

### ASX ANNOUNCEMENT

Date: 18 August 2022

## OUTSTANDING Ni-Cu-PGM, GOLD and LITHIUM-CAESIUM-TANTALUM SOIL GEOCHEMISTRY RESULTS AT THE BEAU PROJECT, WA

- Four large and significant soil geochemistry anomalies identified, including:
  - a large copper-nickel-PGM-silver-cobalt anomaly up to 2.5 km by 1 km in size and associated with previously unrecognised layered mafic gabbros
  - a gold-palladium anomaly about 500 metres in diameter
  - two lithium-caesium-tantalum anomalies each about 1 km in dimension that may be part of a large zoned intrusive pegmatite system
- Field checking and relevant follow-up sampling of all areas will commence by the end of August to identify reconnaissance drill targets as quickly as practicable
- A reconnaissance drill programme will be organised as soon as practicable and subject to access and the harvest period
- There has been no previous exploration at Beau prior to Impact's work

Three large and significant soil geochemistry anomalies for a range of battery metals and precious metals have been identified at Impact Minerals Limited's (ASX:IPT) 100% owned Beau Project, part of the greater Arkun-Beau-Jumbo project area in the emerging mineral province of southwest Western Australia (Figure 1).

Impact Minerals' Managing Director Dr Mike Jones said *"These are the first detailed soil geochemistry results we have had from the hitherto poorly explored greater Arkun project area and confirm our belief that the area is very prospective for a range of battery, strategic and precious metals. In addition, it is a validation of our targeting methodology which we have applied across our extensive project portfolio in Western Australia and put together over the past 18 months"*.

*"A large nickel-copper-PGM anomaly overlies previously unidentified layered mafic intrusive rocks; these are known hosts to significant massive sulphide deposits around the globe. In addition, we have identified a gold anomaly that is associated with rare earth responses and which may be part of a large intrusion-related system. To cap it all off, we also have identified two areas with significant responses for a range of metals associated with a zoned lithium pegmatite system. Follow-up field checking will commence later this month in order to define targets for first-pass drilling as soon as practicable and to identify the bedrock which is mostly obscured by laterite. We also look forward to getting the results from a further 600 soil samples that are still to come from the northern part of the Arkun project"*.

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Figure 1. Location of Impact's projects in Western Australia.

Previous work by Impact across the Arkun and Beu project areas using a proprietary geophysical-geochemical technology owned by Southern Sky Energy Pty Ltd, identified 17 broad areas of interest, principally for Ni-Cu-PGM mineralisation, for follow-up work (ASX Release 10<sup>th</sup> June 2021).

Reconnaissance soil geochemistry traverses along gazetted roads and tracks over 15 of these targets identified a total of 22 more specific targets for both Ni-Cu-PGM mineralisation and, for the first time in the area, lithium-caesium-tantalum pegmatites and Rare Earth Elements (REE). A number of the original targets returned anomalous soil results for more than one style of mineralisation. Targets for both Ni-Cu-PGM and lithium were identified at Beu (ASX Release 21<sup>st</sup> September 2021).

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## Results of the Soil Geochemistry Survey

Four significant anomalies have been identified at Beau by a more detailed follow-up soil geochemistry survey, one each for nickel-copper-PGM and gold-palladium and two for lithium-caesium-tantalum.

The samples were taken at a spacing of 200 metres by either 200 metres or 400 metres and submitted for the ionic leach method at ALS Laboratories in Perth (see below for further details).

The results of the soil geochemistry survey are described below and presented as additive *response ratios* in Figures 2 to 7.

A response ratio is a simple measure of how anomalous a soil geochemical value for a particular element is above the local *background value* of that element which is conventionally simply calculated as the mean of the lowest quartile of data.

The magnitude of each analytical result is then expressed as a *response ratio*, which is a *times background* value, calculated by dividing each result by the background value. Thus, a *response ratio* of 3 is a value three *times background*.

This procedure normalises the data and allows the response ratios for individual metals that occur within assemblages specific to say, nickel-copper-PGM-gold and lithium-caesium-tantalum mineralisation to be added together in order to amplify the metal associations.

Background values, as well as maximum and minimum assay values for the elements of interest, are provided for reference in Table 1.

### 1. NICKEL-COPPER-PALLADIUM-PLATINUM-GOLD RESULTS

The results for nickel-copper-palladium-platinum, together with spatially associated metals silver, cobalt and gold are shown as additive response ratios on an image of the regional magnetic data in Figure 2. These metals are considered pathfinder metals for many mafic-associated massive sulphide systems globally (ASX Releases 10<sup>th</sup> June 2021 and 21<sup>st</sup> September 2021).

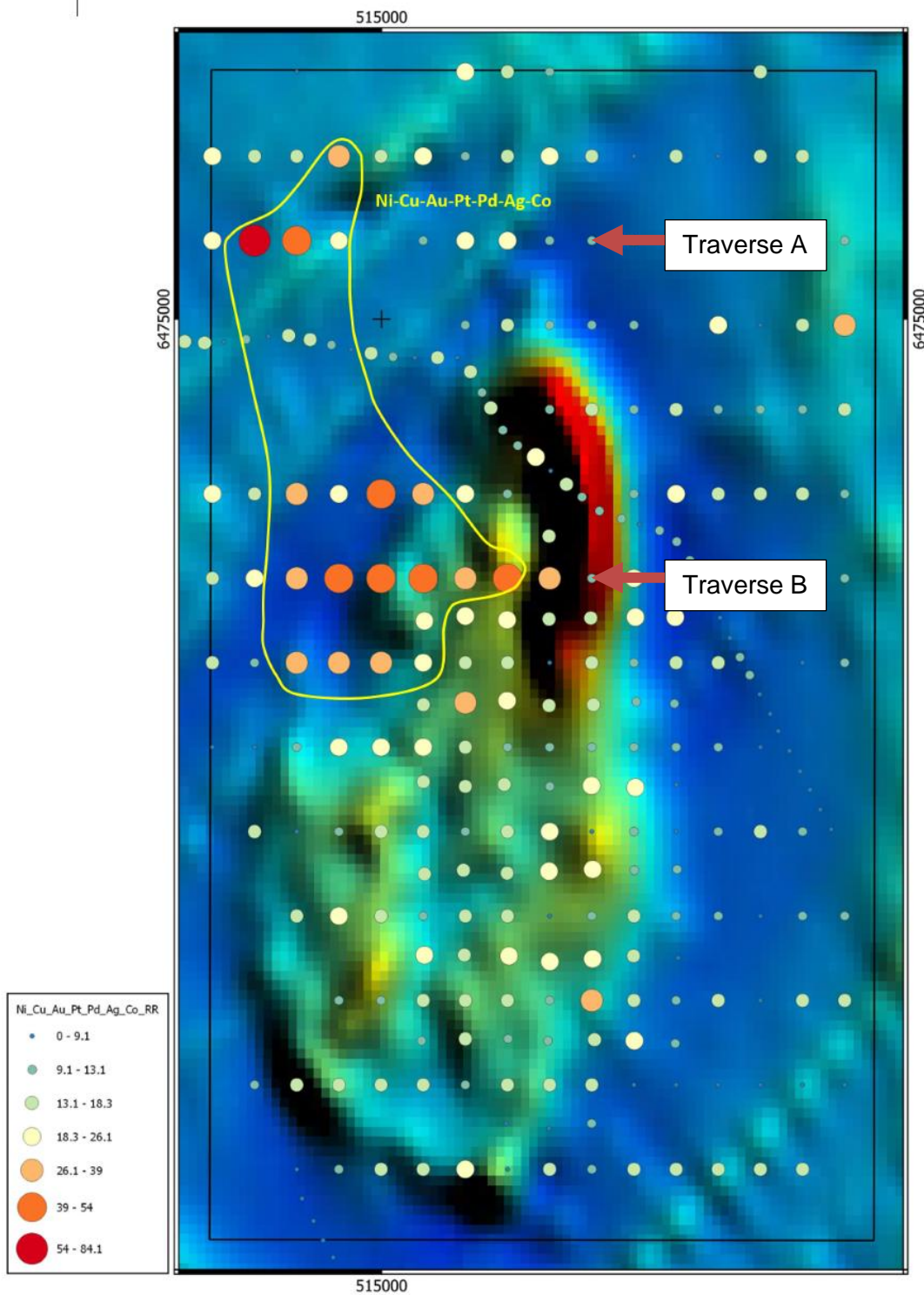
One large coherent anomaly that is up to 2.5 km long north-south and 1 km wide with combined responses up to 88 times background has been identified in the north west of the Beau tenement (Figure 2). Particularly strong responses occur along two traverses (Traverse A and B, Figure 3).

On Traverse A strong responses in particular for copper-nickel-palladium-cobalt occur at the western end of the traverse in an area where there are numerous loose boulders of layered gabbro (Figure 4).

Layered gabbros are mostly found as part of large mafic intrusions that host massive nickel-copper sulphide deposits. Impact is the first company to record such rocks in the area. This is a highly encouraging development and further field checking is required.

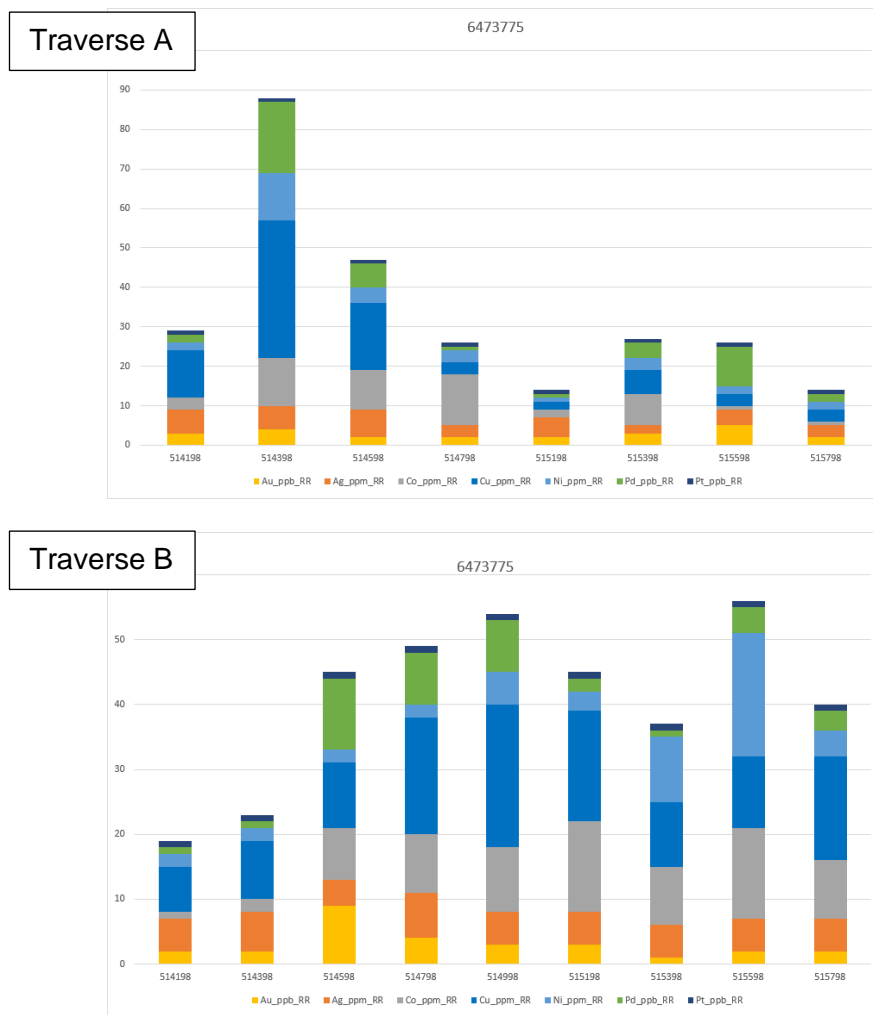
On Traverse B moderate responses for copper-nickel-cobalt-palladium occur over a broad area of about one kilometre. This area has not been field checked and is also a priority area for follow up work.

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**Figure 2.** Combined response ratios for nickel-copper-cobalt-platinum-palladium-silver-gold-cobalt plotted on an image of the regional magnetic data (more magnetic units in warmer colours). The main soil anomaly is highlighted and is mostly coincident with rocks of low magnetic response and interpreted as part of a large mafic intrusion. The strong magnetic unit in the northeast is probably a unit of banded iron formation.

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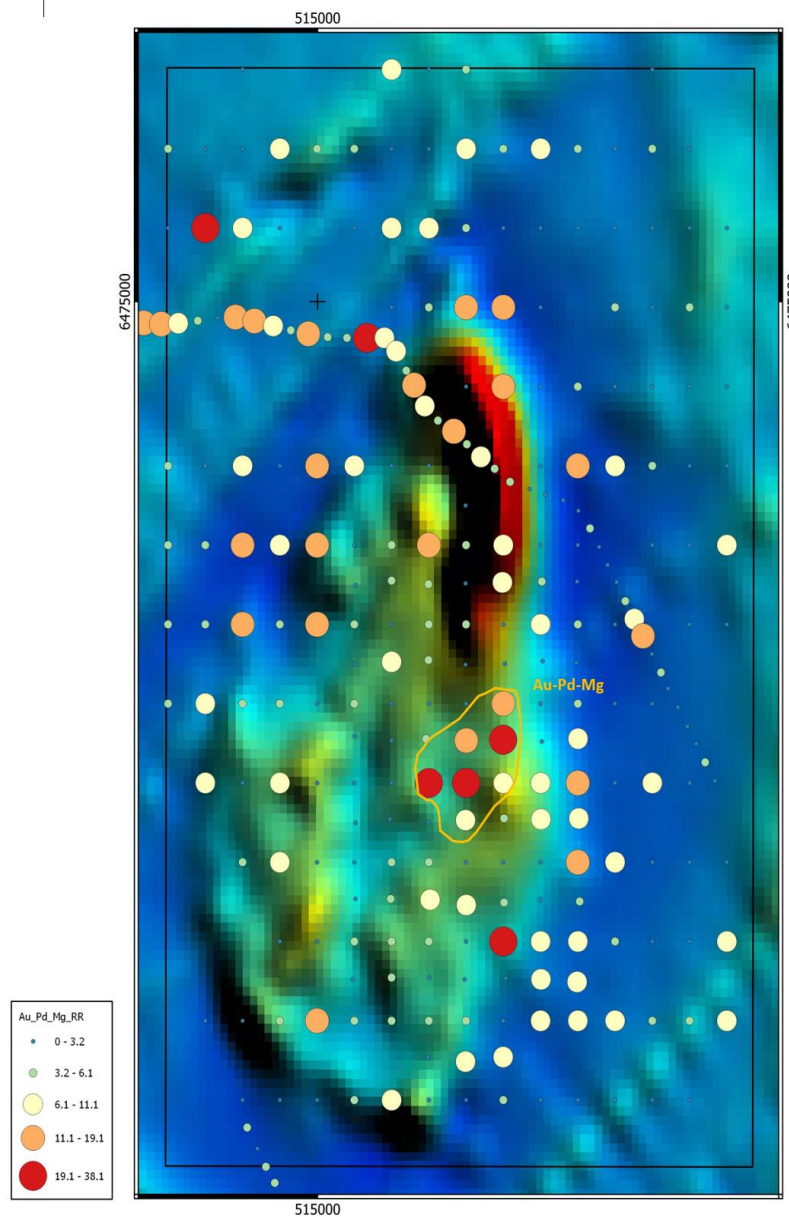
**Figure 3.** Stacked bar charts of additive response ratios for Traverse A (top) and Traverse B (bottom).



**Figure 4.** Loose boulder of rhythmically layered gabbro from Traverse A. Such textures occur within many layered mafic intrusions globally that host major metal deposits.

## 2. GOLD

A discrete gold-palladium-in-soil anomaly about 500 metres in diameter has been identified in the central part of the Beau project (Figure 5). The responses for both metals are moderate and are associated with strong magnesium responses. Although not discussed here, magnesium is strongly correlated with REE elements in the soil geochemistry data and together these suggest the responses may be related to an alkaline intrusion. The area has not been field checked and this is a priority area for further work.



**Figure 5.** Combined response ratios for gold-palladium-magnesium plotted on an image of the regional magnetic data (more magnetic units in warmer colours) and showing a coherent anomaly about 500 metres in diameter. The elevated magnesium responses show a strong correlation to elevated REE responses. This area has not been field checked.

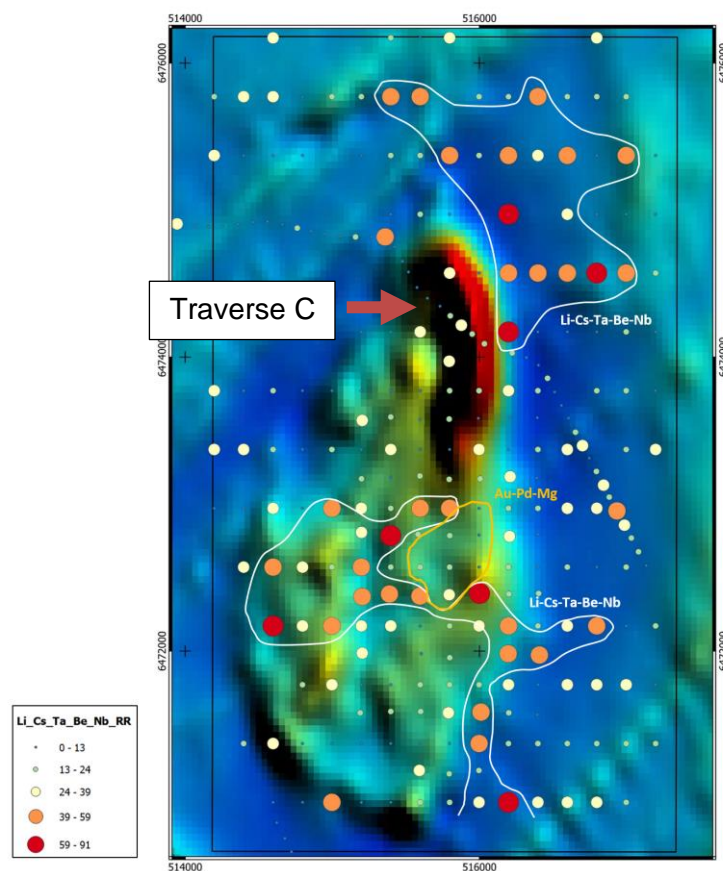
### 3. LITHIUM-CAESIUM-TANTALUM

Two large irregular shaped soil anomalies each about 1 kilometre in dimension with modest to strong response ratios for lithium-caesium-tantalum have been identified in the north east and central parts of the Beau project.

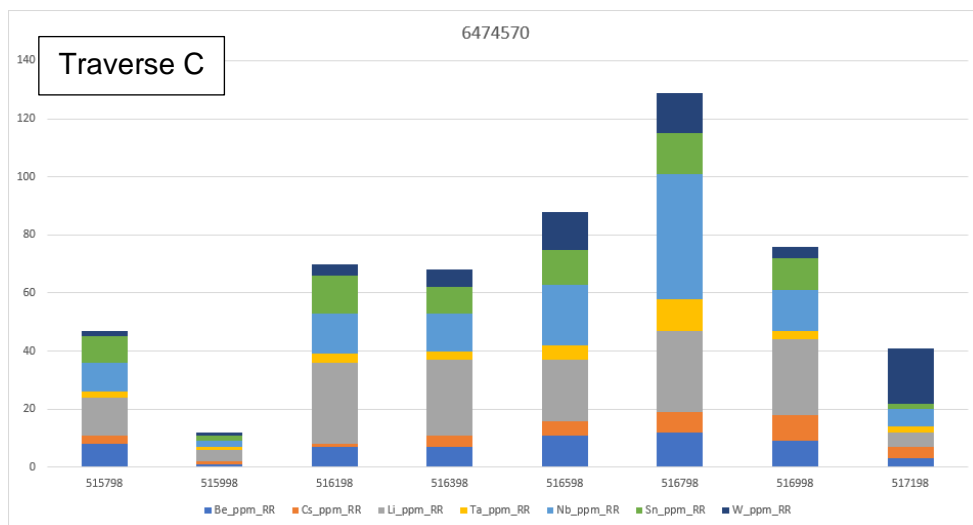
As well as these three metals, there are also variable responses for the associated metals beryllium and niobium and additive response ratios for all five metals are shown in Figure 6. Particularly strong responses occur on Traverse C (Figure 6 and Figure 7).

These five metals commonly form part of a zoned system of pegmatites in a widely used model for exploration for lithium-dominant pegmatites (Figure 8). Responses for the individual metals do vary significantly within the two areas identified, but together the responses are permissive of a large zoned pegmatite system. There are indications of such zonation along Traverse C (Figure 7). Of note, the southern anomaly also partly rings the gold-palladium anomaly, suggesting a possible genetic relationship.

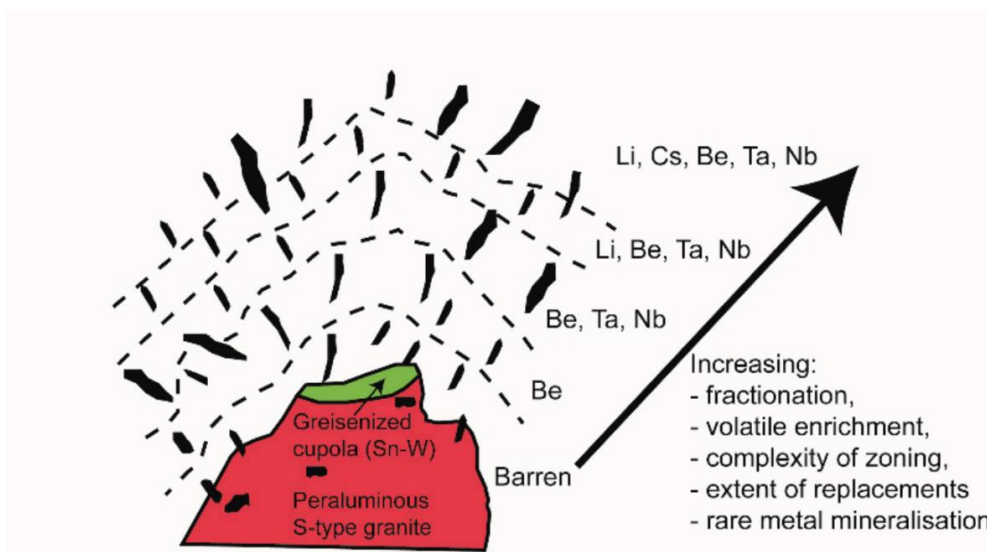
Both of the geochemical anomalies occur in areas of poor outcrop and extensive laterite and require detailed field checking and possible infill soil geochemistry samples to better define any possible zonation.



**Figure 6.** Combined response ratios for lithium-caesium-tantalum-beryllium-niobium plotted on an image of the regional magnetic data (more magnetic units in warmer colours). These areas have not been field checked.



**Figure 7.** Stacked bar charts of additive response ratios for Traverse C. The elements are plotted in order from bottom to top as per the exploration model and suggest they may be part of a zoned system (Figure 7).



**Figure 8.** Cartoon of a widely used exploration model for zoned pegmatite systems showing a core of beryllium (Be) dominant mineralisation passing outwards to tantalum, niobium, lithium and caesium dominant mineralisation.

### 3. DISCUSSION AND NEXT STEPS

The results of Impact's first ever detailed soil geochemistry programme at Beau and within the greater Arkun-Beau-Jumbo project area has successfully identified four high-priority target areas for further work and cover a wide range of battery and precious metals. The geological terrain, which is very poorly explored, is permissive for significant mineralisation of the types discussed here, and Impact considers the results from its exploration targeting work in this region thus far highly encouraging

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It is equally encouraging that Impact's targeting methodology and exploration workflow exemplified here has returned numerous areas for follow-up work and this augers well for Impact's other projects throughout the emerging mineral province of Western Australia where the same work flow is being applied (Figure 1).

A further 600 soil samples have already been taken across a number of other targets within the Arkun project and have been submitted to ALS for assay. These results are eagerly awaited although there are currently significant back logs and long turn-around times.

At Beau, follow-up field checking and sampling will commence by the end of August with the aim of prioritising areas for reconnaissance drill traverses as soon as practicable. Access will be restricted for drilling until the harvest period later in the year. This will however allow time for the statutory approvals to be lodged.

### About the Soil Geochemistry Survey

The soil samples were submitted to ALS in Perth for analysis by the ionic leach method. This method is a so-called "partial digest" technique that uses very dilute chemical solutions that only extract weakly bound ions from the sample for analysis.

Many case studies have shown that partial digests tend to give better discrimination of soil geochemical anomalies over background values. However the weak nature of the chemical solutions used, means that the **absolute** values of metals returned in the analysis are much lower than those returned from more aggressive digestion techniques such as aqua regia and four acid digests. It is the background-to-anomaly ratio, reflected in the "*times background*" response ratio that is the critical factor to consider.

Table 1 gives the maximum and minimum values and the background values of the soil assays for reference.

### COMPLIANCE STATEMENT

This report contains new Exploration Results for soil samples from the Beau Project.

**Dr Mike Jones**

Managing Director

### **Competent Person's Statement**

*The review of exploration activities and results contained in this report is based on information compiled by Dr Mike Jones, a Member of the Australian Institute of Geoscientists. He is a director of the company and works for Impact Minerals Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mike Jones has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

**Table 1.** Maximum minimum and background values for metals mentioned in this report

Element	Maximum	Minimum	Background
Au_ppb	0.540	0.010	0.017
Ag_ppm	0.002	0.000	0.000
Be_ppm	0.009	0.000	0.000
Co_ppm	0.292	0.007	0.021
Cs_ppm	0.009	0.000	0.001
Cu_ppm	5.510	0.048	0.157
Li_ppm	0.030	0.000	0.001
Mg_pct	0.028	0.001	0.001
Nb_ppm	0.016	0.000	0.000
Ni_ppm	1.065	0.021	0.055
Pd_ppb	0.780	0.025	0.025
Pt_ppb	0.300	0.050	0.050
Ta_ppm	0.001	0.000	0.000
W_ppm	0.008	0.000	0.000

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**APPENDIX 1 - SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Soil samples of a weight of about 250 grams were taken from a depth of about 15-20 cm below surface. They were sieved on site to -2 mm and placed in plastic snap seal bags for transport to the laboratory.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	The soil samples were taken at between 400 m and 200 m spacings within paddocks and covering the entire tenement. There are sufficient samples to calculate estimates of the background values for the metals of interest.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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</i>	The soil samples were taken using industry standard procedures.
Drilling techniques	<i>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).</i>	N/A
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	N/A
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Standard field procedures for soil samples were used.
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	No sample bias has been established.
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	N/A
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	N/A
	<i>The total length and percentage of the relevant intersections logged</i>	N/A

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Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	N/A
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	N/A
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The size and distribution of the soil samples is appropriate for first pass exploration.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Laboratory QC procedures for soil samples involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates.
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	No field duplicates were taken as this is not warranted at this early stage of exploration.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are appropriate
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were submitted to ALS Laboratories in Perth for analysis by the ionic leach method ME-MS23 with ICP-MS finish for 61 elements including: Ag, Au, Bi, Cd, Co, Cr, Cs, Cu, Li, Mo, Ni, Pb, Pd, Pt, Sn, Ta, W, Zn. Sample preparation involved weighing out of 50 g of the soil sample and adding a fixed aliquot of the digest.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	N/A
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Duplicate samples are not required at this early stage of exploration.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The results have not been verified by independent or alternative companies. This is not required at this stage of exploration.
	<i>The use of twinned holes.</i>	N/A
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary assay data has been entered into standard Excel templates for plotting in QGIS and IOGAS.
	<i>Discuss any adjustment to assay data.</i>	There are no adjustments to the assay data.
<b>Location of data points</b>	<i>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.</i>	Sample locations were located by handheld GPS.

Criteria	JORC Code explanation	Commentary
	<i>Specification of the grid system used.</i>	The grid system for ARKUN is MGA_GDA94, Zone 50.
	<i>Quality and adequacy of topographic control.</i>	N/A
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The samples were taken at 200 metre to 400 metre spacings along the traverses.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	N/A
	<i>Whether sample compositing has been applied.</i>	N/A
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Not relevant to soil results.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	Not relevant to soil results.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Samples were taken by Impact contractors and delivered by them directly to the laboratory.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	At this stage of exploration a review of the sampling techniques and data by an external party is not warranted.

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	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 Arkun-Beau Project currently comprises 8 exploration licences covering about 2,100 km <sup>2</sup> . The tenements are held 100% by Aurigen Pty Ltd a 100% owned subsidiary of Impact Minerals Limited. Impact has signed Land Access agreements in place with the various Native Title claimants that cover the area and with selected landowners.
	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.	The tenements are in good standing with no known impediments.
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	There has been no significant previous work at this project.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	Nickel-copper-PGE sulphide mineralisation associated with mafic to ultramafic intrusions and gold-copper in deformed and metamorphosed greenstone belts.

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <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> </ul>	N/A
<b>Data aggregation methods</b>	<p>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.</p>	N/A.
	<p>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.</p>	N/A
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	N/A
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	N/A
<b>Diagrams</b>	<p>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.</p>	Refer to Figures in body of text.
<b>Balanced reporting</b>	<p>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.</p>	All results reported are representative

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Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	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.	Assessment of other substantive exploration data is not yet complete however considered immaterial at this stage.
<b>Further work</b>	The nature and scale of planned further work (e.g. 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	Follow-up work programmes will be subject to interpretation of results which is ongoing.

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