

1957/48
C.3

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES,
GEOLOGY AND GEOPHYSICS.

RECORDS

1957, NO. 48



RADIOMETRIC INVESTIGATIONS AT CHWALCZYK'S
PROSPECT, NEAR ROSSARDEN, TASMANIA.

by

W.J. LANGRON.

RECORDS 1957, NO. 48



RADIOMETRIC INVESTIGATIONS AT CHWALCZYK'S
PROSPECT, NEAR ROSSARDEN, TASMANIA.

by

W.J. LANGRON.

1. INTRODUCTION

At the request of the Tasmanian Department of Mines, three boreholes at Chwalczyk's Prospect were radiometrically logged by the writer. Holes Nos. 1 and 2 were logged on 20th February, 1957, and Hole No. 3 was logged on 20th March, 1957.

The Prospect is situated on the eastern bank of Storey's Creek about a mile and a half south-west of the village of Rossarden, with which it is connected by a bulldozed track (Plate 1). The lease is held by Tasmania United Uranium Co.

The original discovery, a small zone of increased radioactivity on the eastern bank of Storey's Creek, was investigated by an adit. The three holes, sited by the Company's consultant geologist, were drilled to test the extent of the mineralisation and structure revealed in the adit.

2. GEOLOGY

The geology of the Prospect is discussed in detail by Ostle (1956). The Prospect is in granite and the mineralisation (pitchblende and secondary uranium minerals) occurs in a flat-lying band of sheared, fine-grained granite.

Mineralisation revealed in the adit is patchy, but some samples collected by the writer assayed up to 4.5 per cent (equivalent) U_3O_8 .

3. TECHNICAL DETAILS

The drill holes (No. 1, 2, and 3) are vertical ones, size AX, and were drilled to 150 ft., 101 ft., and 108 ft., respectively. Because of a blockage, Hole No. 3 could be logged to only 93 ft.

Logging was performed with a bore-hole ratemeter, type EA191, manufactured by Electronic Associates Ltd., Toronto, Canada.

At the conclusion of the logging some readings were taken at one-foot intervals with the probe held against the walls of the adit. It was thought that these readings would serve as a general guide to the variation of radioactivity within the adit.

4. DISCUSSION OF RESULTS

The radiometric logs of the holes are presented graphically on Plate 1. Plate 2 is a sketch of the adit showing the count rate along the walls and face.

The logs show very weak radioactivity, and there is practically no correlation between the radioactivity and the few features in the geological section.

Core recovery from Holes Nos. 1 and 2 was good. Recovery from Hole No. 3 was comparatively poor. The cores were examined prior to logging but no sign of uranium mineralisation could be seen.

2.

The holes are entirely in granite and there is no noticeable variation in radioactivity between the shear zones and the granite (see Plate 1). In Hole No. 1, a seam containing sparse pyrite mineralisation was intersected between 115 ft. and 120 ft., but no abnormal radioactive values are present.

The only noticeable correlation between radioactivity and geological features is in the upper part of Hole No. 3, where the radioactivity is associated with talus and weathered granite.

The readings taken along the adit show much greater variation. It is noticeable that the highest readings are mainly in the northern wall. Counts ranged up to 13,000 per minute, which is about 70 times normal background count.

The results of some radiometric assays of samples taken from the adit are included in Plate 2.

5. CONCLUSIONS

It is clear from the radiometric results that the drill holes have not intersected uranium mineralisation of commercial grade.

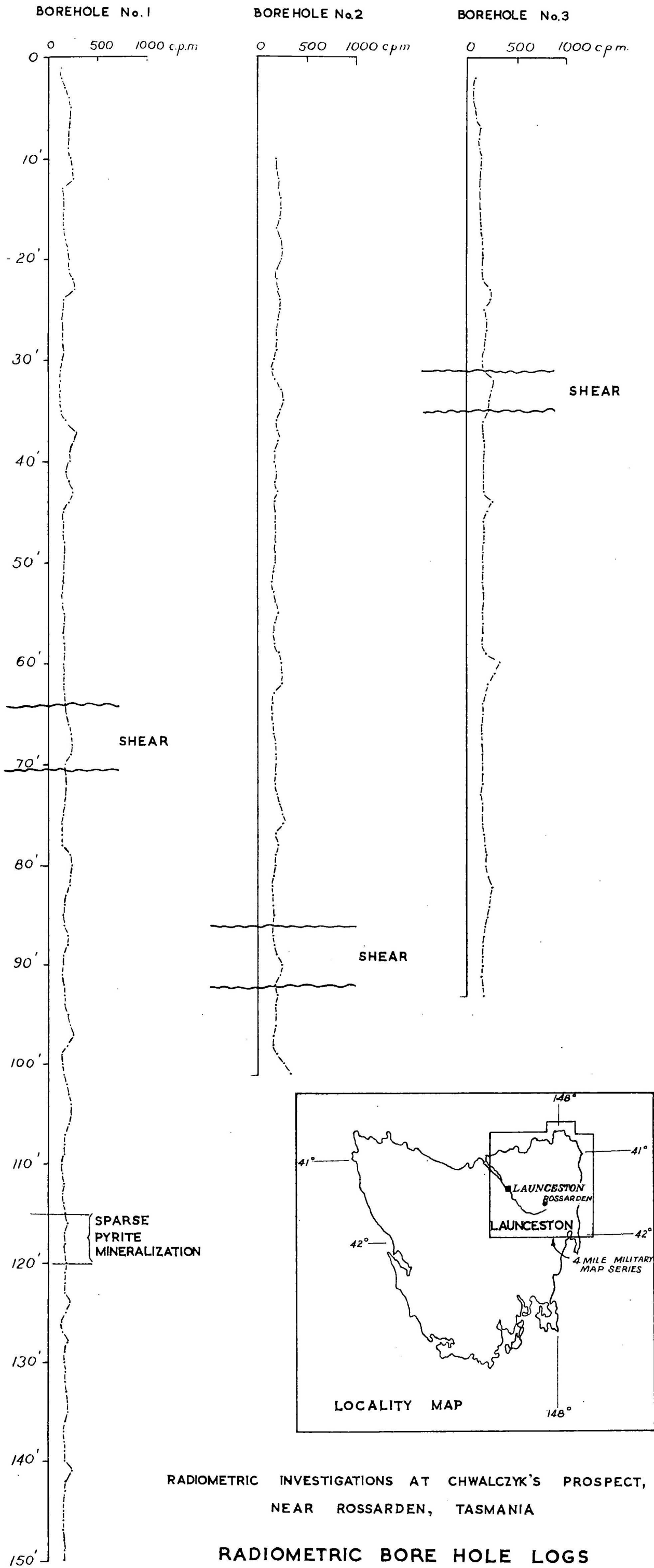
The fact that there is good ore exposed in the adit and that the highest radiometric count was obtained in the face is promising and suggests that future exploration should be carried out by extending the adit.

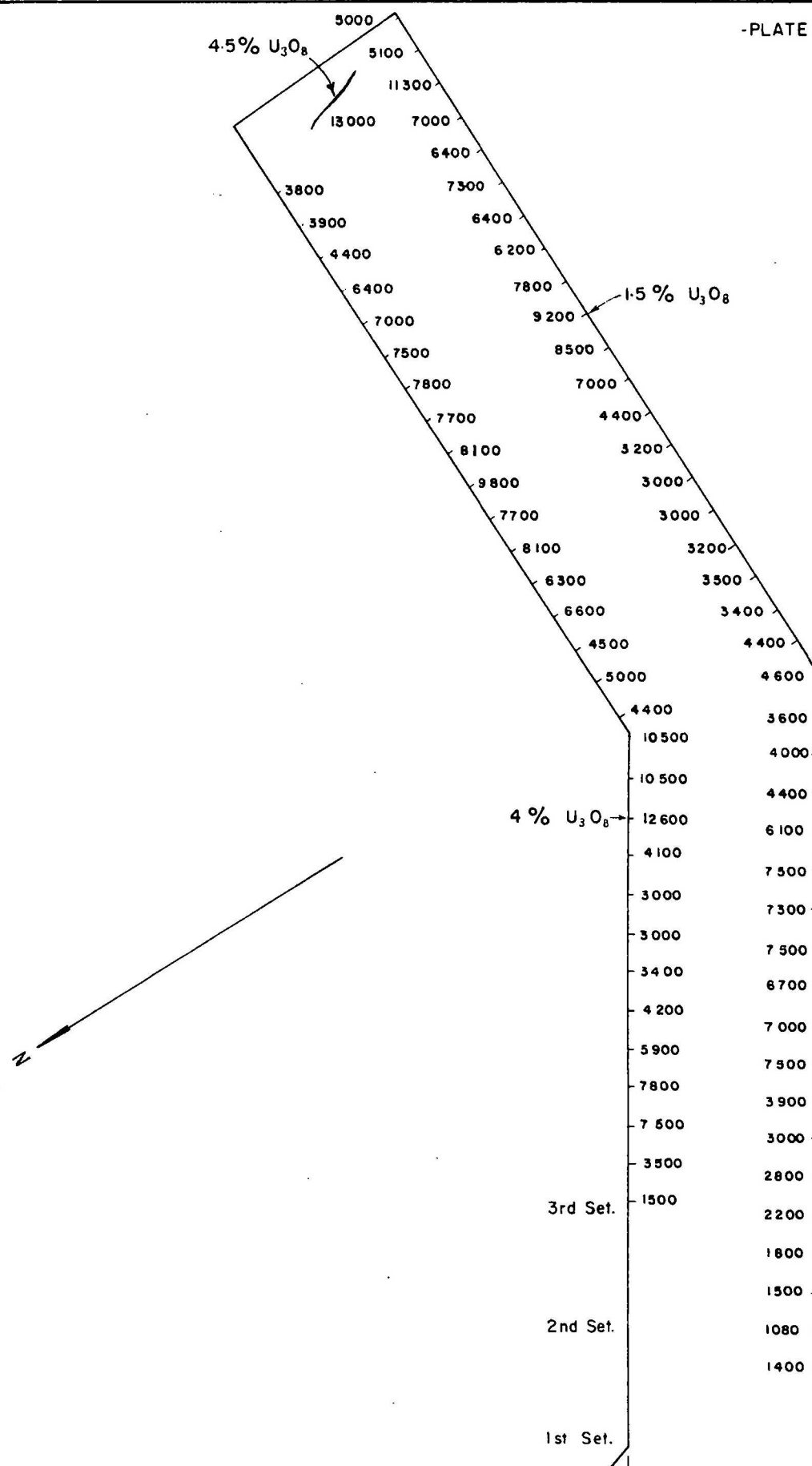
6. ACKNOWLEDGEMENT

The writer wishes to thank Mr. T.D. Hughes of the Tasmanian Department of Mines, for his assistance and courtesy during the work.

7. REFERENCE

- Ostle, D., 1956 - Uranium Occurrences in Tasmania.
Bur.Min.Resour.Aust., Rec.1956/97.





RADIOMETRIC INVESTIGATIONS AT CHWALCZYK'S PROSPECT,
NEAR ROSSARDEN, TASMANIA

RESULTS OF PROBING ALONG ADIT

FIGURES SHOWN AGAINST SAMPLING POSITIONS ALONG WALL
ARE IN COUNTS PER MINUTE
NORMAL BACKGROUND COUNT APPROX. 200 C.P.M.

GEOPHYSICIST