

MINERAL CLAIM N4417
GARDNERS GOLD PROSPECT
NORTHERN TERRITORY
FOR RUSTLERS ROOST MINING PTY LTD

CR 98 / 419

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INTRODUCTION

Gold was first discovered in this area by Jack Gardner during the 1960's. The Adelaide River Uranium Mine was found when Jack took his mates to the area for a hunting trip. His mates had borrowed a Geiger counter from the Darwin Uranium Group (funded by the Commonwealth Government and the Australian Atomic Energy Commission) and climbed the hill from the gold find and found very high levels of radiation. The site of Jack's gold find is not known except that it must be downhill from the uranium mine.

Northern Gold NL carried out a soil survey for gold in 1991 which resulted in several encouraging anomalous zones being delineated. Open hole Reverse Circulation drilling of 12 holes with a total of 360 metres was then carried out.

As this area was considered likely to contain a GIGIAC, Mineral Claim N4417 was pegged in 1992 and granted on the 4th January 1993 for a five year period.

This report is written to accompany an application for renewal of the Mineral Claim for a ten year period.

OVERVIEW

The area occupied by this Mineral Claim contains Lower Proterozoic shales, medium to coarse grained greywackes and conglomerate which are folded into a fairly tight anticline, the axis of which runs about north-south through the middle of the Claim. The expected position in such a setting for the occurrence of a GIGIAC has not been tested yet for gold mineralisation. Previous exploration by Northern Gold NL found gold mineralisation in a position where saddle reefs would be expected to occur by drilling. As would be expected these were narrow mineralisation zones.

Unfortunately, Rustler's Roost Mining Pty Ltd has not yet been able to carry out further work in this area, although it has a fairly high priority.

Plans have been formulated to carry out a detailed Regolith sampling program which should establish whether a GIGIAC is present or not. The very steep nature of the terrain makes such a survey very difficult but not impossible. Staff training is being contemplated in which staff personnel who would be engaged in this survey would be instructed on safety precautions when working on slopes of more than 30 degrees with loose round pebbles which have weathered from conglomerate.

DETAILS OF CLAIM

Mineral Claim N4417 has an area of 39.90 hectares with north-south boundaries being 894 metres in length and east-west boundaries 447 metres. The Datum Peg is located about 12.65 kilometres from Mount Tynm on a true bearing of about 290.5 degrees. It was advertised in the Northern Territory News on the 2nd of September 1992. It was granted on the 4th of January 1993 and only for a period of five years rather than the ten years applied for.

The terrain of the area of the Mineral Claim is very hilly with steep sided hills rising to something like 60 metres above the creeks. Climbing some of these hills is quite hazardous as slopes quite often exceed thirty degrees and many of the slopes are covered in rounded quartz pebbles so it is very easy to lose one's footing only to slide some 50 odd metres to the creek below.

One old uranium shaft is located in the north-west corner of the Claim with others outside the boundary. The Northern Territory Department of Mines and Energy has recently done a good job in making these shafts safe after a trail bike rider fell into one, being quite seriously injured.

The area is fairly well timbered, mostly with Eucalypt type trees.

LOCATION AND ACCESS

The Claim is located about 4 kilometres south from the township of Adelaide River.

Access by vehicle is only possible because tracks were cut into the area when Uranium was being mined in the 1950's. The tracks are very narrow so that vehicles cannot pass or overtake. For this reason, a one way traffic route leads into the area and another leads out of the area. However there are no traffic signs, so that if two vehicles meet head on with one going up a steep slope and one going down, a dangerous situation is developed because backing on such old unmaintained tracks would not be easy.

Tourists are taken on a quick tour of the uranium mining area by tourist operators. Tourists peer down the shafts and pick over the shaft dumps, presumably looking for specimens of uranium.

PREVIOUS EXPLORATION AND MINING

As mentioned previously the first recorded exploration in this area was carried out by Jack Gardner who evidently interspersed prospecting with periods in gaol for supplying alcoholic beverages to his mates. An account of this and the finding of uranium in the area is probably not found in the library of the Department of Mines & Energy (although it might be if one had the time to research it) However there is an amusing and lively narrative of these events in a book entitled "The Uranium Hunters" by R. Annabell published by Rigby Ltd Australia in 1971.

A Bureau of Mineral Resources unpublished paper (in the Record Series) gives an account of an unsuccessful drilling programme to find uranium following a detailed and accurate plane table survey of the geology of the uranium mine area. There does not appear to be any record of the mining in the area, although statistics indicate that less than twenty tonnes of uranium ore were produced from this Adelaide River uranium mine combined with the production from the George Creek mine which is about 7 kilometres south south east from the Adelaide River Uranium Mine.

Evidently a lot of Darwin business people invested in the Company which carried out mining at Adelaide River, and because the mine was such an abject failure, these people do not wish to discuss it as they lost a lot of money on the venture.

During the period 1979-1980 Urangesellschaft Australia Pty Ltd carried out regional geological mapping, airborne Electromagnetic Magnetic & Radiometric surveys and stream geochemical surveys. The most interesting outcome of this work was a strong arsenic, copper and lead anomaly in the streams draining the area where there exists a possibility of a GIGIAC.

Details of Northern Gold's exploration can be found in a report entitled "Annual Report for Exploration Licence 5065 - Drill Report 1992 Arum Prospect.

For convenience sake and to ease the burden on any hapless reader of this report the positions of the drill hole collars resulting from their work are shown on an accompanying map.

GEOLOGICAL MAPPING

The only detailed geological mapping which has been completed in this area was carried out by geologists from the Darwin Uranium Group in the 1950's. The results of this work have been incorporated in this report on Map 2 and comprises that part of the Map to the northwest where it can be seen that the boundaries between the various rock types are quite detailed and wavy because of the steep nature of the terrain with creek beds sometimes deeply incised.

However, the rest of Map 2 has been compiled using results from studies of various airphotographs and from field traverses. It can readily be seen that the conglomerate bed, the thick medium to coarse grained greywacke beds and the shale beds are folded into a distinct anticline when the dip of the limbs is taken into account.

The position of a GIGIAC, if indeed there is one, would be between the conglomerate bed and the shale bed south of the conglomerate bed along the anticline axis. This GIGIAC could be similar to the GIGIAC which has been outlined at the surface at Happy Valley (MCN's N4416 N4418) which is about one and a half kilometres to the East. The beds are quite similar and along strike on adjoining plunging anticlines with a syncline in between.

It can be seen from the accompanying maps that the area where a GIGIAC could be expected to be present in MCN 4417 has not yet been sampled for gold. This activity could be carried during the coming dry season if the Mineral Claim were renewed in time for the necessary arrangements to be made for the work.

It is recommended that a regolith sampling survey would be the most likely method to give an indication of the extent of any gold mineralisation (if any) at depth. This should consist of trenches spaced at 20 metres running in an east-west direction, with rock pieces being dug from the bottom of these trenches as from as deep as possible with a geology hammer over distances of 2.5m or 5m to obtain a 2 kilogram or 2+ kilogram sample for gold assay.

SURFACE SAMPLING AND ASSAYING

The surface soil sampling carried out by Northern Gold NL resulted in many anomalous gold assays being obtained.

These anomalies may be due to possible saddle reefs, at least on the western limb of the anticline and to spreading of gold values from these small reefs down the steep slopes.

The results of the drilling program would lend credence to this theory as one metre drill intersections gave good gold values and the drilling direction and inclinations were generally down strike. Thus narrow quartz reefs may be carrying the gold values and these would fit the description of saddle reefs.

As mentioned under the previous heading, regolith sampling by hand using a mattock to refusal and then a geology hammer to obtain rock pieces as deep as possible below the trench bottoms would probably be the most effective exploration to test the possibility of a GIGIAC being present.

DRILLING

As mentioned previously, the Darwin Uranium Group carried out diamond drilling in this area in the search for uranium. The drilling was designed to test a fault zone which is to the west of the Claim area. Much of the diamond drill core from this program and other programs (probably carried out by the Company mining uranium in the area) is lying around on the surface on and near the Mineral Claim area. Some details of the drilling are contained in the BMR Record mentioned earlier. Logging of these cores was used to help construct the geology of the area in conjunction with the plane table geological mapping.

Logs and assays from the drilling carried out by Northern Gold NL can be found in the Annual Reports pertaining to Exploration Licence 5065.

No other drilling has been carried out in this area as far as is known.

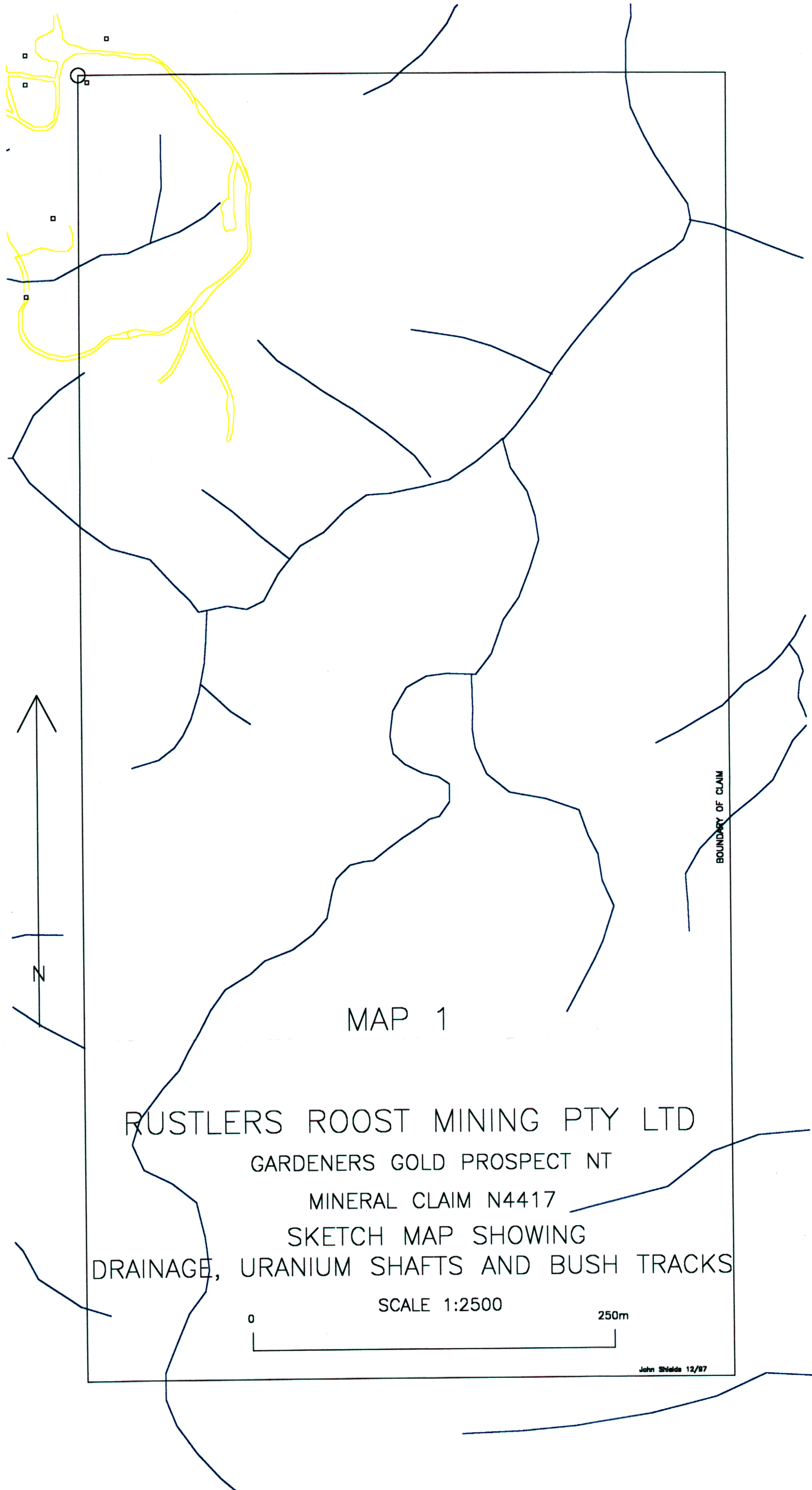
CONCLUSIONS

Mineral Claim N4417, known as Gardners should be renewed as it contains possible saddle reefs and also the possibility of a GIGIAC. A realistic programme of testing has been outlined in this report which is based on all exploration results which can be located.

The possibility of finding the regolith gold values associated with a GIGIAC is probably quite high

A regolith geochemical survey to test this possibility could be mounted once the renewal is formalised and the necessary finance and personnel are to hand.

This work would be best carried out in the dry season so as to minimise the risk of injury to personnel.

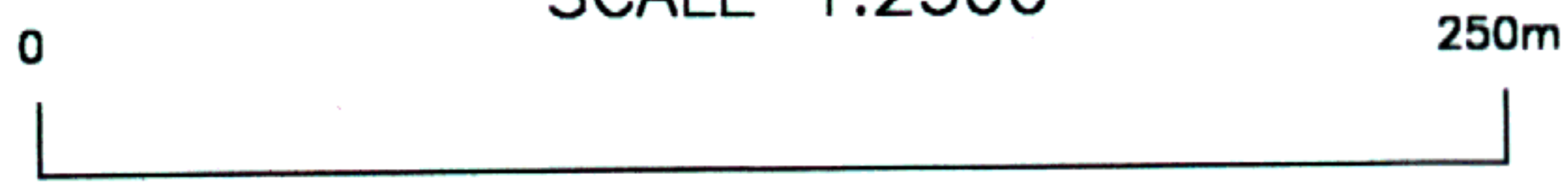


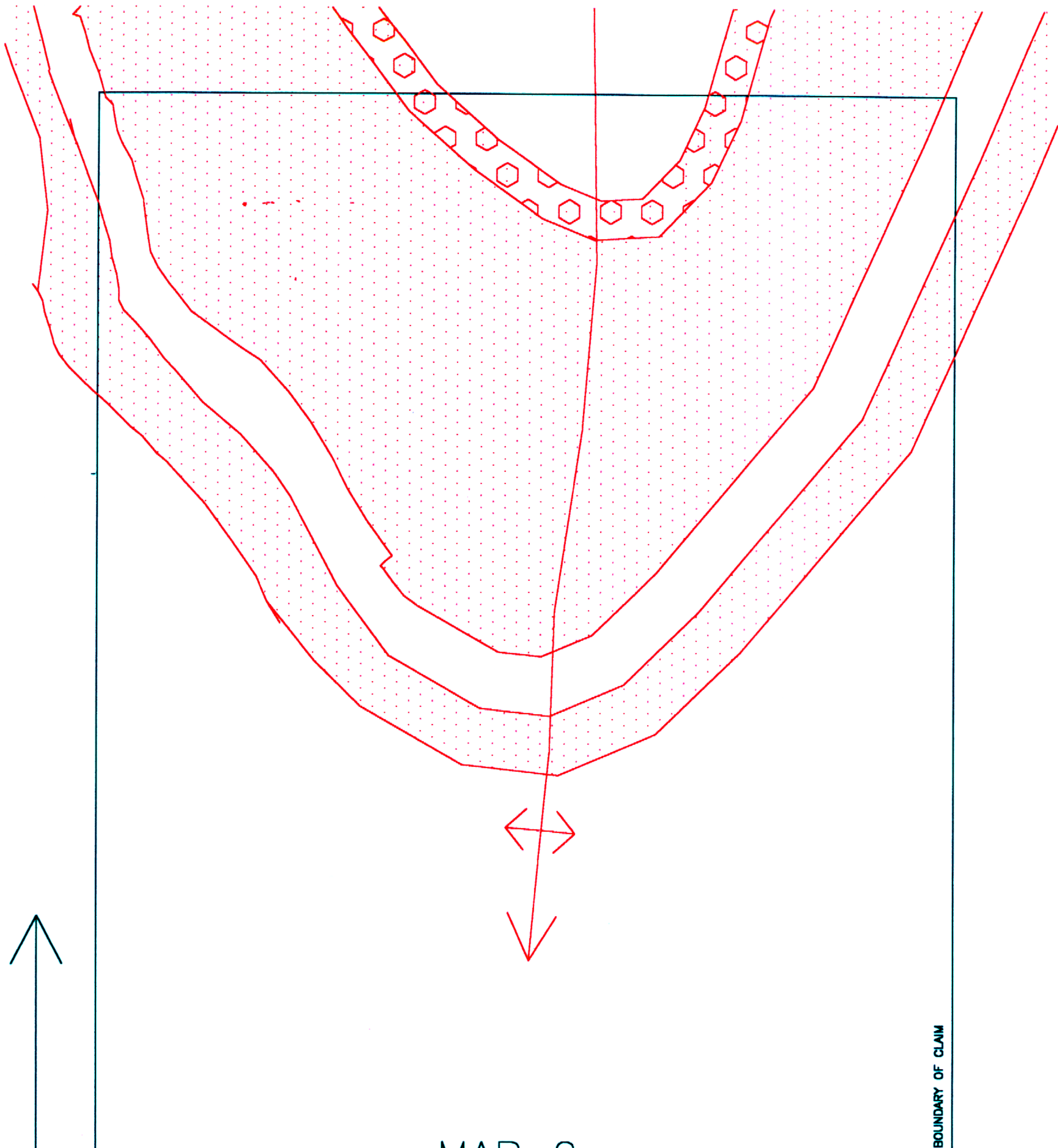
BOUNDARY OF CLAIM

MAP 1

RUSTLERS ROOST MINING PTY LTD
GARDENERS GOLD PROSPECT NT
MINERAL CLAIM N4417
SKETCH MAP SHOWING
DRAINAGE, URANIUM SHAFTS AND BUSH TRACKS


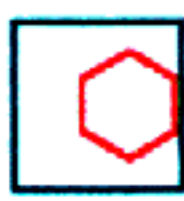
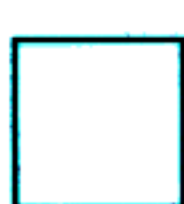
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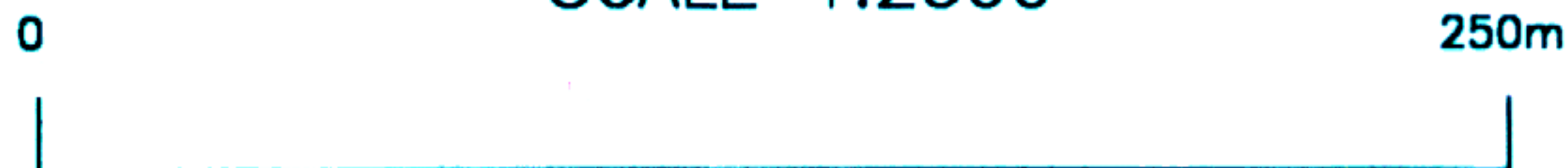


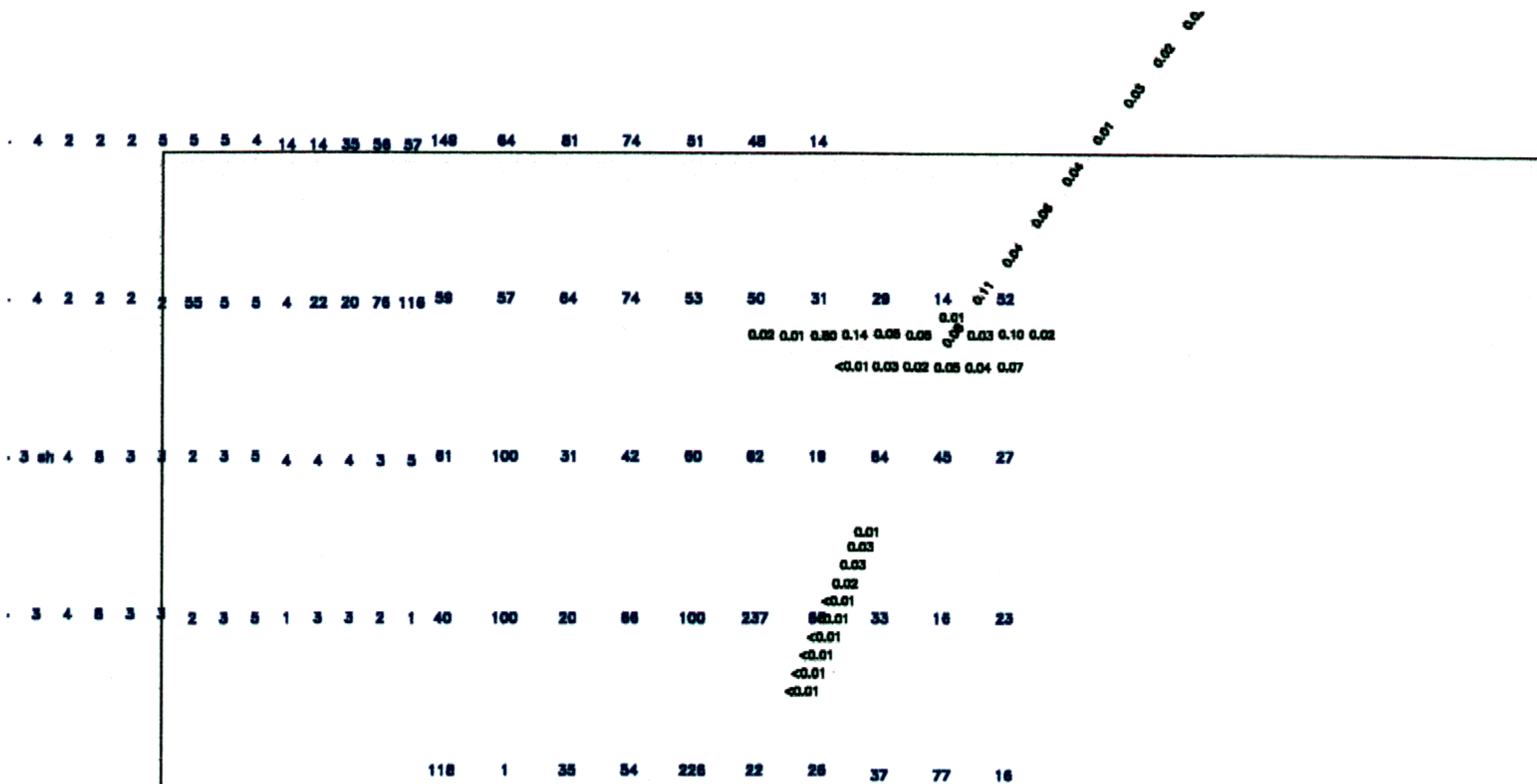
MAP 2

RUSTLERS ROOST MINING PTY LTD
GARDENERS GOLD PROSPECT NT
MINERAL CLAIM N4417
SKETCH MAP SHOWING
SOLID GEOLOGY
LEGEND

-  GREYWACKE
-  CONGLOMERATE
-  SHALE

SCALE 1:2500







MINERAL CLAIM BOUNDARY

MAP 4

RUSTLER'S ROOST MINING PTY LTD

MINERAL CLAIM N4417

GARDENERS GOLD PROSPECT NT

SKETCH MAP SHOWING
REVERSE CIRCULATION DRILL HOLES

