



CSA Global
Mining Industry Consultants
an ERM Group company

Mila Resources Kathleen Valley Project

COMPETENT PERSONS REPORT

REPORT N° R189.2021
12 September 2021



Report prepared for

Client Name	Mila Resources plc
Project Name/Job Code	Kathleen Valley Project
Contact Name	Mark Stephenson
Contact Title	MD
Office Address	Lockstrood Farm, Ditchling Common, Burgess Hill RH15 0SJ

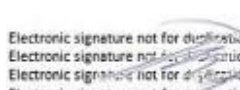
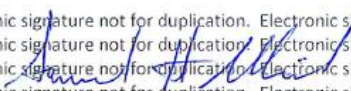
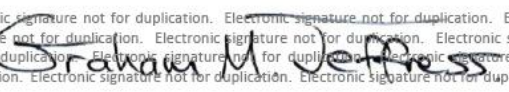
Report issued by

CSA Global Office	CSA Global Pty Ltd Level 2, 3 Ord Street West Perth WA 6005 AUSTRALIA T +61 8 9355 1677 F +61 8 9355 1977 E info@csaglobal.com
Division	Corporate

Report information

Filename	R189.2021 NGMCPR02 NGM CPR Kathleen Valley-marked 12 September 2021
Last Edited	10/24/2021
Report Status	Final

Author and Reviewer Signatures

Coordinating Author and Competent Person	Tony Donaghy BSc (Hons), Associate Diploma of Civil Engineering, P.Geo	 Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.
Peer Reviewer	Sam Ulrich BSc (Hons), GDipAppFin, MAusIMM, MAIG, FFin	 Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.
CSA Global Authorisation	Graham M. Jeffress BSc (Hons), RPGeo, FAIG, FAusIMM, FSEG	 Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.

© Copyright 2021

Executive Summary

The effective date of this CPR is the 12th of September 2021. Mila has entered into a conditional agreement to acquire an initial 30% interest in the Kathleen Valley gold project from Trans Pacific Energy Limited (“TPE”), a wholly owned subsidiary of New Generation Minerals (“NGM”), for consideration of £3,750,000 by way of issuing new ordinary shares in the Company, £300,000 in cash consideration and the novation of the Series 3 Convertible Loan Note Instrument from NGM to the Company.

Conditional on the successful completion of 11,000 metres drilling at Kathleen Valley, the Company will have a right to acquire a further 25% interest in the Kathleen Valley Project from TPE for consideration of £3,125,000 by way of issuing new ordinary shares in the Company. Finally, and conditional on a second spend by the Company of not less than £1,500,000, the Company will have a right to acquire a further 25% interest in the Kathleen Valley Project held by TPE for consideration of £3,125,000 by way of issuing new ordinary shares in the Company. The transaction is subject to satisfactory due diligence, approvals, and fundraising.

The Kathleen Valley Project (“Kathleen Valley”) in Western Australia (“the Project”) will be the key focus for exploration activities for the next two years.

Kathleen Valley Project

The Kathleen Valley Project is located approximately 650 km northeast of Perth and 30 km north of the township of Leinster in Western Australia (Figure 11). The project consists of a single exploration licence (E36/876), covering an area of approximately 7.25 km².

The project area is in the Kalgoorlie Terrane within the Eastern Goldfields Super Terrane of the Archaean Yilgarn Craton. Greenstone belts in the region include part of the Agnew Greenstone Belt, the Mount Keith–Perseverance Greenstone Belt and the Yakabindie Greenstone Belt.

The project is at the greenfields stage of exploration. The primary exploration targets are volcanic-hosted massive sulphide (VMS) zinc, magmatic nickel-copper, Archaean orogenic gold, and pegmatite-hosted lithium. While an Inferred Mineral Resource and Exploration Target have been estimated for the project, these represent the least confidence level in Mineral Resource Estimation. Significant work needs to be carried out before the potential of the project to host sufficient material to be economic for mineral extraction can be determined. The programs of work proposed by Mila are designed to test that potential.

Gold has been mined in the area since the 1890s with most of the early production coming from the Kathleen Valley (4 km north of the project area) and Sir Samuel (5 km south of the project area) mining centres.

Southern Geoscience Consultants (SGC) highlighted a late-channel Versatile Time Domain Electromagnetic (VTEM) and surface Fixed-Loop Transient Electromagnetic (FLTEM) conductivity anomaly in the southwest corner of the tenement area. It has a relatively large areal size approximately 400 m x 125 m and is interpreted to be centred at a depth approximately 100–125 m below surface. The source of the bedrock conductor has been confirmed by drilling of 12 reverse circulation percussion (RCP) holes by NGM as massive sulphide lenses hosting anomalous zinc, gold, and silver.

Based on the RCP drill program, NGM has estimated JORC (2012) compliant Inferred Mineral Resources and an Exploration Target as follows.

Table 1: *Inferred Mineral Resource estimate for the Kathleen Valley gold-zinc-silver mineralisation*

Cut-off Au g/t	Volume	Tonnes	Au g/t	Au oz	Ag g/t	As ppm	Cu ppm	Pb ppm	S %	Zn %
0.5	113,000	327,000	2.0	21,000	5.0	2,970	530	490	5.8	1.2
1.0	107,000	311,000	2.1	20,600	5.0	3,050	530	500	5.7	1.2

Source: Maddox (2021)

Table 2: Exploration Target estimate for the Kathleen Valley gold mineralisation

Tonnage range		Grade range – Au g/t		Au oz range	
2,500,000	3,500,000	1.8	2.5	145,000	280,000

Source: Maddox (2021)

Section 4.7 of this report details the methodology and assumptions made to estimate the Mineral Resources and Exploration Target. The Exploration Target is based on a range of potentially expected widths and grades of gold within the highlighted area. The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the exploration target itself will be realised.

While the results are strongly encouraging for gold-silver-zinc potential, more exploration work needs to be done before confidence can be established in grade continuity in order to advance a Mineral Resource estimate.

Mila will further drill test the Exploration Target to assess the interpretation that it represents a buried VMS system with potential for an orogenic gold overprint.

Pegmatite dykes are common in the project region (Figure 12), with strikes mapped up to 200 m in length. Work by previous explorers suggests the pegmatites are for the most part narrow, with widths generally less than 10 m.

Exploration by Jubilee Mines NL in 1998 and 2000 included rock chip results from pegmatites approximately 200–300 m north of the present E36/876 northern tenement boundary that returned results of 0.89% Li₂O, 0.92% Li₂O, 1.01% Li₂O, and 1.09% Li₂O (Figure 12 – Source: Kelly, 2002).

Recent lithium exploration work by ASX-listed explorer Liontown Resources (ASX:LTR) at Kathleen’s Corner and Mount Mann, immediately north of E36/876, has identified a lithium Mineral Resource estimate of 21 Mt at 1.4% Li₂O and 170 ppm Ta₂O₅, at a 0.5% Li₂O cut-off, in spodumene-bearing pegmatites (Figure 12 – LTR ASX announcement, 4 September 2018).

The source granite of this pegmatite field is yet to be determined; however, the large granite batholith to the northwest and west of the Liontown Resources and Mila projects comprises pegmatitic monzogranite, a type of granite that is proving to be related to lithium deposits elsewhere in Western Australia. Due to thermodynamic constraints on mineralisation related to pegmatites around such granite masses, lithium-bearing minerals form within pegmatites within a well-defined radius of the source granite. The situation of the pegmatites at Kathleen Valley in relation to this monzogranite is comparable to those of the lithium mineralised pegmatites mentioned above and is encouraging for exploration. Although the only three samples analysed to date evidence lepidolite as the main lithium host within the project pegmatites (grades up to 3.41% Li₂O), and no spodumene has been observed to date, CSA Global believes the project still has good potential for hosting spodumene (lithium) bearing pegmatites.

The presence of significant gold, silver and zinc on the tenement is encouraging. Previous exploration has not ruled out the possibility for blind mineralised systems where the gold does not intersect the base of oxidation in the regolith profile. The significant gold, silver and zinc intersected by NGM in a system blind to surface demonstrates potential exists under the areas to the north under the soil gold anomalies.

Technical Risks

A key risk, common to all exploration companies, is that the expected mineralisation may not be present or that it may be too small to warrant commercial exploitation. The Project is early stage, and significant exploration is still required to determine the likelihood of discovery. If a discovery is made, significant work programs are still required to test the potential of that discovery for economic mineral extraction. Such work programs are typically stage gated with the aim of decreasing uncertainty and risk at each stage towards a decision point whether mining is economically viable. While good potential exists on the Project for discovery, the Project currently resides at the high uncertainty, and therefore high risk, end of the spectrum

of that stage gated work process. The work programs to be undertaken by Mila are designed to increase certainty and mitigate risks. However, such is the nature of exploration that positive results cannot be guaranteed.

The interpretations and conclusions reached in this report are based on current scientific understanding and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for absolute certainty.

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond CSA Global’s control and that CSA Global cannot anticipate. Any of these factors may substantially alter the performance of any exploration operation.

Native title has been determined over the Kathleen Valley project. Access and exploration activity must be cleared with the native title holders before work can commence.

Planned Work

The planned exploration activity on the Project is summarised and reviewed in Section 6. CSA Global has reviewed the exploration program and believes the program is appropriate. CSA Global endorses this exploration approach exploring for the styles of mineralisation targeted. The program is reasonable given the targets to be tested and the operational logistics of exploration activity in the project area. In addition, CSA Global has made recommendations for exploration activity for the Project.

Mila provided CSA Global with a copy of their planned expenditure for the Project for 2021 (Table 3). All costs included are in Great British Pounds (GBP£) as converted from local Australian Dollar cost estimates using an exchange rate of GBP£0.55 : A\$1.00.

Table 3: Summary of Mila Kathleen Valley planned exploration expenditure, 2021.

GBP	Main Target	Northern Targets	Total
	11,110		
Meterage	m	2,400 m	13,510 m
RC Drilling	£ 295,971	£ 58,656	£ 354,627
DD Drilling	£ 442,684		£ 442,684
Assay and cutting	£ 99,337	£ 19,687	£ 119,024
Site Operational Costs	£ 218,745	£ 43,351	£ 262,096
Geophysics and JORC	£ 203,500	£ 40,330	£ 243,830
Contingency	£ 126,024	£ 24,976	£ 150,999
	£ 1,386,261	£ 187,000	£ 1,573,261

**JORC costs include cost items such as geological interpretation, data management, potential resource estimation and compliant reporting.*

In Table 3, the main target refers to the zone described in the JORC report and the northern targets refer to new areas of interest to the north within the Kathleen Valley project tenement.

The proposed budget is considered consistent with the exploration potential of Mila’s Project and is considered adequate to cover the costs of the proposed program. The budgeted expenditure is also considered sufficient to meet the minimum statutory expenditure on the tenement.

The mineral property held by Mila is considered to be an “exploration project” that is intrinsically speculative in nature. The Project is at the “advanced exploration” stage. CSA Global considers, however, that the Project has sound technical merit and to be sufficiently prospective, subject to varying degrees of exploration risk, to warrant further exploration and assessment of its economic potential, consistent with the proposed program.



Mila has prepared staged exploration and evaluation programs, specific to the potential of the Project, which are consistent with the budget allocations, and warranted by the exploration potential of the Project. CSA Global considers that the relevant areas have sufficient technical merit to justify the proposed programs and associated expenditure.

Contents

Report prepared for	II
Report issued by	II
Report information	II
Author and Reviewer Signatures	II
EXECUTIVE SUMMARY	III
Kathleen Valley Project	III
Technical Risks	IV
Planned Work	V
1 INTRODUCTION	10
1.1 Context, Scope and Terms of Reference	10
1.2 Compliance with the VALMIN and JORC Codes	11
1.3 Principal Sources of Information and Reliance on Other Experts.....	11
1.4 Authors of the Report	12
1.5 Independence	12
1.6 Declarations	13
1.6.1 Purpose of this Document.....	13
1.6.2 Competent Person’s Statement	13
1.6.3 Site Inspection	13
1.7 About this Report	14
2 REGIONAL GEOLOGY	15
2.1 Introduction	15
2.2 The Yilgarn Craton	15
3 APPLICABLE EXPLORATION MODELS	18
3.1 Introduction	18
3.2 Komatiite Volcanic-Hosted Nickel-Copper-Cobalt Sulphide	18
3.3 Archaean Gold	20
3.4 Volcanic-Hosted Massive Sulphide Lead-Zinc-Copper	25
3.5 Pegmatite Lithium	26
4 KATHLEEN VALLEY PROJECT.....	29
4.1 Location, Access and Infrastructure	29
4.2 Climate, Topography and Vegetation	30
4.3 Tenure.....	30
4.4 Local Geology.....	30
4.5 Previous Exploration Activity	32
4.6 NGM Exploration Activity	34
4.7 JORC Mineral Resource and Exploration Target – Gold-Zinc-Silver	38
4.7.1 Drilling	38
4.7.2 Quality Assurance and Quality Control	39
4.7.3 Modelling	39
4.7.4 Data Analysis	40
4.7.5 Variography	40
4.7.6 Bulk Density.....	40

4.7.7	Grade Estimation.....	41
4.7.8	Exploration Target.....	41
4.8	Exploration Potential and Targets	42
5	TECHNICAL RISKS.....	44
6	PLANNED WORK.....	45
6.1	CSA Global Assessment of Planned Exploration	45
6.2	Kathleen Valley Planned Work	45
6.2.1	Planned Exploration	45
7	REFERENCES.....	48
8	GLOSSARY.....	50
9	ABBREVIATIONS AND UNITS OF MEASUREMENT	53

Figures

Figure 1:	Location of the Kathleen Valley Project, Western Australia.....	10
Figure 2:	Regional geology of the Yilgarn Craton	15
Figure 3:	Schematic geological map of the Yilgarn Craton showing distribution of komatiites	18
Figure 4:	Komatiite flow facies and prospective environments for nickel-copper-cobalt sulphide formation	20
Figure 5:	Gold endowment of geological terranes of the Yilgarn Craton	22
Figure 6:	Distribution of M2 regional metamorphic facies, granite types and gold deposits in the EGST	23
Figure 7:	Two high-flux zones in the KKR and major centres of gold production.....	24
Figure 8:	Schematic cross-section of a typical VMS deposit.....	25
Figure 9:	Schematic presentation of granite-pegmatite relationship and regional rare-element zoning in a cogenetic granite and pegmatite group.....	27
Figure 10:	Generalised pegmatite composition and lithium mineral zoning pattern in relation to the parent granite.....	28
Figure 11:	Mila’s Kathleen Valley Project tenure and location	29
Figure 12:	Local geology of the Kathleen Valley project area	31
Figure 13:	Barrick auger soil gold sample locations (left) and RCP drill collars (right), Kathleen Valley project area	33
Figure 14:	VTEM local anomalism defined within E36/876 (mid channel CH25BZ left, late channel CH34BZ right) – well defined anomalism (purple dots), possible anomalism (yellow dot)	34
Figure 15:	Kathleen Valley FLTEM surveying – KV1 – CH15BZ, CH25BZ and CH35BZ imagery with survey coverage and modelled conductors (primary late channel conductor of interest in yellow)	35
Figure 16:	Long-section looking east showing drill intersections and gold grades, KVR001-012, Kathleen Valley	36
Figure 17:	Contoured gold results from soil sampling with interpreted structural trends, Kathleen Valley (dashed red lines) and historical drilling (red circles with straight line)	37
Figure 18:	Completed RCP drilling over gold-zinc-silver mineralisation, Kathleen Valley	39
Figure 19:	Oblique view showing location of drilling and modelled domains, Kathleen Valley	40
Figure 20:	Kathleen Valley Exploration Target	42

Tables

Table 1:	Inferred Mineral Resource estimate for the Kathleen Valley gold-zinc-silver mineralisation	III
Table 2:	Exploration Target estimate for the Kathleen Valley gold mineralisation.....	IV
Table 3:	Summary of Mila Kathleen Valley planned exploration expenditure, 2021.....	V
Table 4:	Tenement details for the Kathleen Valley Project.....	30
Table 5:	Previous exploration summary for the Kathleen Valley Project.....	32
Table 6:	Significant drill intersections, drillholes KVRC001-012, Kathleen Valley	36
Table 7:	Assay results of sampled pegmatites, Kathleen Valley	38
Table 8:	Inferred Mineral Resource estimate for the Kathleen Valley gold-zinc-silver mineralisation	38
Table 9:	Exploration Target estimate for the Kathleen Valley gold mineralisation.....	38
Table 10:	Model grade estimation details, Kathleen Valley gold-zinc-silver	41
Table 11:	Top cuts applied, Kathleen Valley gold-zinc-silver	41
Table 12:	Summary of Mila Kathleen Valley planned exploration expenditure, 2021.....	47

Appendices

Appendix A	JORC Code Table 1 for Kathleen Valley Project (12 th September 2021)
Appendix B	Drill Collar Locations for the Kathleen Valley Project (GDA94 Zone 51)
Appendix C	Significant Drill Intersections for the Kathleen Valley Project
Appendix D	Soil Sample Locations for the Kathleen Valley Project (GDA94 Zone 51)

1 Introduction

1.1 Context, Scope and Terms of Reference

The effective date of this CPR is the 12th of September, 2021. In 2019, Trans Pacific Energy Group Ltd (TPE), a private company registered in Australia, relocated registration from Australia to the United Kingdom (UK) and changed the company name to New Generation Minerals Limited (“NGM”). The Western Australian projects previously held and explored by TPE were likewise transferred into the name of NGM in the UK. CSA Global Pty Ltd (“CSA Global”), an ERM Group Company, was requested by Mila Resources plc (“Mila” or “the Company”) to prepare a Competent Persons Report (CPR) in relation to their acquisition of the Kathleen Valley Gold Project from NGM.

This CPR details the Company’s Kathleen Valley (E36/876) Project (“the Project” – Figure 1).



Figure 1: Location of the Kathleen Valley Project, Western Australia.

The CPR is subject to the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (“VALMIN¹ Code”). In preparing this CPR, CSA Global:

- Adhered to the VALMIN Code.

¹ Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code), 2015 Edition, prepared by the VALMIN Committee of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. <<http://www.valmin.org>>

- Took due note of the rules and guidelines issued by such bodies as the Australian Securities and Investments Commission (ASIC) and the Australian Securities Exchange (ASX), including ASIC Regulatory Guide 111 – Content of Expert Reports and ASIC Regulatory Guide 112 – Independence of Experts.
- Relied on the accuracy and completeness of the data provided to it by Mila, and that Mila made CSA Global aware of all material information in relation to the Project.
- Relied on Mila’s representation that it will hold adequate security of tenure for exploration and assessment of the Project to proceed.
- Required that Mila provide an indemnity to the effect that Mila would compensate CSA Global in respect of preparing the report against any and all losses, claims, damages and liabilities to which CSA Global or its Associates may become subject under any applicable law or otherwise arising from the preparation of the report to the extent that such loss, claim, damage or liability is a direct result of Mila or any of its directors or officers knowingly providing CSA Global with any false or misleading information, or Mila, or its directors or officers knowingly withholding material information.
- Required an indemnity that Mila would compensate CSA Global for any liability relating to any consequential extension of workload through queries, questions, or public hearings arising from the report.

1.2 Compliance with the VALMIN and JORC Codes

The report has been prepared in accordance with the VALMIN Code, which is binding upon Members of the Australian Institute of Geoscientists (AIG) and the Australasian Institute of Mining and Metallurgy (AusIMM), the JORC² Code and the rules and guidelines issued by such bodies as the LSE that pertain to Independent Expert Reports.

1.3 Principal Sources of Information and Reliance on Other Experts

CSA Global has based its review of the Project on information made available to the principal author by Mila, along with technical reports prepared by consultants, government agencies and previous tenements holders, and other relevant published and unpublished data. CSA Global has also relied upon discussions with Mila’s management for information contained within this assessment. This report has been based upon information available up to and including 12th September 2021.

CSA Global has endeavoured, by making all reasonable enquiries, to confirm the authenticity, accuracy, and completeness of the technical data upon which this report is based. Unless otherwise stated, information and data contained in this technical report or used in its preparation has been provided by Mila in the form of documentation.

Mila was provided a final draft of this report and requested to identify any material errors or omissions prior to its lodgement.

Descriptions of the mineral tenure; tenure agreements, encumbrances and environmental liabilities were provided to CSA Global by Mila or its technical consultants. Mila has warranted to CSA Global that the information provided for preparation of this report correctly represents all material information relevant to the Project. CSA Global has not reviewed the status of NGM’s tenure agreements pertaining to the Project and has relied on information provided by NGM with regard to the legal title to the tenement.

Neither CSA Global, nor the authors of this report, is qualified to provide comment on any legal issues associated with the Project. The property descriptions presented in this report are not intended to represent a legal, or any other opinion as to title.

This report contains statements attributable to third parties. These statements are made or based upon statements made in previous technical reports that are publicly available from either government

² Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. (The JORC Code), 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC). <<http://www.jorc.org>>

departments or the ASX. The authors of these previous reports have not consented to the statements' use in this report, and these statements are included in accordance with ASIC Corporations (Consents to Statements) Instrument 2016/72.

1.4 Authors of the Report

CSA Global is a privately owned, mining industry consulting company headquartered in Perth, Western Australia. CSA Global provides geological, resource, mining, management and corporate consulting services to the international resources sector and has done so for more than 30 years.

This CPR has been prepared by a team of consultants sourced principally from CSA Global's Perth, Western Australia office. The individuals who have provided input to the CPR have extensive experience in the mining industry and are members in good standing of appropriate professional institutions. The consultants preparing this CPR are specialists in the field of geology and exploration, in particular relating to nickel, copper and cobalt.

The following individuals, by virtue of their education, experience, and professional association, are considered Competent Persons, as defined in the JORC Code (2012), for this report. The Competent Persons' individual areas of responsibility are discussed below.

The author of the CPR is Mr Tony Donaghy who is a Principal Consultant with CSA Global in Perth, Western Australia. Mr Donaghy is an internationally recognised expert in the global search for nickel, copper, cobalt and platinum group elements (PGEs) and a skilled exploration geologist who is familiar with most geological environments and a broad variety of mineral commodities. He has more than 25 years' experience covering all continents and all aspects of the industry – from leading continental-scale grassroots targeting exercises, through greenfields and brownfields exploration project design and execution, mining, property evaluation and due diligence, to board level strategy development and guidance. Mr Donaghy is a Registered Professional Geoscientist with the association of Professional Geoscientists of Ontario, an RPO and has sufficient experience that is relevant to the Technical Assessment of the Mineral Assets under consideration, the style of mineralisation and types of deposit under consideration and to the activity being undertaken to qualify as a Practitioner as defined in the 2015 Edition of the "Australasian Code for the public reporting of technical assessments and Valuations of Mineral Assets", and as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Peer review was completed by CSA Global Principal Consultant, Mr Sam Ulrich (BSc (Hons), GDipAppFin, MAusIMM, MAIG, and FFin). Mr Ulrich has over 20 years' experience in mineral exploration and corporate services. His exploration experience ranges from grassroots to near mine resource development in Australia and Asia. Mr Ulrich is part of CSA Global's corporate team primarily working on transactions. He provides geological due diligence, independent technical reporting for mergers and acquisitions, and company listings, as well as acting as Competent Person under the JORC Code for a range of Exploration Results in gold, base metals, and uranium. Mr Ulrich is a valuation expert and VALMIN specialist, delivering technical appraisals and valuations for independent expert reports, target statements, schemes of arrangement, stamp duty assessments, asset impairments, and due diligence exercises on projects worldwide. He has extensive experience in the exploration and development of Archaean orogenic gold deposits, which combined with his mineral economics research into Australian gold mines, provides him with specialist skills in applying economic/valuation criteria to exploration targeting and ranking, and the valuation of mineral assets. Mr Ulrich has the relevant qualifications, experience, competence, and independence to be considered a "Specialist" under the definitions provided in the VALMIN Code and a "Competent Person" as defined in the JORC Code.

1.5 Independence

Neither CSA Global, nor the authors of this report, has or has had previously, any material interest in Mila or the mineral properties in which Mila has an interest. CSA Global's relationship with Mila is solely one of professional association between client and independent consultant.

CSA Global is an independent geological consultancy. Fees are being charged to Mila at a commercial rate for the preparation of this report, the payment of which is not contingent upon the conclusions of the report. The fee for the preparation of this report is approximately A\$35,000.

No member or employee of CSA Global is, or is intended to be, a director, officer or other direct employee of Mila. No member or employee of CSA Global has, or has had, any shareholding in Mila.

There is no formal agreement between CSA Global and Mila as to Mila providing further work for CSA Global.

1.6 Declarations

1.6.1 Purpose of this Document

This report has been prepared by CSA Global at the request of Mila. Its purpose is to provide a CPR of the Kathleen Valley (E36/876) Project.

The report is to be included in the prospectus for the company to seek admission to the standard segment of the official list and to trading on the LSE. It is not intended to serve any purpose beyond that stated and should not be relied upon for any other purpose.

The statements and opinions contained in this report are given in good faith and in the belief that they are not false or misleading. The conclusions are based on the reference date of 12th of September, 2021, and could alter over time depending on exploration results, mineral prices, and other relevant market factors.

1.6.2 Competent Person's Statement

The information in this report that relates to Technical Assessment of the Mineral Assets, Mineral Resource Estimates, Exploration Targets, or Exploration Results in accordance with the JORC Code is based on information compiled and conclusions derived by Mr Tony Donaghy, a Principal Consultant and an employee of CSA Global.

Mr Donaghy is a Registered Professional Geoscientist with the association of Professional Geoscientists of Ontario, an RPO and has sufficient experience that is relevant to the Technical Assessment of the Mineral Assets under consideration, the style of mineralisation and types of deposit under consideration and to the activity being undertaken to qualify as a Practitioner as defined in the 2015 Edition of the "Australasian Code for the public reporting of technical assessments and Valuations of Mineral Assets", and as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Donaghy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information relating to the estimation of Mineral Resources and an Exploration Target at Kathleen Valley in Section 4.7 of this report are based on, and fairly represent, information and supporting documentation compiled by Mr Richard Maddocks (MSc in Mineral Economics, BAppSc in Applied Geology and Grad Dip in Applied Finance and Investment). Mr Maddocks is a consultant to Auralia and is a Fellow of the AusIMM (member no. 111714) with over 30 years of experience. Mr Maddocks has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Maddocks consents to the inclusion in this report of the matters based on his information in the form and content in which it appears.

1.6.3 Site Inspection

No site visit was made to the Project, as the author has sufficient knowledge of these regions to assess the Project; the Project is at an early stage, and no further material information would be gained. The author currently has enough information to assess the Project.

1.7 About this Report

This report describes the prospectivity of the Kathleen Valley Project located in the state of Western Australia in Australia. The geology and mineralisation for each of the Project are discussed, as well as the exploration work done, and the results obtained there from.

No valuation has been requested or completed for the Project.

2 Regional Geology

2.1 Introduction

The Kathleen Valley project lies within the Kalgoorlie terrane of the Eastern Goldfields Superterrane (EGST) of the Archaean Yilgarn Craton of Western Australia.

The regional geology of the EGST and geological controls on mineralisation are summarised by Cassidy *et al.* (2006), McCuaig *et al.* (2010), Witt *et al.* (2013, 2018) and Smithies *et al.* (2017). The following is a synopsis of their work. In the following, “Ma” refers to million years before present and “Ga” billion years before present.

2.2 The Yilgarn Craton

The Archaean Yilgarn Craton has been divided into six major terranes, from west to east: the Narryer, South West, Youanmi, Kalgoorlie, Kurnalpi and Burtville terranes, with the three easternmost forming the EGST (Figure 2). The terranes are denoted based on major differences in stratigraphic ages and whole rock and isotopic geochemistry of volcanic and intrusive rocks.

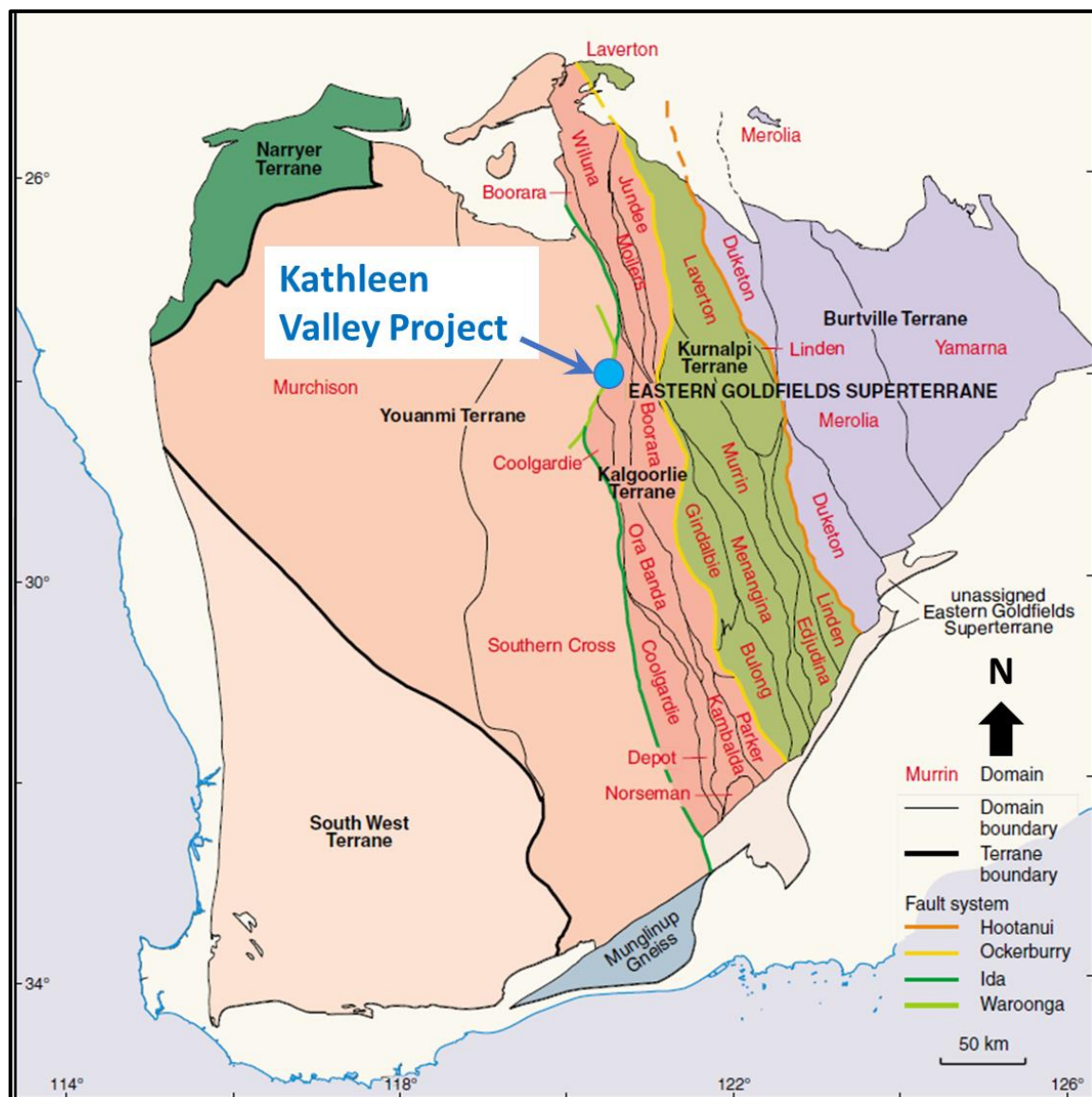


Figure 2: Regional geology of the Yilgarn Craton
 Source: Modified after Cassidy *et al.* (2006)

The South West Terrane forms the southwestern part of the Yilgarn Craton. The South West Terrane consists of high-grade granitic gneisses and metasedimentary and meta-igneous rocks that have experienced multiple phases of deformation and granite and pegmatite intrusion between c. 2.75 Ga and 2.62 Ga. Although the South West Terrane has been informally divided into three domains based on the interpretation of geophysical and geochronological data, the exact nature of the domains, as well as the location of the boundaries between them, is poorly constrained. Supracrustal sequences in the South West Terrane range in age from c. 3.2–2.8 Ga to c. 2.72–2.67 Ga.

Detrital zircons in metasedimentary sequences with a spectrum of ages from older than 3.73–3.17 Ga indicate a complex old provenance. Granites in the South West Terrane have emplacement ages from c. 2.75–2.62 Ga, with the majority younger than 2.69 Ga. Granulite-facies metamorphism was synchronous with emplacement of c. 2.64–2.62 Ga charnockitic granites. Intrusive and volcanic rocks at Boddington were metamorphosed to upper greenschist to lower amphibolite facies at c. 2640 Ma.

The boundary between the South West Terrane and the Youanmi Terrane is poorly defined. The older crustal components of the South West Terrane are thought to have accreted to the Youanmi Terrane after 2.8 Ga, with collision of the Narryer Terrane at c. 2.75 Ga, and continued deformation and metamorphism and granite intrusion between 2.75 Ga and 2.65 Ga. Collision of the South West Terrane with the Youanmi Terrane is inferred to have resulted in the emplacement of volumetrically abundant granites at 2.64–2.62 Ga and coincident high-grade metamorphism.

The three tectono-stratigraphic terranes of the EGST are defined on the basis of distinct volcanic facies, geochemistry, and age of volcanism that ranges from older than 2.81–2.66 Ga. Tectonic juxtaposition of the terranes occurred after c. 2.66 Ga. Internally the terranes are subdivided into domains with internally consistent stratigraphy and structural evolution. The terranes and domains are bounded by series of interconnected faults interpreted largely from potential field geophysical datasets. Each terrane is divided into structurally bound domains that preserve dismembered, thrust repeated parts of the succession, and locally have distinct volcanic facies relationships.

The Kalgoorlie Terrane comprises predominantly young (2.71–2.66 Ga) and minor old (>2.73 Ga) lithostratigraphic sequences. Older (>2.73 Ga) greenstone successions in the Norseman, Boorara and Wiluna domains are overlain by younger greenstones. The best defined lithostratigraphic sequence of the Kalgoorlie Terrane are in the Kambalda and Ora Banda domains in the southern Kalgoorlie Terrane. In these areas, the 2.71–2.66 Ga greenstone successions are divided into the c. 2.71–2.69 Ga tholeiitic and komatiitic mafic-ultramafic Kambalda Sequence and c. 2.69–2.66 Ga felsic volcanoclastic Kalgoorlie Sequence. Similar lithostratigraphic sequences are present in the Boorara and Jundee domains in the northern part of the Kalgoorlie Terrane. The Kalgoorlie Sequence, incorporating the Black Flag Group, comprises felsic volcanoclastic and epiclastic rocks of trondhjemitic-tonalite-granodiorite type, with subordinate lavas that were deposited between 2.69 Ga and 2.66 Ga. Several depositional and magmatic sequences in the Kalgoorlie Sequence can be grouped into unconformity bound lithostratigraphic packages that record deposition in a series of transtensional, deep-marine intra-arc basins.

Geochronology isotopic data subdivide the craton into an older Yilgarn proto-craton to the west and the younger, more primitive EGST to the east. Formation of the Kalgoorlie-Kurnalpi Rift (KKR) within the EGST was associated with the 2.7 Ga magmatic event. Most aspects of the KKR are satisfied by broadly coincident plume-related magmatism in the Kalgoorlie Terrane and westward subduction to the east of the Burtville Terrane. Geochemical characteristics of 2730–2700 Ma calc-alkaline volcanism and 2685–2630 Ma low-SiO₂ and alkali-rich intrusions support models for a continental margin subduction zone setting.

Five metamorphic events have been distinguished in the EGST: Ma, M1, M2, M3a and M3b, as follows:

- Ma = Rare granulite-facies metamorphism at c. 2720–2685 Ma synchronous with voluminous magmatic activity and deposition of volcanic sequences. Postulated as representing the roots of arcs.
- M1 = Discrete, amphibolite- to granulite-facies metamorphism, also at c. 2720–2685 Ma. It is not known whether the restriction of these M1 assemblages in long linear exposures. These exposures may reflect preferential exhumation of a more widespread metamorphic event, or if they reflect the original

distribution of these assemblages. If the distribution is original, they may reflect conditions attained in Archaean subduction zones.

- M2 = Regional metamorphism at c. 2685–2665 Ma characterised by upper greenschist- to amphibolite-facies metamorphism, synchronous with widespread emplacement of High-Ca granitoid rocks. Metamorphic grades increase towards granitoid margins and reflect advection of heat into the crust by granitoid melts. This event forms the dominant regional metamorphic event and predates the late basins.
- M3 = Characterised by upper greenschist- to amphibolite-facies metamorphism and is only recognised as spatially associated with late siliciclastic basins at 2665–2650 Ma, although regionally it would be difficult to distinguish from M2 assemblages. This metamorphic event is interpreted as related to extension, formation of late basins, and generation and emplacement of Low-Ca granites into the crust.
- M4 = Hydrothermal greenschist to lower amphibolite-facies alteration assemblages representing multiple potential pulses of gold mineralisation c. 2650–2620 Ma.

3 Applicable Exploration Models

3.1 Introduction

The following section of the report summarises the key target mineralisation deposit styles and relevant exploration criteria appropriate to the Project. This is done to provide context for the individual assessments of project potential and exploration strategy that follows in the remainder of the report.

The relevant regional mineralisation styles, exploration criteria and geological factors that control mineralisation have been extensively reviewed by:

- Nickel-copper-cobalt sulphide: Naldrett (2010), McCuaig *et al.* (2010), Barnes and Fiorentini (2012), Mole *et al.* (2014), and Le Vaillant *et al.* (2018).
- Archaean gold: McCuaig *et al.* (2010) and Witt *et al.* (2013, 2018).
- Volcanic-hosted massive sulphide (VMS) lead-zinc-copper: Huston *et al.* (2005), McCuaig *et al.* (2010), Hannington (2014), and Piercey *et al.* (2015).
- Pegmatite lithium: Černý (1991), Galeschuk *et al.* (2007), and London (2008, 2016).

The following is a synopsis of their work.

3.2 Komatiite Volcanic-Hosted Nickel-Copper-Cobalt Sulphide

The Archaean Yilgarn Craton of Western Australia hosts world-class examples of nickel-copper-cobalt sulphide mineralisation associated with komatiite ultramafic lavas within Archaean greenstone belts. The best examples are the 2.7 Ga Kambalda-style deposits of the Kalgoorlie Terrane between Norseman and Wiluna (e.g. Kambalda, Perseverance, Mount Keith), and the 2.9 Ga deposits of the Forrestania (e.g. Flying Fox) and Lake Johnston (e.g. Emily Ann, Maggie Hays) belts within the Youanmi Terrane (Figure 3). Deposits in the Kambalda area have been mined since the early 1970s.

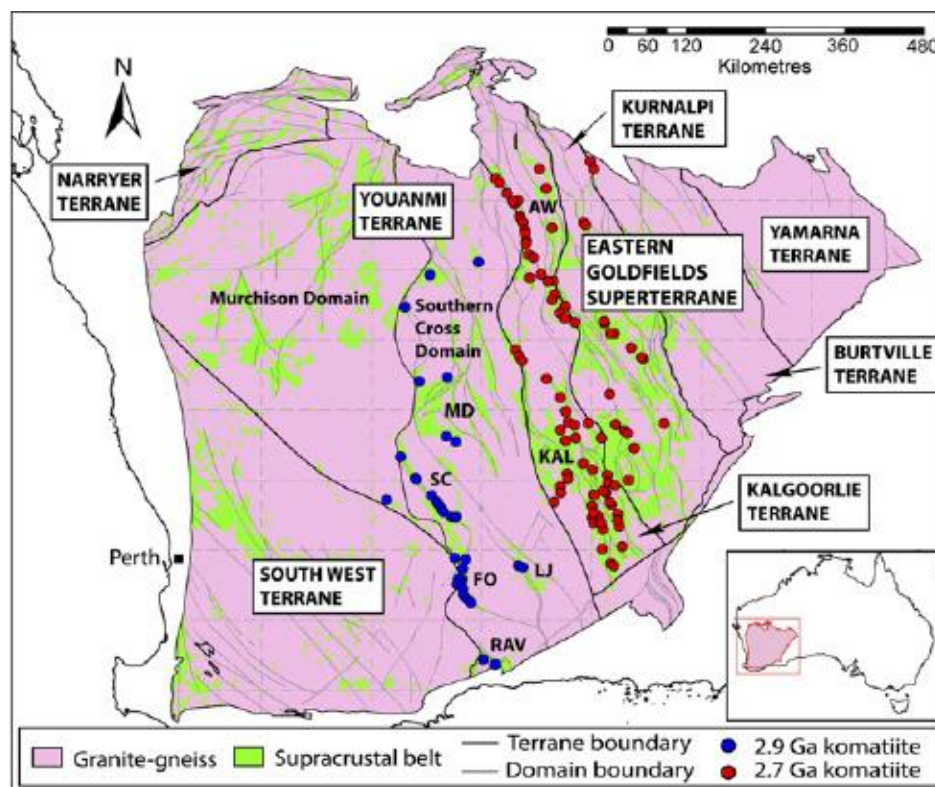


Figure 3: Schematic geological map of the Yilgarn Craton showing distribution of komatiites
AW – Agnew-Wiluna; KAL – Kalgoorlie/Kambalda; SC – Southern Cross; FO – Forrestania; LJ – Lake Johnston
Source: Mole *et al.* (2014)

The komatiite lavas represent high-temperature ultramafic magmas sourced from the Earth's mantle and erupted onto the Earth's surface. They are restricted in the geological record to the Archaean and Paleoproterozoic. This is due primarily to the cooling of the Earth's mantle over time prohibiting the formation of such high-temperature melts of the mantle post the Paleoproterozoic period.

Nickel-copper-cobalt sulphides are interpreted to form in-situ within the lava flow by a process of contamination of the ultramafic magma by incorporating external sulphur. As the komatiite lava moved across the Earth's surface, the high temperature lava melted and incorporated substrate lithologies into the lava. This melting of substrate was achieved in long-lived lava channels where prolonged high-heat input into the substrate from the channelised lava flow led to thermomechanical erosion and incorporation of substrate fragments into the lava (Figure 4). If this substrate comprised sulphide-bearing material, the injection of external sulphur into the komatiite drove the magmatic system to sulphur saturation. The nickel, copper and cobalt within the magmatic system combines with the sulphur and precipitates as sulphide droplets within the magma (Figure 4).

Once formed, the dense sulphide phase settles within the lava channel to the channel floor, where it accumulates as nickel-copper-cobalt sulphide. At the same time, the ultramafic magma begins to crystallise olivine, which as it is also denser than the surrounding magma begins to settle to the floor of the lava channel. The process of settling sulphide and olivine crystals within the lava channel is directly analogous to stream sediment dynamics. The dense sulphide and olivine crystal phases accumulate in parts of the channel floor where the flow dynamic changes and reduces the lava streams capability to carry and transport the dense phases, such as changes in flow direction, areas where the flow ponds, depressions and embayments in the lava channel floor, etc.

Komatiite lava-channels favourable for sulphide accumulation also accumulate olivine-crystals from the melt under the same gravitational settling model. High magnesium oxide content in soil or rock geochemistry is a good proxy for high-olivine content and is used as an exploration vector for channelised lava environments rich in olivine that are favourable for nickel sulphide accumulation. In Western Australia, these ultramafic lava channels have often experienced serpentinization of the olivine in the presence of metamorphic, hydrothermal or meteoric water, that breaks down the olivine crystal structure to the hydrous mineral serpentine. Iron present in the olivine mineral lattice is not readily incorporated into the serpentine mineral lattice and the excess iron that results from serpentinization is precipitated as magnetite. Thus, originally olivine-rich channelised environments favourable for nickel sulphide accumulation contain significant secondary magnetite after the serpentinization of the olivine. This secondary magnetite results in a high magnetic susceptibility of the rock and a prominent magnetic anomaly response to magnetic survey techniques.

Soil geochemistry is effective for detection of magmatic nickel-copper sulphide mineralisation if it is outcropping to sub-cropping, and the soil profile does not contain a substantial proportion of transported material. If the host volcanic channel is buried below surface and is not intersected by the base of oxidation in the regolith weathering profile that produced soils, then nickel-copper magmatic sulphide systems are often geochemically blind to surface. They are closed systems bound within the confines of the volcanic channel, with little to no alteration halo or geochemical exchange with the surrounding wall rock. Targeted use of EM surveys remains the preferred tool for direct detection of nickel sulphide mineralisation of sufficient quantity and quality for economic extraction, as typical magmatic sulphide assemblages become electrically connected and conductive at 18–20% sulphide content by volume.

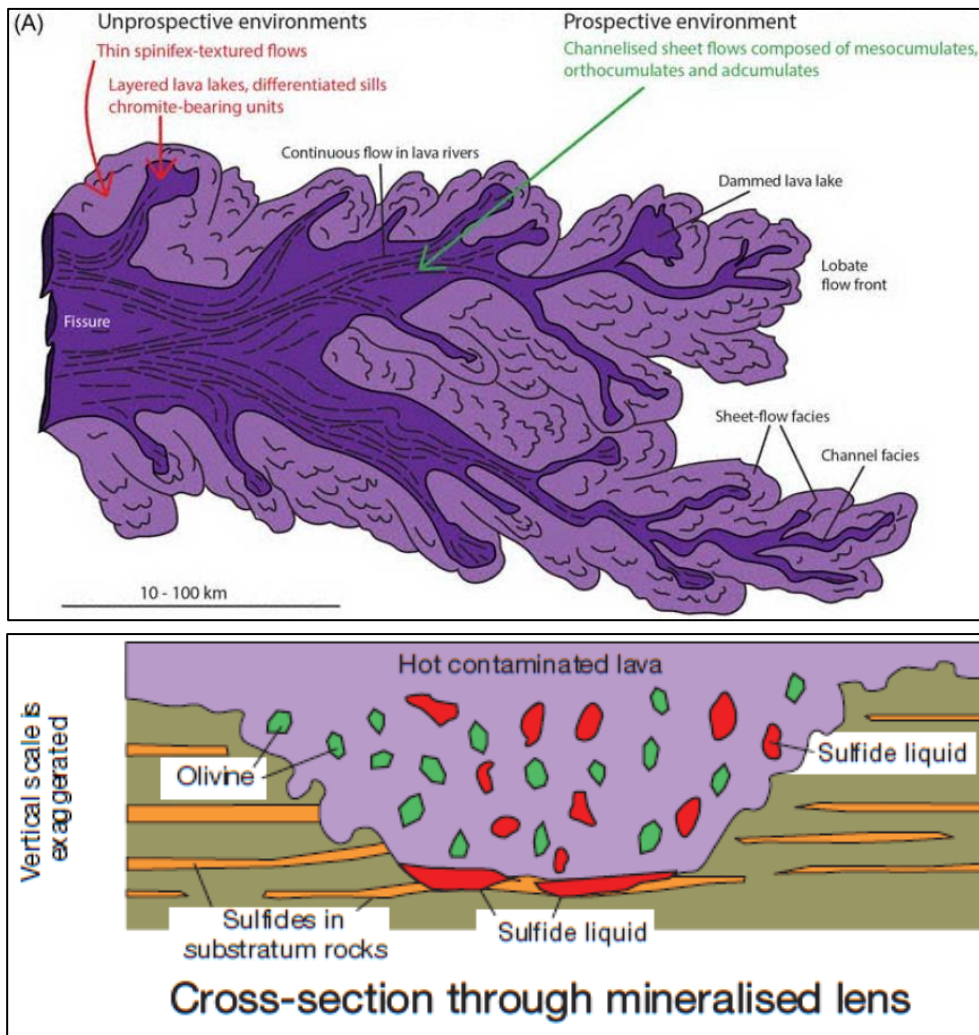


Figure 4: Komatiite flow facies and prospective environments for nickel-copper-cobalt sulfide formation
Source: Naldrett (2014)

3.3 Archaean Gold

The EGST contains gold endowment (production plus resources) of 7,154 tonnes of gold (Witt *et al.*, 2013). This figure represents 71% of the total gold endowment of the Yilgarn Craton (Figure 5). The Golden Mile deposit (2,093 tonnes – Witt *et al.*, 2018) is clearly dominant. In the EGST, the major endowment occurs in lower greenschist facies greenstones, but if the giant Golden Mile deposit is excluded, the distribution of gold favours upper greenschist facies greenstones. Similarly, if the Golden Mile is ignored, the average size of deposits is more evenly distributed among lower greenschist to middle amphibolite facies domains (Figure 6).

Granitic rocks in the EGST are only weakly endowed, with more than 90% of deposits hosted by greenstone units. However, 53% (23% if the Golden Mile is excluded) of gold endowment and 18% of gold deposits in the EGST lie within 1 km of a Mafic Group (granite or porphyry) intrusions. The number of deposits, and gold ounces, per square kilometre decrease regularly with increasing distance from Mafic Group intrusions. In the Kurnalpi Terrane, a weaker association of gold with Syenitic Group intrusions is recognised.

World-class gold deposits formed on the reactivated margins of the KKR system, which became throughput zones for mantle-derived magmas, hydrothermal fluids, and heat during 2675–2620 Ma orogenesis.

During orogenic shortening, the central portion of the KKR remained relatively undeformed while the margins of the rift were reactivated. The rift margins are broadly equivalent to the Kalgoorlie Terrane in the west and the eastern part of the Kurnalpi Terrane (Figure 7). These rift margins are characterised by rapid transitions

in M2 metamorphic grade from low- to higher grade metamorphic facies, closely-spaced rift margin-parallel faults, and many sites of localised, syn-volcanic to late-tectonic hydrothermal alteration.

Although large crustally derived granites are widespread in the rift centre, reactivated marginal zones outlined in Figure 7 contain abundant intrusions (Mafic Group, Syenitic Group, lamprophyre) with a metasomatised mantle source component. The marginal zones were foci of deformation, and heat and fluid flow, with access to the mantle, which contain many well-endowed gold deposits, as distinct from the central zone, which contains fewer gold deposits, most of which are lesser endowed.

Two sub-classes of orogenic gold can be distinguished. Proximal intrusion-related gold deposits formed from magmatic-hydrothermal fluids derived from some Mafic and Syenitic Group intrusions, potentially throughout the 2685–2630 Ma period. Distal-source related gold deposits formed from deeply sourced, low salinity H₂O-CO₂ fluids of uncertain origin, after 2650 Ma.

Although this latter period was largely coincident with emplacement of Low-Ca granites, there is no further evidence that the ore fluid was sourced from Low-Ca intrusions. The spatial association of gold with Mafic or Syenitic Group intrusions is less notable in higher metamorphic grade (deeper crustal environment rocks, suggesting that most deposits can be classified as distal-source related.

At the prospect scale, the structural architecture is the dominant factor in the search for gold mineralisation, with the junction of prominent regional structures the primary target environment for exploration.

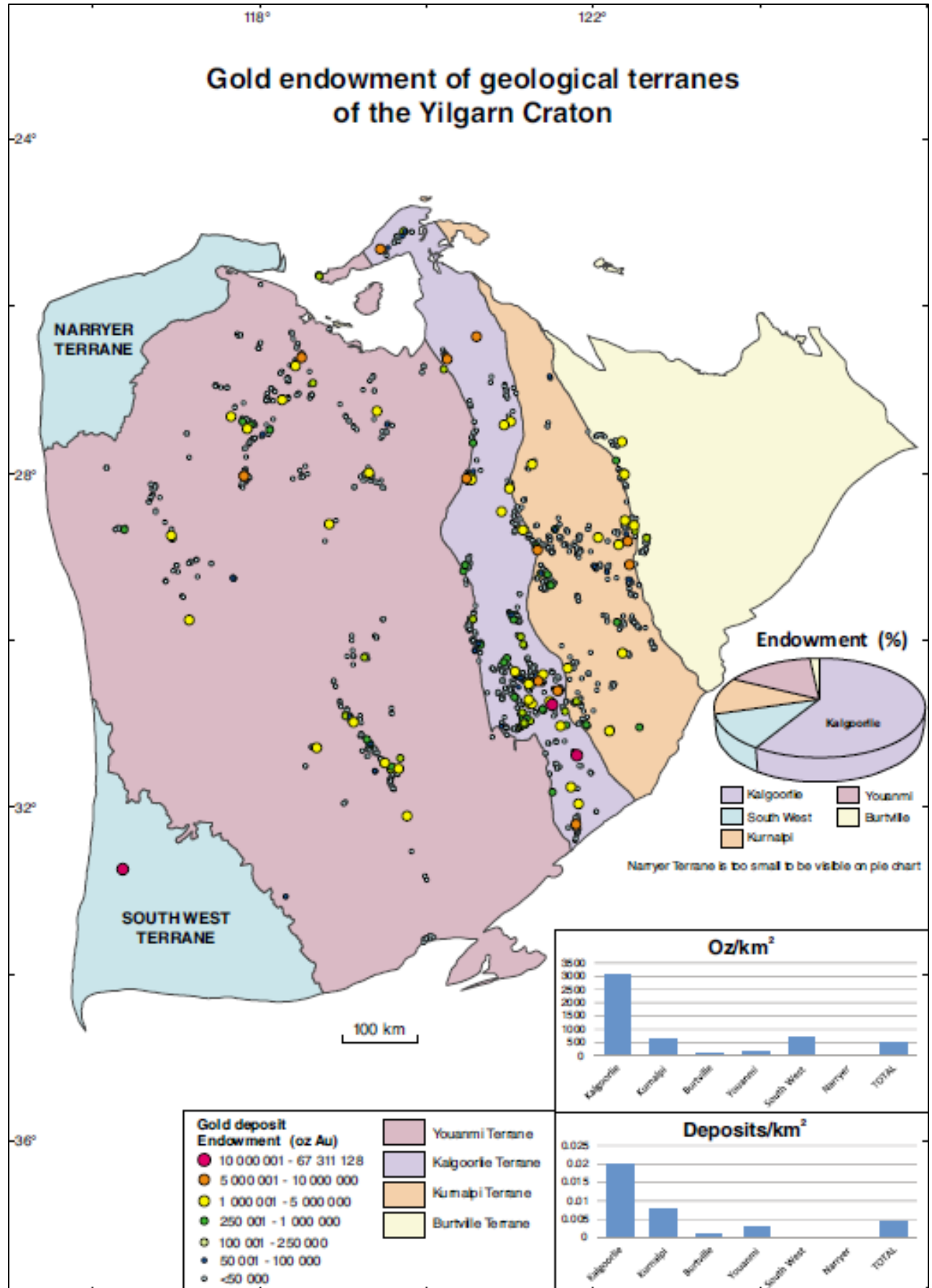


Figure 5: Gold endowment of geological terranes of the Yilgarn Craton
 Source: Witt et al. (2013)

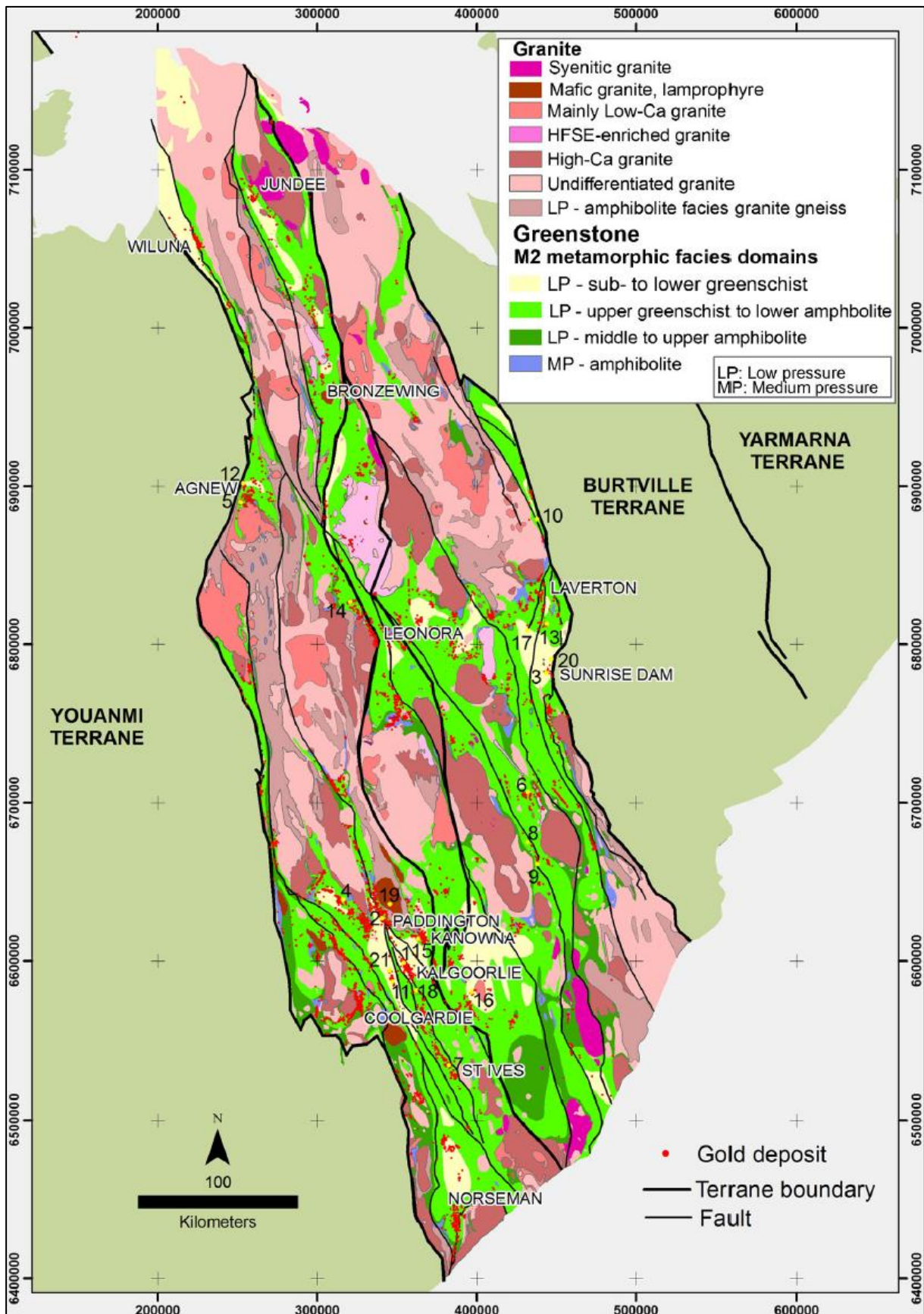


Figure 6: Distribution of M2 regional metamorphic facies, granite types and gold deposits in the EGST
 Note: Deposits or camps numbered 1–21 are tabulated in Table 4 of Witts et al. (2018). Projection: GDA94 MGA Z51.
 Source: Witt et al. (2018).

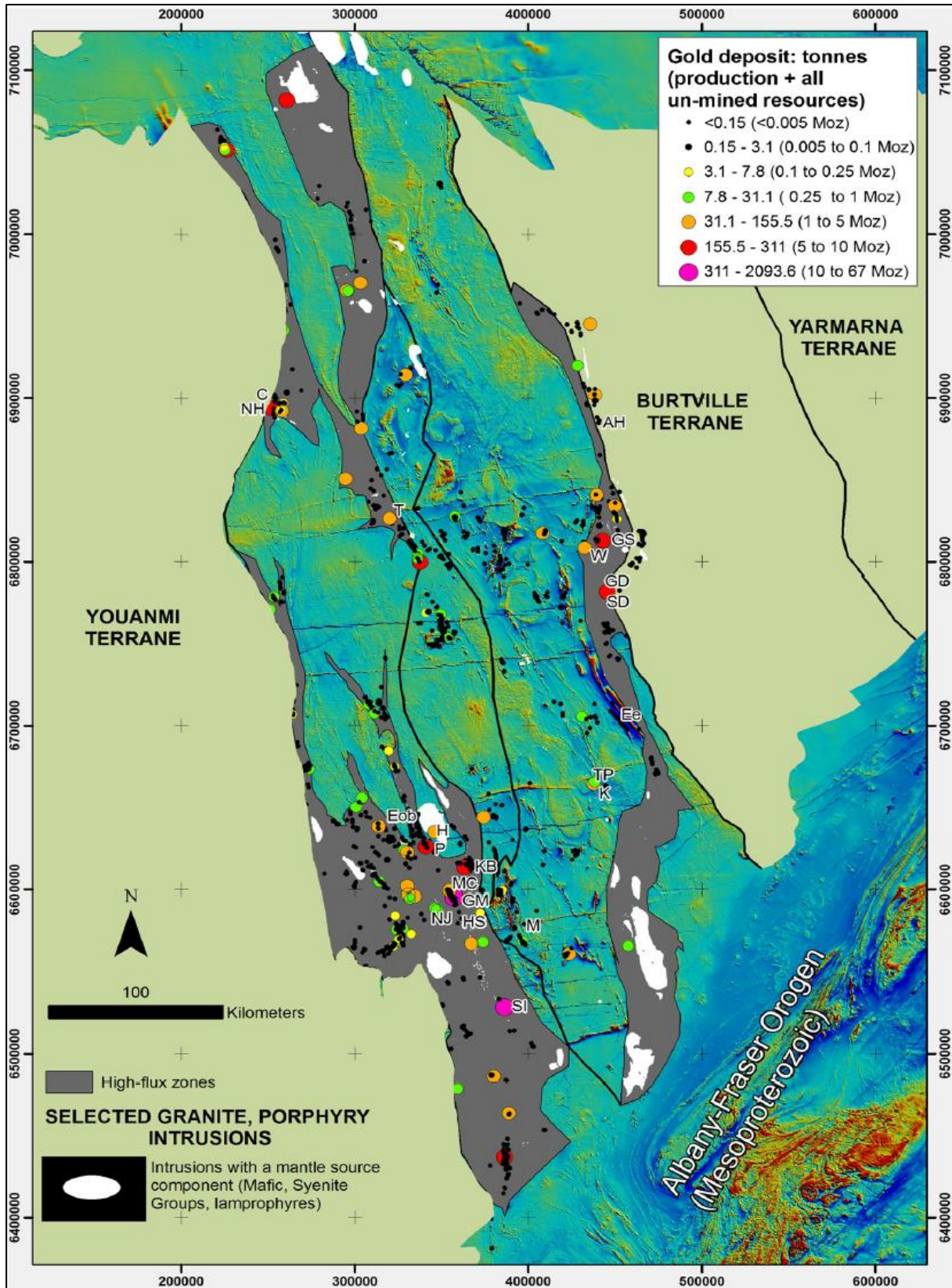


Figure 7: Two high-flux zones in the KKR and major centres of gold production
 Defined by the distribution of intrusions with a mantle source component (Mafic and Syenite groups, carbonatite, lamprophyre). High-flux zones are high-strain zones with rapid metamorphic grade transition; widespread, superimposed hydrothermal alteration episodes; relatively abundant mantle source component intrusions; and large gold deposits. Deposits or camps are tabulated in Table 4 of Witts et al. (2018). Projection: GDA94 MGA Z51.
 Source: Witt et al. (2018)

3.4 Volcanic-Hosted Massive Sulphide Lead-Zinc-Copper

VMS deposits are stratabound and sometimes stratiform lenses of polymetallic massive to semi-massive sulphides, sulphide-rich sediments, disseminated replacement ores, and stockwork sulphide-bearing veins that occur in submarine volcanic environments. They form at or near the seafloor by syngenetic precipitation from mainly seawater-derived and metal-enriched hydrothermal fluids. The fluids are moderate- to high-temperature driven by the accompanying volcanism. VMS systems are formed in Island Arc and Back-Arc settings.

Generally, VMS systems consists of two main parts:

- 1) A typically mound-shaped to tabular, stratabound body composed mainly of massive to semi-massive sulphide, quartz, minor phyllosilicates, and iron oxides minerals.
- 2) An underlying vertically extensive discordant to semi-discordant stockwork of copper-rich veins and disseminated sulphides, referred to as the “feeder zone”, “stringer zone” or “stockwork zone”.

These two ore types are accompanied by considerable and intense hydrothermal alteration and the host-rocks that encompass the feeder or stringer zone are called the “alteration pipe”. This zone can be very irregular in shape and the alteration pipes are enveloped in distinctive alteration halos, which may extend into the hangingwall strata above the VMS deposit.

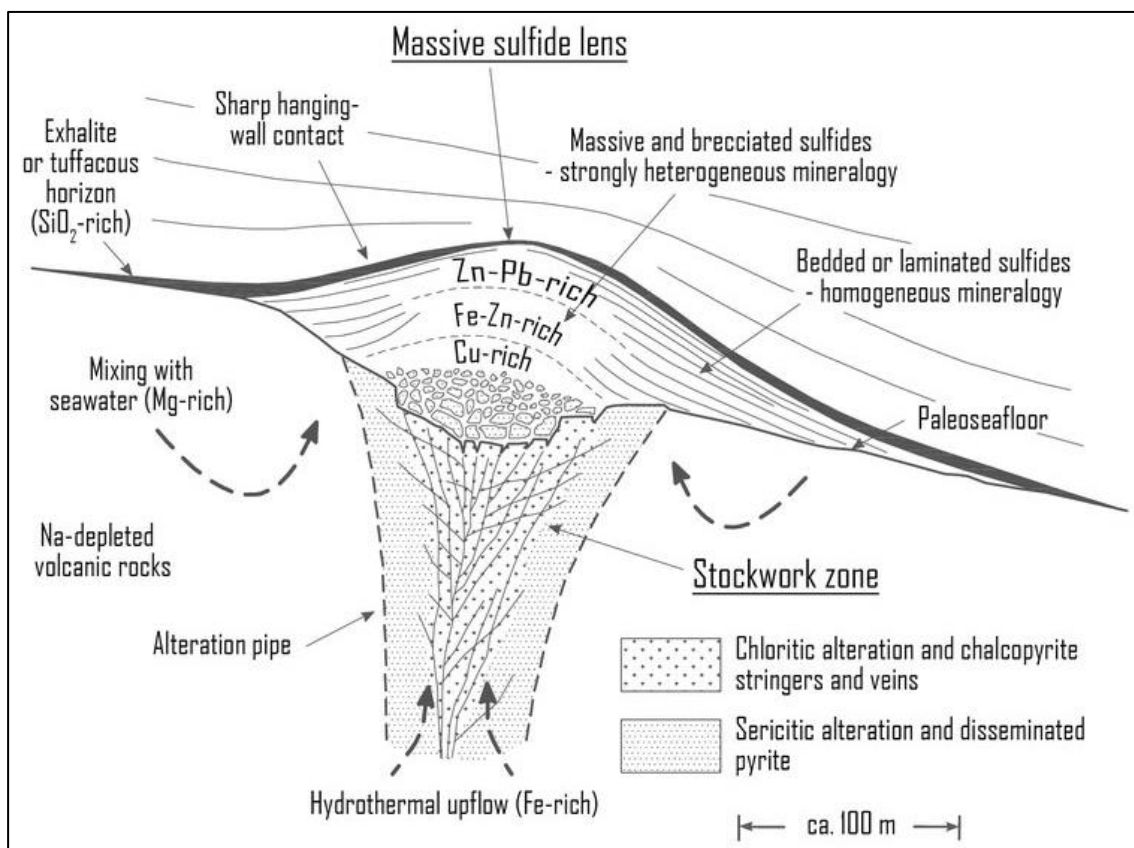


Figure 8: Schematic cross-section of a typical VMS deposit
Adapted from Hannington (2014)

In general, most VMS deposits show an internal metal zonation, with copper-sulphides occurring dominantly at the base and in the stringer zone. Zinc- and lead-rich sulphides occur at the top of the massive sulphide body or at the outer margins, reflecting temperature-dependent solubilities of the ore minerals in cooling hydrothermal fluids discharged onto the seafloor.

Most discoveries of VMS deposits in the Yilgarn were made in the 1960s and 1970s, and exploration was hampered by generally poor outcrop of preferred host sequences (felsic volcanoclastics and sedimentary sequences) and deeply weathered regolith. Only two economic camps have been delineated to date: the

Golden Grove–Scuddles deposits (Murchison Domain, Youanmi Terrane) and the Teutonic Bore–Jaguar deposits (Gindalbie Domain, Kurnalpi Terrane).

The paucity of VMS deposits in the Yilgarn is thought to be due to the paucity of magmatic arc crust within the Yilgarn. Isotopic data has been used to show that the Teutonic Bore and Jaguar deposits are in the narrow Gindalbie Domain of the EGST that is unique in terms of its intermediate volcanic rock complexes and coeval bimodal basalt-rhyolite complexes at 2694 ± 4 to 2676 ± 5 Ma. These are interpreted as representing marginal arc and arc-rift sequences, respectively.

Based on these isotopic proxies for lithospheric architecture, it has been argued that the Yilgarn lacks significant VMS in the EGST due to the presence of older crust, which inhibited heat flow and the occurrence of large VMS systems.

3.5 Pegmatite Lithium

The lithium exploration targets discussed in this report relate to pegmatite-hosted mineralisation. The target commodities are lithium and tantalum; commercially exploited principally in the form of the lithium-bearing minerals spodumene, petalite or lepidolite and tantalum bearing minerals.

The pegmatites that host commercial quantities of these minerals largely belong to the lithium-caesium-tantalum (LCT) family of rare-element pegmatites. The rare-element LCT family is subdivided into several types and sub-types as outlined by Černý (1991) and this pegmatite classification scheme is the generally accepted standard.

The pegmatites currently exploited for lithium and tantalum; particularly in Australia, are predominantly the LCT family rare-element albite-spodumene type and the complex type spodumene and petalite sub-types.

These pegmatites are interpreted to be largely derived from high silica, aluminium-rich, sulphur-type granitic melts which host elevated levels of incompatible rare elements such as lithium, caesium, niobium, tantalum, tin, beryllium, and yttrium. The granites are typically emplaced syn to late tectonic/orogenic and the granites enriched in rare elements are termed “fertile” granites. As the “fertile” granite crystallises the incompatible elements fractionate and are enriched in the residual granite melt, as are the volatile or fluxing agents such as H_2O , B, F and P, which reduce the viscosity of the residual melt, and prevent crystallisation at normal granitic crystallisation temperatures and allow these melts to continue fractionating and move considerable distances away from their source granite prior to crystallising as pegmatites. Lithium and tantalum mineralised pegmatites may be emplaced up to 10 km from their parent granite.

The movement of the pegmatite forming melt is largely focused along regional to local scale structures and the final form of the pegmatite (i.e. sills, dykes) by local structure and/or rock fabrics. The timing of the formation of the granite pegmatite melt with respect to local structural deformation is one of the key factors in exploration for pegmatites.

In terms of exploration, the rare-element pegmatites tend to be regionally zoned (with generally increasing fractionation and increasing volatile and rare-element content) away from the source granite as illustrated in Figure 9 and Figure 10, with lithium \pm tantalum bearing pegmatites generally the furthest from granite. In some instances, further outboard of the main lithium \pm tantalum zone, albite type pegmatites may occur which may host minor rare elements.

Sampling of blocky K-feldspar and/or muscovite to obtain key element content ratios is widely used to map the pegmatite fractionation trends. Key element ratios include potassium/rubidium and potassium/caesium. Other commonly used fractionation indices are niobium/tantalum, magnesium/lithium; with all these indices decreasing with higher fractionation states. Typically, in published research data, the potassium/rubidium and potassium/caesium indices are based on careful analysis of individual minerals such as blocky K-feldspar or muscovite. In practice a combination of both these individual minerals, if possible, and if not, whole rock sampling can provide useful fractionation information. Pegmatites with the greatest economic potential for LCT mineralisation have very low potassium/rubidium, potassium/caesium, niobium/tantalum, and magnesium/lithium ratios.

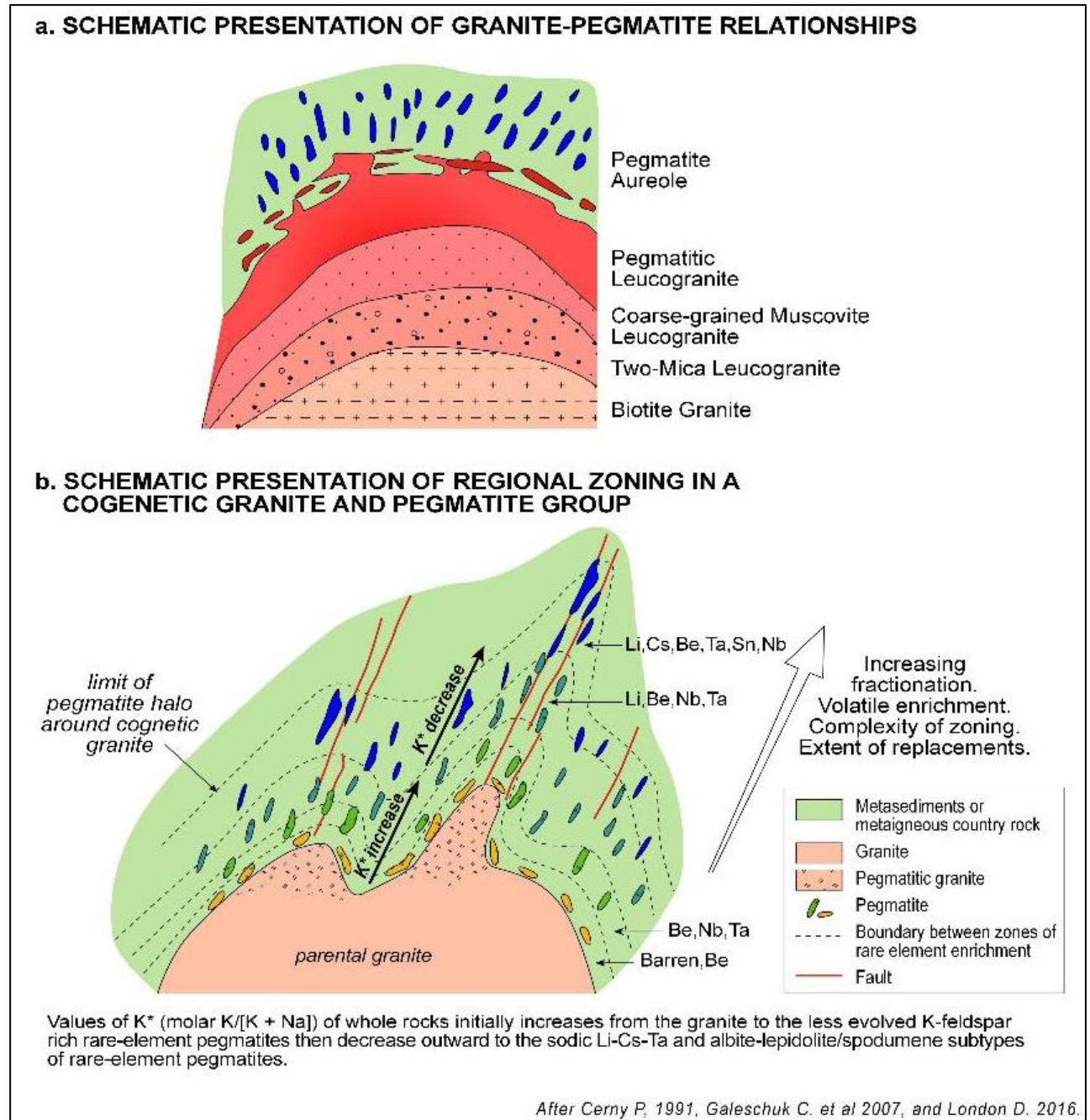


Figure 9: Schematic presentation of granite-pegmatite relationship and regional rare-element zoning in a cogenetic granite and pegmatite group

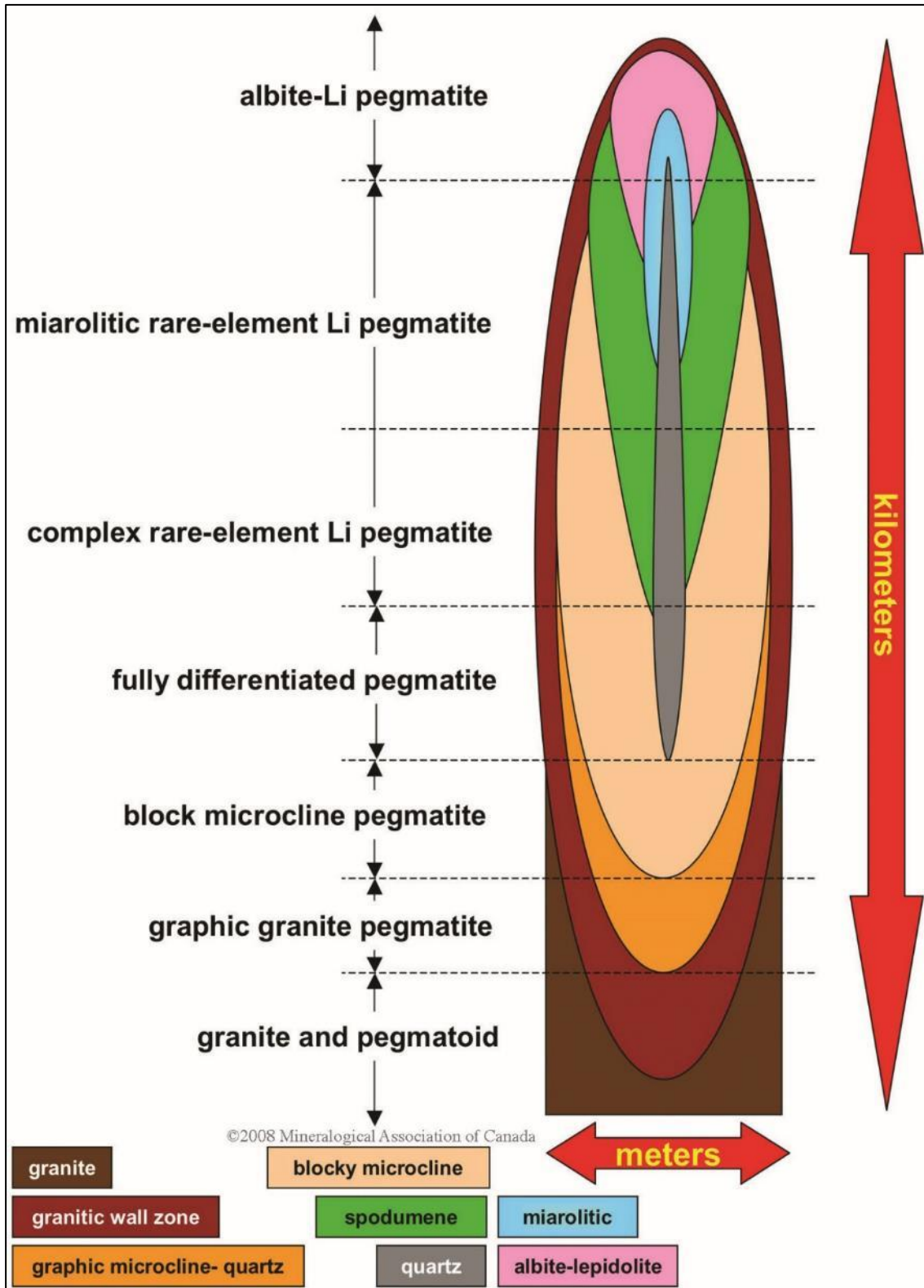


Figure 10: Generalised pegmatite composition and lithium mineral zoning pattern in relation to the parent granite

Notes: Five textural-paragenetic types of pegmatites are recognised: type I: graphic (graphic microcline-quartz intergrowths), type II block (coarse perthitic microcline cores), type III: fully differentiated (granitic borders, block microcline intermediate zones, quartz core), type IV: complex rare-element (Li-rich, grading outward to miarolitic variants of the same composition), and type V: albite-spodumene or albite-lepidolite, miarolitic or not (London, 2008) – the dashed lines are approximately 1 km apart.

Source: London (2008).

4 Kathleen Valley Project

4.1 Location, Access and Infrastructure

The project is located approximately 650 km northeast of Perth and 30 km north of the township of Leinster in Western Australia. The project is located on the Yakabindie Station Pastoral Lease. The sealed Goldfields Highway runs only 2 km west of the project area and access to the project area is possible along station and exploration tracks from the highway. The project consists of a single exploration licence E36/876 (Figure 11), covering an area of approximately 7.25 km².

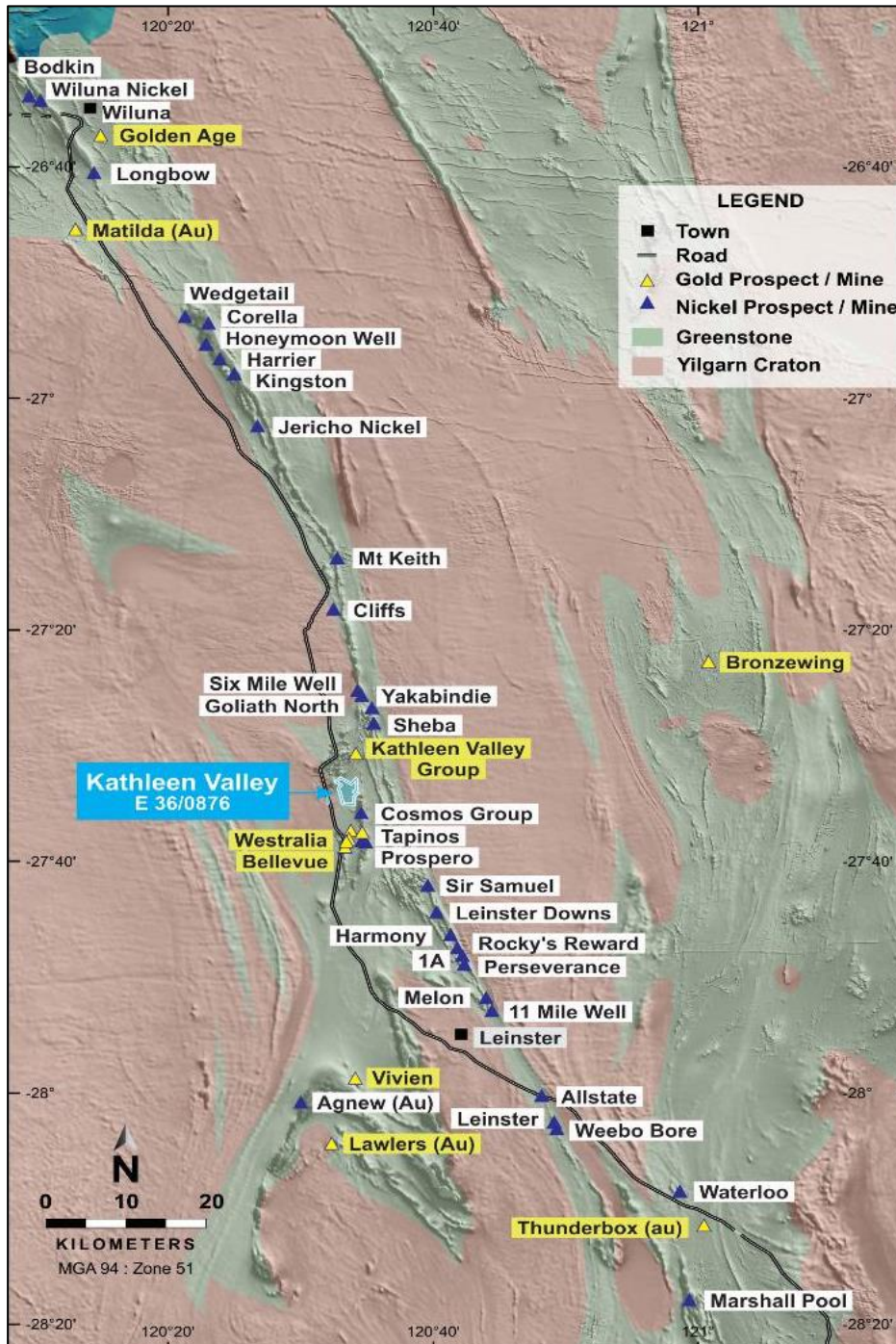


Figure 11: Mila’s Kathleen Valley Project tenure and location
 Note: Granite (pink), greenstone (green) over grey-scale aeromagnetic Total Magnetic Intensity.
 Source: NGM

4.2 Climate, Topography and Vegetation

The climate of the Kathleen Valley region is semi-arid to arid with cool winters and hot summers. Rain is most common in winter with periods of short-term flood and drought being common. The mean annual rainfall is 210 mm. January is the hottest month with an average temperature of 22–36°C; July is the coolest with an average temperature of 6–18°C.

The area is approximately 500 m above sea level, generally undulating with maximum topographic relief no more than 40–50 m across the project area. The area is vegetated with mulga woodlands, acacia shrublands and annual and perennial grasslands.

4.3 Tenure

Mila has advised CSA Global that the due diligence on matters in respect of tenure is covered by an Independent Solicitor’s Report prepared by Eakin McCaffery Cox, Mila’s legal counsel in Sydney, New South Wales, that appears in Section 9 of the Prospectus.

Mila’s Kathleen Valley Project exploration licence details are provided in Table 4. CSA Global has been advised by Mila that the tenement has been maintained in good standing.

Table 4: Tenement details for the Kathleen Valley Project

Tenement	Grant date	Expiry date	Holder name	Interest (%)
E36/876	10-11-2017	09-11-2022	TASEX Geological Services Pty Ltd	20
			NGM	80

Source: NGM

4.4 Local Geology

The local geology is covered extensively by Kelly (2002), Busbridge (2003), Watts (2005), Jacobson *et al.* (2007), Thomas and Leaver (2012), and Jones (2018), and illustrated by Figure 12. The following is a synopsis of their reports.

The project area is in the Kalgoorlie Terrane within the EGST of the Archaean Yilgarn Craton. Greenstone belts in the region include part of the Agnew Greenstone Belt, the Mount Keith–Perseverance Greenstone Belt and the Yakabindie Greenstone Belt.

The weakly deformed Yakabindie Greenstone sequence comprises the layered Kathleen Valley Gabbro overlain by the massive tholeiitic Mount Goode Basalt. The Mount Goode Basalt is overlain by metamorphosed sedimentary and felsic volcanic rocks. The overturned Yakabindie sequence which dips steeply to the northwest and youngs to the south, is bounded to the east by the north trending Miranda Fault and intruded in the west by granitic rocks. The area surrounding the junction of the Miranda Fault with the northwest trending, sinistral Highway and Yakabindie Faults has been intensely sheared with some block rotation. The Yakabindie Shear zone, 1 km west of the project area, is a 100 m-wide zone of deformed metabasalt with a well-developed steep, northwest trending mineral lineation.

The project area, which lies to the west of the Miranda Fault, is underlain by the Archaean Mount Goode Basalt and interflow sediments. The lower part of the basalt is a massive porphyritic, tholeiitic metabasalt, with the upper part being characterised by the patchy development of a plagioclase–phyric phase forming plagioclase phenocrysts throughout the fine-grained metabasalt. Pillow-lava and flow-top breccia structures are locally preserved in some areas.

Pegmatite dykes are common in the project region and strike mainly northwest to southeast, are massive to layered, with varying dips, and strikes mapped up to 200 m in length. They are composed of quartz, feldspar, muscovite, lepidolite, spodumene and cassiterite. Work by previous explorers suggests the pegmatites are for most part narrow with widths generally less than 10 m.

Tertiary and Quaternary sediments cover much of the terrain in the form of dunes, alluvial wash, and salt-lakes.

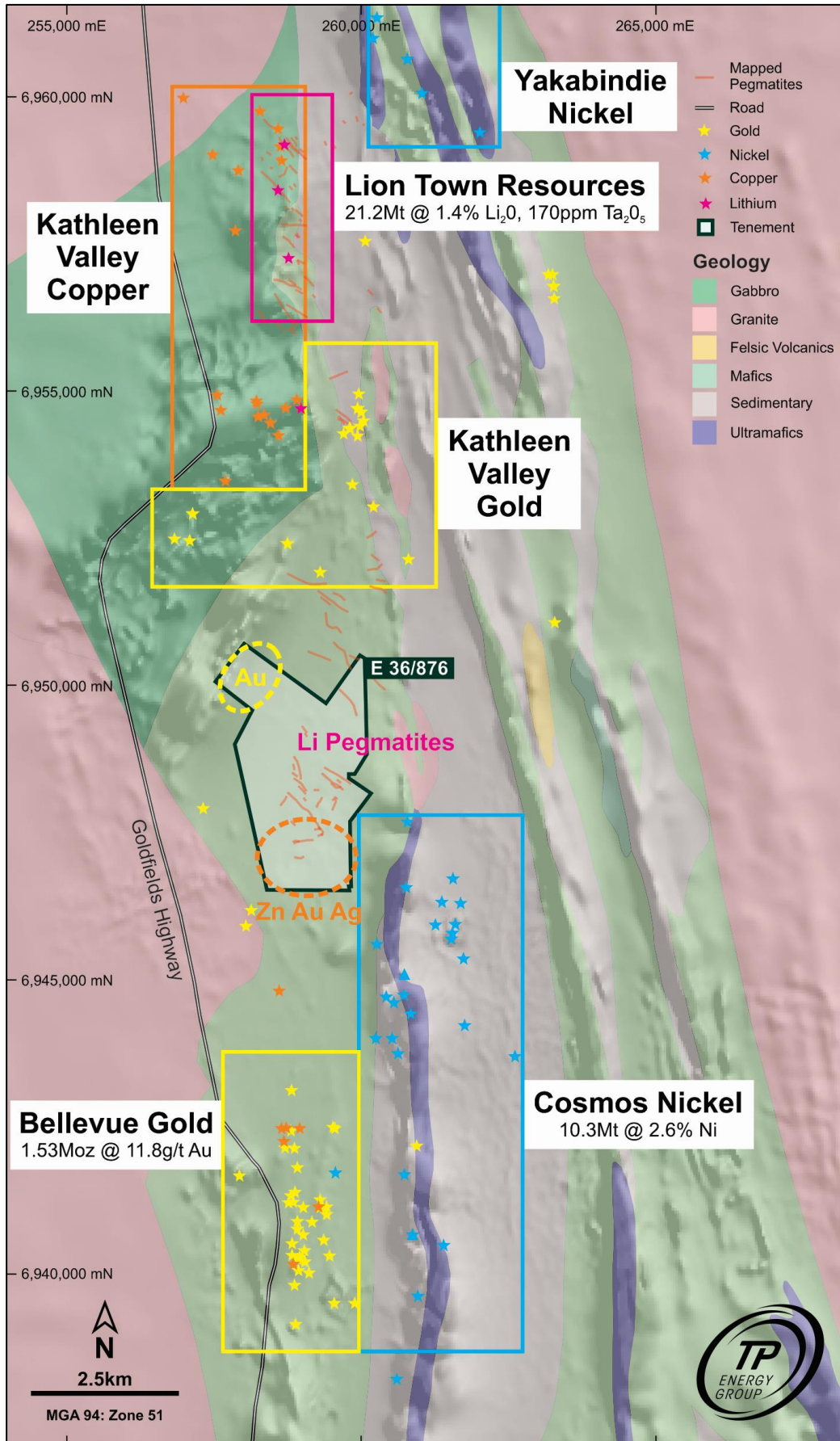


Figure 12: Local geology of the Kathleen Valley project area
 Source: NGM

4.5 Previous Exploration Activity

Previous exploration activity is covered extensively by Kelly (2002), Busbridge (2003), Watts (2005), Thomas and Leaver (2012), Jones (2018), Hutchison (2018, 2019), and Mortimer (2018, 2019). The following is a synopsis of their reports, summarised in Table 5.

Table 5: Previous exploration summary for the Kathleen Valley Project

Year	Company	Commodity	Work done	WAMEX item and tenements
1992 to 2003	Bellevue Gold Project Pty Ltd, Plutonic, Barrick Gold of Australia Limited, Xstrata Nickel	Au	Airborne magnetic survey, rock chip sampling, soil sampling, RCP drilling	A037167, A040355, A042834, A066473, A056513, A052788, A094718; P36/1065, P36/1113, P36/1114, P36/1281, M36/333
2003 to 2008	Cazaly Resources Limited, Global Nickel Investments	Au, Ni	Limited rock chip sampling	A077738, A074787, A072087, A070984; E36/501
2008 to 2013	Western Resources and Exploration Pty Ltd		No reports submitted	E36/691, E36/692
2015 to 2016	Golden Spur Resources Pty Ltd		Tenement application withdrawn	E36/850
2016 to 2018	TasEx Geological Services Pty Ltd		Compilation	E36/876
2018 to 2020	NGM		Compilation, reprocessing of regional VTEM survey data acquired in 2009, reconnaissance mapping and sampling, FLTEM ground EM survey, RC drilling 12 holes (2,160 m total drilling), borehole EM in four holes	E36/876

Gold has been mined in the area since the 1890s with most of the early production coming from the Kathleen Valley (4 km north of the project area) and Sir Samuel (5 km south of the project area) Mining Centres. At Kathleen Valley (outside the current tenement area), the bulk of the production came from the Yellow Aster and Nil Desperandum mines, with the Main Road deposit being mined from 1990 to 1991.

At Sir Samuel, the major producer was the Bellevue Group. Only sporadic small-scale production continued at Bellevue between the 1950s and 1980s. Exploration work during the 1970s established major extensions at depth beneath the old Bellevue workings (Liu, 1998). Underground mining at Bellevue Mine continued from the late 1980s to 1997. A total of 802,168 ounces of gold was produced from the mine (Source: Watts, 2005).

Known gold mineralisation in the general area appears to be commonly associated with simple quartz veins or more complex stockworks. Numerous north-northwest trending, crosscutting, gold-bearing structures offset the local geology. These structures are commonly associated with strong alteration zones. The main gold prospects in the region are hosted by several lithologies ranging from basalt and/or dolerite at Miranda and Bellevue to conglomerates and metabasalt at Kathleen Valley.

Most of the mineralisation in the Kathleen Valley area is contained in gold-bearing quartz reefs and lenses hosted by metamorphosed felsic conglomerates of the Jones Creek Conglomerate. The Yellow Aster and Nil Desperandum mines lie in a north-northwest trending zone adjacent to sheared metabasalt east of the Miranda Fault. The Main Road deposit, about 2 km north of the project area is hosted by metabasalt.

The Sir Samuel group of workings, centred on the Bellevue mine, lies to the west of the Miranda Fault. The workings are associated with an east-younging, metamorphosed tholeiitic basalt sequence that has been mylonitized within a north-striking, west-dipping shear zone. Gold mineralisation is contained within massive and disseminated sulphides in quartz breccia lodes and in the surrounding mylonitized basalt (Liu, 1998). Most of the exploration in the project area has been for gold and nickel.

Between 1909 and 1967, 424 tonnes of copper were mined from the Kathleen Valley area (Watts, 2005). The copper mineralisation, commonly associated with gold and silver, is contained in pyrite-chalcopyrite-quartz veins within mafic hosts. These veins are spatially related to north-northwest trending shear zones within the Kathleen Valley Gabbro and the Mount Goode Basalt.

Two minor occurrences of tin have been noted in the region. A cassiterite-bearing lepidolite-albite pegmatite 1 km north of the project area and a small deposit 400 m southwest of the Sir Samuel town site were worked between 1945 and 1953. A total of 8 tonnes of ore containing 0.2 tonnes of tin was produced (Watts, 2005).

The most comprehensive work within the project area was completed by Barrick Gold and joint venture partners between 1992 and 2003. This exploration work largely focused on gold and included rock chip sampling, widespread auger soil sampling and reverse circulation percussion (RCP) drill testing of some gold targets following on from some anomalous results from the auger and rock chip sampling program (Figure 13). However, the follow-up RCP drilling intersecting only minor gold anomalous material and the project was suspended (Table 5 and references therein). Assays for auger sampling were gold only with no other elements analysed, while RCP samples assayed for gold, arsenic, copper, nickel, lead and zinc only. Barrick surrendered the tenements in 2003.



Figure 13: Barrick auger soil gold sample locations (left) and RCP drill collars (right), Kathleen Valley project area
 Source: Jones (2018)

Jubilee Mines NL explored ground to the north of Kathleen Valley for tantalum (and lithium) in 1998 and 2000. Their results included four rock chip samples (PEG001A – two samples; PEG001B, PEG 002 – Figure 12) taken from two pegmatite dykes approximately 200–300 m north of the present E36/876 northern tenement boundary. The remainder of their sampling was well to the north of the present project towards Kathleen’s Corner. The two pegmatite dykes closest to the Kathleen Valley tenement returned results of 0.89% Li₂O, 0.92% Li₂O, 1.01% Li₂O, and 1.09% Li₂O (Source: Kelly, 2002).

Recent lithium exploration work by ASX-listed explorer Liontown Resources (ASX:LTR) at Kathleen’s Corner and Mount Mann, immediately north of E36/876, has identified a lithium Mineral Resource estimate of 21 Mt at 1.4% Li₂O and 170 ppm Ta₂O₅, at 0.5% Li₂O cut-off, in spodumene-bearing pegmatites (LTR ASX announcement, 4 September 2018). Pegmatites at Kathleen’s Corner comprise sub-horizontal to moderately dipping pegmatite vein sets (dipping 0–45° west) over an area of 1,000 m x 600 m, with veins ranging in thickness from 3 m to 20 m.

4.6 NGM Exploration Activity

Southern Geoscience Consultants (SGC) completed a review and reprocessed data in 2018 of a regional Versatile Time Domain Electromagnetic (VTEM) survey flown in 2009. They highlighted a late-channel conductivity anomaly in the southwest corner of the tenement area (Figure 14). Anomalism is apparent over four flight lines, strikes northwest/southeast, and is centred at ~258,725E, ~6,946,625N. The conductivity response appears to correlate with a magnetic anomaly also striking northwest/southeast. A Fixed-Loop Transient Electromagnetic (FLTEM) survey was completed by NGM over the southern portion of the project to confirm the VTEM anomaly in late 2018.

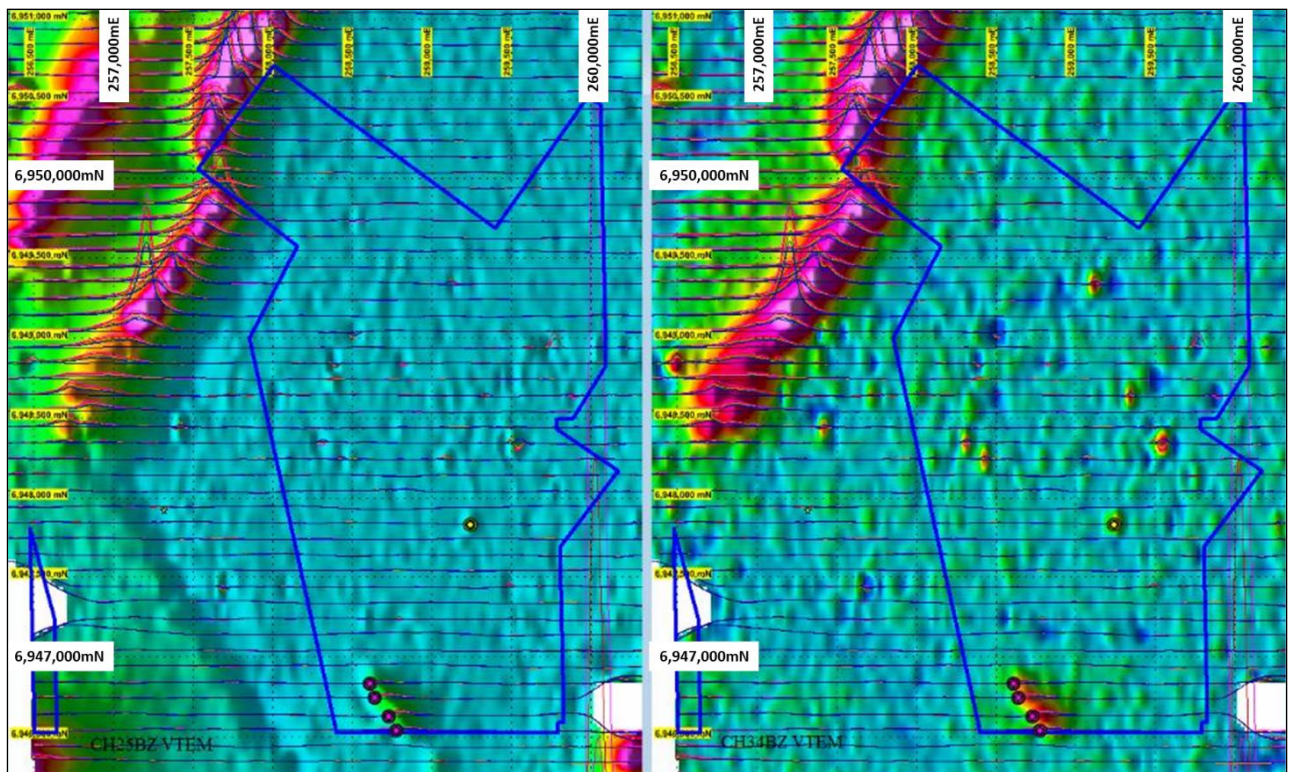


Figure 14: VTEM local anomalism defined within E36/876 (mid channel CH25BZ left, late channel CH34BZ right) – well defined anomalism (purple dots), possible anomalism (yellow dot)
Source: Mortimer (2018)

The survey comprised five east-west detailed lines (75 m line spacing/50 m station spacing) totalling 3.25 km of survey lines (70 stations). The survey confirmed a moderate to high-conductance bedrock FLTEM conductor (Target KV1). The modelled plate conductor has a relatively large areal size of approximately 400 m x 125 m (Figure 15) and is centred at a depth of approximately 100–125 m below surface. A site visit to the area conducted by NGM determined that surface outcrop over the anomaly is basalt, with no indication of sedimentary rock units or mineralisation that may give rise to a conductivity response.

In early 2019, NGM followed up the FLTEM survey results with two reverse circulation (RC) holes (KVRC001 and 002) spaced 30 m apart and drilled to depths of 161 m and 191 m, respectively. Both RC holes drilled intersected a broad fault/shear zone averaging a width of approximately 17 m within the host basalt and comprising strong silica-quartz-chlorite alteration with abundant sulphide mineralisation (up to 10%). KVRC001 targeted the centre of the modelled EM plate conductor and intersected an 18 m-wide zone at 137 m downhole. KVRC002 targeted the top of the modelled EM plate conductor to gain geological control and intersected a 16 m-wide zone from 106 m downhole. The altered shear zone in both holes is strongly mineralised with pyrrhotite-pyrite-arsenopyrite sulphides.

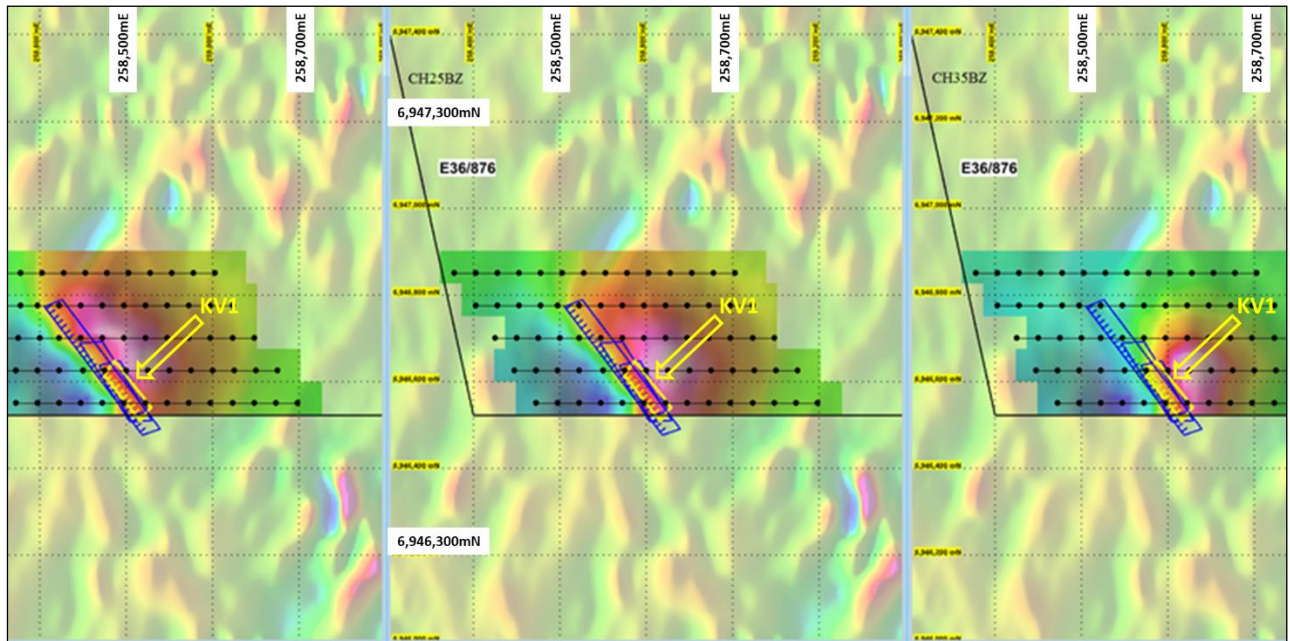


Figure 15: Kathleen Valley FLTEM surveying – KV1 – CH15BZ, CH25BZ and CH35BZ imagery with survey coverage and modelled conductors (primary late channel conductor of interest in yellow)
Source: Mortimer (2019)

In addition, 1 m of massive sulphide (more than 90% sulphide comprising dominantly pyrrhotite-pyrite) was intersected at the top of the shear zone within the initial drillhole KVR001 at a downhole depth of 137–138 m. The same sulphide zone is believed to have been intersected as a 2 m zone of semi-massive sulphide (more than 60% sulphide) in hole KVR002 at a downhole depth of 119–121 m at the base of the shear zone.

A low 0.25 Hz base transmitter frequency borehole EM survey of KVR001 was completed by GEM Geophysics following the completion of the drilling. The second hole KVR002 was blocked at approximately 23 m depth due to the hole collapsing at the water table. The late-channel borehole EM data models with both an in-hole conductor and an off-hole conductor coincident with the larger of the two mineralised intersections in KVR001 and KVR002. All vectors from both the in-hole and off-hole EM conductor models point below and southwest of the main KVR001 sulphide intercept. To date, this modelled borehole EM anomaly has not been followed up with drilling.

In 2020, NGM followed up the FLEM anomaly and mineralisation encountered in RC drilling holes KVR001-002, with a further 10 RC holes (KVR003-012) drilled for 1,808 m of additional drilling. This has given four drill sections spaced 50 m apart along the targeted northwest-southeast strike length of the original FLEM conductivity anomaly.

All 10 drillholes intersected mineralisation in the targeted zone. The gold-silver mineralisation occurs within a visual zone of bleached, altered, veined and sulphide mineralised rocks within the Mount Goode Basalt sequence. Mineralisation demonstrates a strong association between sulphur, arsenic, gold, silver and zinc, defining a tabular body striking north-northwest to south-southeast and dipping approximately 50° to the northeast. The mineralisation is blind at surface and pinches to the west, coming to within approximately 40 m of the surface.

Mineralisation is open along strike to the northwest and southeast and is open at depth to the northeast. Borehole EM survey of the four deeper eastern-most holes on each drill line demonstrates a consistent conductive plate model anomaly coincident with the mineralised intersections and extending to the northeast of the drillholes.

Significant drill intersections from the RC holes are depicted in Table 6 and Figure 16.

Table 6: Significant drill intersections, drillholes KVRC001-012, Kathleen Valley

Hole ID	From (m)	To (m)	Width (m)	Au (g/t)	Ag (g/t)	Zn (%)
KVRC001 including and	135	143	8	2.40	3.77	2.69
	135	137	2	5.49	2.98	0.85
	137	138	1	0.5	4.57	8.82
KVRC001	159	160	1	1.21	1.08	1.15
KVRC002 including and	109	121	12	0.51	3.67	1.15
	114	117	3	1.03	8.68	0.77
	119	120	1	0.52	3.24	6.18
KVRC004 including and	91	98	7	3.24	15.38	0.92
	95	96	3	5.65	33.27	1.42
	97	98	1	0.91	58.8	3.10
KVRC005	153	159	6	0.33	5.87	3.97
	159	164	5	1.38	3.98	0.72
KVRC006	102	108	6	3.07	<0.5	0.05
	112	114	2	2.42	<0.5	0.02
KVRC008 including	111	119	8	3.38	5.99	1.74
	118	119	1	13.95	10.8	1.38
KVRC009 including	159	163	4	1.75	5.63	3.09
	161	163	2	3.10	4.35	2.41
KVRC010	42	44	2	1.42	0.26	0.19
KVRC012 including	134	142	8	1.10	0.83	0.21
	134	138	4	1.52	1.63	0.37

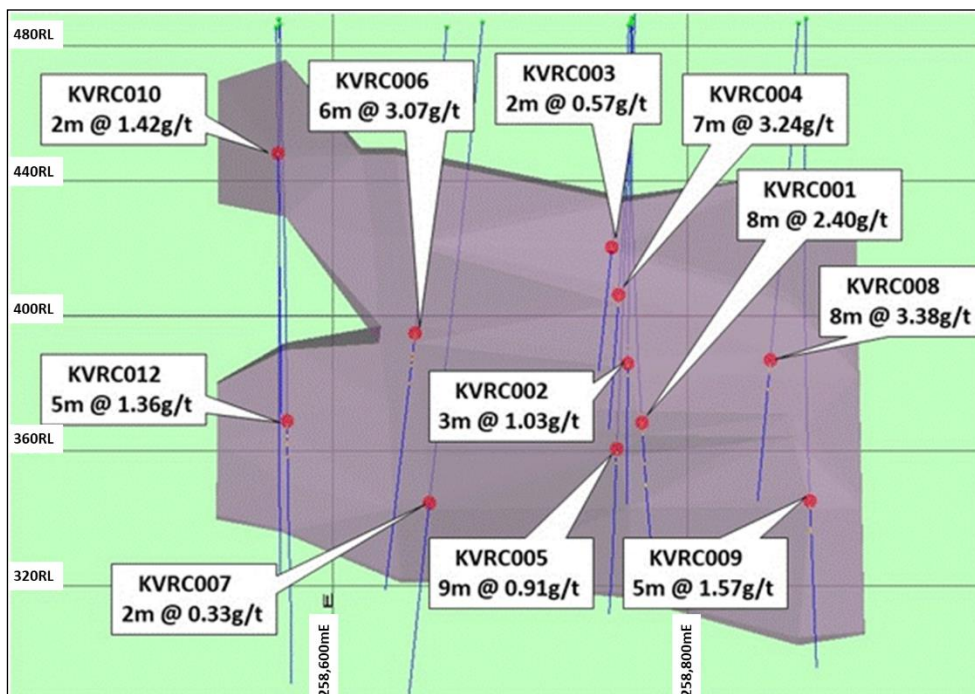


Figure 16: Long-section looking east showing drill intersections and gold grades, KVRC001-012, Kathleen Valley
Source: Maddox (2021)

In 2019, NGM also followed up surface pegmatite occurrences on the Project, visiting and sampling several pegmatite outcrops. Pegmatites are common within the tenement and typically strike approximately northwest with a dip of about 45° towards the southwest. The length of individual pegmatites is up to 350 m with pegmatites commonly occurring in an en echelon zone up to 500 m long and up to 150 m wide. The pegmatites usually have a true thickness of about 0.5–1.0 m, although slumping of collapsed outcrop down-

slope can give the appearance of greater thickness. No pegmatites were observed to have a true thickness greater than 2 m.

Also in 2019, a total of 316 shallow auger samples were collected over two areas in the northwest and northeast areas of the Kathleen Valley tenement (Figure 17). The purpose of the campaign was to sample the regolith (surface) zone to identify structural gold trends in areas with historical gold shafts and eluvial nugget patch scrapings. A maximum result of 0.54 ppm Au was returned from the southeast corner of the eastern survey block (magenta zone in Figure 17), with anomalous gold trends being defined by the green contours above an assay of 0.01 ppm Au (>10 ppb Au). The results from this program suggest several structural gold trends, with the western zone showing a strong northeast-southwest trend (700 m x 200 m), which parallels the sheared mafic-ultramafic geological contact along the tenement boundary. Sampling in the eastern block returned an apparent northwest-southeast anomalous gold trend (700 m x 120 m) as well as an apparent crosscutting northeast-southwest trend (550 m x 50 m). The 538 ppb Au (>0.5 g/t Au) anomaly was historically drill tested by three Barrick Gold RC holes, which did not explain the source of this anomaly in the southeast corner of the block.

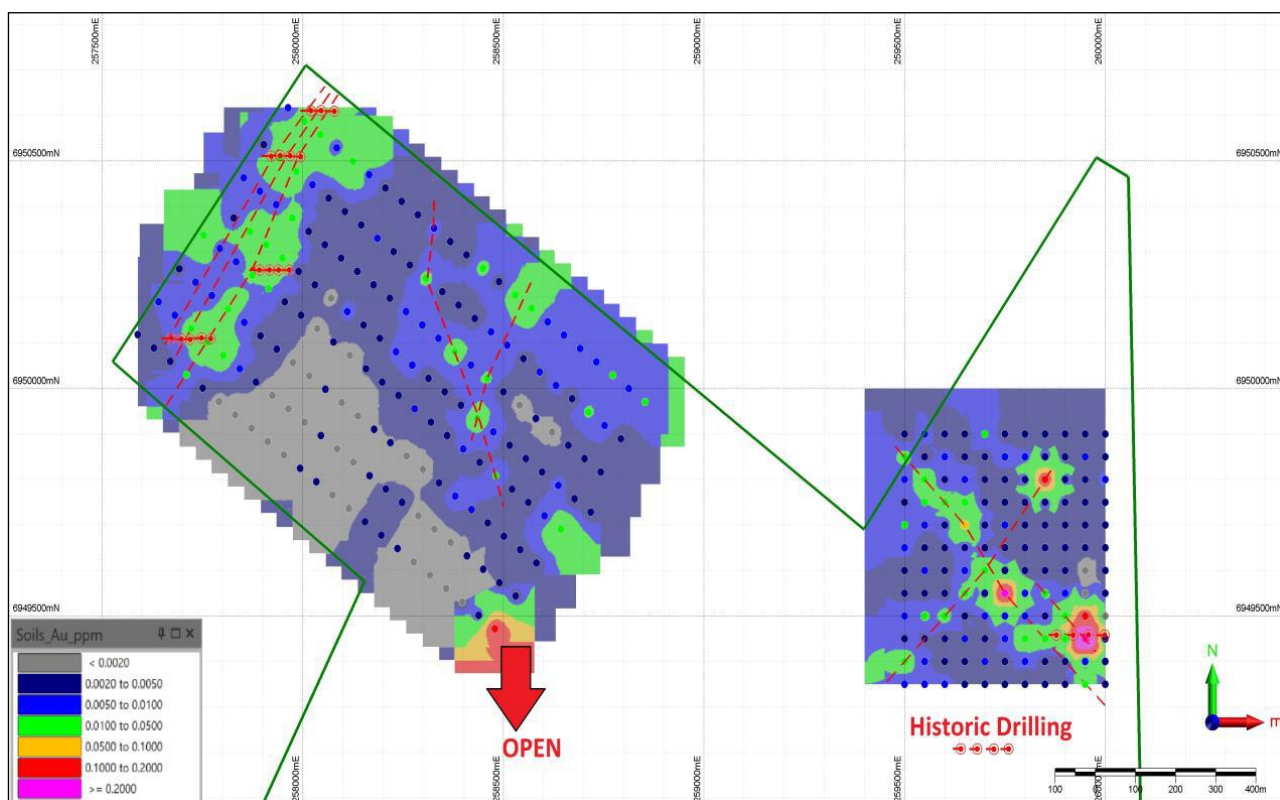


Figure 17: Contoured gold results from soil sampling with interpreted structural trends, Kathleen Valley (dashed red lines) and historical drilling (red circles with straight line)
Source: NGM

Lepidolite was observed in about half of the pegmatites but the amount varies, with some pegmatites containing more lepidolite than others and the distribution of lepidolite within individual pegmatites varies substantially along-strike. Typically, the lepidolite occurs as sparsely scattered small (about 5 mm diameter) clots or as disseminated fine-grained flecks defining a subtle banding that, with increasing lepidolite, grades into wispy streaks. With further increase in lepidolite narrow (1–3 cm thick) bands result. In rare instances, small pods (up to about 15 cm x 10 cm x 5 cm) of massive fine-grained lepidolite are present.

The composition of the pegmatites is relatively simple; feldspar (both microcline and albite), quartz, muscovite and lepidolite. The only obvious difference between observed pegmatite composition and texture was the presence or lack of lepidolite, suggesting a cogenetic relationship. No beryl, tourmaline, apatite, cassiterite, tantalite, spodumene or petalite were observed in the pegmatites observed. Assay results for the three samples submitted for analysis are depicted in Table 7.

Table 7: Assay results of sampled pegmatites, Kathleen Valley

Sample ID	East (m)	North (m)	Li ₂ O (%)	Cs (ppm)	Ta (ppm)	Nb (ppm)	Sn (ppm)	Rb (ppm)
PSKV2	258,972	6,949,062	3.412	2,440	291	113	288	25,900
PSKV4	259,158	6,947,792	0.458	282	242	69	270	13,300
PSKV5	259,144	6,947,803	0.015	333	7.5	5	14	19,100

The three pegmatite samples assayed were analysed at least ten times each at varying points on the sample using Raman spectroscopy in an attempt to identify spodumene. All three samples showed the presence of quartz, sodium feldspar (albite) and lepidolite. No spodumene was detected in any of the three samples.

In addition to the pegmatites, two outcrops of felsic porphyry were observed, centred upon locations 259,565 mE, 6,948,825 mN and 259,265 mE, 6,947,580 mN (GDA94 Zone 51). The relationship between the feldspar porphyry observed on the project, the regional monzogranite porphyry batholith to the northwest of the project, and the various pegmatitic dykes observed on the project is yet unclear.

4.7 JORC Mineral Resource and Exploration Target – Gold-Zinc-Silver

Based on the results of the 2019 and 2020 RC drill programs and accompanying borehole EM geophysical surveys, NGM and Auralia Mining Consulting have estimated a JORC (2012) compliant Inferred Mineral Resource and Exploration Target (Maddox, 2021. Table 8 and Table 9). The size of the Exploration Target will be a larger zone than the JORC (2012) compliant Inferred Mineral Resource estimate because the latter would rely solely upon the data from the closely drilled initial 12 RC holes, whereas an Exploration Target will be more led by the broader electromagnetic signatures beyond these holes as an indication of the size potential of the system as reasonably extrapolated from the current limited data.

Table 8: Inferred Mineral Resource estimate for the Kathleen Valley gold-zinc-silver mineralisation

Cut-off Au g/t	Volume	Tonnes	Au g/t	Au oz	Ag g/t	As ppm	Cu ppm	Pb ppm	S %	Zn %
0.5	113,000	327,000	2.0	21,000	5.0	2,970	530	490	5.8	1.2
1.0	107,000	311,000	2.1	20,600	5.0	3,050	530	500	5.7	1.2

Source: Maddox (2021)

Table 9: Exploration Target estimate for the Kathleen Valley gold mineralisation

Tonnage range		Grade range – Au g/t		Au oz range	
2,500,000	3,500,000	1.8	2.5	145,000	280,000

Source: Maddox (2021)

The Exploration Target is based on a range of potentially expected widths and grades of gold within the highlighted area. The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the exploration target itself will be realised.

The Competent Persons Statement relating to the estimation of this Mineral Resource and Exploration Target by Mr Richard Maddox is stated in Section 1.6.2 of this report.

Assessment of the drilling data to arrive at the Mineral Resource and Exploration Target estimate entailed the following methodology and assumptions. The following contains extracts from the Maddox (2021) Mineral Resource estimate report.

4.7.1 Drilling

A total of 2,160 m in 12 drillholes were included in the block model area (Figure 18).

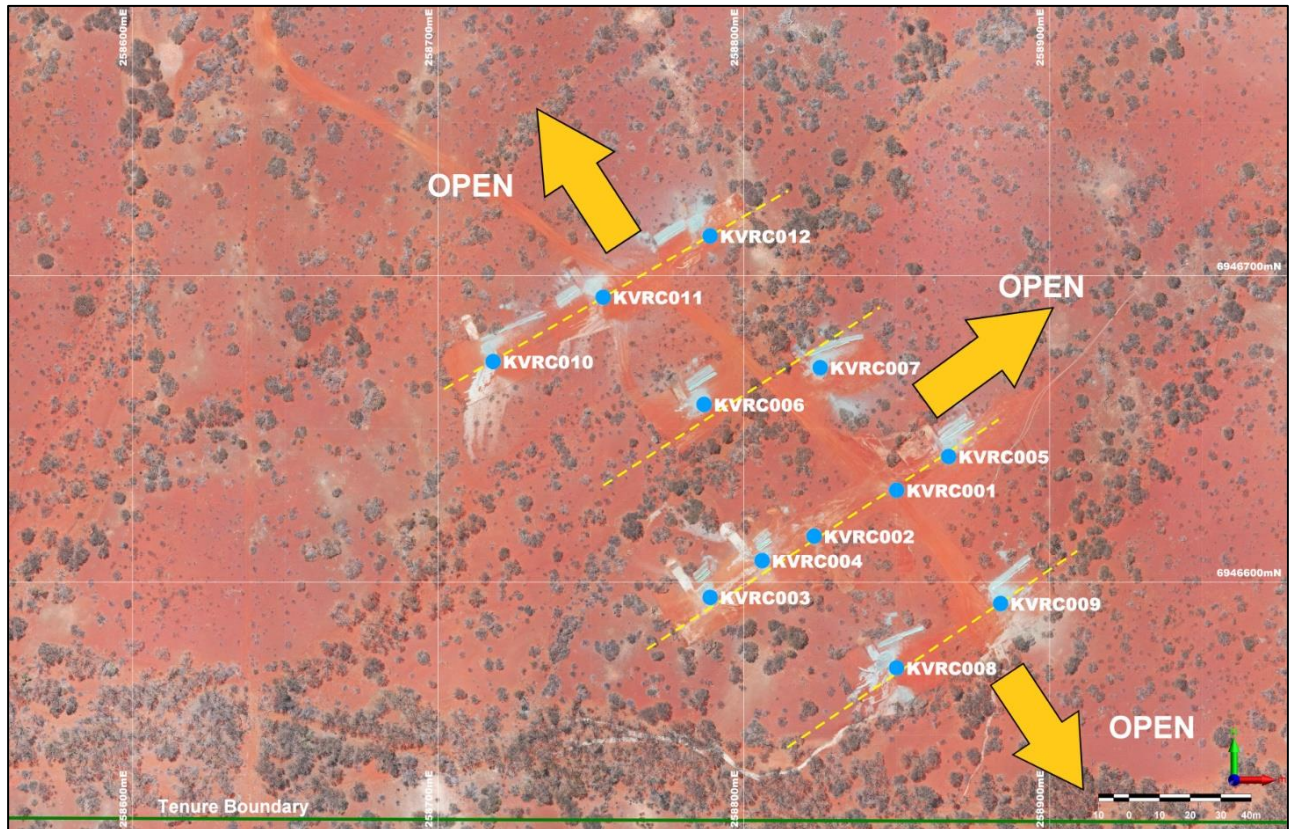


Figure 18: Completed RCP drilling over gold-zinc-silver mineralisation, Kathleen Valley
 Source: NGM

4.7.2 Quality Assurance and Quality Control

Standards were not included in the assay submittals due to the multi-element analysis. Field duplicates were collected. The dataset is limited however no significant issues were raised in the duplicate sample analysis.

4.7.3 Modelling

Geological and grade modelling was done using Vulcan v12.0.5. Two solid mineralised shapes were interpreted based on gold grades within the sulphidic shear zone. A nominal grade of 0.5 g/t was used to delineate the shapes, but some lower grades were included to ensure a minimum downhole width of 2 m was modelled.

The modelled domains were based on gold grades. The gold mineralisation is associated with a sulphide rich horizon that also contains elevated levels of base metals (zinc, copper, lead), silver anomalism and arsenic. These elements do not correspond exactly according to geology (i.e. high gold values do not overlay high arsenic or base metal values). This indicates a more complicated history of metal deposition and fluid intrusion into the mineralised horizon. It may be possible that gold mineralisation represents a different mineralising event than that of the base metals.

The block model was constructed with the following parameters:

- Origin: 258,600 E, 6,946,400 N, 200 RL (GDA94)
- Rotation: None
- Extents: 330 mE, 380 mN, 340 mRL
- Block size: 5 m x 10 m x 5 m parent, 2.5 m x 5 m x 2.5 m sub-block size
- Variables modelled included gold, silver, arsenic, copper, lead, zinc, and sulphur.

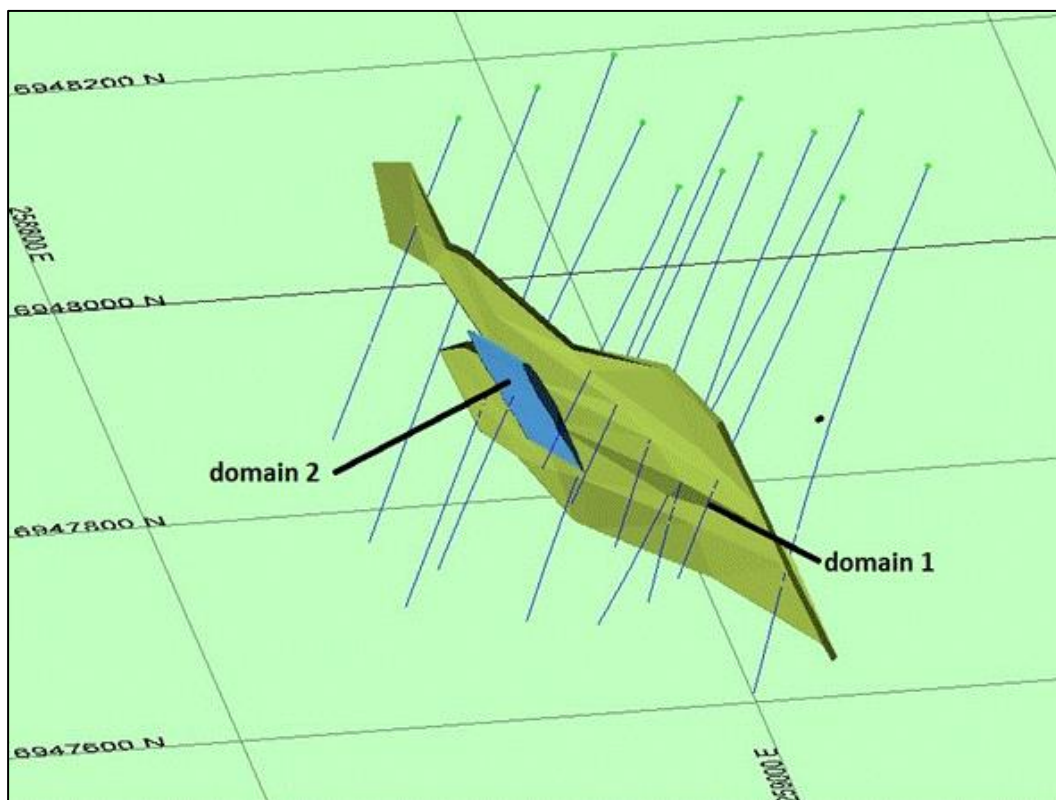


Figure 19: Oblique view showing location of drilling and modelled domains, Kathleen Valley
Source: Maddox (2021)

4.7.4 Data Analysis

Raw sampling intervals within the two mineralised domains are all on 1 m intervals so this has also been used as the composite interval. There are no residual composites. Domain 2 is not included in the data analysis as it is based on one hole only.

4.7.5 Variography

Given the limited data of only 57 composites in domain 1, variography was not robust. A meaningful variogram was produced from the gold data but the other elements did not produce useful variograms. Gold has been estimated using ordinary kriging (OK) but the other elements have been estimated with inverse distance squared (ID2). Gold has also been estimated with ID2 as a comparison.

4.7.6 Bulk Density

There is currently no empirical data for bulk densities within the deposit. All drilling to date has been with RC with no direct measurements possible. Dry bulk densities have been assumed based on similar rock types within the Eastern Goldfields of Western Australia.

The dry bulk densities used are:

- Oxide: 1.8 t/m³
- Transitional: 2.2 t/m³
- Primary ore: 2.9 t/m³
- Primary waste: 2.7 t/m³

The density for primary ore is slightly higher than the waste due to the presence of massive to disseminated sulphides within the ore horizon.

4.7.7 Grade Estimation

All elements were estimated using a single estimation pass. Gold was estimated with OK, and silver, copper, lead, zinc, arsenic and sulphur were estimated with ID2. Details are summarised in Table 10.

Table 10: Model grade estimation details, Kathleen Valley gold-zinc-silver

Variable	Major (m)	Semi major (m)	Minor (m)	Major direction	Semi-major direction	Minor direction	Minimum holes	Minimum samples	Maximum samples	Disc. X	Disc. Y	Disc. Z
Au_ok	100	80	15	150°	0°	-60°	2	2	15	1	2	1
Au_id2	100	80	15	150°	0°	-60°	2	2	15	1	2	1
Ag	100	80	15	150°	0°	-60°	2	2	15	1	2	1
As	100	80	15	150°	0°	-60°	2	2	15	1	2	1
Cu	100	80	15	150°	0°	-60°	2	2	15	1	2	1
Pb	100	80	15	150°	0°	-60°	2	2	15	1	2	1
S	100	80	15	150°	0°	-60°	2	2	15	1	2	1
Zn	100	80	15	150°	0°	-60°	2	2	15	1	2	1

Search directions were based on the orientation of the mineralised lode. Search extents were selected to ensure that all blocks within the domains were informed with the relevant variables, In the case of gold, the search distances were about double the ranges indicated by the variography.

The parent block size is 5 m x 10 m x 5 m, this has been based on the minimum block size to ensure adequate delineation of the domains. A sub block size of 0.5 m x 5 m x 2.5 m was used for more detailed delineation of surfaces.

Top cuts were applied based on analysis of cumulative log frequency graphs. The top cuts applied are given in Table 11.

Table 11: Top cuts applied, Kathleen Valley gold-zinc-silver

Variable	Top cut applied	% of composites cut
Gold	10 g/t	1.7%
Silver	30 g/t	1.7%
Arsenic	20,000 ppm	3.4%
Zinc	40,000 ppm	3.4%

4.7.8 Exploration Target

Figure 20 shows a long section looking east with the location of the FLEM and downhole electromagnetic (DHEM) conductive “plates” extending out from the drilled mineralisation. This forms the basis for the exploration target. The Exploration Target is based on a range of potentially expected widths and grades of gold within the highlighted area. The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the exploration target itself will be realised.

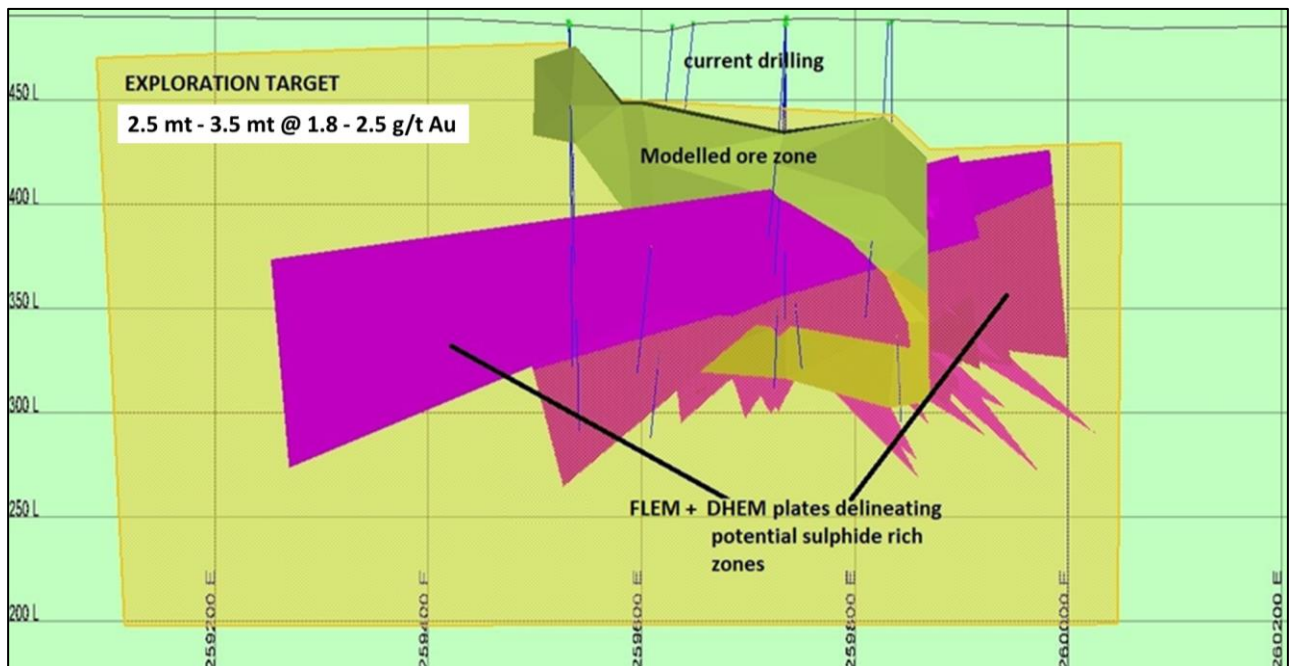


Figure 20: Kathleen Valley Exploration Target
Source: Modified after Maddocks (2021)

CSA Global has reviewed this methodology and agrees with the conclusions drawn as to exploration potential and targets. Mila’s planned exploration activity and timetable to improve this Inferred Mineral Resource estimate is detailed in Section 6 of this report; in summary the proposed activities comprise drilling over the next two years.

4.8 Exploration Potential and Targets

The project is at greenfields stage of exploration. The primary exploration targets are VMS lead-zinc-copper, Archaean orogenic gold, pegmatite lithium and magmatic nickel-copper. While an Inferred Mineral Resource and Exploration Target have been estimated for the project, these represent the least confidence level in Mineral Resource Estimation. Significant work needs to be carried out before the potential of the project to host sufficient material to be economic for mineral extraction can be determined.

The source of the sulphide that gave the coincident magnetic, VTEM and FLTEM bedrock conductivity anomaly in the southwest corner of the tenement is enigmatic. The silicified-sulphidic shear system is located entirely within a very thick sequence of meta-basalts with no interbedded volcanics or sediments and the sulphides or shear system are not evident at surface. From the holes drilled, it appears that there may have been a hiatus between two submarine basaltic flows allowing for the deposition of a zinc-gold-silver VMS-style sulphide horizon. However, significant syntectonic sulphide veins are also present in deformed and metamorphosed gold deposits in the region as seen at Bellevue Gold Mine to the south. These types of gold deposits occur in mixed submarine volcanic, volcanoclastic and sedimentary sequences typically metamorphosed to greenschist and lower amphibolite facies. Mineralisation is composed mainly of gold-bearing sulphides, where the gold is thought to have been introduced into the sulphide system by later structurally controlled hydrothermal fluids during deformation. Ore contains considerable iron, variable amounts of copper, lead and zinc and has locally high concentrations of arsenic, antimony, and mercury. Silver content generally exceeds that of gold (Au:Ag = 1:2 to 1:10). The host rocks are typically sericitized and chloritized, and some deposits are enveloped by zones of aluminous alteration resulting from extreme alkali depletion.

The borehole EM anomalies coincident with the drill intersected sulphide horizon represents a legitimate drill target, as a possible explanation for the conductivity response may be further sulphide accumulation with potential to host either VMS zinc and/or remobilised shear-hosted gold-silver. The potential metal mineralisation affinity of any such sulphide accumulation is speculative until it has been further drill tested.

The Exploration Target will be the focus of further exploration activity to increase the JORC Resource estimate category and fully determine the distribution and nature of the gold-silver-zinc mineralisation by:

- Infill drilling on a 20 m x 20 m basis within the current Exploration Target area
- Extending drilling along strike to increase the footprint of the Exploration Target
- Drill deeper to understand the potential scale of the Exploration Target.

CSA Global is of the opinion that the presence of anomalous gold elsewhere on the tenement is encouraging. Previous historical gold exploration has focused almost exclusively on gold-only assay analysis. CSA Global would recommend that further exploration activity for gold conduct multi-element analyses. Previous exploration has not ruled out the possibility for blind mineralised systems where the gold does not intersect the base of oxidation in the regolith profile. Potential exists that a wider suite of elements analysed may recognise alteration envelopes of characteristic pathfinder elements around possible gold systems that previous gold-only analyses may have missed. Also, the samples were taken at a universal depth of 20 cm across the entire tenement, and nothing is known regarding the sample medium taken for each sample site. Hence, further potential exists for previous sampling to be skewed by transported material unrelated to potential bedrock signature.

The source granite for the pegmatite field at Kathleen Valley has not been conclusively identified. The large granite batholith to the north and west of the tenements is mapped by the GSWA as a pegmatitic monzogranite. Such monzogranites are thought to be related to lithium mineralisation elsewhere in Western Australia. This monzogranite may comprise the source, particularly as the pegmatite field seems to be radial to the batholith margins and the intrusion is mapped as monzogranitic in composition (a granitoid composition commonly spatially associated with lithium pegmatites). However, this is speculative and needs to be demonstrated. The mapped presence of pegmatites on the Kathleen Valley Project, at comparable lateral distance from the granite batholith as mapped for the spodumene-bearing pegmatites at Kathleen's Corner to the north of the project, is encouraging. No spodumene has been detected to date in the samples analysed by NGM, and it appears that the lithium content of the dykes sampled to date is hosted in lepidolite. However, the sampling of dykes at present (three samples) is very limited and CSA Global is of the opinion that the project has potential for hosting spodumene (lithium)-bearing pegmatites.

While the area along strike of the project location within the greenstone terrane has identified nickel resources associated with komatiites of the Agnew-Wiluna Greenstone Belt, there are no reported or geophysical indications of substantial komatiitic volcanic rocks on the tenement. While subsurface geology on the tenement is yet unknown, the lack of evidence to date for komatiite-host lithologies on the tenement would indicate that potential for hosting similar style nickel deposits is low.

5 Technical Risks

A key risk, common to all exploration companies, is that the expected mineralisation may not be present or that it may be too small to warrant commercial exploitation. The Project is early stage, and considerable exploration is still required to determine the likelihood of discovery. If a discovery is made, significant work programs are still required to test the potential of that discovery for economic mineral extraction. Such work programs are typically stage gated with the aim of decreasing uncertainty and risk at each stage towards a decision point whether mining is economically viable. While good potential exists on the Project for discovery, the Project currently resides at the high uncertainty, and therefore high risk, end of the spectrum of that stage gated work process. The work programs to be undertaken by Mila are designed to increase certainty and mitigate risks. However, such is the nature of exploration that positive results cannot be guaranteed.

The interpretations and conclusions reached in this report are based on current scientific understanding and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for absolute certainty.

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond CSA Global's control and that CSA Global cannot anticipate. These factors include, but are not limited to, site-specific geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the Project in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any exploration operation.

As with most early exploration prospects, the key technical risk is that further exploration may not result in the discovery of an economic resource. The Project is early stage, and significant exploration is still required to determine the likelihood of discovery.

Native title has been determined over the Kathleen Valley Project. Access and exploration activity has to be cleared with the native title holders before work can commence.

6 Planned Work

6.1 CSA Global Assessment of Planned Exploration

The planned exploration activity on the Project is summarised and reviewed below. CSA Global has reviewed the exploration program and is of the opinion that the program is appropriate. CSA Global endorses this exploration approach exploring for the styles of mineralisation targeted. The program is reasonable given the targets to be tested and the operational logistics of exploration activity in the Project area.

6.2 Kathleen Valley Planned Work

6.2.1 Planned Exploration

Mila's initial target in the Kathleen Valley tenement will be to drill test the Inferred Mineral Resource Estimate and JORC Exploration Target (Maddocks, 2021) in the southwest corner of the tenement for further mineralisation as intersected in drillholes KVR001-012.

To further define the potential of the Inferred Mineral Resource Estimate and JORC Exploration Target, with the aim to attempt to progress the Inferred Mineral Resource in size and confidence level in the Mineral Resource Estimate, CSA Global recommends Mila complete the following:

- Drill approximately 25 to 35 suitably spaced new holes with reverse circulation drilling and diamond tails where appropriate, with 8 to 10 of the new holes drilled to a depth of 400 metres. The new holes should both be:
 - infill within the existing Inferred Mineral Resource Estimate and JORC Exploration Target to increase confidence levels in the continuity of mineralisation, and
 - seek to extend the mineralisation outside the current Inferred Mineral Resource Estimate and JORC Exploration Target area.
- DHEM be completed on selected holes to assist in guiding the deeper and extensional drilling.
- Conduct specific gravity measurements and metallurgical test work on the diamond drilling core to educate any potential future Mineral Resource Estimate.

Furthermore, the 2019 regolith shallow auger sampling campaign identified two additional structural gold trends in the north west and north of the Exploration Target (Figure 17). CSA Global recommends that these should also be explored and could cost efficiently be done in conjunction with the work above. CSA Global recommends Mila complete the following:

- Drill approximately 6 to 10 suitably spaced new holes with reverse circulation drilling to a depth of 200 metres.
- DHEM be completed on selected holes to identify below-surface anomalies.

It is also planned to further define the extent and mineralogy of the pegmatites previously mapped within its boundaries (Figure 12). The goal of this work will be to provide an early definition of potential similarities to the lithium-bearing pegmatites under investigation to the north of the tenement.

Second-stage investigation of the project will focus on more detailed geological and geochemical study of targets for both mineralisation styles defined during the first stage, and on drilling (both percussion and diamond) to more fully define potential for viable mineralisation.

Mila provided CSA Global with a copy of their planned expenditure for the Project for 2021 (



Table 12). All costs included are in Great British Pounds (GBP£) as converted from local Australian Dollar (A\$) cost estimates using an exchange rate of GBP£0.55 : A\$1.00.

Table 12: Summary of Mila Kathleen Valley planned exploration expenditure, 2021.

GBP	Main Target	Northern Targets	Total
	11,110		
Meterage	m	2,400 m	13,510 m
RC Drilling	£ 295,971	£ 58,656	£ 354,627
DD Drilling	£ 442,684		£ 442,684
Assay and cutting	£ 99,337	£ 19,687	£ 119,024
Site Operational Costs	£ 218,745	£ 43,351	£ 262,096
Geophysics and JORC	£ 203,500	£ 40,330	£ 243,830
Contingency	£ 126,024	£ 24,976	£ 150,999
	£ 1,386,261	£ 187,000	£ 1,573,261

*JORC costs include cost items such as geological interpretation, data management, potential resource estimation and compliant reporting.

The proposed budget is considered consistent with the exploration potential of Mila's Project and is considered adequate to cover the costs of the proposed program. The budgeted expenditure is also considered sufficient to meet the minimum statutory expenditure on the tenement.

The mineral property held by Mila is considered to be an "exploration project" that is intrinsically speculative in nature. The Project is at the "advanced exploration" stage. CSA Global considers, however, that the Project has sound technical merit and to be sufficiently prospective, subject to varying degrees of exploration risk, to warrant further exploration and assessment of its economic potential, consistent with the proposed program.

Mila has prepared staged exploration and evaluation programs, specific to the potential of the Project, which are consistent with the budget allocations, and warranted by the exploration potential of the Project. CSA Global considers that the relevant areas have sufficient technical merit to justify the proposed programs and associated expenditure.

7 References

- Askins, P.W. 2007, Gairdner Project Annual Report for E70/2848 for the Period 22 February 2006 to 21 February 2007, WA Department of Mines Industry Regulation and Safety, open file report.
- Barnes, S., and Fiorentini, M. 2012, Komatiite Magmas and Sulfide Nickel Deposits: A Comparison of Variably Endowed Archean Terranes. *Economic Geology*, v. 107, pp. 755-780.
- Busbridge, M.J. 2003, Bellevue-Violet Range P36/1113 (1), P36/1114 (2), P36/1281 (3), M36/333 (4) Surrender Report For The Periods (1) 13 May 1992 – 28 February 2003, (2) 24 September 1991 - 28 February 2003, (3) 17 February 1993 - 28 February 2003, (4) 5 September 1995 - 28 February 2003, WA Department of Mines Industry Regulation and Safety, open file report.
- Cassidy, K.F., Champion, D.C., Krapež, B., Barley, M.E., Brown, S.J.A., Blewett, R.S., Groenewald, P.B., and Tyler, I.M. 2006, A revised geological framework for the Yilgarn Craton, Western Australia: Western Australia Geological Survey, Record 2006/8, 8p.
- Černý P. 1991. Rare-element granitic pegmatites Part 1: Anatomy and Internal Evolution of Pegmatite Deposits: *Geoscience Canada*, Volume 18 Number 2, pp. 49-67
- Galeschuk, C., and Vanstone, P. 2007, Exploration techniques for Rare Element Pegmatite in the Bird River Greenstone Belt, Manitoba. In: Milkereit (Ed) 2007, *Proceedings of Exploration 07. 5th Decennial Conference on Mineral Exploration*, Toronto, Canada. pp. 823-839.
- Hanington, M. 2014, Volcanogenic massive sulfide deposits, in Scott, S. D., ed., *Treatise on Geochemistry*, Second Edition, 13, Elsevier-Pergamon Oxford, pp. 463-488.
- Huston D.L., Champion D.C., Cassidy K.F. 2005, Tectonic controls on the endowment of Archean cratons in VHMS deposits: Evidence from Pb and Nd isotopes. In: Mao J., Bierlein F.P. (eds) *Mineral Deposit Research: Meeting the Global Challenge*. Springer, Berlin, Heidelberg
- Hutchison, N. 2018, Review of NGM Groups Kathleen Valley & Lake Yindarlgooda Project, Leinster Kalgoorlie Regions, WA. Internal Report, New Generation Minerals Ltd
- Hutchison, N. 2019, New Generation Minerals Activities Update January 2019. Internal Report, New Generation Minerals Ltd
- Jacobson, M.I., Calderwood, M.A., and Grguric, B.A. 2007, *Guidebook to the pegmatites of Western Australia*. Hesperian Press, Western Australia, 394p.
- Jones, A. 2018, Kathleen Valley Project (E36/876) Summary Document, Internal Report, TasEx Geological Services Pty Ltd
- JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) [online]. Available from <http://www.jorc.org> (The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia).
- Kelly, M.C. 2002, Kathleen Valley Gold Project Combined Annual report for the Kathleen valley and Mt Harris Joint Ventures M36/162, 176, 264-266, 328, 365, 376, 441, 459-460, P36/1407. Ref. C46/1999. For the Period 1 January 2001 to 31 December 2001. Sir Samuel Mines NL, WA Department of Mines Industry Regulation and Safety, open file report.
- Le Vaillant, M., Fiorentini, M.L., and Barnes, S.J. 2018, Chapter 2 - Review of Predictive and Detective Exploration Tools for Magmatic Ni-Cu-(PGE) Deposits, With a Focus on Komatiite-Related Systems in Western Australia, in Mondal, S. K. and Griffin, W. L. (eds), 2018, *Processes and Ore Deposits of Ultramafic-Mafic Magmas through Space and Time*, Elsevier, Pages 47-78.
- London, D. 2008, Pegmatites. *The Canadian Mineralogist*, Special Publication 10.
- London, D. 2016, Rare-Element Granitic Pegmatites, *Reviews in Economic Geology*, v18, pp. 165-193
- Maddox, R. 2021, New Generation Minerals Kathleen Valley Gold Project Mineral Resource Estimate Exploration Target, 15 February 2021. Auralia Mining Consulting. Internal Report, New Generation Minerals Ltd.

- McCuaig, T.C., Miller, J., and Beresford, S. (compilers) 2010, Controls on giant minerals systems in the Yilgarn Craton – a field guide: Geological Survey of Western Australia, Record 2010/26, 164p.
- Mole, D., Fiorentini, M., Thébaud, N., Cassidy, K., McCuaig, T., Kirkland, C., Romano, S., Doublier, M., Belousova, E., Barnes, S., and Miller, J. 2014, Archean komatiite volcanism controlled by the evolution of early continents. *Proceedings of the National Academy of Sciences of the United States of America*. 111.
- Mortimer, R. 2018, Kathleen Valley/North Cosmos E36/876 - High Level Geophysical Review/Recommendations. Southern Geoscience Consultants. Internal Report, New Generation Minerals Ltd
- Mortimer, R. 2019, Kathleen Valley FLTEM 2018 - Survey Documentation and Final Results/Interpretation. Report Number SGC3448. Southern Geoscience Consultants. Internal Report, New Generation Minerals Ltd
- Naldrett A.J. 2010, Secular variation of magmatic sulfide deposits and their source magmas. *Economic Geology*, v. 105, pp. 669–688.
- Piercey, S., Peter, J., and Herrington, R. 2015, Zn-rich Volcanogenic Massive Sulphide (VMS) Deposits. 37-57. In Archibald, S. and Piercey, S. (eds.), *Current Perspectives on Zinc Deposits*. Irish Association for Economic Geology, pp.37-57
- Smithies, R.H., Morris, P.A., Wyche, S., De Paoli, M., and Sapkota, J. 2017, Towards a geochemical barcode for Eastern Goldfields Superterrane greenstone stratigraphy — preliminary data from the Kambalda–Kalgoorlie area: Geological Survey of Western Australia, Record 2017/7, 26p.
- Thomas, B., and Leaver, G. 2012, Cosmos Nickel Project Tenements E36/535, E36/717, M36/24-25, M36/127, M36/162, M36/176, M36/180, M36/264-266, M36/299, M36/302-303, M36/305, M36/328-330, M36/332, M36/342, M36/349, M36/365, M36/371, M36/375-377, M36/441, M36/459, M36/460, M36/467, M36/603, M36/632-633, M36/659-660. Ref: C34/2000 Annual Report for the Period 26th May 2011 to 25th May 2012. Xstrata Nickel Australasia Pty Ltd, WA Department of Mines Industry Regulation and Safety, open file report.
- VALMIN, 2015. Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code) [online]. Available from <http://www.valmin.org> (The VALMIN Committee of the Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists).
- Watts, M. 2005, Annual Report E 36/0501 Cosmos North Project for the Period 5 December 2003 to 4 December 2004. Cazaly Resources Ltd, WA Department of Mines Industry Regulation and Safety, open file report.
- Witt, W.K., Ford, A., Hanrahan, B., and Mamuse, A. 2013, Regional-scale targeting for gold in the Yilgarn Craton: Part 1 of the Yilgarn Gold Exploration Targeting Atlas: Geological Survey of Western Australia, Report 125, 130p.
- Witt, W.K., Cassidy, K., Lu, Y-J., and Hagemann, S. 2018, The tectonic setting and evolution of the 2.7 Ga Kalgoorlie - Kurnalpi Rift, a world-class Archean gold province. *Mineralium Deposita*. 10.1007/s00126-017-0778-9.

8 Glossary

For brevity, the reader is referred to internet sources such as Wikipedia www.wikipedia.org for explanations of unfamiliar terms. All technical terms in the report are used in their usual standard meaning. Below are brief descriptions of some terms used in this report.

Aeromagnetic:	A survey undertaken by helicopter or fixed-wing aircraft for the purpose of recording magnetic characteristics of rocks by measuring deviations of the Earth’s magnetic field.
Amphibolite:	A mafic metamorphic rock consisting mainly of amphibole minerals, especially hornblende and actinolite.
Anomaly:	An area where exploration has revealed results higher than the local background level.
Archaean:	The oldest geologic time period, pertaining to rocks older than about 2,500 million years.
Assay:	The testing and quantification metals of interest within a sample.
Auger drilling:	Drilling using a helical screw. Samples are returned to surface by the auger blades, also known as flights. Auger drilling is used in soft rocks such as clay, shale or sand.
Chalcopyrite:	A brass-yellow mineral with a chemical composition of $CuFeS_2$.
Competent Person:	Clause 11 of the JORC Code: A “Competent Person” is a minerals industry professional who is a Member or Fellow of a “Recognised Professional Organisation” (RPO), as included in a list available on the JORC website. These organisations have enforceable disciplinary processes including the powers to suspend or expel a member. A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking.
Craton:	An old and stable part of the continental lithosphere.
Diamond drilling:	Drilling method employing a (industrial) diamond encrusted drill bit for retrieving a cylindrical core of rock.
Domain:	Geological zone of rock with similar geostatistical properties; typically a zone of mineralisation.
Dyke:	A tabular body of intrusive igneous rock, crosscutting the host strata at a high angle.
Electromagnetic (EM):	A geophysical survey technique where potential fields are measured under the influence of an applied current.
Exploration Results:	Clause 18 of the JORC Code: Exploration Results include data and information generated by mineral exploration programs that might be of use to investors, but which do not form part of a declaration of Mineral Resources or Ore Reserves.
Exploration Target:	Clause 17 of the JORC Code: An Exploration Target is 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.
Facies:	Changes in composition, mineral associations or crystallisation sequence brought about by different depositional environments, increasing distance from source, or differing physical and chemical parameters.

Fault:	A wide zone of structural dislocation and faulting.
Felsic:	Light coloured rocks containing an abundance of feldspars and quartz.
Gabbro:	A coarse-grained mafic intrusive rock, which is low in silica and has relatively high levels of iron and magnesium minerals.
Geochemical:	Pertains to the concentration of an element.
Geophysical:	Pertains to the physical properties of a rock mass.
Gneiss:	Layered metamorphic rock, often of felsic composition
Granite:	A coarse-grained igneous rock containing mainly quartz and feldspar minerals and subordinate micas.
Granulite:	A rock produced by deep-seated high pressure and temperature conditions.
Greenschists:	Metamorphic rocks that formed under the lowest temperatures and pressures.
Greenstones:	Compact dark green altered or metamorphosed basic igneous rocks that owe their colour to the presence of green minerals,
Greenstone belt:	Term applied to elongate or belt-like areas within Precambrian shields that are characterised by abundant greenstones
Intrusive:	Any igneous rock formed by intrusion and cooling of hot liquid rock below the earth's surface.
JORC Code:	Clause 1 of the JORC Code: The <i>Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves</i> (the "JORC Code" or "the Code") sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves.
Komatiite:	An extrusive ultramafic lava flow
Lepidolite:	Lithium-bearing mica
Lode:	A deposit of metalliferous ore formed in a fissure or vein.
Mafic:	Igneous rock composed dominantly of dark coloured minerals such as amphibole pyroxene and olivine, generally rich in magnesium and iron.
Magnetite:	Iron oxide mineral with chemical formula Fe_3O_4 , hard, dense, black to grey, noted for ferrimagnetic properties – can be magnetised to become a magnet.
Magnetic anomaly:	Zone where the magnitude and orientation of the earth's magnetic field differs from adjacent areas, typically caused by magnetic properties of basement rocks.
Meta-:	A prefix meaning "metamorphosed".
Metamorphic:	A rock that has been altered by metamorphism from a pre-existing igneous or sedimentary rock type.
Mineral Resource:	Clause 20 of the JORC Code: 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 subdivided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Outcrop:	A visible exposure of bedrock or ancient superficial deposits on the surface of the Earth.
Paleoproterozoic:	Spanning the time period from 2,500 to 1,600 million years ago. The first of the three sub-divisions of the Proterozoic Eon.
Pegmatite:	An exceptionally coarse-grained igneous rock, with interlocking crystals, usually found as irregular dykes, lenses or veins.
Porphyry:	Igneous rocks in which large crystals (phenocrysts) are set in finer ground mass, which may be crystalline or glass.
Precambrian:	All geologic time, and its corresponding rocks, before the beginning of the Palaeozoic (from 570 Ma back).
Proterozoic:	The second oldest Eon (geologic time period), pertaining to rocks older than 541 Ma (million years) and younger than about 2,500 Ma.
Pyrite:	A very common iron sulphide mineral FeS_2 .
Pyrrhotite:	An iron sulphide mineral with the formula $Fe_{(1-x)}S$ ($x = 0$ to 0.2).
Quartz:	Common mineral composed of crystalline silica, with chemical formula SiO_2 .
Quaternary:	The most recent geological era from 2.6 Ma to the present
RC drilling:	Reverse Circulation. A percussion drilling method in which the fragmented sample is brought to the surface inside the drill rods, thereby reducing contamination.
Schist:	A metamorphic rock dominated by fibrous or platy minerals, with a strongly foliated fabric (schistose cleavage).
Sedimentary:	A term describing a rock formed from sediment.
Shear:	A deformation resulting from stresses that cause rock bodies to slide relatively to each other in a direction parallel to their plane of contact.
Soil sampling:	The collection of soil specimens for mineral analysis.
Spodumene:	lithium-bearing pyroxene
Strata:	Sedimentary rock layers.
Stratigraphic:	Pertaining to the composition, sequence and correlation of stratified rocks.
Strike:	Horizontal direction or trend of a geological strata or structure.
Structural:	Pertaining to rock deformation or to features that result from it.
Sulphide minerals:	Mineralisation characterised by compounds of metals and sulphur.
Terrane:	Any rock formation or series of formations or the area in which a particular formation or group of rocks is predominant.
Ultramafic:	Igneous rock in which more than 90% of the minerals are ferromagnesian minerals (olivine, pyroxene).
Volcanics:	Rocks formed or derived from volcanic activity.

9 Abbreviations and Units of Measurement

%	percent
°	degrees
°C	degrees Celsius
A\$	Australian dollars
Ag	silver
AIG	Australian Institute of Geoscientists
As	arsenic
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
Au	gold
AusIMM	Australasian Institute of Mining and Metallurgy
Be	beryllium
Bi	bismuth
cm	centimetre(s)
Co	cobalt
CPR	Competent Persons Report
Cs	caesium
CSA Global	CSA Global Pty Ltd
Cu	copper
DHEM	downhole electromagnetic
EGST	Eastern Goldfields Superterrane
EM	electromagnetic
Fe	iron
FLTEM	fixed-loop transient electromagnetic
ft	feet or foot
g	gram(s)
g/cm ³	grams per cubic centimetre
g/t Au	grams per tonne, gold
Ga	billion years before present
GSWA	Geological Survey of Western Australia
ha	hectares
Hg	mercury
ID2	inverse distance squared
IP	induced polarisation
kg	kilogram(s)
KKR	Kalgoorlie-Kurnalpi Rift
km	kilometres
km ²	square kilometres
LCT	lithium-caesium-tantalum
Li	lithium
Li ₂ O	lithium oxide (or lithia)
LSE	London Stock Exchange
m	metres

Ma	million years before present
Mg	magnesium
Mila	Resources Plc
mm	millimetres
Mo	molybdenum
Mt	million tonnes
Na	sodium
Nb	niobium
NGM	New Generation Minerals Limited
Ni	nickel
OK	ordinary kriging
oz	troy ounce (31.103 grams)
Pb	lead
Pd	palladium
PGE	platinum group element
ppb	parts per billion
ppm	parts per million
Pt	platinum
QAQC	quality assurance and quality control
RAB	rotary air blast
Rb	rubidium
RC	reverse circulation
RCP	reverse circulation percussion
RTO	reverse takeover
S	sulphur
Sb	antimony
Se	selenium
SGC	Southern Geoscience Consultants
SiO ₂	silicon dioxide (or silica)
Sn	tin
t/m ³	tonnes per cubic metre
Ta	tantalum
Ta ₂ O ₅	tantalum pentoxide
Te	tellurium
TPE	Trans Pacific Energy Group Ltd
UK	United Kingdom
VMS	volcanogenic massive sulphide
VTEM	versatile time domain electromagnetic
W	tungsten
Zn	zinc

Appendix A JORC Code Table 1 for Kathleen Valley Project (12th September 2021)

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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 downhole gamma sondes, or handheld x-ray fluorescence (XRF) instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	Reverse circulation (RC) samples have been split on the rig by a cone splitter attached to a cyclone. 1 m cone spilt samples were collected off the splitter in their original calico sample bags along the length of the favourable targeted horizon through to end of hole. 4 m composite samples using a spear were collected over the remaining non-favourable unmineralised upper zones, with 1 m spears also collected in any zones that had signs of potential mineralisation.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	An onboard cone splitter was used for the RC sampling to ensure sample representivity for all samples reported within the anomalous zones. Cone splitting is considered an industry best practice method for ensuring sample representivity.
	<i>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. 'RC 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.</i>	Determination of mineralisation was established by modelling of the fixed loop transient electromagnetic (FLTEM) and downhole electromagnetic (DHEM) target zones and as confirmed by the earlier 2019 RC drilling. These zones were visually confirmed by geological observations in the field and determined to be accurately estimated. RC drilling was used to obtain 1 m samples from which a nominal 2–3 kg (depending on sample recovery) was pulverised. 4 m composite samples were collected through zones determine to be non-mineralised for data set completeness. Samples were submitted to ALS in Kalgoorlie and then dispatched to ALS, a commercial laboratory in Perth for analysis. Samples were analysed using a four-acid digest with ME-ICP-AES or ME-OG finish for 33 elements.
Drilling techniques	<i>Drill type (e.g. core, RC, 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.).</i>	The 2019 RC drilling was undertaken by JarrahFire Drilling (2 holes) and the 2020 drilling was completed by Ausdrill (10 holes), both using a 5½-inch face sampling RC hammer with a 5¾-inch button bit on 5-inch rods.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	All sample were dry and sample recovery in all holes was high with negligible loss of recovery observed except in the upper unmineralised 1–2m which has some loss during collaring of the hole. No relationship has been established between sample recovery and reported grade as the project is in its preliminary stages. Samples were all dry and no negligible sample loss was noted. Diamond core and further RC drilling techniques will be used in future to establish a baseline for this purpose.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	
	<i>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.</i>	

Criteria	JORC Code explanation	Commentary
Logging	<i>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.</i>	Detailed industry standard of sieving each interval and collecting drill chips in chip trays was undertaken for geological logging. Drillhole logs are digitally entered directly into Microsoft Excel spreadsheets as the drilling progressed which were then imported and validated in Micromine Software.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Chip trays were photographed at completing of hole for quick reference and validation by the Director of Geolithic Geological Services.
	<i>The total length and percentage of the relevant intersections logged.</i>	The entire length of all RC holes were logged.
Subsampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core was drilled
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	RC samples were cone split to achieve a nominal 2–3 kg split sample for laboratory submission. Samples were dry to damp.
	<i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i>	The sample preparation technique was completed by a commercial laboratory and is considered industry best standard practice.
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	No subsampling was completed as all 1 m samples were collected by the cone splitter.
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Field duplicates were collected through the mineralised zones by way of spear sampling of 4 m composites and 1 m cone splits through the mineralised zones to compare results.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are appropriate to the grain size of the mineralisation.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were submitted to ALS in Kalgoorlie and then dispatched to ALS, a commercial laboratory in Perth for analysis. Samples were analysed using a four-acid digest with ME-ICP-AES or ME-OG finish for 33 elements.
	<i>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.</i>	Earlier FLTEM survey formed the initial target zone with DHEM completed in five of the 12 drillholes for Exploration Target modelling and future drill testing. DHEM parameters are as follows: <ul style="list-style-type: none"> • Tx Loop size: 500 m x 800 m • Transmitter: GAP HPTX-70 • Receiver: EMIT SMARTem24 • Sensor: EMIT DigiAtlantis • Station spacing: 2–10 m • Tx Freq: 0.5 Hz • Duty cycle: 50% • Current: ~130 Amp • Stacks: 32–64 • Readings: 2–3 repeatable readings per station
	<i>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.</i>	Duplicate samples came back within expected range for this style of mineralisation.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Auralia Mining Consultants and CSA Global Pty Ltd (CSA Global) have verified the significant intersections based on the issued laboratory results and certificates.
	<i>The use of twinned holes</i>	12 RC holes have been completed into this project. The project is too early at this stage. Diamond core drilling and twinning will be completed during the next phase of works.
	<i>Discuss any adjustment to assay data</i>	No adjustments have been made to the assay data.
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	The holes were pegged by experienced personnel from Geolithic Geological Services using a handheld global positioning system (GPS) + 3 m. The rig was setup over or as close to the nominated hole position and final collar position and RL was determined using a detailed GPS controlled drone orthophotography digital terrain model (DTM) at completion of the drilling.
	<i>Specification of the grid system used.</i>	MGA94_51.
	<i>Quality and adequacy of topographic control.</i>	A high-quality 120 m flight height drone ortho-photogrammetry survey was completed and processed using DroneDeploy's Terrain processing mode. 667 images x 17MP resolution were captured, producing 31.2M points and 4M mesh triangles with a point cloud density of 46.83 points/m ² . DroneDeploy produced a GSD Orthomosaic with 2.44 cm/px resolution. An Absolute Altitude model was also generated from the Mesh producing a DEM of 9.76 cm/px. The survey reported a RMSE accuracy the of Camera GPS Location of 1.42 m which is more than adequate for this level of drilling detail.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Drilling was completed along four drill traverses spaced ~50 m apart. Holes are spaced 20–40 m apart along the traverses.
	<i>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.</i>	The geological and grade continuity as well as the current drill spacing is more than adequate for this early discovery and Inferred Resource category. Infill and extension drilling have been planned to increase the drill density so as to convert the Inferred Resource to Indicated category and to test the Exploration Target zone.
	<i>Whether sample compositing has been applied</i>	No post assaying compositing has been applied.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Drilling was designed to intersect the modelled FLTEM and DHEM target zones at right angles to the define mineralised target zone. This was achieved and interpretations suggest there is no sample bias.
	<i>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.</i>	No sampling bias has been identified.
Sample security	<i>The measures taken to ensure sample security.</i>	Samples were in the possession of two responsible Geolithic Geological Services personnel from field collection to laboratory submission. No issues with security have been identified.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p><i>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.</i></p> <p><i>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.</i></p>	<p>Exploration Licence E36/876 is located 30km north of Leinster within the rich Mount Keith–Kathleen Valley–Leinster minerals belt. TPE holds 80% of the Kathleen Valley project in joint venture with Metal Rocks who hold 20% following the completion of an earn-in and the signing of an agreement between the parties in 2019.</p> <p>All regulatory and heritage approvals have been met and there are no known impediments to operate in the area.</p>
Exploration done by other parties	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>Gold has been mined in the area since the 1890s with most of the early production coming from the Kathleen Valley (4 km north of the Project area) and Sir Samuel (5 km south of the project area) mining centres.</p> <p>The most comprehensive work within the project area was completed by Barrick Gold and joint venture partners between 1992 and 2003. This exploration work largely focused on gold and included rock chip sampling, widespread auger soil sampling and reverse circulation percussion (RCP) drill testing of some gold targets in the north of the project area. The follow-up RCP drilling intersected only minor gold anomalous material and the project was suspended. Assays for auger sampling were for gold only with no other elements analysed, while RCP samples assayed for gold, arsenic, copper, nickel, lead, and zinc.</p>
Geology	<p><i>Deposit type, geological setting and style of mineralisation.</i></p>	<p>The project area is in the Kalgoorlie Terrane within the Archaean Yilgarn Craton. Greenstone belts in the region include part of the Agnew Greenstone Belt, the Mount Keith–Perseverance Greenstone Belt and the Yakabindie Greenstone Belt.</p> <p>The weakly deformed Yakabindie Greenstone sequence comprises the layered Kathleen Valley Gabbro overlain by the massive tholeiitic Mount Goode Basalt. The Mount Goode Basalt is overlain by metamorphosed sedimentary and felsic volcanic rocks. The overturned Yakabindie sequence which dips steeply to the northwest and youngs to the south, is bounded to the east by the north trending Miranda Fault and intruded in the west by granitic rocks. The area surrounding the junction of the Miranda Fault with the northwest trending, sinistral Highway and Yakabindie Faults has been intensely sheared with some block rotation. The Yakabindie Shear zone, 1 km west of the project area, is a 100 m wide zone of deformed metabasalt with a well-developed steep, northwest trending mineral lineation.</p> <p>The project area, which lies to the west of the Miranda Fault, is underlain by the Archaean Mount Goode Basalt and interflow sediments. The lower part of the basalt is a massive porphyritic, tholeiitic metabasalt, with the upper part being characterised by the patchy development of a plagioclase–phyric phase forming plagioclase phenocrysts throughout the fine-grained metabasalt. Pillow-lava and flow-top breccia structures are locally preserved in some areas.</p> <p>Mineralisation is associated with a sulphidic base metal bearing VMS exhalative horizon between basalt flows. Gold-arsenic bearing structures and fluids associated with faulting/shearing in the region have utilised the VMS horizon as a conduit resulting in gold and base metal mineralisation occurring concurrently.</p>

Criteria	JORC Code explanation	Commentary
Drillhole information	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i></p> <ul style="list-style-type: none"> • <i>easting and northing of the drillhole collar</i> • <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</i> • <i>dip and azimuth of the hole</i> • <i>downhole length and interception depth</i> • <i>hole length.</i> <p><i>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.</i></p>	<p>All relevant drillhole information can be found in Error! Reference source not found. of this report.</p> <p>No information is excluded with details from all 12 holes being reported.</p>
Data aggregation methods	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>RC samples are collected as 1 m cone split samples within the mineralised zones, so no weighting or averaging has been applied.</p>
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results</i></p> <p><i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘downhole length, true width not known’).</i></p>	<p>Results within this report are reported as true widths as the holes are interpreted to have intersected the target at or very close to perpendicular.</p>
Diagrams	<p><i>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 drillhole collar locations and appropriate sectional views.</i></p>	<p>Appropriate maps, sections and diagrams are included in the report.</p>
Balanced reporting	<p><i>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.</i></p>	<p>All grades and mineralised widths are included in the report.</p>

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<i>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.</i>	<p>Everything meaningful and material is disclosed in the body of the report. Geological observations have been factored into the report.</p> <p>Bulk samples, metallurgical, bulk density, groundwater, geotechnical and/or rock characteristics test have not been factored at this early stage but be included in the next round of RC and DD core drilling programs.</p> <p>There are no known potential deleterious or contaminating substances other than arsenic which is associated with the gold mineralisation.</p>
Further work	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or large scale step out drilling.</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>Approximately 30 RC holes and 10 diamond tails have been planned (~10,000 m) to depths of up to 400 m to test infill the resource zone and test the extensions of the defined mineralisation. DHEM will be completed on selected holes to assist in guiding the deeper and extensional drilling. Bulk density (SG) and metallurgical test works will be undertaken on the DD core. This will facilitate an increased resource estimation and mining potential.</p> <p>Areas of extension within the Exploration Target are shown in diagrams within the report.</p>

Section 3: Estimation and Reporting of Mineral Resources (Maddox, 15th February 2021)

Criteria	JORC Code explanation	Commentary
Database integrity	<p><i>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.</i></p> <p><i>Data validation procedures used.</i></p>	Data was inspected for errors. No obvious errors were found. Drillhole locations, downhole surveys, geology and assays all corresponded to expected locations.
Site visits	<i>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.</i>	The competent person has not visited the site. The early stage of the project did not warrant a site visit.
Geological interpretation	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology</i></p>	<p>The two modelled mineralised domains were interpreted based on the location of a sulphide-rich mineralised lode. The lode was continuous over several drilling sections.</p> <p>This mineralised lode was the basis for the geological interpretation used in the Mineral Resource estimation.</p> <p>There are no obvious alternative interpretations that would impact the final result.</p>
Dimensions	<i>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.</i>	The modelled deposit has a strike extent of 300 m and a vertical down dip extent of about 450 m. The mineralised zones are from about 1 m to 10 m wide.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domains, 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.</i>	Vulcan v12.0.5 was used in the interpretation, data analysis and estimation. The estimation for gold was done using ordinary kriging (OK). Silver, arsenic, copper, zinc and sulphur were estimated with inverse distance squared (ID2) techniques. Variography was used to derive kriging parameters for gold. Poor variography for other variables led to ID2 being used. The search dimensions used were 100 m (major) x 80 m (semi-major) x 15 m (minor) and the search directions were 150° (bearing), 0° (plunge) and a dip of -60°.
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i>	For gold estimation was done with OK and ID2. These two different estimation techniques were within 5% of each other in terms of contained ounces.
	<i>The assumptions made regarding recovery of by-products.</i>	While no assumptions have been made regarding the recovery of by-products (copper, lead, zinc, arsenic, sulphur) were estimated along with gold. Gold was the primary element modelled and estimated.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>	Composites were modelled at 1 m intervals to reflect the dominant sample intervals in the database. The block size was 10 m X, 25 m Y, 10 m Z. A sub-block size of 1.25 m X, 1.25 m Y, 1.25 m Z was used to accurately model the narrow ore horizon. The larger parent block size of 5 x 10 x 5 was used in grade estimation.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	The parent block size used was 5 x 10 x 5 with sub-blocks of 2.5 x 5 x 2.5. The drill data is on nominal 50 m spacing so while the block size may be small compared to this spacing it was chosen to adequately delineate the narrow vein interpretation. The maximum search dimension was 100 m.
	<i>Any assumptions behind modelling of selective mining units.</i>	No assumptions were made on modelling of selective mining units.
	<i>Any assumptions about correlation between variables.</i>	No assumptions were made on correlation of modelled variables.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	The geological interpretation of a generally narrow, sub-vertical lode was used to constrain the mineral resource estimate. The modelled shape was estimated with a hard boundary
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	Top cuts were applied to gold, silver, arsenic and zinc based on analysis of cumulative log frequency graphs. Top cuts used were 10 g/t for gold, 30 g/t for silver, 20,000 ppm for arsenic and 40,000 ppm for zinc.
<i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	Swath plots were constructed through the model and the gold OK estimate was compared to an ID2 estimate.	
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Estimates are on a dry tonne basis
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The cut-off grade of 0.5 g/t Au used for reporting corresponds to a potential mining cut-off grade appropriate for open pit mining methods.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	<i>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.</i>	While no mining factors have been implicitly used in the modelling.
Metallurgical factors or assumptions	<i>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.</i>	No metallurgical factors have been assumed.
Environmental factors or assumptions	<i>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.</i>	No environmental factors or assumptions were used in the modelling.
Bulk density	<i>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.</i> <i>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.</i> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	Bulk density within the mineralised horizon was estimated with a regression formula derived from 2,197 measurements on 43 diamond drillholes. The formula used is: Bulk Density (t/m ³) = (0.0702 x Ni %) + 2.8316. Weathered material was assigned a density of 1.8. Transitional material 2.2. Fresh waste 2.7 and fresh ore 2.9. These dry bulk densities were assumed based on similar geology.
Classification	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>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).</i>	The Kathleen Valley Mineral Resource has been classified as Inferred. The spacing of drilling and the amount of data reflects, at this stage, a low level of confidence. This classification reflects the Competent Person's view of the deposit.

Criteria	JORC Code explanation	Commentary
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates</i>	No audits or reviews have been completed
Discussion of relative accuracy/ confidence	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<p>The classification of the Kathleen Valley Mineral Resource as Inferred is reflective of the early development stage of the project. Only 12 RC holes have been completed and, although a mineralised zone has been delineated, the understanding of the geological, structural and metallurgical characteristics is at a very early stage.</p> <p>The Inferred estimate is a global estimate and no economic parameters have been applied.</p>

Appendix B Drill Collar Locations for the Kathleen Valley Project (GDA94 Zone 51)

Hole ID	Depth	Dip	Azimuth	MGA grid	MGA East	MGA North	RL
KVRC001	191	-60	240	MGA94_51	258846.13	6946628.79	488.57
KVRC002	161	-60	240	MGA94_51	258822.78	6946614.80	487.36
KVRC003	120	-60	240	MGA94_51	258787.13	6946593.70	486.05
KVRC004	140	-60	240	MGA94_51	258806.05	6946604.38	486.57
KVRC005	220	-60	240	MGA94_51	258866.48	6946640.50	489.89
KVRC006	190	-60	240	MGA94_51	258784.26	6946655.28	485.59
KVRC007	220	-60	240	MGA94_51	258824.26	6946667.49	487.03
KVRC008	160	-60	240	MGA94_51	258846.61	6946571.37	486.80
KVRC009	214	-60	240	MGA94_51	258883.69	6946591.61	488.14
KVRC010	132	-60	240	MGA94_51	258715.92	6946672.34	485.42
KVRC011	186	-60	240	MGA94_51	258750.27	6946692.31	486.52
KVRC012	226	-60	240	MGA94_51	258783.76	6946713.37	487.98

Appendix C Significant Drill Intersections for the Kathleen Valley Project

Hole ID	From	To	Width	Au g/t	Ag g/t	As ppm	Cu ppm	Pb ppm	S %	Zn ppm
KVRC001	135	143	8	2.40	3.77	1,912.3	758.4	359.8	6.18	26,939
KVRC002	114	117	3	1.03	8.68	6,421.3	232.5	1,798.7	1.88	7,737
KVRC003	76	78	2	0.57	1.03	376.0	372.5	48.0	2.56	2,638
KVRC004	91	98	7	3.24	15.44	2,699.4	521.0	1,829.4	5.53	9,159
KVRC005	155	164	9	0.91	5.77	296.0	834.7	228.7	12.02	23,915
KVRC006	102	108	6	3.07	0.25	6,030.0	159.3	14.2	0.64	487
KVRC006	111	116	5	1.35	0.25	4,720.0	118.0	18.2	0.61	342
KVRC007	157	159	2	0.37	0.53	303.0	173.0	16.5	3.30	679
KVRC008	111	119	8	3.38	5.99	992.4	591.8	388.6	6.52	17,398
KVRC009	158	163	5	1.57	4.94	1,289.0	1,099.8	308.2	10.93	25,662
KVRC010	42	44	2	1.42	0.38	13,131.0	263.5	11.5	2.58	1,891
KVRC011	no significant intersection									
KVRC012	134	139	5	1.36	1.40	9,052.0	331.2	666.2	1.88	3,118

Appendix D Soil Sample Locations for the Kathleen Valley Project (GDA94 Zone 51)

Sample no.	East	North
KVA1	257963	6950617
KVA2	258004	6950588
KVA3	258044	6950558
KVA4	258085	6950529
KVA5	258125	6950499
KVA6	258166	6950470
KVA7	258206	6950441
KVA8	258247	6950411
KVA9	258287	6950382
KVA10	258327	6950352
KVA11	258368	6950323
KVA12	258408	6950294
KVA13	258449	6950264
KVA14	258489	6950235
KVA15	258530	6950206
KVA16	258570	6950176
KVA17	258611	6950147
KVA18	258651	6950117
KVA19	258691	6950088
KVA20	258732	6950059
KVA21	258772	6950029
KVA22	258813	6950000
KVA23	258853	6949970
KVA24	257903	6950536
KVA25	257943	6950507
KVA26	257984	6950477
KVA27	258024	6950448
KVA28	258065	6950418
KVA29	258105	6950389
KVA30	258146	6950360
KVA31	258186	6950330
KVA32	258227	6950301
KVA33	258267	6950271
KVA34	258308	6950242
KVA35	258348	6950213
KVA36	258388	6950183
KVA37	258429	6950154
KVA38	258469	6950125
KVA39	258510	6950095
KVA40	258550	6950066
KVA41	258591	6950036
KVA42	258631	6950007
KVA43	258672	6949978
KVA44	258712	6949948
KVA45	258752	6949919
KVA46	258793	6949889

Sample no.	East	North
KVA47	257853	6950463
KVA48	257893	6950434
KVA49	257934	6950404
KVA50	257974	6950375
KVA51	258015	6950345
KVA52	258055	6950316
KVA53	258096	6950287
KVA54	258136	6950257
KVA55	258177	6950228
KVA56	258217	6950198
KVA57	258258	6950169
KVA58	258298	6950140
KVA59	258338	6950110
KVA60	258379	6950081
KVA61	258419	6950052
KVA62	258460	6950022
KVA63	258500	6949993
KVA64	258541	6949963
KVA65	258581	6949934
KVA66	258622	6949905
KVA67	258662	6949875
KVA68	258702	6949846
KVA69	258743	6949816
KVA70	257828	6950375
KVA71	257868	6950345
KVA72	257909	6950316
KVA73	257949	6950287
KVA74	257990	6950257
KVA75	258030	6950228
KVA76	258071	6950199
KVA77	258111	6950169
KVA78	258152	6950140
KVA79	258192	6950110
KVA80	258233	6950081
KVA81	258273	6950052
KVA82	258313	6950022
KVA83	258354	6949993
KVA84	258394	6949963
KVA85	258435	6949934
KVA86	258475	6949905
KVA87	258516	6949875
KVA88	258556	6949846
KVA89	258597	6949816
KVA90	258637	6949787
KVA91	258677	6949758
KVA92	258718	6949728



Sample no.	East	North
KVA93	257753	6950337
KVA94	257794	6950308
KVA95	257834	6950279
KVA96	257875	6950249
KVA97	257915	6950220
KVA98	257955	6950190
KVA99	257996	6950161
KVA100	258036	6950132
KVA101	258077	6950102
KVA102	258117	6950073
KVA103	258158	6950044
KVA104	258198	6950014
KVA105	258239	6949985
KVA106	258279	6949955
KVA107	258319	6949926
KVA108	258360	6949897
KVA109	258400	6949867
KVA110	258441	6949838
KVA111	258481	6949808
KVA112	258522	6949779
KVA113	258562	6949750
KVA114	258603	6949720
KVA115	258643	6949691
KVA116	257693	6950263
KVA117	257733	6950234
KVA118	257773	6950204
KVA119	257814	6950175
KVA120	257854	6950145
KVA121	257895	6950116
KVA122	257935	6950087
KVA123	257976	6950057
KVA124	258016	6950028
KVA125	258057	6949998
KVA126	258097	6949969
KVA127	258137	6949940
KVA128	258178	6949910
KVA129	258218	6949881
KVA130	258259	6949852
KVA131	258299	6949822
KVA132	258340	6949793
KVA133	258380	6949763
KVA134	258421	6949734
KVA135	258461	6949705
KVA136	258502	6949675
KVA137	258542	6949646
KVA138	258582	6949616
KVA139	257641	6950191
KVA140	257681	6950161
KVA141	257722	6950132
KVA142	257762	6950102
KVA143	257803	6950073

Sample no.	East	North
KVA144	257843	6950044
KVA145	257884	6950014
KVA146	257924	6949985
KVA147	257964	6949955
KVA148	258005	6949926
KVA149	258045	6949897
KVA150	258086	6949867
KVA151	258126	6949838
KVA152	258167	6949808
KVA153	258207	6949779
KVA154	258248	6949750
KVA155	258288	6949720
KVA156	258328	6949691
KVA157	258369	6949662
KVA158	258409	6949632
KVA159	258450	6949603
KVA160	258490	6949573
KVA161	258531	6949544
KVA162	257589	6950119
KVA163	257629	6950089
KVA164	257670	6950060
KVA165	257710	6950030
KVA166	257751	6950001
KVA167	257791	6949972
KVA168	257832	6949942
KVA169	257872	6949913
KVA170	257913	6949883
KVA171	257953	6949854
KVA172	257993	6949825
KVA173	258034	6949795
KVA174	258074	6949766
KVA175	258115	6949736
KVA176	258155	6949707
KVA177	258196	6949678
KVA178	258236	6949648
KVA179	258277	6949619
KVA180	258317	6949590
KVA181	258358	6949560
KVA182	258398	6949531
KVA183	258438	6949501
KVA184	258479	6949472
KVA185	260000	6949900
KVA186	259950	6949900
KVA187	259900	6949900
KVA188	259850	6949900
KVA189	259800	6949900
KVA190	259750	6949900
KVA191	259700	6949900
KVA192	259650	6949900
KVA193	259600	6949900
KVA194	259550	6949900



Sample no.	East	North
KVA195	259500	6949900
KVA196	260000	6949850
KVA197	259950	6949850
KVA198	259900	6949850
KVA199	259850	6949850
KVA200	259800	6949850
KVA201	259750	6949850
KVA202	259700	6949850
KVA203	259650	6949850
KVA204	259600	6949850
KVA205	259550	6949850
KVA206	259500	6949850
KVA207	260000	6949800
KVA208	259950	6949800
KVA209	259900	6949800
KVA210	259850	6949800
KVA211	259800	6949800
KVA212	259750	6949800
KVA213	259700	6949800
KVA214	259650	6949800
KVA215	259600	6949800
KVA216	259550	6949800
KVA217	259500	6949800
KVA218	260000	6949750
KVA219	259950	6949750
KVA220	259900	6949750
KVA221	259850	6949750
KVA222	259800	6949750
KVA223	259750	6949750
KVA224	259700	6949750
KVA225	259650	6949750
KVA226	259600	6949750
KVA227	259550	6949750
KVA228	259500	6949750
KVA229	260000	6949700
KVA230	259950	6949700
KVA231	259900	6949700
KVA232	259850	6949700
KVA233	259800	6949700
KVA234	259750	6949700
KVA235	259700	6949700
KVA236	259650	6949700
KVA237	259600	6949700
KVA238	259550	6949700
KVA239	259500	6949700
KVA240	260000	6949650
KVA241	259950	6949650
KVA242	259900	6949650
KVA243	259850	6949650
KVA244	259800	6949650
KVA245	259750	6949650

Sample no.	East	North
KVA246	259700	6949650
KVA247	259650	6949650
KVA248	259600	6949650
KVA249	259550	6949650
KVA250	259500	6949650
KVA251	260000	6949600
KVA252	259950	6949600
KVA253	259900	6949600
KVA254	259850	6949600
KVA255	259800	6949600
KVA256	259750	6949600
KVA257	259700	6949600
KVA258	259650	6949600
KVA259	259600	6949600
KVA260	259550	6949600
KVA261	259500	6949600
KVA262	260000	6949550
KVA263	259950	6949550
KVA264	259900	6949550
KVA265	259850	6949550
KVA266	259800	6949550
KVA267	259750	6949550
KVA268	259700	6949550
KVA269	259650	6949550
KVA270	259600	6949550
KVA271	259550	6949550
KVA272	259500	6949550
KVA273	260000	6949500
KVA274	259950	6949500
KVA275	259900	6949500
KVA276	259850	6949500
KVA277	259800	6949500
KVA278	259750	6949500
KVA279	259700	6949500
KVA280	259650	6949500
KVA281	259600	6949500
KVA282	259550	6949500
KVA283	259500	6949500
KVA284	260000	6949450
KVA285	259950	6949450
KVA286	259900	6949450
KVA287	259850	6949450
KVA288	259800	6949450
KVA289	259750	6949450
KVA290	259700	6949450
KVA291	259650	6949450
KVA292	259600	6949450
KVA293	259550	6949450
KVA294	259500	6949450
KVA295	260000	6949400
KVA296	259950	6949400

Sample no.	East	North
KVA297	259900	6949400
KVA298	259850	6949400
KVA299	259800	6949400
KVA300	259750	6949400
KVA301	259700	6949400
KVA302	259650	6949400
KVA303	259600	6949400
KVA304	259550	6949400
KVA305	259500	6949400
KVA306	260000	6949350
KVA307	259950	6949350
KVA308	259900	6949350
KVA309	259850	6949350
KVA310	259800	6949350
KVA311	259750	6949350
KVA312	259700	6949350
KVA313	259650	6949350
KVA314	259600	6949350
KVA315	259550	6949350
KVA316	259500	6949350



csaglobal.com

