

#### **ASX Release**

Wednesday September 8th, 2021

#### **ASX Code**

PAK

#### About Us

Pacific American Holdings Limited (the Company) is an ASX listed company with a diversified asset portfolio with a focus on renewable energy including hydro power generation and bulk commodities for steel making. PAK is advancing the development of its Primary Power subsidiary to expand its portfolio of renewable technologies. PAK holds a 50% interest in GP Hydro Pte Ltd and 100% ownership of the Elko Project with 303MT of JORC 2012 compliant resources in the highly productive East Kootenay region of British Columbia. The Company continues to invest in the exploration of gold and based metal projects that give shareholders exposure to high value assets.

#### Board

Non-Executive Chairman – Geoff Hill Executive Director & CEO – Mark Sykes Non-Executive Director – Simon Bird

#### **Company Secretary**

Wayne Kernaghan

#### Management

Business Development - Dom Hill

Investment GP Hydro Pte Ltd

Ownership 50%

Project Elko Project
Ownership 100%

JORC 2012 303MT Resource,

117MT Measured

Stage Exploration

Pacific American Holdings Limited ABN 83 127 131 604 GPO Box 1546 SYDNEY, NSW, 2001

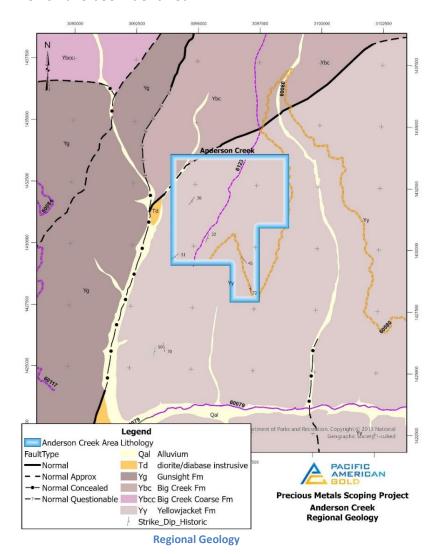
www.pacificamerican.com.au

# **Extensive Historic Geological Mapping**

#### **Anderson Creek Gold Project**

# **Highlights**

- Geological mapping of project area includes numerous veins, quartz outcrops, and a diabase dyke intrusion, along with oxidised and mineralised breccia in the northern region.
- Oxidised zones generally occur at depths less than 45 metres
- D1 and D2 veins are the only named veins on the Anderson Creek claims, with potential mineralisation in other veins.
- **Nine distinct veins** with parallel orientation to the D1 and D2 veins have been identified.



This market announcement has been authorised for release to the market by the Board of Pacific American Holdings Limited.

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## **Regional Geology**

The regional geology consists of the Proterozoic metasedimentary Yellowjacket Formation and the Lemhi Group above. These Formations were intersected by a Tertiary igneous event consisting of intrusive and extrusive rock types. The lower valleys are filled with recent alluvium and colluvium within the creek beds. The area is pine forested with significant soils covering most of the hill sides and ridgetops.





Quartz near property

**Brecciated rock near claim AC09** 

#### **Local Geology**

The Yellowjacket Formation is the only mapped rock unit in the Anderson Creek Claim area. In areas away from fault and vein structures, the Yellowjacket Fm consists of a finely laminated argillaceous quartzite with pronounced light and dark bands. These rocks are hard, brittle, and dense.

In areas adjacent to faults and vein structures, contact metamorphism has changed the Yellowjacket Fm rocks into phyillite and mica-schist. The phyllite rocks contain associated biotite, garnets, staurolite and andalusite, all commonly occurring in phyllite. Courser grained metamorphosed parts of the Yellowjacket Fm take on a gneissic appearance.



For	mation	Lithology	Thickness (m)	Age (Ma)
Alluvium (Qal), Alluvial Fans (Qaf), Landslides (Qls)		River gravel, sand, clay and silt. Small alluvial fans occur at the base of creeks and streams.	10 - 100	Recent
Granodiorite (Tgd)		Gray, locally altered, composed of plagioclaise, quartz, potassium feldspar, biotite and horneblende. Opaque minerals accouint for about 1-2 percent of total.	paque 10cm to 2m ~65	
Diorite/Diabase (Td)		Greenish black weathers to brown. Composed of medium grained plagioclase, hornblende, biotite, and magentite. Inclusions of Yy are common. Observed as intrusions into the Yellowjact (Yy) Fm.	10cm to 2m	~65
_		Major Unconformity		
Big Creek Fm (Ybc)	Gunsight Fm (Yg)	Quartzite, brownish grey to medium gey, fine grained feldspathic, argillaceous matrix. Medium to thick bedded, parallel laminated and locally cross-bedded. Commonly brecciated due to thrusting.	?	
	Apple Creek Fm (Yac)	Fine grained quartzite and siltite, greenish grey to dark greeenish grey. Contains thin lenses of of ferrodolomite	?	
	Big Creek Fm (Ybc)	Quartzite. Light to medium grey, fine-grained, well-sorted, well-rounded with parallel laminations and locally cross- bedded. Dark heavy minerals occur in beddng structures.	?	~545
	Big Creek Fm (Ybcc)	Quartzite. Light to medium grey, Coarse-grained, well-sorted, well-rounded with parallel laminations and locally crossbedded. Dark heavy minerals occur in beddng structures.  Coarse grained component of Ybc.	?	
Yellowjacket Fm (Yy)		Argillaceous Quartzite, medium grey to dark grey, very fine grained, feldspathic, biotitic. Occurs in graded bed 10cm to 1m thick. Fining upward grading occurs with increased argillaceous material. Locally metamorphosed into phyllite and phyllicit schist, with small garnets, silmanite, andalusite. Phyllite and schist associated with auriferous veins and instrusions of Td, and Tgd.	200m - 1000m	~545
	Alluvium (Qal), Lands Granoc  Diorite/	Gunsight Fm (Yg)  Apple Creek Fm (Ybcc)  Big Creek Fm (Ybcc)	Alluvium (Qal), Alluvial Fans (Qaf), Landslides (Qls)  River gravel, sand, clay and silt. Small alluvial fans occur at the base of creeks and streams.  Granodiorite (Tgd)  Granodiorite (Tgd)  Diorite/Diabase (Td)  Greenish black weathers to brown. Composed of medium grained plagioclase, hornblende, biotite, and magentite. Inclusions of Yy are common. Observed as intrusions into the Yellowjact (Yy) Fm.  Major Unconformity  Quartzite, brownish grey to medium gey, fine grained feldspathic, argillaceous matrix. Medium to thick bedded, parallel laminated and locally cross-bedded. Commonly brecciated due to thrusting.  Fine grained quartzite and siltite, greenish grey to dark greeenish grey. Contains thin lenses of of ferrodolomite Quartzite. Light to medium grey, fine-grained, well-sorted, well-rounded with parallel laminations and locally cross- bedded. Dark heavy minerals occur in bedding structures. Quartzite. Light to medium grey, Coarse-grained, well-sorted, well-rounded with parallel laminations and locally cross- bedded. Dark heavy minerals occur in bedding structures. Coarse grained component of Ybc.  Argillaceous Quartzite, medium grey to dark grey, very fine grained, feldspathic, biotitic. Occurs in graded bed 10cm to 1m thick. Fining upward grading occurs with increased argillaceous material. Locally metamorphosed into phyllite and phyllicit schist, with small garnets, silmanite, anadlusite. Phyllite and schist associated with auriferous veins and instrusions of Td, and Tgd.	Alluvium (Qal), Alluvial Fans (Qaf), Landslides (Qls)  Granodiorite (Tgd)  Granodiorite (Tgd)  Diorite/Diabase (Td)  Gunsight Fm (Yg)  Apple Creek Fm (Ybc)  Big Creek Fm (Ybc)  Big Creek Fm (Ybc)  Big Creek Fm (Ybc)  Argillaceous materials of the Mere Seeded. Dark heavy minerals occur in bedding structures. Coarse grained domponent of Ybc.  Argillaceous Quartzite, light to medium gray, force grained, well-sorted, well-rounded with parallel laminations and locally crossbedded. Dark heavy minerals occur in bedding structures. Coarse grained, feldspathic, biotite, or Guns grained plagicolase, hornblende, biotite, and magentite. Inclusions of Yy are common. Observed as intrusions into the Yellowjact (Yy) Fm.  Major Unconformity  Quartzite, prownish grey to medium gey, fine grained feldspathic, argillaceous matrix. Medium to thick bedded, parallel laminated and locally cross-bedded. Commonly brecciated due to thrusting. Fine grained quartzite and slitite, greenish grey to dark greeenish grey. Contains thin lenses of of ferrodolomite quartzite. Light to medium grey, fine-grained, well-sorted, well-rounded with parallel laminations and locally crossbedded. Dark heavy minerals occur in bedding structures. Coarse grained component of Ybc.  Argillaceous Quartzite, medium grey, to dark grey, very fine grained, feldspathic, biotitic. Occurs in graded bed 10cm to 1m thick. Fining upward grading occurs with increased argillaceous material. Locally metamorphosed into phyllite and phyllicit schist, with small garnets, silmanite, andalusite. Phyllite and schist associated with auriferous veins and instrusions of Td, and Tgd.

**Generalised Stratigraphic Column of the Anderson Creek Claims** 

Hornfelsic metamorphism is very strong with 30-60 meters from contact metamorphism. The degree of metamorphism decreases away horizontally from fault and vein structures for about 150-210 meters.

#### **Ore Geology**

Joseph Umpleby described the ore geology at Gibbonsville in USGS Bulletin 528, in 1913. He said: "The ore deposits at Gibbonsville occur in narrow east-west veins. Most of them are narrow fissures averaging less than a foot in width, **though some are 5 or 6 feet wide**."

Most of the gold in Gibbonsville occurs within the pyrite. "[Gold] varies directly with the pyrite, and as only 40 per cent of the gold yields to amalgamation it is probably included in the pyrite." Umpleby.

The best recovery of gold at Gibbonsville occurred in oxidised zones. The oxidised zones generally occur at depths less than 47 metres. However, Umpleby states that meteoric water carries large volumes of oxygen and thus will oxidise material below standing water-tables and that oxidised ore material can continue at depths below 47 meters (150 feet).







**Quartz vein outcropping Anderson Creek** 

### **Anderson Creek Claims Geology**

The geology of the Anderson Creek claim area is predominantly composed of the Yellowjacket Formation. The claim area contains numerous veins, quartz outcrops, a diabase dyke intrusion, and some oxidised and mineralised breccia.

The D1 and D2 veins are the only named veins on the Anderson Creek claims. However, nine different small veins in parallel with the D1 and D2 veins have been identified. At one point, these veins were sampled, and small adits were built, but no commercial mining ever occurred in the Diane veins.



**Outcrop along Ridge 3** 



PAK personnel observed a prominent diabase dyke and an adjacent breccia zone, or pipe at the northwest part of the staked claims. This dyke appears to be the source of the quartz veins, breccia pipe, contact metamorphism and associated wall rock alteration.

#### **Next Steps**

PAK is currently reviewing the assays from the recent sampling program and modelling these in conjunction with the historic results. Over the next few weeks, the Company will finalise the modelling, develop exploration plans, complete a second sampling plan and develop a JORC exploration target. The Company will be a making a number of announcements in regard to Anderson Creek and other exploration projects under review.

#### **For Further Information Contact**

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#### **Dom Hill**

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More details are available on PAK's website www.pacificamerican.com.au

#### **Previously Released Information**

These ASX announcements refer to information extracted from reports available for viewing on PAK's website www.pacificamerican.com.au and announced on:

- •06.09.2021 "Historic Gold Assays Anderson Creek Gold Project"
- 02.03.2021 "Maiden Drilling Program Completed Over Three Gold Targets"
- 01.10.2020 "Drill Ready Western Australian Gold Project"

PAK confirms it is not aware of any new information or data that materially affects the information included in the original market announcements, and, in the case of exploration targets, that all material assumptions and technical parameters underpinning the exploration targets in the relevant market announcements continue to apply and have not materially changed. PAK confirms that the form and context in which the Competent Person's findings presented have not been materially modified from the original market announcements.

#### **Forward Looking Statements**

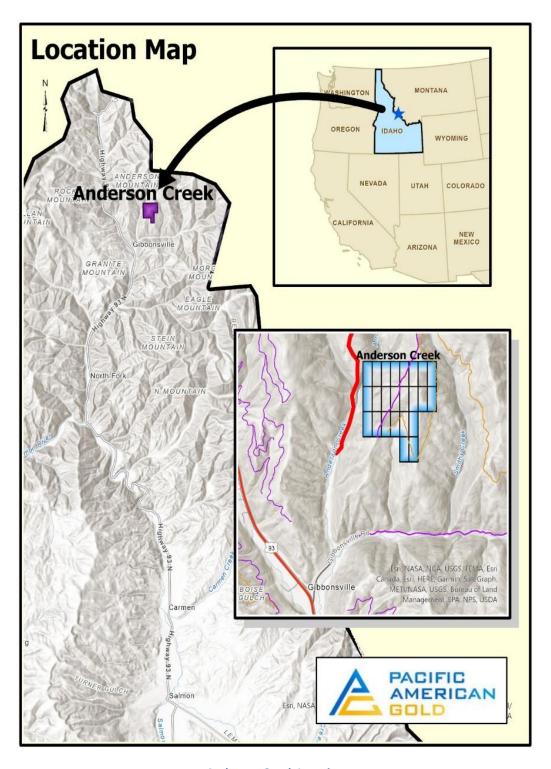
Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of the Company, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking.



The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the authors at the time of writing.

It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for absolute certainty.

Any economic decisions which might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.



**Anderson Creek Location** 



#### **Certification of Qualifications**

# CERTIFICATION OF QUALIFICATIONS Dwight M. Kinnes, CPG (Author) Chief Technical Officer American Rare Earths, Ltd.

I, DWIGHT M. KINNES, Qualified Professional Member (QP) #4063295RM of the Society of Mining Engineers (SME), HEREBY CERTIFY THAT:

- I am currently employed as Chief Technical Officer with American Rare Earths Ltd, with an office in Centennial, CO 80122.
- 2. I am a graduate of Colorado State University, with a B.S. degree in Geology (1986), I have been practicing my profession since 1986.
- 3. I am a registered member of the Society Of Mining Engineers (SME), number 4063295.
- 4. From 1986 to present I have been actively employed in various capacities in the mining industry in numerous locations in North America, South America, Asia, Australia, and Europe.
- 5. I have read this announcement dated September 8, 2021 and concur with the findings in this announcement as presented by the Author.
- 6. As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, The Technical Report Contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 7. I am employed by American Rare Earths Ltd and through an agreement with Pacific American Holdings Ltd, concurrently provide time and expertise to Pacific American Holdings Ltd.
- 8. I consent to the filing of this Technical Report with any stock exchange and other regulatory authority and publication by them, including publication of this Technical Report in the public company files on their websites accessible by the public.

DATED in Centennial, Colorado, USA this 8th day of September 2021.

Dwight M. Kinnes, CPG (4063295RM - SME)



# **JORC Code, 2012 Edition – Table 1**

**Section 1 Sampling Techniques and Data** 

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg 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.	US Bureau of Mines (USBM) collected surface samples in 1992 and presented in the report MLA 25-92. ECM mining collected surface and adit samples from 1997 through 1983.
	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.	Rock samples were collected of various rocks types present in the Anderson Creek claim area
	In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	Rock samples were collected to determine if any mineralisation occurs within the claim area. Rock samples were collected from rock outcrop, surface float, and material adjacent to old works. These samples cannot be used for resource determination,
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	n/a
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	n/a
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	n/a
	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.	n/a





Criteria	JORC Code explanation	Commentary
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.	USBM personnel made rock descriptions in MLA 25-93. ECM geologists described rock samples in reports from 1977 through 1983.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Rock descriptions are qualitative in nature.
	The total length and percentage of the relevant intersections logged.	n/a
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	n/a
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	n/a
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	n/a
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	n/a
	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.	n/a
	Whether sample sizes are appropriate to the grain size of the material being sampled.	n/a
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.	USBM and ECM samples were assayed using fire assay with some ICP assays.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	n/a
	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.	Few historical samples were rerun,





Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	PAK collected surface samples in July 2021 with assay results pending.
	The use of twinned holes.	n/a
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Assay data collected from historic reports. Copies of laboratory sheets include in some reports. Assay values are considered to be correct, but have not been verified by PAK.
	Discuss any adjustment to assay data.	
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.	Samples location on field maps.
	Specification of the grid system used.	Historic system grids unknown
	Quality and adequacy of topographic control.	n/a
Data spacing and distribution	Data spacing for reporting of Exploration Results.	n/a
	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.	The project is preliminary in nature. Samples are not sufficient for resources or reserves
	Whether sample compositing has been applied.	n/a
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Samples are biased to determine nature of mineralisation
	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
Sample security	The measures taken to ensure sample security.	Historic procedures for sample security are unknown.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been performed for this initial field/data review



## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	PAK controls 24 Federal Lode Claims covering an area of 496 acres (201.6 hectares).
	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.	Annual claim maintenance fees are payable to the BLM by September 1st of each year. PAK paid initial staking fees in June 2021, then paid the annual fees for all claims on August 20, 2021.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The project area was mapped and sampled most recently by the USBM in 1992 and 1993 reported USBM report MLA 25-93.
Geology	Deposit type, geological setting and style of mineralisation.	Mineralisation at Anderson Creek consists of high-angle veins in fault and shear zones within the Yellowjacket Formation. The Yellowjacket Formation consists of a banded argillaceous quartzite. A Tertiary aged diorite/diabase intrusion rest unconformably below the Yellowjacket Formation. Extensive contact metamorphism occurs in areas where the Yellowjacket Formation is adjacent to the Tertiary diorite. Contact metamorphism is also present adjacent to vein and fault zones. Gold is associated with pyrite which forms in the veins. Brecciated ore shoots have been observed and usually contains the highest grade material observed at Anderson Creek.
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:	n/a
	easting and northing of the drill hole collar	n/a
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	n/a
	dip and azimuth of the hole	n/a
	down hole length and interception depth	n/a
	hole length.	n/a





Criteria	JORC Code explanation	Commentary
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No recent drilling has been in the project area. PAK cannot verify the accuracy of the locations of the previous drilling.
	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	n/a
Data aggregation methods	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
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	n/a
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	n/a
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	n/a
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	n/a
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.	n/a
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	n/a
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.	n/a

## **ASX ANNOUNCEMNT**



# **ASX:PAK**

Criteria	JORC Code explanation	Commentary
	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	PAK is currently developing Exploration Target reports for the Anderson Creek Project area.
Further work	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	