

ACN 009 253 187

ASX ANNOUNCEMENT

1st May 2024

Parkinson Dam Prospect –Geophysical Processing and Interpretation

Archimedes Consulting ("Archimedes"), an Adelaide based geophysical company, has been engaged by Tasman Resources Ltd (Tasman) (ASX:TAS) to conduct special processing and interpretation of high-resolution, aeromagnetic survey data over Tasman's EL6495 tenement located in South Australia and integrate it with the data from the recently completed IP survey (see Tasman's ASX Announcement dated 16 April 2024) and help identify possible feeder zones to assist in selecting drill targets for a drilling programme planned for later this year.

The objects of the engagement are to try to identify:

• Porphyry stock at depth which may contain copper/ gold (Cu-Au) mineralisation;

• A possible magmatic intrusion at greater depth from which the porphyry and whole epithermal system originated;

- Faults associated with the epithermal systems and 3D images of the fault faces;
- Magnetic Lineaments indicating the structural orientation at different depths; and
- Alteration zones of the epithermal system that may contain Au mineralised ore bodies.

To achieve these objectives, Archimedes will apply its proprietary technology, including its unique ACM method, which allows it to image rock magnetisation properties in 3D from the surface to significant depths.

The mineralisation in question is related to the major Gawler Range Volcanics – Hiltaba event (1590Ma mineralisation), responsible for regional-scale metallogeny. The mineralised system identified extends over at least 3 km², and in one area, high grade gold-silver mineralisation and very thick, but low-grade lead-zinc has been intersected in drilling. The mineralisation is considered typical for epithermal deposits and is likely to be part of the extensive Mesoproterozoic metallogenic event on the Gawler Craton, which was responsible for Olympic Dam, Prominent Hill, Carrapateena, and Menninnie Dam as well as a number of other significant mineral occurrences in South Australia.

The drilling to date has identified multiple occurrences of possible epithermal gold-silver mineralisation, located close to the surface within the volcanic rocks, and which is considered likely to be above a porphyry stock, and also associated with the fault system.

Epithermal deposits typically form close to the surface of the crust, i.e., within a thousand metres. There is often a close association of epithermal deposits with nearby porphyry deposits. In porphyry deposits, the metals condense out of solution as the escaping fluids cool. Eventually, those fluids reach the surface as hot springs. Epithermal deposits are both genetically and spatially associated with porphyries.



Hydrothermal fluids that form epithermal gold-silver deposits and their alteration haloes strongly affect the physical properties of the host rock. Depending on alteration intensity, mineralogy and rock types, the rock magnetisation decreases, whereas bulk density, electrical resistivity, and potassium concentration can increase or decrease.

This can be resolved by application of a high-resolution airborne survey with a low flight altitude (60m) and close flight line spacing (50m). This project area is covered by such a high-resolution aeromagnetic survey which is likely to detect these epithermal targets.

The porphyry stock, which is likely to be located at depth will have elevated density and magnetisation. The low-sulfidation and intermediate-sulfidation geothermal zone has depleted magnetisation and is nonmagnetic or has very low magnetic susceptibilities, but it has a potassium enriched centre. A highsulfidation magmatic hydrothermal system with an ore zone typically has a low resistivity and is also nonmagnetic or has a very low magnetic susceptibility.

The results of the new survey, combined with the results from the recently completed IP survey (see Figures 1 -5 below), will identify the drill targets for drill testing, planned for later this year.



Figure 1: Outline of chargeability anomaly (blue dashes) at 300m depth over airborne magnetic image. IP survey area shown in red (previous drill holes shown as red dots. Grid MGA2020 Zone 53



The IP survey delineated a dominantly north-easterly trending chargeability anomaly also associated with high resistivity, located in the north-western portion of the survey area. It was first detected at a depth of around 100m and extends to the depth limit of the IP survey.

At this stage the significance of this anomaly from an exploration perspective is uncertain, however it is conceivable that it could represent a deeper feeder zone to the known shallower, epithermal mineralisation already discovered. This anomaly has not been tested by the previous drilling as the few holes drilled in this area did not exceed 100m in vertical depth.

The deeper portions of the anomaly are perhaps associated with a north - east trending magnetic break, one of an array of subtle north-east trending structural features obvious in the airborne magnetics (Figure 1). There appears to be a cross cutting north -westerly component to the anomaly at depth and it is open to both the south-west and north-west. Its relationship to the narrow NNW trending Gairdner dykes obvious on the magnetic image is uncertain.



Figure 2: IP Chargeability Slice at 300m depth showing drill hole locations (red dots, not the black dots along the survey lines). Grid MGA2020 Zone 53.





Figure 3: Parkinson Dam cross section at 703,800E (Grid AGD84 Zone 53), showing previous drilling results and possible location of follow-up diamond drill hole to test for higher grade lead-zinc mineralisation.

Several other more discrete lower-level IP chargeability anomalies were also detected in the area surveyed (refer Figure 2). Only one previous drillhole, PD59, has tested any of these other IP features. This vertical hole intersected some broad zones of low -grade silver - base metal mineralisation from around 150 to 260m including up to 2.3% Pb, 1.1% Zn and 10.5g/t Ag from 193 to 194m.





Figure 4: Montage showing IP Chargeability slices from 50 to 450m. Red boundary is limit of IP survey shown in Figure 3. Blue dashed line is outline of IP anomaly at 300m depth. Previous drillholes are small red dots (refer Figure 1).





Figure 5: IP Resistivity Slice at 300m depth showing drill hole locations (red dots). Grid MGA2020 Zone 53.

Cyun Thomas

<u>Greg Solomon</u> Executive Chairman

This announcement was authorised by the above signatory.

Disclaimer The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource.

Competent Persons Statements

The information in this announcement that relates to Exploration Results is based on and fairly represents information compiled by Michael J. Glasson, a Competent Person who is a member of the Australian Institute of Geoscientists. Mr Glasson is a part time employee of the company. Mr Glasson is a shareholder. Mr Glasson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Glasson consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



Appendix 1

The following tables are provided to ensure compliance with the JORC CODE (2012 Edition) for THE REPORTING OF EXPLORATION RESULTS.

JORC TABLE 1 (Parkinson Dam, EL 6495, formerly EL 5602))

Section 1 Sampling techniques and data			
(criteria in this group apply to all succeeding groups)			
Criteria	JORC Code explanation	Commentary	
Sampling techniques.	 Nature and quality of sampling (EG cut channels, random chips or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF 	A dipole-dipole IP geophysical survey was carried out on 11 N-S lines 2km long, spaced 200m apart over an area of 4km ² in the northern portion of the exploration licence.	
	instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The survey was carried out by Zonge Engineering using a GGT-30 high power transmitter and a GDD model GRx8-32 receiver powered by a Zonge ZMG-30	
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used 	genset.	
	 Aspects of the determination of mineralisation that are Material to the Public Report. In cases 	n/a	
	where "industry standard" work has been done this would be relatively simple (eg "reverse circulation drilling was used to obtain 1m		
	produce a 30g charge for fire assay"). In other cases more explanation may be required, such as		
	sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may		
Drilling techniques.	 Drill type (eg. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka 	n/a	
	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.).		
Drill sample recovery.	 Whether core and chip sample recoveries have been properly recorded and results assessed. 	n/a	
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 		
	 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material 		



Logging.	 Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	n/a
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography. 	
	 The total length and percentage of the relevant intersections logged. 	
Sub-sampling techniques and sample preparation.	• If core, whether cut or sawn and whether quarter, half or all core taken.	n/a
	• If non-core, whether riffled, tube sampled, rotary split etc. and whether sampled wet or dry.	
	• 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. 	
	 Whether sample sizes are appropriate to the grainsize of the material being sampled. 	
Quality of assay data and laboratory tests.	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	n/a
	• For geophysical tools, spectrometer, 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. 	
Verification of sampling and assaying.	• The verification of significant intersections by either independent or alternative company personnel.	n/a
	• The use of twinned holes.	Verification of data is managed and checked by company personnel with
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	extensive experience. All data is stored electronically, with industry standard systems and backups
	 Discuss any adjustment to assay data. 	n/a



ASX Announcement 1st May 2024

Location of data points.	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	IP survey lines were located with a hand held GPS which is considered adequate for this type of survey.
	• Specification of the grid system used.	The grid system used is MGA2020 Zone 53.
	 Quality and adequacy of topographic control. 	
Data spacing and distribution.	 Data spacing for reporting of Exploration Results. 	Line spacing is considered quite adequate for this type of survey.
	 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. 	n/a
	• Whether sample compositing has been applied.	n/a
Orientation of data in relation to geological structure.	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	Lines were run approx. perpendicular to the interpreted strike of the main epithermal mineralisation.
	 If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	n/a
Sample security	• The measures taken to ensure sample security.	n/a
Audits or reviews.	• The results of any audits or reviews of sampling techniques and data.	No review or audits of sampling techniques or data have been conducted.

Section 2 Reporting of Exploration Results (Parkinson Dam Project, EL 6495)

(criteria listed in the preceding group apply also to this group)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status.	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental	Exploration Licence No 6495, is located approximately 60km west of Port Augusta, South Australia and is owned 100% by Tasman Resources Ltd.
	settings.	There are no partnerships or royalties involved. The EL is covered by the Barngala native title claim and a native title mining agreement is in place. Tasman has conducted a successful heritage clearance over the area currently under investigation by Tasman to permit exploration activities. There are no historical or wilderness sites or national parks or known environmental settings that affect the prospect.
	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.	Tasman has secure tenure over the EL at the time of reporting and there are no known impediments to obtaining a licence to operate in the area.



Exploration done by other parties.	Acknowledgment and appraisal of exploration by other parties.	Prior to Tasman's tenure limited uranium exploration had been carried out within the tenement area by PNC Exploration during the 1980's. Calcrete sampling was completed by Helix Resources over the southern portion of the tenement area in the early 2000's and several anomalous calcrete values were obtained which attracted Tasman to the
		In 2005 Tasman discovered outcropping epithermal veining within the Corunna Conglomerate. Subsequent drilling intersected epithermal Au-Ag-Pb-Zn mineralisation associated with the veining at Tasman's Parkinson Dam prospect. Low level epithermal mineralistion was also discovered at the Corrie Dam prospect in 2015.
Geology.	Deposit type, geological setting and style of mineralisation.	The geology comprises Mesoproterozoic Corunna Conglomerate which forms a north plunging syncline overlying Palaeo- proterozoic metasediments and is in faulted contact with the Gawler Range Volcanics to the north. Tasman is exploring the area for epithermal Au-Ag-base metal mineralisation associated with the margin of the Gawler Range Volcanics.
Drill hole information.	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	n/a
	• Easting and northing of the drill hole collar	
	 Elevation or RL (Reduced Level-elevation above sea level in metres) of the drill hole collar 	
	Dip and azimuth of the hole	
	Down hole length and interception depth	
	 Hole length 	



Data aggregation methods.	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually material and should be stated. 	n/a
	 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. 	
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with 	n/a
widths and intercept lengths.	respect to the drill hole angle is known, its nature should be reported.If it is not known and only the down-hole lengths	
	are reported, there should be a clear statement to this effect (eg. 'downhole length, true width not known').	
Diagrams.	 Where possible, maps and sections (with scales) and tabulations of intercepts should be included for any material discovery being reported if such diagrams significantly clarify the report. 	These are included in the body of the report.
Balanced reporting.	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high 	Most available images of IP data have been reported for this geophysical programme.
	grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data.	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; 	Any other substantive exploration data such as pertinent geological observations, geophysical results are included where appropriate.
	metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances	
Further work.	 The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions including the main 	The nature and timing of planned further work is included in the report.
	geological interpretations and future drilling areas, provided this information is not commercially sensitive	