

**ANNUAL REPORT
EXPLORATION LICENCE 4/61
SAVAGE RIVER, TASMANIA**

for the period
22nd February, 1988 to 15th January, 1989

BY

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SAVAGE RESOURCES LIMITED

Incorporated in Tasmania

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Plate 1: Specimen Reef cross section 2a back pocket
(with proposed drillholes)

Plate 2: plan of drilling area back pocket

Introduction

No field work has been done in the licence area this year. In the March quarter the target concept was worked out and a program prepared to test the inferred extension of the ore shoot of the old workings but this had to be deferred first because the company had too many commitments elsewhere and once the decision was made to drill without joint venture support, in December, the particular rig best suited for the job was committed elsewhere. It is hoped to start drilling in early February.

Developing the target concept

In previous reports the position of Specimen Reef was deduced from surveys including some of the surviving workings meshed with the measurements and rather limited bearings recorded in the old reports by Thureau, Harcourt Smith and Montgomery. The oldtime miners regarded Specimen Reef as a simple tabular body and their measurements can be put together on this model to make a set of structure contours. From these the position of the reef can be predicted. (see map). The fit between the contours drawn from the levels 1 and 2 match those from levels 2 and 3 which is a good internal check. Although none of the records give a dip reading on the reef structure the dip is obtainable from the structure contour approach. Another source of confusion is the old terminology used with "underlay" for dip and "dip" for plunge.

The ore shoot within the vein plunges South, so that although the vein itself dips south easterly, the shoot runs on a diagonal to the dip direction. If the vein is envisaged as like a corrugated iron roof, the dip is in the line of corrugations with the shoot like a diagonal stripe of paint running at 45 degrees to them. In the plan shown some marker beds from the geological mapping work are added to the previous Specimen Reef map. The bedding/vein intersection has a southerly plunge. The plunge of the ore shoot fits so well to the intersection of bedding trends with the vein that a wall rock control is probable. (The control might be connected with disseminated carbonate).

If this is so the shoot is predictable would be expected to follow the swing in strike going south(see map), but since there is a general dip to the east the swing will be less than that at the surface.

Thureau comments that the productive vein material is visibly different to the barren material; it has more carbonate and less quartz. The SPC 1 intersection which fits the description of an "ore clinker" appears to lack quartz but contains two carbonates with a central magnetite core. In contrast barren vein material from the dumps is mostly a ferroan carbonate with substantial quartz and pyrite.

The vein was regarded as a strong feature which could be followed

for hundreds of feet but which was gold bearing only in the special shoot zones in which the clinkers of (magnetite) iron oxide were present and the vein changed character to become carbonate rich and quartz poor. The sections that were productive tended to "run" in the upper working because of the decomposition of the carbonate. The barren phase is presumably represented in the dump near the battery where a banded composite carbonate/quartz/pyrite is found which includes fragments up to 0.3m across, which adds substance to the report that typical vein thickness was 0.3 to 0.8 metres. This is thicker than any vein encountered in any of the drillholes and is an indication of the degree to which our drilling has missed representative examples of the reef.

Not much of our drilling is related to the Specimen Reef as a target; e.g. drillholes SPC 2,3,5,7,8,9,10,11 are on geophysical/geochemical targets only. The necessary work on sorting out the old data was not attempted until after the first drilling program was done. Holes 1,4 and 12 are all within 40m of each other where they cut Specimen Reef and 1 and 4 in particular are in an area which would not be expected to contain gold since the old reports show that drives from adits 2 and 3 were in barren material nearby. In fact the reef in these 2 bores is so poor that it is almost absent. The tunneller doing the work on the No 3 level anticipated going through 300' or so of barren vein in this area but they may have thought they had lost it, put in a crosscut and so found the "Lower Vein" and put in a drive along it. This drive was

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accidentally cut by hole 4 and a piece of timber recovered. The rich minor vein in SPC 1 is in a position incompatible with its being Specimen Reef proper but it plots perfectly parallel with it if linked to the piece of mine timber intersection. This all makes sense as a parallel vein of the Specimen Reef set.

Hole 12 was drilled too close to the known dead spot and got to a better but still poor and unmineralized section of Specimen Reef while stopping short of the Lower Vein. Hole 6 penetrates many small veins with alteration zones with a somewhat thicker Specimen Reef, but when compared with the plot of the ore shoot as worked it would also lie outside it. These 2 holes provide a tight limit on the possible strike length of the deposit.

It is unfortunate that no competent observer's records cover the mine's actual producing phases; Thureau was there after the top adit was finished but before the drive from No 2 got into the ore shoot, although a footnote to his report shows that the ore was encountered after his visit but before his report was printed. Then Montgomery was there when the ground had been prepared for stoping then left while other work went on in preparing the battery. This was the great missed opportunity because the drive from No 2 adit was blocked by the time Harcourt Smith came through. His visit took place when the No 3 adit had been put in and the vein was being followed in a drive, but in the barren form with 400' to go before reaching the target, the White's Winze ore shoot. The mine appears to have been operating 2 years later when Twelvrees visited the

Golden Ridge area.

Some specimens of the quartz were sent to Dr van Moort at Tas. Uni. to help with his project in which magnetism of quartz is being correlated with gold yield. The rule is that the more magnetic the quartz the better the vein is for gold and it is of interest that one of the specimens was the most magnetic he has yet encountered.

Target size

The gold occurrences reported are confined to a zone about 50m across, confined by bores SPC 6 and SPC 12. The plunge length in plan is 150m from the worked out adit 1 to the lower vein intersection in SPC 1.

If the wall rock control concept holds the Specimen Reef proper would be expected to be gold bearing when the Lower reef was gold bearing, and perhaps some other veins as well. (The lower vein lies 18 m below Specimen according to the structure contour model).

The lower vein is a thin vein that would be expected to be poor relative to a neighboring stronger vein yet in fact it is so extremely rich that it has generated a reluctance to take it seriously. A vein of this quality and the thickness reported as typical of Specimen Reef (0.3-0.8m) would be stupendous. The more

realistic hope is that the main vein would carry something like the same amount of gold per unit area of the vein, with other veins of the same set being productive to some degree while crossing the "zone of favourable wall rocks" over a target area of 50m*300m.

The one ore intersection does give a starting point to work from to get a target model, however suspect, to gauge the possibilities for a small high grade deposit. The extrapolation proceeds as follows: The gold is contained in a 20cm length of BQ core of which only about a quarter is vein material, volume 0.32 litres. At 2.7 density; .864kg. It contains 930g/t gold therefore the gold content is 0.803g. It can be taken for the purpose of the exercise to represent a section of vein surface equal to the split surface of the core; $4.5*20\text{cm}=90\text{sq. cm.}$ (actually rather richer than this). This converts to 89.2g of gold per sq. metre of the notional vein surface. With a target size of 50*300m the gold content would be 1,338,333g, or 43,028.4oz valued at about \$A20,000,000, just carrying the figures through (at \$A470/oz.). With 2m stopes to maintain headroom this gold would be contained in 81,000 tonnes of functional ore valued at \$250/tonne.

Work program

The object is to test firstly for the development of both Specimen Reef and the Lower Reef at accessible points inside the zone of the ore shoot.

Drilling costs are likely to be of this order, based on an informal quote from Stacpoole's, December '88:

Location fee	\$1000-00
work time per hour	\$100-00
standby time per hour	\$65-00
hammer drilling per metre	\$35-00
diamond drilling (NQ preferred)	\$70-00

Site 1, 140m hole, 75 deg. to 140 deg. site shared with SPC 5 at 200S, 35E. This hole is intended to duplicate the SPC 1 gold intersection after penetrating Specimen Reef inside the zone of the ore shoot.

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Location	\$1000-00
Hammer drilling 90m	\$3150-00
Core drilling 60m	\$4200-00
hole surveys 3hr standby	<u>\$125-00</u>
	\$8545-00

Site 2, 105m hole, vertical, at 150S, 25E. This is the site that was originally selected for hole 6 and then hole 12. It is intended to intersect the White's Winze ore shoot mentioned by Harcourt Smith.

Rig Shift 4hrs work rates	\$400-00
Hammer drilling 65m	\$2275-00
Core drilling 40m	\$2800-00
hole surveys 3hr standby	<u>\$125-00</u>
	\$5510-00
TOTAL	\$14095-00

This would constitute the minimum needed for a real test of the ore shoot hypothesis. Should encouragement be obtained, i.e. visible gold in the core, there would then be justification for the following hole on the next track South. It is risky because the general dip angle cannot be safely extrapolated over the distance.

Site 3, 240m, vertical, at 380S, 225E. intended to intersect the Specimen and lower reefs inside the inferred zone of favourable wall rocks at depth so as to extend the shoot length by 250m from site 1.

Rig shift 4hrs work rate	\$400-00
Hammer drilling 180m	\$6300-00
Core drilling 60m	\$4200-00
hole surveys 3hr standby	<u>\$175-00</u>
	\$11195-00

One other site could be contemplated. It was my intention that the drilling of the East Specimen surface gold anomaly should test out the concept that the gold at the surface reflects another ore shoot in Specimen Reef. The angle chosen for bores SPC 8 and 9 was unfavourable. A vertical hole in this area of 50m or so would reach the inferred location of the reef.

Rig shift 4hrs work rate	\$400-00
Hammer drilling 40m	\$1400-00
Core drilling 30m	\$2100-00
hole surveys 3hr standby	<u>\$175-00</u>
	\$4045-00

11

10

Total for extra 2 holes \$15290-00

Assays

The precollar samples can be done in 2m lengths, the core presents some problems with the absence of a cutter but it may be possible to use the saw blade that remains here on the SRM mines clapped out machine to select promising intervals.

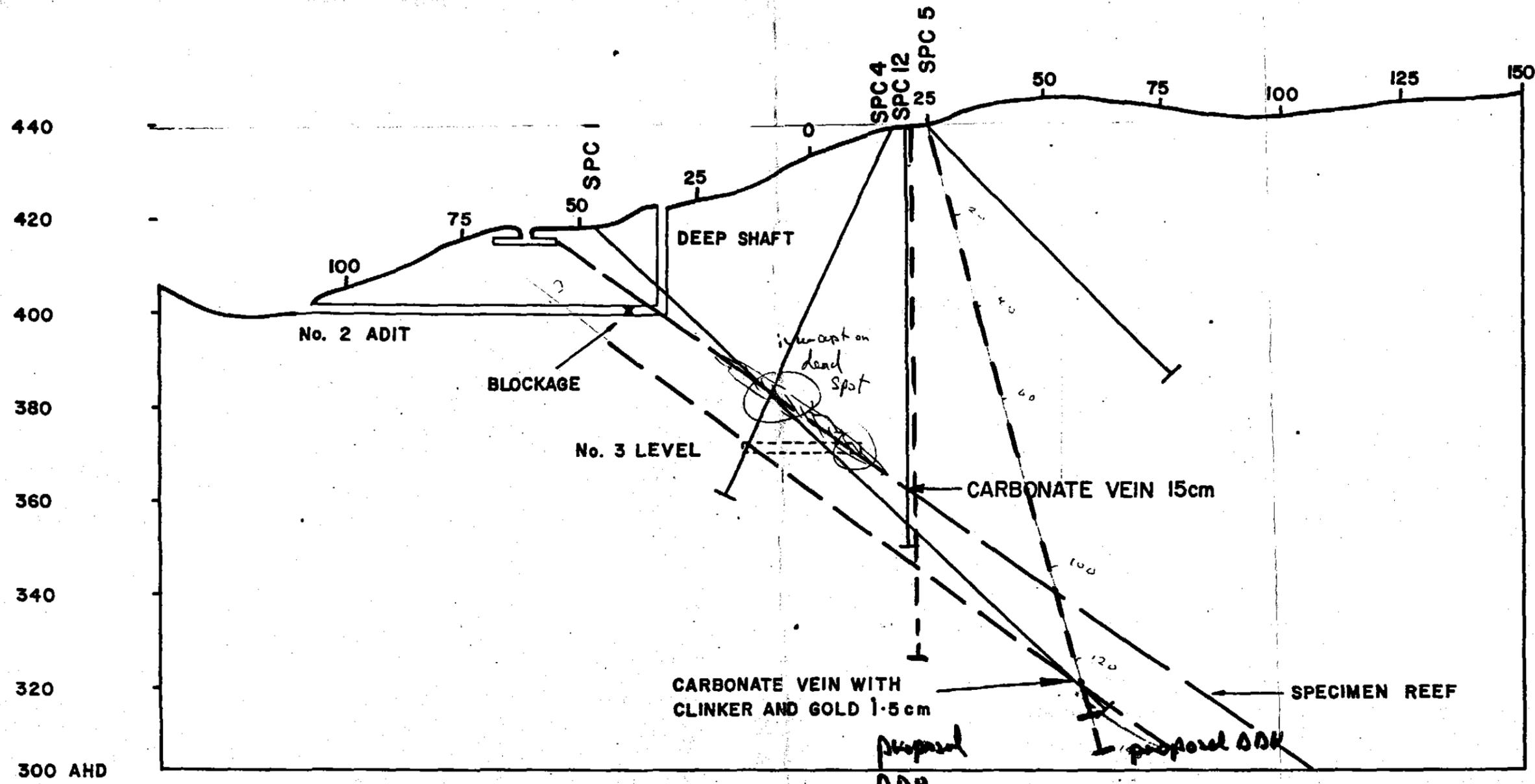
cost: based on the short program

80*	Analabs	329	Au	for	cuttings	\$800-00
20*	"	"	"	select	core	\$200-00
	total					\$1000-00

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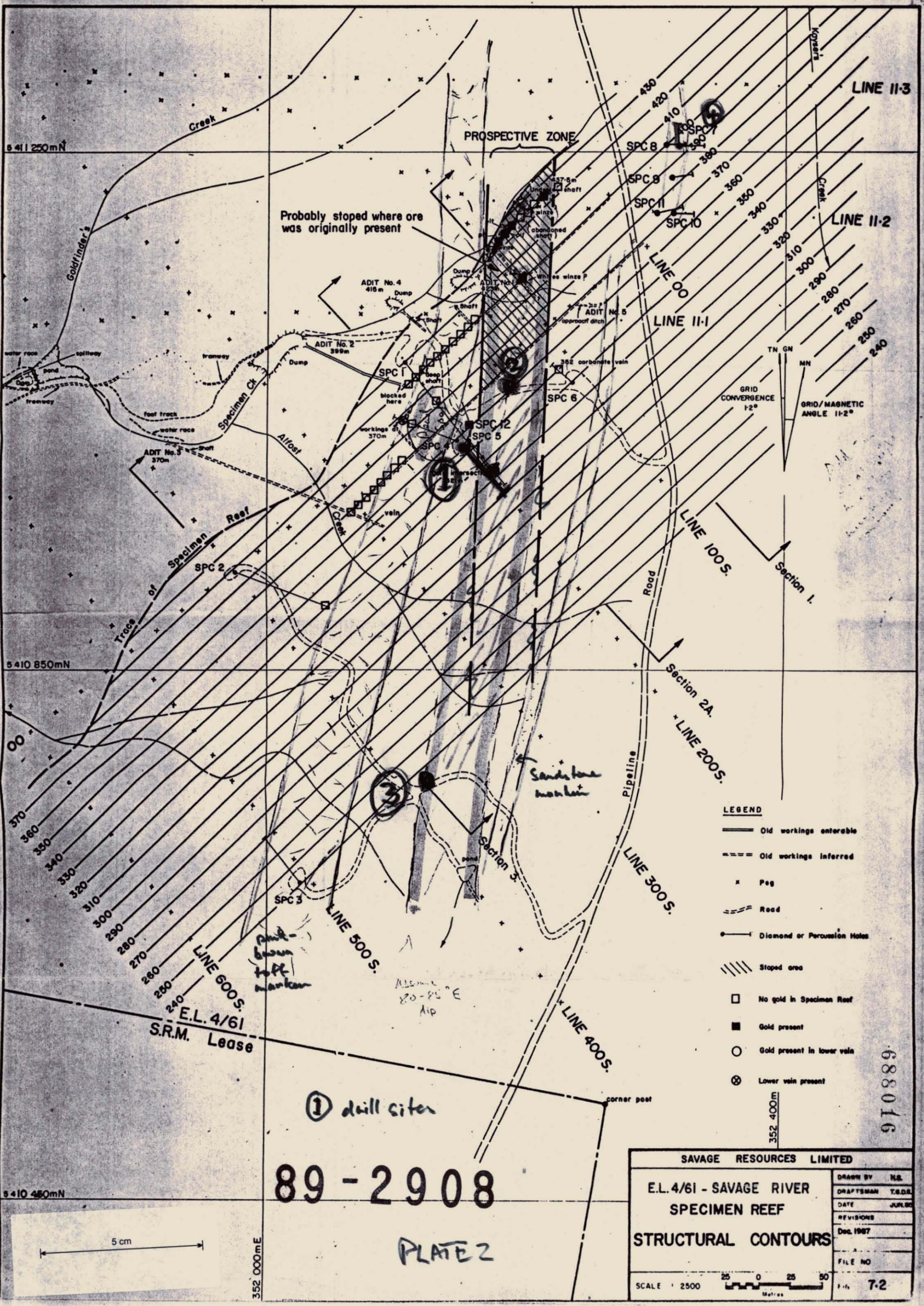


5 cm

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PLATE 1

SAVAGE RESOURCES LIMITED	
E.L.4/61 - SAVAGE RIVER SPECIMEN REEF Cross Section 2 A (Looking North East)	
DRAWN BY :	DRAFTSMAN: T.S.D.S.
DATE :	Dec '87
REVISIONS :	
FILE NO :	
SCALE 1:1250	
FIG. 7-3	



- LEGEND**
- Old workings enterable
 - - - Old workings inferred
 - x Peg
 - Road
 - Diamond or Percussion Holes
 - ▨ Stoped area
 - No gold in Specimen Reef
 - Gold present
 - Gold present in lower vein
 - ⊗ Lower vein present

5 410 450mN

5 410 850mN

5 411 250mN

352 000mE

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PLATE 2

① drill sites

SAVAGE RESOURCES LIMITED	
E.L. 4/61 - SAVAGE RIVER SPECIMEN REEF STRUCTURAL CONTOURS	
DRAWN BY	N.B.
DRAFTSMAN	T.S.D.L.
DATE	JUN. 80
REVISIONS	
Dec. 1987	
FILE NO	
7-2	
SCALE 1:2500	Metres

688016

