



7 May 2024

## Pioneer Dome Lithium Project, Western Australia

# Updated Scoping Study shows Pioneer Dome set to generate strong free cashflow

Study outlines two economically robust options: Mine gate sale operation will generate substantial cashflow at current prices while concentrate production will generate strong returns at higher prices; Project on track to be shovel-ready by end of this calendar year

### **Key Findings of Updated Mine Plan**

#### **Build Own Concentrator Scenario:**

- Pioneer Dome generates substantial Net Present Values (NPV) at consensus prices for 6 per cent spodumene concentrate (SC6); The project is significantly leveraged to price increases
- The strong findings are based on consensus forecast of US\$1393/t for SC6 and a seven-year mine life and assumes Develop builds all site infrastructure (including processing and accommodation facilities)

Description	Avg SC6 Price (USD/t con)	Project Revenue (A\$M)	Free Cash Flow (A\$M)	Pre-Tax NPV <sub>8%</sub> (A\$M)	Pre-tax IRR (A\$M)
Bloomberg Consensus	1,393	2,172	666	373	34%
Flat Pricing (1500 SC6)	1,500	2,339	823	495	44%
Flat Pricing (2000 SC6)	2,000	3,119	1,558	1,016	76%

- Pre-production capital is A\$285m; Processing capital costs for 1.2Mtpa facility have been completed by leading engineering firm Primero
- Average annual steady state SC5.5 concentrate production is ~200kt; Life of Mine 1.13Mt
- The mine plan post construction and ramp up delivers A\$134m per year of pre-tax cashflow at consensus prices (A\$156M cashflow per year at US\$1500/t for SC6)
- Study is based on previously reported Dec-22 maiden Mineral Resource (11.2Mt at 1.2% Li<sub>2</sub>O); Deposit is open in all directions and has significant exploration potential for further growth in inventory/mine-life
- Under Develop's new mine plan, the project changes from a large-scale open pit operation to small lowstrip ratio starter pits and underground mines with a production target of 8.1Mt at 1.2% Li<sub>2</sub>O; This delivers a huge reduction in surface disturbance by cutting mined waste from 117.4Mt to 8.5Mt
- The metallurgical recovery in the new mine plan is more conservative at 66%, previously Feb-23 study recovery was set at 74%. This change in recovery accounts for a scale up of the scoping study level metallurgical test work and presents upside potential for the project's economics

#### Mine Gate Sale or Toll Treatment Scenario:

- A mine gate sale or toll treatment scenario would substantially reduce the capital outlay by A\$250m to
  just A\$35-40m; Significantly increases the NPV and greatly reduces construction and operating risks
  (subject to third party commercial terms)
- The main orebody in the mine plan outcrops and produces ore from month 3 of the schedule, meaning revenue is generated very early in the Project life, especially in a mine gate sale or toll treatment scenario
- Pioneer Dome is one of only a handful of ASX-listed lithium JORC-compliant Resources that does not have a Spodumene offtake agreement. Australian Spodumene is highly sought after because it qualifies for significant flow-through offshore government subsidies
- Heritage and flora and fauna surveys have been completed and mining approval documents have been submitted. Develop expects the project to be shovel-ready in the second half of this calendar year





Develop (ASX: DVP) is pleased to announce the results of the Updated Scoping Study for its Pioneer Dome Lithium Project in Western Australia.

The Mine Plan shows Pioneer Dome is set to generate strong financial returns based on two production scenarios.

The first of these is based on building a processing plant, including a flotation circuit, accommodation camp and all associated site infrastructure, at a cost of A\$285m.

The Study shows that this operation would generate significant free cashflow. Based on the consensus price forecast, which at US\$1393/t is only marginally higher than the current spot auction prices of  $\sim$ US\$1300/t, the project will generate A\$666m in free cashflow and have a pre-tax NPV<sub>8</sub> of A\$373m.

Develop would consider adopting this option in the event that the price of 6 per cent spodumene concentrate rose to US\$1500/t. At this price the project delivers free cashflow of A\$823m.

The results in this scenario are significantly better than those contained in the previous Scoping Study of February 2023. This is due mainly to Develop's decision to mine Pioneer Dome predominantly via underground methods.

Small, low strip ratio pits will produce early ore and cashflow and create access points for the larger underground mines. This will deliver significant benefits, including an increased production profile compared to previous mine plans and the ability for fast and effective production ramp-up.

The second scenario is based on a mine gate sale or toll treatment arrangement. This scenario would have a capital cost of just A\$35-40m, saving an estimated A\$250m due to there being no need to construct a processing plant, associated site infrastructure or an accommodation camp.

Under this second scenario and subject to third party commercial terms being acceptable, the Project's NPV and cashflow increases significantly and the construction and operating risks reduce substantially.

Develop Managing Director Bill Beament said: "The study shows Pioneer Dome is set to generate outstanding cashflow and financial returns in both of the two scenarios outlined.

"In light of these findings, we will advance studies on both options in parallel while we progress the approvals process and other aspects of the project. This is expected to take around six months.

"A decision on which route to pursue will be taken in light of the prevailing price environment at the time".

Mr Beament said the study showed Pioneer Dome was an extremely robust project with strong financial returns across the price spectrum and substantial upside due to its leveraged exposure to any rise in the lithium market.

"We have completely redesigned the project, removing the planned large pits and replacing it with smaller pits which will generate cashflow faster and for less capital cost," he said.

"We will then go underground, which was not contemplated in the previous study. This will generate less waste and surface disturbance.

"If we adopt a toll treatment or mine gate sale approach, our capital cost will be no more than \$40m and the time to first production and revenue will be extremely short by any comparable measure.

"There is also very limited availability of JORC-classified Spodumene resources in Australia which are not already covered by offtake contracts. Such resources qualify for substantial government subsidies, including from the US, further underpinning the financial merit of Pioneer Dome.

"As a result of this study, we now have a host of development and funding options to consider".

#### **CAUTIONARY STATEMENTS**

The Scoping Study referred to in this announcement is a preliminary technical and economic study to determine the potential viability of the Pioneer Dome Lithium Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of Ore Reserves. Further exploration and evaluation work and appropriate studies are required before Develop will be able to estimate any Ore Reserves or to provide any assurance of an economic development case.

Approximately 94% of the Life-of-Mine (LOM) Production Target is in the Indicated Mineral Resource category with only 6% in the Inferred Mineral Resource category. Develop has concluded that it has reasonable grounds for disclosing a Production Target which includes the 6% Inferred Mineral Resources given the characteristics of the deposits and the location of the Inferred Resources within the deposits.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of further Measured or Indicated Resources or that the Production Target or preliminary economic assessment will be realised.

It should be noted that the term "ore" is used in this announcement to describe mineralised material that mine optimisation modelling considered potentially economic. It should not be confused with the stricter definition of economically extractable material as denoted by ore in an "Ore Reserve".

The Scoping Study is based on the material assumptions outlined in this announcement. These include assumptions about the availability of funding. While Develop considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the outcome indicated in the Scoping Study for the build own concentrator scenario, funding in the order of ~\$300 million will likely be required to cover capital expenditure and working capital. Investors should note that there is no certainty that Develop will be able to raise that amount of funding when needed.

It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Develop's existing shares.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

#### **EXECUTIVE SUMMARY**

Australian energy transition metals company Develop Global Ltd ("Develop", "DVP" or "the Company") (ASX: DVP) is pleased to announce that it has completed the updated scoping study on its flagship 100%-owned Pioneer Dome Lithium Project ("Pioneer Dome" or the "Project") located approximately 130km south of Kalgoorlie and 270km north of the Port of Esperance.

The results confirm the Project's strong financial and technical merits based on a 1.2 million tonne per annum ("Mtpa") processing facility. The mine plan confirms that Pioneer Dome has the potential to be a very profitable mine with low cash operating costs, robust margins and outstanding economic returns.

The mine plan indicates Pioneer Dome will produce steady state average annual production of 200,000 tonnes of Spodumene concentrate with a life of mine payable of 1.13 million tonnes of Spodumene.

The Project at consensus pricing is forecast to generate revenue of A\$2.2 billion and pre-tax free cash flow of A\$666 million over an estimated 7-year mine life.

#### **Financial Summary and Key Outcomes**

A summary of financial model outputs are presented in Table 1, Table 2 and Figure 1, key commodity price assumptions are presented in Table 3. Key metrics of the mine plan are outlined in Table 4 and Figure 2 - Figure 4.

Table 1 - Financial Model Outputs

	Unit	
Pre Tax NPV <sub>8%</sub> <sup>1</sup>	\$AM	373
Pre-Tax IRR	%	34%
Payback	Mths	~4 years
Free Cash-flow	\$AM	666
Maximum Cash Down	\$AM	307

<sup>&</sup>lt;sup>1</sup> NPV discount factors are presented in real dollars

Table 2 - Kev Financial Statistics

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Study Outcomes				
Production Rate	<u>1.2 l</u>	<u>Mtpa</u>		
Mine plan Project revenue (real)	A\$2,172	? million		
Mine plan Free Cash flow (pre-tax real)	A\$666	million		
Infrastructure capital	A\$275 million			
Pre-tax NPV <sub>8%</sub>	A\$373 million			
Internal Pre-tax Rate of Return (IRR)	34%			
Max Negative Cash flow	A\$307 million			
Project payback	~4 y	ears		
Average Annual Free Cash flow (real)	A\$134 million			
Mine plan assumed revenue	A\$268 / t ore	A\$1,920 / t con		
AISC (includes royalties)	A\$151.5 / t ore	A\$1,080 / t con		
Construction Capital Cost	A\$35 / t ore	A\$252 / t con		

Figure 1 - Pre-Tax Cash Flow -Annual and Cumulative AUD M AUD M (Cum) 400 800 350 700 300 600 250 500 200 400 150 300 100 200 50 100 Υ3 Υ4 **Y**5 Y6 **Y7** Υ8 (50) (100)(100) (200)(150) (300) (200)(400)(250)(500)(300)(600)

Table 3 - Commodity Price Deck Forecast

Cumulative Cash Flow (right axis)

Pricing Index (USD)	CY2024	CY2025	CY2026	CY2027	CY2028	CY2029	CY2030	LT
Bloomberg	967	1,288	1,190	1,450	1,450	1,450	1,450	1,450
Consensus								

Capex

Net Revenue

Opex

Table 4 - Mining Physicals

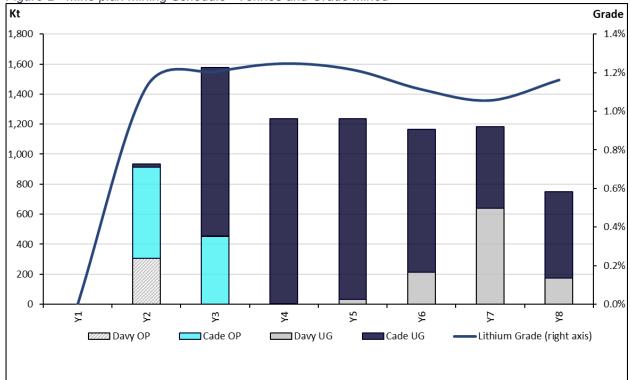
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Deposit	Mined Total Rock (Mt)	Mined Waste Rock (Mt)	Mined Ore (Mt)	Mined Grade (%)	Li₂O metal (kt)	Strip Ratio (t:t)
Open Pit	9.0	7.6	1.4	1.2	15.7	5.6
Underground	7.7	0.9	6.7	1.2	78.4	-
Total	16.7	8.5	8.1	1.2	94.2	5.6

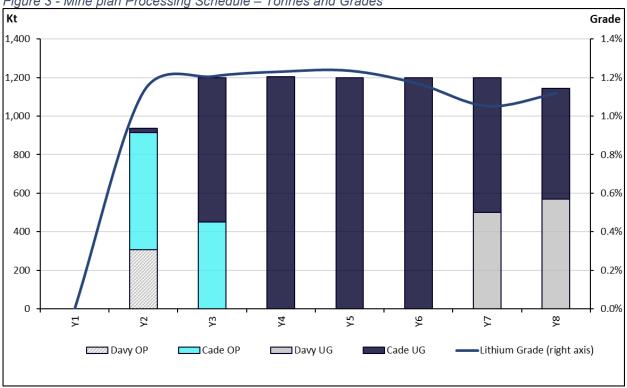
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----Cashflow









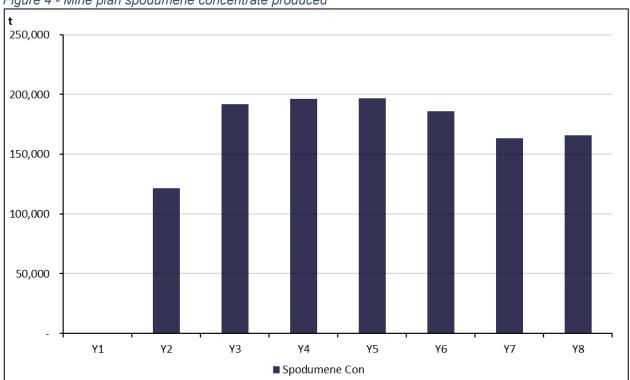


Figure 4 - Mine plan spodumene concentrate produced

#### **Mine Plan Summary**

Develop's Pioneer Dome mine plan work has been completed to a high standard with the assistance of a group of highly experienced independent consultants and contractors, including:

- Process Plant Infrastructure and Non-Process Infrastructure Primero
- Geology and Resources Trepanier
- Capital and Operating Cost Estimates Primero/Develop

The Company would like to extend its thanks to all consultants and staff that assisted during the completion of this study.

#### PROJECT BACKGROUND

The 450km² Pioneer Dome Project (DVP: 100%) is in the core of Western Australia's lithium corridor in the Eastern Goldfields, approximately 130km south of Kalgoorlie and 270km north of the Port of Esperance. A Mineral Resource of 11.2Mt @ 1.2% Li<sub>2</sub>O has been defined at Dome North in the northern area of the Project.

The southern Yilgarn area is recognised as being well-endowed with spodumene deposits, including the Pioneer Dome, Bald Hill Mine, the Mt Marion Mine, the Manna Project and the Buldania Project, all of which are located within a circle with a 90km radius.



#### **PROJECT TENURE**

The Dome North spodumene deposits are situated on Unallocated Crown land approximately 60 km north of Norseman and 130 km south of the regional centre of Kalgoorlie, in the Eastern Goldfields region of Western Australia (Figure 5). The Ngadju Native Title Claimant Group has a determined Native Title Claim (WC1999/002 or WAD6020/1998) that covers the greater Pioneer Dome Project.

The Dome North lithium deposits resource estimate is entirely within M15/1896, which is a granted Mining Licence. Essential Metals Pty Ltd (100% owned subsidiary of Develop Global) is the registered holder of the tenement and holds a 100% unencumbered interest in all minerals within the tenement.

#### **GEOLOGY & MINERALISATION**

In the vicinity of the project area, the Archean greenstone sequence dominates, and is broadly north-south striking, westerly dipping and younging to the east. Lithologies include tholeiitic basalt, pyroxene spinifex-textured basalt, komatiite, peridotite and dolerite, in addition to sedimentary rock derived from felsic volcanic and volcaniclastic rocks and pelitic and psammitic metasedimentary rocks of the Black Flag Group (Cade Deposit host rock). Interflow sediments are also present, commonly in the form of carbonaceous shale horizons.

The entire greenstone sequence is intruded by a series of pegmatite dykes and sills associated with the later stage Pioneer Dome granite intrusive. These pegmatite dykes form a swarm of intrusive bodies along a strike length of approximately 15 km along the eastern edge of the granite dome.

The lithium mineralisation at Dome North is contained in three deposits: Cade, Davy and Heller. The deposits have left-stepping lensoidal pegmatites that are north-north-east to north-east trending with a steep dip to the east-south-east. Tantalum is elevated within the spodumene bearing pegmatites, but it does not occur by itself in economic concentrations and widths.

#### **RESOURCES**

Develop is pleased to report its Mineral Resource estimate (MRE) for its Pioneer Dome Lithium Project acquired through the acquisition of Essential Metals (ESS) via a scheme of arrangement on 6 November 2023.

Table 5 - Dome North Mineral Resource Estimate

Classification	Tonnes (Mt)	Li <sub>2</sub> O %	Ta₂O₅ ppm	Contained Li <sub>2</sub> O (t)	Fe <sub>2</sub> O <sub>3</sub> %
Indicated	8.6	1.23	55	105,000	0.46
Inferred	2.6	0.92	62	24,000	0.55
Total	11.2	1.2	57	129,000	0.48

Note: Appropriate rounding applied.

The release of this statement for the Pioneer Dome MRE's ensures alignment with DVP's reporting requirements.

There have been no significant changes to the MREs relative to previous disclosure by ESS, as a result, the Cade, Davy and Heller MRE's remain unchanged.

This ASX announcement also includes in the attachments to this release all required JORC Code Tables and supporting information within the appendixes.

The MRE for Pioneer Dome mine was prepared by independent geology consultants Trepanier Pty Ltd (see ASX announcement dated 20 December 2022) and is reported according to the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the 'JORC Code') 2012 edition.

#### **ESG**

Our commitment to sustainability is deeply ingrained in our company values. Our sustainability strategy defines how we aim to integrate environmental and social science into our business model and guide us in our efforts to achieve sustainable outcomes for the environments we operate in.

We are applying this approach to our planning for Pioneer Dome, by embedding sustainability-driven designs, decisions, planning and operation into the Project.

Since the acquisition of the site by Develop, focus has been placed on reducing the environmental impact of mining by reducing the overall clearance envelopes and material mined through the lens of the Company's over-arching approach to ESG. The new mine plan has significant reduction in clearance areas required by reducing mined waste from 117.4Mt to 8.5Mt.

Pioneer Dome project is significantly de-risked from an ESG point of view, the Project sits within a granted mining lease, all flora, fauna and heritage surveys conducted and no significant sites identified. Engagement with Traditional Owners is a key focus with no sites identified within the mining envelopes and in principle agreement on how to manage the site has been reached.

#### **MINING**

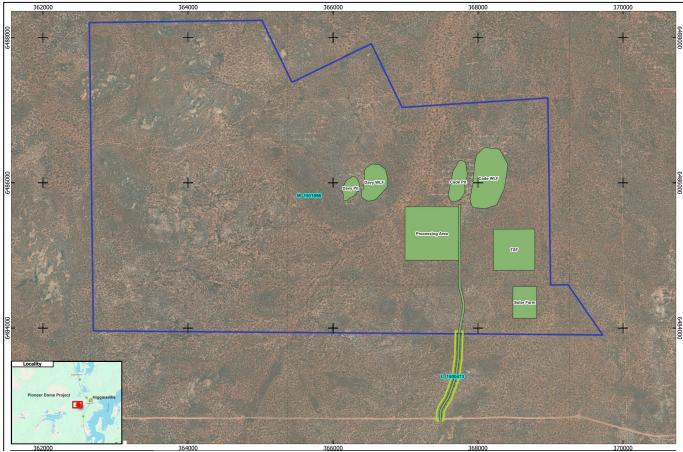
Develop has completed the mining portion of a study update for Pioneer Dome.

The mine operating costs for the underground mining have been completed by Develop using its own mining services division to price the works required, the cost estimate accuracy is +/- 15%. Open pit mine operating costs are based on contractor rates, the estimate accuracy is +/- 25%.

Based on the inputs and constraints, the assumed mining method for the deposit is a mixture of open pit and underground methods. Open pit mining will be conventional open pit method using two 125 tonne class excavators matched with 90 tonne trucks. It has been assumed that all material will require blasting.

Underground mining will be a combination of overhand and underhand long-hole stoping with paste fill as the main method for backfilling, unconsolidated rock fill will be used during the operation where applicable to remove the need to haul waste rock to surface.

Figure 6 - Pioneer Dome Site Layout



#### **Open Pit Mining**

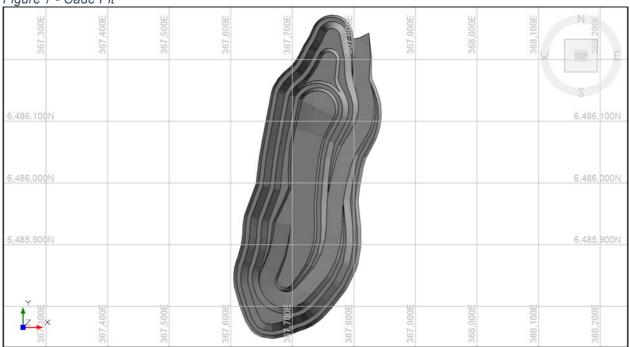
Conventional open pit mining has been selected as the basis for the operation using two 125t class excavator matched to 90t class trucks. Current assumptions are that all material will require blasting. The mining costs are based on Contractor mining with the Owner providing management and technical support including geology, ore control, mine planning and survey.

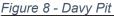
The pit shells selected from the pit optimisation were based on separate revenue factors for Cade and Davy to reduce the waste mining requirements and improve on the economics early in the mine plan. Pit designs were carried out with the addition of 10% dilution and assuming 95% recovery of all ore prior to scheduling. The mine inventory by pit is summarised in Table 6 with pits shown in Figure 7 and Figure 8. Open pit mining schedules are shown in Figure 9 and Figure 10.

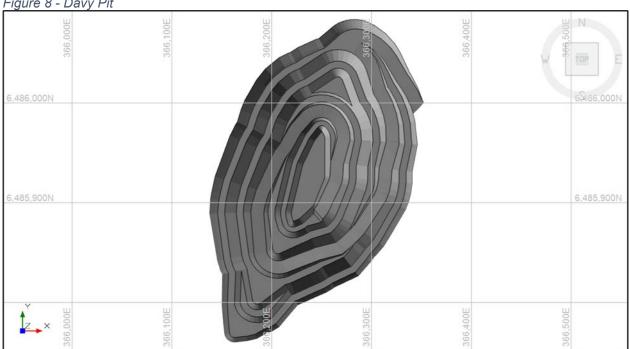
Table 6 - Open Pit Mining Physicals

Deposit	Mined Total Rock (Mt)	Mined Waste Rock (Mt)	Mined Ore (Mt)	Mined Grade (%)	Li <sub>2</sub> O metal (kt)	Strip Ratio (t:t)
Cade	5.9	4.8	1.1	1.2	12.8	4.6
Davy	3.1	2.8	0.3	1.0	3.0	9.1
Total	9.0	7.6	1.4	1.2	15.7	5.6

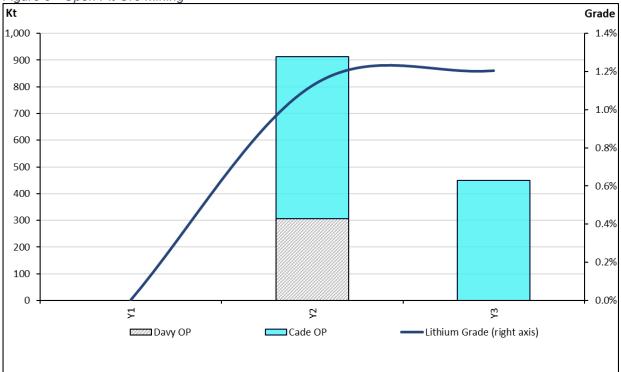




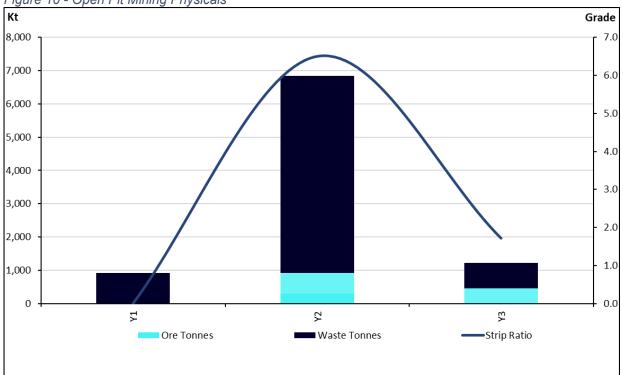












#### **Underground Mining**

The underground mines have been optimised, designed and scheduled to enable mining utilising standard high-capacity mobile underground mining equipment. Underground material will be transported to the surface by Sandvik TH663 (or similar) underground trucks. The trucks will travel up declines at a gradient of 1:7 to the Run of Mine pad (ROM) or waste dump.

Each ore body is accessed via a decline developed from the open pit excavations. The ventilation and escapeway accesses are also mined from existing open pit voids to reduce development metres planned in oxidised material.

The mining method which forms the basis of the work is longhole open stoping. Stoping will follow a top-down sequence, commencing at the extremities of each level and retreating to the level access. Stope stability will be maintained with mixture of rock fill and paste fill.

Ore drives have been designed at 25 m vertical intervals (floor-to-floor) and are planned to be developed with a jumbo drill rig at minimum dimensions of 5.0mW x 5.0mH. Following ore drive development, the remaining material will be extracted by longhole retreat open stoping. Table 7 below shows the key mining physicals from both Cade and Davy undergrounds with overall mine plans outlined in Figure 11 – Figure 13.

Table 7 - Underground Mining Physicals

Deposit	Mined Total Rock (Mt)	Mined Waste Rock (Mt)	Mined Ore (Mt)	Mined Grade (%)	Li <sub>2</sub> O metal (kt)	Development (km)
Cade	6.4	0.7	5.7	1.2	67.6	15.3
Davy	1.3	0.2	1.1	1.0	10.9	4.9
Total	7.7	0.9	6.7	1.2	78.4	20.2

Figure 11 - Cade UG Layout

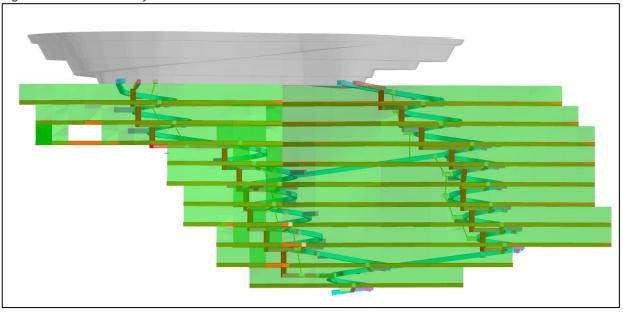


Figure 12 - Davy UG Layout

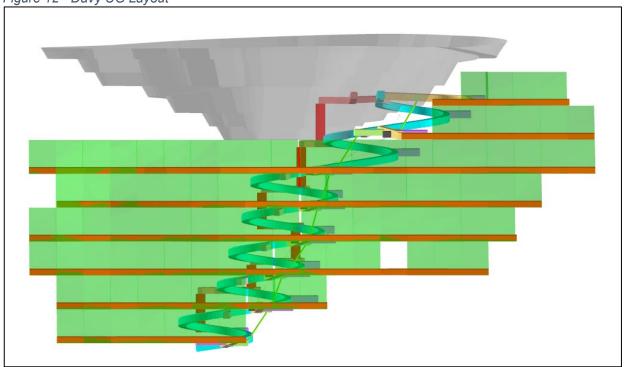
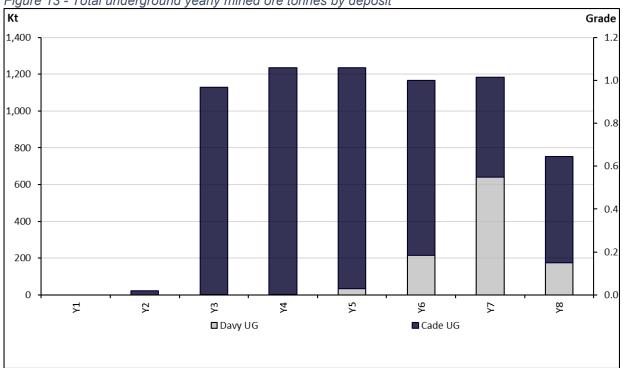


Figure 13 - Total underground yearly mined ore tonnes by deposit



#### **PROCESS DESIGN**

The concentrator process plant design is a hybrid DMS and flotation flowsheet. Based on metallurgical characterisation work to date, this will provide flexibility to treat a range of ore types and will maximise recovery and quality. This flowsheet is similar to other benchmark operations in the Western Australia spodumene industry (Pilgangoora and Greenbushes for example).

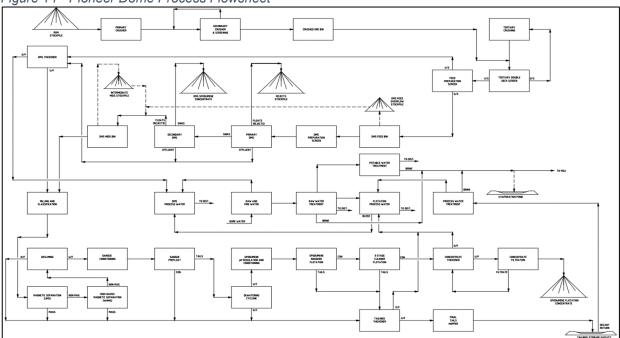
A high-level process mass balance model was developed from the process design criteria and metallurgical variability test work data and forms the basis for selection of major process equipment.

Mica rejection ahead of DMS has not been included in the flowsheet as test work indicates there is no tangible effect on DMS concentrate quality. DMS will be used ahead of the flotation and will take the form of a conditioning stage prior to mica flotation.

Magnetic separation is also included ahead of spodumene flotation for rejection of iron minerals prior to the flotation process.

These pre-treatment steps are not always used during spodumene processing; however, they are not novel or new to industry.

Figure 14 - Pioneer Dome Process Flowsheet



Equipment selection and sizing is preliminary for the purpose of this Scoping Study, however it is based on metallurgical testwork, high level mass balance modelling, database/benchmark data or assumptions if required. Details of key equipment sizing is as follows:

#### **Crushing Circuit**

Ore from the ROM is crushed to a suitable feed size for the high-pressure grinding roll (HPGR), which is approximately P100 32mm. The C130 primary crusher size was selected based on its suitability to treat a ROM ore particle size of up to 800mm. A preliminary Metso Bruno model, using testwork and benchmark data was used to select an HP300 secondary cone crusher.

An HPGR with 1,240mm x 980mm rolls and 2 x 500kW drives was selected based on benchmarking and advice from vendors during budget quotation.

#### **DMS Circuit**

The DMS circuit was sized based on the required throughput and particles size to be treated. This resulted in four 420mm cyclones being required.

#### **Milling Circuit**

A preliminary calculation and benchmarking based on the required throughput and target grind size of P80 150µm were used to select the 1.75MW ball mill.

#### **Magnetic Separation**

The required volumetric slurry throughput from the preliminary mass balance was used as the key parameter for sizing and selection of a low intensity magnetic separator (LIMS) and a wet high intensity magnetic separator (WHIMS). Benchmarking was used to ensure the models selected were appropriate for the required duty.

#### **Flotation Circuit**

The volumetric slurry throughput from the preliminary mass balance was used along with the required residence time from metallurgical test work as the key parameters for sizing and selection of flotation cells in the gangue pre-flotation and spodumene flotation circuits. The same flowsheet configurations were used as per test work. Benchmarking was used to ensure the cell sizes selected were appropriate for the expected carry rates and lip loadings.

#### **Tailings Storage Facility**

The site geological aspects relevant to the TSF design have not been assessed in this Scoping Study and further development is required in a subsequent study phase.

A preliminary location for the TSF was selected based on proximity to the process plant.

An allowance for the first stage of earth works and infrastructure was made based on benchmarks for other wet unlined TSF benchmarks. No allowance for future wall raises or infrastructure extensions have been included in the scope of this study.

#### **METALLURGICAL RECOVERIES**

The metallurgical recovery estimates were revised to better replicate the updated treatment strategy. The following adjustments have been applied:

- Oxide/transition has been classified as 'weathered' material
- A 'fixed combined tail' approach to recovery has been determined from test work
- Applying a lithia loss for Magnetic Separation and Scale-up
- Reduction in recovery whereby test work feed grade is higher than processing feed grade
- Reduction in final spodumene product from SC5.7 down to SC5.5

Table 8 - Global Metallurgical Recovery Determination

Ore Type	Mill Feed (Mt)	Recovery (%)
Cade Weathered	1.1	73.1
Cade Fresh	5.7	67.5
Davy Weathered	0.3	37.1
Davy Fresh	1.1	63.2
	Global Recovery	66.1

#### LOGISTICS AND TRANSPORT

A consultant has been engaged on behalf of Develop to assess options for transport and logistics of Pioneer Dome concentrate and is still in development. The Esperance port facility is 272km by road and will be a focus as place of export.

#### **COST ESTIMATION**

#### **Capital Cost Estimate**

Capital costs are presented in Table 9 and are calculated on pricing received during the study as well as first principles build up. They have been calculated as at March quarter 2024 (calendar year) to an accuracy of +/-20%.

Table 9 - Capital Cost Estimate Summary (+/- 20%)

Pre-Production Capital	Capital (A\$M)
Processing Plant	235.5
Site Infrastructure	34.0
Site Buildings	15.5
Sub Total	285.0
Operating Capital	Capital (A\$M)
Mining (includes UG fleet)	103.2
Sub Total	103.2
Total	388.1

#### **Operating Cost Estimate**

Mining and processing and all operating costs are summarised below in Table 10.

Table 10 - Operating Cost Estimate Summary

Operating Cost	Unit	Value
Cost Per Unit		
Open Pit Mining	\$/t OP ore	8.3
Underground Mining	\$/t UG ore	71.0
Processing	\$/t ore	51.5
G and A	\$/t ore	4.1
Shipping	\$/t ore	12.1
C1	\$/t ore	122.9
Sustaining Capital	\$/t ore	12.8
AISC	\$/t ore	135.7
Royalties	\$/t ore	15.5
Capital	\$/t ore	35.3
Total Cost (including royalties and capital)	\$/t ore	186.4

<sup>\*</sup>Variances may appear in table due to rounding

#### FINANCIAL EVALUATION

The mine plan financial model (the "Financial Model") demonstrates the robust economics of the Project.

The Pioneer Dome Mineral Resource has been used as the basis to design a detailed open pit and underground mine plan and optimised mining schedule to deliver ore grading 1.2% Li<sub>2</sub>O to a 1.2Mpta processing plant over 7 years to produce steady state annual average spodumene concentrate of 200,000 tonnes.

The mine plan average onsite operating cost including mining, processing, and on-site administration are A\$123 per ore tonne processed, on a real basis.

Given the assumed commodity prices and AUD:USD exchange rate of 67 cents, the Project delivers gross revenue of A\$2.2 billion and a net pre-tax cash flow of A\$666M and averages A\$134M per annum post construction and production ramp up.

On this basis, the Project has a pre-tax NPV<sub>8%</sub> of A\$373M and IRR of 34% and a payback period of 4 years.

Annual cash flows are represented in Figure 15, Table 11 represents the mine plan summary.

Figure 15 - Annual Cashflow Graph

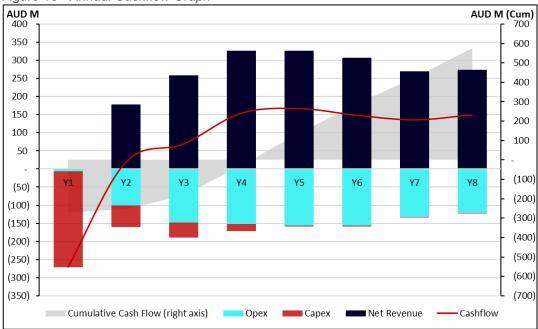


Table 11 - Financial Summary

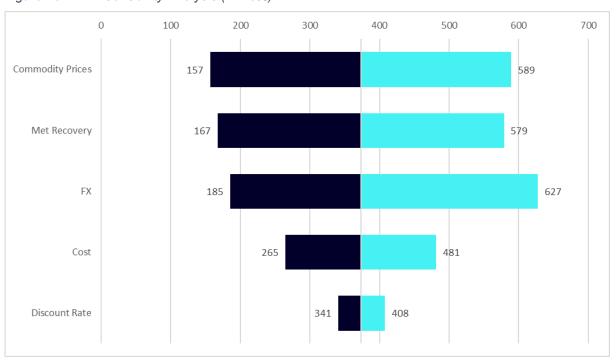
Table 11 - Financial Summary		
Mining	Unit	
Mined Ore Tonnes	Mt	8.1
Nominal Throughput	Mtpa	1.2
Mine plan (Mining)	Yrs	7.0
Processed Tonnes	Mt	8.1
Avg Li₂O Grade	%	1.2
Payable Spodumene Con	kt	1,131
Economic Assumptions	Unit	Amount
Avg. Spodumene (SC 6.0 equivalent)	USD/t	1,393
Avg. Exchange Rate	AUD:USD	0.67
Cash Flow	Unit	Amount
Gross Revenue	A\$M	2,172
Transport & Royalties	A\$M	223
On Site Operating Costs	A\$M	896
Net Operating Cash Flow Pre-Tax	A\$M	1,053
Upfront CAPEX	A\$M	285
- Processing plant & Infrastructure	A\$M	236
- Other Pre-Production Capital Infrastructure	A\$M	50
Sustaining CAPEX	A\$M	103
Net Cash Flow Pre-Tax	A\$M	666
Value Metrics	Unit	Amount
Pre-Tax NPV <sub>8%</sub>	A\$M	373
Pre-Tax IRR	%	34

#### **Sensitivity Analysis**

The sensitivity of the pre-tax NPV was evaluated for changes in key driven variables and parameters such as:

- o Commodity price
- Metallurgical Recovery
- Exchange rate between USD:AUD
- Fixed and variable costs including: mining rates, diesel price, power cost, grade control, site establishment, mobilisation, demobilisation, plant and equipment
- o Discount rate

Figure 16 - NPV Sensitivity Analysis (+/-15%)



This announcement is authorised for release by the Board of Directors.

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#### **About Develop**

Develop (ASX: DVP) has a twin-pronged strategy for creating value. The first of these centres on the exploration and production of future-facing metals. As part of this, the Company owns the Sulphur Springs copper-zinc-silver project in WA's Pilbara region. This project is currently the focus of ongoing exploration to grow the inventory and various development studies. Develop also owns the Woodlawn zinc-copper project in NSW. Woodlawn, which is on care and maintenance, comprises an underground mine and a new processing plant. Develop has also recently acquired the Pioneer Dome Lithium Project in WA's lithium corridor' in the Eastern Goldfields. This project is currently the focus of ongoing exploration to grow the inventory and various development studies. The second plank of Develop's strategy centres on the provision of underground mining services. As part of this, Develop has an agreement with Bellevue Gold (ASX: BGL), Mineral Resources (ASX: MIN) and Karora (TSX: KRR) to provide underground mining services at their Projects in Western Australia.

#### **Pioneer Dome Mineral Resources Statement**

ME )	ME	Classification	Tonnes (Mt)	Li <sub>2</sub> O %	Ta <sub>2</sub> O <sub>5</sub>	Contained Li <sub>2</sub> O (t)	Fe2O3
: DOME .00%)	DOME	Measured	-	-	-	-	-
PIONEER (DVP 10	PIONEER	Indicated	8.6	1.23	55	105,000	0.46
PION (DV	PIO	Inferred	2.6	0.92	62	24,000	0.55
		Total	11.2	1.2	57	129,000	0.48

Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

The Company confirms that it is not aware of any information or data that materially affects the information included in the relevant market announcement and all material assumptions and technical parameters underpinning the estimates in the Original Announcement continue to apply and have not materially changed.

#### **Competent Person Statements**

The information in this announcement that relates to Metallurgical Results at the Pioneer Dome Project is based on information complied or reviewed by Mr Kurt Tiedemann who is an employee of the Company. Mr Tiedemann is a member of the Australasian Institute of Mining and Metallurgy and Mr Tiedemann n has sufficient experience with the style of mineralisation and the type of deposit under consideration to qualify as Competent Persons as defined in the JORC Code 2012 Edition. Mr Tiedemann consents to the inclusion in the report of the results reported here and the form and context in which it appears.

The information in this announcement that relates to the Dome North Lithium Project Mineral Resource is based on information complied by Mr Andrew Dunn (previous employee of Essential Metals) and Mr Lauritz Barnes (consultant with Trepanier Pty Ltd). Mr Dunn and Mr Barnes are both member of the Australasian Institute of Geoscientists. Mr Dunn and Mr Barnes both have sufficient experience with the style of mineralisation and the type of deposit under consideration to qualify as Competent Persons as defined in the JORC Code 2012 Edition. Mr Dunn and Mr Barnes consent to the inclusion in the report of the results reported here and the form and context in which it appears.

#### Forward-looking Statements

The information contained in this document ("Announcement") has been prepared by DEVELOP Global Limited ("Company"). This Announcement is being used with summarised information. See DEVELOP's other and periodic disclosure announcements lodged with the Australian Securities Exchange, which are available at www.asx.com.au or at www.develop.com.au for more information.

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This Announcement may include certain statements that may be deemed "forward-looking statements". All statements in this Announcement, other than statements of historical facts, that address future activities and events or developments that the Company expects, are forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. The Company, its shareholders, directors, officers, agents, employees or advisers, do not represent, warrant or guarantee, expressly or impliedly, that the information in this Announcement is complete or accurate. To the maximum extent permitted by law, the Company disclaims any responsibility to inform any recipient of this Announcement of any matter that subsequently comes to its notice which may affect any of the information contained in this Announcement. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, continued availability of capital and financing, and general economic, market or business conditions. DEVELOP assumes no obligation to update such information.

Investors are cautioned that any forward-looking statements are not guarantees of future performance and that actual results or developments may differ materially from those projected in forward looking statements. Please undertake your own evaluation of the information in this Announcement and consult your professional advisers if you wish to buy or sell DEVELOP shares.

This Announcement has been prepared in compliance with the JORC Code 2012 Edition. The 'forward-looking information' is based on the Company's expectations, estimates and projections as of the date on which the statements were made. The Company disclaims any intent or obligations to update or revise any forward looking statements whether as a result of new information, estimates or options, future events or results or otherwise, unless required to do so by law.

# APPENDIX 1 – DOME NORTH MINERAL RESOURCE ESTITMATE MATERIAL SUMMARY

Material information summary as required under ASX Listing Rule 5.8 and JORC Code (2012) reporting guidelines.

#### MINERAL RESOURCE STATEMENT

The Mineral Resource Statement for the Dome North Mineral Resource Estimate (MRE) was prepared during December 2022 and is reported according to the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the 'JORC Code') 2012 edition.

The Mineral Resource Estimate reported in this announcement is a rerelease of the Mineral Resource reported in December 2022 by Essential Metals (ESS). There have been no significant changes to the Mineral Resource Estimate relative to previous disclosure by ESS following the acquisition of the company by Develop via a scheme of arrangement on 6 November 2023, as a result, the Cade, Davy and Heller MRE's remain unchanged.

The Indicated and Inferred Mineral Resource, which was prepared by independent specialist resource and mining consulting group Trepanier (Geology & Resource Consultants), comprises 11.2Mt at an average grade of 1.16% Li2O and 57ppm Ta2O5 and is set out in Table 1 and Table 2.

Table 1: Dome North Mineral Resource Summary by Deposit and Category: (0.3% Li₂O cut-off grade)

Deposit	Classification	Tonnes (Mt)	Li₂O %	Ta₂O₅ ppm	Contained Li₂O (T)	Fe₂O₃ %
Cade	Indicated	6.9	1.26	49	88,000	0.44
	Inferred	1.3	0.88	49	11,000	0.44
Davy	Indicated	1.6	1.08	81	18,000	0.54
	Inferred	0.6	0.89	73	4,000	0.58
Heller	Inferred	0.7	1.02	76	8,000	0.72
Total	Total	11.2	1.16	57	129,000	0.48

Note: Appropriate rounding applied.

Table 2: Mineral Resource Summary by Category: Dome North spodumene Deposits

Classification	Tonnes (Mt)	Li₂O %	Ta₂O₅ ppm	Contained Li₂O (t)	Fe₂O₃ %
Measured	-	-	-	-	-
Indicated	8.6	1.23	55	105,000	0.46
Inferred	2.6	0.92	62	24,000	0.55
Total	11.2	1.16	57	129,000	0.48

Note: Appropriate rounding applied.

The Mineral Resource is reported and classified in accordance with the guidelines of the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code; 2012). The three deposits that comprise the Mineral Resource Estimate are Cade, Davy and Heller and their locations are shown in Figure 1 below.

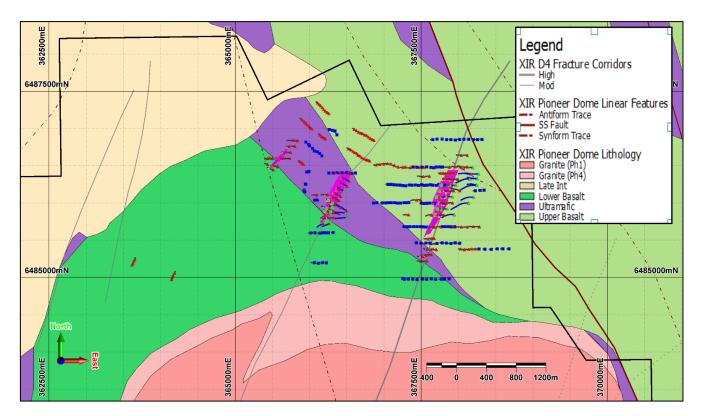


Figure 17: Local geology & structural interpretation of the Dome North Project area.

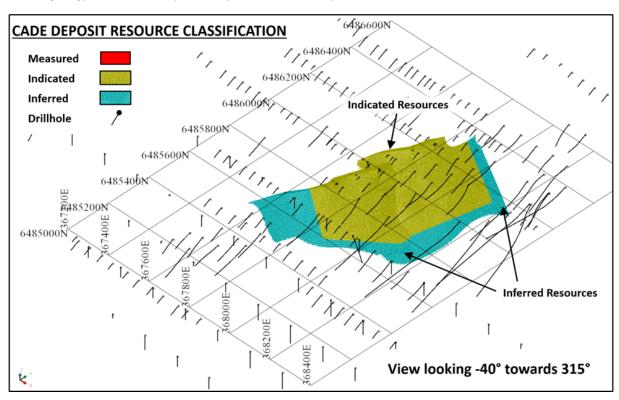


Figure 18: Cade Deposit Mineral Resource Classification

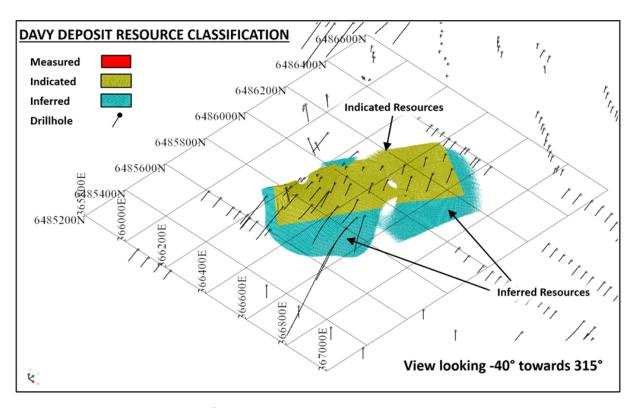


Figure 19: Davy Deposit Mineral Resource Classification

#### **Location and Description**

The Dome North Mineral Resource is part of the Pioneer Dome Project, owned 100% by Essential Metals Limited, and is located approximately 50km north of Norseman in the Eastern Goldfields Province of Western Australia. The Project is well serviced by existing infrastructure including a sealed road, water pipeline, rail and a gas pipeline all are related to the modern mining history within the tenement package and the proximity to other current and historic operations and the nearby regional centre of Kalgoorlie.

#### Geology and geological interpretation

The Pioneer Dome project area is located at the southern end of the Kalgoorlie Terrane, which is part of the Eastern Goldfields Superterrane (EGS) of the Yilgarn Craton. The Dome North spodumene deposits fall within the Depot Domain, near the boundary of the Kambalda Domain to the east (Cassidy et al., 2006).

In the vicinity of the Project area, the Archean greenstone sequence dominates, and is broadly north-south striking, westerly dipping and younging to the east. Lithologies include tholeitic basalt, pyroxene spinifex textured basalt, komatiite, peridotite and dolerite, in addition to sedimentary rock derived from felsic volcanic and volcaniclastic rocks and pelitic and psammitic metasedimentary rocks of the Black Flag Group (Cade Deposit host rock). Interflow sediments are also present, commonly in the form of carbonaceous shale horizons.

The entire greenstone sequence is intruded by a series of pegmatite dykes and sills associated with the later stage Pioneer Dome granite intrusive. These pegmatite dykes form a swarm of intrusive bodies along a strike length of approximately 15 km along the eastern edge of the granite dome.

The host rocks differ between each of the deposits. Cade is hosted in metasediment of the Black Flag Group, of which are fine grained and largely quartz, mica, amphibole and garnet in composition +/- pyrite, and alusite with black shale interbeds common. The host metasediments are strongly deformed, locally folded and sheared providing the structural preparation for a later stage pegmatite emplacement. The Davy and Heller deposits are hosted in both ultramafic (pyroxenite dominant) and mafic (basalt) rocks where pegmatites have intruded sheared contacts along NNE striking faults. Mafic lithologies tend to be more favourable for thickening of the spodumene pegmatites within

a more brittle host.

#### **Drilling techniques**

Drill holes within the Resource model were Reverse Circulation (RC) drill holes drilled with a  $4\frac{1}{2}$  -  $5\frac{1}{2}$ " face sampling hammer, Aircore drilling used a 90mm face-sampling blade bit or hammer in hard rock and diamond drilling was undertaken using an industry standard HQ3 triple tube with a diamond-set cutting bit. The Mineral Resources are defined by 7 aircore holes, 72 RC holes, 13 diamond holes and 17 RC holes with diamond tails.

#### Sampling techniques

RC drilling samples were collected at 1m intervals from a cone splitter attached to the drill cyclone. Samples were approximately 3kg. Air core drilling samples were laid out on the ground as 1m sample piles. Single metre samples were taken in pegmatite lithology and three metre composite samples were collected for the entire length of the drillhole by sampling 3 consecutive sample piles, using an aluminium scoop. HQ3 diamond core from the pegmatite (target zone) was half cut then quarter cut from one half only for lab submission. Sample length was dependent on geological contacts and ranged from 0.2m to 1.2m in length.

#### **Sample Analysis**

Analysis of all drilling samples was undertaken by Intertek Genalysis and Nagrom Laboratories, both located in Perth, for rare metals including lithium and tantalum. Samples were analysed using a four-acid digestion with a Mass Spectrometer (MS) determination (Intertek analysis code ZR01 / 4A Li MS-48).

#### **Adjustment for Iron Contamination**

In addition to Li2O and Ta2O5, Trepanier has also estimated the Fe2O3 for Essential Metals for the Mineral Resource as a potential deleterious element in the production of spodumene concentrates. During the process of drilling, sampling and assaying, two key issues cause contamination and, hence, artificial elevation of the Fe2O3 assays for the drill samples. Firstly, the highly abrasive nature of the Li2O/Ta2O5 mineralised pegmatite on the RC drilling bits and rods has resulted in iron contamination of the drill samples in the field. Secondly, when the drill samples were pulverised in laboratory in steel containers, the highly abrasive nature resulted in further iron contamination. As such, Trepanier completed a statistical analysis into both of the abovementioned issues which then allowed for factoring of the Fe2O3 assays to account for the contamination. Step one is to subtract 0.17% from all Genalysis Fe2O3 assays for samples pulverised in a steel bowl. Step two is to subtract a regressed factor by depth from all RC samples. It should be noted this process has been used to understand the potential Fe2O3 grades in the resource attempting to remove the Fe2O3 present from drilling and/or sample preparation contamination. The Fe2O3 grades are an estimate only, however consistent with the broad estimation techniques applied for the estimate of the global resource.

#### **Mineralisation Interpretation**

Resource intersections were calculated using 0.3% Li2O cut off with a maximum 3m internal dilution and no external dilution typically applied except where drill hole logging (e.g. continuous pegmatite) and assays indicate wider internal dilution is warranted. A significant increase in Fe2O3 at the contacts between the elevated iron mafic country rock and the iron poor pegmatites further refines the position of this contact in additional to the geological logs.

#### **Estimation Methodology**

Grade estimation for all elements was completed using Ordinary Kriging (OK) in GEOVIA Surpac™ software into the mineralised domains. A separate model was built for each deposit, but with the same block sizes. The estimates were resolved into 4m (E) x 20m (N) x 10m (RL) parent cells that had been sub-celled to 0.5m (E) x 2.5m (N) x 1.25m (RL) at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cut analysis used a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis

of the data population, no top-cuts were applied for Li2O, Ta2O5 or for Fe2O3.

#### **Mineral Resource Classification**

The Mineral Resources estimates for the Dome North lithium deposits have been classified in accordance with the criteria laid out in the 2012 JORC code.

Key factors considered for the resource classification included:

- Drill spacing (typically 80m x 80m).
- · Confidence in geological interpretation
- Confidence in mineralised zone interpretation
- Sample and geochemical analysis quality
- Availability of bulk density data

The Cade lithium Resource has, in part, been classified as an Indicated Mineral Resource. In situ reasonably fresh spodumene-bearing pegmatite rock chip samples collected at surface where the Cade pegmatite outcrops suggested that the weathering of the pegmatite is limited and shallow drilling and metallurgical test work has now demonstrated the minimal amount of weathering. As such, shallow, near surface fresh pegmatite has now been included within the Indicated resources at Cade.

The bulk densities applied to the fresh, oxide and transitional material pegmatite were based on determinations from drill core, of which 220 of the 1,395 measurements are from within the defined estimated domains at Cade and Davy.

Typical drill spacings for Indicated is 80m by 70-80m and for Inferred is up to 160m x 80m around the fringes of the Indicated.

#### **Cut-off Grade**

The shallow, sub-cropping nature of the Dome North deposits suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation. As such, the Mineral Resource has been reported at a 0.3% Li2O lower cut-off grade to reflect assumed exploitation by open pit mining.

#### **Modifying Factors**

No modifying factors were applied to the reported Mineral resources. Parameters reflecting mining dilution, ore loss and metallurgical recoveries will be considered during the planned mining evaluation of the project.

#### Metallurgy

The Company has conducted scoping study level metallurgical test work on the Cade Deposit and Davy deposits covering oxide, transitional and fresh material with the results demonstrating that all zones of the two deposits will be amenable to conventional processing methods using dense medium separation and flotation.

#### **Historical Exploration**

There has been no previous lithium exploration drilling or sampling on the Pioneer Dome Project other than by Essential Metals Ltd (Formerly Pioneer Resources Ltd.). Previous mapping by the Western Australian Geological Survey and Western Mining Corporation (WMC) in the 1970's identified several pegmatite intrusions, however, these were not systematically explored for Lithium or associated elements. There were no pegmatites previously identified in the Dome North project area.

Recent exploration undertaken by Essential Metals commenced with a comprehensive review of historical data, which identified the potential for LCT-type pegmatites. Field reconnaissance followed guided by GSWA geology maps, first pass soil geochemistry and geophysics. Identification of prospective pegmatites and follow up work

included detailed geological mapping and surface sampling in the form of rock chips and further infill soil sampling. Reverse circulation drilling has been conducted on all deposits for the purposes of preliminary exploration followed by resource definition. Diamond drilling has been carried out at the Cade and Davy deposits for resource definition, Specific Gravity (SG) measurements and metallurgical test work. For a more detail summary of the drill programme please refer to Section Error! Reference source not found.

END.

# **Section 1: Sampling Techniques and Data**

Dome North Resource Estimate (Cade, Davy and heller deposits)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Diamond Core (DD) and Reverse Circulation (RC) drilling were used to obtain samples for geological logging and assaying.</li> <li>Diamond core was cut and sampled at nominal 1m intervals, or intervals determined by geological contacts.</li> <li>Industry-standard RC drilling, using a face-sampling hammer with a booster and auxiliary compressor was used to ensure dry samples. Individual one metre samples were collected using a cyclone and a cone splitter into sub samples of approximately 3kg.</li> <li>The company used industry standard practices to measure and sample the drill core and RC cuttings.</li> <li>0.3m to 1.1m half-core samples, and 1-3m RC composite samples weighing nominally between 1.0 - 4.0kgs were submitted to the laboratory for multi-element analysis.</li> <li>Pulverisation using LM5 (steel mill) - Samples above 3kg were riffle split prior to pulverisation. Ones less than 3kg were entirely pulverised. Pulverisation using Zirconium or Tungsten Carbide (WC) bowl involved fine crushing (-2mm) then rotary or riffle splitting for 100g subsample to be pulverised. All samples were pulverised to nominal P80/75um to produce a standard charge for analysis.</li> <li>Lithium exploration package of elements: analysed by a four-acid digestion with a Mass Spectrometer (MS) determination (Intertek analysis code ZR01 / 4A Li MS-48). The quoted detection limits for this method are a lower detection limit of 0.1ppm and an upper detection of 10,000ppm Li. Most other elements have a similar analytical range. Any over range samples were re analysed by a sodium peroxide zirconium crucible fusion with a detection range of 1ppm to 20% Li.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul> <li>PQ and HQ (oriented coring) was used for diamond drilling.</li> <li>Reverse Circulation drilling, 4.5-inch drill string, 5.25 – 5.75-inch face-sampling hammer with auxiliary and booster compressors used to help exclude ground water.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Sample condition, including estimated recovery and moisture content were recorded for each sample by a geologist or technician.</li> <li>Core recoveries are recorded by the drillers in the field at the time of drilling and checked by a geologist or technician.</li> <li>Zones with poor sample recovery are often associated with high levels of oxidation. When poor sample recovery was encountered during drilling, the geologist and driller have endeavoured to rectify the problem to ensure maximum sample recovery.</li> <li>weathering, this can result depletion of lithium bearing spodumene crystals. In these zones the competency of the rock is low and difficult to core using the diamond boring method.</li> </ul>

Criteria	JORC Code explanation	Commentary
		Drilling intervals with poor sample recovery are not expected to have sample bias. Both fine and coarse material was recovered in these intervals.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drillholes are geologically logged for the total length of the hole using a long hand logging method. Logging routinely recorded weathering, lithology, mineralogy, mineralisation, structure, alteration and veining. Logs are coded using the company geological coding legend and entered into the company database.</li> <li>All diamond drillholes were orientated with reference to bottom of the hole and geotechnically and structurally logged for recovery, RQD, fracture frequency and alpha/beta measurements on oriented core.</li> <li>Logging has primarily been qualitative, but it includes quantitative estimates of mineral abundance.</li> <li>Diamond core are photographed wet and dry.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Diamond core are cut with an automated core-saw with quarter core samples submitted for analysis.</li> <li>Zones of similar lithology were divided into intervals nominally 1m in length for sampling purposes.</li> <li>For incompetent rock, intervals of diamond core were homogenised by passing through a 50:50 25mm riffle splitter multiple times, then each sample was split using a 25:75 25mm riffle splitter to generate a one quarter sub-sample.</li> <li>RC drilling - Individual one metre samples were collected via a cone splitter directly attached to the cyclone. Individual samples were nominally 3kg. The remainder of the drill sample was laid out in order on the drill pad. Cyclones are routinely cleaned.</li> <li>Geologist looks for evidence of sample contamination, which was recorded if seen.</li> <li>The use of booster and auxiliary compressors ensures samples are dry, which best ensures a quality sample.</li> <li>The majority of samples were dry, with good to excellent recoveries.</li> <li>The sample collection, splitting and sampling for the types of drilling used is considered standard industry practise and fit for purpose.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The sample preparation and assay method used is considered standard industry practice and is appropriate for the style of deposits</li> <li>Samples were assayed by Intertek Laboratory in Perth.</li> <li>Samples were prepared and analysed by the following methods:</li> <li>Samples weighed, crushed to 90% p3mm and split 50:50 and pulverised to 90% p75µm with the coarse residue retained in vacuum seal bags.</li> <li>A Zirconium and Tungsten Carbide bowls were used to grind the majority of samples to minimise Fe contamination for the mineralised pegmatite samples.</li> <li>Samples were assayed using a Sodium peroxide fusion in a nickel crucible with multispectral (MS) and optical emission spectroscopy (OES) analysis. (FP6-Li/OM19).</li> <li>A subset of samples was additionally assayed using a 4-acid digest with an induction coupled plasma multi spectral (MS) analysis (4A-Li/MS48).</li> <li>Gravimetric determinations were carried out on all pulverised samples to determine loss on ignition (LOI) at 1000°C (TGA)</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The company included certified reference material, blanks and duplicates within the at a minimum frequency on 1:30. Field Duplicated were selected in zones of significant mineralisation at a frequency on 1:20.</li> <li>In addition to Develop's QA/QC methods (duplicates, standards and blanks), the laboratory has additional internal checks.</li> <li>The following analytical methods were compared for 137 samples: 4A-Li/MS48 vs FP6-Li/OM19. Results for Al, Ba, Be, Ca, Cs, Fe, K, Li, Mg, Mn, Nb, P, Rb, S, Sn, Sr, Ta, and W were compared using scatter plots. No grade bias was observed between the two methods for Li, Cs, Ta, Sn, and Nb.</li> <li>The sample preparation and the analysis method for the diamond core is considered standard industry practice and is appropriate for the deposit.</li> <li>The significant intersections reported have been prepared and reviewed by geologists with relevant Li experience.</li> <li>No twinned holes have been drilled.</li> <li>The geological and sampling information were collected in MDS software, validated in Micromine and then uploaded to the Company's SQL drilling database.</li> <li>The Company has adjusted the lithium (Li), tantalum (Ta) and caesium (Cs) assay results to determine Li<sub>2</sub>O, Ta<sub>2</sub>O<sub>5</sub> and Cs<sub>2</sub>O grades. This adjustment is a multiplication of the elemental Li, Ta and Cs assay results by 2.153, 1.221 and 1.0602 to determine Li<sub>2</sub>O, Ta<sub>2</sub>O<sub>5</sub> and Cs<sub>2</sub>O grades respectively. Fe<sub>2</sub>O<sub>3</sub> has been adjusted for both drilling and pulverisation contamination. This is covered in more detail in Section 3.</li> <li>A two-step adjustment has been applied to the Fe<sub>2</sub>O<sub>3</sub> assays to account for (i) contamination for some sample pulps by the steel bowl at the grinding stage, and (ii) contamination of RC chips with the drill bit and tube wear with increasing hole depth. Step one is to subtract 0.17% from</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.     Specification of the grid system used.	<ul> <li>all Genalysis Fe<sub>2</sub>O<sub>3</sub> assays, step 2 is to subtract a regressed factor by depth from all RC samples.</li> <li>Peroxide fusion assays were given priority over 4-acid assays in the database.</li> <li>No adjustments were made to the assay data.</li> <li>The collar locations of the holes were pegged out using RTKGPS survey equipment by a surveyor with Spectrum Surveys Pty Ltd, Kalgoorlie.</li> <li>Downhole surveys for RC and Diamond core holes were collected every 5 to 30 m from surface to bottom of hole either by the AXIS Mining Technology or Reflex north seeking gyro tool, surveys were carried out</li> </ul>
	Quality and adequacy of topographic control.	<ul> <li>by the drilling operator.</li> <li>MGA94 (Zone 51)</li> <li>Topographic control is by RTK DGPS, carried out by a qualified surveyor. Hole RL's are checked against the Shuttle Radar Topographic Mission (SRTM) Digital Terrain Model (DTM).</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data/drill hole spacing are variable and appropriate to the geology and historical drilling spacing.</li> <li>Drill spacing are set out on a drill line spacing of 40-160m, spaced between 20m - 80m along drill lines.</li> <li>Data spacing and distribution is sufficient to establish geological and grade continuity for three deposits within the Dome North project resulting in three Resource Estimates.</li> </ul>

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The strike of the mineralisation at the Cade deposit is estimated to be broadly north-north-east, and dipping east, therefore angled diamond drill holes at -60° have been drilled towards 270° to intersect the mineralisation as close to perpendicular as possible.</li> <li>Drilling was designed to intersect the target perpendicular to the mapped geology and angled at -60° for the best representation of lithological thickness.</li> <li>Four diamond drill holes were drilled 'down dip' into the Cade deposit to a vertical depth of approximately 120 metres, penetrating through the oxide, transition, and fresh mineralisation zones. The orientation of these 4 holes were designed to stay within the central part of the pegmatite to maximise the recovery of mineralised material for metallurgical studies. These drill holes are evenly spaced across the strike of the pegmatite body, repeatedly passing through the same vertical zone. Hole spacing is designed to minimise sampling bias by collecting equal quantities of core from across the Cade pegmatite.</li> <li>Drillhole designs are considered appropriate for the geometry of the host sequence.</li> </ul>
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by the on-site geological team. The Company uses standard industry practices when collecting, transporting, and storing samples for analysis. Drilling pulps and aliquots are stored by the Company in the Kalgoorlie facility.  Detailed records are kept of all samples that are dispatched, including details of chain of custody.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No reviews have been undertaken.

# Section 2: Reporting of Exploration Results Criteria listed in the preceding section also apply to this section.

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	The drilling reported is located entirely within tenement M15/1896. The tenement is located approximately 40-60km north of Norseman, WA. The Company is the registered holder of the tenements and holds a 100% unencumbered interest in all minerals within the tenement. The tenement is on vacant crown land. The Ngadju Native Title Claimant Group has a determined Native Title Claim which covers the Pioneer Dome project.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	There has been no previous LCT exploration drilling or sampling on the Pioneer Dome project other than that carried out by the Company. Previous mapping by the Western Australian Geological Survey and Western Mining Corporation (WMC) in the 1970's identified several pegmatite intrusions; however, these were not systematically explored for Lithium.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Project pegmatites are consistent with records of highly differentiated Lithium Caesium Tantalum (LCT) pegmatite intrusion. This type of pegmatite intrusions are the target intrusions of hard rock lithium deposits.</li> <li>The Dome North deposits are classified as a Spodumene sub type and is highly enriched in Lithium.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	Details of Mineral Resource estimate drill holes are provided in Appendix 1 of this announcement.     No Exploration Results are being reported
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>RC Intersections noted are from 1m sample intervals.</li> <li>Diamond core intersections are derived from weighted average calculations due to variable sample lengths that have been adjusted to geological boundaries.</li> <li>Li<sub>2</sub>O intercepts calculated using 0.5% cut off with a maximum 3m internal dilution and no external dilution typically applied except where drill hole logging (e.g. continuous pegmatite) and assays indicate wider internal dilution is warranted.</li> <li>Metal equivalent values are not being reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	No Exploration Results are being reported
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in the body of text within this announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No Exploration Results are being reported     Comprehensive reporting of all exploration results has previously been reported by the Company.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No Exploration Results are being reported
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</li> </ul>	<ul> <li>Further work currently being undertaken/planned includes:</li> <li>Metallurgical studies</li> <li>Resource definition drilling</li> <li>Geotechnical drilling</li> <li>Sterilisation drilling</li> <li>Water target drilling</li> </ul>

# **Section 3: Estimation and Reporting of Mineral Resources**

### Dome North resource estimate (Cade, Davy and heller deposits)

Criteria listed in the preceding section also apply to this section.

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	<ul> <li>The drilling has been imported into a relational SQL server database using Datashed™ (Industry standard drill hole database management software).</li> <li>All of the available drilling data has been imported into 3D mining and modelling software packages (Surpac™ and Leapfrog™), which allow visual interrogation of the data integrity and continuity. All of the resource interpretations have been carried out using these software packages. During the interpretation process it is possible to highlight drilling data that does not conform to the geological interpretation for further validation.</li> </ul>
	Data validation procedures used.	<ul> <li>Data validation checks were completed on import to the SQL database.</li> <li>Data validation has been carried out by visually checking the positions and orientations of drill holes.</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	CP, Mr Andrew Dunn, has visited the site numerous times since October 2020 including during drilling programmes.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The confidence in the geological interpretation is considered robust as the continuity the pegmatite is consistent between drill holes.</li> <li>The geological interpretation is supported by drill hole logging, assays, mineralogical studies and surface mapping completed by Essential Metals prior to acquisition by Develop.</li> <li>No assumptions have been made regarding the geological interpretation.</li> <li>There have been no alternative interpretations have been considered at this stage.</li> <li>Constraining wireframes were created in Leapfrog™ Geo software for the logged pegmatite veins and the internal spodumene rich zones.</li> <li>The key factors affecting grade continuity is the presence of spodumene within the pegmatite.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Mineral Resource estimate is based on LCT pegmatite dykes, striking roughly north-north-east/south-south-west, dipping steeply to the east for a strike length of approx. 1000m and downdip of 350m at Cade, 650m strike and 300m down-dip at Davy and 350m strike and 250m down-dip at Heller.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	<ul> <li>Grade estimation used Ordinary Kriging for Li<sub>2</sub>O %, Ta<sub>2</sub>O<sub>5</sub> ppm and Fe<sub>2</sub>O<sub>3</sub> (Adj2) % using GEOVIA Surpac™ version 2022.</li> <li>As a potential deleterious element, Fe<sub>2</sub>O<sub>3</sub> has been estimated for this resource as factored Fe<sub>2</sub>O<sub>3</sub>. Identification of contamination during both the sample collection (steel from drill bit and rod wear) and assay phases (wear in the steel pulverisation containers) has resulted in a detailed statistical analysis and co-located data comparison between diamond core and RC assays. Factors have been applied to the raw Fe<sub>2</sub>O<sub>3</sub> assays in two steps. Step one is to subtract 0.17% from all Genalysis Fe<sub>2</sub>O<sub>3</sub> assays</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>for samples pulverised in a steel bowl. Step two is to subtract a regressed factor by depth from all RC samples.</li> <li>Drill hole samples were flagged with the wireframed domain code.</li> <li>Sample data were composited to 1m which is the most frequent sampling interval.</li> <li>Top-cut analysis used a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, no top-cuts were applied.</li> <li>Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate and grade ranges reasonably long (up to 180m).</li> <li>The Block Model was constructed with parent blocks of 4m (E) x 20m (N) x 10m (RL) parent cells that was sub-celled to 0.5 (E) x 2.5m (N) x 1.25m (RL) at the domain boundaries for accurate domain volume representation.</li> <li>Search ellipse sizes were based primarily on a combination of the variography and the trends of the wireframed mineralized zones. Hard boundaries were applied to the estimation domain.</li> <li>Three estimation passes were used. The first pass had a limit of 120m, the second pass 240m and the third pass searching a large distance to fill any remaining blocks within the wireframed zones. Passes used a minimum of 6 samples and a maximum of 12 samples and maximum samples per hole of 4 – based on the sample distribution and number of samples contained within each domain.</li> <li>Validation of the block model included a volumetric comparison of the resource wireframe to the block model volume. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnes have been estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The shallow, sub-cropping nature of the Dome North deposits suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation. As such, the Mineral Resource has been reported at a 0.3% Li2O lower cut-off grade to reflect assumed exploitation by open pit mining
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul> <li>A scoping study predicated on mining by open pit method was previously been announced by Essential Metals prior to acquisition by Develop.</li> <li>The Pioneer Dome Lithium Project is located in a well- established mining region in close proximity to existing transport, energy and camp infrastructure.</li> <li>On the basis of these assumptions, it is considered that there are no mining factors which are likely to affect the assumption that the deposits have reasonable prospects for eventual economic extraction.</li> </ul>

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	2020 Metallurgical test work  Two composites for the test work programme were selected from five core drill holes from the Cade Deposit, with each composite intended to represent the mean grade and lithology of the Cade deposit. Geological logging, elemental assays and an open pit optimisation were used to check that the composites were as representative of the deposit as is practical, given the samples available.  The tests conducted on the first composite included:
		<ul> <li>Head Assay and X-Ray Diffraction (XRD);</li> <li>Crusher work index (CWi) and Abrasion Index (Ai) tests; and</li> <li>Size by assay (SxA) and Heavy Liquid Separation (HLS) at a series of different crush sizes</li> </ul>
		The first composite was noted to include a portion of mineralisation containing petalite, a lithium-bearing mineral that typically requires a different process flowsheet to spodumene. This material was situated towards the edge of the Resource. A second composite was generated from the same drill holes as the first but excluded the 3.7m wide petalite wall zone identified in hole PDRCD318.
		The tests conducted on the second composite included:
		<ul> <li>Head Assay and X-Ray Diffraction (XRD);</li> <li>Size by assay (SxA) and Heavy Liquid Separation (HLS) at a series of different crush sizes; and</li> <li>Batch flotation test work on head and DMS mid samples. This work included de-sliming, magnetic separation and mica pre-flotation steps.</li> </ul>
		The XRD scan showed that no petalite was detected in the second composite sample, providing evidence that petalite occurrences outside the identified wall zone in hole PDRCD318 may be low.
		The lithium grades of the two composites were 1.41% Li <sub>2</sub> O and 1.56% Li <sub>2</sub> O respectively. The second composite was then used for the dense medium separation (DMS) and flotation test work.
		A series of HLS tests was conducted, including one to investigate production of an upgraded direct-shipped ore (DSO). This test, using a crush size of $P_{100}$ 6.3mm, showed that up to 81% Li <sub>2</sub> O can be recovered into approximately 42% of plant feed mass, producing an upgraded material containing 2.0% Li <sub>2</sub> O.
		These HLS results represent a theoretical maximum recovery for this sample and variability testing with a DMS cyclone and larger sample mass is recommended to verify any results.
		Under the DMS pilot test stage, a concentrate of $5.7\%$ Li <sub>2</sub> O was achieved at a global recovery of $28.6\%$ Li <sub>2</sub> O. The Secondary DMS floats were then composited with -0.85mm material and used as feed to flotation test work, containing an assayed grade of $1.67\%$ Li <sub>2</sub> O.
		The flotation test work based on the DMS feed included a series of tests

with each one preceded by grinding the feed to P<sub>80</sub> 150µm and de-sliming

Criteria	JORC Code explanation	Commentary				
		via screen or cyclone at a cut size of 20 µm before performing the batch flotation tests.				
		Table 1 (repeated) – Concentrate Summary				
				Grade	Global	
		Concentrate	Grade (% Li₂O)	(% Fe₂O₃)	Recovery (%Li₂O)	
		T12 Flot Con &	(76 LI <sub>2</sub> O)	1 6203)	(76L12O)	
		DMS Con	5.66	1.3	82%	
		T15 Flot Con & DMS Con	5.65	0.7	74%	
		2022 Metallurgical test work  In March this year, a diamond drilling (DD) programme was completed, consisting of six holes drilled into the weathered profile (up to the first ~50m from surface) of the Cade deposit (Cade Weathered), four holes drilled into the weathered profile of the Davy deposit (Davy Weathered) and three into the fresh rock of the Davy deposit (Davy Fresh).  The results from the drill programme were reported in June (Refer to ESS ASX announcement dated 7 June 2022 "Assays confirm high-grade near-surface lithium at Dome North").  The grade and recovery data from Heavy Liquid Separation (HLS) and batch Whole of Ore Flotation (WOF) test work was then compared to the previous Cade Fresh test work to assess if the three composites are expected to be amenable to the previously tested hybrid pilot Dense Media Separation (DMS) and flotation flowsheet and reagent regime. The three composites for the test work programme were selected from core drill holes from the three domains. Geological logging, elemental assays and an open pit optimisation were used to check that the				
		the samples available.  The key findings were a	as follows:			
		<ul> <li>The test work was desi hybrid pilot DMS and flet.</li> <li>The results show that the return an overall recover rates returned for the partner of th</li></ul>	obtation flowship cade Weatery similar to reviously test it represents the Davy Frest all recovery a see of weather the promain via a half recovery a fee of the the results sugtanget concellicates that the Cade Weath	neet.  athered mine the 74-82%  ted Cade Fre 73% of the sh mineralisa at around 64 ring in the Da rom these re hybrid pilot E ggest it could entrate grade te vast bulk ered and Da	eralisation is exp Li <sub>2</sub> O overall recesh composite some sexpected with the sexpected sexpected sexpected sexpected and flotation of the point of the	pected to sovery sample. ce. d to return composite, ted overall on e of 30-  orth esult in

Criteria	JORC Code explanation	Commentary
		Although the Davy Weathered and Davy Fresh composites have returned lower recoveries, they represent smaller components of the Mineral Resource. The Davy weathered and transitional zones represent 4% of the Mineral Resource whilst the Davy fresh zone represents 16% of the Mineral Resource.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	<ul> <li>Environmental studies including Flora and Fauna studies were completed. Targeted search for flora/fauna and vegetation communities of conservation significance within the Project area was carried out prior to drilling programs. Desktop studies have been carried out, according to the DBCA Communities database, the project area is not located within the boundary of any Threatened or Priority Ecological Communities listed by the DBCA or within any proposed / vested Conservation Reserve.</li> <li>No Threatened Flora pursuant to the Biodiversity Conservation (BC) Act 2016 and the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act 1999 were identified within the survey area.</li> <li>One Priority Flora taxon, as listed by Department of Biodiversity, Conservation and Attractions (DBCA) was identified within the survey area; Diocirea acutifolia (P3). Botanica recorded a total of 75 locations of this taxon (estimated total of 30,191 plants; 13,781 plants within the survey area).</li> <li>An application to impact 9.5ha of the total population area (estimated total of 2126 plants to be impacted) of Diocirea acutifolia was submitted to DBCA. BC obtained email confirmation from DBCA on 8th August 2019 that the proposal will impact a maximum of 7% of the total number of plants and 3.5% of the mapped extent, based on clearing 40m width along drill lines. The proportional impact of the exploration is unlikely to be significant at either the local or regional scale.</li> <li>The pegmatite (lithium mineralised rock) contains no sulphides and would be benign with no acid forming potential. The host rocks contains some pyrite and will have some acid forming potential. At this very early stage of the project, no detailed work has been carried out in this regard, however due to the potential for AMD this will require further studies investigating the potential impacts and mitigation processes during pre-feasibility studies.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>A total of 1,395 bulk density measurements have been completed to date on samples taken from 29 diamond holes or core tails drilled into Cade and Davy.</li> <li>Of these readings, 220 were from spodumene-rich pegmatite.</li> <li>Samples of half HQ core ranging between 7cm and 30cm length were submitted to Genalysis for measuring. They were primarily taken from fresh mineralised pegmatite zones from between surface and 234m downhole (up to 200m vertically below surface).</li> <li>These were analysed by domain and by depth from surface. Results are very consistent and an average of 2.68 has been used for fresh pegmatite.</li> <li>Densities were assigned, based on oxidation code, as follows: Oxide: 1.95 Transition: 2.31 Fresh: 2.68</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	The Mineral Resource for the Dome North Lithium Project has been classified on the basis of confidence in the detailed geological understanding and defined continuity of the mineralised zone (drill spacing

Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>80m x 80m), the relative confidence in the oxide/transition zone and the availability of bulk density data from the oxide/transition zone.</li> <li>Portions of the Cade and Davy deposits have been defined as Indicated Mineral Resource.</li> <li>At Cade, drilling has now intersected near surface pegmatite – which has also been metallurgically tested with reasonable recoveries. As such, shallow, near surface fresh pegmatite has now been included within the Indicated resources at Cade.</li> <li>Typical drill spacings for Indicated is 80m by 70-80m.</li> <li>Portions of the Cade and Davy deposits drilled at spacings of up to 160m x 80m have been classified as Inferred Mineral Resource.</li> <li>Due to a lack of diamond core and bulk density measurements, Heller is classified as Inferred.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	No external audits of the MRE have been carried out.
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	The relative accuracy of the MRE is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade.