

**SUMMARY**

A Dighem survey was flown over the Montezuma area in February, 1982 as part of a joint venture between EZ, Getty and CSR. The primary exploration target was for Renison style mineralisation.

The survey defined a number of sub-parallel anomalous zones several hundreds of metres long; these were mostly of low conductance (<10 mhos) but some anomalies within the zones had higher values (max. value 47 mhos). There were no definite magnetic responses directly associated with any of the EM anomalies detected within the joint venture area, although one zone ('A') crosses a strong magnetic linear at a shallow angle and an isolated anomaly ('4') is coincident with a weak, broad magnetic high.

A series of closely spaced, sub-parallel EM zones of mostly weak but varying conductances, having no magnetic expression are typical of responses over graphitic shales. However the zones closely parallel a prominent fault direction (striking NNE) and thus the better responses may be due to mineralisation within a fault or shear. No Renison style deposit is indicated but a body of cassiterite/ stannite mineralisation in a pyritic gangue cannot be discounted and presumably a large occurrence similar to one of the several small base metal deposits in the area is also a possibility.

For this report, the EM zones have been labelled alphabetically and the single anomalies, numerically. A list of the most prospective responses is given below in order of priority. It is recommended that the VLF technique be used for ground follow up, although other (EM) methods may be needed in areas of thick overburden. Despite the lack of related magnetic responses, a magnetic survey is also recommended.

**First Priority:**

A2, A1  
4  
J5  
F2, F1, (F3)  
D2, D1  
C2

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**Second Priority:**

3, 5  
L1

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**Third Priority:**

all other responses