

ACN 009 253 187

# **ASX ANNOUNCEMENT**

#### 20 June 2024

# PARKINSON DAM PROJECT UPDATE ACM REVIEW IDENTIFIES DRILLING TARGETS

# **HIGHLIGHTS**

- Archimedes Consulting conducted a 3D magnetic sources review and mapping over the Parkinson Dam licence area.
- Using the available high-resolution aeromagnetic data, the following were identified by Archimedes:
  - Relatively shallow, low magnetic susceptibility zones interpreted to be possibly due to epithermal alteration prospective for epithermal Au-Ag mineralisation.
  - Higher magnetic semi-vertical pipe-shaped features extending to near-surface from depths as shallow as 1.2 km and down to 5km representing possible fluid pathways for hydrothermal systems including possible porphyry stock or magnetite/hematite breccia typical for IOCG systems coincident with elevated gravity zones.
  - o Five of the magnetic targets were selected as primary exploration targets.
- Final selection of top targets will occur after in-fill gravity survey is conducted which is planned to be undertaken in the next few months.

## **DETAILS**

## **EL 6495 (Tasman 100%)**

# **BACKGROUND AND PRIOR EXPLORATION**

Tasman discovered new, outcropping epithermal-style gold and silver mineralisation (Parkinson Dam Prospect EL6495, located approx. 60km W of Port Augusta in South Australia) in 2005, and later undertook a drilling programme of over 80 holes that hit encouraging high grade gold, silver, lead, and zinc epithermal mineralisation in a number of these holes .The best results achieved from the drilling programme were:

- PD 63: High grade gold and silver (21m at 21g/t Au and 83g/t Ag, including 9m down hole at 31g/t Au and 152g/t Ag) (refer Tasman's ASX announcements -14 June 2007 / 19 June 2007) and
- PD 30: High grade lead and zinc (7.6% Pb, 10.5% Zn, 0.4% Cu, 1.20g/t Au, 120g/t Ag) over 1.66m down hole in first cored hole PD 30 (refer Tasman's ASX announcement of 6 November 2006).

Tasman undertook further exploration on the exploration licence over the years and relinquished parts of the licence area but has retained the area that hosts the high-grade mineralisation that was encountered in the drilling. Shallow low level epithermal mineralisation was also discovered by Tasman at Corrie Dam in 2015, located 8 km to the southwest of the Parkinson Dam prospect.

#### IP Geophysical Survey – Parkinson Dam Prospect

Tasman recently undertook an IP dipole-dipole geophysical survey in March 2024 and the results were announced in April 2024. The IP survey was aimed at identifying possible additional base metal-gold (Au) -silver (Ag) mineralised zones, including possible deeper sources to the mineralisation previously identified and potentially larger more resistive silicified zones at depth which may be associated with gold mineralisation (see Tasman's ASX announcements of 21 March 2024 and 16 April 2024).

The IP survey delineated numerous chargeability anomalies, which are often associated with high resistivity, first detected at a depth of around 100m and extending to the depth limit of the survey. Further interpretation indicates that at least some of these IP anomalies are related to iron-sulphide bearing Gairdner dykes which are not known to host mineralisation.

#### **RECENT PROGRESS**

#### ACM, 3D Mapping and Target Generation

Archimedes Consulting (Archimedes"), an Adelaide based geophysical consultancy company, was appointed to review the past exploration and the information generated by the IP survey, and process the existing high-resolution aeromagnetic datasets using 3D magnetic source detection algorithms, to detect and map in 3D over the entire licence area the following:

- Potential porphyry stock and feeders at depth which may contain copper (Cu)- Au mineralisation,
- Possible magmatic intrusions at greater depth from which the porphyry and whole epithermal system originated,
- To detect and map alteration zones of the epithermal system which may contain Au mineralisation; and
- Potential magnetite-dominated breccia forming pipe-like structures typical for IOCG mineralisation systems,

to assist in identifying possible areas of mineralisation and in generating future drill targets.

Using its proprietary ACM method, Archimedes was able to detect and map in 3D:

- Potential mineralisation styles of epithermal Au-Ag;
- Inferred porphyry, intrusion-related and/or IOCG Au-Cu.
- Specific regions of anomalously low magnetic susceptibility responses where magnetite was
  destroyed, that correspond in area and depth extent to known silica-rich epithermal Au-AgPb-Zn mineralisation (see Figures 1a and 1b). Dot-colour shows Magnetic Susceptibility as per
  Table 1. Other regions of similar potential were also indicated.
- Higher magnetic semi-vertical pipe-shaped features extending from depths of between 1,200 metres to 5,000 metres to far shallower depths. These features are interpreted as possibly representing fluid pathways for hydrothermal systems including a possible porphyry stock which may contain Cu-Au mineralisation or magnetite/hematite breccia typical for IOCG systems (see Figures 2A and 2B,). Dot-colour shows Magnetic Susceptibility as per Table 1.

- Five of the above magnetic features that are also co-incident with the strongest gravity anomalies indicated by the limited gravity data that is presently available, were selected as primary exploration targets (T1 to T5) (see Figures 3 and 4), and
- Magnetic Lineaments ("MLs") potentially indicate the possible structural orientation and potential fluid pathways at different depths and are interpreted to represent fault and shear zones associated with epithermal systems (see Figures 5a and 5b).

The elevation of the Parkinson Dam licence ranges between approximately 170m - 240m above mean sea level (see Figure 6 below).

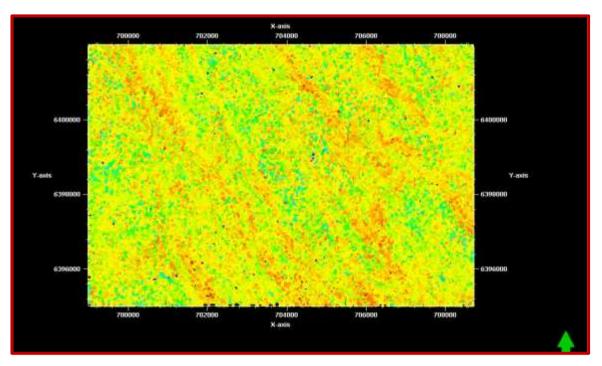


Figure 1a. Top view of ACM-Cube of individual Magnetic Sources within the study area (MGA 2020 Zone 53). . Dot-colour shows Magnetic Susceptibility as per Table 1.

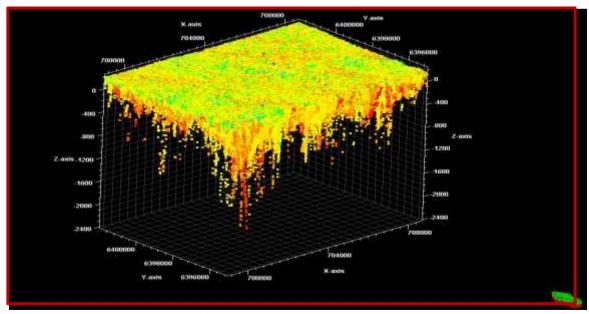


Figure 1b. 3D view of ACM-Cube of individual Magnetic Sources within the study area. . Dot-colour shows Magnetic Susceptibility as per Table 1.

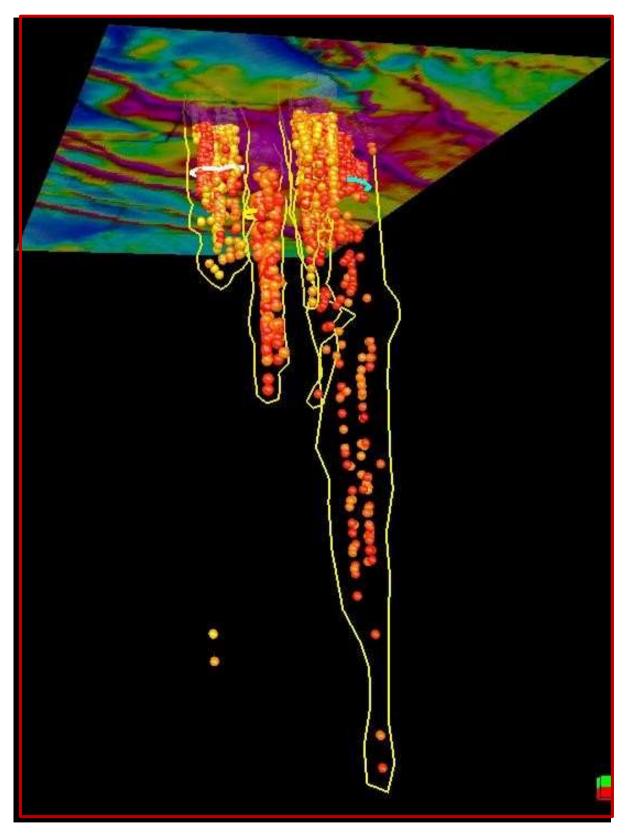


Figure 2A. 3D View visualisation of some of the highly magnetic semi-vertical features detected by ACM. The polygons outline a few selected features, starting at a depth of -450m below MSL ("mean sea level"). . Dot-colour shows Magnetic Susceptibility as per Table 1.

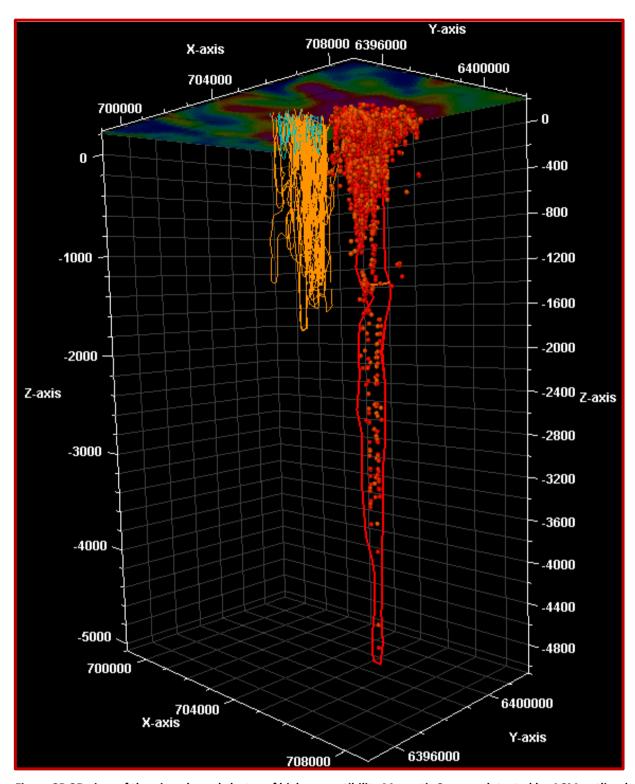


Figure 2B 3D view of the pipe-shaped cluster of high susceptibility Magnetic Sources detected by ACM outlined in red. South-west of this feature is located a cluster of similar type of features outlined in yellow extending to a depth of 1.2km-1.6km and shallow, near surface cluster of low magnetic susceptibility epithermal zones underlying the IP survey and drillhole area outlined in blue. The outlined magnetic features are beneath the image of the low-pass filter of RTP. . Dot-colour shows Magnetic Susceptibility as per Table 1.

Magnetic Susceptibility Classes	CGS Units cm/gm/s	SI Units	ACM-Cube Bin Colour of Magnetic Susceptibility
7: Lowest Value	1.00E-06	0.00001261	
7: Highest Value	4.46E-05	0.000561	
6: Lowest Value	4.46E-05	0.000561	
6: Highest Value	8.43E-05	0.00106	
5: Lowest Value	8.43E-05	0.00106	
5: Highest Value	1.59E-04	0.00200	0
4: Lowest Value	1.59E-04	0.00200	0
4: Highest Value	3.01E-04	0.00378	
3: Lowest Value	3.01E-04	0.00378	
3: Highest Value	5.69E-04	0.00714	0
2: Lowest Value	0.000568565	0.00714	0
2: Highest Value	0.001074135	0.0135	<u> </u>
1: Lowest Value	0.001074151	0.0135	0
1: Highest Value	0.002029271	0.0255	
-1: Lowest Value	0.002029294	0.0255	0
-1: Highest Value	0.003833717	0.0482	0
-2: Lowest Value	0.003833768	0.0482	0
-2: Highest Value	0.007242726	0.0910	•
-3: Lowest Value	0.007242743	0.0910	
-3: Highest Value	0.007956989	0.100	
-4: Lowest Value	0.007957016	0.100	
-4: Highest Value	0.0.012	0.151	•

Table 1 Magnetic susceptibility classes marked in colours used to detect & map epithermal alteration zones, porphyry stock, feeders & dykes. The highest & lowest values mark the ranges into which susceptibilities computed by ACM were binned. Allocated colours used in the ACM cube are in the right column.

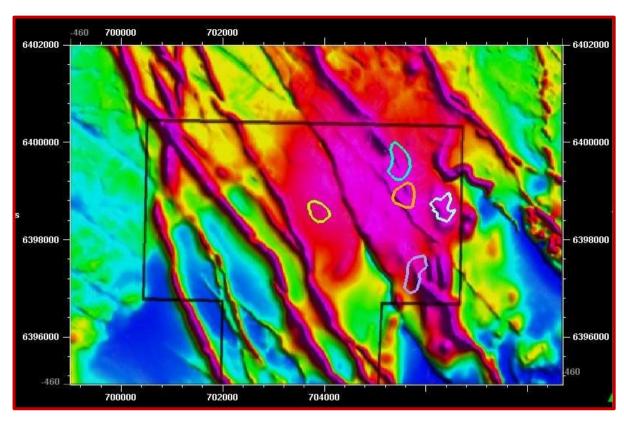


Figure 3. Location of magnetic semi vertical pipe-shaped features on the image of the Vertical Gradient of RTP magnetics. The polygons outlining these features are relative to -450m MSL.

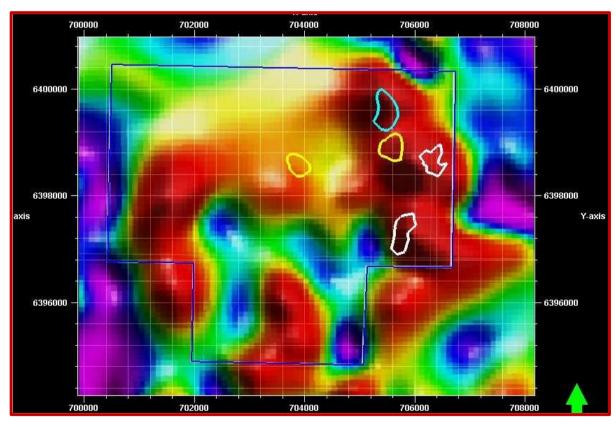


Figure 4. Location of magnetic semi vertical pipe-shaped features on the image of the Vertical Gradient of the currently available Bouguer Gravity. The polygons outlining these features are relative to -450m MSL.

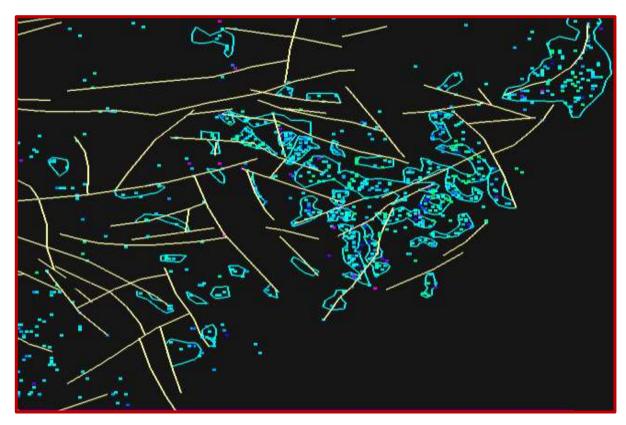


Figure 5a Plan view of low-susceptibility epithermal alteration zone outlined as blue polygons. Low susceptibility Magnetic Sources (shown in blue-green). Magnetic Lineaments interpreted from ACM from surface to 200m above MSL are shown in pale yellow.

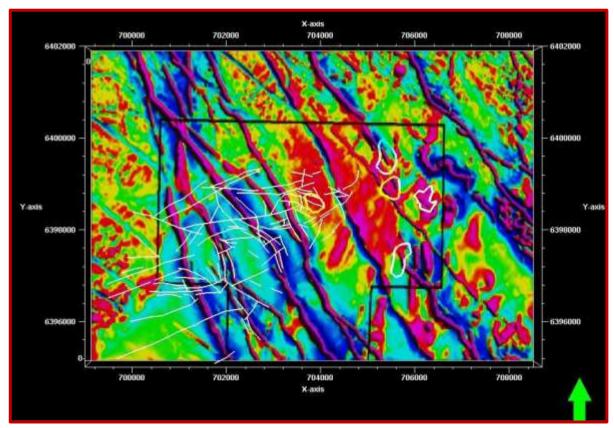


Figure 5b. Magnetic Lineaments (shown in white) interpreted from Magnetic Sources at depth of +200m to +230m above MSL, superimposed on the image of the Vertical Gradient of RTP. Five selected targets, outlined by polygons, at depth of -450m below MSL are shown in white and yellow.

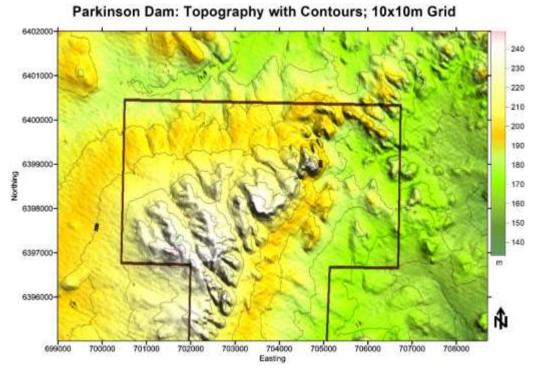


Figure 6. Parkinson Dam: Topography with Contours (elevation above mean sea level)

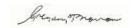
# **SUMMARY**

#### The combination of:

- Tasman's 2005-2007 drilling results that lead to a drilling programme of over 80 holes that hit encouraging high grade gold, silver, lead, and zinc epithermal mineralisation in a number of these holes, the best results from which were:
  - PD 63: High grade gold and silver- (21m at 21g/t Au and 83g/t Ag, including 9m down hole at 31g/t Au and 152g/t Ag) and
  - PD 30: High grade lead and zinc (7.6% Pb, 10.5% Zn, 0.4% Cu, 1.20g/t Au, 120g/t Ag) over 1.66m down hole in first cored hole PD 30
- The results from the IP Survey that Tasman conducted in March 2024, and
- The further highly encouraging results from the ACM review, mapping and drilling target generation, that Archimedes Consulting recently completed,

make the Parkinson Dam project a strongly compelling exploration target.

As a result, Tasman intends to undertake a detailed in-fill gravity survey in the next few months, to provide greater confidence in the location and designing of the proposed drilling programme that Tasman is planning to undertake later this year or early in 2025, to drill test the first 5 target areas that have been identified by the ACM method.



# Greg Solomon Executive Chairman

This announcement was authorised by the above signatory.

For further information please contact Greg Solomon on +61 8 9282 5889.

#### 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.