

**REPORT ON DEVELOPMENT AT UNITED URANIUM
PROSPECT, ROSSARDEN - LOFTUS HILLS, 1957**

LYELL E.Z. EXPLORATIONS

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The Adit

MICROFILMED

The continuance of the uranium deposit under the hill from its discovered outcrop is being tested by this eastwardly-driven tunnel. The results so far are very satisfactory.

Where first exposed in the preliminary prospecting hole the formation was 9 inches wide. As the adit advanced this width increased and in the present face 43 feet from the original outcrop it is 3 feet wide.

The average width along this adit is about 2 feet.

Face samples during progress have shown assays from 2.4% to 3.4% U_3O_8 with specimens running up to 9.25% U_3O_8 .

Resulting from this work there is at grass anything from 25-30 tons of Uranium Ore giving Geiger Counts of from 3000 to 8000, per minute. My estimate is that this will average 2.0% U_3O_8 i.e. about £80 per ton.

However, it is essential that this ore be hauled up to the roadway and properly sampled. The necessary haulage line and equipment is the next step. The cramping conditions on the creek-bank have reached the limit of practicability.

The total length penetrated viz. 43 feet shows the strike of the deposit to be nearly east-west. This differs from the strike at the outcrop and the real strike is at present obscure. Continuation of the adit following the strike must go on.

Diamond Drilling

It was early suggested that the original outcrop was just a "plum in the pudding". My own interpretation was that it occurred in a definite major structure viz. a flat shear-zone in the granite.

The two diamond drill holes so far completed confirm the existence and continuity of that shear-zone for at least 100 feet beyond the original prospect. Core recovery and probing tests with the Geiger Counter have proved indecisive and equivocal, and therefore add to the list of diamond drilling shortcomings.

Nett Result So Far

The present position is encouraging. The persistence and increased width of the formation in the Adit demands that this work be continued and elaborated as development proceeds.

It must be realised that the ore being produced and stock-piled is 'development ore' and is inevitably lower in grade than that which will ultimately be produced by stoping.

It is pertinent at the present juncture to express appreciation of the practicality and effectiveness of the work in the Adit being carried out by Mr. Pitchford.

Sgd. C. Loftus-Hills M.B.E., D.Sc.
Consulting Geologist.

Hobart
6th March, 1957.

Adit Workings

The face of this drive at the time of my last report was showing about 3 feet of Uranium-bearing formation. Unfortunately after driving a few feet further this suddenly ceased. Driving was continued in the general direction of the strike of the shear, but showed only low geiger-counter readings and only incipient shearing.

My visit just made was to determine what had happened. I find that the change was due to the occurrence of a pronounced fault passing across the drive as a smoothed 'head'. The strike of this fault is N.E.-S.W. and the dip N.W. at 80°.

A study of this fault indicates that it is post-ore i.e. that it has displaced the mineralised zone after that mineralisation was complete. It is further indicated that it is a 'normal' fault i.e. that the hanging-wall side has moved down relative to the foot-wall side.

It follows from this that the uranium-bearing band in the shear must probably be at a higher level on the east side. An examination of the back of the drive beyond the fault shows a continuous flat back. This looks like the bottom of the real shear. It is significant in this connection that Pitchford reports his highest Geiger-counter readings in the roof of the drive beyond the fault.

Therefore the next step is to look for the Uranium Band and the real shear above that drive. This should be started immediately east of the fault plane.

I would expect the displacement of the Uranium band to be of the order of magnitude of 8 feet.

If the Uranium-Band is not found by rising upwards recourse must be had to looking downwards. This would involve sinking a winze on the Fault using the Fault-plane as a western wall of the winze to break to.

17th May, 1957

Sgd. C. Loftus-Hills

Consulting Geologist.