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GEOPHOTO MINERALS REPORT 1970/21

MEMORANDUM REPORT ON GEOFRACTURE ANALYSIS,

BLUE TIER, N.E. TASMANIA, E.L.6/68

G. Thomas,  
Geophoto Services Inc.,  
Denver, U.S.A.

Including:

Figure 1.

Figure 2.

N. E. TASMANIA  
GEOFRACTURE ANALYSIS

Dr. Don Gould annotated the fracture traces on flight strip, mosaic laydowns; data was then transferred via Saltzman projector to base map of area @ 1:100,000 scale to avoid distortion and omission problems encountered in previous study.

Gould's annotated fracture-trace data computer tabulated in a histogram and manually diagrammed in rosette <sup>form</sup> ~~form~~ indicates that the fracture data in the previous work last fall was more strongly influenced by the east-west flight lines than was realized at the time. Consequently, the decision to re-fly the area and redo the fracture work has been proven to have been correct.

The new fracture-trace data defines a structural framework for the project area similar to that proposed by Solomon (Geology and mineralization of Tasmania: Geology of Australian Ore Deposits - 8th Commonwealth Mining and Metals, 1965). The structural features within the project area have been produced by simple plate coupling between transcurrent megashears oriented approximately at 100°.

Left-lateral coupling of the plate(s) has produced in the project area north-westerly anticlinal plate-drag folds intruded by granitic stocks (See Solomon, p. 472, "Igneous activity") during the Tabberabberan Orogeny; a NE tension direction which appears to localize mineralization was also produced at this time.

Comparison of these inferred anticlinal-stock features with known mines, geochemical data and gamma data shows that the majority of the producing localities and anomalies occur on the flanks and noses of the anticlinal-stock features.

Consequently, it is postulated that mineralized localities will be found on the flanks and especially noses of these stocks where fracturing is concentrated and where the northeasterly tension zones cross the stock features. This hypothesis is confirmed by Solomon (p. 473, "Tabberabberan Orogeny") for western Tasmania. Mineralization may also be found where the two tension zones intersect.

The accompanying map shows the features inferred from the fracture data and the localities of anomalously high Potassium and Uranium concentrations. Also shown are those localities considered to have the best prospective potential based on fracture-trace and gamma data.

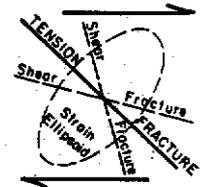
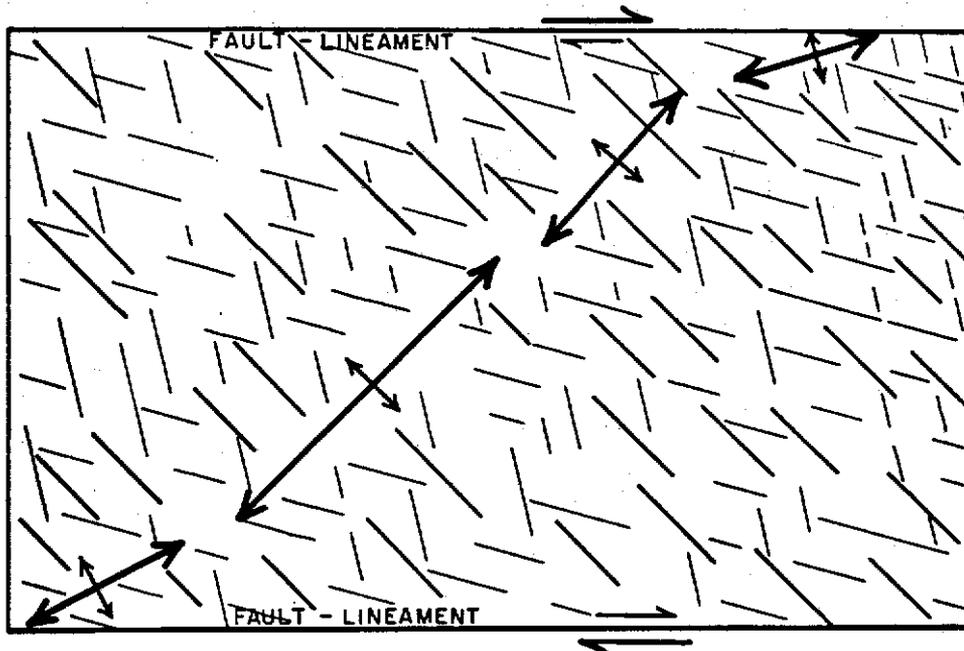
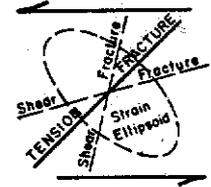
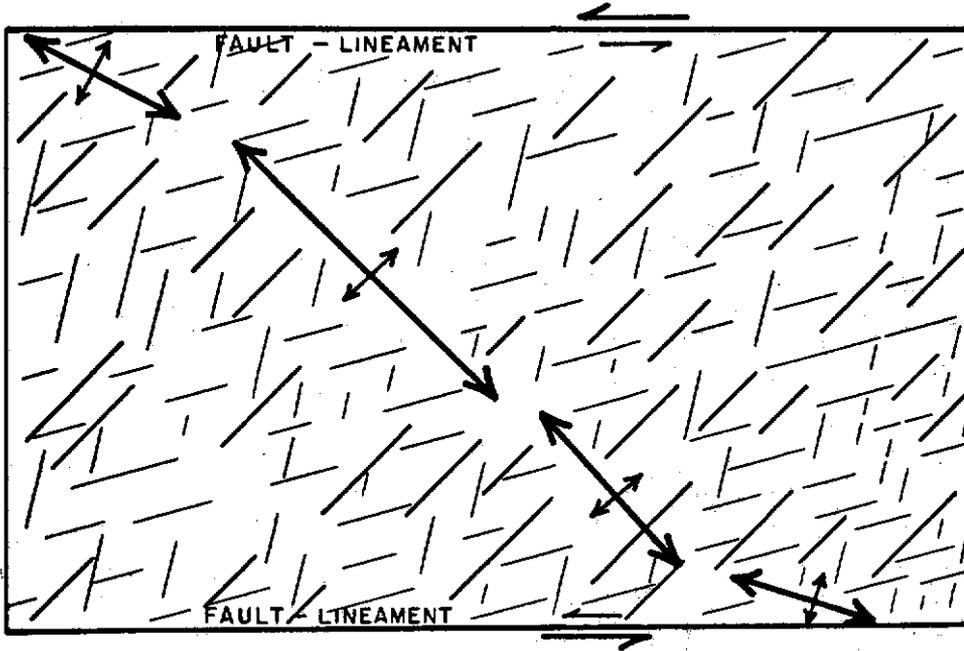
*G. Thomas*

*Drawing*

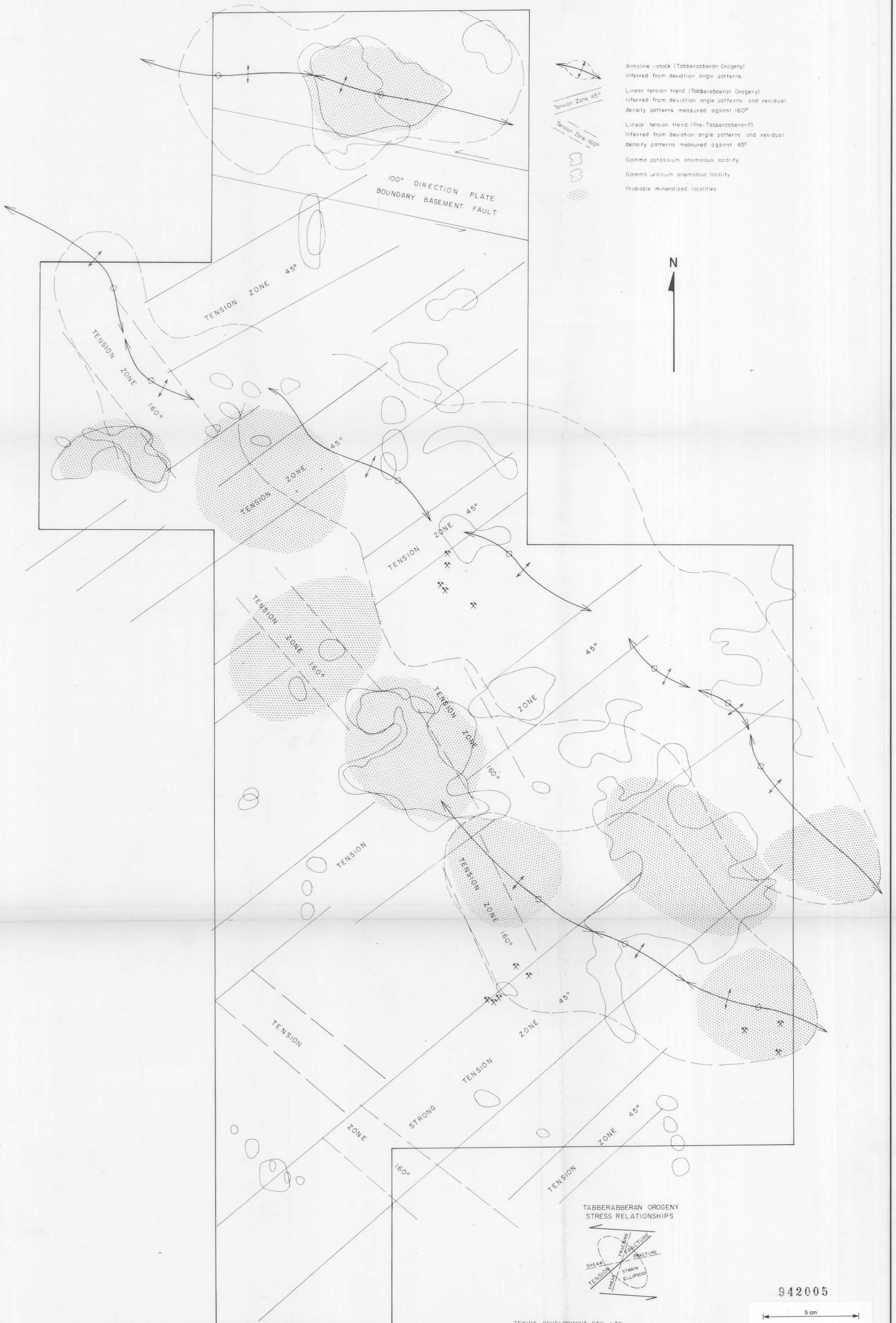
*1/126 - Geo fracture analysis*

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# SIMPLE SHEAR - PLATE COUPLING



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 GEOPHOTO SERVICES, INC.  
 A SUBSIDIARY OF  
 TEXAS INSTRUMENTS INCORPORATED  
 DENVER, COLORADO



TEXINS DEVELOPMENT PTY. LTD.  
 E.L. 6/68 NORTH EAST TASMANIA  
**GEOFRACTURE ANALYSIS**  
 SCALE: 1:100,000

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DRAWING NO. 1/126