

17 May 2018

# Follow Up Drilling at the JE Zone on the Paperbark Project Intersects Zinc and Lead Mineralisation

### **Highlights**

- Drill testing of a soil geochemical anomaly in December 2017 discovered a new zinc mineralised system at the JE Zone on the Paperbark Project, north-west Queensland<sup>1</sup>
- Zinc and lead mineralisation was confirmed over a down hole depth of 50m from 116.0m until 166.0m in drill hole PB03-17 completed in December 2017
- Drilling to follow up the zinc intersection in drill hole PB03-17, which was strongly weathered resulting in the significant loss of sulphides, has now been completed in drill hole PB05-18, situated 335m south-west of drill hole PB03-17
- Drill hole PB05-18 intersected relatively unweathered zinc and lead sulphide mineralisation over a down hole depth of 51.4m from 202.0m until 253.4m
- 37 samples have been submitted for geochemical analysis, with the results expected prior to the end of June
- Two further drill holes will be completed during the drill program currently underway at the Paperbark Project, to test the potential of the JE Zone
- One drill hole will be completed to determine if the zinc mineralisation at the JE Zone is connected at depth to the JB Zone Mineral Resource which is currently 10.4Mt @ 2.7% Zn, 0.2% Pb, 1g/t Ag at a 1.5% Zn cut-off grade and is classified as Inferred in accordance with the JORC Code (2012)<sup>2</sup>

Pursuit Minerals Limited (ASX: PUR) (**Pursuit** or the **Company**) is pleased to announce follow up drilling at the JE Zone on the Paperbark Project has intersected zinc and lead sulphide mineralisation over a down hole depth of 51.4m from 202.0m down hole in drill hole OB05-18. Zinc and lead mineralisation was discovered at the JE Zone in December 2017, when drill hole PB03-17 intersected strongly weathered sphalerite and lead mineralisation. Follow up drill hole PB05-18 was designed to test the JE Zone mineralised horizon, at a depth below the strongly weathered zone, so an accurate assessment of the potential of the JE Zone zinc mineralisation could be made. Two further drill holes will be completed at the JE Zone during the current Paperbark Project drilling program and one additional hole will be drilled to see if the JE Zone mineralisation is connected at depth to the JB Zone Mineral Resource to the west.

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<sup>&</sup>lt;sup>1</sup> See ASX Announcement by the Company on 6 December 2017. The Company is not aware of any new information or data that materially affects the information contained in that announcement.

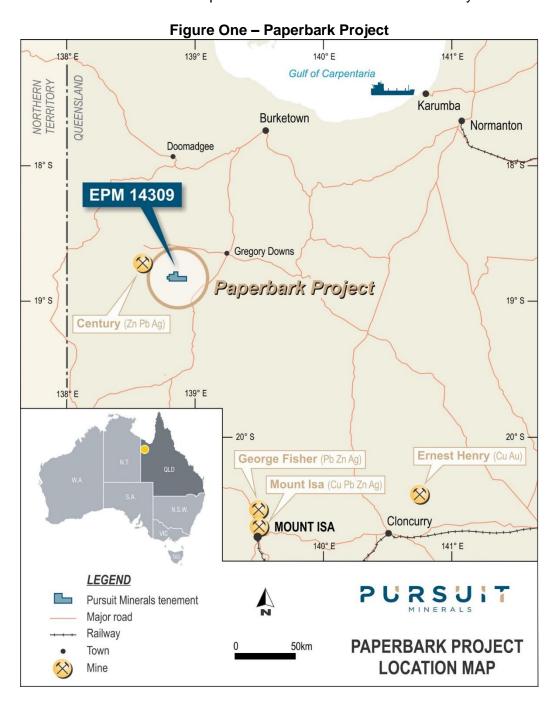
<sup>&</sup>lt;sup>2</sup> See ASX announcement dated 24 April 2017. The Company is not aware of any new information that materially affects the information included in that announcement and that all material assumptions and technical parameters underpinning the estimates in the Resource Statement continue to apply and have not materially changed.



Pursuit Minerals Managing Director Jeremy Read said the 2018 drilling program at the Paperbark Project has got off to a strong and encouraging start with the intersection of fresh zinc and lead sulphide mineralisation at the JE Zone.

"Last year we intersected 50m of strongly weathered zinc and lead mineralisation at the JE Zone and the objective of the first hole drilled at the JE Zone in 2018, was to intersect the mineralised horizon below the depth of weathering, which is exactly what we have achieved," Mr Read said.

"Drill hole JB05-18 intersected zinc and lead sulphides over a down hole depth of 51.4m and we now await the results from the 37 samples we have submitted to the laboratory."





#### Paperbark Project – JE Zone Drilling Program

The Paperbark Project is located approximately 215km north-northwest of Mount Isa and 25km south-east of the Century Mine in north-west Queensland. It occurs within the Lawn Hill Platform of the Western Succession of the Mt. Isa Province. The project consists of one exploration permit EPM 14309, covering an area of approximately 70km². Exploration by previous companies focused on the JB Zone, where a Mineral Resource of 10.4Mt @ 2.7% Zn, 0.2% Pb, 1g/t Ag at 1.5% Zn cut-off grade and classified as Inferred in accordance with the JORC Code (2012), has been defined.

At Paperbark, Proterozoic basement rocks, members of the McNamara Group sediments, are well exposed. Geological mapping by previous tenement holders has contributed to a good understanding of the distribution of the various geological units, including:

- Torpedo Creek quartzite (orthoquartzite and conglomerate);
- Gunpowder Creek formation (dolomitic, feldspathic fine-grained sandstone-siltstone):
- Paradise Creek formation (stromatolitic, dolomitic siltstone);
- Esperanza formation (stromatolitic chert, sandstone and dolomitic siltstone);
- Lady Loretta formation (laminated, stromatolitic siltstone and shale);
- Shady Bore quartzite (orthoguartzite, fine dolomitic sandstone); and
- Riversleigh siltstone (carbonaceous siltstone, shale and sandstone).

The sediments dip moderately (30 degrees) to the southwest and all units are potential hosts for base metal mineralisation. The Proterozoic rocks are cross cut by two significant, north-east trending faults (named the Grunter and Barramundi faults), with a series of second order faults splaying off the main structures.

#### **Drill Hole PB05-18**

Auger drilling by Newmont in 1978 initially located anomalous lead and zinc at the JE Zone Prospect³. The lead anomalies were clearly controlled by the Dhufish Fault (Figure Two) and occurred over outcropping Gunpowder Creek formation. Follow up geological mapping and sampling by RMG Resources Limited, identified an area of 0.14km² of gossanous siltstones with lead grades up to 2.5% at the JE Zone Prospect⁴. In December 2017 Pursuit completed drill hole PB03-17 which tested the down-dip extent of the gossanous and zinc-anomalous siltstones at the JE Zone, and also intersected the Dhufish Fault, which is interpreted to be the fault structure controlling the mineralisation at the JE Zone. In drill hole PB03-17 oxidised zones of breccia and algal dolomites were intersected from a depth of 116.0m until the end of hole at 166.0m, downhole depth. The entire interval from 116.0m until 166.0m was strongly anomalous in zinc and lead, with the strongest zinc and lead mineralisation occurring between 137.0 – 140.0m and 147.0 – 149.0m down hole depth.

The entire length of drill hole PB03-17 was strongly weathered with the majority of the zinc and lead mineralisation converted to iron oxides. Consequently, substantial levels of zinc and lead would have been lost from the drill hole. As a result of the greatly increased depth of weathering, drill hole PB05-18 (Table One, Figure Three) was drilled down dip of drill hole PB03-17, with the objective of intersecting the zinc and lead sulphide mineralisation below the depth of weathering.

<sup>&</sup>lt;sup>3</sup> Newmont. A to P 1937M Annual report, December 1978

<sup>&</sup>lt;sup>4</sup> RMG Resources Limited. ASX Announcement 11 October 2012



**EPM 14309 LEGEND** Riversleigh Fm Gunpowder Creek C Fm Barramundi Gunpowder Creek B Fm Shady Bore Quartzite Lady Loretta Fm Gunpowder Creek A Fm Torpedo Creek Quartzite Esperenza Fm PB02-17 Paradise Creek Fm Kamarga Volcanics/Sediments Mt Oxide Chert Yeldham Granite EPM 25191 7920000 N Drill hole - (2017) Prospect area **Grunter North** Planned drill hole Historic drill hole Barramundi Sandstone PR01-17 Dhufish JE Zone PB03-17 (T.D. 166.0) **Stonemouse Grunter South** Fox Tasman PAPERBARK PROJECT **Devils Gossan GEOLOGY, DRILLING** 7915000 N AND PROSPECTS 7915000 N-Mt Panorama EPM 25191 **Black Hills** 2km 275000 E 270000 F

Figure Two – JE Zone Prospect Location

#### **Table One**

Prospect	Drill Hole Name	Easting (GDA94, Zone 54)	Northing (GDA94, Zone 54)	Azimuth (Degrees, Magnetic)	Dip (Degrees)	Actual Depth (m)
Paperbark	PB05-18	272 517	7 917 795	050	-70	315.6

Drill hole PB05-18 intersected oxidised and weathered dolomitic siltstones to a down hole depth of 56.0m. Below this depth the rock sequences were relatively unweathered. From a down hole depth of 56.0m until a down hole depth of 125.8m interbedded dolomitic siltstones and mudstones were intersected. From 125.8m until 276.2m alternating sequences of algal dolomites, mudstones, and sedimentary breccias belonging to the 'Lower Mineralised Dolomites' of the Paradise Creek Formation were intersected. From a down hole depth of 276.2m until the end of the hole at 315.6m dolomitic sandstones of the Gunpowder Creek Formation were intersected.

Various levels of sphalerite and galena mineralisation were intersected in the Lower Mineralised Dolomites of the Paradise Creek Formation from a down hole depth of 202.0m until 253.4m. Visual



estimates of the degree of mineralisation are given in Table Two. The geological sequences intersected by drill hole PB05-18 are shown in Figures Four and Five.

37 samples of half core have been submitted for geochemical analysis and the results are expected before the end of June 2018.

The drilling rig is currently on site at the Paperbark Project continuing with the follow up drill program at the JE Zone, where two more holes are scheduled to be drilled (targets JE-08 and JE-07 on Figure Three). An additional drill hole will be completed to the west of the JE Zone (target JB-02 on Figure Three) to determine if the zinc-lead mineralisation at the JE Zone is connected at depth to the JB Zone Mineral Resource.

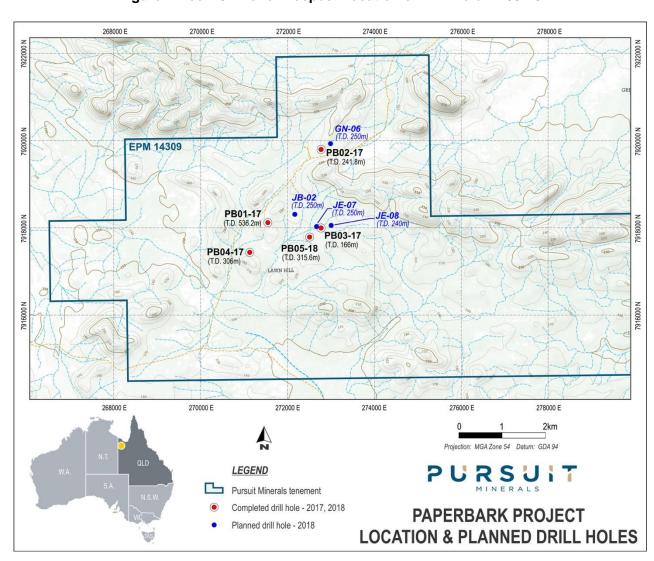


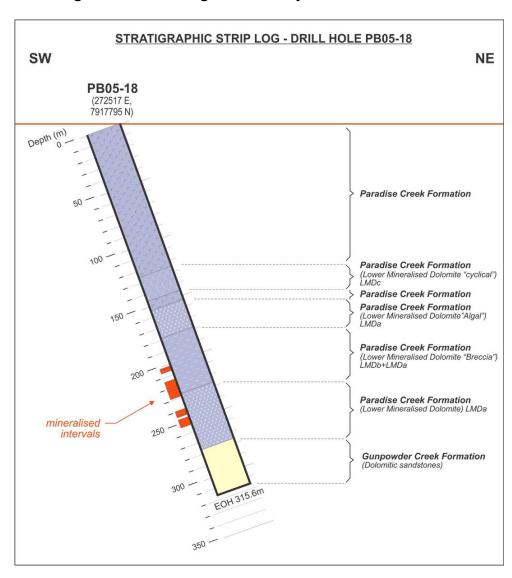
Figure Three – JE Zone Prospect Location of Drill Hole PB05-18



Table Two - Visual Estimates of Mineralisation in Drill Hole PB05-18

Prospect	Drill Hole Name	Down Hole Depth from (m)	Down Hole Depth (m)	Visual Estimate of Degree of Sphalerite Mineralisation	Visual Estimate of Degree of Galena Mineralisation
Paperbark	PB05-18	202.0	203.1	8%	0.2%
Paperbark	PB05-18	203.1	206.1	2%	0.5%
Paperbark	PB05-18	213.6	219.6	2%	1%
Paperbark	PB05-18	219.6	221.8	5%	3.5%
Paperbark	PB05-18	221.8	228.5	3%	0.5%
Paperbark	PB05-18	239.1	243.2	3%	1.0%
Paperbark	PB05-18	243.2	244.5	5%	2%
Paperbark	PB05-18	246.6	253.4	2%	0.1%

Figure Four - Geological Summary for Drill Hole PB05-18





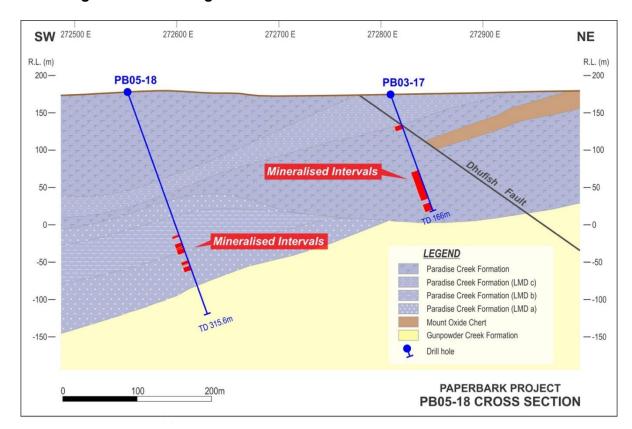


Figure Five – Geological Cross Section Drill Holes PB05-18 and PB03-17

#### **About Pursuit Minerals**

Following completion of acquisition of the Bluebush, Paperbark and Coober Pedy Projects from Teck Australia Pty Ltd in 2017, Pursuit Minerals Limited (ASX:PUR) has become a mineral exploration and project development company advancing copper and zinc projects in world-class Australian metals provinces. Having acquired zinc and copper projects in the heart of the Mt Isa Province, Pursuit Minerals is uniquely placed to deliver value as it seeks to discover world class deposits adjacent to existing regional infrastructure and extract value from its existing mineral resources.

In 2018, Pursuit is expanding its project portfolio by applying for high quality vanadium projects, on open ground, in both Sweden and Finland. Sweden has a long history with vanadium, being the country where vanadium was first confirmed as a metal. Finland, has in the past produced up to 10% of the worlds vanadium from the Mustavarra mine in central Finland and is currently rated the number one jurisdiction globally for developing mineral projects.

Led by a team with a wealth of experience from all sides of minerals transactions, Pursuit Minerals understands how to generate and capture the full value of minerals projects. From local issues to global dynamics, Pursuit Minerals knows how to navigate development and deliver returns to shareholders and stakeholders.



#### Competent person's statement

Statements contained in this announcement relating to exploration results are based on, and fairly represents, information and supporting documentation prepared by Mr. Jeremy Read, who is a member of the Australian Institute of Mining & Metallurgy (AusIMM), Member No 224610. Mr. Read is a full-time employee of the Company and has sufficient relevant experience in relation to the mineralisation styles being reported on to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Read consents to the use of this information in this announcement in the form and context in which it appears.

The data in this announcement that relates to the Mineral Resource for the JB Prospect is based on, and fairly represents, information and supporting documentation prepared by Mr Simon Tear, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM), Member No 202841 and who has sufficient experience relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Tear is a director of H&S Consultants Pty Ltd and he consents to the inclusion of the estimates of the Mineral Resource for the JB Prospect Resource in this announcement in the form and context in which it appears.

## JORC TABLE

## TABLE 1 – Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	N/A – Sample results are not presented in the announcement. Only visual descriptions of the mineralisation are given. One metre samples of NQ2 half core have been dispatched to the laboratory for analysis.
Drilling techniques	Drill type (eg 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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	The drilling techniques used were Reverse Circulation and diamond HQ and NQ2 drilling. Reverse Circulation drilling drilled the rock sequences from 0m until 91.7m. Samples were taken as 1m splits. From 91.7m until 119.6m HQ diamond drilling was used. From 119.6m until the end of the hole at 315.6m the drilling technique was NQ2 diamond drilling. The drill hole was drilled at an inclination of -70 degrees towards 50 degrees (magnetic). The drill core was orientated and direction of geological structures were recorded.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples.  Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	The HQ and NQ2 diamond drill core from the Proterozoic basement rocks were measured and compared against the drilled depths of the hole on a metre by metre basis. This allowed core recovery factors to be determined. Drill core recovery was generally in excess of 90%. Only minor areas of core loss were experienced throughout the drill hole, with sections of core loss ranging in down hole width from 0.2m – 0.4m.  In order to ensure the drill core samples are representative of the rock sequences drilled, half drill core was cut and submitted to the laboratory for analysis.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  The total length and percentage of the relevant intersections logged.	The section of drill hole PB05-18 which was diamond drill core has been fully geologically and geotechnically logged to a standard which would support a Mineral Resource estimation. The top section of the drill hole, above the area of mineralisation, was Reverse Circulation drilled and the drill chips were geologically logged. Geotechnical logging of the drill chips from the reverse circulation drilling was not possible. As drill hole PB05-18 is only the second hole drilled into the JE Zone, there are currently no plan to undertake a Mineral Resource estimation. If further drilling is undertaken with the objective of defining a Mineral Resource, then the geological and geotechnical logging completed will be of sufficient standard to allow the estimation of a Mineral Resource.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.  For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.  Whether sample sizes are appropriate to the grain size of the material being sampled	From the reverse circulation drilling between 0.0 - 91.7m samples were taken as 1m splits from the cyclone and approximately were 3-4 kg in weight. These samples were above the zone of mineralisation and have not been submitted for analysis. Samples from the diamond drilling through the mineralised zone from 202.0m until 253.4m were taken as half NQ2 diamond drill core, 1 metre in length.  Sub-sampling was not undertaken on the diamond drill core submitted for analysis.  Geochemical standards and duplicate samples were inserted into the assay run, every 20 samples. This is deemed to be appropriate for the drill core samples being collected. Results for the duplicates and standards are not yet available.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	The half core samples have been submitted to the ALS laboratory in Mt Isa for assaying. Samples will be prepared using Sample Preparation PREP31B. A sample prepared using ALS PREP31B is placed into the ALS tracking system, weighed, dried and finely crushed to better than 70% passing a 2mm screen. A split of up to 250g is taken and pulverised to better than 85% passing a 75 micron screen. This method is deemed suitable for half core drill samples.  Each sample will be assayed using ALS technique MEICP61A. The ALS MEICP61A analysis technique takes as a 0.25g sample and digests the sample with perchloric, nitric, hydrofluoric and hydrochloric acids. The reside is topped up with dilute hydrochloric acid and the resulting solution is analysed by inductively coupled plasma-emission spectrometry. The four acid digestion used in this method is described by ALS as a "near-total" digest.  Standard, duplicate and blank samples were submitted in the sample run every 20 samples. Sample results are yet to be received from the laboratory.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The mineralised intersection reported in the announcement is only the second drill hole into the zinc and lead mineralised rocks within the Paradise Creek Formation at the JE Zone. Assay results are yet to be received. Consequently, no independent verification has yet been completed.
	The use of twinned holes.	The mineralised intersection reported in the announcement is only the second drill hole into the zinc and lead mineralised rocks within the Paradise Creek Formation at the JE Zone. Assay results are yet to be received. Consequently, no twinned holes have yet been completed.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Geological and geotechnical data was collected in the field and entered directly into an acQuire database on a MacBook field computer. Data was verified using the acQuire data base and upon verification was uploaded into a "cloud based" acQuire data base hosted by a third-party provider.
	Discuss any adjustment to assay data.	N/A – assay data has yet to be received.

Criteria	JORC Code explanation	Commentary
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.	The drill hole collar location was located in the field using a hand-held GPS and reported in GDA94 Zone 54K with an accuracy of +/- 5m.
	Specification of the grid system used.	Datum: Geocentric Datum of Australia (GDA) Grid Co-ordinates: Map grid of Australia 1994 (MGA94), Universal Transverse Mercator, using the GRS80 Ellipsoid, Zone 54K
	Quality and adequacy of topographic control.	The altitude of each sample location was recorded using a hand-held GPS to an accuracy of +/- 5m.
Data spacing and	Data spacing for reporting of Exploration Results.	The diamond drill core from drill hole PB05-18 was sampled on a 1 metre basis using half core samples.
distribution	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.	Drill hole PB05-178 is the second drill hole to intersect the zinc and lead mineralised rocks within the Paradise Creek Formation encountered at the JE Zone and there are no plans to currently define a Mineral Resource. However, as samples and geological data are being collected on a metre by metre basis, the data will be of sufficient quality to establish the geological and grade continuity for a Mineral Resource to be estimated.
	Whether sample compositing has been applied.	Samples were not composited
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Variable strength mineralisation was recorded from 202.0 until 253.4m, down hole depth. 37 samples of 1m half core were cut from this length of mineralisation. Therefore, there will be no bias in the sampling of the mineralised zone.
	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.	N/A – drill holes samples have yet to been received back from the laboratory
Sample security	The measures taken to ensure sample security.	Samples were collected in the field by Pursuit Minerals staff and were under their control at all times. Samples were then taken to the laboratory by Pursuit Minerals staff and submitted directly to the laboratory. Therefore, there was no opportunity for samples to be tampered with.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques and data were completed due to the limited nature of the sampling program (37 samples).

**TABLE 1 – Section 2: Exploration Results** 

Criteria	JORC Code explanation	Commentary	
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The tenement (EPM 14309) comprising the Paperbark Project is 100% owned by Pursuit Minerals Limited.  A 2% Net Smelter Return to Teck Australia Pty Ltd will be due from any production from Paperbark	
	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.	EPM14309 is valid until 12 September, 2022.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No assay or geochemical results from other parties are used in this announcement. Geological results were referred to from Newmont and RMG Resources Limited, previous holders of the EPM14309 tenement area. The Newmont information were taken from the A to P 1937M, Annual report of 1978. The RMG Resources Limited information was taken from an announcement RMG Resources made on 11 October 2012.	

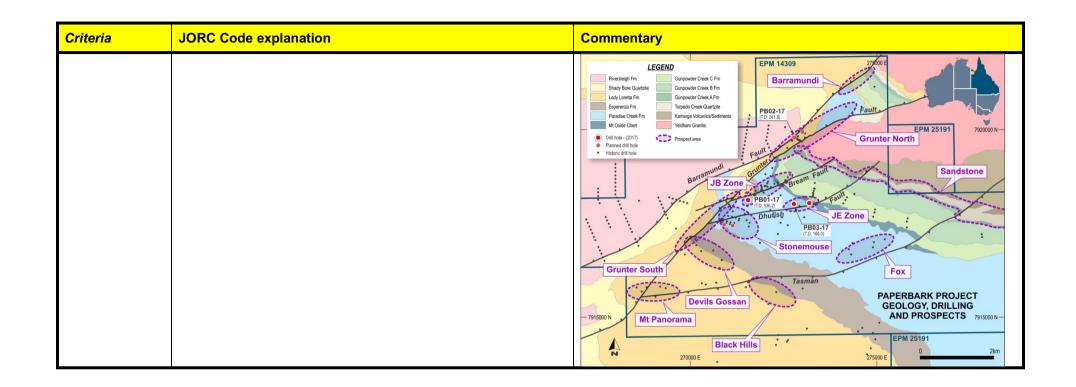
Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The mineralisation is associated with algal dolomites, siltstones and sedimentary breccia's within the Lower Mineralised Dolomites of the what is interpreted to be the Paradise Creek Formation. The mineralisation appears to be associated with dissolution and evaporitic collapse breccia zones and minor veins of quartz carbonate. The mineralisation is very weathered down to a vertical depth of at least 150m and much of the sphalerite and galena has been replaced with iron oxides above that depth. The mineralisation is clearly related to later stage faults and collapse zones within carbonates. Pursuit considers the mineralisation to be epigenetic in origin and similar to Irish Style or Mississippi Valley Type.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	Prospect Drill Hole (GDA94, GDA94, Zone 54) Raimuth (Degrees) PB05 272 517 7 917 795 050 -70 315.6  Summary geology as drilled in hole PB05-18 is as follows (all depths are down hole depths):  Reverse Circulation 0 - 49m Totally oxidised claystone and minor siltstone 49 - 56m Partially weathered dolomitic siltstone and mudstone 56 – 91.7mDark grey dolomitic mudstone minor dolomitic siltstone. 0.5% pyrite.  HQ Core 91.7-112.5m Coarsely bedded (30-50cm) to massive dolomitic mudstone minor siltstone

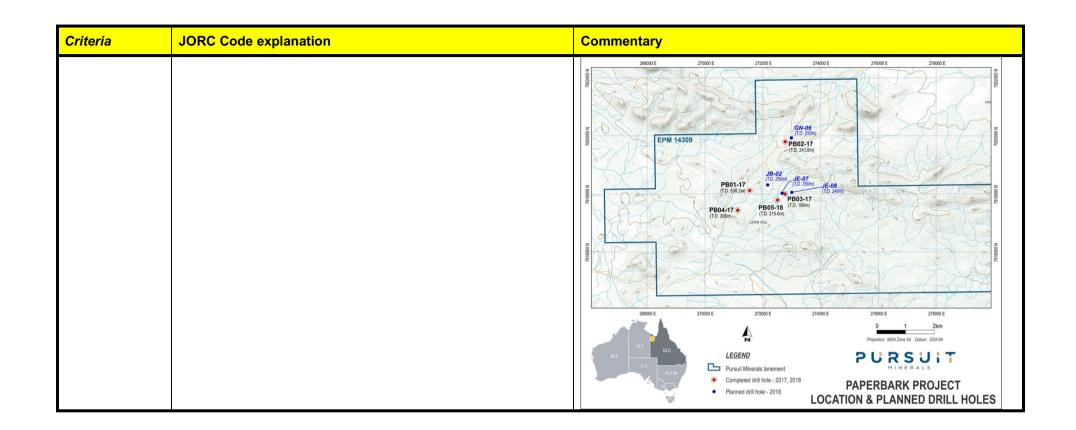
Criteria	JORC Code explanation	Commentary	
		112.5-125.8m	Interbedded dolomitic sandstone, siltstone and minor
		mudstone	
		NQ core at 11	9.6m
		125.8-146m	Probable LMDc unit. banded, cyclical to flaser bedded, dolomitic -siltstone, fine grained sandstone and mudstone with abundant dewatering textures and ripple cross beds.
		146-149.5m	Coarsely banded to massive dolomitic mudstone
		149.5-153.6m	bedded dolomitic sandstones, siltstones and mudstone, 40cm bed of fine grained sandstone at base of interval. 0.5% pyrite, 0.1% chalcopyrite disseminations
		153.6-178.6m	Probable LMDa unit laminated and thinly bedded "algal" dolomite minor thin sedimentary breccias. 0.5% pyrite and 0.1% sphalerite
		178.6-195.5m	LMDa unit. "algal" dolomite with increased proportion of sedimentary breccia bands. Zones with minor thin calcite-quartz-pyrite sphalerite-galena veins and minor breccia infill.
		198.6-226.5m	0.5 -2% pyrite, 0.5 – 2% sphalerite 0.2% galena locally. Possible LMDb /LMDa unit. Altered laminated "algal" dolomites and dolomitic sedimentary breccias some minor dissolution breccia possible.
		000 5 070 0	irregular zones of minor to moderate intensity mineralization. 5-15cm patches a 5-10% s sphalerite+ galena, 0.5% pyrite. Widespread zones 0.5-2% sphalerite +-galena+-pyrite.
		226.5-276.2m	Probable LMDa unit with small patches of LMDb. laminated and thinly bedded "algal" dolomite minor thin sedimentary breccias Variable bands and quartz-calcite-sphalerite-galena-
			pyrite veins and thin bands of sphalerite. A few 5-15cm patches approximately 4-8% sphalerite+ galena minor pyrite. Widespread zones 0.5-2% sphalerite+-galena+-pyrite+-chalcopyrite.
		276.2-313m	Dolomitic Sandstones, quartz grains and lithic fragments, pale pink to orange carbonate matrix cement. 0.5 % pyrite and chalcopyrite disseminations and blebs.

Criteria	JORC Code explanation	Commentary	
		313-315.6m EOH. Banded "algal dolomites, and fine-grained sandstones, Evaporite textures in bands of dolomitic siltstone -mudstone.	
		Lithological summary 0 - 125m Paradise Creek Formation	
		125-146 Paradise Creek Formation (Lower Mineralised Dolomite "cyclical") LMDc 146-153.6 Paradise Creek Formation 153-178.6 Paradise Creek Formation (Lower Mineralised Dolomite"Algal") LMDa 178.6-226.5 Paradise Creek Formation (Lower Mineralised Dolomite "Breccia") LMDb+LMDa 226.5-276.2 Paradise Creek Formation (Lower Mineralised Dolomite) LMDa 276.2-315.6 Gunpower Creek Formation Dolomitic sandstones	
	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.	This information has not been excluded.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	N/A – Visual description of mineralisation only	
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	N/A – Visual description of mineralisation only	

Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.	The Lower Mineralised Dolomite units of the Paradise Creek Formation containing the mineralisation are interpreted to dip at moderate angle to the south-west. The structural orientation data collected in drill hole PB05-18 suggests that the drill hole intersected the mineralised units at a high angle and hence down hole depths will be close to true thicknesses.
	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').	Down-hole widths were reported. The exact true width is not known, but down hole widths are anticipated to be close to true thicknesses.

Criteria	JORC Code explanation	Commentary
Criteria Diagrams	JORC Code explanation  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.	STRATIGRAPHIC STRIP LOG - DRILL HOLE PB05-18 SW  PB05-18 (272517 E, 7917795 N)  Pephin (m) (Lower Mineralised Dolomite 'cyclical') LiMDa  Paradise Creek Formation (Lower Mineralised Dolomite 'Algal') LiMDa  Paradise Creek Formation (Lower Mineralised Dolomite 'Breccia') LiMDa  Paradise Creek Formation (Lower Mineralised Dolomite 'Breccia') LiMDa  Paradise Creek Formation (Lower Mineralised Dolomite 'Breccia') LiMDb+LMDa  Paradise Creek Formation (Lower Mineralised Dolomite 'Breccia')
		mineralised intervals  250  300  Gunpowder Creek Formation (Dolomitic sandstones)  Gunpowder Creek Formation (Dolomitic sandstones)





Criteria	JORC Code explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades	SW 272500 E 272600 E 272700 E 272800 E 272800 E 272800 E NE RL (m) 200 PB05-18 PB03-17 -150 -100 -50 -50 -100 -100 -100 -150 -100 -150 -100 -150 -100 -150 -100 -150 -100 -150 -15
Other substantive exploration data	and/or widths should be practiced to avoid misleading reporting of Exploration Results.  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	N/A – Visual description of mineralisation only
Further work	characteristics; potential deleterious or contaminating substances.  The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Follow up drilling will be conducted in order to attempt to define the extent of the mineralisation intersected in PB05-18. Two more drill holes are planned to be completed as a part of the current drilling program. The planned holes will be drilled at targets JE-07 and JE-08 on the map shown below.

