



TAITON RESOURCES
LIMITED

ASX: T88

ANNOUNCEMENT

IP survey supports the Magmatic Hydrothermal Mineral System over 3.8km long and 2km wide. Potential Zones of Mineralisation Identified.

Highway Project, South Australia

ASX Release – 4th May 2023

- **Induced Polarisation (IP) Survey results supports proposed geological model of an intrusive source (potentially porphyry) driving a hydrothermal mineral system.**
- **Potential mineralised system of over 3.8km by 2km in dimension.**
- **Conductive zones identified coincident with historical anomalous molybdenum and base metal drill assays indicating potential for mineralisation.**
- **Drilling plans have been submitted to the South Australian Department of Energy and Mining.**
- **Trial Ultrafine soil sampling program over Merino to provide time and cost-effective prospect scale targeting commencing imminently.**

For personal use only

Taiton Resources Limited (“T88” or “the company”) is pleased to provide an update on its activities at the Highway Project in the Gawler Craton of South Australia.

Induced Polarisation (IP) Geophysical Survey

An IP survey was completed over the Merino prospect within the Highway project (Figure 1) which lies within the 100% owned EL 6658 and EL 6706. The survey area is approximately 64km northwest of Glendambo Roadhouse.

For personal use only

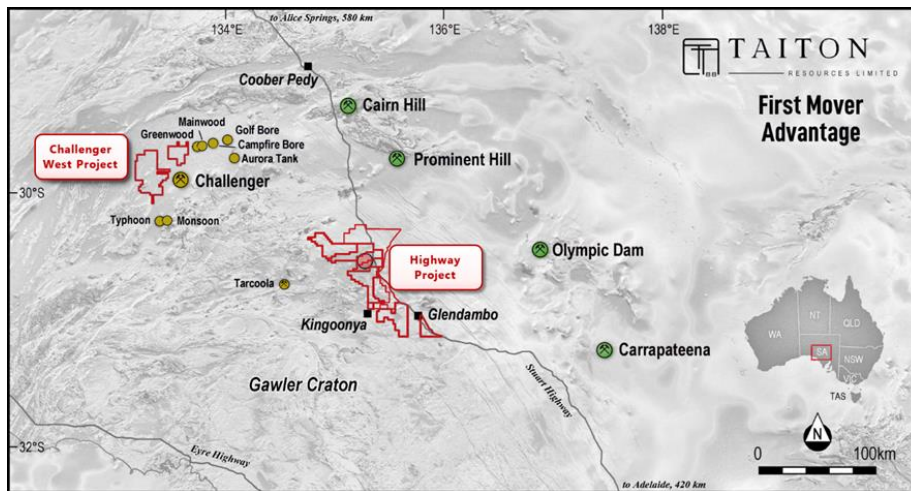


Figure 1: Location of the Highway Project, South Australia.

The survey was conducted by Geophysical Resources and Services Pty Ltd and the IP-resistivity survey, modelling and interpretation was carried out by Taiton’s geophysical consultants Mitre Geophysics Pty Ltd (Mitre). The collected data was modelled by Mitre to produce 2D and 3D chargeability and resistivity models.



TAITON RESOURCES
LIMITED

ASX: T88

ANNOUNCEMENT

Results from the survey has identified an intrusive body with associated alteration haloes for both phyllic (chargeable response) and potassic (radiometric response) alteration.

Incorporating the existing geochemical and geological datasets with acquired IP data the company has identified multiple targets for potential mineralisation (Figure 2).

Coincidental chargeability and resistivity elements of the completed IP survey lie underneath coincidental historical drilling in vectoring three clear priority targets.

For personal use only

For personal use only

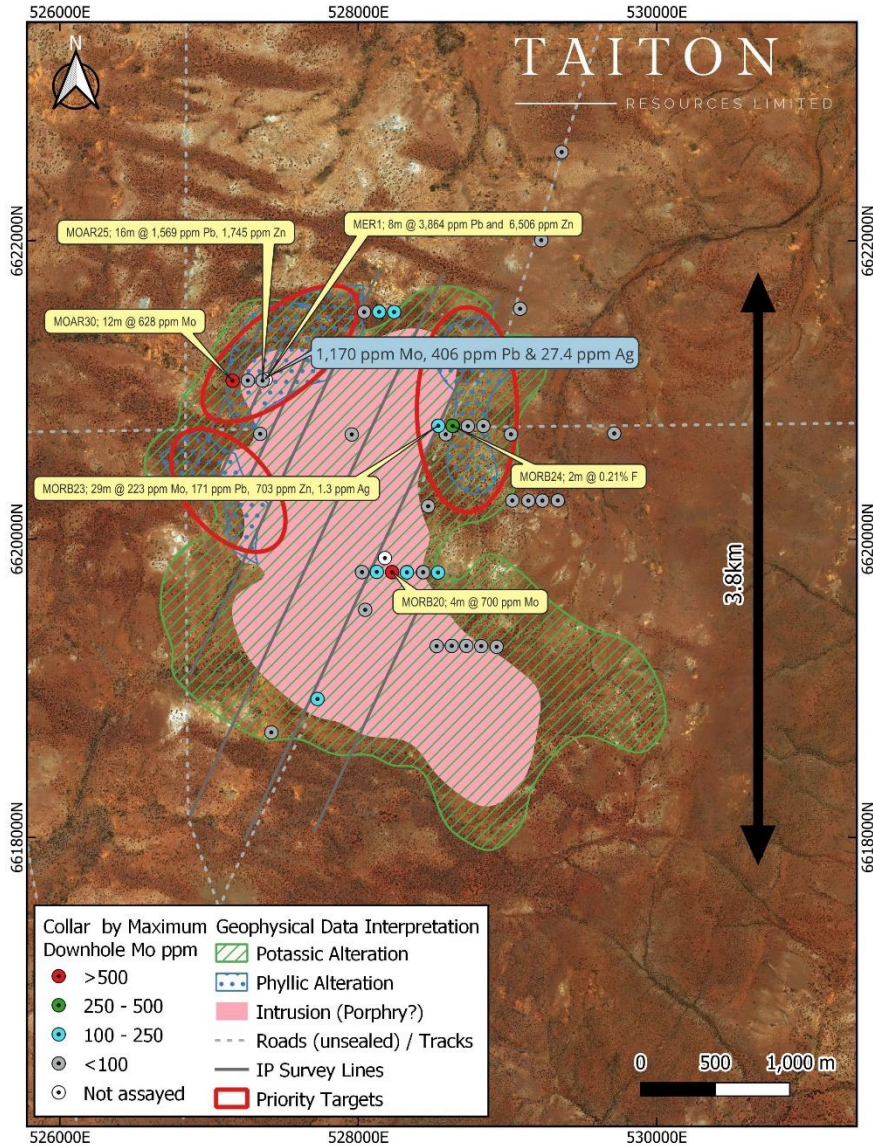


Figure 2: Priority target areas that have been interpreted from the completed IP Survey primarily using chargeability response. The priority targets are coincidental with historical drilling with anomalous molybdenum and pathfinder elements. The interpreted intrusive body is up to 3.8km long and over 1km wide.

The IP data may also have delineated zones of potentially phyllic alteration where Taiton field team have observed rock textures that show at least two phases of mineralisation (See Figure 3). The rock sample was discovered during previous mapping of veined and brecciated rocks in the vicinity of drillhole MER1, which was drilled in 1996 (MIMEX Technical Report 2729; source SARIG). Textures in the sub-cropping rocks are considered analogous to the stockwork of quartz veins produced around the upper levels of mineralised porphyry plutons. See previously announced on the 20th February 2023.



Figure 3: Offset and crosscutting quartz veins indicate development through multiple pulses and support field observations for a large hydrothermal-magmatic porphyry style event at Merino Prospect. (See Announcement 20th February 2023)



TAITON RESOURCES
LIMITED

ASX: T88

ANNOUNCEMENT

The company now has clarity on target mineralised zones. The historical drilling at MOAR 30 (12m at 620ppm Mo) lies within a clear zone of overlapping chargeable alteration halo and a resistive source (the Intrusion) indicating a high level of interest for our maiden drilling program.

The IP survey results reinforce Taiton's target model that the Merino prospect may contain substantial molybdenum mineralisation. This is supported by geological observations and results that resemble those of the Climax-type molybdenum porphyry system.

The IP survey detected a resistive body (modelled over $\sim 1,000 \Omega m$) that may represent the upper limits of an intrusion associated with the Hiltaba Suite granites. Previous field work has identified an upper crustal felsic intrusion (microgranite) partly exposed at surface. The resistive body has been modelled over $>2.5km$ and $>1km$ wide, with two dome-like features in the north and south.

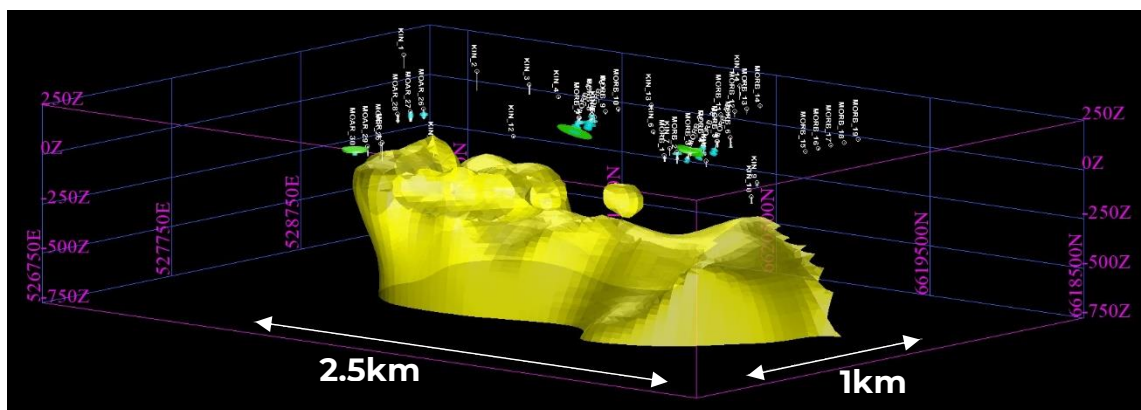


Figure 4: The potential Highway intrusive body (Yellow), modelled over 1,000 Ωm resistive shell interpreted to represent the upper expression of a Hiltaba granite intrusion. Historical drill holes coloured by Mo ppm, green > 500 ppm and cyan 100 – 500 ppm.



The body deepens from the north to the south, and an extensive 100m to 150m thick conductive layer covers the survey area. This layer may be due to weathering of a clay and sericite-rich cap on the underlying granite intrusion. See Figure 4 for details.

Modelling has also delineated higher chargeability zones (up to 13 mV/V) in the northern part of the survey area where the intrusion is shallowest (Figure 5). The 9 mV/V shell defines broader chargeability zones, interpreted as potential phyllic alteration and / or zones of disseminated pyrite. Pyrite alteration is not indicative of molybdenum mineralisation, but it can be used as a vector to it.

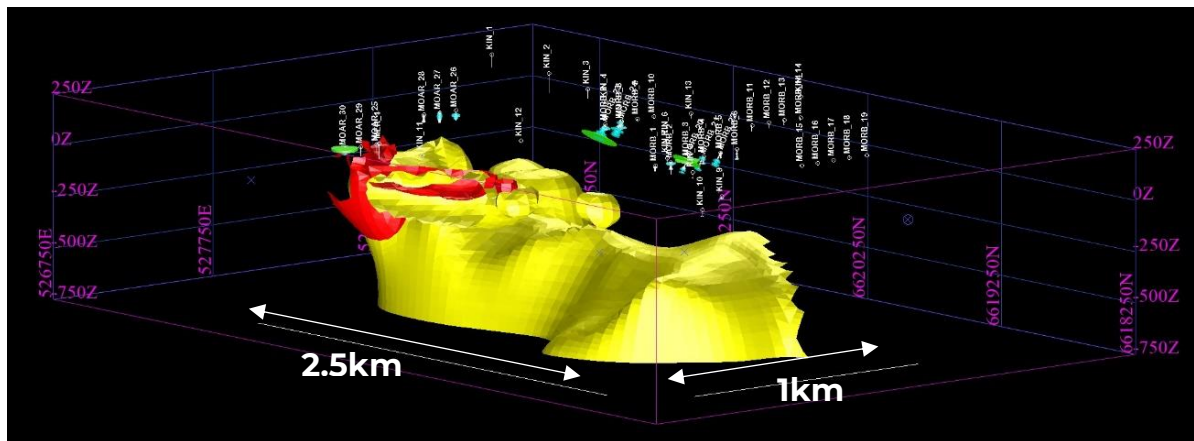


Figure 5: Interpreted Intrusion that is showing the areas of chargeability, Red (9 mV/V shell) layered with historical drilling coloured by Mo ppm, green > 500 ppm and cyan 100 – 500 ppm.

In the northwest of the survey area, two roughly east-west trending zones of high resistivity (Figure 6) and high chargeability (Figure 7) are present near the surface, extending up to 200m deep. These zones have resistivity over 1000 Ω m and chargeability up to 13 mV/V. They are interpreted as a structurally controlled silicified pyritic halo overprinting the interpreted porphyry complex and an earlier potassic alteration zone. Due to their potential, these targets are a high priority for follow-up drilling.



For personal use only

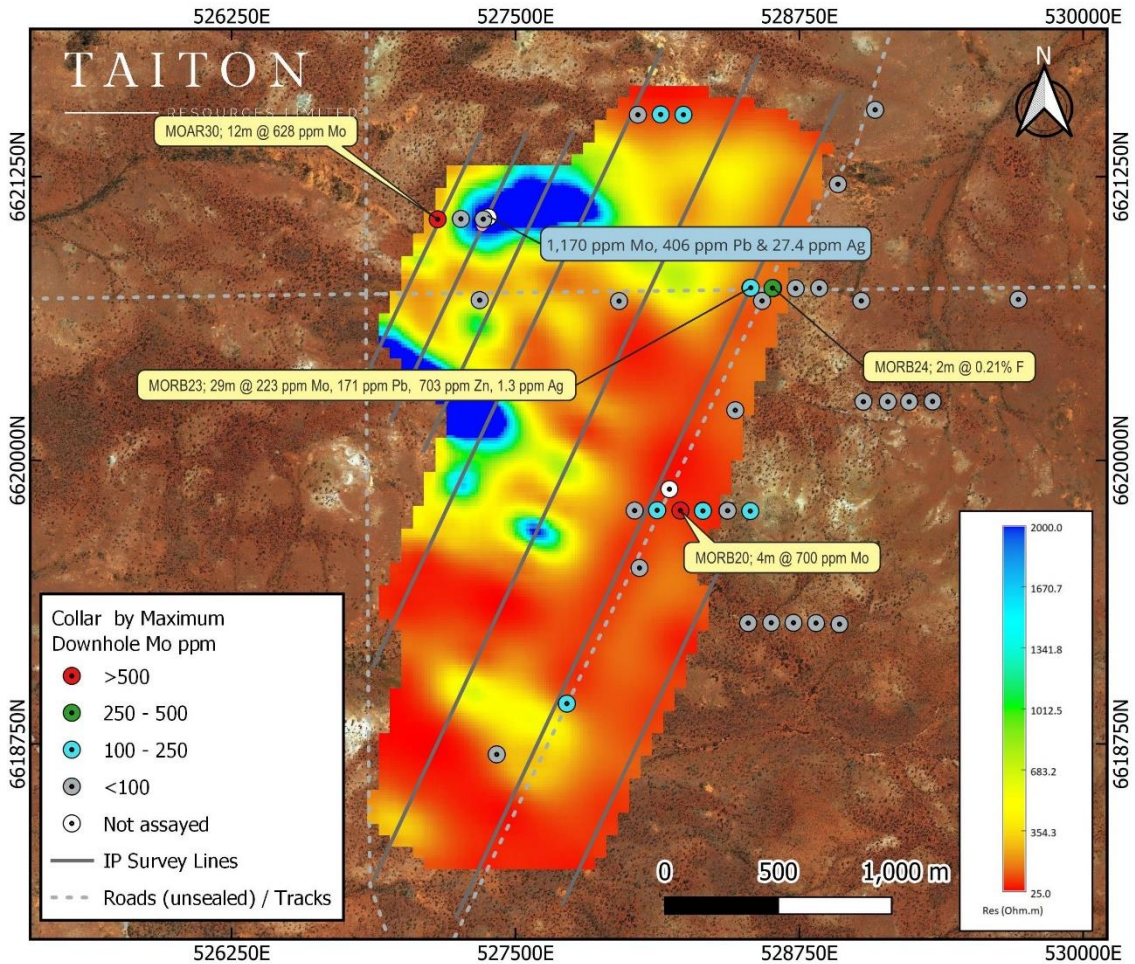


Figure 6. Plan section of the 162m slice of the resistivity model showing areas of high resistivity (blue) coincident with historical anomalous geochemical drill (yellow) and rock chip (blue) assays.

For personal use only

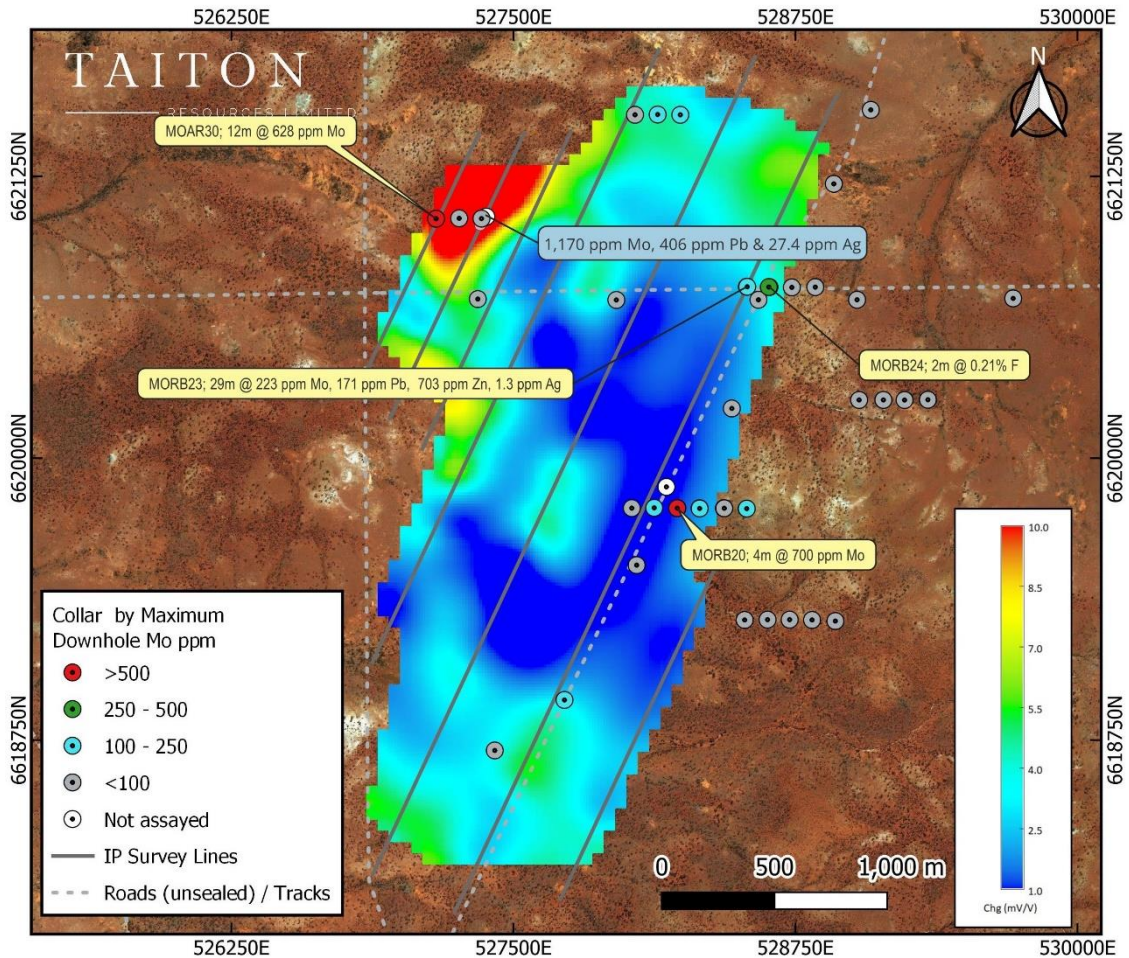


Figure 7. Plan section of the 162m slice of the chargeability model showing areas of high chargeability (yellow-red) coincident with historical anomalous geochemical drill (yellow) and rock chip (blue) assays.

Managing Director Noel Ong commented:

“This is a significant step in our exploration to vector our maiden drilling program at Merino. The IP survey in conjunction with historical drilling has given us clear sight on where we should have our drill traverse.”



TAITON RESOURCES
LIMITED

ASX: T88

ANNOUNCEMENT

Our narrative since from the start of our journey was to identify the presence of a Fertile Mineralised Hydrothermal System. We believe that at this stage we have proven this to be the case.

We are extremely excited to take on the next phase. The results have also given us the confidence to add layers to the process of discovery. We are implementing an Ultrafine soil survey to further define the area while we are awaiting drilling approvals from the South Australian Energy and Mines.

To continue our aggressive approach for discovery and showcasing the potential of the Highway project, we will be undergoing a project wide study to unlock other potentials. "

Classification of the Merino Molybdenum Porphyry System

Holistic interpretation and analyses of surface mapping, sampling, and historical drill hole data initially classifies the Merino Prospect as a Climax type molybdenum porphyry [1]. In active tectonic belts, molybdenum porphyries form in rift (Climax-type), arc, or continental collision settings [2].

The geological signatures at the Merino Prospect best conform to the rift, or Climax-type, classification for molybdenum porphyries [3]. These geological signatures include:

- anomalous molybdenum assay results from rock chip and shallow historical drilling,
- high silica (SiO₂) intrusion (observed microgranite and resistivity modelling),
- a large alteration halo of potassium (K) from radiometric imagery,



TAITON RESOURCES
LIMITED

ASX: T88

ANNOUNCEMENT

- low temperature intermediate argillic alteration indicated from base metal anomalism (sphalerite and galena) while chargeable response may indicate pyrite-clay.
- many deposits contain fluorite, elevated fluorite drill results and topaz and fluorite alteration noted in historical literature.
- green rocks (propylitic); textures of breccia and stockwork
- late-stage cross-cutting quartz veins enriched in silver (Ag); and
- trace element compositions and ratios in unweathered rock chip samples

This announcement has been approved for release by the Managing Director.

For further information please contact:

Noel Ong

Managing Director

E: noel.ong@taiton.com.au

P: +61 (3) 8648 6431

For personal use only



TAITON RESOURCES
LIMITED

ASX: T88

ANNOUNCEMENT

References:

1. Climax Molybdenum Deposit, USA
<https://www.climaxmolybdenum.com/operations/usa#co-climax>
<http://portergeo.com.au/database/mineinfo.asp?mineid=mn478>
2. Trace element geochemistry of molybdenite from the Shapinggou superlarge porphyry Mo deposit, China
<https://www.sciencedirect.com/science/article/abs/pii/S0169136816305613>
3. Ludington, S, Plumlee, G.S., Climax-Type Porphyry Molybdenum Deposits, USGS Open File Report 2009-1215
<https://pubs.usgs.gov/of/2009/1215/pdf/OF09-1215.pdf>

COMPETENT PERSON STATEMENT

The information in this report that relates to exploration results and geological data for the Highway Project is based on information generated and compiled by Shane Tomlinson, who is a member of the Australian Institute of Geoscientists (AIG).

Shane Tomlinson has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".



TAITON RESOURCES
LIMITED

ASX: T88

ANNOUNCEMENT

FORWARD LOOKING INFORMATION:

This announcement contains forward-looking statements. Wherever possible, words such as “intends”, “expects”, “scheduled”, “estimates”, “anticipates”, “believes”, and similar expressions or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved, have been used to identify these forward-looking statements.

Although the forward-looking statements contained in this announcement reflect management’s current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, Taiton cannot be certain that actual results will be consistent with these forward-looking statements. A number of factors could cause events and achievements to differ materially from the results expressed or implied in the forward-looking statements. These factors should be considered carefully and prospective investors should not place undue reliance on the forward-looking statements.

Forward-looking statements necessarily involve significant known and unknown risks, assumptions and uncertainties that may cause actual results, events, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements. Although Taiton has attempted to identify important risks and factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors and risks that cause actions, events or results not to be anticipated, estimated or intended, including those risk factors discussed in Taiton's public filings.

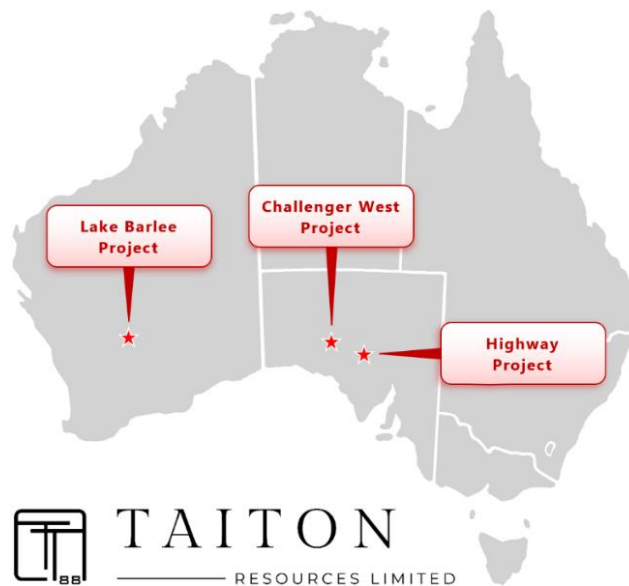
There can be no assurance that the forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, prospective investors should not place undue reliance on forward-looking statements. Any forward-looking statements are made as of the date of this announcement, and Taiton assumes no obligation to update or revise them to reflect new events or circumstances, unless otherwise required by law.

For personal use only

About Taiton Resources Limited

Taiton Resources Limited (ASX: T88) is an early-stage mineral exploration and development company with a portfolio of projects across South Australia and Western Australia, comprising the following:

- (a) **Highway Project** – total land holding of 2,980 sq km, located in South Australia,
- (b) **Lake Barlee Project** – total land holding of 668.7 sq km, located in Western Australia; and
- (c) **Challenger West Project** – total land holding of 997 sq km, located in South Australia.



Taiton Resources Limited (ASX: T88) project locations.

The company's initial focus is at Highway Project where magmatic-hydrothermal mineralisation has been identified at shallow depth and is interpreted to have formed at the same time as the world-class Olympic Dam deposit.

JORC Code, 2012 Edition – Table 1

Merino Prospect.

Dominion Mining and Resolute entered into a 50/50 JV which included historical tenement EL 1792 and the area of the Merino Prospect. The JV was operated by Dominion from 1993 – 1995. In 1995 the JV attained an additional partner in MIMEX, by way of a farm-in agreement. From the end of 1995, MIMEX became the operators. The operators of the programs that explored Merino Prospect with drilling in 3 phases between 1993 to 1996 are described herein as the JV Partners.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drill results being reported
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> No drill results being reported
Drill sample recovery	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No drill results being reported

Criteria	JORC Code explanation	Commentary
	<i>loss/gain of fine/coarse material.</i>	
Logging	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • No drill results being reported
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • No drill results being reported
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • No drill results being reported
Verification of sampling and assaying	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • No drill results being reported

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drill results being reported
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drill results being reported
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drill results being reported
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> No drill results being reported
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No drill results being reported

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 licence to operate in the area. 	<ul style="list-style-type: none"> The Merino Prospect is contained within tenements EL 6658 and EL6706, which are 100% owned by Taiton Resources Limited. The prospect overlaps the Native Title Determination area for the Antakirinja Matu-Yankunytjatjara People and the Department of Defence Woomera Prohibited Area Tenements EL 6658 and EL6706 are granted to Taiton Resources Limited. The Company also holds an Exploration Permit (Number: REX 058-22) to access the Woomera Permit Area. A Part 9B Native Title agreement has been signed with the Antakirinja Matu-Yankunytjatjara People.

Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> In 1991, the South Australian Department of Mines and Energy (SADEM) completed a reconnaissance bedrock drilling program in the Kingoonya area. The program identified anomalous Cu, Pb, Zn, Mo at Merino Prospect (Morris 1992). 1992 - 1995. Dominion and Resolute entered into the "Gawler Joint Venture" in 1993, which was operated by Dominion. Exploration at Merino Prospect included calcrete geochemical survey, Phase 1 drilling of 25 RAB drill holes (MOAR 1 - 24) and Phase 2 of 6 RAB holes (MOAR 26 - 30). In 1995 MIMEX farmed in to the Joint Venture and conducted further calcrete sampling, an IP survey and RAB drill hole (MER 1.)
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Petrology reports commissioned by the JV Partners to Pontifex and Associates in Adelaide and included in the Annual Reports describe samples with hydrothermal alteration and polymetallic associations with pyrite in quartz veins. Some host rocks are described as porphyritic microgranite. Zircon geochemical analyses by Taiton Resources Limited on a sample collected at 7m by SADEM at Merino Prospect finds evidence for fluid mixing and hydrothermal activity. The footprint of observations of hydrothermal activity as indicated by review of Annual Reports submitted by the JV Partners extends over more than 4 km². The extent of alteration has been confirmed by initial field mapping by Taiton Resources. The style of mineralisation is interpreted to be magmatic-hydrothermal with porphyry style characteristics. The tectonic setting for the magmatic-hydrothermal activity is interpreted to be back-arc intra-continental during the Mesoproterozoic Olympic Metallogenic Event.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from</i> 	No drill results being reported

Criteria	JORC Code explanation	Commentary
	<i>the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No drill results being reported
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> No drill results being reported
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No new assay data is being reported. Refer to figures in body for spatial context of Induced Polarisation (IP) survey and proposed target areas.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All relevant data and targets discussed is included on plan view maps and oblique images. All drill hole intersections significant rock chip results to explain the exploration concepts at Merino Prospect have been tabled in the JV Partner Annual Reports and ASX announcement 20th February 2023 and 9th March 2023.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The surveys for Merino prospect used local coordinate system with the following conversion to GDA2020/MGA53 coordinates: 20400E / 20000N = 527097.0 E / 6620042.0 N Line Orientation = 064.95 degrees. Data acquisition was completed by Geophysical Resources & Services (GRS) between February 17 and March 15, 2023. The Merino MIMDAS survey consisted of seven lines spaced 200m and 400m apart with length varying from 1200m up to 4000m. Equipment used included a

Criteria	JORC Code explanation	Commentary
		<p>Zonge GGT-30 Transmitter and the MIM Distributed Acquisition System (MIMDAS).</p> <ul style="list-style-type: none"> • Both Induced Polarisation (IP)-Resistivity and Magnetotelluric (MT) data were collected during the survey. • The survey used the standard MIMDAS Pole-Dipole (PDIP) configuration. All lines have 100m dipole receivers with the forward transmitter electrode stations also spaced at 100m, but offset 50m from the receiver electrodes (i.e., at the midpoint of each receiver dipole). • For each line, all receiver dipoles are laid out and active for all transmitter sites along the line so that readings are taken synchronously on both sides of the transmitter electrode. • The remote transmitter electrode was located a significant distance and perpendicular from the survey lines. Telluric cancellation was used where required.
<p><i>Further work</i></p>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Merino Prospect is prospective for polymetallic porphyry-style mineralisation. The potentially large scale of a porphyry alteration system warrants a broad footprint Induced Polarisation / Resistivity survey across a wide area. The Company continues to undertake surface sampling and multi-element assaying for porphyry system indicators and vectors. • The results of the geophysics and surface geochemical programs will guide plans for future targeting and drilling.