidiary	—	—	(31,243)

22. Finance charges

	Year ended 31 December 2017 US$	Six months ended 30 June 2017 US$	Six months ended 30 June 2018 US$
Bank	294,745	246,845	153,077
Shareholder loans	1,332,809	—	1,173,262
Other financial liabilities	2,210,114	—	2,250,055
Total	**3,837,668**	**246,845**	**3,576,394**

23. Taxation

Major components of the tax income

	Year ended 31 December 2017 US$	Six months ended 30 June 2017 US$	Six months ended 30 June 2018 US$
Deferred			
Originating and reversing temporary differences	2,665,166	1,014,566	5,849,803
Total	**2,665,166**	**1,014,566**	**5,849,803**

Reconciliation of tax income

	Year ended 31 December 2017	Six months ended 30 June 2017	Six months ended 30 June 2018
Applicable tax rate	28%	28%	28%
Tax income at applicable tax rate	2,158,959	520,534	6,002,721
Less:			
Disallowable charges	(48,426)	1,708	(140,842)
Deferred tax not recognised	554,633	492,324	(12,076)
Total	**2,665,166**	**1,014,566**	**5,849,803**

24. Earnings per share

The calculations of basic and diluted earnings per share have been based on the following loss attributable to ordinary shareholders and weighted average number of ordinary shares outstanding:

	Year ended 31 December 2017 US$	Six months ended 30 June 2017 US$	Six months ended 30 June 2018 US$
Loss attributable to ordinary shareholders	(5,045,403)	(844,485)	(15,588,485)
Weighted average number of ordinary shares in Kropz SA (Pty) Ltd	300	300	300
Basic and diluted earnings per share	**(16,818)**	**(2,815)**	**(51,962)**

There were no dilutive instruments in issue in any period presented.

25. Notes to the statement of cash flows

Reconciliation of net loss before taxation to cash flows used in operations:

	Six months ended 30 June 2017 US$	Year ended 31 December 2017 US$	Six months ended 30 June 2018 US$
Loss before taxation	**(1,859,069)**	**(7,710,570)**	**(21,438,288)**
Finance income	(371,809)	(603,701)	(196,125)
Finance costs	246,845	3,837,669	3,576,394
Operating loss	**(1,984,034)**	**(4,476,602)**	**(18,058,019)**
Depreciation	22,435	529,158	531,855
Loan written off	—	(26)	—
Loss on disposal of property, plant and equipment	—	—	78,588
Impairment	—	487,632	—
Fair value gains on game animals	(250,238)	(305,282)	—
Provision for onerous contracts	—	720,721	—
Foreign exchange (profit)/loss	(3,613,067)	(8,866,189)	14,534,451
Gain on disposal of subsidiary	—	—	(31,243)
Operating cash flow before changes in working capital	**(5,824,904)**	**(11,910,587)**	**(2,944,369)**
Increase in inventories	(1,837,248)	(831,097)	(119,689)
Decrease in receivables	2,765,528	2,951,539	208,695
(Decrease) / increase in payables	(6,911,368)	(2,213,318)	140,266
Total	**(11,807,992)**	**(12,003,463)**	**(2,715,096)**

26. Net debt reconciliation

Six months ended 30 June 2017

	Opening balance	Cashflows	Other non-cash movements	Foreign exchange gain / loss	Closing balance
Cash and cash equivalents	5,161,905	(4,879,011)	—	165,927	**448,821**
Shareholder loan payable	(57,304,934)	(3,594,400)	—	(1,137,316)	**(62,036,650**
Other financial liabilities – current	(1,768,945)	—	(5,731,055)	—	**(7,500,000)**
Other financial liabilities – non-current	(35,653,341)	(12,815,785)	5,731,055	(2,039,403)	**(44,777,474)**
Total	**(89,565,315)**	**(21,289,196)**	**—**	**(3,010,792)**	**(113,865,303)**

Year ended 31 December 2017

	Opening balance	Cashflows	Other non-cash movements	Foreign exchange gain / loss	Closing balance
Cash and cash equivalents	5,161,905	(4,982,825)	—	139,389	**318,469**
Shareholder loan payable	(57,304,934)	(3,996,430)	—	(2,827,968)	**(64,129,332)**
Other financial liabilities – current	(1,768,945)	—	(13,231,055)	—	**(15,000,000)**
Other financial liabilities – non-current	(35,653,341)	(16,289,455)	13,231,055	(6,664,589)	**(45,376,330)**
Total	**(89,565,315)**	**(25,268,710)**	**—**	**(9,353,168)**	**(124,187,193)**

Six months ended 30 June 2018

	Opening balance	Cashflows	Other non-cash movements	Foreign exchange gain / loss	Closing balance
Cash and cash equivalents	318,469	(273,702)	—	(4,936)	**39,832**
Shareholder loan payable	(64,129,332)	(291,132)	—	(931,503)	**(65,351,967)**
Other financial liabilities – current	(15,000,000)	—	—	—	**(15,000,000)**
Other financial liabilities – non-current	(45,376,330)	(2,762,881)	—	(1,289,785)	**(49,428,996)**
Total	**(124,187,193)**	**(3,327,715)**	**—**	**(2,226,224)**	**(129,741,131)**

27. Related parties

Kropz SA (Pty) Ltd and its subsidiaries

The ultimate parent company at 30 June 2018 is Kropz International SARL, incorporated in Luxembourg.

The following parties are related to Kropz SA (Pty) Ltd:

Name	Relationship
M Summers	Director
M Nunn	Director
Elandsfontein Land Holdings (Pty) Ltd	Subsidiary
Kropz Elandsfontein (Pty) Ltd	Subsidiary
West Coast Fertilizers (Pty) Ltd	Subsidiary
Xsando (Pty) Ltd	Subsidiary
SA Lithium (Pty) Ltd	Subsidiary until 5 March 2018
First Gear Exploration Limited	Common ownership
African Rainbow Capital Ltd	Minority shareholders in certain subsidiaries
Tiestabyte (Pty) Ltd	Minority shareholders in certain subsidiaries

The following transactions were carried out with related parties:

Related party balances

Loan accounts – Owed (to) / by related parties

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Kropz International SARL	(62,036,650)	(64,059,332)	(65,234,551)
African Rainbow Capital Ltd	(24,251,941)	(27,146,416)	(30,261,906)
Tiestabyte (Pty) Ltd	(3,485,434)	(3,901,970)	(3,607,489)
Tiestabyte (Pty) Ltd	2,093,185	2,366,585	2,202,290
P Le Roux	1,454	1,547	—
M Nunn	629,595	712,802	1,498,444

Related party transactions

Interest paid to/ (received from) related parties

	For the six months ended 30 June 2017	For the year ended 31 December 2017	For the six months ended 30 June 2018
Kropz International SARL	1,096,310	1,320,357	1,173,262
African Rainbow Capital Ltd	1,157,637	2,384,106	1,088,680
Tiestabyte (Pty) Ltd	169,733	346,309	130,601
Tiestabyte (Pty) Ltd	(119,988)	(247,599)	(95,190)
Management fees paid to related parties			
Kropz International SARL	239,615	479,060	116,443

First Gear Exploration Limited

The ultimate parent company at 30 June 2018 is Kropz plc, incorporated in England & Wales.

The following parties are related to First Gear Exploration Limited:

Name	Relationship
T Amoah	Director
P Le Roux	Director
Kropz SA (Pty) Ltd	Common ownership
Elandsfontein Land Holdings (Pty) Ltd	Common ownership
Kropz Elandsfontein (Pty) Ltd	Common ownership
West Coast Fertilizers (Pty) Ltd	Common ownership
Xsando (Pty) Ltd	Common ownership
SA Lithium (Pty) Ltd	Common ownership until 5 March 2018
Russell Brooks Limited	Minority shareholder
M Nunn	Other related party

The following transactions were carried out with related parties:

Related party balances

Loan accounts – Owed (to) / by related parties

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Kropz International SARL	—	(70,000)	—
Kropz plc	—	—	(117,416)
M Nunn	(16,524)	(47,416)	(7,561)

Related party transactions

Management fees paid to related parties

	For the six months ended 30 June 2017	For the year ended 31 December 2017	For the six months ended 30 June 2018
T Amoah	7,268	10,041	4,388

28. Categories of financial instruments

Financial assets by category

The accounting policies for financial instruments have been applied to the line items below:

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Financial assets at amortised cost			
Trade and other receivables	65,417	207,826	187,871
Loans receivable	3,079,321	3,629,172	4,026,838
Other financial assets	1,783,368	1,897,630	1,697,529
Cash and cash equivalents	448,821	318,469	39,832

Financial liabilities by category

The accounting policies for financial instruments have been applied to the line items below:

	30 June 2017 US$	31 December 2017 US$	30 June 2018 US$
Financial liabilities at amortised cost			
Shareholder loan payable	62,036,650	64,129,332	65,351,967
Trade and other payables	5,845,125	11,254,703	10,264,265
Other financial liabilities	52,277,474	60,376,330	64,428,996

29. Financial risk management objectives

Capital risk management:

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The capital structure of the Group consists of shareholder and external debt, which includes loans and borrowings (excluding derivative financial liabilities) disclosed in notes 14 and 15 and equity as disclosed in the statement of financial position

Shareholder and external third-party loans from foreign entities to South African companies are subject to the foreign exchange controls as imposed by the South African Reserve Bank ("**SARB**"). All inward loans into South Africa require approval by the SARB and all loans in the current capital structure have been approved by the SARB and all entities in the Group are compliant with the SARB approvals relevant to the entity concerned and the approvals granted by the SARB.

Liquidity risk:

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, Group treasury maintains flexibility in funding by maintaining availability under committed credit lines.

The Group's risk to liquidity is a result of obligations associated with financial liabilities of the Group and the availability of funds to meet those obligations. The Group manages liquidity risk through an ongoing review of future commitments and credit facilities.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

	Less than 1 year US$	Between 1 and 2 years US$	Between 2 and 5 years US$	Over 5 years US$
At 30 June 2017				
Shareholder loan payable	—	—	62,036,650	—
Trade and other payables	5,845,125	—	—	—
Other financial liabilities	7,500,000	44,777,474	—	—
Total	**13,345,125**	**44,777,474**	**62,036,650**	**—**
At 31 December 2017				
Shareholder loan payable	—	—	64,129,332	—
Trade and other payables	11,254,703	—	—	—
Other financial liabilities	15,000,000	45,376,330	—	—
Total	**26,254,703**	**45,376,330**	**64,129,332**	**—**
At 30 June 2018				
Shareholder loan payable	—	—	65,351,967	—
Trade and other payables	10,264,265	—	—	—
Other financial liabilities	15,000,000	49,428,996	—	—
Total	**25,264,265**	**49,428,996**	**65,351,967**	**—**

Credit risk:

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group's financial assets include trade and other receivables, loans receivable, other financial assets and cash and cash equivalents.

Ongoing credit evaluation is performed on the financial conditions of the counterparties to the trade and other receivables, loans receivable and other financial assets. The Group only deposits cash with major banks with high quality credit standing and limits exposure to any one counter-party.

No credit limits were exceeded during the reporting period, and management does not expect any losses from non-performance by these counterparties.

Interest rate risk:

As the Group has no significant interest-bearing assets, the Group's income and operating cash flows are substantially independent of changes in market interest rates.

At 30 June 2018, if interest rates on Rand-denominated borrowings for the Group had been 1% higher/lower with all other variables held constant, post-tax profit and equity for the year would have been $93,211 (Jun 2017: $100,044) lower/higher, mainly as a result of higher/lower interest expense on floating rate borrowings.

Foreign currency risk:

Most of the Group's transactions are carried out in Rand. Exposures to currency exchange rates arise from the Group's loans from Kropz International SARL and BNP Paribas, refer to note 14 and 15.

At 30 June 2018, if the Rand/US Dollar exchange rate had changed by 1% with all other variables held constant, post-tax profit and equity for the year would have been $1,046,481 (Jun 2017: $260,141) lower/higher mainly as a result of loss/profit on foreign exchange differences on the US Dollar denominated loan from Kropz International SARL.

30. Segment information

Operating segments

Up to the date of approval of the financial information for the year ended 30 June 2018, the Board of Directors considered that the Group had one operating segment, being that of phosphate mining. Accordingly, all revenues, operating results, assets and liabilities are allocated to this activity.

Geographical segments

Since the incorporation of First Gear Exploration Limited in February 2017, the Group has operated in two principal geographical areas – South Africa and Ghana.

The Group's revenue from continuing operations from external customers by location of operations and information about its non-current assets by location of assets are detailed below.

	30 June 2017 South Africa US$	30 June 2017 Ghana US$	30 June 2017 Group US$
Revenue	—	—	—
Total non-current assets	112,464,644	—	112,464,644

	31 December 2017 South Africa US$	31 December 2017 Ghana US$	31 December 2017 Group US$
Revenue	—	—	—
Total non-current assets	127,986,283	—	127,986,283

	30 June 2018 South Africa US$	30 June 2018 Ghana US$	30 June 2018 Group US$
Revenue	—	—	—
Total non-current assets	119,930,708	—	119,930,708

31. Material subsequent events

Group re-organisation

On 10 January 2018 Kropz plc was incorporated in England and Wales as a wholly owned subsidiary of Kropz International SARL.

Under a series of Share Purchase Agreements, a re-organisation of the Kropz Group has been completed, including:

- the acquisition by Kropz plc of a 50% plus 1 share interest in First Gear Exploration Limited from Kropz International SARL on 4 June 2018;
- a share-for-share exchange whereby Kropz International SARL sold 100% of its equity and loan interests in Kropz SA (Pty) Ltd to Kropz plc on 27 November 2018;
- the acquisition by African Rainbow Capital (Pty) Ltd of Tiestabyte (Pty) Ltd's 5% equity and loan interests in Kropz Elandsfontein (Pty) Ltd on 27 November 2018;
- the acquisition by Kropz plc of Kropz International SARL's 32% interest in Kropz Elandsfontein (Pty) Ltd on 27 November 2018;
- the acquisition by Kropz plc of Kropz International SARL's 23% interest in Elandsfontein Land Holdings (Pty) Ltd on 27 November 2018;

- the sale by African Rainbow Capital (Pty) Ltd of a further 4% of its interest in Kropz Elandsfontein (Pty) Ltd to Kropz plc in exchange for the issue of Kropz plc Shares on 27 November 2018.

Following completion of the re-organisation, Kropz plc owns, directly and indirectly, 100% of the issued share capital of Kropz SA (Pty) Ltd, 74% of the issued share capital of Kropz Elandsfontein (Pty) Ltd and 70% of the issued share capital of Elandsfontein Land Holdings (Pty) Ltd.

Loan restructuring

As part of the wider group reorganisation certain shareholder loans in Kropz SA (Pty) Ltd, Kropz Elandsfontein (Pty) Ltd and Elandsfontein Land Holdings (Pty) Ltd were consolidated and set-off against various other loans receivable and payable. The consolidation and set-off of various loans was completed in order to simplify the debt structure of the Group.

In addition, loans payable to Kropz International SARL and African Rainbow Capital (Pty) Ltd were reduced through the issue of new share capital in Kropz SA (Pty Ltd, Kropz Elandsfontein (Pty) Ltd and Elandsfontein Land Holdings (Pty) Ltd.

The remaining loans payable to Kropz International SARL were novated to Kropz plc on 27 November 2018 in exchange for new shares in Kropz plc. Following the debt restructuring, there are no loans payable to Kropz International SARL by the Kropz Group.

Renegotiation of BNP Paribas loan terms

The Group was unable to fund the instalment payments on the bank loan as they fell due and consequently, under the terms of the facility agreement, was in default from 1 April 2018. On 20 September 2018 the Group and BNP Paribas conditionally agreed a waiver of the breach and restructure of the facility under which the first capital repayment has been deferred to 2020. In addition, BNP Paribas provided all the necessary consents required to facilitate all the contemplated transactions leading up to the admission of Kropz plc to AIM. The waiver and restructured facility are contingent on the admission of Kropz plc's shares to trading on AIM by 30 November 2018.

Offer for the acquisition of Cominco Resources Limited

On 10 August 2018 Kropz plc entered into an exclusivity agreement with Cominco Resources Limited (''Cominco'') for proposed acquisition by Kropz plc of Cominco. Cominco is the licence holder for a phosphate asset in the Republic of Congo.

Under the terms of the agreement, Kropz plc must pay Cominco US$100,000 non-refundable working capital contributions for each month commencing 20 July 2018 until the first to occur of the agreement being terminated by Kropz plc or the completion of the share purchase.

Kropz plc has made an offer to acquire the share capital of Cominco at the date of Admission of Kropz plc's shares to trading on AIM.

SECTION B

INDEPENDENT REVIEW REPORT ON THE INTERIM FINANCIAL INFORMATION OF THE COMINCO GROUP

The Directors
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The Directors
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United Kingdom

27 November 2018

Dear Sirs

INDEPENDENT REVIEW REPORT TO KROPZ PLC, GRANT THORNTON UK LLP. H&P ADVISORY LIMITED AND MIRABAUD SECURITIES LIMITED

We have been engaged by the Directors of Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited to review the interim financial information of Cominco Resources Limited ("**Cominco**") and its subsidiaries, being those entities listed in note 1 to the interim financial information (the "**Cominco Group**"). The interim financial information comprises the consolidation statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flow for the six months ended 30 June 2017 and 30 June 2018, and the consolidated statement of financial position as at 31 December 2017 and 30 June 2018 (the "**interim financial information**").

This report is made solely to the Directors of Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited in accordance with International Standard on Review Engagements (UK and Ireland) 2400 issued by the Financial Reporting Council. Our work has been undertaken so that we might state to the Directors those matters we are required to state to them in an independent review report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited, for our review work, for this report, or for the conclusions we have formed.

Responsibilities

The interim financial information is the responsibility of, and has been approved by, the directors of Cominco. The directors of Cominco are responsible for preparing the interim financial information in accordance with the accounting policies set out in notes 2 and 3 of the interim financial information.

The annual financial statements of Cominco are prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("**IFRS**"). The interim financial information has been prepared in accordance with the accounting policies the Company intends to use in preparing its next annual financial statements.

Our responsibility is to express to the Directors of Kropz plc, Grant Thornton UK LLP, H&P Advisory Limited and Mirabaud Securities Limited a conclusion on the interim financial information based on our review.

Save for any responsibility arising under the AIM Rules to any person as and to the extent there provided, to the fullest extent permitted by law we do not assume any responsibility and will not accept any liability to any person other than the addressees of this letter for any loss suffered by any such person as a result of, arising out of, or in connection with this report or our statement, required by and given solely for the purposes of complying with the AIM Rules, consenting to its inclusion in Kropz plc's AIM admission document dated 27 November 2018 ("**Admission Document**").

Scope of review

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2400, 'Engagements to Review Historical Financial Statements' issued by the Financial Reporting Council for use in the United Kingdom. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK and Ireland) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the interim financial information is not prepared, in all material respects, in accordance with the accounting policies set out in notes 2 and 3 of the interim financial information.

Declaration

For the purposes of paragraph (a) of Schedule Two of the AIM Rules, we are responsible for this report as part of the Admission Document and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import. This declaration is included in the Admission Document in compliance with Schedule Two of the AIM Rules for Companies.

Yours faithfully

Mazars LLP

INTERIM FINANCIAL INFORMATION OF THE COMINCO GROUP
CONSOLIDATED STATEMENT OF FINANCIAL POSITION

at 30 June

	Notes	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
ASSETS				
Non-Current Assets				
Exploration and evaluation assets	*4*	41,231	43,614	42,565
Property, plant and equipment	*5*	29	18	14
		41,260	**43,632**	**42,579**
Current Assets				
Other receivables	*6*	145	150	108
Cash and cash equivalents	*7*	920	523	247
		1,065	**673**	**355**
TOTAL ASSETS		**42,325**	**44,305**	**42,934**
EQUITY & LIABILITIES				
Equity				
Share capital	*8*	50,750	50,750	50,750
Share-based payments reserve	*21*	—	—	—
Foreign currency translation reserve		(2,734)	(634)	(1,840)
Accumulated loss		(6,018)	(6,195)	(6,311)
		41,998	**43,921**	**42,599**
Non-Current liabilities				
Provisions	*9*	156	164	160
		156	**164**	**160**
Current liabilities				
Trade and other payables	*10*	171	220	175
Loans and borrowings	*11*	—	—	—
		171	**220**	**175**
TOTAL EQUITY AND LIABILITIES		**42,325**	**44,305**	**42,934**

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the six months ended 30 June

	Notes	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Continuing operations				
Administrative expenses		(277)	(115)	(114)
Operating loss	***15***	**(277)**	**(115)**	**(114)**
Finance expense	***16***	(54)	(39)	(2)
Loss before taxation		**(331)**	**(154)**	**(116)**
Taxation	***17***	**—**	—	—
Loss after taxation		**(331)**	**(154)**	**(116)**
Other comprehensive income / (loss)				
Items that are or may be reclassified subsequently to profit or loss				
Foreign currency translation reserve		5,299	3,199	(1,206)
Other comprehensive income / (loss) for the period		**5,299**	**3,199**	**(1,206)**
Total comprehensive income / (loss) for the period attributable to equity shareholders of the parent		**4,968**	**3,045**	**(1,322)**
Basic and diluted earnings per share (cents)	***18***	**(0.01)**	**(0.00)**	**(0.00)**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the six months ended 30 June

	Share capital US$'000	Accumulated loss US$'000	Foreign Currency Translation Reserve US$'000	Total US$'000
Balance at 31 December 2016	**48,946**	**(5,864)**	**(5,933)**	**37,149**
Share issue	1,804	—	—	1,804
Total comprehensive loss for the period	—	(154)	3,199	3,045
Balance at 30 June 2017	**50,750**	**(6,018)**	**(2,734)**	**41,998**
Share issue	—	—	—	—
Total comprehensive loss for the period	—	(177)	2,100	1,923
Balance at 31 December 2017	**50,750**	**(6,195)**	**(634)**	**43,921**
Share issue	—	—	—	—
Total comprehensive loss for the period	—	(116)	(1,206)	(1,322)
Balance at 30 June 2018	**50,750**	**(6,311)**	**(1,840)**	**42,599**

CONSOLIDATED STATEMENT OF CASH FLOWS

for the six months ended 30 June

	Notes	Six months ended 30 June 2017 US$'000	Year ended 31 December 2017 US$'000	Six months ended 30 June 2018 US$'000
Cash flows from operating activities	***19***	**(180)**	**(316)**	**(117)**
Tax paid		—	—	—
Net cash used in operating activities		**(180)**	**(316)**	**(117)**
Cash flows from investing activities				
Purchase of exploration and evaluation assets	***4***	(111)	(413)	(157)
Purchase of property, plant and equipment	***5***	(2)	(2)	—
Net cash used in investing activities		**(113)**	**(415)**	**(157)**
Cash flows from financing activities				
Share issue proceeds	***8***	1,804	1,804	—
Receipt of borrowings	***11***	131	137	—
Repayment of borrowings	***11***	(899)	(938)	—
Net cash from financing activities		**1,036**	**1,003**	**—**
Net cash movement for the period		**743**	**272**	**(274)**
Cash at the beginning of the period		100	100	523
Foreign exchange effects on cash		77	151	(2)
Total cash at the end of the period	***7***	**920**	**523**	**247**

NOTES TO THE CONSOLIDATED INTERIM FINANCIAL INFORMATION

for the six months ended 30 June

1. Reporting entity

Cominco Resources Limited ("**Cominco**") is a company incorporated and domiciled in the British Virgin Islands ("**BVI**") with Company Number BV No 1416753.

Cominco Resources Limited is the parent company of the Cominco Group, which includes the following subsidiaries in the consolidated interim financial information:

Name	Country of incorporation	Percentage controlled at 30 June 2018	Principal activity	Consolidation method
Cominco S.A	Republic of Congo	100%	Development	Full
Cominco Resources (UK) Ltd	England and Wales	100%	Service Company	Full

The Cominco Group operates solely in the Republic of Congo ("**ROC**") and Cominco S.A holds the licences for the Cominco Group's natural resource interests in ROC. The details of these including date of grant, renewal, duration and expenditure commitments are given in Note 4 to the financial information.

2. Basis of preparation

2.1. Statement of compliance

The consolidated interim financial information has been prepared in accordance with IAS 34 'Interim Financial Reporting'.

Standards, amendments and interpretations adopted in the current financial year

The Cominco Group has adopted all of the new and revised Standards and Interpretations that are relevant to its operations and effective for accounting years 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 Cominco Group.

The Cominco Group has not adopted any standards or interpretations in advance of the required implementation dates. It is not expected that adoption of the standards or interpretations which have been issued by the International Accounting Standards Board but have not been adopted will have a material impact on the financial information.

2.2. Going concern

The Cominco Group is at an early stage of development and as such does not have profitable operations. At 30 June 2018 the Cominco Group had a cash balance of US$247,000.

The Cominco Group completed a definitive feasibility study for the $605m 4.1Mtpa Hinda phosphate Project in June 2015 and in December 2015, Cominco SA was awarded the 25-year renewable mining exploitation permit by the ROC Government. The Environmental and Social Impact Assessment was completed in late 2015 and a Certificate of Environmental Compliance issued by the ROC Government on 14 July 2016. In January 2016 (updated in May 2018) the Cominco Group completed an internal pre-feasibility study for a "starter project" with a significantly lower capital cost of $34.5m to produce 900 ktpa of phosphate concentrate.

Extensive negotiations were held with the Congolese Government in September and October 2017 and the terms of a comprehensive Mining Investment Agreement ("**MIA**") agreed. The MIA was signed on 10 July 2018 by the Minister for Mines and Energy, Minister for Transport and Minister for Finance on behalf of the Government, and by Patrick Stevenaert for Cominco SA and by Roderick Smith for Cominco. The MIA grants extensive tax concessions and

guarantees that all permits, licences and approvals necessary for development, operation of the Hinda mine and export of product will be granted. The MIA is enforceable under international World Bank rules.

On 10 August 2018 the exclusivity agreement described in Note 24 was entered into with Kropz plc ("**Kropz**"). Under the terms, Kropz must pay Cominco US$100,000 non-refundable working capital contribution for each month commencing 20 July 2018 until the first to occur of the Agreement being terminated by Kropz or the Completion of the share sale. The first working capital payment of US$100,000 was received on 17 August 2018.

The Directors have prepared cash flow forecasts for the Cominco Group which indicate that the Cominco Group will require further funding within the next six months, once the working capital contributions from Kropz come to an end. Kropz have advised that they have taken steps to ensure that Kropz is admitted to trading on AIM and their working capital budget includes US$2.8 million to meet Cominco's proposed working capital and Project development requirement through to 31 December 2020.

The Directors have therefore concluded that it is appropriate to prepare the Cominco Group's consolidated financial statement on a going concern basis. However, if the Kropz transaction does not proceed, and in the absence of the additional funding being in place for working capital for the next twelve months these conditions indicate the existence of a material uncertainty which may cast significant doubt over the Cominco Group's ability to continue as a going concern and, therefore, that it may be unable to realise its assets and discharge its liabilities in the normal course of business. The financial information does not include the adjustments that would result if the Cominco Group was unable to continue as a going concern.

2.3. Use of estimates and judgement

The preparation of financial information in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the year in which the estimate is revised.

Information about such judgements and estimates is contained in the accounting policies and/or the notes to the consolidated interim financial information. Areas of judgement that have the most significant effect on the consolidated interim financial information:

- Going concern – Note 2.2
- Capitalisation and impairment of exploration and evaluation costs – Note 3.6, Note 4
- Provisions and contingent liabilities – Note 9, Note 12

2.4. Functional and presentational currency

The consolidated financial interim information is presented in US Dollars as the directors believe it to be the most appropriate and meaningful currency for investors.

The functional currencies of Cominco and its subsidiaries are:

- Cominco Resources Limited: Euros
- Cominco S.A: Central African Francs
- Cominco Resources (UK) Ltd: British Pounds Sterling

being the currency in which the majority of the companies' transactions are denominated.

In order to satisfy the requirements of IAS 21 with respect to presentation currency, the financial information has been translated from these functional currencies into US Dollars using the procedures outlined below:

- Assets and liabilities where the functional currency is other than US Dollars were translated into US Dollars at the relevant closing rates of exchange;

- Non-US Dollar trading results were translated into US Dollars at the relevant average rates of exchange;
- Differences arising from the retranslation of the opening net assets and the results for the period have been taken to the foreign currency translation reserve; and
- Share capital has been translated at the historical rates prevailing at the dates of transactions.

The exchange rates used were as follows:

Euro / US Dollar exchange rate:	Year ended 31 December 2016	Year ended 31 December 2017	Six months 30 June 2017	Six months 30 June 2018
Average rate	1.1069	1.1291	1.0820	1.2106
Closing rate	1.0536	1.1979	1.1409	1.1678

The Central African Franc is pegged to the Euro at an exchange rate of XAF 655.957 to €1.

3. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in the consolidated interim financial information and have been applied consistently by Cominco Group entities.

3.1. Basis of consolidation

Subsidiaries

Subsidiaries are entities controlled by Cominco. Control exists when Cominco has the power, directly or indirectly, to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that are currently exercisable or convertible are taken into account. The financial information of subsidiaries is included in the consolidated interim financial information from the date that control is obtained.

Transactions eliminated on consolidation

Intra-group balances and any unrealised gains, losses, income or expenses arising from intra-group transactions are eliminated in preparing the consolidated interim financial information.

3.2. Foreign currency

The assets and liabilities of operations, including fair value adjustments arising on consolidation, are translated to US Dollars at exchange rates ruling at the date of the consolidated statement of financial position. The revenues and expenses of operations and net investments in subsidiaries are translated to US Dollars at rates approximating to the exchange rates ruling at the dates of the transactions.

Foreign exchange differences arising on retranslation are recognised in other comprehensive income. They are reclassified to profit or loss upon disposal.

Further foreign exchange differences arise from the translation required for the presentation of the financial information in US Dollars. This is recognised in other comprehensive income.

3.3. Finance income and expenses

Finance income comprises interest income on funds invested and related foreign currency gains. Interest income is recognised as it accrues, using the effective interest method. Finance expenses comprise interest expense on borrowings and related foreign currency losses. All borrowing costs are recognised in profit or loss using the effective interest method.

3.4. Income tax expense

Income tax expense comprises current and deferred tax. Income tax expense is recognised in profit or loss except to the extent that it relates to items recognised in other comprehensive income, in which case it is also recognised in other comprehensive income. Current tax is the expected tax payable on the taxable income for the period, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous periods.

Deferred tax is recognised using the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amount used for taxation purposes. Deferred tax is not recognised for the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit, and differences relating to investments in subsidiaries that will not reverse in the foreseeable future. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

3.5. Share-based payment transactions

The Cominco Group issues equity-settled share-based payments to certain employees. Equity settled share-based payments are measured at fair value (excluding the effect of non-market based vesting conditions) at the date of grant. The fair value determined at the grant date for each tranche of the equity-settled share-based payments is expensed on a straight-line basis over the vesting year, based on the Cominco Group's estimate of shares that will eventually vest. At the end of each reporting year, the Cominco Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in statement of comprehensive income such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the share-based payments reserve.

Failure by an employee to meet a service condition (whether due to voluntary departure or involuntary redundancy) is accounted for as forfeiture. Previously recognised expenses in respect of forfeited share-based payments are reversed through the statement of comprehensive income.

The fair value of equity share-based payments is measured by using the Black-Scholes-Merton Model. The expected life used in the models has been adjusted, based on management's best estimate, for the effects of non-transferability, exercise restrictions, and behavioural considerations.

3.6. Exploration and evaluation assets

These comprise costs directly incurred in exploration and evaluation as well as the cost of mineral licences. They are capitalised pending the determination of the feasibility of the project. When the decision is taken to develop a mine the related assets are transferred to property, plant and equipment and the exploration and evaluation costs are amortised over the estimated life of the project. Where a project is abandoned or is determined not economically viable, the related costs are written off.

The recoverability of deferred exploration and evaluation costs is dependent upon a number of factors common to the natural resource sector. These include the extent to which a company can establish mineral reserves on its properties, the ability of the company to obtain necessary financing to complete the development of such reserves and future profitable production or proceeds from the disposition thereof.

Projects are tested for impairment in accordance with IFRS 6 whenever events or changes in circumstances indicate that the carrying amount of the asset may exceed its fair value less costs to sell or value in use. When a project is considered to be impaired, the associated exploration expenditure is written off to the consolidated statement of comprehensive income.

3.7. Property, plant and equipment

Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for its intended use, and the estimated costs of dismantling and removing the items and

restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Subsequent costs

The Cominco Group recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied with the item will flow to the Cominco Group and the cost of the item can be measured reliably. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Depreciation

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Land is not depreciated. The estimated useful lives for the current and comparative periods are as follows:

Item	Depreciation method	Average useful life
Property improvements	Straight line	5 years
Furniture & Fittings	Straight line	3 years
Plant & equipment	Straight line	3 years
Motor vehicles	Straight line	3 years

The residual value, if not insignificant, is reassessed annually.

Impairment

The carrying amounts of the Cominco Group's assets are reviewed at the date of each consolidated statement of financial position to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

3.8. Financial instruments

Classification and measurement

The Cominco Group classifies its financial assets and financial liabilities into the following categories:

- Financial assets measured at amortised cost
- Financial liabilities measured at amortised cost.

Classification of financial assets depends on the business model for managing the financial assets and the contractual terms of the cash flows. Management determines the classification of financial assets at initial recognition. Generally, the Cominco Group does not acquire financial assets for the purpose of selling in the short term. The Cominco Group's business model is primarily that of ''hold to collect'' (where assets are held in order to collect contractual cash flows).

Financial assets held at amortised cost

This classification applies to debt instruments which are held under a hold to collect business model and which have cash flows that meet the ''solely payments of principal and interest'' (SPPI) criteria.

At initial recognition, trade and other receivables that do not have a significant financing component are recognised at their transaction price. Other financial assets are initially recognised at fair value plus related transaction costs. They are subsequently measured at amortised cost using the effective interest method. Any gain or loss on de-recognition or modification of a financial asset held at amortised cost is recognised in the income statement.

Impairment of financial assets

A forward looking expected credit loss (ECL) review is required for debt instruments measured at amortised cost or held at fair value through other comprehensive income and other receivables that give rise to an unconditional right to consideration.

As permitted by IFRS 9, the Cominco Group applies the ''simplified approach'' to other receivables and the ''general approach'' to all other financial assets. The general approach incorporates a review for any significant increase in counterparty credit risk since inception. The ECL reviews include assumptions about the risk of default and expected loss rates.

Financial liabilities

Financial liabilities include current borrowings and trade and other payables that are short term in nature and are stated at amortised cost.

Cash and cash equivalents

Cash and cash equivalents represent bank balances and call deposits.

Share capital – Common shares

Incremental costs directly attributable to the issue of common shares and share options are recognised as a deduction from equity.

Impact of transition to IFRS 9 Financial Instruments as at 1 January 2018

The Cominco Group adopted IFRS 9 Financial Instruments on 1 January 2018, which resulted in changes in accounting policies. The standard replaced the provisions of IAS 39 that relate to recognition, classification and measurement of financial assets and financial liabilities, de-recognition of financial instruments, impairment of financial assets and hedge accounting. The new accounting policies relating to financial instruments are set out above.

For transition, the Cominco Group has elected to apply the limited exemption in IFRS 9 relating to the classification, measurement and impairment requirements for financial assets and accordingly has not restated comparative periods.

The transition to IFRS 9 has not resulted in an impact on the Cominco Group's opening retained earnings as at 1 January 2018.

Financial assets have been classified as financial assets measured at amortised cost in accordance with IFRS 9. Previously the Cominco Group's financial assets were classified as ''loans and other receivables''.

4. Exploration and evaluation assets

Exploration and evaluation assets relate entirely to deferred exploration costs incurred on the continued exploration and development of the principal asset of the Cominco Group, a 100% interest in the Hinda Phosphate Project (''**Hinda**'' or the ''**Project**''), located in the ROC.

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
At cost			
Balance at beginning of the period	37,961	37,961	43,614
Additions	111	413	157
Capitalised depreciation	4	15	4
Capitalised finance costs	—	—	—
Foreign exchange gain / (loss)	3,155	5,225	(1,210)
At end of the period	**41,231**	**43,614**	**42,565**

Included within the carrying value of exploration and evaluation assets are finance charges and capitalised depreciation (stated at the balance sheet exchange rates) of:

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Depreciation	1,946	2,054	2,001
Finance charges	3,014	3,165	3,077

On 15 December 2015 Hinda Permis d'exploitation (Exploitation or Mining Licence) 2015-975 was granted for an initial term of 25 years, renewable upon expiry in 2040 in accordance with the Mining Code 2005. Article 61 of the Code provides that an Exploitation Licence shall be renewed at the request of the bearer, under the same conditions as it was granted, for periods not to exceed 15 years each, if the mineable reserves require a mining period that is longer than the term initially anticipated.

The Exploitation Licence covers an area of 263.6km^2, of which 216.2km^2 fell within the Hinda Exploration Licence and 47.4km^2 within the Kola-Tchikanou Exploration Licence. The Exploitation Licence covers all of the Mineral Resources identified, the known extensions and Infrastructure requirements for the proposed project, such as tailings storage, overburden dumps and plant sites. The Kola-Tchikanou and Hinda exploration licences were therefore allowed to lapse.

The details of the current Exploitation Licence and four former Exploration Licences , dates of grant and duration are as follows:

Tenement Number	Tenement Name	Tenement Type	Resource Type	Date Granted / (Expired)	Term (years)	Area km^2	Expenditure commitment (Euros)
2015-975	Permis-Hinda	Exploitation Permit	Phosphate	07/12/2015	25+15	263.6	N/A
2016-139	Permis Hinda	Exploration Permit	Phosphate	25/04/2016 / (25/04/2018)	—	918	N/A
2016-138	Permis Hinda	Exploration Permit	Uranium	25/04/2016 / (25/04/2018)	—	918	N/A
2015-111	Kola-Tchikanou	Exploration Permit	Phosphate	13/01/2015 / (13/01/2017)	—	694	171,000 over 2 years
2015-110	Kola-Tchikanou	Exploration Permit	Uranium	13/01/2015 / (13/01/2017)	—	694	171,000 over 2 years

The exploration licences have now been allowed to lapse. Further information is given in Note 24.

The Cominco Group will need to raise funds to take the Hinda Project through to development. If insufficient funds are raised, some assets may require impairment in the financial information.

5. Property, plant and equipment

	Office Equipment, Fixtures & Fittings & Property improvements US$'000	Motor Vehicles US$'000	Project & Drilling Assets US$'000	IT equipment US$'000	Total US$'000
Cost					
As at 1 January 2017	**484**	**484**	**650**	**31**	**1,649**
Additions	—	—	2	—	**2**
Disposals	(38)	—	—	—	**(38)**
Foreign exchange gains	38	40	54	3	**135**
As at 30 June 2017	**484**	**524**	**706**	**34**	**1,748**
Additions	—	—	—	—	**—**
Disposals	(2)	—	—	—	**(2)**
Foreign exchange gains	22	26	35	2	**85**
As at 31 December 2017	**504**	**550**	**741**	**36**	**1,831**
Additions	—	—	—	—	**—**
Disposals	—	(53)	—	—	**(53)**
Foreign exchange losses	(14)	(13)	(20)	(1)	**(48)**
As at 30 June 2018	**490**	**484**	**721**	**35**	**1,730**
Depreciation					
As at 1 January 2017	(483)	(473)	(631)	(31)	**(1,618)**
Charge for the period	(1)	(2)	(3)	—	**(6)**
Disposals	38	—	—	—	**38**
Foreign exchange losses	(38)	(39)	(53)	(3)	**(133)**
As at 30 June 2017	**(484)**	**(514)**	**(687)**	**(34)**	**(1,719)**
Charge for the period	—	(9)	(3)	—	**(12)**
Disposals	2	—	—	—	**2**
Foreign exchange losses	(22)	(27)	(33)	(2)	**(84)**
As at 31 December 2017	**(504)**	**(550)**	**(723)**	**(36)**	**(1,813)**
Charge for the period	—	—	(4)	—	**(4)**
Disposals	—	53	—	—	**53**
Foreign exchange gains	14	13	20	1	**48**
As at 30 June 2018	**(490)**	**(484)**	**(707)**	**(35)**	**(1,716)**
Net Book Value					
At 30 June 2017	**—**	**10**	**19**	**—**	**29**
At 31 December 2017	**—**	**—**	**18**	**—**	**18**
At 30 June 2018	**—**	**—**	**14**	**—**	**14**

6. Other receivables

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Current			
Prepayments and accrued income	2	2	21
Other receivables	143	148	87
Total	**145**	**150**	**108**

7. Cash and cash equivalents

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Cash at bank and in hand	885	468	193
Restricted cash subject to charges and guarantees	35	55	54
Total	**920**	**523**	**247**

8. Share capital and reserves

Authorised:	30 June 2017 Number	31 December 2017 Number	30 June 2018 Number
50,000,000 ordinary shares of no par value	50,000,000	50,000,000	50,000,000
Issued and outstanding:	**Number**	**Number**	**Number**
Opening balance	40,155,339	40,155,339	46,965,144
Issued in the period	6,809,805	6,809,805	—
Closing balance	**46,965,144**	**46,965,144**	**46,965,144**
	US$'000	**US$'000**	**US$'000**
Opening balance	48,946	48,946	50,750
Issued in the period	1,804	1,804	—
Closing balance	**50,750**	**50,750**	**50,750**

Shares issued:

On 10 April 2017 Cominco made a non-renounceable entitlement offer to all existing shareholders of one new share for every six shares held at an issue price of €0.25 each. A shortfall facility was provided where any shareholder could apply for additional shares should there be a shortfall. The issue was fully subscribed raising US$1,804,000 for the issue of 6,809,805 shares, and all applications for shares and for shortfall shares were met.

Reserves:

The following is a description of each of the reserve accounts that comprise equity shareholders' funds:

Share capital

The share capital comprises the issued ordinary shares of Cominco at no par value.

Accumulated loss

Accumulated loss comprises the Cominco Group's cumulative accounting profits and losses since inception.

9. Provisions

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Opening balance	144	144	164
Additional provisions	—	—	—
Unused amounts reversed	—	—	—
Foreign exchange differences	12	20	(4)
Total	**156**	**164**	**160**

A provision relating to a 2010 to 2012 tax audit in the ROC has been recognised. The Cominco Group has been awaiting a formal summary from the Congolese tax authorities. However the Cominco Group has not received any further correspondence from the tax authorities regarding these matters since March 2015.

The provision has not been discounted.

10. Trade and other payables

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Trade and other payables	19	35	3
Other taxes and social security	6	3	2
Accruals and deferred income	146	182	170
Total	**171**	**220**	**175**

11. Loans and borrowings

Other borrowings

In April 2016, each of the three directors provided a loan of US$221,300 (€200,000) (for a total of US$664,000) to Cominco to meet short term funding requirements. The loans were unsecured, repayable within 1 year, bearing an interest rate of 18% per year calculated daily. An interest expense of US$82,000 had been accrued at 31 December 2016.

Between February and April 2017 Mr Smith provided an additional unsecured loan of US$137,000 (€121,059) to Cominco.

Upon closing the entitlement offer in April 2017 the total loans from Directors of US$815,000 plus accumulated interest of US$124,000 were repaid from the proceeds of the share entitlement issue.

12. Contingencies and contractual commitments

Capital Commitments

At 30 June 2018, there were no material contingencies or contractual commitments.

Other contractual commitments

In order to maintain the Cominco Group's exploration permits in good standing, the Cominco Group is committed to meet the conditions under which the permits were granted. The timing and the amount of expenditure commitments and obligations of the Cominco Group are subject to the work programmes required as per the permit commitments. This may vary significantly from the forecast programmes based upon the results of the work performed. Drilling results in any of the permit areas may also result in variation of the forecast programmes and resultant expenditure. Such activity may lead to accelerated or decreased expenditure.

Lease commitments

The Cominco Group is committed to make the following payments under non-cancellable operating lease arrangements:

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Land and buildings			
Within one year	58	62	6
Between two and five years	—	—	—
Total	**58**	**62**	**6**

A total operating lease cost of US$17,000 has been capitalised as part of the cost of exploration and evaluation assets in respect of operating leases in the ROC (Dec 2017: US$30,000).

Contingent liabilities – Contractor dispute

In 2015 Cominco entered into a dispute with the contractor responsible for the delivery of the DFS over a claim for additional costs, delay and expenses which amount to approximately US$687,000 (Dec 2017: US$707,000; Jun 2017: US$673,000).

Cominco counterclaimed against the contractor for delay and additional costs incurred by it. The claim and counter claim have not been pursued by the contractor or by Cominco and the Directors are of the opinion that no amount is payable by Cominco, and no amount is likely to be recovered from the contractor.

No provision or receivable has therefore been made in respect of the disputed amounts.

13. Segment reporting

IFRS 8 requires operating segments to be identified on the basis of internal reports about components of the Cominco Group that are regularly reviewed by the Chief Operating Decision Maker, the Board, in order to allocate resources to the segments and to assess their performance.

The Cominco Group operations relate to the exploration, evaluation and development of phosphate deposits in the ROC with support provided from the British Virgin Islands and the United Kingdom. As such the Cominco Group has only one reportable segment. All non-current assets are located in the ROC.

14. Staff numbers and costs

The average number of persons employed by the Cominco Group (excluding Directors) during the period and analysed by category was as follows:

	Year ended 31 December 2017 Number	Six months ended 30 June 2017 Number	Six months ended 30 June 2018 Number
Finance and administration	4	4	4
Technical	3	3	3
Total	**7**	**7**	**7**

The aggregate staff costs (excluding directors' remuneration) were as follows:

	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Finance and administration	229	27	15
Technical	—	—	—
Total	**229**	**27**	**15**

Remuneration of Directors and key management personnel

	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Executive Directors			
P Stevenaert	140	27	15
Total	**140**	**27**	**15**

15. Operating loss

The operating loss is stated after charging:

	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Depreciation on property, plant and equipment	3	2	—
Employee costs	369	27	15
Operating lease payments – property	84	57	49

16. Finance charges

	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Other borrowings interest	40	40	—
Bank charges	5	3	2
Foreign exchange (gain) / loss	9	(4)	—
Total	**54**	**39**	**2**

17. Taxation

Major components of the tax expense	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Current			
Income tax	—	—	—
Total	**—**	**—**	**—**

Reconciliation of tax expense	Year ended 31 December 2017	Six months ended 30 June 2017	Six months ended 30 June 2018
Applicable tax rate	0%	0%	0%
Tax expense at applicable tax rate	—	—	—
Foreign tax	—	—	—
Total	**—**	**—**	**—**

The Cominco Group provides for taxes based on the statutory tax accounts maintained and prepared in accordance with the respective countries' tax legislation.

The current tax expense calculations of the companies within the Cominco Group are based on taxable profits for the period and are computed in accordance with the legislation of the respective countries of incorporation.

There is an unrecognised deferred tax asset that relates to unrelieved tax losses. It is not currently possible to reliably estimate the potential deferred tax asset relating to these losses as there is uncertainty as to whether future taxable profits will be available against which the temporary difference can be utilised, particularly as the Mining Investment Agreement referred to in Note 24 provides exoneration of taxes in respect of the Cominco Group's Hinda phosphate project, although it is considered any such asset will not be material.

18. Earnings per share

The calculations of basic and diluted earnings per share have been based on the following loss attributable to ordinary shareholders and weighted average number of ordinary shares outstanding:

	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Loss attributable to ordinary shareholders	(331)	(154)	(116)
Weighted average number of ordinary shares in issue	45,098,585	41,679,197	46,938,364
Basic and diluted loss per share (cents)	**(0.01)**	**(0.00)**	**(0.00)**

19. Notes to the statement of cash flows

Reconciliation of net loss before taxation to cash flows used in operations:

	Six months ended 30 June 2017 US$'000	Year ended 31 December 2017 US$'000	Six months ended 30 June 2018 US$'000
Loss before taxation	**(154)**	**(331)**	**(116)**
Finance expense	39	54	2
Operating loss	**(115)**	**(277)**	**(114)**
Depreciation	2	3	—
Bank charges	(3)	(5)	(2)
Realised foreign exchange gain / (loss)	4	(9)	—
Operating cash flow before changes in working capital	**(112)**	**(288)**	**(116)**
(Increase) / decrease in receivables	(31)	(30)	39
(Decrease) / increase in payables	(37)	2	(40)
Total	**(180)**	**(316)**	**(117)**

20. Net debt reconciliation

Six months ended 30 June 2017	Opening balance US$'000	Cashflows US$'000	Other non-cash movements US$'000	Foreign exchange gain / loss US$'000	Closing balance US$'000
Cash and cash equivalents	100	743	—	77	920
Loan Notes payable	(710)	801	(40)	(51)	—
Total	**(610)**	**1,544**	**(40)**	**26**	**920**

Year ended 31 December 2017	Opening balance US$'000	Cashflows US$'000	Other non-cash movements US$'000	Foreign exchange gain / loss US$'000	Closing balance US$'000
Cash and cash equivalents	100	272	—	151	523
Other borrowings	(710)	801	(40)	(51)	—
Total	**(610)**	**1,073**	**(40)**	**100**	**523**

Six months ended 30 June 2018	Opening balance US$'000	Cashflows US$'000	Other non-cash movements US$'000	Foreign exchange gain / loss US$'000	Closing balance US$'000
Cash and cash equivalents	523	(274)	—	(2)	247
Other borrowings	—	—	—	—	—
Total	**523**	**(274)**	**—**	**(2)**	**247**

21. Share options

On 26 March 2013 the Board approved the institution of an Enterprise Management Incentive ("**EMI**") based scheme (the "**Scheme**") for certain senior employees. EMI schemes are United Kingdom tax authority approved schemes and create a tax efficient mechanism to operate an Option Scheme for employees of the Cominco Group based in the United Kingdom.

Following the formal implementation of the Scheme Cominco is required, under the requirements of IFRS 2, to account for the fair value of committed options. Therefore, the fair value of the options has been debited as a cost to the Statement of Comprehensive Income and Expenditure with a corresponding credit to an equity reserve in the Consolidated Statement of Financial Position.

	30 June 2017		31 December 2017		30 June 2018	
	Weighted average exercise price €	Number	Weighted average exercise price €	Number	Weighted average exercise price €	Number
Outstanding at 1 January	2.00	150,000	2.00	150,000	—	—
Issued during the period	—	—	—	—	—	—
Forfeited during the period	—	—	—	—	—	—
Expired during the period	—	—	(2.00)	(150,000)	—	—
Outstanding at 31 December	**2.00**	**150,000**	**—**	**—**	**—**	**—**

All options in issue vest immediately on issue and therefore no charge was recognised in any period in respect of these options.

During 2016, 50,000 12 month options exercisable at €2.00 were granted to each of three former senior technical employees (150,000 options in total) as part of a services agreement to provide services to the Cominco Group. These options expired on 7 October 2017 and were cancelled during the year ended 31 December 2017.

There were no options outstanding at 30 June 2018.

No directors have been granted options.

22. Related party transactions

In the opinion of the Board, at 30 June 2018 there was no ultimate controlling party of Cominco. Cominco and its subsidiaries have a related party relationship with its Directors. At 30 June 2018 the Directors of Cominco and entities controlled by or in which they had an interest controlled approximately 69.0% per cent of the voting shares of Cominco.

During the year ended 31 December 2017 Cominco made a non-renounceable share entitlement issue. The Directors of Cominco and entities controlled by or in which they had an interest subscribed for their full entitlement.

In April 2016, each of the three directors provided a loan of €200,000 (for a total of €600,000) to Cominco to meet short term funding requirements. The loans were unsecured, repayable in 1 year, bearing an interest rate of 18% per year calculated daily. Between February and April 2017 Mr Smith provided an additional unsecured loan of €121,059 to Cominco. Upon closing the entitlement offer the total loans from Directors was €721,059 plus accumulated interest of €109,900 was set off against the subscription otherwise payable in respect of the share entitlement issue.

Entities associated with Mr Smith and Mr Ikin were parties to the Exclusivity Agreement described in Note 2.2 and Note 24.

The Cominco Group has also entered into the following transactions with key management personnel:

	Year ended 31 December 2017 US$'000	Six months ended 30 June 2017 US$'000	Six months ended 30 June 2018 US$'000
Remuneration and reimbursement of expenses			
P Stevenaert remuneration	140	81	91

No balances were outstanding to key management personnel at the balance sheet dates.

23. Financial instruments

Financial assets by category

The accounting policies for financial instruments have been applied to the line items below:

Financial assets at amortised cost	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Other receivables	143	147	87
Cash and cash equivalents	920	523	247

The carrying value of financial assets approximate their fair value.

Financial liabilities by category

The accounting policies for financial instruments have been applied to the line items below:

	30 June 2017 US$'000	31 December 2017 US$'000	30 June 2018 US$'000
Financial liabilities at amortised cost			
Trade and other payables	25	37	5

The carrying value of financial liabilities approximate their fair value.

There were no derivative instruments outstanding at 30 June 2018 (2017: nil).

The main financial risks arising from the Cominco Group's activities are liquidity, credit, interest rate and foreign currency risk.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk for the Cominco Group comprises two main types of risk: currency risk and interest risk. An assessment of the Cominco Group's exposure is given below.

Foreign currency risk

The Cominco Group's exploration expenditure is made in the ROC and head office expenses are predominantly made in the UK in Pounds Sterling. The Cominco Group is not currently exposed to movements in exchange risk between its functional currency, the Euro, and the Central African Franc. These rates are fixed and do not fluctuate.

At the year-end the majority of the Cominco Group's cash resources were held in Euros. The Cominco Group therefore also has downside exposure to any strengthening of Pound Sterling against the Euro as this would increase expenses in Euro terms and accelerate the depletion of the Cominco Group's cash resources.

Any weakening of Pound Sterling against the Euro would, however, result in a reduction in expenses in Euro terms and preserve the Cominco Group's cash resources. There is not considered to be any material exposure in respect of other monetary assets and liabilities of the Cominco Group as these are of a short-term nature.

Sensitivity analysis

The Cominco Group holds cash in Euros arising from fund raising. The main risk is through foreign exchange fluctuations and how these move in companies where the cash balances are held in a currency that is different to the functional currency. The level of cash and cash equivalents held in currencies different to the functional currency are kept at a minimum level to mitigate this risk.

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument or cash flows associated with the instrument will fluctuate due to changes in the market interest rates. Interest rate risk arises from interest-bearing financial assets and liabilities that are used by the Cominco Group.

Interest-bearing assets comprise cash and cash equivalents which are considered to be short-term liquid assets. The Cominco Group's policy is to retain its surplus funds on short-term deposits, usually between one week and three months' duration, at prevailing market rates. Given that the directors do not consider that interest income is significant in respect of the Cominco Group's operations no sensitivity analysis has been provided in respect of any potential fluctuations in interest rates.

Liquidity risk

The Cominco Group's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. As at 30 June 2018, the Cominco Group had unrestricted cash of US$193,000 (Dec 2017: US$468,000) to settle trade and other payables (excluding provisions) of US$175,000 (2016: US$220,000).

Most of these accounts payable have contractual maturities of less than 30 days and are subject to normal trade terms.

As the Cominco Group has finite cash resources and no material income, the liquidity risk is significant and is managed by controls over expenditure and cash resources. Full disclosure of the going concern status of the Cominco Group is provided in the basis of preparation.

Credit risk

Credit risk is the risk of loss associated with a counter-party's inability to fulfil its payment obligations. The Cominco Group's maximum exposure to credit risk is limited to the carrying value of its cash and cash equivalents and trade and other receivables.

The credit risk on cash is limited because the Cominco Group invests its cash in deposits with well-capitalised financial institutions with strong credit ratings.

Capital management

The Cominco Group's objective when managing capital is to safeguard the Cominco Group's ability to continue as a going concern and have access to adequate funding for its exploration and development projects, so that it can provide returns for shareholders and benefits for other stakeholders. The Cominco Group manages the capital structure and makes adjustments in the light of changes in economic conditions and risk characteristics of the underlying assets. In order to maintain or adjust the capital structure the Cominco Group may issue new shares, acquire debt, or sell assets. Management regularly review cash flow forecasts to determine whether the Cominco Group has sufficient cash reserves to meet future working capital requirements and to take advantage of business opportunities.

24. Material subsequent events

Mining Investment Agreement

Extensive negotiations were held with the Congolese Government in September and October 2017 and the terms of a comprehensive Mining Investment Agreement ("**MIA**") agreed. The MIA was signed on 10 July 2018 by the Minister for Mines and Energy, Minister for Transport and Minister for Finance on behalf of the Government, and by Patrick Stevenaert for Cominco SA and by Roderick Smith for Cominco.

The MIA grants extensive tax concessions and guarantees that all permits, licences and approvals necessary for development, operation of the Hinda mine and export of product will be granted. The MIA is enforceable under international World Bank rules.

Exclusivity Deed and working capital funding

On 10 August 2018 Cominco and key shareholders representing approximately 70% of Cominco's shares entered into an exclusivity deed with Kropz plc ("**Kropz**").

Under this agreement, the key shareholders, Cominco and Kropz agree to negotiate in good faith definitive documentation for the sale of their shares in Cominco for US$85.17 cents per share (amounting to a US$40 million enterprise value), satisfied by the issue of Kropz shares upon Kropz shares being admitted to trading on the AIM market of the London Stock Exchange.

During the term, Kropz must pay Cominco non-refundable working capital contributions as described in Note 2.2 and the key shareholders must not continue or participate in any negotiations with a third party to sell their shares, facilitate evaluation of Cominco, or enter into any agreement to deal in their shares with any third party.

Kropz has appointed joint brokers and advisors with the intention of admission to trading on AIM to raise sufficient funds to complete construction and commissioning of their Elandsfontein phosphate mine in South Africa.

Expiry of Exploration Licenses

The Cominco Group's Hinda Phosphate Exploitation License described in Note 4 covers an area of 263.6km^2, of which 216.2km^2 fell within the Hinda Exploration License and 47.4km^2 within the Kola-Tchikanou Exploration License. The Exploitation License covers all of the Mineral Resources identified, the known extensions and Infrastructure requirements for the proposed project, such as tailings storage, overburden dumps and plant sites.

The Kola-Tchikanou exploration licenses were therefore allowed to lapse during 2017, and the Hinda exploration licenses were allowed to lapse in 2018.

PART IX

SECTION A

ACCOUNTANTS' REPORT ON THE UNAUDITED PRO FORMA STATEMENT OF NET ASSETS OF THE ENLARGED GROUP

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The Directors
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27 November 2018

Dear Sirs

ACCOUNTANTS' REPORT ON THE UNAUDITED PRO FORMA STATEMENT OF NET ASSETS OF THE ENLARGED GROUP

We report on the unaudited pro forma financial information set out in this Part IX of the Company's AIM admission document dated 27 November 2018 ("**Admission Document**") which has been prepared on the basis of the notes thereto, for illustrative purposes only, to provide information about how the Placing, debt restructuring and acquisition of Cominco Resources Limited and its subsidiaries (the "**Cominco Group**") might have affected the financial information presented on the basis of the accounting policies adopted by the Company, its subsidiaries and the Cominco Group (the "**Enlarged Group**") in preparing financial information as at and for the period ended 30 June 2018.

Responsibilities

It is the responsibility of the Directors of the Company to prepare the unaudited pro forma financial information. It is our responsibility to form an opinion on the financial information as to the proper compilation of the unaudited pro forma financial information and to report our opinion to you.

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

Basis of opinion

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

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

forma financial information has been properly compiled on the basis stated and that such basis is consistent with the accounting policies of the Enlarged Group.

Opinion

In our opinion:

a) the unaudited pro forma financial information has been properly complied on the basis stated; and

b) such basis is consistent with the accounting policies of the Enlarged Group.

Declaration

We are responsible for this report as part of the Admission Document and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import.

Yours faithfully

Mazars LLP

SECTION B

UNAUDITED PRO FORMA STATEMENT OF NET ASSETS OF THE ENLARGED GROUP

Set out below is an unaudited pro-forma statement of net assets of the Enlarged Group as at 30 June 2018, which has been prepared on the basis of the financial information on the Subsidiaries of Kropz plc, as adjusted for the acquisition of Cominco, the Placing and Subscription and debt restructuring, as set out in the notes below.

The unaudited pro forma has been prepared for illustrative purposes only and, because of its nature, will not represent the actual consolidated financial position of the Enlarged Group at the date of Admission.

	Aggregated subsidiaries of Kropz plc Note 1 US$'000	Cominco Group Note 2 US$'000	Net Placing and Subscription proceeds Note 3 US$'000	Interim funding received Note 4 US$'000	Debt restructuring Note 5 US$'000	Pro forma net assets US$'000
Non-Current Assets						
Property, plant and equipment	103,532	14	—	—	—	**103,546**
Exploration and evaluation assets	2,985	42,565	—	—	—	**45,550**
Loans receivable	4,027	—	—	—	(3,708)	**319**
Other financial assets	1,698	—	—	—	—	**1,698**
Deferred tax	7,689	—	—	—	—	**7,689**
	119,931	**42,579**	**—**	**—**	**(3,708)**	**158,802**
Current Assets						
Inventories	913	—	—	—	—	**913**
Trade and other receivables	300	108	—	—	—	**408**
Cash and cash equivalents	40	247	32,000	3,992	—	**36,279**
	1,253	**355**	**32,000**	**3,992**	**—**	**37,600**
TOTAL ASSETS	**121,184**	**42,934**	**32,000**	**3,992**	**(3,708)**	**196,402**
Non-Current Liabilities						
Shareholder loan payable	(65,352)	—	—	(3,186)	68,538	**—**
Other financial liabilities	(49,429)	—	—	(806)	6,037	**(44,198)**
Provisions	(4,256)	(160)	—	—	—	**(4,416)**
	(119,037)	**(160)**	**—**	**(3,992)**	**74,575**	**(48,614)**
Current Liabilities						
Trade and other payables	(10,264)	(175)	—	—	—	**(10,439)**
Other financial liabilities	(15,000)	—	—	—	15,000	**—**
	(25,264)	**(175)**	**—**	**—**	**15,000**	**(10,439)**
TOTAL LIABILITIES	**(144,302)**	**(335)**	**—**	**(3,992)**	**89,575**	**(59,054)**
NET (LIABILITIES) / ASSETS	**(23,118)**	**42,599**	**32,000**	**—**	**85,867**	**137,348**

Notes:

1. The unaudited net liabilities of the subsidiaries of Kropz plc as at 30 June 2018 have been extracted without adjustment, other than rounding to thousands of US Dollars, from the aggregated interim financial information of the subsidiaries of Kropz plc set out in Section A of Part VIII of this document.

   No account has been taken of the activities of the subsidiaries of Kropz plc subsequent to 30 June 2018.

2. The unaudited net assets of Cominco Resources Limited and its subsidiaries (the "**Cominco Group**") as at 30 June 2018 have has been extracted without adjustment from the interim financial information on the Cominco Group set out in Section B of Part VIII of this document.

   No account has been taken of the activities of the Cominco Group subsequent to 30 June 2018.

3. The gross proceeds of the Fundraising are expected to be approximately US$35 million (approximately £27.3 million). The total costs and expense relating to Admission are payable by the Company and are estimated to amount to approximately US$3.0 million (approximately £2.3 million) (including VAT). The proceeds have been converted into US Dollars at a rate of 1.28 US Dollars to the Pound.

4. Subsequent to 30 June 2018 additional funds have been invested by the pre-Admission shareholders of the Kropz Group. The funds have been injected by way of unsecured loans and convertible loan notes (US$2.5m) which convert automatically on Admission of the Company's shares to trading on AIM.

   The funds were provided by the following shareholders:

	US$'000
Kropz International SARL (in Kropz Elandsfontein (Pty) Ltd)	685
Kropz International SARL (in Kropz plc)	2,500
African Rainbow Capital (in Kropz Elandsfontein (Pty) Ltd)	806
Total interim funding	**3,992**

5. As part of a wider group reorganisation the Kropz Group's debts were restructured prior to Admission of the Company's shares to trading on AIM. The key transactions include:

   - ARC acquired the 5 per cent. equity interest held by Tiestabyte (Pty) Ltd in Kropz Elandsfontein (Pty) Ltd under an agreement dated 4 June 2018. All equity and loan interests of Tiestabyte (Pty) Ltd were acquired by ARC on satisfaction of the agreement's conditions on 27 November 2018. At that date, loans receivable, totalling US$2.2m at 30 June 2018, were offset against loans payable to ARC.
   - Loans receivable from Mike Nunn which totalled US$1.5m were novated to Kropz International SARL and offset against loans payable by the Kropz Group to that entity.
   - Shareholder loans payable by Kropz Elandsfontein (Pty) Ltd, Kropz SA (Pty) Ltd and Elandsfontein Land Holdings (Pty) Ltd to Kropz International SARL were partially capitalised to equity at the respective company level on 27 November 2018. The remaining shareholder loans payable to Kropz International SARL were novated to Kropz plc as set out in Part X of this document. Accordingly, the shareholder loans now exist between Elandsfontein (Pty) Ltd, Kropz SA (Pty) Ltd, Elandsfontein Land Holdings (Pty) Ltd and Kropz plc. The loans are eliminated on consolidation at Kropz plc level.
   - Loans payable by Kropz Elandsfontein (Pty) Ltd and Elandsfontein Land Holdings (Pty) Ltd to ARC were partially capitalised to equity at the respective company level on 27 November 2018. In addition, in order to equalise the loan funding provided by the various shareholders in accordance with the Shareholder Agreements, a portion of the loan payable to African Rainbow Capital (Pty) Ltd was novated to Kropz plc in exchange for ordinary shares in the Company.
   - On 20 September 2018 BNP Paribas agreed to an amendment of the facility agreement. Under the terms of the revised agreement the first capital repayment is payable in 2020. The current portion of the loan has therefore been reallocated to non-current liabilities. Details of the waiver are provided in paragraph 15.33 of Part X (Additional Information) of this document.

   Following the restructuring of the Kropz Group's debt, the other financial liabilities comprise:

	US$'000
BNP Paribas	29,907
ARC	13,901
Other	390
Total funding	**44,198**

PART X

ADDITIONAL INFORMATION

1. RESPONSIBILITY

The Directors, whose names are set out on page 20 of this document, and the Company, accept responsibility, both individually and collectively, for the information contained in this document. To the best of the knowledge and belief of the Directors and the Company (each of whom have taken all reasonable care to ensure that such is the case) the information contained in this document is in accordance with the facts and does not omit anything likely to affect the import of such information.

2. THE COMPANY

2.1 The Company was incorporated and registered in England and Wales on 10 January 2018 under the Companies Act as a public limited company with the name Kropz plc and registered number 11143400.

2.2 The liability of the Company's members is limited to the amount, if any, unpaid on the Ordinary Shares.

2.3 The Company is governed by, and its securities were created under, the Companies Act and the subordinated legislation made thereunder.

2.4 The Company's registered office and principal place of business is located at Suite 4F Easistore Building, Longfield Road, North Farm Estate, Tunbridge Wells, United Kingdom, TN2 3EY. The telephone number of the Company's registered office and principal place of business is +44 (0) 1802 516 232. The Company is domiciled in the UK.

2.5 Other than the Board, the Company has in place a Remuneration and Nomination Committee and an Audit and Sustainability Committee with effect from Admission.

2.6 The Company's principal activity following Admission will be to act as the holding company of the Group.

3. THE GROUP

On Admission, the Company will be the holding company of the following subsidiaries (held directly or indirectly):

Name	*Country of incorporation*	*Voting interest*	*Ownership interest*
Kropz SA (Pty) Limited	South Africa	100 per cent.	100 per cent.
Kropz Elandsfontein (Pty) Limited	South Africa	74 per cent.	74 per cent.
Elandsfontein Land Holdings (Pty) Limited	South Africa	70 per cent.	70 per cent.
West Coast Fertilizers (Pty) Limited	South Africa	70 per cent.	70 per cent.
Xsando (Pty) Ltd	South Africa	70 per cent.	70 per cent.
First Gear Exploration Limited	Ghana	50 per cent.+1 share	50 per cent.+1 share
Cominco Resources Limited	BVI	71.3 per cent.	71.3 per cent.
Cominco S.A.	Congo Brazzaville	71.3 per cent.	71.3 per cent.
Cominco Resources (UK) Limited	United Kingdom	71.3 per cent.	71.3 per cent.

4. SHARE CAPITAL

4.1 The Company does not have an authorised share capital and was incorporated with an issued share capital of £1 made up of one ordinary share of £1.

4.2 The changes to the issued share capital of the Company which occurred between the date of incorporation and the date of this document are as follows:

(a) on 20 March 2018, the Company issued and allotted 49,999 ordinary shares to Kropz International for cash at nominal value of £1 per ordinary share, resulting in an issued share capital of 50,000 ordinary shares of £1 each in the capital of the Company;

(b) on 4 June 2018, each ordinary share of £1 each in the capital of the Company was divided into 10 ordinary shares of 10 pence each in the capital of the Company, resulting in an issued share capital of 500,000 ordinary shares of 10 pence each in the capital of the Company;

(c) on 21 August 2018, the Company issued 163,221 Ordinary Shares to Kropz International pursuant to a share for share exchange whereby Kropz International received 163,221 Ordinary Shares in consideration for the transfer of: (i) its holding of 1,125,001 ordinary shares of no par value in First Gear Exploration (representing 50 per cent. plus 1 share of the issued share capital of First Gear Exploration); and (ii) the novation rights and obligations under the FGE Loan Agreements to the Company, resulting in an issued share capital of 663,221 ordinary shares of 10 pence each in the capital of the Company;

(d) on 26 November 2018, the Company sub-divided the existing 663,221 ordinary shares of 10 pence each into 663,221 Ordinary Shares and 663,221 deferred shares of £0.099 each in the capital of the Company ("**Deferred Shares**");

(e) on 27 November 2018, the company issued and allotted 1 ordinary share of 0.1 pence in the capital of the Company (the "**Buy-back Share**") to Kropz International in cash for 1 penny, resulting in an issued share capital of 663,222 Ordinary Shares and 663,221 Deferred Shares;

(f) on 27 November 2018, the Company issued 93,260,034 Ordinary Shares (the "**Reorganisation Shares**") to Kropz International pursuant to an asset and share purchase agreement dated 21 November 2018 between the Company (1) and Kropz International (2) whereby Kropz International received the Reorganisation Shares in consideration for the transfer of (i) the entire issued share capital of Kropz SA; (ii) 32 per cent. of the issued share capital of Kropz Elandsfontein; (iii) 23 per cent. of the issued share capital of ELH; (iv) the benefit of the outstanding Kropz SA loan account of US$1,242,454; (v) the benefit of the outstanding Kropz Elandsfontein loan account of US$30,743,792; and (vi) the benefit of the outstanding ELH loan account of US$1,692,072, resulting in an issued share capital of 93,923,256 Ordinary Shares and 663,221 Deferred Shares;

(g) on 27 November 2018, the Company bought back the Deferred Shares for an aggregate sum of 1 penny and these were then cancelled, resulting in an issued share capital of 93,923,256 Ordinary Shares; and

(h) on 27 November 2018, the Company issued 5,499,124 Ordinary Shares to the ARC Fund (the "**ARC Consideration Shares**") pursuant to a share purchase agreement whereby the ARC Fund received the ARC Consideration Shares in consideration for the transfer of 4 per cent. of the issued share capital of Kropz Elandsfontein, resulting in an issued share capital of 99,422,380 Ordinary Shares.

4.3 The Conversion and Capitalisation will result in the allotment and issue of 16,777,846 Ordinary Shares immediately prior to Admission. The Offer will result in the allotment and issue of 55,669,176 Ordinary Shares on Admission. The Placing and Subscription will result in the allotment and issue of 68,359,376 Ordinary Shares, diluting the holders of Existing Ordinary Shares by 46.1 per cent. (without taking account of the allotment and issue of the Offer Shares).

4.4 The issued, fully paid, share capital of the Company as at 27 November 2018 (being the latest practicable date before publication of this document) was as follows:

	Number	*Nominal Value*
Ordinary Shares	99,422,380	£99,422.38

4.5 Assuming completion of the Placing, Subscription, Conversion, Capitalisation and Acquisition (assuming 71.3 per cent. acceptances of the Offer), the issued, fully paid, share capital of the Company, immediately following Admission, is expected to be as follows:

	Number	*Nominal Value*
Ordinary Shares	240,228,778	£240,228.778

4.6 Save as disclosed in paragraph 10 of this Part X:

(a) no share or loan capital of the Company has been issued or is proposed to be issued;

(b) there are no Ordinary Shares in the Company not representing capital;

(c) there are no shares in the Company held by or on behalf of the Company itself;

(d) there are no outstanding convertible securities, exchangeable securities or securities with warrants issued by the Company;

(e) there are no acquisition rights and/or obligations over authorised but unissued share capital of the Company and the Company has made no undertaking to increase its share capital; and

(f) no share or loan capital of the Company is under option and the Company has not agreed conditionally or unconditionally to put any share or loan capital of the Company under option.

5. SECURITIES BEING ADMITTED

5.1 The Ordinary Shares are ordinary shares of 0.1 pence each in the capital of the Company, issued in British Pounds Sterling.

5.2 The International Security Identification Number (ISIN) of the Ordinary Shares is GB00BZ1HLP69 and the Stock Exchange Daily Official List (SEDOL) number will be BZ1HLP6 . The Company's LEI is 2138005Y467BCQ3QOT77.

5.3 The Ordinary Shares will be in registered form. They will be capable of being held in certificated form or in uncertificated form in CREST. The Company's registrars are Link Asset Services of The Registry, 34 Beckenham Road, Beckenham, Kent BR3 4TU.

5.4 The dividend and voting rights attaching to the Ordinary Shares are set out in paragraphs 8.2 and 8.13 of this Part X.

5.5 Section 561 of the Act gives Shareholders rights of pre-emption in respect of allotments of securities which are or are able to be paid up in cash (other than by way of allotments to employees pursuant to an employee share scheme as defined under section 1166 of the Act). Subject to limited exceptions and to the extent authorised pursuant to the Resolutions (defined at paragraph 5.9 of this Part X), unless Shareholders' approval is obtained in a general meeting of the Company, the Company must normally offer Ordinary Shares to be issued for cash to existing shareholders pro-rata to their shareholdings.

5.6 The Ordinary Shares will have no right to share in the profits of the Company other than through a dividend, distribution or return of capital (further details of which are set out in paragraph 8.13 of this Part X).

5.7 Each Ordinary Share will be entitled on a pari passu basis with all other issued Ordinary Shares to share in any surplus on a liquidation of the Company.

5.8 The Ordinary Shares will have no redemption or conversion rights.

5.9 On 26 November 2018, the following resolutions (the "**Resolutions**") of the sole shareholder of the Company were, *inter alia*, passed:

(a) the existing ordinary shares of 10 pence each were sub-divided into Ordinary Shares and Deferred Shares (which were subsequently bought back and cancelled as per paragraphs 4.1(d), (e) and (g) above);

(b) the Directors were authorised, conditional on Admission, for the purposes of section 551 of the Act to allot relevant securities of the Company, such authority being limited to:

(i) the allotment of the Buy-back Share;

(ii) the allotment of the Reorganisation Shares;

(iii) the allotment of the ARC Consideration Shares;

(iv) the allotment of the Placing Shares;

(v) the allotment of the Subscription Shares;

(vi) the allotment of the Conversion Shares;

(vii) the allotment of the Capitalisation Shares;

(viii) the allotment of the Offer Shares;

(ix) the allotment of the Warrants;

(x) the allotment of the Options; and

(xi) otherwise than pursuant to sub-paragraphs (i) and (x) above, up to 8,756,153.0 pence (approximately 33 per cent. of the Enlarged Share Capital (assuming 100 per cent. acceptances of the Offer)) immediately following Admission,

such authorisation expiring on the earlier of the date falling 15 months after the date of the passing of such resolution and the conclusion of the next annual general meeting of the Company (unless previously renewed, varied or revoked by the Company in a general meeting);

(c) the Directors were empowered to allot equity securities of the Company, such authority being limited to:

(i) the allotment of the Buy-back Share;

(ii) the allotment of the Reorganisation Shares;

(iii) the allotment of the Placing Shares;

(iv) the allotment of the Subscription Shares;

(v) the allotment of the Conversion Shares;

(vi) the allotment of the Capitalisation Shares;

(vii) the allotment of the Offer Shares;

(viii) the allotment of the Warrants;

(ix) the allotment of the Options; and

(x) otherwise than pursuant to paragraphs (i) and (ix) above, up to 2,626,845.9 pence (approximately 10 per cent. of the Enlarged Share Capital (assuming 100 per cent. acceptances of the Offer)) of the issued share capital of the Company immediately following Admission,

as if section 561(1) of the Act did not apply to those allotments, that authorisation expiring on the conclusion of the next annual general meeting of the Company (unless previously renewed, varied or revoked by the Company in general meeting); and

(d) to adopt the Articles, conditional on Admission.

6. MANDATORY BIDS, SQUEEZE OUT AND SELL OUT RULES RELATING TO THE ORDINARY SHARES

6.1 Mandatory Offers

Under the City Code, if an acquisition of shares were to increase the aggregate holding of the acquirer and its concert parties to shares carrying 30 per cent. of more of the voting rights in the Company, the acquirer and, depending on the circumstances, its concert parties, would be required (except with the consent of the Panel on Takeovers and Mergers) to make a cash offer for the outstanding shares in the Company at a price not less than the highest price paid for the shares by the acquirer or its concert parties during the previous 12 months. This requirement would also be triggered by any acquisition of shares by a person holding (together with its concert parties) shares carrying between 30 and 50 per cent. of the voting rights in the Company if the effect of such acquisition were to increase that person's percentage of the voting rights.

6.2 **Squeeze-out**

Under the Companies Act, a person who makes an offer to acquire shares in the Company (an "**offeror**") may require Shareholders to transfer their shares to the offeror, on the terms of that offer, provided that the offer is approved or accepted by the holders of 90 per cent. or more of the shares to which the offer relates within three months of the last day on which the offer can be accepted. In order to enforce this right, the offeror must give notice to any Shareholder not approving or accepting the offer within certain time limits, notifying them of the offeror's wish to acquire their shares in the Company (the "**Squeeze-out Notice**"). After the expiration of six weeks after the giving of the Squeeze-out Notice, the offeror can require that the Company registers the shares in their name provided that the consideration due to the holders of such shares is delivered to the Company to be held on trust for such Shareholders. The consideration offered to such Shareholders whose shares are acquired compulsory under the Companies Act must, in general, be the same as the consideration that was available under the offer.

6.3 **Sell-out**

The Companies Act also gives minority Shareholders in the Company a right to be bought out in certain circumstances by an offeror who had made a takeover offer. If a takeover offer related to all the shares and at any time before the end of the period within which the offer could be accepted the offeror held or had agreed to acquire not less than 90 per cent. of the shares, any holder of the shares to which the offer relates who has not accepted the offer can by a written communication to the offeror require it to acquire those shares. The offeror would be required to give any Shareholder notice of his right to be bought out within one month of that right arising. The offeror may impose a time limit on the rights of minority shareholders to be bought out, but that period cannot end less than three months after the end of the acceptance period. If a shareholder exercises its rights, the offeror is bound to acquire those shares on the terms of the offer or on such other terms as may be agreed.

6.4 Director Concert Party

Under the City Code Mike Nunn, Ian Harebottle and Mark Summers are presumed to be acting in concert for the purposes of the City Code ("**Director Concert Party**") and, on Admission, will together hold Ordinary Shares representing an aggregate of up to 22.3 per cent. of the Enlarged Share Capital (assuming minimum acceptances under the Offer).

Ian Harebottle, Mark Summers and Michelle Lawrence are participants in the ESOP and will at Admission be granted options over certain Ordinary Shares ("**ESOP Options**"). Further details relating to the ESOP are set out in paragraph 10.4 of this Part X of this document.

Director Concert Party's interests immediately following Admission

The interests of the Director Concert Party in the Ordinary Shares of the Company at Admission are as follows:

	Mike Nunn		*Ian Harebottle*		*Mark Summers*		*Michelle Lawrence*		*Combined interest*	
	Number	*%*	*Number*	*%*	*Number*	*%*	*Number*	*%*	*Number*	*%*
Ordinary Shares on Admission	51,587,817	21.5	1,674,456	0.7	334,889	0.1	—	—	55,597,162	22.3
ESOP Options granted at Admission	—	—	3,362,609	41.1	3,362,609	41.1	1,465,137	17.9	8,190,355	100.0
Total maximum potential interest in Ordinary Shares *	51,587,817	20.8	5,037,065	2.0	3,697,498	1.5	1,465,137	0.6	61,787,517	24.9

* assumes that the ESOP Options, which will not be fully vested at Admission, are exercised in full and that there are no further changes to the Company's issued share capital from Admission.

6.5 **Cominco Concert Party**

Under the City Code the accepting Cominco Shareholders (save for Macquarie Bank Limited) are deemed by the Panel to be acting in concert with each other ("**Cominco Concert Party**").

Cominco Concert Party's interests immediately following Admission

The interests of the Cominco Concert Party in the Company, immediately following Admission, will be as follows:

*Cominco Shareholder**	*No. of Ordinary Shares*	*Percentage of Enlarged Share Capital*
Ackerman Group Holdings Limited	18,073,368	7.52
R & H Trust Co (Guernsey) Limited as Trustees of The Resource Securities Trust	17,481,224	7.28
Moez Daya	4,240,234	1.77
Scarlatti Holdings Limited	1,268,442	0.53
Cocacabana 2016 (PTC) Limited	1,261,743	0.53
Fitel Nominees Limited	499,040	0.21
Pateen Services Inc.	388,141	0.16
Riveck Nominees Pty Limited	327,277	0.14
Boswell International Inc.	83,173	0.03
Cedar Assets Group Limited	77,629	0.03
Lampam Pty Ltd	58,221	0.02
Crestmont Invest Ltd	48,518	0.02
Smith & Williamson Nominees Limited	42,696	0.02
Viva Global Limited	39,923	0.02
Jean-Pierre Conrad	27,725	0.01
Nicolas Rouveyre	27,723	0.01
Carrington Street Investments Pty Ltd	17,656	0.01
Tal Paneth	14,061	0.01
George Kay	11,186	0.00
Keith Middleton	10,516	0.00
Middleton Nominees Pty Ltd	10,318	0.00
Major Super Fund Pty Ltd	4,913	0.00
Paul Thesinger Super Pty Ltd	4,310	0.00
David Peacock	3,326	0.00
NCS Holdings Pty Ltd	2,001	0.00
Chelmsford Nominees Pty Ltd	1,964	0.00
Christopher Curtain	1,964	0.00
Mark Gare	1,964	0.00
David King	1,964	0.00
Tom Porter	1,964	0.00
Kym Townley	1,964	0.00
Andrew Hogarth	983	0.00
Total	44,036,131	18.30

* Any further Cominco Shareholders who accept the Offer after the date of this document will also be included in the Cominco Concert Party.

6.6 **ARC Concert Party**

Under the City Code, Mike Nunn and the ARC Fund are presumed to be acting in concert for the purposes of the City Code ("**ARC Concert Party**") and, on Admission, will together hold Ordinary Shares representing an aggregate of up to 73.6 per cent. of the Enlarged Share Capital (assuming 71.3 per cent. acceptances of the Offer by Final Closing Date).

ARC Concert Party's interests immediately following Admission

The interests of the ARC Concert Party in the Ordinary Shares of the Company at Admission are as follows:

Shareholder	*No. of Ordinary Shares*	*Percentage of Enlarges Share Capital*
ARC Fund	125,103,064	52.1%
Mike Nunn*	51,587,817	21.5%

* Mike Nunn beneficial interest in Ordinary Shares held through Kropz International.

7. CONTROL

7.1 As at the date of this document, the ARC Fund's interest in the Company is 53.0 per cent.

7.2 Upon Admission, the ARC Fund will hold 125,103,064 Ordinary Shares representing in aggregate 52.1 per cent. of the Enlarged Share Capital (which could subsequently drop to below 50 per cent. if further Cominco Shareholders accept the Offer following First Closing Date but prior to the Final Closing Date) and will be able to exercise control over the Company (where control means owning 30 per cent. or more of the voting rights attaching to the share capital of the Company).

7.3 During the 12 months from Admission, it has been agreed between Kropz International and the ARC Fund that, due to the lock-ins provided by Kropz International which do not allow for the transfer of Ordinary Shares as outlined in paragraph 15 of Part I of this document during the lock-in period, if as a result of further acceptances of the Offer prior to the Final Closing Date, the ARC Fund's percentage of the Further Enlarged Share Capital falls below 50.5 per cent., Kropz International will not vote 20 million of its Ordinary Shares in Kropz so that the ARC Fund's Ordinary Shares represent more than 50 per cent. of voting shares of the Further Enlarged Share Capital.

7.4 The ARC Fund has entered into the ARC Relationship Agreement with the Company (1), Grant Thornton (2), H&P (3) and Mirabaud (4), pursuant to which the ARC Fund has respectively agreed to certain measures being put in place with effect from Admission, to enable the management of the Company to operate independently of them and those persons most closely associated with them for so long as they and such associates collectively own or control more than 20 per cent. of the issued share capital of the Company. Further details of the ARC Relationship Agreement are set out in paragraph 15.11 of this Part X.

7.5 As at Admission, to the best of the knowledge of the Company, save as disclosed in this paragraph, there are no persons who at the date of this document directly or indirectly control the Company, where control means owning 30 per cent. or more of the voting rights attaching to the share capital of the Company.

7.6 The Company is not aware of any arrangements which may at a subsequent date result in a change in control of the Company.

8. ARTICLES OF ASSOCIATION

Conditional on Admission, the Articles include provisions to the following effect:

8.1 **Objects of the Company**

Under the Companies Act, the objects of the Company are unrestricted. The Articles do not specify any restrictions on the objects of the Company.

8.2 **Voting Rights**

Subject to any rights or restrictions as to voting attached to any class of shares, at any general meeting, on a show of hands, every member who (being an individual) is present in person or by proxy or (being a corporation) is present by a duly authorised representative, not being himself a member entitled to vote, has one vote and, in the case of a poll, every member present in person or by proxy has one vote for every share of which he is the holder. No member is entitled to vote at a general meeting either personally or by proxy if

he or any person appearing to be interested in shares held by him has been duly served with a notice under section 793 of the Companies Act and is in default for the prescribed period in supplying to the Company the information required thereby or, unless the Directors determine otherwise, if any calls in respect of shares held by him have not been paid.

8.3 **Notices of General Meetings**

An annual general meeting of the Company shall be called on 21 clear days' notice, that is excluding the date of deemed receipt of such notice and the date of the meeting. Any general meeting of the Company shall be called on 14 clear days' notice, subject, in either case to the Companies Act. The Directors can call a general meeting at any time they think fit. The Company is required to send notice to members (except where the member is not entitled to such notice under the Articles or pursuant to any other restrictions imposed), the Company's Directors and Auditors. Notice will be sent to those registered in the register of members of the Company at such relevant time as is decided by the Directors in accordance with the Articles. The notice of annual general meeting or general meeting may include a time at which the member must be entered on such register in order to have the right to vote.

In the absence of a specific provision in the Articles, the quorum at meetings of the shareholders of the Company will be two persons, in accordance with section 318 of the Companies Act.

8.4 **Sanctions on Shareholders**

Any member representing 0.25 per cent. or more in nominal value of the issued shares of any class shall not be entitled to vote, receive payment of dividend or other distribution or transfer their shareholding (except in certain circumstances) if he, having been given a section 793 notice, has failed to give the information thereby required within 14 days of such notice. Such restrictions will cease to apply upon any arm's length sale or upon such information being provided.

8.5 **Variation of Rights**

The Articles do not include any special rules for changing the rights attaching to any of its shares. Therefore the rights attached to any class of shares may, in accordance with the Companies Act be altered or cancelled with the sanction of a special resolution passed at a separate general meeting of the holders of shares of that class.

Subject to the provisions of the Companies Act, the Company may by ordinary resolution increase its share capital, consolidate and divide all or any of its shares into shares of a larger amount, cancel any shares not taken or agreed to be taken by any person and sub-divide its shares into shares of a smaller amount and, as set out in the Companies Act, by special resolution (and, with court approval where required) reduce its authorised or issued share capital or any capital redemption reserve and any share premium account in any way subject to authority required by law.

Subject to applicable law, the Company may purchase its own shares.

8.6 **Lien and Forfeiture**

The Company has a first and paramount lien on every share which is not fully paid for all amounts payable to the Company whether called or payable at a fixed time in respect of that share. The Board may sell shares on which the Company has a lien if a sum in respect of which the lien exists is presently payable and is not paid within 14 days of notice requiring the holder to do so.

Subject to the Articles and the terms on which the shares are allotted, the Board may make such calls on shareholders in respect of any money unpaid on their shares. Each shareholder shall (subject to receipt of at least 14 days' notice) pay to the Company the amount called on his shares. If a call or any instalment of a call remains unpaid in whole or part the Board may give the member not less 14 days' notice requiring payment together with interest and expenses. The notice should also state that if the notice is not complied with the shares in respect of which the call was made will be liable to be forfeited.

8.7 **Directors**

Share Qualification

A director is not required to hold any qualification shares.

Board Powers

The Directors are responsible for the management of the Company's business and the Directors may exercise all the Company's powers and may do on its behalf anything that can be done by the Company. The Board may delegate any of its power to such persons or committees as it thinks fit. The members may, by special resolution, direct the Directors to take, or refrain from taking, specified action.

Directors' Conflicts of Interest

Director must declare to the other Directors any situation in which he has or could have a direct or indirect interest that conflicts or possibly might conflict with the interests of the Company. Save in relation to permitted causes, any Director so interested cannot count as part of a meeting of the Directors in relation to voting for quorum purposes.

The permitted causes referred to above are:

(i) the giving of any guarantee, security or indemnity to a director in respect of money lent by him or obligations incurred by him at the request or for the benefit of the Company or any of its subsidiary undertakings;

(ii) any security given by the Company to a third party in respect of a debt or obligation of the Company or any of its subsidiary undertakings which the Director has himself guaranteed or secured in whole or in part;

(iii) any contract or arrangement in which he is interested by virtue of his interest in shares or debentures or other securities of or by the Company or by reason of any other interest in or through the Company;

(iv) any contract or arrangement in which he is interested directly or indirectly as shareholder holding less than 1 per cent. of any class of the equity share capital of, or the voting rights in such company as an officer, shareholder, creditor or otherwise howsoever;

(v) any proposal concerning the adoption, modification or operation of an employee's share scheme, a pension fund or retirement, death or disability benefits scheme which relates both to the directors and employees of the Company or any of its Subsidiaries and does not provide in respect of any director any such privilege or advantage not accorded to the employees to which such scheme or fund relates;

(vi) any arrangement for the benefit of employees of the Company or of any of its Subsidiaries under which the Director benefits in a similar manner to the employees and which does not accord to any director as such any privilege or advantage not accorded to the employees to whom such arrangement relates; and

(vii) any proposal, contract, transaction or arrangement concerning (a) the purchase or maintenance of insurance for the benefit of directors or persons who include directors, or (b) indemnities in favour of directors, or (c) the funding of expenditure by one or more directors in defending proceedings against him or them or (d) doing anything to enable such director or directors to avoid incurring such expenditure.

The Directors shall have the power to authorise certain conflicts, provided that the relevant Director does not vote or count in the quorum in respect of any decision on such authorisation.

Subject to any applicable law, the Company may by ordinary resolution suspend or relax the provisions summarised under sub-paragraphs (a)(vi) and (a)(vii) above either generally or in relation to any particular matter, or ratify any transactions not duly authorised by reason of a contravention of such provision.

Borrowing powers

The Directors may exercise all of the powers of the Company to borrow money, and to mortgage or charge its undertaking, property and assets (present and future) and uncalled capital, or any part thereof and, subject to the provisions of applicable laws, to issue debentures, debenture stock and other securities.

Directors' Meetings

The quorum for meeting of the Board is two Directors.

8.8 **Directors Remuneration and expenses**

The Directors are entitled to such remuneration as the directors determine for their services to the company as directors, and for any other service which they undertake for the Company.

The Directors are entitled to be repaid all reasonable expenses properly incurred by them respectively in connection with their attendance at meetings of directors or committees of directors, general meetings or separate meetings of the holders of any class of shares or of debentures of the Company, or otherwise in connection with the exercise of their powers in relation to the Company.

8.9 **Retirement and Appointment of Directors**

The Company may from time to time by ordinary resolution appoint any person willing to act and who is permitted by law to do so, to be a director. The Directors may also from time to time appoint directors but any director so appointed shall retire by rotation at the next annual general meeting of the Company and stand for re-election.

The Company may remove any Director if he is requested to resign in writing by not less than three quarters of the other directors. A Director will also automatically cease to be a director if he becomes prohibited by law of holding such office and in certain other circumstances.

8.10 **Retirement by Rotation**

At every annual general meeting, any directors appointed by the Board since the last general meeting and any directors who were not appointed or re-appointed at one of the preceding two annual general meetings of the Company shall retire by rotation and stand for re-election.

8.11 **Directors' indemnity and insurance**

Subject to the Companies Act the Company may indemnify any Director and any director of any associated company may be indemnified against any liability by him, including in connection with negligence, default, breach of duty and against any liability incurred by him in defending civil or criminal proceedings in which judgment is given in his favour.

Any former director may be provided with funds to meet his expenditure incurred or to be incurred by him in defending any criminal or civil proceeding which relate or are alleged to relate to his actions or omission as a director.

In each case, officers shall not be indemnified in certain circumstances, including against liability owed to the Company or any associate of the Company, to pay a fine by way of penalty or where such indemnity would be prohibited or rendered void by the Companies Act or any other provision of law.

The Company may also purchase and maintain for any Director or any director of any associated company, insurance against any liability, which has or may be incurred by a relevant director in connection with his duties or powers in relation to the Company or any associated company.

8.12 **Transfers**

All transfers of shares held in certificated form may be effected by transfer in any usual form or in any other form acceptable to the Directors and shall be executed by or on behalf of the transferor and, if the share is partly paid, the transferee. The Directors may refuse to register the transfer of a certificated share if it is not fully paid, the transfer is not lodged at the Company's registered office or such other appointed place, it is not duly stamped, it is not accompanied by the certificate or similar documents, it is in respect of more than one class of share or if it is in favour of more than four transferees. All transfers of shares held in uncertificated form will be effected by means of the relevant system. A transfer of share held in uncertificated form must not be registered if the transfer is in favour of more than four transferees.

8.13 **Dividends**

There are no fixed dates on which a divided entitlement arises. The Company may by ordinary resolution from time to time declare dividends to be paid to Shareholders, although the amount of the dividend cannot exceed the amount recommended by the Directors. In addition, the Directors may pay interim dividends if justified by the profits of the Company available for distribution.

The dividend payment to each Shareholder shall be calculated proportionately to the amounts paid up on each issued Ordinary Share. All dividend payments shall be non-cumulative.

All unclaimed dividends may be used for the benefit of the Company until claimed and shall not attract interest. Any dividend which remains unclaimed twelve years after the date the dividend becomes due for payment shall, at the option of the Directors, be forfeited and shall revert to the Company.

There are no dividend restrictions attaching to the Ordinary Shares, provided they are fully paid up. Payments of dividends may be made by any method the Directors consider appropriate and on a cash dividend there are no special arrangements for non-resident Shareholders. The Directors may make such arrangements as they consider expedient in connection with a dividend payment in shares to deal with any legal or other difficulties that may arise in any territory in which non-resident Shareholders are present. Subject to the passing of an ordinary resolution by the members, members may be offered the right to elect to receive Ordinary Shares, credited as fully paid, rather than cash.

The Ordinary Shares rank pari passu as a class in terms of preference, restriction and all other rights.

9. INTERESTS OF THE DIRECTORS AND SIGNIFICANT SHAREHOLDINGS

9.1 As at the date of this document and as expected to be immediately following the Placing, Subscription, Acquisition and Admission, the interests of the Directors and persons connected to them (within the meaning of section 252 of the Act) in the share capital of the Company, the existence of which is known to or could with reasonable diligence be ascertained by the Directors, are (other than the rights set out in paragraph 6.4 of this Part X) as follows:

Name	*Number of Ordinary Shares at the date of this document*	*Percentage of Existing Ordinary Share Capital*	*Number of Ordinary Shares at Admission*	*Percentage of Enlarged Share Capital*
Lord Renwick of Clifton	—	—	—	—
Ian Harebottle	1,674,456	1.7	1,674,456	0.7
Mark Summers	334,889	0.3	334,889	0.1
Linda Beal	—	—	—	—
Mike Daigle	—	—	—	—
Mike Nunn* **	44,685,669	44.9	51,587,817	21.5
Machiel Reyneke	—	—	—	—

* Mike Nunn beneficial interest in Ordinary Shares held through Kropz International

** Kropz International and the ARC Fund have entered into an arrangement pursuant to which Kropz International has granted to the ARC Fund a call option over 50 per cent. of its shareholdings. The call option over Kropz International's Ordinary Shares can be exercised by the ARC Fund if the value of the ARC Fund's shareholding on the second anniversary of Admission is 20 per cent. lower than its value at Admission. The call option has an alternative settlement of cash or assets, if the transfer of the Ordinary Shares would require the transferee to make a Rule 9 offer for the Company pursuant to the City Code.

9.2 Save as disclosed in paragraph 9.1 above, the Company is not aware of any interest in the Company's ordinary share capital which amounts or would, immediately following Admission, amount to 3 per cent. or more of the Company's issued Ordinary Share capital other than the following:

Name	*Number of Ordinary Shares at the date of this document*	*Percentage of Existing Ordinary Share Capital*	*Number of Ordinary Shares at Admission*	*Percentage of Enlarged Share Capital*
Kropz International* **	44,685,669	44.9	51,587,817	21.5
ARC Fund**	52,727,366	53.0	125,103,064	52.1
Ackerman Group Holdings Limited	—	—	18,073,368	7.5
R & H Trust Co (Guernsey) Limited as Trustees of The Resource Securities Trust	—	—	17,481,224	7.3
Macquarie Bank Limited	—	—	11,633,045	4.8

* Mike Nunn's beneficial interest in Ordinary Shares is held through Kropz International.

** Kropz International and the ARC Fund have entered into an arrangement pursuant to which Kropz International has granted to the ARC Fund a call option over 50 per cent. of its shareholdings. The call option over Kropz International's Ordinary Shares can be exercised by the ARC Fund if the value of the ARC Fund's shareholding on the second anniversary of Admission is 20 per cent. lower than its value at Admission. The call option has an alternative settlement of cash or assets, if the transfer of the Ordinary Shares would require the transferee to make a Rule 9 offer for the Company pursuant to the City Code.

9.3 The voting rights of the Shareholders set out in paragraphs 9.1 and 9.2 do not differ from the voting rights held by other Shareholders.

9.4 Details of the total number of Options granted to the Directors as at the date of this document and as at Admission are as follows:

Name	**Options over Ordinary Shares**	**Exercise Price (pence)**	**Expiry Date**	**Percentage of Enlarged Share Capital at Admission**
Ian Harebottle	3,362,609	0.1	28 November 2028	0.1
Mark Summers	3,362,609	0.1	28 November 2028	0.1

9.5 There are no outstanding loans granted or guarantees provided by the Company to or for the benefit of any of the Directors. There are no outstanding loans or guarantees provided by the Directors to or for the benefit of the Company.

9.6 No Director has any interest, whether direct or indirect, in any transaction which is or was unusual in its nature or conditions or significant to the business of the Company taken as a whole and which was effected by the Company during the current or immediately preceding financial year, or during any earlier financial year and which remains in any respect outstanding or unperformed.

9.7 Save as otherwise disclosed in this document, none of the Directors nor any member of their respective families nor any person connected with the Directors (within the meaning of section 252 of the Act) has any holding, whether beneficial or otherwise, in the share capital of the Company.

9.8 None of the Directors nor any member of their respective families is dealing in any related financial product (as defined in the AIM Rules) whose value in whole or in part is determined directly or indirectly by reference to the price of the Ordinary Shares, including a contract for differences or a fixed odds bet.

10. WARRANTS, OPTIONS AND CONVERSION RIGHTS

The following warrants, options and conversion rights exist in relation to the Company's Ordinary Shares as at the date of this document and as at Admission.

10.1 **Convertible Loan Note Instrument**

On 27 November 2018, the Company executed the Convertible Loan Note Instrument pursuant to which the Company issued Convertible Notes to Kropz International at a rate of one month LIBOR plus 3 per cent. per annum and a final maturity date of 31 December 2019 as set out below. The principal amount of the Convertible Notes and any accrued interest shall automatically convert into Conversion Shares on Admission at a 28.5 per cent. discount to the Placing Price.

As at the date of this document, the following Convertible Notes have been issued to Kropz International:

Noteholder	*Principal amount of Convertible Notes*	*Amount owing under the Convertible Notes (Principal and Interest)*	*Number of Conversion Shares to be issued on Admission pursuant to Conversion*	*Percentage of Enlarged Share Capital at Admission*
Kropz International	US$2,500,000	2,526,708	6,902,148	2.9

On Admission, there will be no outstanding Convertible Notes in issue.

10.2 **Warrants**

On 27 November 2018, the Company executed a warrant instrument pursuant to which the Company granted to each of H&P and Mirabaud, conditional on Admission, 41,728 and 41,728 Warrants respectively. Further details of the specific provisions of Warrants are set out below:

(a) each Warrant entitles the warrantholder to subscribe for one Ordinary Share at an exercise price of 40 pence during the period commencing on Admission and ending on the second anniversary of Admission;

(b) the Warrants will not be admitted to trading on AIM or any other exchange;

(c) Ordinary Shares issued on exercise of the Warrants will rank for all dividends or other distributions declared after the date of allotment of such Ordinary Shares but not before such date and otherwise *pari passu* in all respects with the Ordinary Shares in issue on the date of such exercise;

(d) the warrant instrument contains provisions for appropriate adjustment of the number of Ordinary Shares issued on exercise of the Warrants and the subscription price upon any allotment of fully paid Ordinary Shares by way of capitalisation of profits or reserves or upon any sub-division or consolidation of the Ordinary Shares;

(e) the rights and privileges of the holders of the Warrants may be altered with the consent in writing of the Company and with either the consent in writing of those holders of the relevant Warrants entitled to subscribe for not less than 75 per cent. of the Ordinary Shares which are subject to the outstanding relevant Warrants or with the sanction of an extraordinary resolution of the relevant warrantholders. The necessary quorum for a meeting of the warrantholders is two such holders (present in person or proxy);

(f) H&P may freely transfer, by instrument of transfer, the Warrants to its:

  (i) parent undertakings; or

  (ii) any of its parent undertakings subsidiaries (as defined in Section 1159 of the Companies Act) (each an "**H&P Group Company**"); or

  (iii) any of the directors, members and employees of each H&P Group Company;

(g) Mirabaud may freely transfer, by instrument of transfer, the Warrants to its:

  (i) parent undertakings; or

  (ii) any of its parent undertakings subsidiaries (as defined in Section 1159 of the Companies Act) (each a "**Mirabaud Group Company**"); or

(iii) any of the directors, members and employees of each Mirabaud Group Company;

(h) any transfer of the Warrant, other than as described at paragraph 10.2 (f) or (g), requires the consent of the Company; and

(i) full exercise of the subscription rights under the Warrants will result in the issue of 166,914 Ordinary Shares.

10.3 **Options**

The following section summarises the terms of the plans under which awards over Ordinary Shares will be granted on or after Admission to employees of the Enlarged Group.

The following plans have been adopted by the Company:

1. an executive share option plan which will be used to grant awards on Admission and following Admission (the "**ESOP**") – a performance and service related plan pursuant to which nominal-cost options can be granted; and

2. an executive long term incentive plan (the "**LTIP**") – a performance and service related plan pursuant to which conditional share awards, nominal-cost options and market value options can be granted,

(together, the "**Incentive Plans**").

The Incentive Plans will be used to recruit, retain and incentivise key executives and employees. The ESOP will be used to grant awards on Admission. Although the ESOP will be used primarily to grant awards on Admission, awards may be granted pursuant to the ESOP following Admission up to and including the second anniversary of Admission. The LTIP will be used to grant awards following Admission and will be the main Incentive Plan used to grant awards following Admission.

The following provisions are common to each of the Incentive Plans and further details of the specific provisions of each of the Incentive Plans are set out below.

(a) Dilution limits

At any time, the total number of Ordinary Shares which have been, or which may be issued, pursuant to all awards granted under the Incentive Plans and any future share-based employees' share schemes adopted by the Company following Admission will be limited to a maximum of 12 per cent. of the total issued share capital over the preceding 10 years or, if shorter, the period from Admission.

For the purposes of the above limit:

(i) Ordinary Shares which are the subject of any awards granted prior to Admission shall be excluded;

(ii) Ordinary Shares which are the subject of lapsed awards shall be excluded;

(iii) Ordinary Shares which have been issued into any employee benefit trust during the previous 10 years shall only be brought into account to the extent that they are not at the relevant time allocated to subsisting awards which have already been brought into account; and

(iv) treasury shares will be treated as issued shares (unless guidance published by institutional investor bodies recommends otherwise).

It is intended that awards granted on Admission under the ESOP will represent approximately 3.4 per cent. of the issued share capital of the Company on Admission, which will enable up to 8.6 per cent. of the issued share capital in the Company to be awarded under the ESOP and/or LTIP going forward.

(b) Settlement of awards

Awards under the Incentive Plans may be satisfied with newly issued Ordinary Shares, including the issue of Ordinary Shares from treasury, or Ordinary Shares purchased in the market. The Company may in due course establish an employee benefit trust for the purpose of acquiring shares in the market to settle awards. Further details of the trust are set out below.

(c) Dividend equivalents

The Remuneration Committee may, in its discretion, determine that the number of Ordinary Shares subject to an award may be increased to reflect any dividends declared by the Company from the date of grant until the date that award vests or first becomes exercisable (as the case may be).

(d) Voting, dividend and other rights

An award holder will have no voting or dividend rights in respect of an Ordinary Share subject to an award until the award holder's name is entered onto the register of members in respect of such Ordinary Share following vesting or exercise (as the case may be).

All awards are non-transferrable and non-pensionable.

(e) Malus and clawback

In the event of any of the following:

(i) misstatement in the Company's accounts; or

(ii) gross misconduct on the part of the award holder,

the Remuneration Committee may, in its discretion, reduce the number of Ordinary Shares to which an award relates or impose further conditions on such award or where an award has been settled, require the award holder to make payment to the Company in respect of some or all of the Ordinary Shares released to him or transfer for nil consideration some or all of those Ordinary Shares to the Company.

(f) Variation of share capital

In the event of any variation of share capital of the Company or any capitalisation of profits or reserves by way of consolidation, sub-division, bonus issue or reduction of the Company's share capital or in respect of any discount element in any rights issue or in the event that a special dividend is paid, the number of Ordinary Shares subject to an award and/or the exercise price of any option may be varied in such manner as the Board considers to be appropriate.

(g) Administration and amendment

The Incentive Plans will be administered by the Board provided that the incentive policy and awards in relation to executive directors will be approved by the Remuneration Committee.

The Incentive Plans may be amended in any respect by the Remuneration Committee, although amendments to key provisions of the Incentive Plans which are to the material benefit of participants can only be made with the prior approval of the Company in general meeting.

No amendment may be made to the rules of the Incentive Plans if it would adversely affect the rights of award holders without the approval of existing award holders who hold awards over at least 75 per cent. of the Ordinary Shares subject to the awards so affected.

Minor amendments to the benefit of the administration of the Incentive Plans, or other amendments to take account of changes in legislation, to obtain or maintain favourable tax, exchange control, or regulatory treatment or to take account of a corporate transaction, may be made without the need for either of the approvals set out above where such amendments do not alter the basic principles of the Incentive Plans.

(h) Termination

The Incentive Plans shall terminate on the tenth anniversary of their adoption date, or earlier by resolution of the Remuneration Committee.

10.4 **ESOP**

(a) Overview

The ESOP provides for nominal-cost options to be granted pursuant to the ESOP on Admission ("**ESOP Awards**"). Further ESOP Awards may be granted pursuant to the ESOP following Admission up to and including the second anniversary of Admission.

(b) Grant and eligibility

Employees, including executive directors of the Group, will be eligible, but not entitled, to participate in, and be granted, ESOP Awards. Participation will be at the Board's discretion and, in the case of executive directors, the Remuneration Committee's discretion.

It is intended that the Company will grant awards on Admission to certain key executives in the Company, including the Chief Executive Officer, the Chief Financial Officer and the Chief Operating Officer, in reward for their contribution up to Admission as well as to encourage future growth of the business. The ESOP Awards granted at Admission will be granted over an aggregate of approximately 3.4 per cent. of the Ordinary Shares as at the date of Admission. ESOP Awards may be granted following Admission as the Remuneration Committee may determine, up to and including the second anniversary of Admission to new participants who were not granted ESOP Awards on Admission (although participants who were granted ESOP Awards on Admission may be granted awards under the LTIP).

(c) Vesting of ESOP Awards

The ESOP Awards shall in the normal course vest and become exercisable:

- in the case of ESOP Awards granted on Admission, on the fifth anniversary of Admission, or
- in the case of ESOP Awards granted following Admission, on the fifth anniversary of the date of grant,

and in each case, subject to the option holder having remained in service with the Group for a minimum of five years and shall vest to the extent that the stretching performance conditions set out below have been satisfied. In addition, the ESOP Awards are subject to a financial underpin whereby the ESOP Awards shall not vest unless the Remuneration Committee is satisfied that the financial performance of the Company, taking into account factors such as EBITDA, debt and cash management, supports long term sustainable growth.

On vesting, ESOP Awards shall become exercisable for a period ending on the tenth anniversary of the date of grant and will lapse on the tenth anniversary to the extent not exercised.

(d) Performance conditions

The ESOP Awards granted on Admission will be subject to a share price growth target performance condition based on share price growth above the placing price. The share price growth target will be satisfied if the average of the closing middle market price of the shares over a period of 3 months is such that one or more of the share price growth targets detailed below is satisfied.

The performance condition will be measured on an on-going basis. The performance condition can be satisfied at any time from Admission up to the fifth anniversary of the date of grant. If the performance conditions are satisfied before the fourth anniversary of the date of grant, the ESOP Award will vest as to performance but cannot be exercised until the fifth anniversary of the date of grant. If, and to the extent that, the performance conditions are satisfied between the fourth anniversary of the date of grant and the fifth anniversary of the date of grant, the ESOP Award will vest as to performance but cannot be exercised until twelve months after the date on which the performance conditions are satisfied. The performance conditions will not normally be capable of being satisfied following the fifth anniversary of the date of grant, however the Remuneration Committee shall have discretion to determine, at any time following the fifth anniversary of the date of grant, that the performance conditions have been satisfied and that the ESOP Awards should vest. In each case, vesting of the ESOP Award will be subject to continued employment and the financial underpin as set out in paragraph 10.4(c) above, even if the share price subsequently falls.

The ESOP Awards granted on Admission will vest as to performance as follows:

- 20 per cent. of the award shall vest for growth in share price of 100 per cent. from the placing price;
- a further 20 per cent. of the award shall vest for growth in share price of 250 per cent. from the placing price;

- a further 30 per cent. of the award shall vest for growth in share price of 350 per cent. from the placing price; and
- a further 30 per cent. of the award shall vest for growth in share price of 500 per cent. from the placing price.

Awards shall vest on a straight-line basis between each of the above targets.

The Remuneration Committee will determine whether the performance condition has been met and to the extent performance conditions have not been achieved on or before the fifth anniversary of the date of grant.

It is intended that the performance conditions applying to ESOP Awards granted following Admission will be adjusted to take into account the prevailing share price at the time and will have such share price growth targets as the Remuneration Committee determines appropriate at the time of grant.

Where events occur or circumstances arise which cause the Remuneration Committee to consider that the performance condition has ceased to be appropriate, the Remuneration Committee may waive, vary or replace such condition provided that any new or varied performance condition is in the Remuneration Committee's opinion fair, reasonable and is not materially more difficult or easier to satisfy than the original performance condition was at the date of grant. In particular, the share price target will be subject to adjustment if there are variations in share capital, such as a rights issue, which would adversely affect the ability to meet the target.

(e) Cessation of employment

If an option holder ceases to be employed by the Group prior to the fifth anniversary of the date of grant by reason of death, injury, ill-health, disability, redundancy, retirement with agreement of the Board, as a result of the sale out of the Group of the business or subsidiary by which the option holder is employed or for any other reason which the Board in its absolute discretion permits, ESOP Awards relevant to that award holder shall vest and become exercisable in the normal course following the fifth anniversary of the date of grant or, at the absolute discretion of the Board, as soon as reasonably practicable following cessation. Where, and to the extent that, the performance condition is satisfied between the fourth and fifth anniversary of the date of grant and that part of the ESOP Award only becomes exercisable 12 months following the date on which the performance condition is applied, these provisions shall also apply if the option holder ceases to be employed by the Group for one of the above reasons before the date on which that part of the ESOP Award becomes exercisable.

The number of Ordinary Shares subject to a good leaver's ESOP Awards shall be subject to assessment of the performance condition and the financial underpin and pro-rated down to reflect the reduced five year service period.

If an option holder ceases employment for any other reason prior to the ESOP Award vesting and becoming exercisable, it will immediately lapse in full.

If an option holder ceases employment for any reason after the ESOP Award has vested and become exercisable, it will lapse 6 months following cessation. However, if the award holder ceases employment for gross misconduct, his vested ESOP Awards will immediately lapse in full.

All discretions in relation to any directors who cease employment shall be exercised by the Remuneration Committee.

(f) Change of control, reconstruction or winding up

In the event of a takeover, change of control or winding up of the Company (other than an internal reorganisation), ESOP Awards will vest and become exercisable based on the extent to which the Remuneration Committee determines that the performance conditions have been satisfied (taking into account, if appropriate, the foreshortened performance period) or would have been likely to be met at the end of the performance period.

Award holders will be compulsorily required to rollover their ESOP Awards, if required to do so by the Remuneration Committee and subject to agreement with the acquiring company, for equivalent options over an appropriate number of new shares in the acquiring company with equivalent performance conditions.

In the event of an internal reorganisation of the Company, the Remuneration Committee may determine that ESOP Awards will be automatically exchanged for equivalent awards, subject to the terms of the ESOP Awards, over an appropriate number of new shares.

As at the date of this document and as at Admission, there are Options over 8,190,355 Ordinary Shares outstanding under the ESOP as follows:

Optionholder	Options over Ordinary Shares	Exercise Price (pence)	Expiry Date	Options as Percentage of Enlarged Share Capital at Admission
Ian Harebottle	3,362,609	0.1	28 November 2028	0.1
Mark Summers	3,362,609	0.1	28 November 2028	0.1
Michelle Lawrence	1,465,137	0.1	28 November 2028	0.0

10.5 **LTIP**

(a) Overview

The LTIP is a discretionary share incentive plan which will be used to grant new equity incentive awards over Ordinary Shares to certain key executives and employees of the Group following Admission.

The LTIP provides for the following types of award:

- share options with a nominal exercise price or an exercise price equal to the market value of the Ordinary Shares at the date of grant (''Options''); or
- conditional share awards, being awards delivering free shares to award holders (''**Conditional Shares**''),

(together, the ''**LTIP Awards**'').

(b) Grant and eligibility

Employees, including executive directors of the Group, will be eligible, but not entitled, to participate in, and be granted, LTIP Awards. Participation will be at the Board's discretion and, in the case of executive directors, the Remuneration Committee's discretion, and the Board or the Remuneration Committee (as applicable) will determine when executives and senior management will be granted LTIP Awards, the extent of the grant and the applicable terms subject to the terms set out below.

Eligible employees may be granted LTIP Awards:

- during the period of 42 days following the announcement by the Company of its interim or final results for any period; or
- at any time that the Board determines that exceptional circumstances have arisen.

(c) Vesting of LTIP Awards

The LTIP Awards shall in the normal course vest on the third anniversary of the date of grant (or following such longer period as the Board or the Remuneration Committee (as applicable) may determine prior to grant) subject to the award holder having remained in service with the Group for a minimum of three years and shall vest on a proportional basis depending on the extent to which relevant performance conditions have been satisfied.

On Vesting:

- an Option will become exercisable over vested Ordinary Shares for a period ending on the tenth anniversary of the date of grant; and
- an award holder will become absolutely beneficially entitled to the vested Ordinary Shares subject to an award of Conditional Shares.

(d) Performance conditions

The Remuneration Committee will determine the performance conditions relating to LTIP Awards granted to key executives and senior management and which will relate to a combination of financial and non-financial measures. The precise terms and the weighting of each measure attaching to an LTIP Award shall be determined by the Remuneration Committee at the time of the grant of the relevant LTIP Award. The calibration methodology of the performance conditions will be approved by the Remuneration Committee.

To the extent performance conditions have not been achieved over the relevant performance period, LTIP Awards shall lapse on the date on which the Remuneration Committee determines that the performance conditions have not been met.

Where events occur or circumstances arise which cause the Remuneration Committee to consider that any established performance condition has ceased to be appropriate, the Remuneration Committee may waive, vary or replace such condition provided that any new or varied performance condition is, in the Remuneration Committee's opinion, fair, reasonable and is not materially more difficult or easier to satisfy than the original performance condition was at the date of grant.

(e) Cessation of employment

If an award holder ceases to be employed by the Group prior to the third anniversary of the date of grant by reason of death, injury, ill-health, disability, redundancy, retirement with agreement of the Board, as a result of the sale out of the Group of the business or subsidiary by which the award holder is employed or for any other reason which the Board in its absolute discretion permits, LTIP Awards relevant to that award holder shall vest and become exercisable in the normal course or, at the absolute discretion of the Board, as soon as reasonably practicable following cessation.

The number of Ordinary Shares subject to a good leaver's LTIP Awards shall be subject to assessment of the relevant performance conditions and pro-rated down to reflect the reduced service period. Any element of an LTIP Award subject to the performance conditions shall lapse in the normal course to the extent not vested if the relevant targets have not been met following the end of the three year performance period.

If an award holder ceases employment for any other reason prior to the LTIP Award vesting or becoming exercisable, it will immediately lapse in full.

If an award holder ceases employment for any reason after the LTIP Award has vested or become exercisable, it will lapse 6 months following cessation. However, if the award holder ceases employment for gross misconduct, his vested LTIP Awards will immediately lapse in full.

All discretions in relation to any directors who cease employment shall be exercised by the Remuneration Committee.

(f) Change of control, reconstruction or winding up

In the event of a takeover, change of control or winding up of the Company (other than an internal reorganisation), LTIP Awards shall immediately vest and become exercisable based on the extent to which the Remuneration Committee determines that the performance conditions have been satisfied (taking into account, if appropriate, the foreshortened performance period) or would have been likely to be met at the end of the performance period. In addition, the number of shares subject to LTIP Awards shall be pro-rated to reflect the foreshortened service period unless the Remuneration Committee permits vesting to a greater extent.

Alternatively, LTIP Awards may, by agreement with the acquiring company, be exchanged for awards over shares in the acquiring company.

In the event of an internal reorganisation of the Company, the Remuneration Committee may determine that ESOP Awards will be automatically exchanged for equivalent awards, subject to the terms of the LTIP Awards, over an appropriate number of new shares.

(g) Holding period

The Remuneration Committee may, in its discretion, determine at the time of grant of an LTIP Award that an award holder's vested Ordinary Shares are required to be held for a minimum holding period following the exercise of an Option or an award holder becoming beneficially entitled to the vested Ordinary Shares subject to an award of Conditional Shares. If the Remuneration Committee determines that a holding period shall apply for one LTIP Award it shall not be required to impose a holding period for all LTIP Awards.

10.6 **Employee Benefit Trust (''Trust'')**

The Company may following Admission establish a Trust which will be an employee share scheme and can be used to satisfy awards under the Incentive Plans and any other employees' share scheme established by the Company.

The Trust may be resident outside the UK and will be administered by the trustee. The Trust will be a discretionary trust whose beneficiaries are the employees and executive directors (and former employees and executive directors) of the Company, and their spouses, civil partners, widows, widowers, children and step-children under the age of 18.

The Trust will have the power, *inter alia*, to acquire shares in any member of the Group, grant options over shares to beneficiaries, and transfer shares to beneficiaries to enable them to acquire shares. However, the Trust will not be able to hold more than 5 per cent. per cent of the issued share capital of the Company at any time when it is listed, unless authorised to do so by the Company in a general meeting.

The Trust will be funded by contributions or loans from the Company.

The Trust will waive its right to dividends and to vote in respect of any shares held in the Trust unless otherwise requested by the Company.

11. DIRECTORS' SERVICE AGREEMENTS/LETTERS OF APPOINTMENT

The Company has entered into service agreements/letters of appointment with the Directors as follows:

Executive directors

11.1 Ian Harebottle

On 27 April 2018, Ian Harebottle entered into a service agreement with the Company, pursuant to which he has agreed to act as chief executive officer of the Company. He will devote 5 days per week to his role. Mr Harebottle will receive a salary of £360,000 per annum. Mr Harebottle will be entitled to private medical insurance for himself and for his immediate family and life assurance cover at the rate of 3X base salary. The contract of employment will be terminable on 12 months' prior written notice by either party and Mr Harebottle will not have the right to receive compensation upon termination of the appointment. Mr Harebottle will be subject to the usual restrictive covenants for a period of 12 months following the termination of his appointment.

11.2 Mark Summers

On 20 September 2018, Mark Summers entered into a service agreement with the Company, pursuant to which he has agreed to act as chief financial officer of the Company, effective from 1 September 2018. In addition, on 20 September 2018, Mr Summers entered into a service agreement with Kropz SA, pursuant to which he has agreed to act as chief financial officer for Kropz SA (the ''**South African Agreement**''), effective from 1 September 2018. Under the terms of the two service agreements he will work full time, pro-rated between the service agreements as 85 per cent. to the South African Agreement and 15 per cent to the service agreement with the Company.

Under the terms of the service agreement with the Company, Mr Summers will receive a salary of £31,440 per annum. Mr Summers will be entitled to a contractual annual bonus of up to 27 per cent. of his base salary subject to his achieving key performance indicators as agreed from time to time between Mr Summers and the Company's Board/Remuneration Committee. The service agreement will be terminable on 6 months prior written notice by either party and Mr Summers will not have the right to receive compensation upon termination of the appointment. Mr Summers will be subject to the usual restrictive covenants for a period of 12 months following the termination of his appointment.

Under the terms of the South African Agreement, Mr Summers will receive a salary of ZAR3,060,000 per annum. Mr Summers will be entitled to a contractual annual bonus of up to 27 per cent. of his base salary subject to his achieving key performance indicators as agreed from time to time between Mr Summers and the Board of Kropz SA. Mr Summers will be entitled to Kropz SA making a contribution towards a medical aid scheme for himself and his immediate dependents and a contribution towards life assurance. The service agreement will be terminable on 6 months prior written notice by either party and Mr Summers will not have the right to receive compensation upon termination of the appointment. Mr Summers will be subject to the usual restrictive covenants for a period of 12 months following the termination of his appointment.

Non-executive directors

11.3 Lord Renwick of Clifton

On or around the date of this document, Lord Renwick of Clifton entered into a letter of appointment pursuant to which he was appointed, conditional on Admission, to act as non-executive director of the Company. Lord Renwick of Clifton is entitled to a director's fee of £75,000 per annum. As chair of the Nomination and Remuneration Committee, Lord Renwick of Clifton is entitled to a further £2,500 per annum. The appointment is for an initial term of 12 months and will be terminable at any time on 3 months prior written notice by either party.

11.4 Linda Beal

On or around the date of this document, Linda Beal entered into a letter of appointment pursuant to which she was appointed, conditional on Admission, to act as non-executive director of the Company. Ms Beal is entitled to a director's fee of £30,000 per annum. As chair of the Audit and Sustainability Committee, Ms Beal is entitled to a further £5,000 per annum. The appointment is for an initial term of 12 months and will be terminable at any time on 3 months prior written notice by either party.

11.5 Mike Daigle

On or around the date of this document, Mike Daigle entered into a letter of appointment pursuant to which he was appointed, conditional on Admission, to act as non-executive director of the Company. Mr Daigle is entitled to a director's fee of £30,000 per annum. The appointment is for an initial term of 12 months and will be terminable at any time on 3 months prior written notice by either party.

11.6 Mike Nunn

On or around the date of this document, Mike Nunn entered into a letter of appointment pursuant to which he was appointed, conditional on Admission, to act as non-executive director of the Company. Mr Nunn is entitled to a director's fee of £30,000 per annum. The appointment is for an initial term of 12 months and will be terminable at any time on 3 months prior written notice by either party.

11.7 Machiel Reyneke

On or around the date of this document, Machiel Reyneke entered into a letter of appointment pursuant to which he was appointed, conditional on Admission, to act as non-executive director of the Company. Mr Reyneke is entitled to a director's fee of £30,000 per annum. The appointment is for an initial term of 12 months and will be terminable at any time on 3 months prior written notice by either party.

12. ADDITIONAL INFORMATION ON THE DIRECTORS

12.1 In addition to directorships of the Company, the Directors hold or have held the following directorships or have been partners in the following partnerships within the five years prior to the date of this document:

Director	*Current Directorships and Partnerships (other than the Company)*	*Past Directorships and Partnerships*
Lord Renwick of Clifton	Stonehage Fleming Family & Partners Limited (Guernsey)	Stonehage Fleming (UK) Limited Kaz Minerals plc

Director	*Current Directorships and Partnerships (other than the Company)*	*Past Directorships and Partnerships*
	First Sapphire Media LLP Excelsior Mining Corporation	
Ian Harebottle	Kropz Elandsfontein (Pty) Limited* Kropz SA (Pty) Limited* Elandsfontein Land Holdings (Pty) Limited*	Gemfields Plc Kagem Mining Limited Montepuez Mining Limited Faberge Limited Web Mining Limited Megurama Mining Limited
Mark Summers	Kropz Elandsfontein (Pty) Limited Kropz SA (Pty) Limited Elandsfontein Land Holdings (Pty) Limited West Coast Fertilizers (Pty) Limited SA Lithium (Pty) Ltd Greenheart Foundation (Pty) Ltd Xsando (Pty) Ltd Sell My Car (Pty) Ltd Ingala Lodge (Pty) Ltd Cradle City Business Park Property Owners Association NPC	MDM Engineering Group Limited Amari Holdings (Pty) Ltd MDM Engineering Group Limited (BVI) Amari Bray (Pty) Ltd (in deregistration process) Amari Childrens' Trustfund NPC Cradle City Controlling Property Owners Association NPC Cradle City Developments CC Cradle City Management CC
Linda Beal	Linda Beal Consulting LLP Tax Systems plc Auxxilia Limited San Leon Energy plc	PricewaterhouseCoopers LLP Grant Thornton UK LLP
Mike Daigle	M & J Daigle LLC Kiwanis Club of Greater Brandon (Charity) United Way Sun Coast (Charity) Florida Industrial and Phosphate Research Institute	The Mosaic Company
Mike Nunn	Oakesen Limited Millset Limited NUHU Developments Limited Jeluka Capital Limited Kropz SA (Pty) Ltd* Elandsfontein Land Holdings (Pty) Ltd* Kropz Elandsfontein (Pty) Ltd*	Amari Bray (Pty) Ltd (in deregistration process) Amari Holdings (Pty) Ltd SA Lithium (Pty) Ltd
Machiel Reyneke	African Rainbow Capital (Pty) Ltd African Azure Investments (Pty) Ltd ARC Constellation (Pty) Ltd ARC Health (Pty) Ltd ARC Health Investments (Pty) Ltd ARC Health Managers (Pty) Ltd ARC Imali-Madi (Pty) Ltd ARC Property Development (Pty) Ltd Autoboys Holdings (Pty) ltd Central Plaza Investments 1112	African Rainbow Capital Financial Services Holdings Centriq Insurance Company Ltd Centriq Insurance Holdings Ltd Centriq Life Insurance Company Ltd Credit Guarantee Insurance Corporation of Africa Ltd EOH Forensic Services Lima Mbeu Investment Managers MiAdmin

* Ian Harebottle has been appointed Director with effect and conditional on Admission.

* Mike Nunn has resigned his directorship with effect and conditional on Admission.

Director	*Current Directorships and Partnerships (other than the Company)*	*Past Directorships and Partnerships*
	(Pty) Ltd EBS International (Pty) Ltd Elandsfontein Exploration and Mining (Pty) Ltd Elandsfontein Land Holdings (Pty) Ltd Enviroptek (Pty) Ltd Global Asset Management Ltd Indwe Broker Holdings (Pty) Ltd Indwe Intermediary Support Services (Pty) Ltd Indwe Risk Services (Pty) Ltd K2015036001 (SA) Pty Ltd K2017386337 (SA) Pty Ltd Luxanio 178 (RF) (Pty) Ltd Luxanio Trading 119 (Pty) Ltd Luxanio Trading 185 (Pty) Ltd Main Street 1513 (Pty) Ltd Metswale (Pty) Ltd National Health Group (Pty) Ltd Plastics Green Energy (Pty) Ltd Santam International Ltd Santam Limited Ubuntu-Botho Investment Holdings (Pty) Ltd Uyanda STI Careers (Pty)	MiWay Group Holdings (Pty) Ltd MiWay Insurance Ltd Multiplex Investment Holding Company Principa Decisions PSG Konsult Short-Term Insurance Brokers Santam UK Limited Thatch Risk Acceptances The Lion of Africa Holdings Company Topexec Management Bureau UBI General Partner (Pty) Ltd

12.2 Mark Summers and Michael Nunn were directors of AFGEM Limited at the time of a creditor scheme of arrangement in 2005. The creditor scheme of arrangement was part of a wider transaction which related to the acquisition by AFGEM of a number of companies and which was required to settle all claims on loan accounts by creditors against those companies, being Bellsbank Consolidated Diamond Mine (Pty) Limited (later Bokang Mine (Pty) Limited), Loxton Explorations (Pty) Limited (later Simolotse Mine (Pty) Ltd) and Rex Diamond Corporation (Pty) Limited (later Agisanang (Pty) Limited) (collectively the ''**Scheme Target Companies**''). The creditor meeting of the Scheme Target Companies to approve the scheme was held on 31 March 2005 and was subsequently sanctioned by the relevant court. Pursuant to the scheme, AFGEM Limited agreed to settle all creditor claims against the Scheme Target Companies to the extent of 20 cents for every R1.00 owed to non-preferential creditors and 30 cents for every R1.00 owed to preferential creditors.

12.3 Mark Summers was an executive director of AFGEM Limited when, on 6 October 2009, the company was placed into compulsory liquidation following the lapsing of a sale agreement for the company's assets.

12.4 Ian Harebottle was CEO of Gemfields plc (now Gemfields Limited) from 2009 to 2017. It has been brought to Mr Harebottle's attention that in April 2018 a claim was launched in London on behalf of certain Mozambican individuals making various allegations against Gemfields relating to the period from 2012 to 2018 and seeking compensation for the same. No claim has been made against Mr Harebottle, whether in the particulars of claim or otherwise. Mr Harebottle is no longer a director of Gemfields Limited and as such has no direct involvement in relation to this matter. Gemfields has stated publicly that it will fully examine and defend the claim.

12.5 Save as disclosed above, none of the Directors has:

(a) any unspent convictions in relation to indictable offences; or

(b) had any bankruptcy order made against him or entered into any voluntary arrangements; or

(c) been a director of a company which has been placed in receivership, compulsory liquidation, creditors' voluntary liquidation, administration, been subject to a company voluntary arrangement or any composition or arrangement with its creditors generally or any class of its creditors whilst he was a director of that company or within the 12 months after he ceased to be a director of that company; or

(d) been a partner in any partnership which has been placed in compulsory liquidation, administration or been the subject of a partnership voluntary arrangement whilst he was a partner in that partnership or within the 12 months after he ceased to be a partner in that partnership; or

(e) been the owner of any assets or a partner in any partnership which has been placed in receivership whilst he was a partner in that partnership or within the 12 months after he ceased to be a partner in that partnership; or

(f) been publicly criticised by any statutory or regulatory authority (including recognised professional bodies); or

(g) been disqualified by a court from acting as a director of any company or from acting in the management or conduct of the affairs of a company.

13. EMPLOYEES

During each of the accounting reference periods ending on the dates set out below the Group had the following average number of employees:

Function	*As at 31 December 2015*	*As at 31 December 2016*	*As at 31 December 2017*	*As at Date of Admission Document*
Management	3	3	3	3
Finance and administration	2	2	1	1
Operations	4	7	8	7
	9	12	12	11

14. THE OFFER

14.1 The Company has conditionally offered to acquire the entire issued and to be issued share capital of Cominco on the basis of 1.66 Ordinary Share for each Cominco Share.

14.2 The Offer values the whole of Cominco at US$40 million, and is conditional, *inter alia*, on:

- valid acceptances being received (and not withdrawn) by First Closing Date (or such later time(s) and/or date(s) as the Company may decide) in respect of Cominco Shares which constitute not less than 70 per cent. (or such lesser percentage, being not less than 51 per cent., as the Company may decide) of the Cominco Shares;
- the Hinda Exploitation Convention not having lapsed or terminated;
- the heads of agreement between Cominco S.A. and Port Authority of Pointe-Noire not having lapsed or terminated;
- the Cominco completion meeting having taken place prior to Admission;
- the Company raising a minimum of US$35 million pursuant to the Placing and Subscription (before expenses);
- the Placing Agreement becoming unconditional in all respects (save for Admission) and not having been terminated in accordance with its terms; and
- Admission.

14.3 As at First Closing Date, valid acceptances to accept the Offer have been received in respect of 33,465,747 Cominco Shares representing 71.3 per cent. of the Cominco Shares and, accordingly, the Offer is unconditional as to acceptances. On Admission, the Company will acquire 71.3 per cent. of Cominco, which will require the issue of the First Offer Shares to Cominco Shareholders on Admission.

14.4 Cominco Shareholders who have not accepted by First Closing Date will have until Final Closing Date to accept the Offer. Consequently, the Company may, under the Offer, acquire a further 28.7 per cent. of Cominco post Admission, which would require the issue of a further 22,455,810 Ordinary Shares following Final Closing Date representing 8.5 per cent. of the Further Enlarged Share Capital.

14.5 Pursuant to the terms of the Offer, each accepting Cominco Shareholder that will hold more than 1 per cent. of the Enlarged Share Capital on Admission (or, who would have held more than 1 per cent of the Enlarged Share Capital on Admission had they accepted the Offer by First Closing Date) and has not entered into a Lock-in and Orderly Market Agreement (further details of which are set out in paragraph 15.8 of this Part X) has undertaken to enter into a lock-in and orderly market deed with the Company, Grant Thornton and each of the Joint Brokers following Admission on the same terms as the Locked-in Cominco Shareholders.

14.6 Cominco Shareholders holding 90 per cent. of the votes of the issued Cominco Shares have the right, pursuant to section 176 of the BVI Business Companies Act 2004, to direct Cominco to compulsorily redeem the Cominco Shares held by the remaining Shareholders.

14.7 If the Company receives acceptances under the Offer in respect of, and/or otherwise acquires, 90 per cent. or more of the Cominco Shares and the Offer becomes or is declared unconditional in all respects, the Company intends to apply the provisions of section 176 of the BVI Business Companies Act 2004 to compulsorily redeem the Cominco Shares held by the Shareholders who have not accepted the Offer by Final Closing Date (save those held by the JT Shareholders) on the same terms as the Offer.

15. MATERIAL CONTRACTS

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

Contracts relating to the Acquisition, Admission and the Placing

15.1 Acquisition

15.2 Those agreements relating to the Offer, details of which are set out in paragraph 14 of this Part X.

15.3 Placing Agreement

A Placing Agreement dated 27 November 2018 between the Company (1), the Directors (2), Roderick Smith (3), Grant Thornton (4), H&P (5) and Mirabaud (6), pursuant to which Grant Thornton, as the Company's nominated adviser, and H&P and Mirabaud, as the Company's joint-brokers, have been granted certain powers and authorities in connection with the Placing and the application for Admission. Under the terms of the Placing Agreement, the Company and the Directors has given certain customary warranties to Grant Thornton, H&P and Mirabaud and the Company have given certain customary indemnities to Grant Thornton, H&P and Mirabaud in connection with Admission and other matters relating to the Enlarged Group and its affairs. The Directors liability is capped. Under the terms of the Placing Agreement, Roderick Smith, in his capacity as an executive director of Cominco, has given warranties to Grant Thornton, H&P, Mirabaud in relation to the Cominco Group and its affairs. Roderick Smith's liability is capped. Grant Thornton, H&P and Mirabaud may terminate the Placing Agreement in certain specified circumstances prior to Admission, principally if any of the warranties has ceased to be true and accurate or shall have become misleading in any respect or in the event of circumstances existing which make it impracticable or inadvisable to proceed with Admission. A commission of up to 4 per cent. is payable on the gross proceeds of the Placing, reducing to a maximum of 2 per cent. in respect of placees introduced by the Company.

15.4 Nominated Adviser Agreement

A Nominated Adviser Agreement dated 27 November 2018 between Grant Thornton (1), the Company (2) and the Directors (3), pursuant to which the Company has appointed Grant Thornton, conditional on Admission, to act as Nominated Adviser to the Company on an ongoing basis, as required by the AIM Rules. The agreement contains certain undertakings and indemnities given by the Company in respect of, *inter alia*, compliance with all applicable laws and regulations. The Company undertakes to comply with its legal obligations and those of AIM and the London Stock Exchange and to consult and discuss with Grant Thornton in relation to all of its proposed announcements and statements and to provide Grant Thornton with any information Grant Thornton believes is necessary to enable it to carry out its obligations to the Company or the London Stock Exchange as Nominated Adviser. Pursuant to these arrangements, Grant Thornton has agreed, *inter alia*, to provide such independent advice and guidance to the Directors as they may require to ensure compliance by the Company on a continuing basis with the AIM Rules.

15.5 H&P Broker Agreement

An engagement letter dated 27 November 2018 pursuant to which H&P has, conditional on Admission, been appointed to act as joint-broker to the Company for the purposes of the AIM Rules. The appointment is terminable by either party by written notice.

15.6 H&P Cominco Engagement Letter

An engagement letter dated 16 March 2018 pursuant to which H&P was appointed to provide services in relation to the Offer including the delivery of a valuation report on the Cominco Shares.

15.7 Mirabaud Broker Agreement

A broker agreement dated 27 November 2018 pursuant to which the Company has, conditional on Admission, appointed Mirabaud to act as joint-broker to the Company for the purposes of the AIM Rules. The appointment is for an initial 12 month period and is then terminable by either party giving three months' written notice.

15.8 Lock-in and Orderly Market Agreements

Lock-in and Orderly Market Agreements dated on or around the date of this document between the Company (1), Grant Thornton (2), H&P, Mirabaud (3) and each of the Directors (4), the ARC Fund (5) and Kropz International (6) (the "**Locked-in Shareholders**"), pursuant to which each of the Locked-in Shareholders has, conditional on Admission, undertaken to the Company, Grant Thornton, H&P and Mirabaud that, subject to certain limited exceptions permitted by Rule 7 of the AIM Rules, they will not dispose of Ordinary Shares held by them or on behalf of them for a period of 12 months from the date of Admission in accordance with the AIM Rules.

Each such Locked-in Shareholder has also undertaken that for the period of 12 months following the anniversary of the date of Admission, they will only dispose of Ordinary Shares held by them through H&P or Mirabaud (or the Company's then retained broker) in order to maintain an orderly market in the Ordinary Shares, save in certain limited circumstances.

Cominco Locked-in Shareholders

The Cominco Locked-in Shareholders who, at Admission, will hold in aggregate up to 21,721,458 Offer Shares (representing approximately 9.1 per cent. of the Enlarged Share Capital) have undertaken, save in limited circumstances, not to dispose of their interests in 49.6 per cent. of such Offer Shares at any time prior to the first anniversary of Admission.

The Cominco Locked-in Shareholders have also undertaken that for a further period of 12 months thereafter, that they will only dispose of 49.6 per cent. the Offer Shares through H&P or Mirabaud (or the Company's then retained broker) in order to maintain an orderly market in the Ordinary Shares, save in certain limited circumstances.

Ackerman and Macquarie Lock-in and Orderly Market Agreements

Ackerman Group Holdings Limited, a significant shareholder of Cominco who, at Admission, will hold 18,073,368 Ordinary Shares (representing approximately 7.5 per cent. of the Enlarged Share Capital) ("**Ackerman Shares**") and Macquarie Bank Limited, a significant shareholder of Cominco who, at Admission, will hold 11,633,045 Ordinary Shares (representing approximately 4.8 per cent. of the Enlarged Share Capital) ("**Macquarie**

Shares'') have each undertaken, save in limited circumstances, not to dispose of 49.6 per cent. of the respective Ackerman Shares and Macquarie Shares for a period of six months from the date of Admission.

Ackerman Group Holdings Limited and Macquarie Bank Limited have each also undertaken that for the period of twelve months following the six month period from the date of Admission, they will only dispose of 49.6 per cent. of the respective Ackerman Shares and Macquarie Shares through H&P or Mirabaud (or the Company's then retained broker) in order to maintain an orderly market in the Ordinary Shares, save in certain circumstances.

15.9 Warrant Instrument

A warrant instrument dated 27 November 2018 pursuant to which the Company has agreed to issue Warrants to H&P and Mirabaud. Further details of the warrant instrument are contained in paragraph 10.2 of this Part X.

15.10 MN Relationship Agreement

The Company (1), H&P (2), Mirabaud (3), Grant Thornton (4), Kropz International (5) and Mike Nunn (6) (the ''**RA Shareholder**'') entered into a relationship agreement on 27 November 2018 (''**MN Relationship Agreement**''), such agreement to become effective upon Admission. Under the Relationship Agreement, the RA Shareholder has given certain undertakings to the Company, H&P, Mirabaud and Grant Thornton to: (i) ensure that transactions entered into between any member of the Enlarged Group and the RA Shareholder or its associates, are conducted on an arm's length basis and on normal commercial terms; (ii) that the Enlarged Group shall be managed for the benefit of the Shareholders and the business of the Enlarged Group and not solely for the benefit of the RA Shareholder; and (iii) ensure that Mike Nunn and Kropz International, together with their associates shall not acquire any shares or other securities of the Company, where to do so would give rise to an obligation to make a general offer for the Company under Rule 9 of the City Code.

Under the Relationship Agreement, the RA Shareholder has a right to nominate one director to the board of the Company (the first such appointee being Mike Nunn). This Relationship Agreement will come into force on Admission and shall be in force and effective for any period while the Ordinary Shares are admitted to trading on AIM and while the RA Shareholder (together with their associates) holds 20 per cent. or more of the rights to vote at a general meeting of the Company.

The Relationship Agreement is governed by the laws of England and Wales.

15.11 ARC Relationship Agreement

The Company (1), Kropz Elandsfontein (2), H&P, Mirabaud (3), Grant Thornton (4) and the ARC Fund (5) entered into a relationship agreement on 27 November 2018 (''**ARC Relationship Agreement**''), such agreement to become effective upon Admission. Under the ARC Relationship Agreement, the ARC Fund has given certain undertakings to the Company, Kropz Elandsfontein, H&P, Mirabaud and Grant Thornton to: (i) ensure that transactions entered into between any member of the Enlarged Group and either the ARC Fund or its associates, are conducted on an arm's length basis and on normal commercial terms; (ii) that the Enlarged Group shall be managed for the benefit of the Shareholders and the business of the Enlarged Group and not solely for the benefit of the ARC Fund; and (iii) ensure that the ARC Fund, together with its associates, shall not acquire any shares or other securities of the Company, where to do so would give rise to an obligation to make a general offer for the Company under Rule 9 of the City Code.

Under the Relationship Agreement, the ARC Fund has a right to nominate one director to the board of the Company the first such appointee being Machiel Reyneke. This Relationship Agreement will come into force on Admission and shall be in force and effective for any period while the Ordinary Shares are admitted to trading on AIM and while the ARC Fund (together with its associates) holds 20 per cent. or more of the rights to vote at a general meeting of the Company.

The Relationship Agreement is governed by the laws of England and Wales.

15.12 Subscription Letters

Each Subscriber has entered into a Subscription Letter with the Company to subscribe for the Subscription Shares at the Placing Price.

The Subscription Letters contain customary certifications and undertakings from the Subscribers as to its identity and level of sophistication. The Subscriber's obligation to subscribe for the Subscription Shares is conditional upon Admission occurring by no later than 30 November 2018. The Subscription Letters are governed by the laws of England and Wales.

15.13 ARC Capitalisation Letter

A debt capitalisation letter dated 8 October 2018 pursuant to which the ARC Fund agreed to capitalise the amount of US$5,056,357.61 (owing from the Company to the ARC Fund following various restructuring and capitalisations implemented by the Kropz Group in the pre-Admission restructuring) at the Placing Price. The Capitalisation is conditional on Admission and will result in the issue of 9,875,698 Ordinary Shares to the ARC Fund upon Admission.

15.14 Convertible Loan Note Instrument

On 27 November 2018, the Company executed the Convertible Loan Note Instrument pursuant to which the Company issued Convertible Notes to Kropz International at a rate of one month LIBOR plus 3 per cent. per annum and a final maturity date of 31 December 2019 as set out below. The principal amount of the Convertible Notes and any accrued interest shall automatically convert into Conversion Shares on Admission at a 28.5 per cent. discount to the Placing Price, as described in paragraph 10.1 of this Part X.

15.15 Class A Preference Shares

The net proceeds of the Fundraising to be allocated to the Elandsfontein Project shall be used to subscribe for non-voting non-redeemable class A preference shares in Kropz Elandsfontein ("**Class A Preference Shares**"). The Class A Preference Shares shall rank in priority to the ordinary shares of Kropz Elandsfontein in relation to distributions but behind all debt (other than Shareholders' loans). Shareholders' loans are subordinated to the Class A Preference Shares and may only be repaid, including any interest thereon, if all accrued and accumulated preference dividends on the Class A Preference Shares have been paid.

On the winding up of Kropz Elandsfontein, the holders of Class A Preference Shares shall not be entitled to any return of capital, but will be entitled, on a preferred basis, to all accrued and accumulated preference dividends up to the date of such event.

The rights and privileges of the Class A Preference Shares including the preference dividend will have an initial term of 14 years, commencing on the first subscription date, or such later date as agreed by the parties, following which all rights and privileges shall terminate.

The holders of Class A Preference Shares shall be entitled to preference dividends at a rate of 1 month LIBOR + 3 per cent. nominal, annual and compounded monthly, calculated from the subscription date. No preference dividends will be payable for the period of two years following the first subscription date, although dividends will accrue and accumulate. The first preference dividend, which will include all accrued and accumulated preference dividends from the first subscription date, will be payable on the last day of the second anniversary of the subscription and thereafter, quarterly for the duration of the term of the Class A Preference Shares.

Contracts relating to the Reorganisation

15.16 FGE Asset and Share Purchase Agreement

An asset and share purchase agreement dated 4 June 2018 between the Company (1), First Gear Exploration (2), Kropz International (3) and Michael Nunn (4), pursuant to which the Company was inserted as the new holding company of First Gear Exploration. Pursuant to the agreement the Company acquired from Kropz International 1,125,001 ordinary shares of no par value of First Gear Exploration in consideration for the issue and allotment of 163,221 ordinary shares of 10 pence each in the capital of the Company ("**Consideration Shares**") to Kropz International. The agreement also included the novation of all of Kropz International and Michael Nunn's respective rights and obligations under the FGE Loan Agreements to the Company. The transfer of shares and the novation under the asset and

share agreement occurred on 4 June 2018 and the issue and allotment of the Consideration Shares occurred on 21 August 2018. Under the asset and share purchase agreement Kropz International provided customary title and capacity warranties. The remaining shareholding in First Gear Exploration is held by Kropz International (25 per cent.), Russell Brooks (15 per cent.) and Thomas Amoah (10 per cent.), a local partner in Ghana. The shareholders of First Gear Exploration have entered into a shareholders' agreement, further details of which are in paragraph 15.43 of this Part X.

15.17 Shareholder Restructuring and Capitalisation Agreement

A shareholder restructuring and capitalisation agreement dated 27 November 2018 between the ARC Fund (1), ARC (2), ELH Proprietary Limited (3), Kropz Elandsfontein Proprietary Limited (4), Kropz International (5), Kropz SA (6) and the Company (7), pursuant to which various restructurings and capitalisations were implemented with respect to the Kropz Group which resulted in:

(i) Kropz International holding 23 per cent. of the issued share capital of ELH directly;

(ii) Kropz International holding 32 per cent. of the issued share capital of Kropz Elandsfontein directly;

(iii) an amount of US$1,242,453 being owed to Kropz International by Kropz SA as the loan account;

(iv) an amount of US$30,743,792 being owed to Kropz International by Kropz Elandsfontein on the loan account; and

(v) an amount of US$1,692,073 being owed to Kropz International by ELH on the loan account.

Under the shareholding restructuring and capitalisation agreement, each of the parties provided customary title and capacity warranties.

15.18 Reorganisation Asset and Share Purchase Agreement

An asset and share purchase agreement dated 27 November 2018 between the Company (1) and Kropz International (2) pursuant to which the Company was inserted as the new holding company of the Kropz Group. Pursuant to the agreement the Company purchased from Kropz International:

(i) the entire issued share capital of Kropz SA;

(ii) 32 per cent. of the issued share capital of Kropz Elandsfontein (the remaining shareholding in Kropz Elandsfontein is held by Kropz SA (38 per cent.) and the ARC Fund (30 per cent);

(iii) 23 per cent. of the issued share capital of ELH (the remaining shareholding in ELH is held by Kropz SA (47 per cent.) and the ARC Fund (30 per cent.);

(iv) the benefit of the outstanding Kropz SA loan account of US$1,494,066;

(v) the benefit of the outstanding Kropz Elandsfontein loan account of US$32,162,463; and

(vi) the benefit of the outstanding ELH loan account of US$1,728,233,

for consideration of US$78,230,310.

The consideration was satisfied by the issue and allotment of 93,260,034 Ordinary Shares ("**Reorganisation Shares**") to Kropz International. The transfer of shares, the acquisition of the loan accounts and the issue and allotment of the Reorganisation Shares under the share purchase agreement occurred on 27 November 2018. Under the share purchase agreement Kropz International provided customary title and capacity warranties.

Following completion of the acquisition there were no outstanding amounts owing from Kropz SA, Kropz Elandsfontein or ELH to Kropz International on the loan accounts.

15.19 Tiestabyte Sale of Shares and Claims Agreement

A conditional sale of shares and claims agreement dated 24 August 2018 (which became wholly unconditional on 27 November 2018) entered into between Tiestabyte (1), the ARC Fund (2), ARC (3), Kropz Elandsfontein (4), Kropz SA (5) and Xsando (6) pursuant to which the ARC Fund purchased from Tiestabyte (i) its 5 per cent. holding in Kropz Elandsfontein (ii) 5 per cent. holding in Xsando; and (iii) any and all claims (whether by loan account or

otherwise), arising from any cause whatsoever, that Tiestabyte may have or had against either Kropz Elandsfontein or Xsando, in consideration for ZAR47,913,359. The transfer of shares and claims under the agreement occurred on 26 November 2018.

Pursuant to the agreement, Tiestabyte also ceded, delegated and assigned to ARC Fund all of its rights and obligations under the ZAR70,000,000 facility agreement dated 6 April 2016 entered into between Tiestabyte (1), ARC (2) and Kropz SA (3) (described at paragraph 15.38 of this Part X). ARC Fund and Kropz SA also agreed to become parties to the Xsando Sharehoders' Agreement (as described at paragraph 15.41 of this Part X). Under the agreement, each of Tiestabyte and ARC Fund provided customary warranties, including as to capacity and title.

15.20 Kropz Elandsfontein Share Purchase Agreement

A share purchase agreement dated 27 November 2018 between the Company (1) and the ARC Fund (2) pursuant to which the Company purchased from the ARC Fund 4 per cent. of the issued share capital of Kropz Elandsfontein in consideration for the issue and allotment of 5,499,124 Ordinary Shares to the ARC Fund. Under the share purchase agreement the ARC Fund provided customary title and capacity warranties.

Contracts relating to the Mining Right

15.21 Mining Right

The mining right in relation to Portion 2 and Portion 4 of the farm Elandsfontein 349 measuring 1529.6711 hectares in extent was granted to Kropz Elandsfontein by the Director General of the DMR on 26 November 2014 and was executed on 30 January 2015. It follows the South African State standard form and has been granted for phosphate and silica sand for a period of 15 years from 30 January 2015 terminating on 29 January 2030.

On 20 February 2015, the DMR approved Kropz's Environmental Management Programme Report which included details of the Group's intended mining activities at Elandsfontein ("**EMPr**") in terms of section 39(4) of the MPRDA for the Mining Right. The approval is subject to certain conditions including, inter alia, that Kropz Elandsfontein must (i) conduct a performance assessment and submit a performance assessment report of the EMPr on an annual basis once mining commences and (ii) annually update and review the quantum of the financial provision for rehabilitation of the operation.

15.22 Land Use and Compensation Agreement

A land use and compensation agreement dated 25 April 2016 between ELH (1) and Kropz Elandsfontein (2) ("**Land Use and Compensation Agreement**") pursuant to which ELH (the registered owner of portions 2 and 4 of the farm Elandsfontein of which the Mining Right is comprised) granted Kropz Elandsfontein permission to conduct mining on the ELH in consideration for a quarterly payment of 3 per cent. of the gross turnover of Kropz Elandsfontein once it commences production.

Kropz Elandsfontein ceded its rights, title and interest in, to and under the Land Use and Compensation Agreement, and mortgaged the Mining Right, by way of security to BNPP pursuant to a side agreement, details of which are set out in paragraph 15.35 of this Part X below.

Service Contracts relating to the operation of the Elandsfontein Phosphate Project

15.23 Open Pit Mining Services Agreement

An open pit mining services agreement dated 20 October 2016 between Kropz Elandsfontein (1) and Trollope Mining Services (2000) Proprietary Limited ("**Trollope**") (2), pursuant to which Trollope has agreed to provide open pit mining services for a period of 65 months up to 31 December 2021.

Kropz Elandsfontein is entitled to terminate the agreement if there is continuous failure by Trollope to meet certain production targets.

The agreement contains standard termination provisions in the event of material breach of the agreement, customary insolvency events and force majeure events.

15.24 Agreement for Rendering of Plant Operating Services

An agreement for rendering of services dated 1 November 2016 between Kropz Elandsfontein (1) and West Coast Plant Operations Proprietary Limited ("**WCP**") (2), pursuant to which WCP has agreed to provide operational and maintenance personnel, systems and procedures to the Elandsfontein Phosphate Mine. The agreement expires on 28 February 2022.

Either party may terminate the agreement by giving not less than 120 days' written notice.

The agreement contains standard termination provisions in the event of material breach of the agreement, customary insolvency events and in the event of a force majeure event.

15.25 Electricity Supply Agreement

An electricity supply agreement dated 20 March 2015 between Eskom (1) and Kropz Elandsfontein (2) pursuant to which Eskom had agreed to supply electricity to Kropz Elandsfontein for an indefinite period. Either party may terminate the agreement on 12 months' written notice.

As security for the due payment of the electricity accounts to be rendered in terms of the agreement Kropz Elandsfontein has provided Eskom with an electricity account guarantee for the sum of ZAR5,305,333.34 and an early termination guarantee for the sum of ZAR5,235,712.32.

15.26 Site Laboratory Services Agreement

An agreement for site laboratory services dated 23 May 2016 between Kropz Elandsfontein (1) and Scientific Services CC ("**SSCC**") (2), pursuant to which SSCC agreed, *inter alia*, to design, supply, install, commission and maintain the onsite laboratory and to operate the onsite laboratory and sample analysis, including labour. In the event that the number of samples increases by more than 5 per cent., Kropz Elandsfontein has agreed to pay an additional fee. The agreement commenced on 1 January 2017 and terminates on 31 August 2021.

15.27 Transportation Services Agreement

An agreement for transportation services dated 24 February 2017, effective 1 April 2017 between Van Der Merwe Vervoer Proprietary Limited ("**VDM**") (1) and Kropz Elandsfontein (2), pursuant to which it was agreed that VDM will have the exclusive right to provide transportation (including loading and offloading) services of the phosphate rock product produced at the Elandsfontein Mine to the storage location in Saldanha. The transportation services agreement shall remain in force for a period of five years, to 31 March 2022 and provides for annual minimum tonnages of product to be transported (the minimum tonnages are not binding on Kropz Elandsfontein).

In the event of breach by either party which remains unremedied for more than seven days following receipt of notice of breach, the other party may, *inter alia*, cancel the agreement and claim payment of all arrears. Either party can terminate if circumstances of force majeure occur and continue for a period in excess of 30 days.

15.28 Port Access Agreement

An agreement for port access dated 1 September 2017 between Transnet SOC Ltd (1) and Kropz Elandsfontein (2), pursuant to which Transnet SOC Ltd, through its operating division Transnet Port Terminals, agreed to provide handling and logistical services at the multi-purpose terminal at the port of Saldanha Bay, until 31 March 2022.

The agreement contains take-or-pay provisions in terms of which Kropz Elandsfontein is obliged to provide certain minimum tonnages for handling through the terminal.

The agreement contains standard provisions for termination in the event of breach as well as other standard termination events in relation to insolvency events, compromises, creditors etc.

In the event that a force majeure event prevails longer than a period of one month from the date of commencement of such event then, provided that the parties have consulted with one another to evaluate any practical means of overcoming the effect of the force majeure event and what effect this may have on any tariff payable under the agreement and have

failed to reach written agreement on such matters prior to the expiry of the one month period mentioned before, this agreement shall terminate with immediate effect upon written notice from any one party to the other.

15.29 Sampling, Analysis, Surveying and Inspection Services Agreement

An agreement dated 22 June 2017 between SGS South Africa (Pty) Limited ("**SGS**") (1) and Kropz Elandsfontein (2), pursuant to which Kropz Elandsfontein appointed SGS to provide sampling analysis, survey and inspection services for their phosphate rock concentrate product. The contract commenced on 22 June 2017 and expires on 21 June 2020.

The agreement can be terminated by either party on 30 days' written notice.

Off-take Agreements

15.30 Foskor Off-Take Agreement

A phosphate rock supply and off-take agreement with commencement date 1 June 2017 between Kropz Elandsfontein (1) and Foskor (Pty) Ltd ("**Foskor**") (2) pursuant to which Kropz Elandsfontein agreed to supply Foskor with phosphate rock for a period of three years from 1 June 2017.

The agreement is subject to the successful trial blend of the first 10,000 tonnes of phosphate rock by Foskor. Should Foskor, in its exclusive discretion, not achieve the desired outcome during the blending trial, the agreement shall terminate without the parties incurring any costs or being liable for any damages or loss whatsoever to each other.

Pursuant to the agreement, Kropz Elandsfontein agreed to supply Foskor with 300,000 tonnes of phosphate rock per annum (+/- 10 per cent.).

In the event of an under delivery or expected shortfall against the required quantity as requested by Foskor, Kropz Elandsfontein shall within 5 business days submit a rectification plan to Foskor, which shall set out how Kropz Elandsfontein shall make up the actual expected shortfall in the shortest time reasonably possible, but in any event within 1 month after the under delivery arose.

In the event of:

- Kropz Elandsfontein failing to submit and implement the rectification plan; or
- Foskor rejecting the rectification plan; or
- Kropz Elandsfontein's failure to make up the under delivery within 1 month,

Foskor shall be entitled to purchase phosphate rock to make up for the shortfall and to recover from Kropz Elandsfontein any additional costs incurred in making up the shortfall.

In the event of an under off take or expected shortfall against the required quantity, Foskor shall within five business days submit a rectification plan to the Company, which shall set out how Foskor shall make up the under offtake in the shortest time reasonably possible, but in any event within one month after the under off take arose.

In the event of:

- Foskor failing to submit and implement the rectification plan to Kropz Elandsfontein's satisfaction; or
- Foskor failure to makeup the under offtake within a reasonable period,

Foskor shall make payment of any under offtake not made-up within 1 month without applying premiums or penalties to the price.

The price is subject to market related price adjustments on an annual basis.

Either party may terminate on a breach of a warranty if such breach remains unremedied for a period of 30 business days.

Either party may terminate on a breach of a material provision of the agreement (other than a breach of warranty) if such breach remains unremedied for a period of 30 business days; provided that such breach could reasonably affect Kropz Elandsfontein's ability to deliver phosphate rock or Foskor's ability to take off phosphate rock in terms of the agreement.

The agreement is terminable by either party if either party is wholly prevented by a force majeure event from fulfilling its obligations in terms of the agreement where such prevention endures for a continues period of at least 24 months.

15.31 Kalyaan Off-Take Agreement

An off-take agreement dated 23 October 2016 with an effective date of 1 February 2017 between Kropz Elandsfontein (1) and Kalyaan Resources DMCC ("**Kalyaan**") (2) pursuant to which Kropz Elandsfontein shall sell and Kalyaan shall purchase a specified amount of phosphate rock for an agreed price per year until 31 December 2020.

Pursuant to the terms of the agreement, Kalyaan agreed to purchase 600,000 Mt of phosphate rock in the first contractual year and an amount to be agreed, not being less than 600,000 Mt of phosphate rock, in each contractual year thereafter.

The agreement contains take-or-pay provisions in favour of Kropz Elandsfontein in the event that Kalyaan fails to uplift the agreed quantities under the agreement for any reason other than a force majeure event. Kalyaan shall be entitled to reject shipments which do not meet the quality specifications defined therein.

The agreed price per tonne will be the average of 3 recognised, published prices for 70 BPL (approximately 32 per cent. P_2O_5) P_2O_5 phosphate rock FOB, Jordan or a similar product, less a 10 per cent. discount.

Pursuant to the terms of the agreement, the first shipment was expected to occur during the first quarter of 2017 and Kropz Elandsfontein is obliged to notify Kalyaan at least 60 days prior to the first shipment being ready.

Either Party may terminate on a breach of any warranty, if such breach remains unremedied for a period of 30 days.

Either Party may terminate on a breach of the agreement (other than a breach of warranty), if such breach remains unremedied after 30 Business Days; provided that such breach could reasonably affect Kropz Elandsfontein's ability to deliver phosphate rock or Kalyaan's ability to take off phosphate rock in terms of the agreement.

Either Party shall be entitled forthwith to cancel the agreement in respect of any obligation still to be performed thereunder in the event of a force majeure event continuing for a period of more than 90 days.

15.32 Keytrade Off-Take Memorandum of Understanding

A summary of key terms and conditions dated 24 October 2016 between Kropz Elandsfontein (1) and Keytrade AG ("**Keytrade**") (2) pursuant to which Elandsfontein has agreed to sell, on a FOB Saldanha basis, phosphate concentration to Keytrade for the onward sale to final buyers worldwide (excluding the Southern African Development Community and India). The initial contract period will be for three years from the date agreed by Kropz Elandsfontein and Keytrade.

The parties have agreed that Keytrade will receive a right to a commission of 3 per cent. of the price received for the phosphate concentrate sold by it pursuant to final buyers.

The agreement is subject to the parties entering into a formal marketing and distribution agreement.

Contracts relating to the BNPP Facility

15.33 BNPP Amendment and Default Conditional Waiver

An amendment and default conditional waiver dated 20 September 2018 from BNPP to Kropz Elandsfontein, pursuant to which BNPP agreed, subject to the satisfaction of certain conditions including Admission and the Company granting a fixed change over its US$ denominated bank account, to permanently waive the non-payment event of default and the project completion event of default under the Elandsfontein Phosphate Project Facility Agreement, and to make certain consequential amendments to the facility (as further described at paragraph 15.34 of this Part X). The amendment and default waiver is, conditional on, *inter alia*, Admission.

In addition, pursuant to the amendment and default conditional waiver, Kropz Elandsfontein, the ARC Fund, Kropz Plc and Kropz SA must satisfy certain conditions subsequent within 30 days of Admission including (i) granting BNPP a shareholder limited recourse guarantee and shareholder pledge and cession agreement; (ii) entering into an amended and restated subordination and share retention agreement; (iii) providing any other documentation

necessary to perfect the security granted by the shareholder limited recourse guarantee and shareholder pledge and cession agreement; and (iv) providing all legal opinions required by BNPP in relation to the above actions.

15.34 BNPP Facility Agreement

A facility agreement dated 13 September 2016 between Kropz Elandsfontein (1) and BNPP (2) (as amended by the BNPP amendment and default conditional waiver dated 20 September 2018 with effect from Admission), pursuant to which BNPP agreed to provide a term loan facility to Kropz Elandsfontein in an aggregate amount not exceeding US$30,000,000 to be used for the development, construction and operation of the Elandsfontein Project and for general working capital requirements. Under the terms of the facility agreement certain encumbrances and pledges were concluded between Kropz Elandsfontein and BNPP on 20 October 2016 in respect to certain assets of Kropz Elandsfontein including: (i) a security cession of project documents; (ii) a security cession of accounts; (iii) a security cession of authorisations; (iv) a security cession of claims; and (v) a security cession of insurance and a guarantee.

Under the terms of the facility agreement Kropz Elandsfontein must pay BNPP a fee of 1.5 per cent. per annum in instalments of three months. Kropz Elandsfontein is obliged to repay the loan in eight quarterly instalments, the first of which is payable on 31 March 2020 and, in addition, must make mandatory prepayments on the first repayment date and each of 30 June and 31 December thereafter ("**Calculation Date**") of an amount equal to 50 per cent. of the excess cash flow for the six month period ending on the relevant Calculation Date.

15.35 Side Agreement to the Land Use and Compensation Agreement

A side agreement dated 20 October 2016 between ELH (1), Kropz Elandsfontein (2) and BNPP (3), pursuant to which Kropz Elandsfontein ceded their rights, title and interest in, to and under the Land Use and Compensation Agreement, and mortgaged the Mining Right, by way of security to BNPP.

15.36 Subordination and Share Retention Agreement

A subordination and share retention agreement (as amended and restated on or around the date of this document) between Kropz SA (1), the ARC Fund (2), Kropz PLC (3), ELH (4), Kropz Elandsfontein (5) and BNPP (6), pursuant to which the shareholders of ELH and Kropz Elandsfontein agreed to subordinate all of their respective claims in favour of BNPP and agreed that they will not permit a change of shareholding of ELH and Kropz Elandsfontein, save pursuant to the terms of the shareholders' agreements described at paragraph 15.41, or until all obligations under the BNPP facility agreement, described at paragraph 15.34 of this Part X, have been discharged.

15.37 Shareholder Limited Recourse Guarantee and Shareholder Pledge and Cession Agreement

A shareholder limited recourse guarantee and shareholder pledge and cession agreement dated 20 October 2016 between Kropz SA (1) and BNPP (2), pursuant to which Kropz SA guarantees the performance of Kropz Elandsfontein's obligations to BNPP under the BNPP facility agreement.

Contracts relating to the ARC Investment and ARC Shareholders' Agreements

15.38 Subscription and Option Agreement

A subscription and option agreement dated 12 April 2016 between African Rainbow Capital (1), Kropz International (2), Kropz SA (3), Nuland Limited (4), ELH (5), West Coast Fertilizer (6) and Xsando (7), pursuant to which ARC subscribed for shares in each of Kropz Elandsfontein, West Coast Fertilizer and Xsando for an aggregate amount of R260.

Pursuant to the subscription and option agreement ARC was granted an option to acquire an effective 30 per cent. interest in any business beneficiating products mined by Elandsfontein Exploration pursuant to the Mining Right (excluding any beneficiation undertaken by Xsando and WCF).

15.39 ZAR70,000,000 Facility Agreement

A ZAR70,000,000 facility agreement dated 7 April 2016 between Tiestabyte (1), ARC (2) and Kropz SA (3), pursuant to which African Rainbow Capital and Kropz SA, acting together, made available to Tiestabyte a facility in an aggregate amount totalling ZAR70,000,000, for the purpose of fulfilling Tiestabyte's obligations to advance shareholder loans to Kropz Elandsfontein.

Pursuant to the Tiestabyte Sale of Shares and Claims Agreement (described at paragraph 15.19 of this Part X), Tiestabyte ceded, delegated and assigned to the ARC Fund all its rights and obligations under the ZAR70,000,000 facility agreement.

15.40 Guarantee

A guarantee dated 12 April 2016 from Kropz International (1) and Kropz SA (2) in favour of African Rainbow Capital (3), pursuant to which Kropz International and Kropz SA each guaranteed the obligations, warranties, duties, undertakings and liabilities of Tiestabyte under the sale of share agreement dated 7 April 2016 entered into between, *inter alia*, ARC and Tiestabyte in relation to the sale and purchase by ARC of 25 per cent. of the shares held by Tiestabyte in Kropz Elandsfontein.

Kropz International guaranteed the obligations of Kropz SA under the ARC Shareholders' Agreements, the ZAR70,000,000 facility agreement, the Subscription and Option Agreement and the Cession (in securitatem debit) and pledge agreement to secure Tiestabyte's obligations to African Rainbow Capital and Kropz SA in terms of the ZAR70,000,000 facility agreement.

15.41 Amended and Restated ELH and Kropz Elandsfontein Shareholders Agreement

The respective amended and restated ELH and Kropz Elandsfontein shareholders agreements dated on or around the date of this document between the Company (1), Kropz SA (2) and the ARC Fund (3) and the amended and restated Xsando shareholder agreement dated on or around the date of this document between Kropz SA (1) and the ARC Fund (2) (collectively, the "**Shareholders' Agreements**"). The Shareholders' Agreements will, in addition to regulating the relationships between the shareholders generally, contain the following provisions, amongst others:

ELH and Xsando, in seeking additional finances to fund its respective activities, shall procure these additional finances (i) firstly, from each of its own resources; (ii) secondly, by way of loans or other financial assistance from institutions or third parties on commercially acceptable terms; and (iii) thirdly, by way of shareholder loans, in proportion to each shareholder's shareholding in ELH or Xsando, as applicable. Where a shareholder does not provide its *pro rata* proportion of the shareholder loan then, amongst other things, the non-defaulting shareholders have the election, subject to the terms and conditions set out, to subscribe for such number of shares at nominal price as results in their shareholdings being in the same proportion as their respective loan accounts.

The Company will immediately following the IPO, provide Kropz Elandsfontein with funding via the Class A Preference Share Facility (which will rank ahead of the ordinary shares and shareholder loans in Kropz Elandsfontein, but behind all other debt in Kropz Elandsfontein), with a subscription of US$1million per share (with the potential to do multiple subscriptions). There will be no obligation on any of the other shareholders in Kropz Elandsfontein to match this Preference Share funding up to a maximum of US$32 million. In seeking additional finances to fund its activities, the same provisions as set out above for ELH and Xsando, will apply. Further details of the Class A Preference Shares are set out in paragraph 15.15 above.

Where either ELH or Kropz Elandsfontein are funded by shareholder loans, the following terms (amongst others) shall apply:

(i) in respect of loans advanced by the Company, such loans (i) shall be USD denominated; (ii) shall carry interest at monthly LIBOR plus 3 per cent; and (iii) be repayable by no later than 1 January 2035 (or such earlier date as agreed between the parties to the shareholder agreements); and

(ii) in respect of loans advanced by the ARC Fund, such loans shall be (i) USD denominated but any payments will be made in ZAR at the then current exchange rate; (ii) shall carry interest at monthly LIBOR plus 3 per cent; and (iii) be repayable by no later than 1 January 2035 (or such earlier date as agreed between the parties to the shareholder agreements).

Where Xsando is funded by a shareholder loan advanced by the ARC Fund, amongst other terms such loans shall be: (i) ZAR denominated; (ii) shall carry interest at JIBAR plus 3 per cent. and; (iii) be repayable by no later than 1 January 2035 (or such earlier date as agreed between the parties to the shareholder agreements).

The shareholders agree not to sell, encumber or otherwise dispose of any interest in their respective shares, except in accordance with the pre-emption, tag-along and come-along rights as set out in terms of the provisions of the relevant Shareholders Agreements.

The ELH and Kropz Elandsfontein shareholders agree to a put option in favour of ARC Fund to the effect that, in the event that a trigger event (which includes customary insolvency events and material breaches of the respective shareholders' agreement) occurs in relation to Kropz SA and/or the Company (''**Kropz Parties**''), the ARC Fund can require the Kropz Parties, jointly and severally, to purchase the whole (but not part) of its shares in ELH or Kropz Elandsfontein (as applicable) at a 20 per cent. premium to fair market value and the whole of its loan account (if any) at face value.

The ELH and Kropz Elandsfontein shareholders agree to a call option in favour of the Kropz Parties to the effect that, in the event that a trigger event (which includes customary insolvency events and material breaches of the respective shareholders' agreement) occurs in relation to the ARC Fund, the Kropz Parties can require the ARC Fund to sell to Kropz SA and/or the Company the whole (but not part) of its shares in ELH or Kropz Elandsfontein (as applicable) at a 20 per cent. discount to fair market value and the whole of its loan account (if any) at face value.

In respect of Xsando:

- Kropz SA agrees to a put option in favour of the ARC Fund to the effect that, in the event that a trigger event (which includes customary insolvency events and material breaches of the respective shareholders' agreement) occurs in relation to Kropz SA, the ARC Fund can require that Kropz SA purchases the whole (but not part) of its shares in Xsando at a 20 per cent. premium to fair market value and the whole of its loan account (if any) at face value.
- The ARC Fund agrees to a call option in favour of Kropz SA to the effect that, in the event that a trigger event (which includes customary insolvency events and material breaches of the respective shareholders' agreement) occurs in relation to the ARC Fund, Kropz SA can require the ARC Fund to sell to Kropz SA the whole (but not part) of its shares in Xsando at a 20 per cent. discount to fair market value and the whole of its loan account (if any) at face value.

15.42 West Coast Fertilizer Shareholders' Agreement

A shareholders' agreement, on similar terms to the ELH shareholders' agreements, dated 7 April 2016 between Kropz SA (1), African Rainbow Capital (2) and Tiestabyte (3) in respect of West Coast Fertilizer.

Pursuant to a deed of adherance dated 6 September 2017, the ARC Fund agreed to perform and be bound by all provisions of the shareholders' agreement.

15.43 FGE Shareholders' Agreement

A shareholders' agreement dated on or around the date of this document between the Company (1), Kropz International (2), Thomas Amoah (3) and Russell Brooks (4), pursuant to which the parties agreed the basis on which FGE would finance its activities: (i) firstly, from its own resources; (ii) secondly, by loans or other financial assistance from financial institutions on commercial acceptable terms; and (iii) thirdly, by way of shareholder loans, in proportion to the shareholders' shareholding in FGE respectively. Pursuant to the agreement Thomas Amoah and Russell Brooks would have a free carry for the first year after which they would need to participate pro rata to their holding. If a shareholder does not provide its

pro rata proportion then the non-defaulting shareholders have the election to subscribe for such number of shares at nominal price as results in their shareholdings being in the same proportion as their respective loan accounts.

The shareholders' agreement contain provisions, amongst others, to the following effect:

(i) a right of first refusal on transfers of shares in favour of the Company;

(ii) the shareholders agreed not to sell, encumber or otherwise dispose of any interest in shares except in accordance with the pre-emption and drag provisions in the shareholders' agreement; and

(iii) a call option to the effect that, in the event that a trigger event occurs in relation to Kropz International, Thomas Amoah and Russell Brooks, the Company can require Kropz International, Thomas Amoah and Russell Brooks (as the case may be) to sell the whole (but not part) of its shares in FGE (at a purchase price equal to 80 per cent. of the fair market value) and the whole of its loan account (if any) (at face value).

Contracts relating to the construction of the Elandsfontein Phosphate Mine

15.44 EPCM Services Contract

An agreement for the supply of professional project management services for the Elandsfontein phosphate concentrator project dated 19 February 2015 between Kropz Elandsfontein (1) and DRA (2) pursuant to which DRA rendered engineering, procurement, construction and management services for the Elandsfontein phosphate concentrator project.

An outstanding works list was published on 16 February 2018 and the closure notice is still outstanding. The outstanding works will be completed during the construction stage for the required plant modifications.

Contracts relating to the Cominco Group

15.45 Hinda Exploitation Licence

A mining exploitation licence for phosphates, on a surface of 263.68 km^2, called ''Hinda-Phosphates'', granted through Decree n° 2015-975 of 7 December 2015, duly published in the Official Gazette on 17 December 2015, which expires on 16 December 2040, subject to its renewal for maximum periods of 15 years each.

15.46 Hinda Exploitation Convention

A mining investment convention signed with, *inter alia*, the Republic of Congo and which is effective from 10 June 2018. Operations conducted within the framework of the Hinda Exploitation Licence are duly regulated by the Hinda Exploitation Convention. The Hinda Exploitation Convention is effective since its signature date (10 June 2018) and expires at the same time as the Hinda Exploitation Licence (16 December 2040, subject to the said licence's renewals, which will automatically trigger the prolongation of the Hinda Exploitation Convention for the same duration). Under the Hinda Investment Convention, the only legitimate cause of withdrawal of the Hinda Exploitation Licence is the termination of the said Convention by the Republic of Congo due to Cominco S.A. failing to pay the mining royalty for more than 6 months from receipt of a default notification.

15.47 Exclusivity Agreement

An exclusivity agreement dated 10 August 2018 between the Company (1), Cominco (2) and certain Cominco Shareholders representing approximately 70 per cent. of the Cominco Shares (3), pursuant to which the parties agreed to enter into exclusive discussions in respect to the Acquisition until 31 October 2018 and the Company agreed to pay Cominco a non-refundable (except in certain limited circumstances) working capital contribution of US$100k per month until the earlier of Admission or the 31 October 2018.

15.48 Consultancy Agreement

A consultancy agreement dated 24 October 2018 between Colin Ikin (1) and the Company (2) (as novated from the Company to Kropz International on 27 November 2018) conditional on (i) Colin Ikin providing or procuring the delivery of an irrevocable undertaking to accept the Offer, (ii) Colin Ikin accepting or procuring the acceptance of the Offer and delivering a duly completed form of acceptance in accordance with the terms and conditions of the Offer; and (iii) Admission (conditions (i) and (ii) having been satisfied at the date of this document), pursuant to which Colin Ikin has agreed to provide the following consultancy service to the

Company in respect to assisting with the orderly transition following the acquisition of Cominco and supporting the Company with obtaining the best possible shipping rates for the Enlarged Group's product. The engagement is for a period of 6 months from Admission and subject to a fee of £100,000 per month.

On or around the date of this document, Kropz International's rights, title, interest and benefit in and to the consultancy agreement were assigned to the Company.

Contracts relating to the Aflao Phosphate Project

15.49 Aflao Prospecting Right

A prospecting right and licence for phosphate on a surface of 131.93km^2 granted by the Minister for Lands and Natural Resources for and on behalf of the Government of Ghana with PR Number PL. 4/15, which commenced on 12 October 2018 and which expires on 11 October 2021, subject to its renewal for a maximum period of two years.

16. RELATED PARTY TRANSACTIONS

16.1 Save as set out in paragraphs 15.13, 15.14, 15.16, 15.17, 15.18 and 15.20 of this Part X, the Company has not entered into any related party transactions since 10 January 2018, being the date of incorporation.

16.2 Save as set out below, and the related party transactions set out in Section A of Part VII (*Accountants' Report and the Aggregated Historical Financial Information on the Subsidiaries of Kropz plc*) and in Section A of Part VIII (*Independent Review Report and the Aggregated Interim Financial Information of the Subsidiaries of Kropz plc*) of this document, the Subsidiaries have not entered any related party transactions during the period covered by the historical financial information and up until the date of this document.

On 15 May 2018, Kropz S.A. and Mwanzoleo Proprietary Limited (a company related to Mike Nunn) entered into a sale of rental enterprise agreement in terms of which, inter alia, Kropz SA sold the rental enterprise conducted by it and the property situated at Unit D Floor 3, Matrix Building, No. 8 Bridgeway, Bridgeways Precinct, Century City for a purchase price of R8,200,000.

16.3 Save as set out in the related party transactions set out in Section B of Part VII (*Accountants' Report and Historical Financial Information of the Cominco Group*) and in Section B of Part VIII (*Independent Review Report and the Interim Financial Information of the Cominco Group*) of this document, no members of the Cominco Group has entered in to any related party transactions during the period covered by the historical financial information and up until the date of this document.

17. LITIGATION

17.1 There are currently two pending High Court applications in the Western Cape High Court of South Africa and an internal administrative appeal which is pending before the Water Tribunal. The applicant and appellant in all three matters is the same – a small group of local residents that are opposed to the Elandsfontein Phosphate Project. The first High Court application seeks an order compelling the Minister to take a decision on an appeal by the same applicant against the grant of the Mining Right. The appeal was pending before the Minister for over two years before the Minister rejected the appeal in a decision dated 14 December 2017. This renders the bulk of the relief sought by the applicant in that case moot and the advice given to the applicant will now need to supplement its application papers or bring a new application seeking the judicial review of the Minister's appeal decision if it wants to proceed with the litigation. In the second High Court application the applicant sought to interdict, on an urgent basis, the water use activities authorised in the integrated WUL on the basis that they were automatically suspended by their appeal to the water tribunal. That interdictory relief was subsequently abandoned by the application and, in any event, became moot in the light of the Minister of Water Affair's decision on 11 December 2017 to lift the suspension of the integrated WUL. The administrative appeal currently pending before the Water Tribunal also seeks the setting aside of the mine's integrated WUL. Kropz has submitted comprehensive responding submissions; however, the water tribunal has yet to set the appeal down for hearing. Pending the water tribunal's decision, there is no legal impediment to the continuation with the water use activities authorised in the integrated WUL.

17.2 On 23 October 2017, S.M.E.I Proprietary Limited ("**S.M.E.I**") issued a letter of demand and subsequently, on 12 April 2018, served a motion for the provisional liquidation of Kropz Elandsfontein, in respect of a claim in the amount of R36,146,588.66 (including VAT and interest) ("**Outstanding Amount**") due by Kropz Elandsfontein to S.M.E.I arising from two contracts in respect of (i) structural, mechanical and plate works and (ii) supply and installation piping works. The parties have reached a settlement the terms of which are embodied in a signed acknowlegement of the debt agreement effective from 8 August 2018 in terms of which Kropz Elandsfontein has agreed to make interim payments to S.M.E.I in respect of the Outstanding Amount subject to which, payment in full of the balance will be made out of the Placing proceeds, within 14 days of Admission. The Company has agreed to guarantee Kropz Elandsfontein's obligations in relation to the Outstanding Amount.

17.3 Cominco S.A is in litigation before the Labour Court in Congo, as a result of an action taken by 11 former employees, following their retrenchment in September 2015, to challenge such retrenchment's authorisation, which was duly granted by the local regulator (the Dispute Commission). The claimants are requesting Cominco S.A. to pay additional total compensation of XAF 67,000,000 (approximately £92,000).

There have been several postponements of the Court hearing and the Labour Court has not yet ruled on the case. Cominco's view is that the retrenchment's authorization was validly granted as the applicable procedure was fully complied with. Cominco's legal counsel is of the view that the Court will rule in Cominco S.A.'s favour.

17.4 Other than the litigation mentioned above, no member of the Enlarged Group is or has been involved in any governmental, legal or arbitration proceedings, and the Company is not aware of any such proceedings pending or threatened by or against any member of the Enlarged Group, which may have or have had during the twelve months preceding the date of this document a significant effect on the financial position or profitability of the Enlarged Group.

18. NO SIGNIFICANT CHANGE

Save for the Placing, Subscription, the Acquisition and Admission and as disclosed in this document, there has been no significant change in the financial or trading position of the Enlarged Group since 31 December 2017, being the date to which its last audited accounts were prepared.

19. WORKING CAPITAL

The Directors are of the opinion, having made due and careful enquiry, and taking into account the net proceeds of the Placing and Subscription, the working capital available to the Company and the Enlarged Group will be sufficient for its present requirements, that is for at least 12 months from the date of Admission.

20. TAXATION

20.1 Introduction

The following paragraphs are intended as a general guide only to the United Kingdom tax position of Shareholders who are the beneficial owners of Ordinary Shares in the Company who are United Kingdom tax resident and, in the case of individuals, domiciled in the United Kingdom for tax purposes and who hold their shares as investments (other than under an Individual Savings Account (ISA)) only and not as securities to be realised in the course of a trade.

Certain Shareholders, such as dealers in securities, traders, brokers, bankers, persons connected with the Company, collective investment schemes, insurance companies and persons acquiring their Ordinary Shares in connection with their (or another person's) employment or as an office holder may be taxed differently and are not considered. Furthermore, the following paragraphs do not apply to:

- prospective investors who intend to acquire Ordinary Shares as part of a tax avoidance arrangement; or
- persons with special tax treatment such as pension funds or charities.

Any prospective purchaser of Ordinary Shares in the Company who is in any doubt about their tax position or who is subject to taxation or who is tax resident and/or domiciled in a jurisdiction other than the United Kingdom should consult their own professional adviser immediately.

Unless otherwise stated the information in these paragraphs is based on current United Kingdom tax law and published HMRC practice as at the date of this document. Shareholders should note that tax law and interpretation can change (potentially with retrospective effect) and that, in particular, the levels, basis of and reliefs from taxation may change. Such changes may alter the benefits of investment in the Company.

20.2 Income Tax – taxation of dividends

The taxation of dividends paid by the Company and received by a Shareholder resident for tax purposes in the United Kingdom is summarised below.

Individuals tax resident in the United Kingdom

Dividend income is subject to income tax as the top slice of the individual's income. Each individual has an annual Dividend Allowance of £2,000 (2018/19 tax year) which means that they do not have to pay tax on the first £2,000 of all dividend income they receive.

Dividends in excess of the Dividend Allowance are taxed at the individual's marginal rate of tax, with dividends falling within the basic rate band taxable (2018/19 tax year) at 7.5 per cent. (the "**dividend ordinary rate**"), those within the higher rate band taxable at 32.5 per cent. (the "**dividend upper rate**") and those within the additional rate band taxable at 38.1 per cent. (the "**dividend additional rate**").

Trustees of a Discretionary trust tax resident in the United Kingdom

The annual Dividend Allowance available to individuals is not available to trustees. Trustees of a Discretionary trust tax resident in the United Kingdom are liable to income tax at a rate of 38.1 per cent., which mirrors the dividend additional rate applicable to individuals.

United Kingdom tax resident companies

Shareholders that are bodies corporate resident in the United Kingdom for tax purposes, may (subject to anti-avoidance rules) be able to rely on Part 9A of the Corporation Tax Act 2009 to exempt dividends paid by the Company from being chargeable to United Kingdom corporation tax. Such shareholders should seek independent advice with respect to their tax position.

Shareholders not tax resident in the United Kingdom

Generally, under the disregarded income provisions, shareholders who are non-resident in the United Kingdom will not be subject to any United Kingdom taxation in respect of United Kingdom dividend income.

Shareholders who are tax resident in an overseas jurisdiction may be subject to tax on United Kingdom dividend income under any law to which that person is subject outside the United Kingdom.

Shareholders who are non-resident in the United Kingdom should consult their own tax advisers with regard to their liability to taxation in respect of the cash dividend.

Withholding tax

Under current United Kingdom tax legislation no tax is withheld from dividends or redemption proceeds paid by the Company to Shareholders.

20.3 United Kingdom Taxation of capital gains

The following paragraphs summarise the tax position in respect to a disposal of Ordinary Shares by a Shareholder resident for tax purposes in the United Kingdom. To the extent that a Shareholder acquires Ordinary Shares allotted to him, the amount paid for the Ordinary Shares will generally constitute the base cost of the Shareholder's holding.

A disposal of Ordinary Shares by a Shareholder who is resident in the United Kingdom for United Kingdom tax purposes or who is not so resident but carries on business in the United Kingdom through a branch, agency or permanent establishment with which their

investment in the Company is connected may give rise to a chargeable gain or an allowable loss for the purposes of United Kingdom taxation of chargeable gains, depending on the Shareholder's circumstances and subject to any available exemption or relief.

Individuals tax resident in the United Kingdom

Individual Shareholders who are tax resident in the United Kingdom may be subject to capital gains tax on any gain realised (after any available exemptions, reliefs or losses). Capital gains tax is payable (2018/19 tax year) at the rate of 10 per cent. for basic rate taxpayers or 20 per cent. for higher or additional rate taxpayers.

Individual Shareholders who continuously hold their Ordinary Shares for at least three years from their issue date may, on a subsequent disposal of those Ordinary Shares, qualify for ''Investors' relief''. Investors' relief provides for a reduced rate of capital gains tax of 10 per cent on gains realised on the disposal of certain ordinary shares in trading companies, up to a lifetime limit of £10m of gains, subject to various conditions being met by both the investor and investee company.

Trustees of a Discretionary trust tax resident in the United Kingdom

Where the Shareholder is a Trustee of a Discretionary trust tax resident in the United Kingdom, capital gains tax (2018/19 tax year) at the rate of tax of 20 per cent. may be payable on any gain (after any available exemptions, reliefs or losses).

Companies resident in the United Kingdom

For Shareholders that are bodies corporate and resident in the United Kingdom, any gain may be within the charge to corporation tax.

Shareholders not tax resident in the United Kingdom

Shareholders who are not tax resident in the United Kingdom will not normally be liable to United Kingdom taxation on gains realised on the disposal of shares unless the Shareholder is trading in the United Kingdom through a branch, agency or permanent establishment and the Ordinary Shares are used or held for the purposes of the branch, agency or permanent establishment.

If an individual has been tax resident in the UK in the previous 5 years the position may differ and they should consult their own professional adviser.

20.4 Stamp duty and stamp duty reserve tax (SDRT)

No United Kingdom stamp duty or SDRT should be payable on the issue or allotment of Ordinary Shares pursuant to the Subscription, nor on subsequent transfers or agreements to transfer Ordinary Shares by virtue of the exemption from 28 April 2014 from stamp duty and SDRT on shares traded on AIM.

The statements in this paragraph 20.4 applies to any holders of Ordinary Shares irrespective of their residence and are intended to be a general guide to the current stamp duty and SDRT position.

20.5 Inheritance Tax

Shares in AIM quoted companies that are either trading companies or a holding company of a trading group may after a 2 year holding period qualify for 100 per cent. Business Property Relief for United Kingdom inheritance tax purposes, subject to the detailed conditions for the relief.

21. GENERAL

21.1 The net proceeds of the Placing and Subscription are expected to be US$32 million (approximately £25 million). The total costs and expenses relating to Admission are payable by the Company and are estimated to amount to approximately US$3 million (approximately £2.3 million) (excluding VAT).

21.2 Save in connection with the application for Admission, none of the Ordinary Shares has been admitted to dealings on any recognised exchange and no application for such admission has been made and it is not intended to make any other arrangements for dealings in the Ordinary Shares on any such exchange.

21.3 Mazars who are authorised and regulated by the Institute of Chartered Accountants in England and Wales has given and not withdrawn its written consent to the inclusion in this document of its reports in (i) Section A of Part VII (*Accountants' Report and the Aggregated Historical Financial Information of the Subsidiaries of Kropz plc*); (ii) Section B of Part VII (*Accountants' Report and Historical Financial Information of the Cominco Group*); (iii) Section A of Part VIII (*Independent Review Report and the Aggregated Interim Financial Information of the Subsidiaries of Kropz plc*); (iv) Section B of Part VIII (*Independent Review Report and the Interim Financial Information of the Cominco Group*); and (v) Part IX (*Accountants' Report and Unaudited Pro Forma Statement of Net Assets of the Enlarged Group*).

21.4 The nominated adviser to the Company is Grant Thornton which is authorised and regulated by the Financial Conduct Authority. Grant Thornton has given and not withdrawn its written consent to the inclusion in this document of reference to its name in the form and context in which it appears.

21.5 H&P has given and not withdrawn its written consent to the inclusion in this document of reference to its name in the form and context in which it appears.

21.6 Mirabaud has given and not withdrawn its written consent to the inclusion in this document of reference to its name in the form and context in which it appears.

21.7 CRU has given and not withdrawn its written consent to the inclusion in this document of its report in Part IV (*Phosphate Market Report*) of this document and references to its report in other sections of this document, in the form and context in which they are included.

21.8 SRK (SA) (in its capacity as competent person) has given and not withdrawn its written consent to the inclusion in this document of its report in Section A of Part VI (*Elandsfontein Competent Person's Report*) of this document and references to its report in other sections of this document in the form and context in which they are included.

21.9 SRK (UK) (in its capacity as competent person) has given and not withdrawn its written consent to the inclusion in this document of its report in Section B of Part VI (*Hinda Competent Person's Report*) of this document and references to its report in other sections of this document in the form and context in which they are included.

21.10 Snowden (in its capacity as competent person) has given and not withdrawn its written consent to the inclusion in this document of its report in Section C of Part VI (*Aflao Competent Person's Report*) of this document and references to its report in other sections of this document in the form and context in which they are included.

21.11 Save as disclosed in this document, no person (other than the Company's professional advisers named in this document and trade suppliers) has at any time within the 12 months preceding the date of this document received, directly or indirectly, from the Company or entered into any contractual arrangements to receive, directly or indirectly, from the Company on or after Admission any fees, securities in the Company or any other benefit to the value of £10,000 or more.

21.12 The Shares are in registered form and will, following Admission, be capable of being held in uncertificated form. Prior to the despatch of share certificates following the Placing, transfers will be certified against the register of members. The Company has applied to Euroclear UK & Ireland Limited, the operator of CREST, for the Shares to be admitted to CREST with effect from Admission and Euroclear UK and Ireland Limited has agreed to such admission. CREST is a paperless settlement procedure enabling securities to be evidenced otherwise than by certificate and transferred otherwise than by written instrument. The Articles permit the holding of ordinary shares under CREST. CREST is a voluntary system and holders of Shares who wish to retain share certificates will be able to do so. It is expected that definitive certificates will be posted by the Registrar to those Shareholders who are to receive their Placing Shares in certificated form.

21.13 No person has made a public takeover bid for the Company's issued share capital since the Company's incorporation and the Company is not aware of the existence of any takeover pursuant to the rules of the City Code.

21.14 Save as disclosed in this document, there have been no principal investments made by the Company during the last three financial years.

21.15 Save as disclosed in this document, the Company is not dependent on any patents, licences, industrial or commercial or financial contracts or new manufacturing processes which have a material effect on the Company's business or profitability.

21.16 Save as disclosed in this document, there are no environmental issues that the Directors have determined may affect the Company's utilisation of tangible fixed assets and the Directors have not identified any events that have occurred since the end of the last financial year and which are considered to be likely have a material effect on the Company's prospects for the current financial year.

21.17 Save as disclosed in this document, there are no trends, uncertainties, demands, commitments or events that are reasonably likely to have a material effect on the Company's prospects for at least the current financial year.

21.18 There are no arrangements under which future dividends are waived or agreed to be waived.

21.19 Since the date of its incorporation on 10 January 2018, the Company has not yet commenced operations and it has no material assets or liabilities, and therefore no financial statements have been prepared as at the date of this document.

21.20 The Company confirms that where information in this document has been sourced from a third party, it has been accurately reproduced and the source of the information has been identified. So far as the Company is aware and able to ascertain from the information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading.

21.21 The accounting reference date of the Company is 31 December. The current accounting period will end on 31 December 2018.

21.22 The Placing Price of 40 pence represents a premium of 39.9 pence over the nominal value of 0.1 pence per Ordinary Share.

22. AVAILABILITY OF ADMISSION DOCUMENT

Copies of this Admission Document are available for download from the Company's website at www.kropz.com and are available free of charge at the registered offices of the Company during normal business hours on any weekday (Saturdays and public holidays excepted), and shall remain available for at least one month after Admission.

Dated: 27 November 2018

Black&Callow — c114687

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