

16 FEBRUARY 2021

ASX/MEDIA RELEASE

Extensive multi-element arsenic anomaly defined at Pincunah Project – Pilbara Region, WA

Soil sampling at the Valley of the Gossans prospect highlights a large As-Sb-Se-Ag anomaly within a 2km long corridor, representing an exciting emerging exploration target

Highlights

- Highly encouraging results received from soil sampling completed over the Valley of the Gossans ("VOG") Prospect, at the Pincunah Project, located 100km south of Port Hedland and just 5km south-east of the 873,500oz Mt York gold deposit in the Pilbara.
- The program has outlined an extensive (>2km) robust, coherent and coincident anomalous zone comprised of As, Se, Sb, Bi, Ag, Mo, Cu as well as gold in places, associated with an extensive silicified felsic package. The anomaly is open to the north-west and south-west.
- New rock chips of up to 0.8g/t gold, 2,231g/t silver and 14.7% copper support the significance of the soil anomaly.
- South of the VOG, a pegmatite signature (Cs, Li, Tl and B) anomaly is also associated with an unusual base-metal (Cd, Pb, Zn) signature, possibly suggesting concealed mineralisation and/or hydrothermal alteration within the ultramafic intrusive unit.

Trek Metals Limited (ASX: **TKM**) ("**Trek**" or the "**Company**") is pleased to advise that it has defined an extensive arsenic-multi-element anomaly extending over a strike length of more than 2km at its 100%-owned **Pincunah Gold and Copper Project** in the Pilbara region of WA (Figure 1).

The Pincunah Project is located in an extremely prospective area, immediately south-east of the 873,500oz Mt York Gold Project, owned by Kairos Minerals (ASX: KAI) and the world-class Pilgangoora-Altura lithium mining complex, owned by Pilbara Minerals (ASX: PLS).

The Company has received results from a recently completed 993-sample soil sampling program and 103 rock chip samples. The results have identified a highly anomalous corridor associated with a highly altered felsic unit that hosts some of the previously identified mineralisation at the Valley of the Gossans prospect (see Figure 1 and ASX release, 26 November 2020). The strongly elevated As-Sb-Ag-Se+/-Au corridor is over 2km long and is both open to the north-west and south-east beyond the current limits of the sampling.

Commenting on the program, Trek Executive Director John Young said:

"These exciting soil sampling results have reinforced our belief that the Pincunah Project has the potential to host a deposit of significant scale. It's not often that you see a multielement arsenic anomaly of this tenor and scale."



"This combined with its location just south-east of some major deposits and the fact that the area has had virtually no modern, effective exploration gives us great encouragement that the opportunity for a major discovery here is very significant.

"The next steps at Pincunah are to undertake follow-up soil sampling and a trial IP survey to see if we can detect massive sulphide accumulations. This will be undertaken in the coming weeks, in conjunction with clearances for a Reverse Circulation drill program that we expect to commence as soon as weather conditions and access allow.

"We are particularly interested to see the extension of these soil results to the north-west, with over 5km of the prospective horizon between Valley of the Gossans and Carlindi that remains untested."



Figure 1: Interpreted simplified bedrock geology map at Pincunah showing the sample locations, new structural interpretation from airborne magnetics and assay highlights from recent reconnaissance work. Results are reported in Trek ASX announcement 30 September 2020.



Pincunah Soil Results

The recent ultra-fine fraction soil survey was guided by procedures recommended by ex-WMC Geochemist Dr Nigel Brand, who has recently reviewed the results and identified several significant anomalies in a variety of metals. The sample locations are shown in Figure 1, minimum and maximum values for the various metals are given in Table 1 at the end of the report and details of the sampling and analytical techniques are given in the JORC Table.

The results of this work are highly significant and have identified a potentially very large and prospective exploration target across Pincunah Exploration Licence E45/4909. The most significant anomaly for gold exploration is a regionally **extensive coincident As-Sb-Ag-Se anomaly that is variably coincident with Au-Co-Mo and Bi** and extends for 2.1km and up to 500m wide. The anomaly trends north-west and remains open to the south-east and north-west (Figure 2).



Figure 2. Arsenic anomaly on aerial photography showing the relationship to historical drilling and recent rock chip samples.

This association generally represents a suite of "granitic-felsic" elements commonly associated with porphyry style emplacement. Importantly, this anomaly is associated with the regional topographic



highs related to a mapped 'chert' across the project area. This stratigraphic unit has been mapped as meta-sediments and felsic rocks of the Kangaroo Caves Formation or equivalent.

During a recent field trip, outcrops of this 'çhert' horizon were visually inspected and two samples were taken. One sample is described as a silica-altered breccia rock with minor specs of pyrite on the north side of the 'chert' ridge (Figure 4). The other was described as boxwork-silica rock on the top of a high ridge above silicified volcanic rock (Figure 5).



Figure 3: Reprocessed Ternary Radiometric image (K: pink, U: blue, Th: Green) showing the location of the 2020 Trek and historic Lynas 1997 soil surveys and significant anomalies as well as some relevant highlight drill and tock sample results.



Assays did not return elevated gold, however they returned highly anomalous **arsenic up to 3,600ppm**, **silver up to 13ppm**, **copper up to 600ppm and up to 0.4ppm bismuth**. Field observations indicates this horizon is a very large and regionally extensive zone of hydrothermal alteration which we now know is elevated with unusually high levels of classic pathfinder metals and gold. The north-northwest trending Gossan B outcrops occur on the edge of the geochemistry anomaly and rock sampling in that area returned up to 0.8 g/t gold, 2231 g/t silver, 14.7% copper, >10,000 ppm As and 109 ppm bismuth (Figure 3).

These results strongly suggest that commodity metals gold, copper and silver are strongly associated with pathfinder metals including arsenic and bismuth. The parallel trend at Gossan A to the east occurs off the soil trend and appears to be a possible structural remobilisation of sulphides.



Figure 4: photograph of rock sample TK063



Figure 5: photograph of rock sample TK062

Another important observation from the recent work is that highly gossanous and silicified rocks were again observed and sampled by Trek in August 2020 located 200-300m west of the main area of gossans with assay results up to 0.4 g/t Au and 57 g/t Ag (30 September 2020) associated with the newly identified As-Sb-Ag-Se+/-Au anomaly (Figure 2).

This area represents a high-priority drill target area that has never been drill tested. On review of the newly reprocessed geophysics images, the As-Sb-Ag-Se+/-Au anomaly is strongly coincident with regionally extensive potassium trends in the airborne radiometric data (Figure 3).



The radiometric potassium trends extend for at least 2km and possibly up to 5km to the north-west up to the northern property boundary toward the Mt York gold deposit (Figure 2 & 3) trend indicates that the silicification is strongly associated with extensive potassic alteration and is regionally extensive on Trek licence E45/4909.

South of the anomalous chert/felsic horizon (Kangaroo Caves Formation equivalent) is an intrusive contact with the Dalton Suite ultramafic. The south-western portion of the soil sampling covered this contact zone whereas an unusual Li-Cs-B anomaly typical of pegmatite rocks extends for over 1.5km (Figure 3).

Further ground mapping is required to verify the possibility of buried lithium-caesium-tantalum (LCT) pegmatites that are intruded into the ultramafic rocks. This is a similar geological setting to the world-class Pilgangoora Li-pegmatite deposit, located 10km along strike to the north-west.

At the Carlindi prospect area, the historic soil data completed by Lynas in 1997 was reviewed. Two north-northeast trending gold-in-soil anomalies >20ppb Au that extend for 1.5km and 500m respectively are both open and occur on the western edge of another regionally extensive potassium anomaly (Figure 3). Significantly, this chert horizon and coincident potassium trend extends 6km to the north-west and is also coincident with the Mt York deposit held by Kairos (Figure 3).

Field inspections across these areas indicate variably gold-bearing hydrothermal chert horizons and silicified conglomerate with quartz veins and gossan and high grades in places including a recent quartz vein sample that returned 9.7 g/t Au up dip which backs up the significant high grade drilling intersection 10 m at 5.9 g/t Au (See announcement dated 5 August 2020). In addition, previous rock samples by Trek to the south of the area drilled by Lynas returned up to **1.8 g/t Au** that have not been followed up by drilling (TKM ASX announcement dated 30 September 2020).

Next Steps

The results of the recent soil survey and comparison with other geochemical data and geophysical imagery are extremely encouraging and strongly support the interpretation that multiple horizons of highly altered host rocks occur over at least 6km on Trek's Exploration Licence E45/4909.

These host rocks are clearly visible in the radiometric imagery and suggest a prominent potassic signature that extend a further 6km to the Mt York Resource.

The next round of exploration will involve further soil sampling to extend the survey over the remainder of the trend area in order to properly rank the targets for drilling. The Mt York Resource occurs on a major regional dilational setting (Figure 3) and its possible that the best drill targets on E45/4909 may occur in a similar setting.

This soil sampling survey will enable a better definition of these targets and enable a consistent dataset to rank the targets.

Drill targets are warranted over the recently completed survey area at Valley of Gossans, particularly where the gold-copper-silver-bearing gossans occur on the eastern edge of the extensive soil anomaly. The metal assemblage As-Sb-Ag is often associated with the upper parts of a gold-rich system at depth in a variety of deposit models including intrusive-related gold systems.

In light of the encouraging soil results, Trek will also proceed with the proposed IP survey. The planned survey at Valley of the Gossans will cross the extensive gossans where the historic drilling was completed as well as the extensive potassic chert horizons highlighted from the soil survey.



In addition, ore grade intersections at Carlindi occur at the same horizon as Breccia Hill which back up the interpretation that further gold discoveries are possible along the trend if high quality detailed work is conducted. Once the proposed work program is completed, the Company will be in a strong position to conduct an extensive drill program to test several exciting drill ready targets.

About the Pincunah Project

The Pincunah Project (E45/4909) is located 100km south of Port Hedland and just 5km south of the Mt York Project owned by Kairos Minerals (ASX: KAI). The soil program was completed to cover the "Valley of the Gossans" (VOG) Prospect. At VOG there is extensive evidence of hydrothermal alteration over an area of 2.2km by 0.9km. The north-west trending gossans are poorly exposed at surface as isolated outcrops in a low-lying valley.

Re-processing of the magnetics and radiometrics have revealed that the gossans occur on several prominent linear demagnetised zone that are coincident with mapped felsic volcanics and a strong potassic signature (see Figure 3).



Location of the Pincunah Gold Project

Approved for release by John Young – Executive Director.

ENDS



For further information contact:

INVESTORS:	MEDIA:			
John Young	Nicholas Read			
john@trekmetals.com.au	0419 929 046			
REGISTERED OFFICES – TREK METALS LIMITED ARBN 124 462 826				

Australia 130 Stirling Highway North Fremantle WA 6159

Bermuda Vallis Building, 4th Floor 58 Par-la-Ville Road Hamilton HM 11 Postal Address Locked Bag 4 NORTH FREMANTLE WA 6159

COMPETENT PERSONS STATEMENT

Information in this report relating to Exploration Results is based on and fairly represents information reviewed by Leo Horn, who is a Member of the Australian Institute of Geoscientists and a consultant to Trek Metals. Mr. Horn has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Horn consents to the inclusion of the data in the form and context in which it appears

DISCLAIMERS AND FORWARD-LOOKING STATEMENTS

This announcement contains forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as "seek", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions.

The forward-looking statements in this announcement are based on current expectations, estimates, forecasts and projections about Trek and the industry in which it operates. They do, however, relate to future matters and are subject to various inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied by any forward-looking statements. The past performance of Trek is no guarantee of future performance.

None of Trek's directors, officers, employees, agents or contractors makes any representation or warranty (either express or implied) as to the accuracy or likelihood of fulfilment of any forward-looking statement, or any events or results expressed or implied in any forward-looking statement, except to the extent required by law. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.



Table 1: Fine fraction soil results statistics

		Ag	As	В	Bi	Cd	Cs	Cu	Li	Мо	Pb	Sb	Se	TI	
Element	Au ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Zn ppm
Min	0.0001	0.013	3.66	2	0.0168	0.026	0.223	19.9	2.3	0.076	2.49	0.273	0.042	0.0187	11.9
Max	0.0333	3.83	1560	25	53.6	2.84	9.56	713	109	0.911	129	136.5	5.13	0.226	995
Mean	0.00147	0.2143	128.64	2.14	1.373	0.217	1.152	80.49	9.946	0.398	15.239	10.215	0.315	0.0808	59.702

Table 2: Highlight recent rock sample results

							Bi	Cu
Sample	lat	lon	Description	Au g/t	Ag g/t	As pm	ppm	ppm
			North-south trending gossan vein, malachite-rich,					
			sampled copper-rich material. Gossan veins 2-20cm					
TK036	-21.18148	118.965271	thick.	0.828	2231	10000	109.16	147443
			Spongey textured weathered possible boxwork-silica					
			rock on the top of the ridge above silicified					
TK062	-21.186374	118.975607	volcanic/chert	0.001	2.08	3604.1	0.18	638.5
			Small silica breccia patch on the downslope of the chert					
TK063	-21.186146	118.975715	ridge. Minor specs of pyrite (0.5%)	0.001	13.56	161.4	0.42	122.1
			Quartz gossan breccia vein sample (float). Shear zone					
TK081	-21.15585	118.937191	strike 20 degrees, veins strike 045 degrees.	9.702	1.59	2243.5	0.56	350.2



Appendix 1: The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of the Pincunah Gold Project

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections. Underline commentary pertains to the new Trek samples)

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. 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 (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 sampling by Trek is mainly outcrop rock samples, however in the absence of outcrop. All sample types and descriptions were carefully recorded by the geologist. Ultrafine soil sampling by Trek was conducted from a 30-40cm cleared area to a depth of approximately 25cm. The sample was dry sieved to collect 200-300 grams of -2mm. Two field duplicates were taken every 100 samples. Conventional historical soil sampling by Lynas in 1997 was conducted where a 1 km sample of sieved -2mm material was collected from 20cm depth.
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). 	



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. 	
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. 	Geological descriptions were recorded by Trek for each rock sample.
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. 	
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 (i.e. lack of bias) and precision have been established. 	 Rock samples by Trek were assayed by fire assay for gold (and Pt, Pd for selected samples) and a 48 element package by four acid digest and ICP-MS analysis. Both methods are considered total. The assay techniques are considered appropriate for the mineralisation style. Ultrafine soil samples by Trek were sieved to -53 micron at ALS Laboratories and run for gold plus a 43 multi-element package by aqua regia digestion for acid extractable gold (25 gram charge). Conventional historical soil sampling by Lynas in 1997 were dispatched to Amdel Laboratories for Au. Samples were sorted and dried and the whole samples was pulverized in a ring polarizer. Samples were then digested by aqua-regia digest with gold analysed by graphite furnace AAS.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	



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. Specification of the grid system used. Quality and adequacy of topographic control. 	Location of rock and soil samples by Trek were recorded using a handheld GPS which is considered appropriate for reconnaissance sampling.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Soil sampling was conducted at 50 m spacing with east-west oriented lines spaced 100m apart. A smaller area was conducted at a tighter grid spacing of 50 m by 50 m.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 <u>Reconnaissance rock sampling by Trek was taken where outcrops are available. The orientation of mineralised structures have not yet been properly defined.</u> Soil sampling was conducted on east west grid on the assumption that structures are oriented north-northwest and northwest based on the airborne magnetic images
Sample security	The measures taken to ensure sample security.	
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• Soil results were reviewed by Dr Nigel Brand and an independent interpretation of the results was submitted to Trek.



Section 2: Reporting of 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. 	 The Pincunah Project, located 50-70 km west of Marble Bar, comprises two granted licences E45/4909 and E45/4917 that are held by ACME PILBARA PTY LTD ("APP") which is a 100% subsidiary of Trek Metals Ltd. The project is covered by a Native Title application by the Nyamal People. L PL N050365 covers E45/4909 and UCL covers E45/4917.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Lynas Gold NL (1997): Carried out a conventional soil sampling program on grids ranging from 100 m by 50 m to 200 m by 50 m spacing.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The Pincunah project is situated in the Archean Pilbara Craton which hosts several significant gold deposits shown on the regional map in the body of the announcement. Mineralisation identified at Valley of Gossans is not well understood but is interpreted to be hydrothermally emplaced within gold-bearing structures and intrusions. At Carlindi, gold-bearing shear zones are hosted in Archean siliclastic rocks and the mineralisation style is interpreted to be similar to the Invincible gold deposit at St Ives, in Kambalda.
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. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. 	

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



Criteria	JORC Code explanation	Commentary
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	
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. 	See relevant maps in the body of 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. 	All available data has been presented in figures.
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. 	 Exploration data for the project continues to be reviewed and assessed and new information will be reported if material.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	• Further work is detailed in the body of the announcement.