



TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

# **Molybdenum and Silver Mineralisation Confirmed at Merino Porphyry Prospect, Highway Project, South Australia**

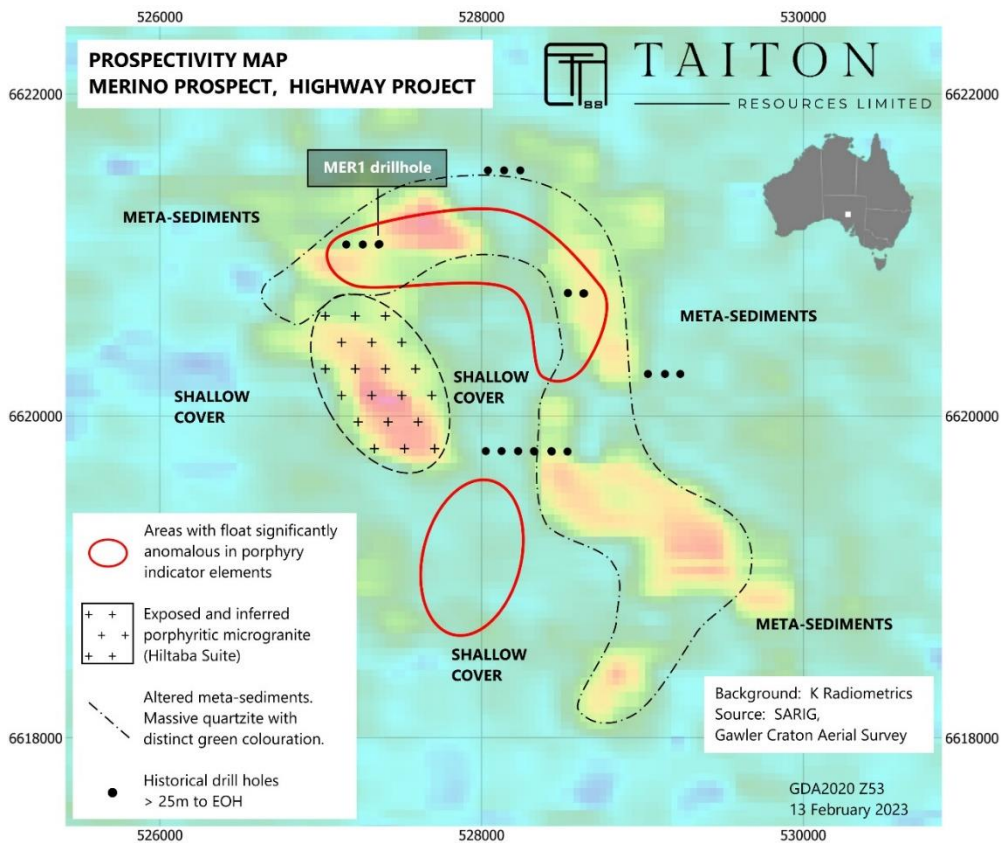
**ASX Release – 9th March 2023**

- **Assays including 1300 ppm molybdenum and 27 ppm silver in porphyry-style brecciated, veined, surface rock chips.**
- **Alteration and mineralisation signatures suggest Merino Prospect has the hallmarks of a Climax-type molybdenite porphyry.**
- **Induced Polarisation and Magnetotelluric surveys on track.**
- **Molybdenum continues to outperform all other metal commodities in 2023.**
- **Airborne magnetic survey has commenced at Lake Barlee, WA.**

**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, and the Lake Barlee Project in Western Australia.

**Surface Sample Assays**

Despite a weathered terrain, field mapping (Figure 1 and Figure 2) discovered previously undocumented rock samples which preserve primary porphyry textures near historical drillhole MER1 (MIMEX Technical Report 2729; source SARIG).



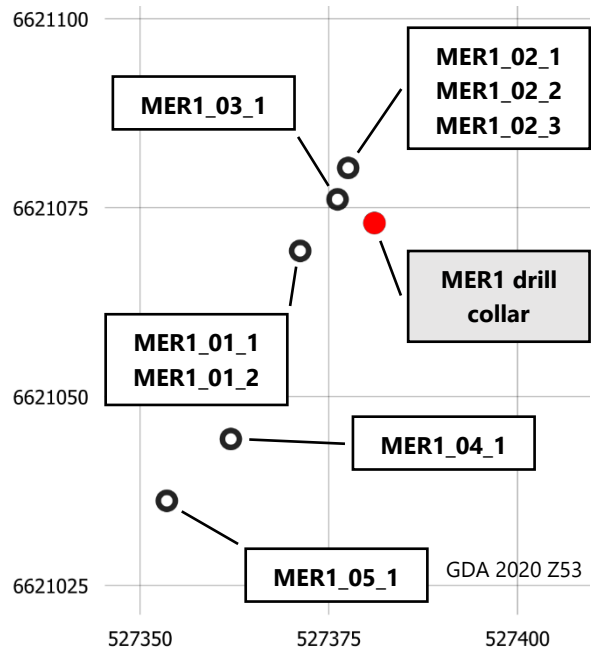
**Figure 1: Prospectivity map showing anomalous areas in red for porphyry indicator elements including molybdenum and silver at Merino Prospect and their relationship to a partly exposed microgranite and altered quartzite wall rocks.**

Cross-cutting quartz veins (Figure 3) suggest development by multiple magmatic hydrothermal pulses and are considered analogous to the stockwork of quartz veins produced around the upper levels of mineralised porphyry plutons.

Intense silicification of subcrop, a localised variation in hill slope gradient and high intensity rainfall events during 2022 are potential factors combining to expose target style rocks at surface.

Rocks were dug with a shovel from 5 locations along a 50m line. Best results include 1300 ppm Mo from MER1\_01\_2, and 1170 ppm Mo, 27.4 ppm Ag from MER1\_02\_2.

Table 1 outlines a summary of assays from the samples collected.



**Figure 2: Location of rock subcrop and float samples (also refer to Appendix 1).**

**Table 1. Summary of Surface Sample Assay Results (ppm).**

Sample Name	Ag	Cu	Mo	Pb	Zn
MER1_01_1	1.4	379	324	346	42
MER1_01_2	4.8	122	<b>1300</b>	442	22
MER1_02_1	6.8	134	634	172	18
MER1_02_2	<b>27.4</b>	31	<b>1170</b>	406	16
MER1_02_3	4.6	31	<b>1230</b>	359	10
MER1_03_1	<0.2	37	8	40	38
MER1_04_1	0.4	104	48	112	42
MER1_05_1	1.2	23	52	77	46



**Figure 3:**  
Rock chip sample from location MERI\_02. Early vein sets (e.g. blue dash) and altered brecciated groundmass are enriched in molybdenum. Later vein sets (e.g. red dash) are enriched in molybdenum and silver.

### 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. These geological signatures include:

- high silica ( $\text{SiO}_2$ ) in the porphyry intrusion;
- a large alteration halo of potassium (K) and
- green rocks (propylitic); textures of breccia and stockwork as depicted in Figure 3;

- interpretation for a molybdenum core, halo of zinc (Zn), lead (Pb) and iron (Fe) sulphides, late stage cross-cutting quartz veins enriched in silver (Ag); and
- trace element compositions and ratios in unweathered rock chip samples.

The Climax molybdenum deposit is the world's archetypal high-silica alkali rhyolite-granite molybdenum porphyry deposit. It is located in Colorado, USA and operated by Freeport McMoran. It has produced nearly 1 million tons of molybdenum over 100 years.



**Figure 4: Climax Molybdenum Mine - climaxmoly\_brochure\_rgb\_2021.pdf**



Climax-type deposits are typically hundreds of millions of tons of ore, with  $\text{MoS}_2$  contents averaging less than 1% of the rock by weight. The late hydrothermal processes related to magmatic intrusions are responsible for porphyry-style alteration and precipitation of molybdenum. Mineralisation occurs as a diffuse zone of molybdenite in fractures and stockworks in both intrusive cores and surrounding meta-sedimentary wall rocks.

### **Summary History of the Climax Molybdenum Mine [3]**

The world-class Climax porphyry molybdenum deposit is the type example of Climax-type porphyry molybdenum deposits [6]. It is the largest molybdenum deposit in the world (total production and reserves) and has produced more total pounds of molybdenum than any other deposit.

The deposit was first discovered in 1879 by Charles Senter but the main mineral commodity, molybdenite, was not identified until 1895 [4].

In 1912 molybdenum was recognized as a hardener for steel and there was minor production from Bartlett Mountain from 1915 to 1917. During this time the principal separation and concentration process for molybdenite by sulfide flotation was developed.

The first real production was in 1918 and the Climax mine was in almost continuous production from 1924 until 1991. Early production averaged about 0.54 percent Mo at a rate of less than 0.5 million tons (Mt) per year [4]. By 1957, 100 Mt of ore had been processed and by 1966, 200 Mt of ore had been processed.



TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

In 1968, the mill was processing more than 43,000 t per day grading just under 0.24 percent Mo. At that time the remaining reserves at Climax were in excess of 400 Mt (Wallace et al., 1968). Since 1918, approximately 470 Mt of ore with an average grade of 0.22 percent Mo have been mined by underground and open pit methods.

Current reserves are 156 Mt grading 0.19 percent Mo and 87 Mt of mineralised material grading 0.25 percent Mo [5]. Of the three orebodies, the Upper orebody is the largest and has the highest molybdenite grade, and it exhibits the most intense hydrothermal alteration [4].

### **Induced Polarisation and Magnetotelluric geophysical surveys to define drill targets at Merino Prospect.**

The induced polarisation and magnetotelluric field survey by Geophysical Resources & Services is currently in progress. Analyses and modelling of data, and interpretation of results with regard to Climax-style porphyry mineralisation will provide targets for drill hole locations. The company has contracted Mitre Geophysics to undertake modelling and interpretation.

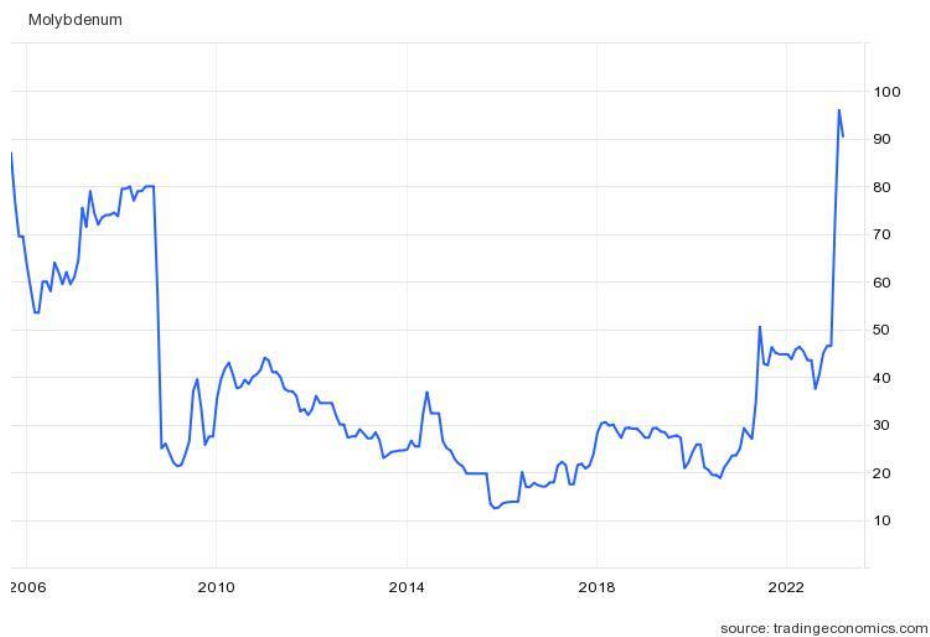


TAITON RESOURCES  
LIMITED

ANNOUNCEMENT

ASX: T88

## Molybdenum Price



**Figure 5 - Molybdenum pricing as of 8<sup>th</sup> March 2023**

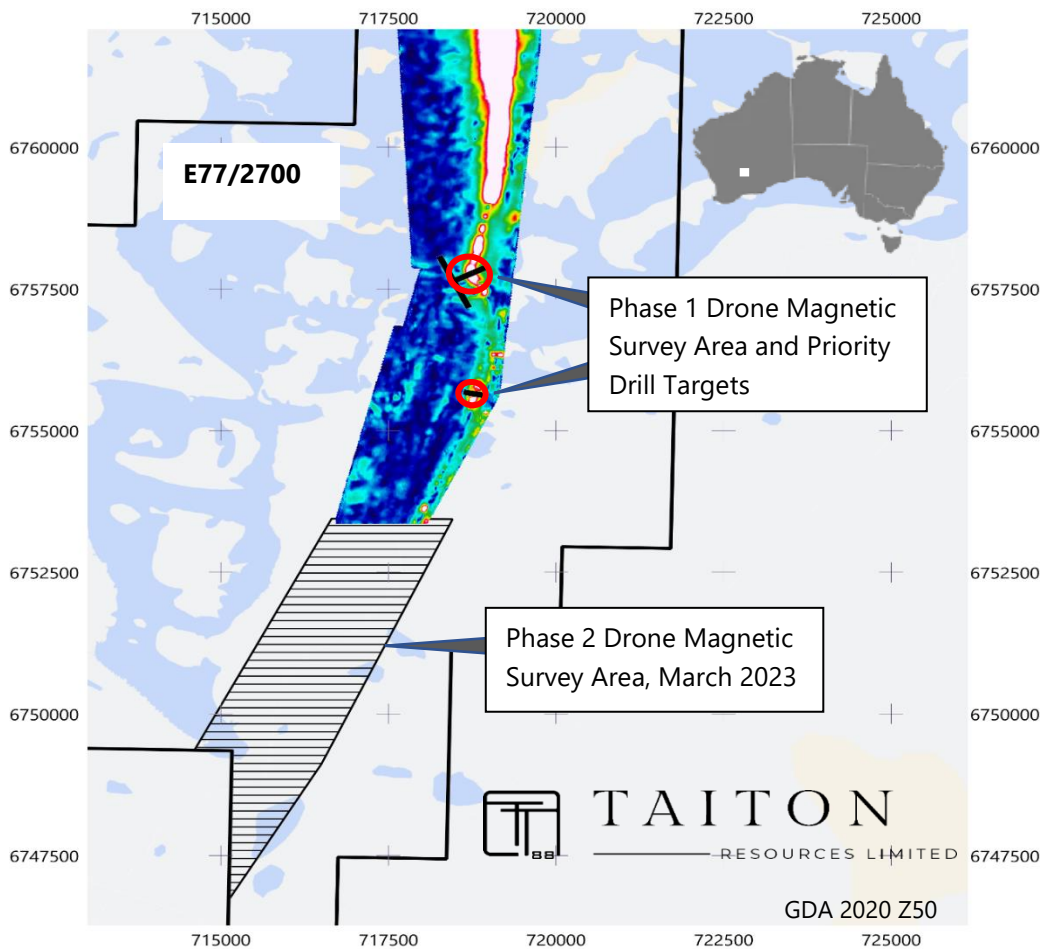
Molybdenum is currently trading at USD 90.50 per kg, in comparison to USD 9.00 per kg for copper. It is outperforming all other metal commodities in 2023. Analysts expect that the molybdenum supply shortage will extend into 2025, and price is likely to trend even higher.

(<https://tradingeconomics.com/commodities>,  
<https://news.metal.com/newscontent/102077910/molybdenum-prices-hit-a-17-year-high-with-persistent-tight-supply-/>)



**Airborne Magnetic Survey commenced at Lake Barlee, WA.**

AirGeoX has commenced an aeromagnetic survey at the Lake Barlee Project in Western Australia (Figure 6). In 2022 AirGeoX conducted a drone (UAV) magnetic survey over the company’s Lake Barlee greenstone belt.



**Figure 6: Lake Barlee Phase 2 Drone Magnetic Survey Area for delineation of gold in greenstone drill targets.**



TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

The technology provided cost-effective, high-resolution and low-noise data that led to the delineation of magnetic anomalies and detailed structural interpretation at two high-priority gold in greenstone target areas.

Following the success of the first survey, AirGeoX has been contracted to extend the survey along the strike extent of the greenstone belt to the tenement boundary. Targets will be refined and prioritised for drilling in consultation with Mitre Geophysics.

Managing Director Noel Ong commented:

***“Today’s announcement is additional evidence that Taiton is unravelling a New Mineral System in our Highway Project in South Australia. Field sampling is now supporting our believe that we have a hydrothermal magmatic porphyritic source of mineralisation.***

***Following our last announcement where we showcased the hydrothermal textures in rock chips, we are now confirming the fertile nature of the system with the anomalous Molybdenum assays.***

***The nature of the Merino prospect is now clearly an overlooked province with clear sight of mineralisation. We have historical drilling showing strong molybdenum mineralisation and now, we are clearly seeing a distribution in outcropping samples.***

***In summary, our work is showing that the Merino Prospect and potentially the whole Highway Project, has been incorrectly classified in terms of age, mineralisation fertility and geology.***



TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

***Our exploration team is now preparing for our maiden drilling program.”***

**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](mailto:noel.ong@taiton.com.au)**

**P: +61 (3) 8648 6431**

### **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 super-large porphyry Mo deposit, China  
<https://www.sciencedirect.com/science/article/abs/pii/S0169136816305613>
3. Shannon, James R. and Nelson, Eric P., 2006, Climax Porphyry Molybdenum Deposit, Colorado: A Summary. Society of Economic Geologists guidebook Series, Volume 38. Pp21 – 37.
4. Wallace, S.R., Muncaster, N.K., Jonson, D.C., MacKenzie, W.B., Bookstrom, A.A. and Surface, V.E., 1968, Multiple intrusion and mineralization at Climax, Colorado, in Ridge, J.D., ed., Ore deposits of the United States, 1933-1967 (Graton-Sales Volume): New York, American Institute of Mining, Metallurgical, and Petroleum Engineers, p. 605– 640.



TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

5. Phelps Dodge Corporation 2004 Annual Report, Phoenix, Arizona.
6. White, W.H., Bookstrom, A.A., Kamilli, R.J., Ganster,, M.W., Smith, R.P., Ranta, D.E. and Steininger, R.C., 1981, Character and origin of Climax-type molybdenum deposits: Economic Geology 75th Anniversary Volume, p. 270–316.

### 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 David McSkimming, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM).

David McSkimming 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”.

David McSkimming is the Director of OreShoot Geosciences under contract to Taiton Resources and is an indirect shareholder through the entity of McSkimming Geophysics. David McSkimming has consented to the inclusion of this information in the form and context in which it appears in this report.



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.

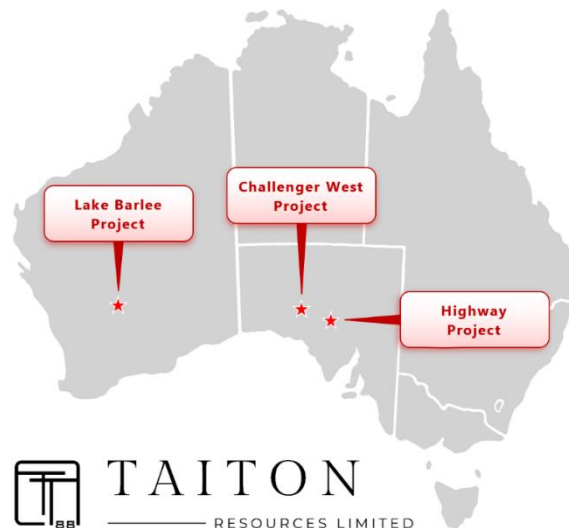
Forward-looking statements necessarily involve significant known and unknown risks, assumptions and uncertainties that may cause actual results, events, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements. Although Taiton has attempted to 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.

## 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.



## Appendix 1

### Sample Locations

Sample Name	Easting	Northing	Grid	Zone
MER1_01_1	527371	6621069	GDA 2020	53
MER1_01_2	527371	6621069	GDA 2020	53
MER1_02_1	527378	6621080	GDA 2020	53
MER1_02_2	527378	6621080	GDA 2020	53
MER1_02_3	527378	6621080	GDA 2020	53
MER1_03_1	527376	6621076	GDA 2020	53
MER1_04_1	527362	6621044	GDA 2020	53
MER1_05_1	527354	6621036	GDA 2020	53

## Appendix 2

### Summary of Historical JV Partner Drilling at Merino Prospect

Year	JV Partner Operator	Drill hole names	Drill type	No. Holes Drilled	Total Drilled (m)
1993	Dominion	MORB 1 -24	RAB	25	768
1995	Dominion	MOAR 25 - 30	RAB	6	259
1996	MIMEX	MER 1	RC	1	91

### Drillholes

Hole Name	Easting GDA 94	Northing GDA 94	Elevation (metres)	Azimuth	Dip	EOH (metres)
MORB 1	528025	6619779	159.5	0	-90	29
MORB 2	528125	6619779	161.0	0	-90	34
MORB 3	528227	6619779	164.0	0	-90	33
MORB 4	528326	6619779	167.2	0	-90	36
MORB 5	528435	6619779	174.1	0	-90	29
MORB 6	528535	6619779	182.5	0	-90	49



TAITON RESOURCES  
LIMITED

## ANNOUNCEMENT

ASX: T88

Hole Name	Easting GDA 94	Northing GDA 94	Elevation (metres)	Azimuth	Dip	EOH (metres)
MORB 7	528537	6620758	168.1	0	-90	26
MORB 8	528633	6620758	172.1	0	-90	34
MORB 9	528735	6620758	173.4	0	-90	12
MORB 10	528839	6620758	172.6	0	-90	12
MORB 11	529033	6620258	174.3	0	-90	30
MORB 12	529141	6620258	176.0	0	-90	28
MORB 13	529234	6620258	176.7	0	-90	25
MORB 14	529338	6620258	176.7	0	-90	14
MORB 15	528526	6619284	165.7	0	-90	4
MORB 16	528627	6619284	168.2	0	-90	4
MORB 17	528725	6619284	170.2	0	-90	2
MORB 18	528824	6619284	173.0	0	-90	3
MORB 19	528928	6619278	173.5	0	-90	2
MORB 20	528227	6619778	164.0	270	-60	70
MORB 21	528326	6619778	167.2	270	-60	69
MORB 22	528434	6619778	174.1	270	-60	70
MORB 23	528535	6620763	168.1	270	-60	75
MORB 24	528636	6620763	172.1	270	-60	78
MOAR 25	527359	6621063	162.7	0	-90	40
MOAR 26	528240	6621523	166.8	0	-90	49
MOAR 27	528140	6621523	166.7	0	-90	49
MOAR 28	528040	6621523	167.2	0	-90	41
MOAR 29	527260	6621063	163.2	0	-90	49
MOAR 30	527158	6621063	164.8	0	-90	31
MER 1	527363	6621065	162.7	0	-90	91



## 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"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Surface rocks collected by Taiton Resources for the purpose of assay and described in this report were recovered by shallow digging along a 50m line near historical JV Partner drill hole MER1. Samples from surface rocks were dispatched to Bureau Veritas in Adelaide for lithium borate fusion and multi-element ICP-MS assay.</li> <li>• The drilling samples from Merino Prospect described in the Annual Reports submitted by the JV partners to the South Australian Department of Primary Industries and Resources, consisted of chips from RAB drilling conducted over 3 phases between 1993 and 1996.</li> <li>• There are no specific records on sample representivity for the RAB drill programs at Merino Prospect in the JV Partner Annual Reports. All the samples from all of the programs have since been discarded or lost by the JV Partners.</li> <li>• The JV Partner Annual Reports indicate that Analabs in Adelaide assayed all the samples for all the phases of drilling at Merino Prospect. Assayed intervals reported during the phase 1 1993 drilling are over 4 metre sample composites; for the phase 2 1995 drilling the assay reporting intervals are over 6 metre sample composites; for the phase 3 1996 drilling the assay reporting intervals are over 2 metres sample composites.</li> <li>• Gold determination was by Fire Assay with AAS finish on a 30g charge by aqua regia digest with carbon rod finish (Analabs method GG334). All other metal determination was by three acid digest AAS (Analabs method GA115).</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling by JV Partners at Merino Prospect consisted of: Phase 1 - 25 rotary air blast holes drilled in 1993, Phase 2 - 6 rotary air blast holes drilled in 1995, and Phase 3 - 1 rotary air blast hole drilled in 1996. Core was not oriented</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• The JV Partner Annual Reports do not include quantification of sample recoveries.</li> <li>• The JV Partner Annual Reports do not discuss measures to maximise sample recoveries.</li> <li>• There is insufficient information in the JV Partner Annual Reports to determine if a relationship exists between sample recovery and grade, or, if there is any bias in grade related to recovered or lost grain sizes.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No geotechnical logging was possible from RAB cuttings. The geological logs in the JV Partner Annual Reports are not sufficient for Mineral Resource Estimation, mining studies and metallurgical studies.</li> <li>• Logged attributes in the JV Partner Annual Reports are descriptive and include lithology, weathering (oxidation), mineralisation, alteration, veining, and structure.</li> <li>• The total length of drilling over 3 Phases by the JV Partners was 1118 metres. The drilled intersections were logged in their entirety from surface to EOH.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material</i></li> </ul>	<ul style="list-style-type: none"> <li>• The JV Partner Annual Reports do not report issues of sample collection or preparation.</li> <li>• The JV Partner Annual Reports do not report issues regarding quality control.</li> <li>• There is insufficient detail in the JV Partner Annual Reports to assess the sampling quality control procedures.</li> <li>• The JV Partner Annual Reports lack details on measures taken to ensure that the sampling is representative.</li> <li>• There is insufficient evidence in the JV Partner Annual Reports to assess whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p>Quality of assay data and laboratory tests</p>	<p><i>being sampled.</i></p> <ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><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></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The rock chip samples announced in this report have been digested and refluxed with a mixture of Acids, including: Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. This extended digest approaches a total digest for many elements however, some refractory minerals are not completely attacked. Li,Ni,S,Sc,V have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry. Ag,As,Be,Bi,Cd,Ce,Co,Cs,Cu,Dy,Er,Eu,Ga,Gd,Hf,Ho,In,La,Lu,Nb,Nd,Pb,Pr,Sb,Se,Sm,Sn,Sr,Ta,Tb,Te,Th,Ti,Tm,U,W,Yb,Zn have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry. An aliquot of sample is accurately weighed and fused with lithium metaborate at high temperature in a Pt crucible. The fused glass is then digested in nitric acid. This process provides complete dissolution of most minerals including silicates. Volatile elements are lost at the high fusion temperatures. (MC-ICP-04) Al,Ca,Cr,Fe,K,Mg,Mn,Na,P,Si,Ti have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry. Ba,Mo,Rb,Re,Y,Zr have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry. Au have been determined by Atomic Absorbption Spectrometry.</li> <li>The JV Partner Annual Reports indicate all samples from the JV drilling at Merino Prospect were analysed at Analabs in Adelaide. Analabs assayed for gold using GG334 method and for all other metals the GA115 method was utilised.</li> <li>Drill logs in the JV Partner Annual Reports indicate magnetic susceptibility measurements were made for the recovered chips over the composite sample intervals sent for assay. There is no information regarding the instrument make and model or any other parameters used in determining magnetic susceptibility</li> <li>The JV Partner Annual Reports do not describe standards, blanks or laboratory checks for samples collected during the Merino Prospect drilling program.</li> </ul>
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>The JV Partner Annual Reports reveal MIMEX staff relogged drill holes previously logged by Dominion staff. Consequently, quartzite host lithologies were revised as granites.</li> <li>MORB 20 was drilled with a -60 degree dip from the same collar location as MORB 3 (vertical). MORB 21 was drilled with a -60 degree dip from the same collar location as MORB 4 (vertical).</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>MORB 22 was drilled with a -60 degree dip from the same collar location as MORB 5 (vertical).  MORB 23 was drilled with a -60 degree dip from the same collar location as MORB 7 (vertical).  MORB 24 was drilled with a -60 degree dip from the same collar location as MORB 8 (vertical).  MER 1 (91 metres to EOH) twinned MORB25 (40 metres to EOH).</p> <ul style="list-style-type: none"> <li>The JV Partner Annual Reports do not provide details on protocols for recording, handling and storing data. Scanned Annual Reports indicate that drill logs were drafted by hand in the field. Assays were stored electronically.</li> <li>No adjustments to assay data have been described in the JV Partner Annual Reports.</li> </ul>
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <li><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></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>All rock chip sample locations in this report were surveyed using a handheld GPS. Datum used is GDA2020 Zone 53.</li> <li>The JV Partners at Merino Prospect surveyed 5 drill fences for 32 drill holes traversing EW on northings of the MGA, Z53, AGD66. Drill hole collars along the fences were positioned 100m apart. The holes were not surveyed downhole. The collars have not been subsequently resurveyed to assess accuracy.</li> <li>The original projection used was AGD66. The coordinates have been repositioned to GDA 2020 grid for the collar table in this report (refer section to the collar table).</li> <li>Geoscience Australia and GSSA commissioned the Gawler Craton Aerial Survey which included LIDAR remote sensing. The survey flew at 200m line spacings at 60m altitude. In 2019 the GCAS product release included LIDAR raster data in a 40m grid in .ers format. This data has been used by the Company for topographic control of the historical drill hole collars at Merino Prospect.</li> </ul>
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><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></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill spacing averages 100 m spacing to depths of between 2 and 91m. Average depth for the 31 holes drilled over 3 phases is 31 metres.</li> <li>Drill hole spacing, density, orientation and directions of drilling are sufficient to provide geological interpretation</li> <li>Sample compositing has been applied at 4 metres during Phase 1 drilling, 6 metres during Phase 2 drilling and 2 metres during Phase 3 drilling.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• The JV Partner Annual Reports provide insufficient information to conclude whether the orientation of sampling achieves unbiased sampling of possible structures.</li> <li>• N/A.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The rock chip samples in this report were collected, processed and dispatched by the consulting Geologist before being delivered to Bureau Veritas, Adelaide.</li> <li>• The JV Partner Annual Reports do not provide information on sample security.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The JV Partner Annual Reports do not describe audits or reviews of sampling techniques and data.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> <li>• 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.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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).</li> <li>• 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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>drilling of 25 RAB drill holes (MOAR 1 - 24) and Phase 2 of 6 RAB holes (MOAR 26 - 30).</p> <ul style="list-style-type: none"> <li>In 1995 MIMEX farmed in to the Joint Venture and conducted further calcrete sampling, an IP survey and RAB drill hole (MER 1.)</li> </ul>
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>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 km<sup>2</sup>. 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 Climax-type molybdenum 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.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li><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"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><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 the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>A summary of the drill hole information sufficient to the understanding of the exploration results are provided in Appendix 2.</li> <li>N/A</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li><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></li> <li><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</i></li> </ul>	<ul style="list-style-type: none"> <li>No statistical weighting techniques, or grade truncations, have been used for the reporting of the Exploration Results in the JV Partner Annual Reports.</li> <li>For drillholes MORB 1 – 24, assayed samples were 4 metre composites; for drillholes MOAR 25 – 30, assay samples were 6 metre composites; for drill hole MER 1, assay samples were 2 metre</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p>composites.</p> <ul style="list-style-type: none"> <li>No metal equivalents have been reported in the JV Partner Annual Reports.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>The geometry of mineralisation is not reported in the JV Partner Annual Reports.</li> <li>All reported intercepts at Merino Prospect described in the JV Partner Annual Reports are down hole lengths, true widths are not known.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>No new assay data is being reported.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>All drill hole intersections significant to explain the exploration concepts at Merino Prospect have been tabled in the JV Partner Annual Reports.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>There is no other substantive exploration data in the JV Partner Annual Reports omitted from this commentary. There is no evidence for potential deleterious or contaminating substances at Merino Prospect.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Merino Prospect is prospective for polymetallic porphyry-style mineralisation. The potentially large scale of a porphyry alteration system is subject to a broad footprint Induced Polarisation / Resistivity / Magnetotelluric Survey. The Company continues to undertake surface sampling and multi-element assaying for porphyry system indicators and vectors.</li> <li>The results of the geophysics and surface geochemical programs will guide plans for future targeting and drilling.</li> </ul>